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DASY5 Validation Report for Body TSL Date: 03.26.2019

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: D1750V2 - SN: 1090

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium parameters used: f = 1750 MHz; σ = 1.449 S/m; ε_r = 54.97; ρ = 1000 kg/m3

Phantom section: Center Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3617; ConvF(8.03, 8.03, 8.03) @ 1750 MHz; Calibrated: 1/31/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1331; Calibrated: 2/6/2019
- Phantom: MFP_V5.1C ; Type: QD 000 P51CA; Serial: 1062
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

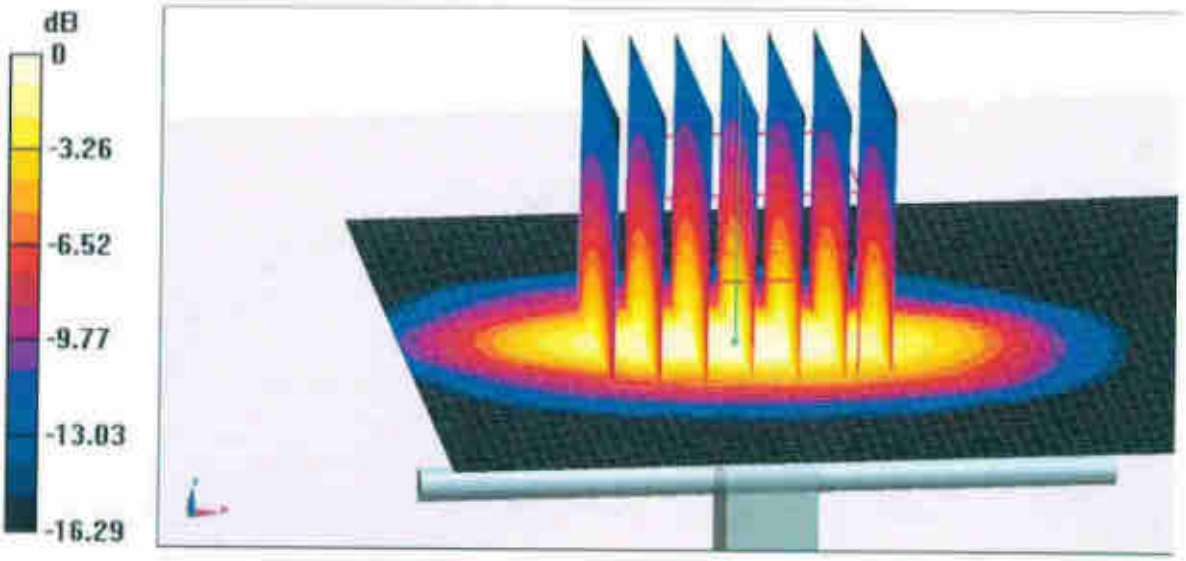
System Performance Check/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 93.13 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 16.8 W/kg

SAR(1 g) = 9.21 W/kg; SAR(10 g) = 4.89 W/kg

Maximum value of SAR (measured) = 14.2 W/kg



0 dB = 14.2 W/kg = 11.52 dBW/kg

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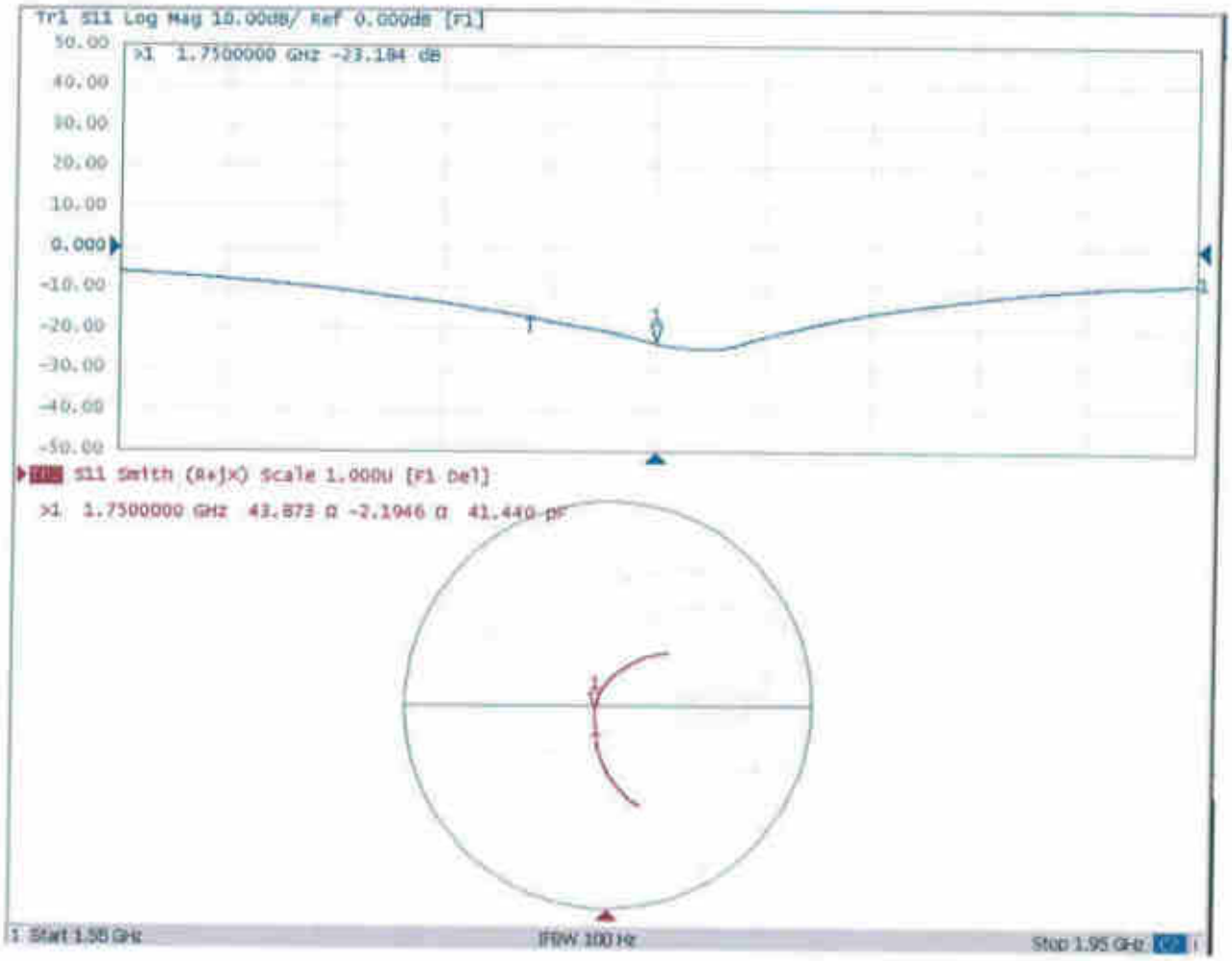
Impedance Measurement Plot for Body TSL



D1750V2, Serial No. 1090 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.

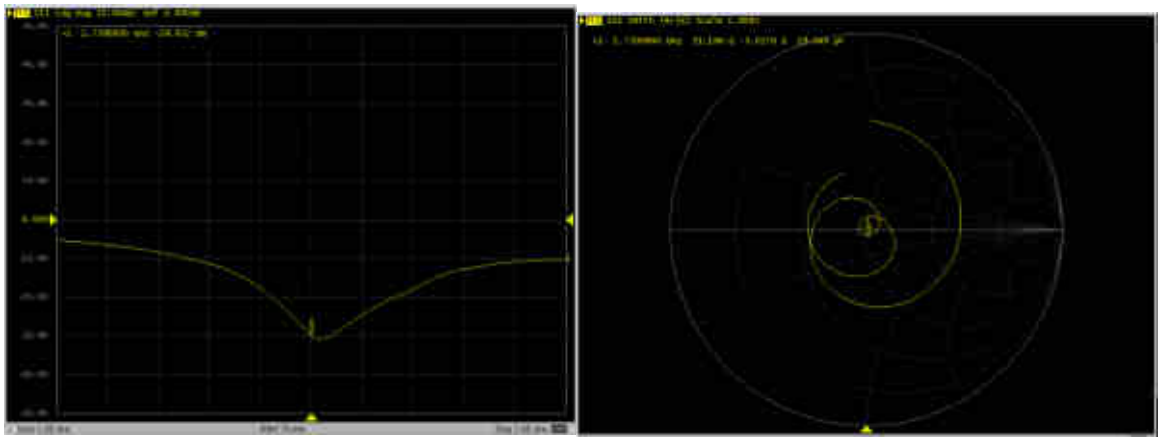
1750V2 – serial no. 1090												
	1750 Head						1750 Body					
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)
2019.3.27	-29.2		47.5		-2.3		-23.2		43.9		-2.2	
2020.3.26	-29.8	-0.02	51.2	-3.66	-3.0	0.70	-25.0	-0.08	45.1	-1.22	-2.17	-0.02

<Justification of the extended calibration>

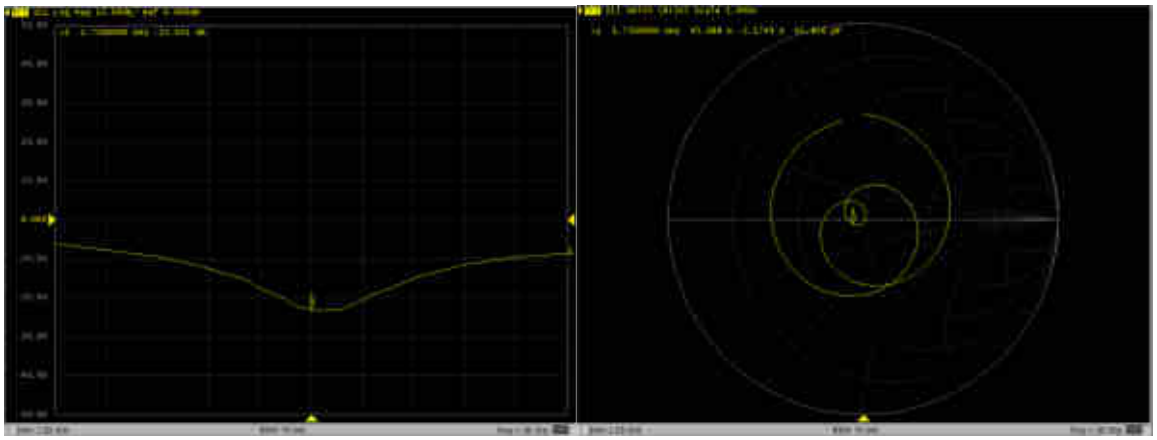
The return loss is < -20dB, within 20% of prior calibration; the impedance is within 5 ohm of prior calibration. Therefore the verification result should support extended calibration.

Dipole Verification Data> D1750V2, serial no. 1090

1750MHz – Head



1750MHz – Body



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CALIBRATION
CNAS L0570

Client **Sporton** **Certificate No: Z19-60085**

CALIBRATION CERTIFICATE

Object	D1900V2 - SN: 5d170
Calibration Procedure(s)	FF-Z11-003-01 Calibration Procedures for dipole validation kits
Calibration date:	March 26, 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)℃ and humidity<70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	106277	20-Aug-18 (CTTL, No.J18X06862)	Aug-19
Power sensor NRP8S	104291	20-Aug-18 (CTTL, No.J18X06862)	Aug-19
Reference Probe EX3DV4	SN 3617	31-Jan-19(SPEAG,No.EX3-3617_Jan19)	Jan-20
DAE4	SN 1331	06-Feb-19(SPEAG,No.DAE4-1331_Feb19)	Feb-20
Secondary Standards	**ID #**	**Cal Date(Calibrated by, Certificate No.)**	**Scheduled Calibration**
Signal Generator E4438C	MY49071430	23-Jan-19 (CTTL, No.J19X00336)	Jan-20
NetworkAnalyzer E5071C	MY46110673	24-Jan-19 (CTTL, No.J19X00547)	Jan-20

	Name	Function	Signature
Calibrated by:	Zhao Jing	SAR Test Engineer	
Reviewed by:	Lin Hao	SAR Test Engineer	
Approved by:	Qi Dianyuan	SAR Project Leader	

Issued: March 29, 2019

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lossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORMx,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 assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices- Part 1: Device used next to the ear (Frequency range of 300MHz to 6GHz)", July 2016

c) IEC 62209-2, "Procedure to measure the Specific Absorption Rate (SAR) For wireless communication devices used in close proximity to the human body (frequency range of 30MHz to 6GHz)", March 2010

d) KDB865664, 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%.

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Measurement Conditions

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

DASY Version	DASY52	52.10.2.1495
Extrapolation	Advanced Extrapolation	
Phantom	Triple Flat Phantom 5.1C	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	1900 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	**Permittivity**	**Conductivity**
Nominal Head TSL parameters	22.0 °C	40.0	1.40 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	40.5 ± 6 %	1.44 mho/m ± 6 %
Head TSL temperature change during test	<1.0 °C	----	----

SAR result with Head TSL

SAR averaged over 1 cm^3 (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	9.90 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	**39.0 W/kg ± 18.8 % (k=2)**
SAR averaged over 10 cm^3 (10 g) of Head TSL	Condition	
SAR measured	250 mW input power	5.12 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	**20.3 W/kg ± 18.7 % (k=2)**

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	**Permittivity**	**Conductivity**
Nominal Body TSL parameters	22.0 °C	53.3	1.52 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	54.5 ± 6 %	1.56 mho/m ± 6 %
Body TSL temperature change during test	<1.0 °C	----	----

SAR result with Body TSL

SAR averaged over 1 cm^3 (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	10.1 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	**40.0 W/kg ± 18.8 % (k=2)**
SAR averaged over 10 cm^3 (10 g) of Body TSL	Condition	
SAR measured	250 mW input power	5.28 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	**21.0 W/kg ± 18.7 % (k=2)**

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Appendix (Additional assessments outside the scope of CNAS L0570)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	51.7Ω+ 6.73jΩ
Return Loss	- 23.3dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	47.8Ω+ 6.72jΩ
Return Loss	- 22.8dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.066 ns

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: 03.26.2019

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN: 5d170

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: f = 1900 MHz; σ = 1.441 S/m; ε_r = 40.48; ρ = 1000 kg/m3

Phantom section: Center Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3617; ConvF(8.14, 8.14, 8.14) @ 1900 MHz; Calibrated: 1/31/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1331; Calibrated: 2/6/2019
- Phantom: MFP_V5.1C ; Type: QD 000 P51CA; Serial: 1062
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

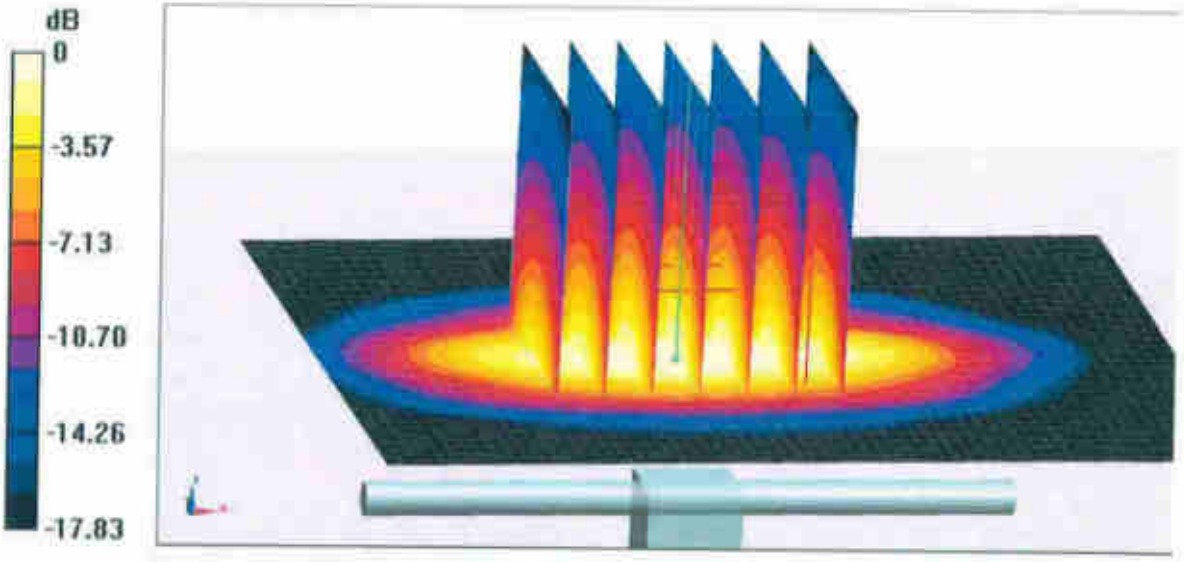
System Performance Check/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 97.54 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 18.9 W/kg

SAR(1 g) = 9.9 W/kg; SAR(10 g) = 5.12 W/kg

Maximum value of SAR (measured) = 15.6 W/kg



0 dB = 15.6 W/kg = 11.93 dBW/kg

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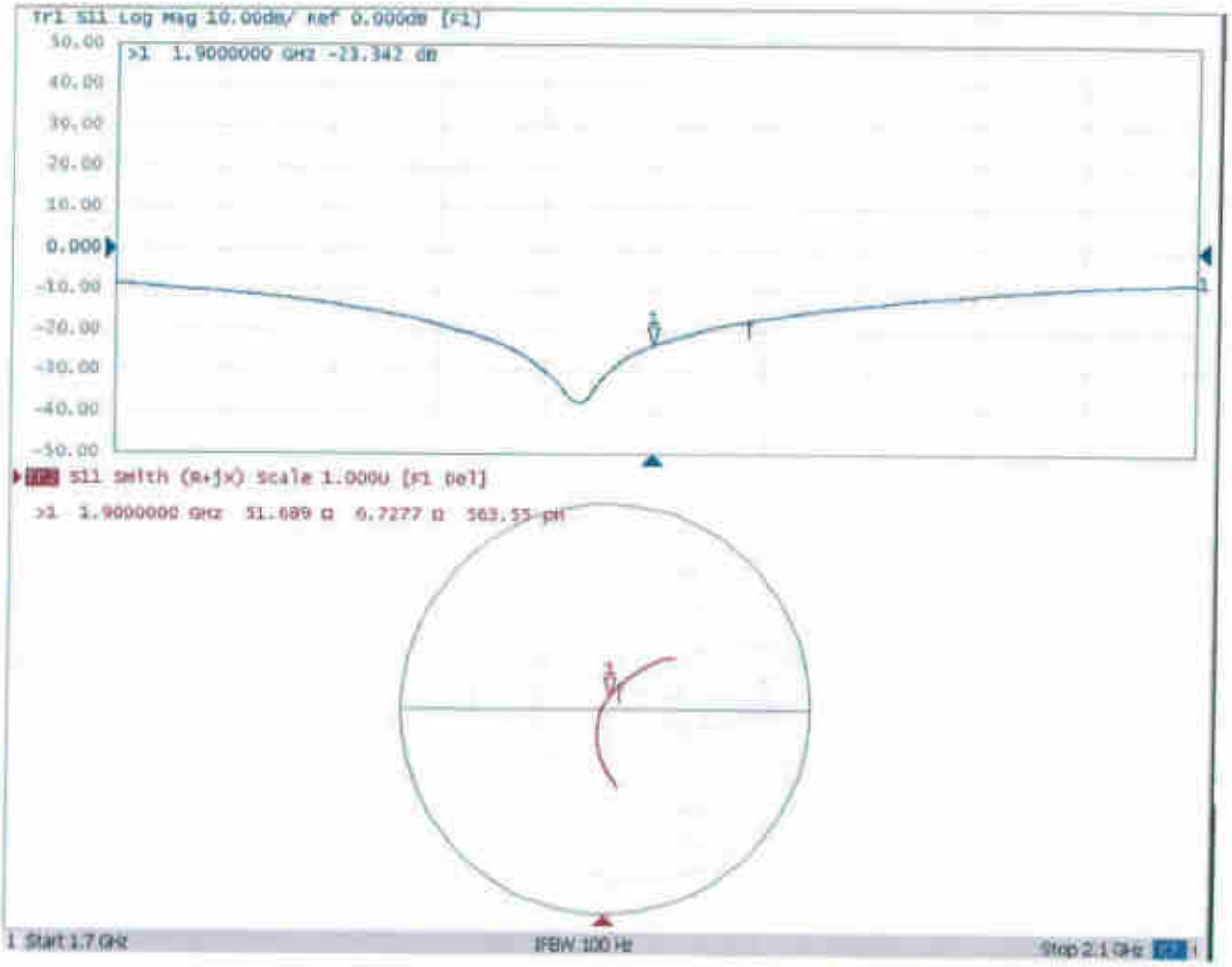
Impedance Measurement Plot for Head TSL



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DASY5 Validation Report for Body TSL Date: 03.26.2019

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN: 5d170

Communication System: UID 0, CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: f = 1900 MHz; σ = 1.56 S/m; ε_r = 54.52; ρ = 1000 kg/m3

Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3617; ConvF(7.78, 7.78, 7.78) @ 1900 MHz; Calibrated: 1/31/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1331; Calibrated: 2/6/2019
- Phantom: MFP_V5.1C ; Type: QD 000 P51CA; Serial: 1062
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

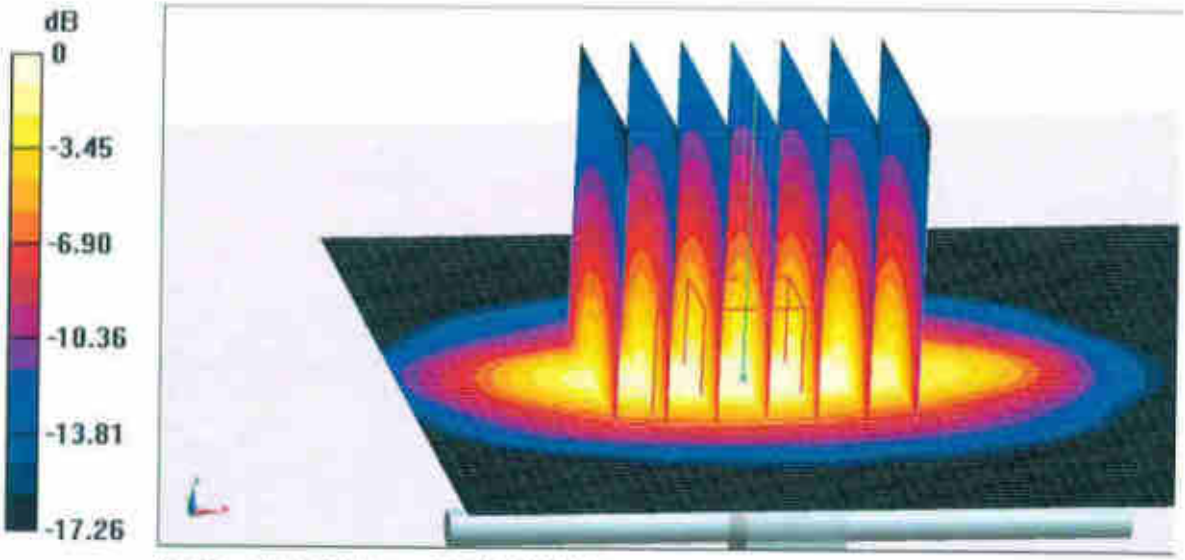
System Performance Check/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 95.48 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 18.6 W/kg

SAR(1 g) = 10.1 W/kg; SAR(10 g) = 5.28 W/kg

Maximum value of SAR (measured) = 15.7 W/kg



0 dB = 15.7 W/kg = 11.96 dBW/kg

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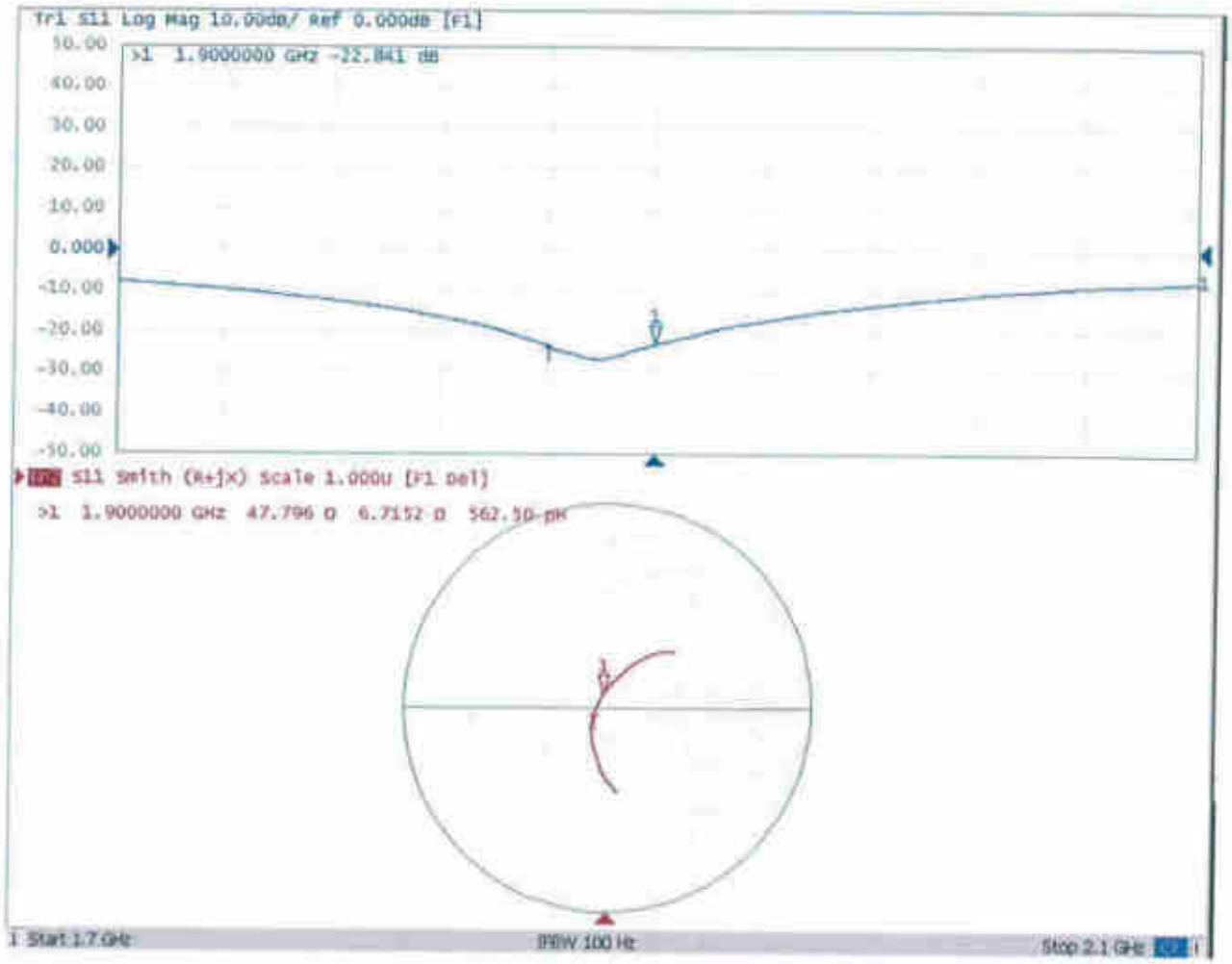
Impedance Measurement Plot for Body TSL



D1900V2, Serial No. 5d170 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.

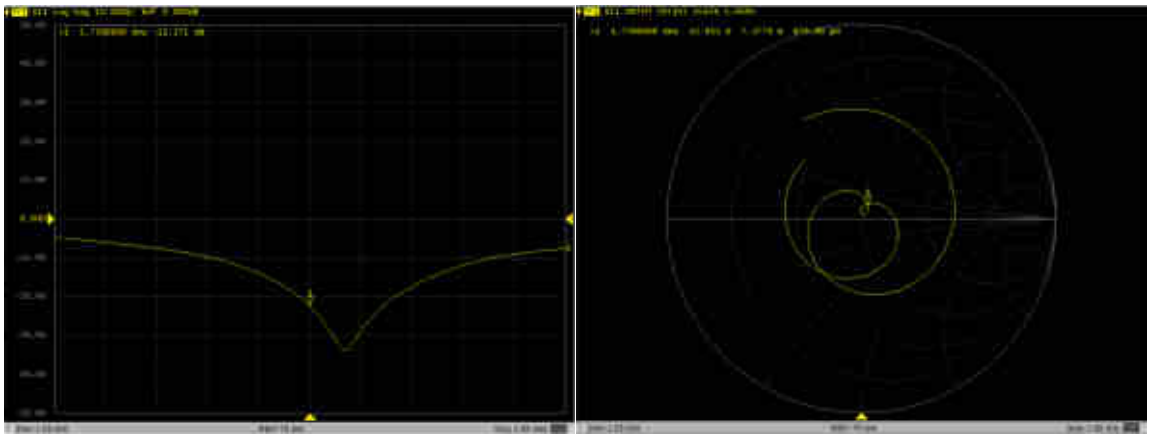
1900V2 – serial no. 5d170												
	1900 Head						1900 Body					
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)
2019.3.26	-23.3		51.7		6.7		-22.8		47.8		6.7	
2020.3.25	-22.3	0.05	53.0	-1.26	7.4	-0.64	-22.5	0.01	49.2	-1.37	7.41	-0.69

<Justification of the extended calibration>

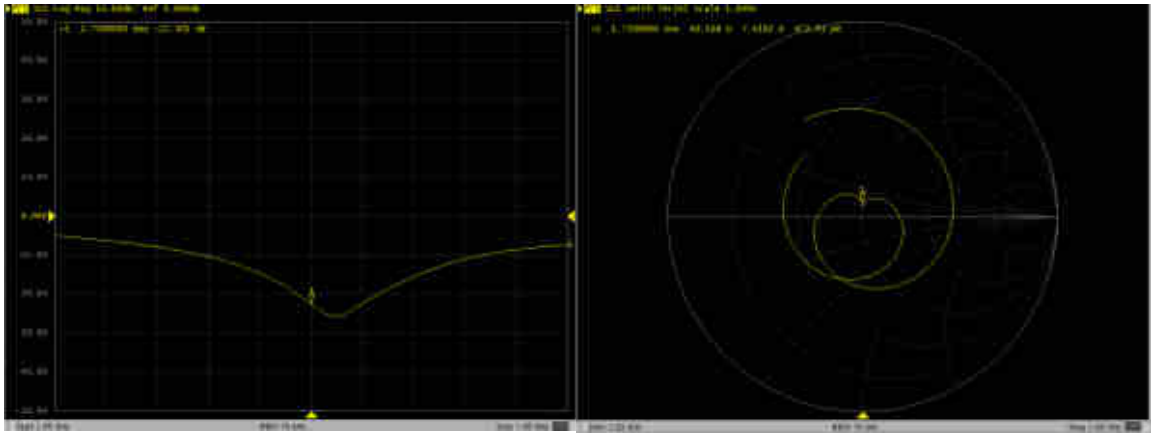
The return loss is < -20dB, within 20% of prior calibration; the impedance is within 5 ohm of prior calibration. Therefore the verification result should support extended calibration.

Dipole Verification Data> D1900V2, serial no. 5d170

1900MHz – Head



1900MHz – Body



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CNAS L0570

Client **Sporton** **Certificate No: Z19-60087**

CALIBRATION CERTIFICATE

Object	D2450V2 - SN: 908
Calibration Procedure(s)	FF-Z11-003-01 Calibration Procedures for dipole validation kits
Calibration date:	March 25, 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)℃ and humidity<70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	106277	20-Aug-18 (CTTL, No.J18X06862)	Aug-19
Power sensor NRP8S	104291	20-Aug-18 (CTTL, No.J18X06862)	Aug-19
Reference Probe EX3DV4	SN 3617	31-Jan-19(SPEAG,No.EX3-3617_Jan19)	Jan-20
DAE4	SN 1331	06-Feb-19(SPEAG,No.DAE4-1331_Feb19)	Feb-20
Secondary Standards	**ID #**	**Cal Date(Calibrated by, Certificate No.)**	**Scheduled Calibration**
Signal Generator E4438C	MY49071430	23-Jan-19 (CTTL, No.J19X00336)	Jan-20
NetworkAnalyzer E5071C	MY46110673	24-Jan-19 (CTTL, No.J19X00547)	Jan-20

	Name	Function	Signature
Calibrated by:	Zhao Jing	SAR Test Engineer	
Reviewed by:	Lin Hao	SAR Test Engineer	
Approved by:	Qi Dianyuan	SAR Project Leader	

Issued: March 28, 2019

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Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORMx,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 assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices- Part 1: Device used next to the ear (Frequency range of 300MHz to 6GHz)", July 2016

c) IEC 62209-2, "Procedure to measure the Specific Absorption Rate (SAR) For wireless communication devices used in close proximity to the human body (frequency range of 30MHz to 6GHz)", March 2010

d) KDB865664, 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%.

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Measurement Conditions

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

DASY Version	DASY52	52.10.2.1495
Extrapolation	Advanced Extrapolation	
Phantom	Triple Flat Phantom 5.1C	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	2450 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	**Permittivity**	**Conductivity**
Nominal Head TSL parameters	22.0 °C	39.2	1.80 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	39.6 ± 6 %	1.84 mho/m ± 6 %
Head TSL temperature change during test	<1.0 °C	---	---

SAR result with Head TSL

SAR averaged over 1 cm^3 (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	13.3 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	**52.8 W/kg ± 18.8 % (k=2)**
SAR averaged over 10 cm^3 (10 g) of Head TSL	Condition	
SAR measured	250 mW input power	6.07 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	**24.2 W/kg ± 18.7 % (k=2)**

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	**Permittivity**	**Conductivity**
Nominal Body TSL parameters	22.0 °C	52.7	1.95 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	53.8 ± 6 %	2.00 mho/m ± 6 %
Body TSL temperature change during test	<1.0 °C	---	---

SAR result with Body TSL

SAR averaged over 1 cm^3 (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	12.8 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	**50.8 W/kg ± 18.8 % (k=2)**
SAR averaged over 10 cm^3 (10 g) of Body TSL	Condition	
SAR measured	250 mW input power	5.91 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	**23.6 W/kg ± 18.7 % (k=2)**

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Appendix (Additional assessments outside the scope of CNAS L0570)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	57.3Ω+ 5.18 jΩ
Return Loss	- 21.6dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	52.6Ω+ 5.81 jΩ
Return Loss	- 24.1dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.020 ns

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

In Collaboration with
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DASY5 Validation Report for Head TSL Date: 03.25.2019

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 908

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: f = 2450 MHz; σ = 1.841 S/m; ε_r = 39.63; ρ = 1000 kg/m3

Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3617; ConvF(7.62, 7.62, 7.62) @ 2450 MHz; Calibrated: 1/31/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1331; Calibrated: 2/6/2019
- Phantom: MFP_V5.1C ; Type: QD 000 P51CA; Serial: 1062
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

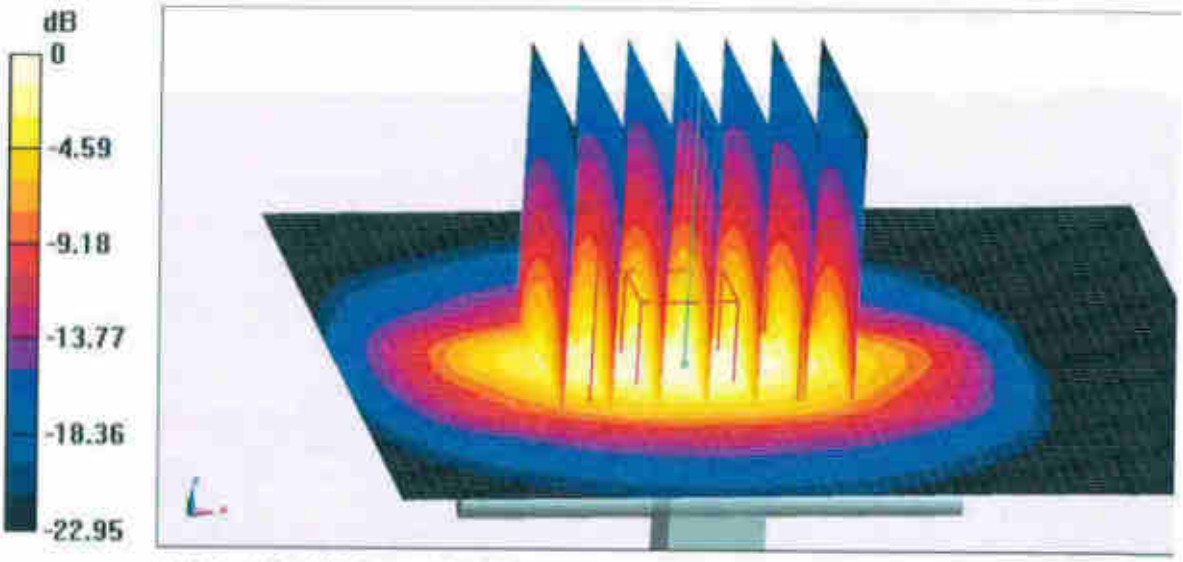
Dipole Calibration/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 96.04 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 28.3 W/kg

SAR(1 g) = 13.3 W/kg; SAR(10 g) = 6.07 W/kg

Maximum value of SAR (measured) = 22.4 W/kg



0 dB = 22.4 W/kg = 13.50 dBW/kg

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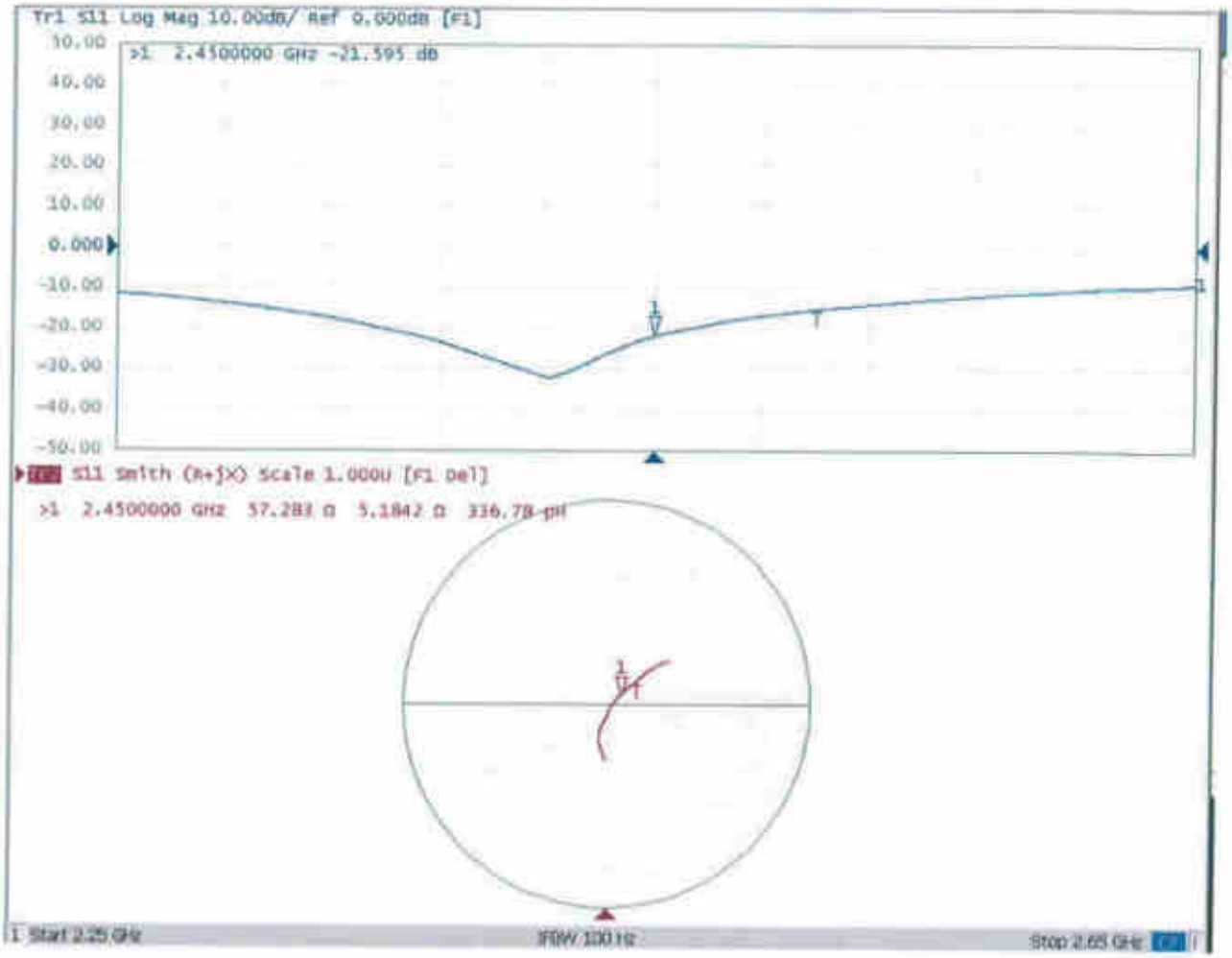
Impedance Measurement Plot for Head TSL



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E-mail: cttl@chinattl.com http://www.chinattl.cn

DASY5 Validation Report for Body TSL Date: 03.25.2019

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 908

Communication System: UID 0, CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: f = 2450 MHz; σ = 2.003 S/m; ε_r = 53.78; ρ = 1000 kg/m3

Phantom section: Center Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3617; ConvF(7.79, 7.79, 7.79) @ 2450 MHz; Calibrated: 1/31/2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1331; Calibrated: 2/6/2019
- Phantom: MFP_V5.1C ; Type: QD 000 P51CA; Serial: 1062
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7450)

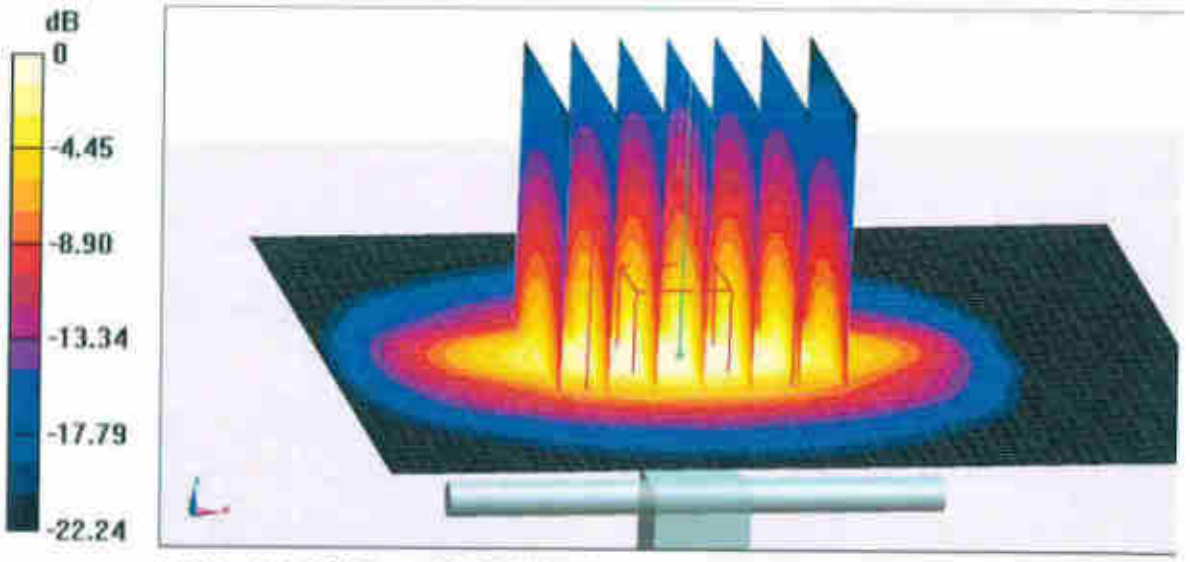
Dipole Calibration/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 95.51 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 27.1 W/kg

SAR(1 g) = 12.8 W/kg; SAR(10 g) = 5.91 W/kg

Maximum value of SAR (measured) = 21.4 W/kg



0 dB = 21.4 W/kg = 13.30 dBW/kg

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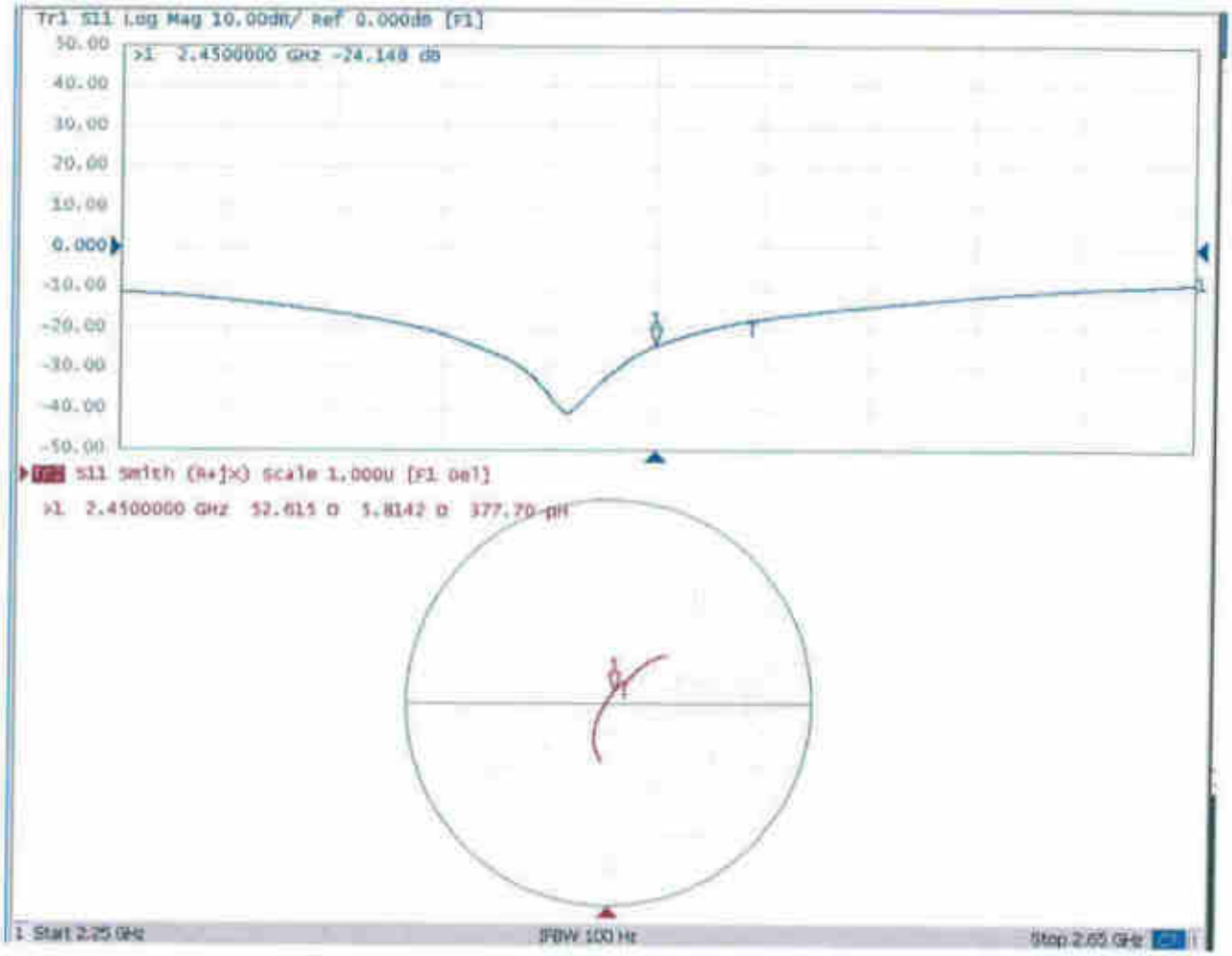
Impedance Measurement Plot for Body TSL



D2450V2, Serial No. 908 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.

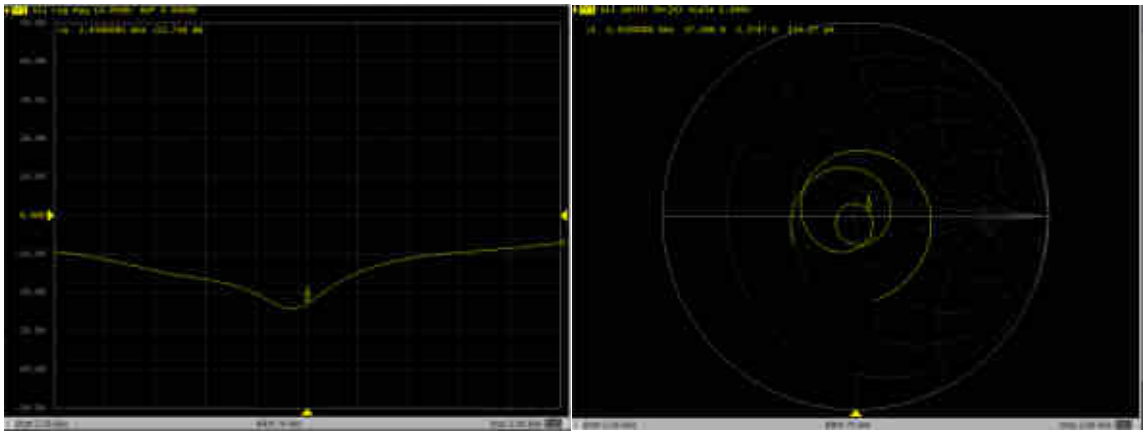
2450V2 – serial no. 908												
	2450 Head						2450 Body					
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)
2019.3.25	-21.6		57.3		5.2		-24.1		52.6		5.8	
2020.3.24	-22.7	-0.05	57.5	-0.18	2.4	2.81	-26.1	-0.08	55.01	-2.40	1.493	4.32

<Justification of the extended calibration>

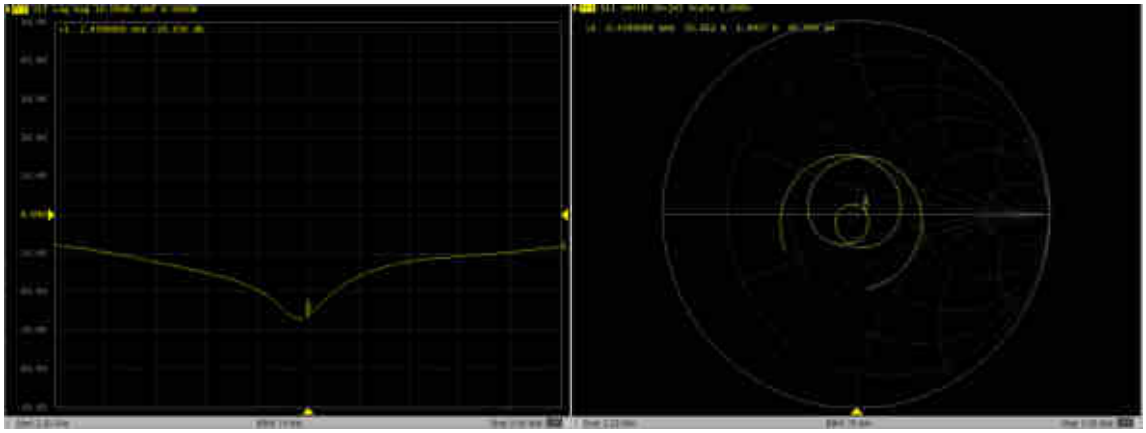
The return loss is < -20dB, within 20% of prior calibration; the impedance is within 5 ohm of prior calibration. Therefore the verification result should support extended calibration.

Dipole Verification Data> D2450V2, serial no. 908

2450MHz – Head



2450MHz – Body



SPORTON INTERNATIONAL (KUNSHAN) INC.
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Accreditation No.: SCS 0108

Client **Sporton**

Certificate No: D2600V2-1061_Nov20

CALIBRATION CERTIFICATE

Object: D2600V2 - SN:1061

Calibration procedure(s): QA CAL-05.v11
Calibration Procedure for SAR Validation Sources between 0.7-3 GHz

Calibration date: November 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 ± 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: BH9394 (20k)	31-Mar-20 (No. 217-03106)	Apr-21
Type-N mismatch combination	SN: 310982 / 06327	31-Mar-20 (No. 217-03104)	Apr-21
Reference Probe EX3DV4	SN: 7405	29-Jun-20 (No. EX3-7405_Jun20)	Jun-21
DAE4	SN: 601	02-Nov-20 (No. DAE4-601_Nov20)	Nov-21

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB39512475	30-Oct-14 (in house check Oct-20)	In house check: Oct-22
Power sensor HP 8481A	SN: US37292783	07-Oct-15 (in house check Oct-20)	In house check: Oct-22
Power sensor HP 8481A	SN: MY41092317	07-Oct-15 (in house check Oct-20)	In house check: Oct-22
RF generator R&S SMT-06	SN: 100972	15-Jun-15 (in house check Oct-20)	In house check: Oct-22
Network Analyzer Agilent E8358A	SN: US41080477	31-Mar-14 (in house check Oct-20)	In house check: Oct-21

	Name	Function	Signature
Calibrated by:	Claudio Leubler	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: November 26, 2020

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	V52.10.4
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	2600 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	**Permittivity**	**Conductivity**
Nominal Head TSL parameters	22.0 °C	39.0	1.96 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	37.6 ± 6 %	2.03 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	----	----

SAR result with Head TSL

SAR averaged over 1 cm^3 (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	14.5 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	**56.6 W/kg ± 17.0 % (k=2)**

SAR averaged over 10 cm^3 (10 g) of Head TSL	condition	
SAR measured	250 mW input power	6.37 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	**25.1 W/kg ± 16.5 % (k=2)**

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	55.6 Ω - 2.3 jΩ
Return Loss	- 24.8 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.149 ns

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

Date: 26.11.2020

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN:1061

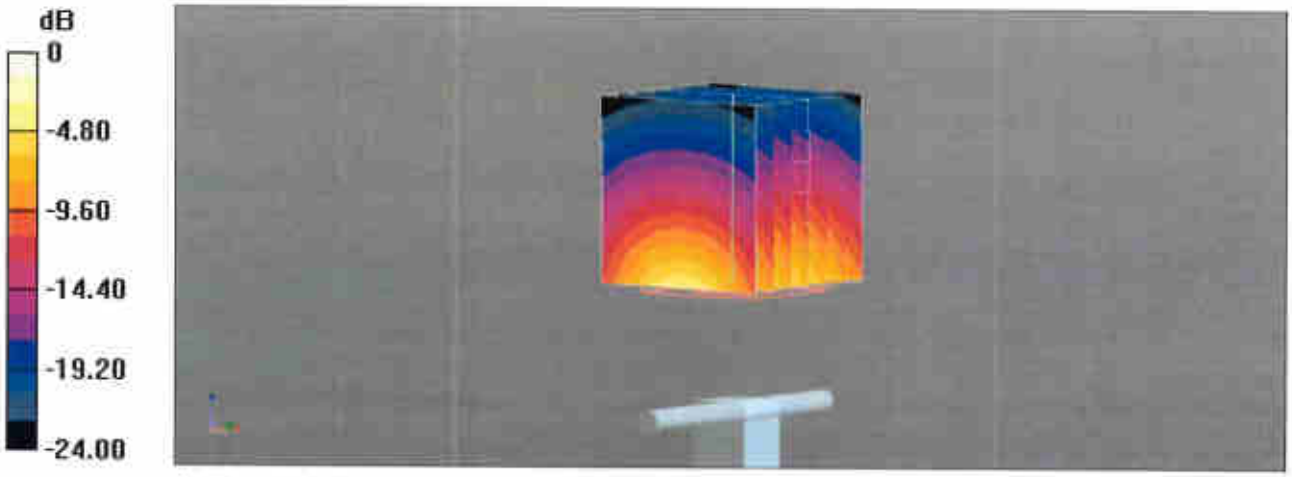
Communication System: UID 0 - CW; Frequency: 2600 MHz
Medium parameters used: f = 2600 MHz; σ = 2.03 S/m; ε_r = 37.6; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

- Probe: EX3DV4 - SN7405; ConvF(7.54, 7.54, 7.54) @ 2600 MHz; Calibrated: 29.06.2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 02.11.2020
- Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

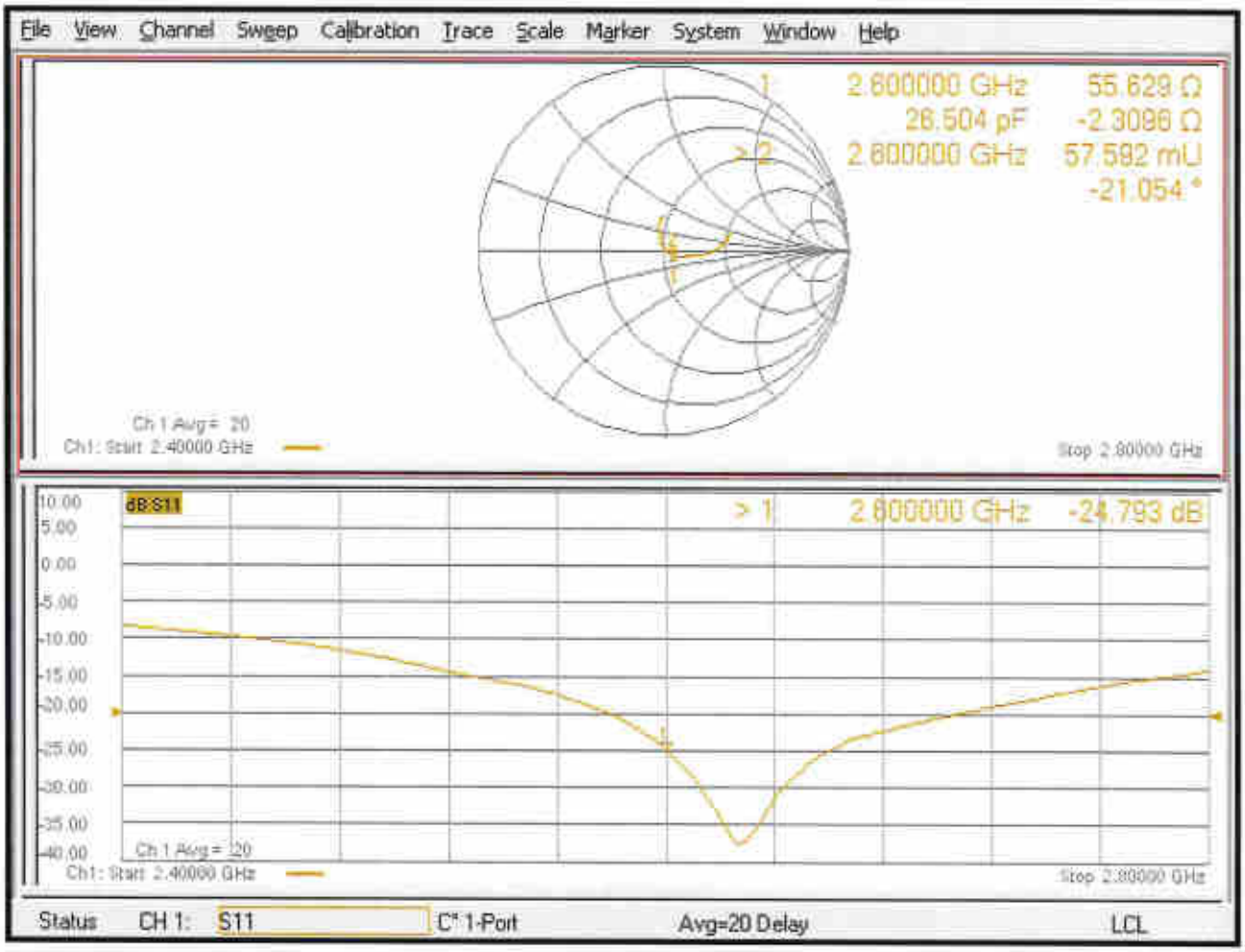
Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 119.2 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 30.9 W/kg
SAR(1 g) = 14.5 W/kg; SAR(10 g) = 6.37 W/kg
Smallest distance from peaks to all points 3 dB below = 8.9 mm
Ratio of SAR at M2 to SAR at M1 = 47%
Maximum value of SAR (measured) = 25.0 W/kg



0 dB = 25.0 W/kg = 13.98 dBW/kg

Impedance Measurement Plot for Head TSL



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S Swiss Calibration Service

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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

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

Issued: September 25, 2019

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 mm, dz = 1.4 mm	Graded Ratio = 1.4 (Z direction)
Frequency	5250 MHz ± 1 MHz 5600 MHz ± 1 MHz 5750 MHz ± 1 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 cm³ (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 cm³ (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 cm³ (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 cm³ (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 cm³ (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 cm³ (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 jΩ
Return Loss	- 24.0 dB

Antenna Parameters with Head TSL at 5600 MHz

Impedance, transformed to feed point	56.0 Ω - 2.7 jΩ
Return Loss	- 24.1 dB

Antenna Parameters with Head TSL at 5750 MHz

Impedance, transformed to feed point	56.7 Ω - 1.0 jΩ
Return Loss	- 23.9 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.195 ns

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

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 MHz; σ = 4.53 S/m; ε_r = 35.1; ρ = 1000 kg/m^3 ,
Medium parameters used: f = 5600 MHz; σ = 4.88 S/m; ε_r = 34.6; ρ = 1000 kg/m^3 ,
Medium parameters used: f = 5750 MHz; σ = 5.03 S/m; ε_r = 34.4; ρ = 1000 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)

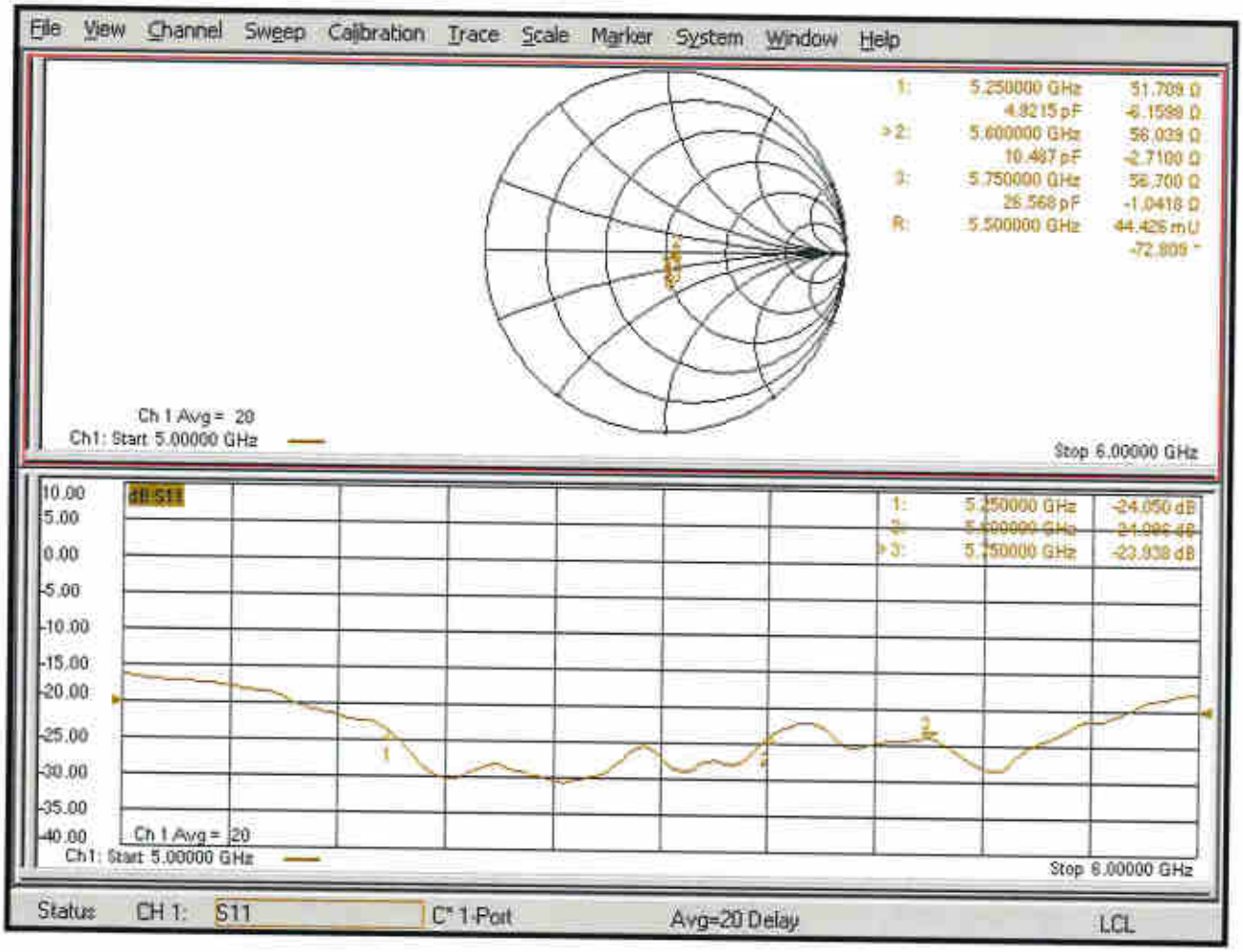
Dipole Calibration for Head Tissue/Pin=100mW, dist=10mm, f=5250 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 78.54 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 27.9 W/kg
SAR(1 g) = 8.09 W/kg; SAR(10 g) = 2.33 W/kg
Maximum value of SAR (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

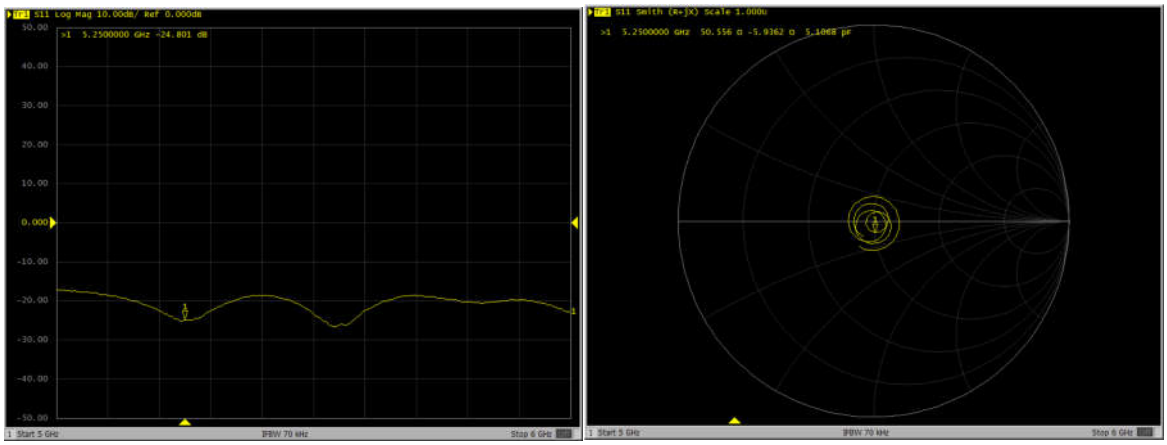
D5GHzV2 – serial no. 1113						
5750 Head						
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)
2019.9.24	-23.94		56.70		-1.04	
2020.9.23	-21.92	0.08	58.56	-1.86	-1.58	0.54

<Justification of the extended calibration>

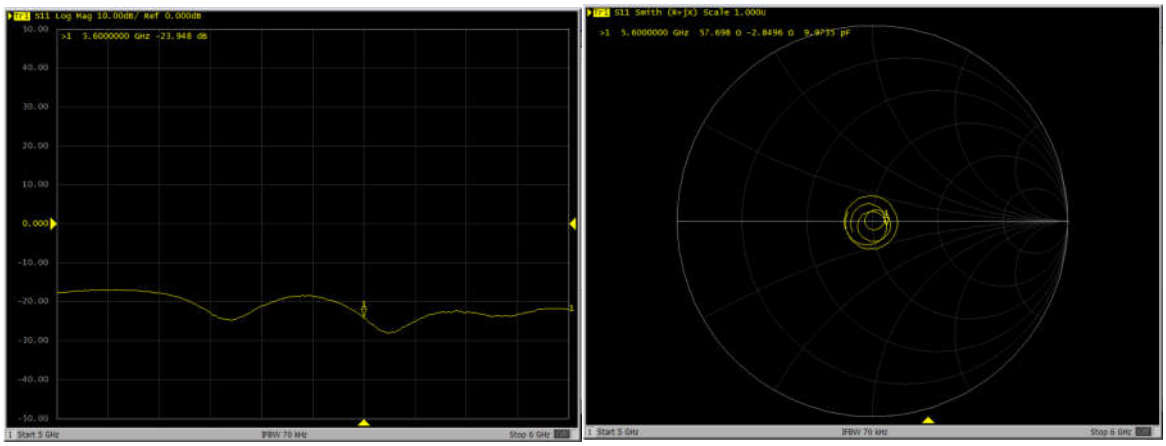
The return loss is < -20dB, within 20% of prior calibration; the impedance is within 5 ohm of prior calibration. Therefore the verification result should support extended calibration.

Dipole Verification Data> D3700V2, serial no. 1008

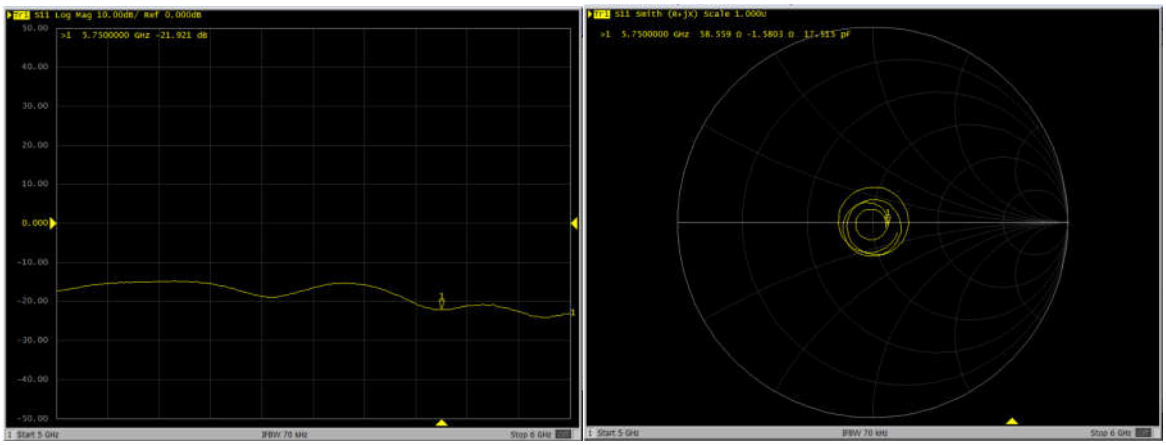
5250MHz – Head



5600MHz – Head



5750MHz – Head



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Accreditation No.: SCS 0108

Client Sporton

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 ± 3)°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

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

Issued: March 26, 2020

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 =	6.1μV ,	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 ± 0.02% (k=2)	404.320 ± 0.02% (k=2)	405.284 ± 0.02% (k=2)
Low Range	3.98091 ± 1.50% (k=2)	3.99691 ± 1.50% (k=2)	3.93809 ± 1.50% (k=2)

Connector Angle

Connector Angle to be used in DASY system	34.0 ° ± 1 °

Appendix (Additional assessments outside the scope of SCS0108)

1. DC Voltage Linearity

High Range		Reading (μV)	Difference (μV)	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 (μV)	Difference (μV)	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 (μV)	Low Range Average Reading (μV)
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 (μV)	Channel Y (μV)	Channel Z (μV)
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 (μV)	min. Offset (μV)	max. Offset (μV)	Std. Deviation (μV)
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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Zeughausstrasse 43, 8004 Zurich, Switzerland

S Schweizerischer Kalibrierdienst
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The Swiss Accreditation Service is one of the signatories to the EA 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 8648C	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

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

Issued: May 27, 2020

Glossary:

TSL	tissue simulating liquid
NORMx,y,z	sensitivity in free space
ConvF	sensitivity in TSL / NORMx,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 ϑ	ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., ϑ = 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 ϑ = 0 (f ≤ 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 ≤ 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 ($\mu V/(V/m)^2$)[A]	0.66	0.47	0.46	± 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	± 3.3 %	± 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	± 3.2 %	± 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	± 1.6 %	± 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	± 1.2 %	± 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	± 1.2 %	± 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	± 1.5 %	± 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	± 1.0 %	± 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	± 0.7 %	± 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	± 0.7 %	± 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	± 1.3 %	± 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 E^2-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

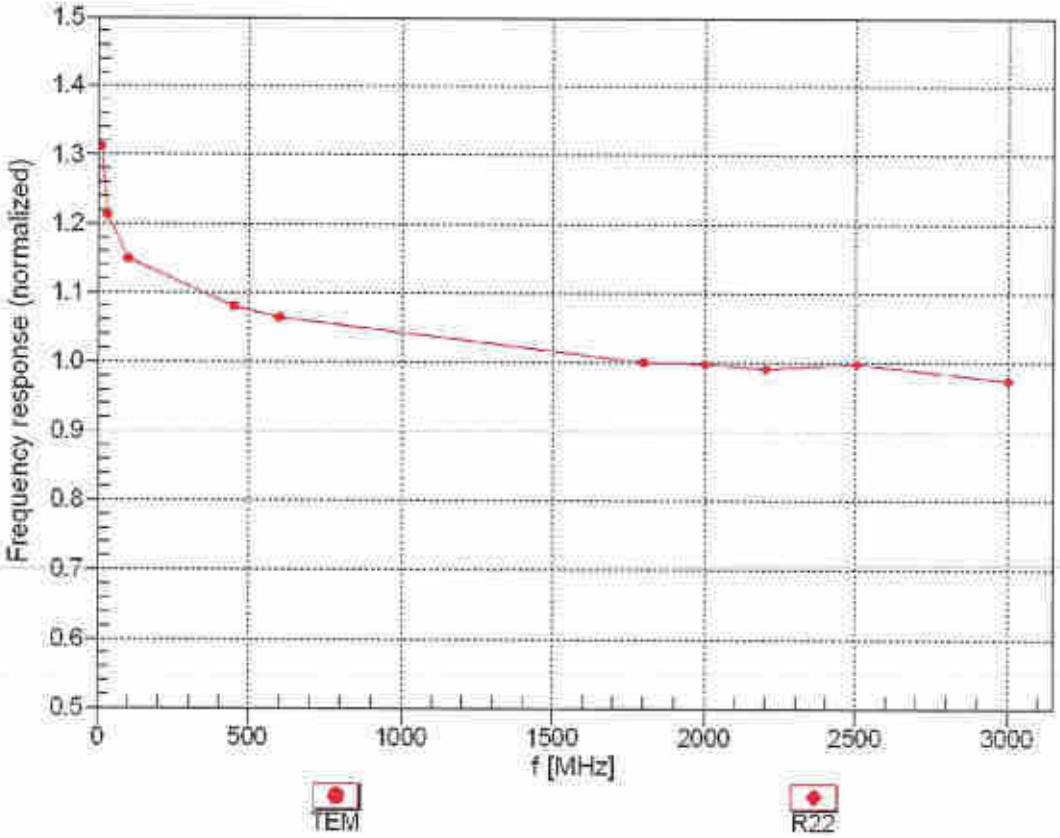
f (MHz) [C]	Relative Permittivity [F]	Conductivity (S/m) [F]	ConvF X	ConvF Y	ConvF Z	Alpha [G]	Depth [G] (mm)	Unc (k=2)
750	41.9	0.89	10.31	10.31	10.31	0.49	0.80	± 12.0 %
835	41.5	0.90	10.05	10.05	10.05	0.45	0.85	± 12.0 %
900	41.5	0.97	9.90	9.90	9.90	0.44	0.80	± 12.0 %
1750	40.1	1.37	8.41	8.41	8.41	0.27	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.

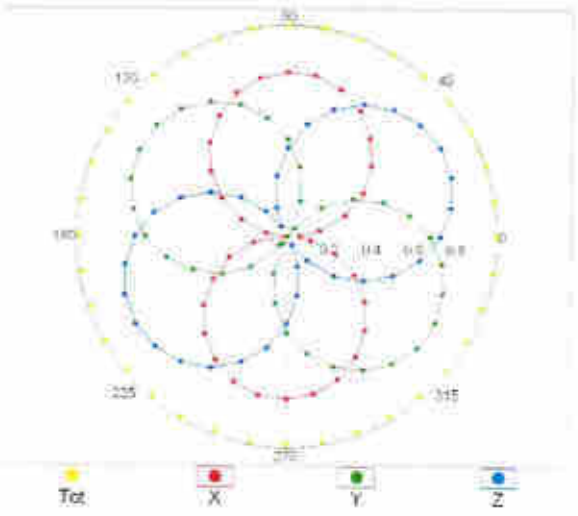
Frequency Response of E-Field
(TEM-Cell:ifi110 EXX, Waveguide: R22)



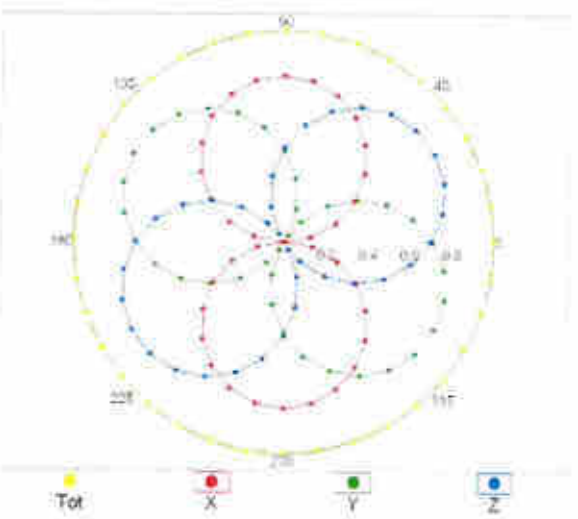
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

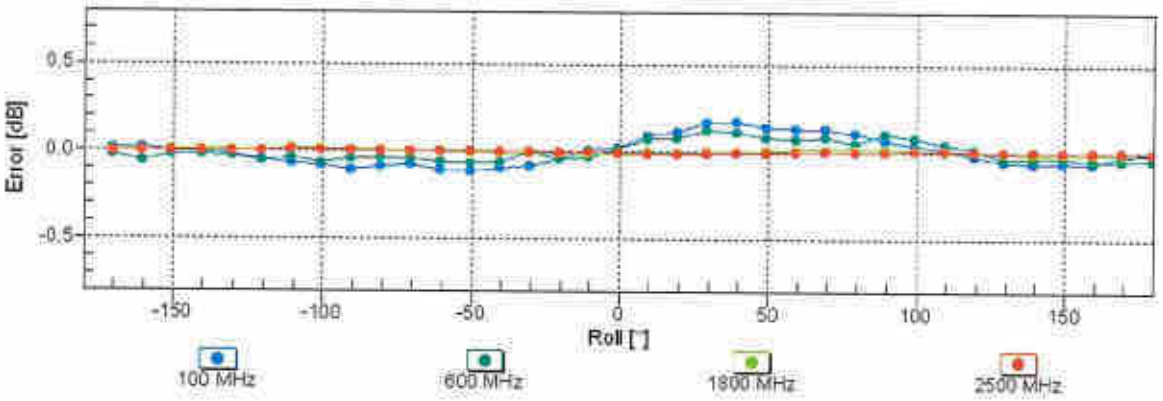
Receiving Pattern (ϕ), ϑ = 0°

f=600 MHz,TEM



f=1800 MHz,R22

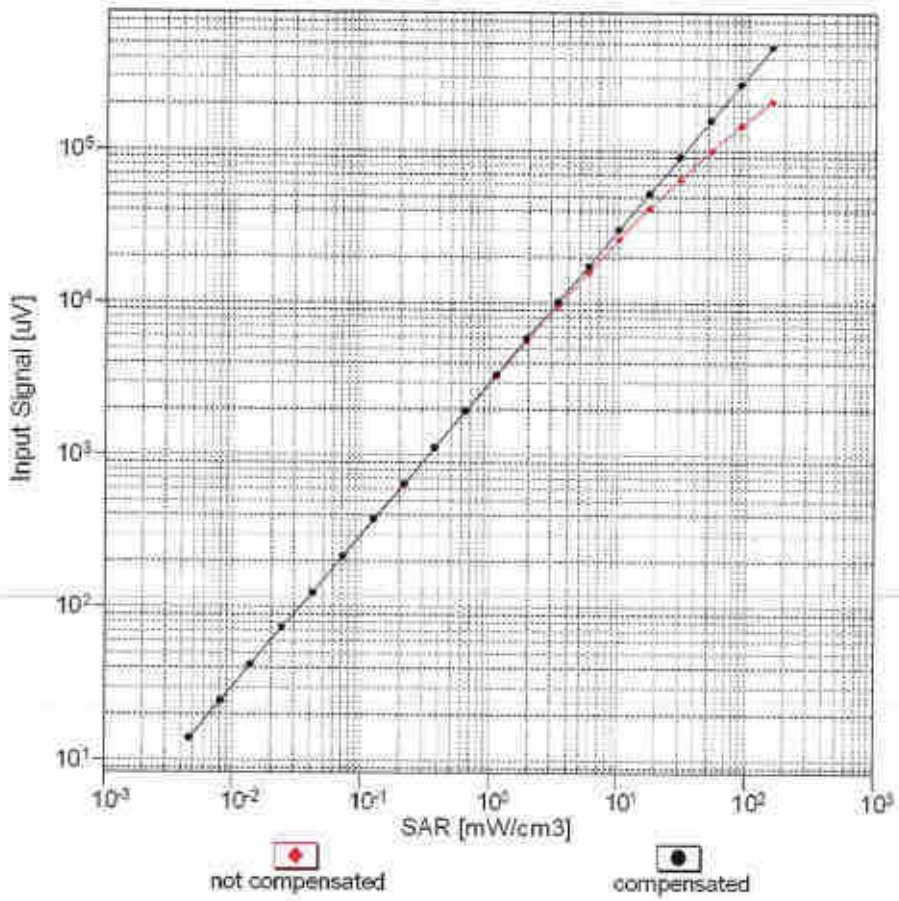


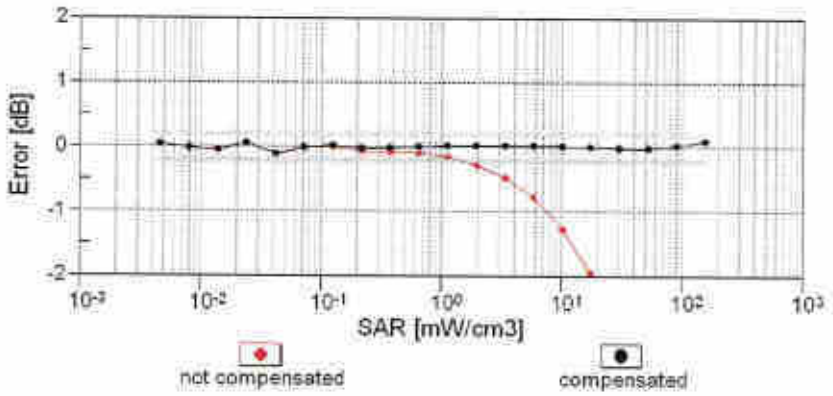


Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

Dynamic Range f(SAR_{head})

(TEM cell , f_{eval}= 1900 MHz)

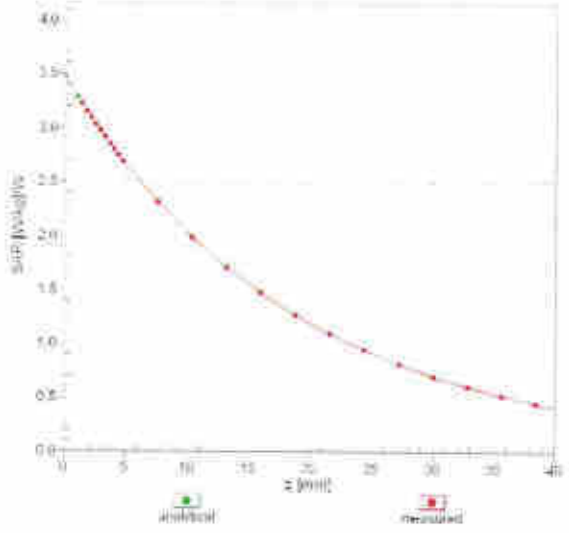




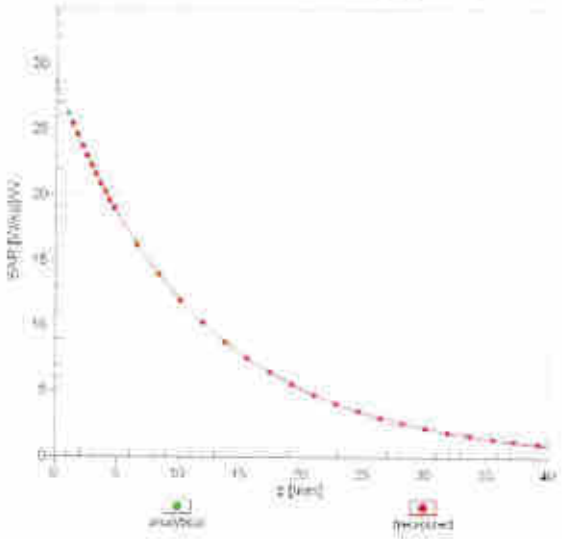
Uncertainty of Linearity Assessment: ± 0.6% (k=2)

Conversion Factor Assessment

f = 835 MHz,WGLS R9 (H_convF)

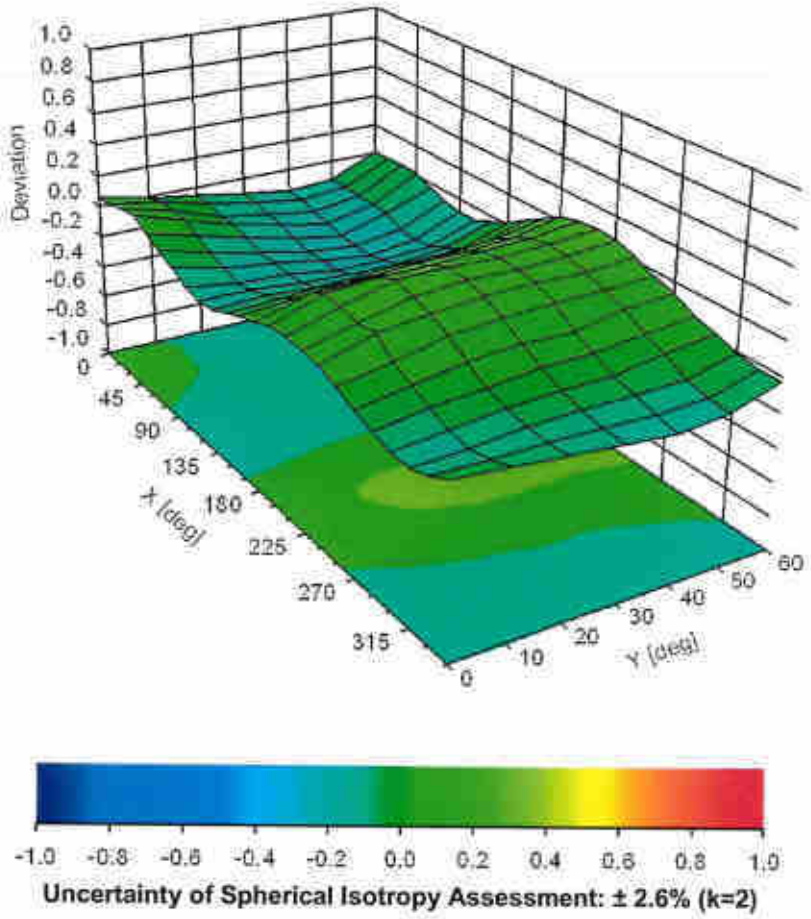


f = 1900 MHz,WGLS R22 (H_convF)



Deviation from Isotropy in Liquid

Error (ϕ, ϑ), f = 900 MHz



Uncertainty of Spherical Isotropy Assessment: ± 2.6% (k=2)

Appendix: Modulation Calibration Parameters

UID	Rev	Communication System Name	Group	PAR (dB)	Unc[E] (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 %
10026	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	3.55	± 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	± 9.6 %
10110	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-FDD	5.75	± 9.6 %
10111	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-FDD	6.44	± 9.6 %
10112	CAG	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-FDD	6.59	± 9.6 %
10113	CAG	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-FDD	6.62	± 9.6 %
10114	CAC	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	WLAN	8.10	± 9.6 %
10115	CAC	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	WLAN	8.46	± 9.6 %
10116	CAC	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	WLAN	8.15	± 9.6 %
10117	CAC	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	WLAN	8.07	± 9.6 %
10118	CAC	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	WLAN	8.59	± 9.6 %
10119	CAC	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	WLAN	8.13	± 9.6 %
10140	CAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-FDD	6.49	± 9.6 %
10141	CAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-FDD	6.53	± 9.6 %
10142	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10143	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-FDD	6.35	± 9.6 %
10144	CAE	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-FDD	6.65	± 9.6 %
10145	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-FDD	5.76	± 9.6 %
10146	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.41	± 9.6 %
10147	CAF	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.72	± 9.6 %
10149	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	± 9.6 %
10150	CAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	± 9.6 %
10151	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-TDD	9.28	± 9.6 %
10152	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-TDD	9.92	± 9.6 %
10153	CAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-TDD	10.05	± 9.6 %
10154	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-FDD	5.75	± 9.6 %
10155	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10156	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-FDD	5.79	± 9.6 %
10157	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-FDD	6.49	± 9.6 %
10158	CAG	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-FDD	6.62	± 9.6 %
10159	CAG	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-FDD	6.56	± 9.6 %
10160	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-FDD	5.82	± 9.6 %
10161	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-FDD	6.43	± 9.6 %
10162	CAE	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-FDD	6.58	± 9.6 %
10166	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-FDD	5.46	± 9.6 %
10167	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.21	± 9.6 %
10168	CAF	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.79	± 9.6 %
10169	CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10170	CAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10171	AAE	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-FDD	6.49	± 9.6 %
10172	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-TDD	9.21	± 9.6 %
10173	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-TDD	9.48	± 9.6 %
10174	CAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-TDD	10.25	± 9.6 %
10175	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10176	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10177	CAI	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10178	CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10179	CAG	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10180	CAG	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10181	CAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-FDD	5.72	± 9.6 %
10182	CAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10183	AAD	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10184	CAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10185	CAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-FDD	6.51	± 9.6 %
10186	AAE	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10187	CAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-FDD	5.73	± 9.6 %
10188	CAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.52	± 9.6 %
10189	AAF	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.50	± 9.6 %
10193	CAC	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	WLAN	8.09	± 9.6 %
10194	CAC	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	WLAN	8.12	± 9.6 %
10195	CAC	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	WLAN	8.21	± 9.6 %
10196	CAC	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	WLAN	8.10	± 9.6 %
10197	CAC	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	WLAN	8.13	± 9.6 %
10198	CAC	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	WLAN	8.27	± 9.6 %
10219	CAC	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	WLAN	8.03	± 9.6 %

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

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

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

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

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

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

10736	AAA	IEEE 802.11ax (80MHz, MCS5, 99pc dc)	WLAN	8.27	± 9.6 %
10737	AAA	IEEE 802.11ax (80MHz, MCS6, 99pc dc)	WLAN	8.36	± 9.6 %
10738	AAA	IEEE 802.11ax (80MHz, MCS7, 99pc dc)	WLAN	8.42	± 9.6 %
10739	AAA	IEEE 802.11ax (80MHz, MCS8, 99pc dc)	WLAN	8.29	± 9.6 %
10740	AAA	IEEE 802.11ax (80MHz, MCS9, 99pc dc)	WLAN	8.48	± 9.6 %
10741	AAA	IEEE 802.11ax (80MHz, MCS10, 99pc dc)	WLAN	8.40	± 9.6 %
10742	AAA	IEEE 802.11ax (80MHz, MCS11, 99pc dc)	WLAN	8.43	± 9.6 %
10743	AAA	IEEE 802.11ax (160MHz, MCS0, 90pc dc)	WLAN	8.94	± 9.6 %
10744	AAA	IEEE 802.11ax (160MHz, MCS1, 90pc dc)	WLAN	9.16	± 9.6 %
10745	AAA	IEEE 802.11ax (160MHz, MCS2, 90pc dc)	WLAN	8.93	± 9.6 %
10746	AAA	IEEE 802.11ax (160MHz, MCS3, 90pc dc)	WLAN	9.11	± 9.6 %
10747	AAA	IEEE 802.11ax (160MHz, MCS4, 90pc dc)	WLAN	9.04	± 9.6 %
10748	AAA	IEEE 802.11ax (160MHz, MCS5, 90pc dc)	WLAN	8.93	± 9.6 %
10749	AAA	IEEE 802.11ax (160MHz, MCS6, 90pc dc)	WLAN	8.90	± 9.6 %
10750	AAA	IEEE 802.11ax (160MHz, MCS7, 90pc dc)	WLAN	8.79	± 9.6 %
10751	AAA	IEEE 802.11ax (160MHz, MCS8, 90pc dc)	WLAN	8.82	± 9.6 %
10752	AAA	IEEE 802.11ax (160MHz, MCS9, 90pc dc)	WLAN	8.81	± 9.6 %
10753	AAA	IEEE 802.11ax (160MHz, MCS10, 90pc dc)	WLAN	9.00	± 9.6 %
10754	AAA	IEEE 802.11ax (160MHz, MCS11, 90pc dc)	WLAN	8.94	± 9.6 %
10755	AAA	IEEE 802.11ax (160MHz, MCS0, 99pc dc)	WLAN	8.64	± 9.6 %
10756	AAA	IEEE 802.11ax (160MHz, MCS1, 99pc dc)	WLAN	8.77	± 9.6 %
10757	AAA	IEEE 802.11ax (160MHz, MCS2, 99pc dc)	WLAN	8.77	± 9.6 %
10758	AAA	IEEE 802.11ax (160MHz, MCS3, 99pc dc)	WLAN	8.69	± 9.6 %
10759	AAA	IEEE 802.11ax (160MHz, MCS4, 99pc dc)	WLAN	8.58	± 9.6 %
10760	AAA	IEEE 802.11ax (160MHz, MCS5, 99pc dc)	WLAN	8.49	± 9.6 %
10761	AAA	IEEE 802.11ax (160MHz, MCS6, 99pc dc)	WLAN	8.58	± 9.6 %
10762	AAA	IEEE 802.11ax (160MHz, MCS7, 99pc dc)	WLAN	8.49	± 9.6 %
10763	AAA	IEEE 802.11ax (160MHz, MCS8, 99pc dc)	WLAN	8.53	± 9.6 %
10764	AAA	IEEE 802.11ax (160MHz, MCS9, 99pc dc)	WLAN	8.54	± 9.6 %
10765	AAA	IEEE 802.11ax (160MHz, MCS10, 99pc dc)	WLAN	8.54	± 9.6 %
10766	AAA	IEEE 802.11ax (160MHz, MCS11, 99pc dc)	WLAN	8.51	± 9.6 %
10767	AAC	5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	7.99	± 9.6 %
10768	AAC	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.01	± 9.6 %
10769	AAC	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.01	± 9.6 %
10770	AAC	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	± 9.6 %
10771	AAC	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	± 9.6 %
10772	AAC	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.23	± 9.6 %
10773	AAC	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.03	± 9.6 %
10774	AAC	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	± 9.6 %
10775	AAB	5G NR (CP-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.31	± 9.6 %
10776	AAC	5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.30	± 9.6 %
10777	AAB	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.30	± 9.6 %
10778	AAC	5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.34	± 9.6 %
10779	AAB	5G NR (CP-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.42	± 9.6 %
10780	AAC	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.38	± 9.6 %
10781	AAC	5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.38	± 9.6 %
10782	AAC	5G NR (CP-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.43	± 9.6 %
10783	AAC	5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.31	± 9.6 %
10784	AAC	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.29	± 9.6 %
10785	AAC	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.40	± 9.6 %
10786	AAC	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.35	± 9.6 %
10787	AAC	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.44	± 9.6 %
10788	AAC	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.39	± 9.6 %
10789	AAC	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.37	± 9.6 %
10790	AAC	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.39	± 9.6 %
10791	AAC	5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.83	± 9.6 %
10792	AAC	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.92	± 9.6 %
10793	AAC	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.95	± 9.6 %
10794	AAC	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.82	± 9.6 %
10795	AAC	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.84	± 9.6 %
10796	AAC	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.82	± 9.6 %
10797	AAC	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.01	± 9.6 %
10798	AAC	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.89	± 9.6 %
10799	AAC	5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.93	± 9.6 %

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

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

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

Full Power for ANT1

GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.14	31.97	31.68	33.50	23.14	22.97	22.68	24.50
GPRS 1 Tx slot	32.12	31.96	31.66	33.50	23.12	22.96	22.66	24.50
GPRS 2 Tx slots	28.78	28.80	28.65	30.50	22.78	22.80	22.65	24.50
GPRS 3 Tx slots	27.01	26.94	26.87	28.70	22.75	22.68	22.61	24.44
GPRS 4 Tx slots	25.17	25.54	25.08	27.00	22.17	22.54	22.08	24.00
EDGE 1 Tx slot	26.01	25.90	25.57	27.50	17.01	16.90	16.57	18.50
EDGE 2 Tx slots	22.87	22.67	22.65	24.50	16.87	16.67	16.65	18.50
EDGE 3 Tx slots	20.93	20.88	20.86	22.70	16.67	16.62	16.60	18.44
EDGE 4 Tx slots	19.51	19.43	19.02	21.00	16.51	16.43	16.02	18.00

GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	29.70	29.64	29.55	31.00	20.70	20.64	20.55	22.00
GPRS 1 Tx slot	29.68	29.70	29.58	31.00	20.68	20.70	20.58	22.00
GPRS 2 Tx slots	26.41	26.38	26.49	27.50	20.41	20.38	20.49	21.50
GPRS 3 Tx slots	24.56	24.36	24.76	25.70	20.30	20.10	20.50	21.44
GPRS 4 Tx slots	23.14	23.02	23.32	24.50	20.14	20.02	20.32	21.50
EDGE 1 Tx slot	25.81	25.52	25.63	26.50	16.81	16.52	16.63	17.50
EDGE 2 Tx slots	22.35	22.44	22.50	23.50	16.35	16.44	16.50	17.50
EDGE 3 Tx slots	20.90	20.54	20.70	21.70	16.64	16.28	16.44	17.44
EDGE 4 Tx slots	19.16	18.79	19.08	20.50	16.16	15.79	16.08	17.50

Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	23.50	23.53	23.25	25.00	23.36	23.50	23.40	25.00	23.54	23.60	23.52	25.00
3GPP Rel 99	RMC 12.2Kbps	23.55	23.56	23.26	25.00	23.48	23.51	23.46	25.00	23.56	23.62	23.53	25.00
3GPP Rel 6	HSDPA Subtest-1	22.89	22.70	22.67	24.00	22.78	22.86	22.94	24.00	22.99	23.06	23.06	24.00
3GPP Rel 6	HSDPA Subtest-2	22.82	22.70	22.63	24.00	22.75	22.84	22.85	24.00	22.95	23.04	23.06	24.00
3GPP Rel 6	HSDPA Subtest-3	22.33	22.43	22.21	23.50	22.34	22.45	22.43	23.50	22.67	22.67	22.76	23.50
3GPP Rel 6	HSDPA Subtest-4	22.45	22.36	22.32	23.50	22.20	22.34	22.45	23.50	22.78	22.77	22.87	23.50
3GPP Rel 8	DC-HSDPA Subtest-1	22.86	22.68	22.66	24.00	22.76	22.85	22.91	24.00	22.98	23.03	23.04	24.00
3GPP Rel 8	DC-HSDPA Subtest-2	22.79	22.68	22.62	24.00	22.73	22.83	22.82	24.00	22.94	23.01	23.04	24.00
3GPP Rel 8	DC-HSDPA Subtest-3	22.30	22.41	22.20	23.50	22.32	22.44	22.40	23.50	22.66	22.64	22.74	23.50
3GPP Rel 8	DC-HSDPA Subtest-4	22.42	22.34	22.31	23.50	22.18	22.33	22.42	23.50	22.77	22.74	22.85	23.50
3GPP Rel 6	HSUPA Subtest-1	22.71	22.48	22.44	24.00	22.52	22.58	22.65	24.00	22.76	22.80	22.79	24.00
3GPP Rel 6	HSUPA Subtest-2	20.64	20.46	20.44	22.00	20.54	20.57	20.61	22.00	20.70	20.76	20.84	22.00
3GPP Rel 6	HSUPA Subtest-3	21.69	21.48	21.46	23.00	21.55	21.57	21.69	23.00	21.75	21.79	21.79	23.00
3GPP Rel 6	HSUPA Subtest-4	20.67	20.45	20.43	22.00	20.50	20.54	20.67	22.00	20.78	20.82	20.79	22.00
3GPP Rel 6	HSUPA Subtest-5	22.70	22.50	22.50	24.00	22.50	22.60	22.60	24.00	22.80	22.80	22.80	24.00

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Band 2 (1900MHz Band)
Part 24E

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				18700	18900	19100		
Frequency (MHz)				1860	1880	1900		
20	QPSK	1	0	23.78	23.96	23.68		
20	QPSK	1	49	23.79	23.83	23.73	25.5	0
20	QPSK	1	99	23.80	23.70	23.66		
20	QPSK	50	0	22.84	22.93	22.75		
20	QPSK	50	24	22.81	22.88	22.73	24.5	1
20	QPSK	50	50	22.91	22.81	22.81		
20	QPSK	100	0	22.89	22.90	22.74		
20	16QAM	1	0	23.01	23.12	23.14		
20	16QAM	1	49	23.22	23.21	23.09	24.5	1
20	16QAM	1	99	23.18	23.09	22.87		
20	16QAM	50	0	21.98	22.02	21.84		
20	16QAM	50	24	21.95	22.01	21.84	23.5	2
20	16QAM	50	50	22.01	21.98	21.88		
20	16QAM	100	0	22.00	21.91	21.78		
20	64QAM	1	0	22.39	22.48	22.37		
20	64QAM	1	49	22.51	22.52	22.36	23.5	2
20	64QAM	1	99	22.38	22.52	22.30		
20	64QAM	50	0	21.38	21.42	21.25		
20	64QAM	50	24	21.38	21.44	21.29	22.5	3
20	64QAM	50	50	21.47	21.37	21.31		
20	64QAM	100	0	21.45	21.41	21.23		
Channel				18675	18900	19125	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1857.5	1880	1902.5		
15	QPSK	1	0	23.92	23.56	23.92		
15	QPSK	1	37	23.82	23.91	23.76	25.5	0
15	QPSK	1	74	23.80	23.91	23.88		
15	QPSK	36	0	22.99	23.14	23.03		
15	QPSK	36	20	22.94	23.14	22.93	24.5	1
15	QPSK	36	39	22.94	23.10	22.91		
15	QPSK	75	0	22.95	23.09	22.88		
15	16QAM	1	0	23.20	23.21	23.14		
15	16QAM	1	37	23.06	23.16	22.99	24.5	1
15	16QAM	1	74	23.03	23.10	22.96		
15	16QAM	36	0	22.12	22.28	22.15		
15	16QAM	36	20	22.20	22.30	22.06	23.5	2
15	16QAM	36	39	22.09	22.27	22.06		
15	16QAM	75	0	22.08	22.24	22.00		
15	64QAM	1	0	22.51	22.48	22.20		
15	64QAM	1	37	22.23	22.24	22.05	23.5	2
15	64QAM	1	74	22.31	22.19	22.13		
15	64QAM	36	0	21.28	21.43	21.20		
15	64QAM	36	20	21.35	21.49	21.20	22.5	3
15	64QAM	36	39	21.23	21.42	21.20		
15	64QAM	75	0	21.22	21.39	21.15		
Channel				18650	18900	19150	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1855	1880	1905		
10	QPSK	1	0	23.55	23.78	23.95		
10	QPSK	1	25	23.88	23.94	23.93	25.5	0
10	QPSK	1	49	23.93	23.67	23.89		
10	QPSK	25	0	22.98	23.15	22.90		
10	QPSK	25	12	23.02	23.20	22.97	24.5	1
10	QPSK	25	25	22.81	23.10	22.93		
10	QPSK	50	0	22.85	23.01	22.94		
10	16QAM	1	0	23.18	23.20	22.94		
10	16QAM	1	25	23.13	23.19	23.00	24.5	1
10	16QAM	1	49	23.11	23.18	22.98		
10	16QAM	25	0	22.18	22.34	22.08		
10	16QAM	25	12	22.11	22.29	22.05	23.5	2
10	16QAM	25	25	22.10	22.31	22.15		
10	16QAM	50	0	22.01	22.31	22.01		
10	64QAM	1	0	22.34	22.39	22.10		
10	64QAM	1	25	22.19	22.38	22.16	23.5	2
10	64QAM	1	49	22.26	22.34	22.11		
10	64QAM	25	0	21.29	21.49	21.12		
10	64QAM	25	12	21.35	21.43	21.19	22.5	3
10	64QAM	25	25	21.23	21.45	21.19		
10	64QAM	50	0	21.11	21.47	21.07		
Channel				18625	18900	19175	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1852.5	1880	1907.5		
5	QPSK	1	0	23.95	23.77	23.88		
5	QPSK	1	12	23.87	23.66	23.92	25.5	0
5	QPSK	1	24	23.67	23.56	23.67		
5	QPSK	12	0	23.06	23.18	22.95		
5	QPSK	12	7	23.12	23.00	23.01	24.5	1
5	QPSK	12	13	22.96	23.06	22.96		
5	QPSK	25	0	22.92	23.16	22.96		
5	16QAM	1	0	23.18	23.06	22.92		
5	16QAM	1	12	23.18	23.10	23.02	24.5	1
5	16QAM	1	24	23.03	23.19	22.98		
5	16QAM	12	0	22.23	22.26	22.15		
5	16QAM	12	7	22.19	22.31	22.13	23.5	2
5	16QAM	12	13	22.25	22.21	22.01		
5	16QAM	25	0	22.24	22.37	22.01		
5	64QAM	1	0	22.27	22.35	22.37		
5	64QAM	1	12	22.33	22.47	22.45	23.5	2
5	64QAM	1	24	22.19	22.35	22.33		
5	64QAM	12	0	21.29	21.44	21.14		
5	64QAM	12	7	21.35	21.38	21.22	22.5	3
5	64QAM	12	13	21.31	21.34	21.15		
5	64QAM	25	0	21.37	21.41	21.21		
Channel				18615	18900	19185	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1851.5	1880	1908.5		
3	QPSK	1	0	23.94	23.87	23.83		
3	QPSK	1	8	23.78	23.90	23.94	25.5	0
3	QPSK	1	14	23.65	23.67	23.86		
3	QPSK	8	0	22.95	22.92	22.92		
3	QPSK	8	4	23.01	22.91	22.89	24.5	1
3	QPSK	8	7	22.96	22.98	22.77		
3	QPSK	15	0	22.96	23.02	22.83		
3	16QAM	1	0	22.92	23.01	22.93		
3	16QAM	1	8	23.02	23.13	22.95	24.5	1
3	16QAM	1	14	22.98	23.20	22.91		
3	16QAM	8	0	22.23	22.23	22.04		
3	16QAM	8	4	22.19	22.24	22.14	23.5	2
3	16QAM	8	7	22.25	22.38	22.09		
3	16QAM	15	0	22.24	22.20	22.17		
3	64QAM	1	0	22.27	22.35	22.04		
3	64QAM	1	8	22.33	22.43	22.41	23.5	2
3	64QAM	1	14	22.19	22.29	22.09		
3	64QAM	8	0	21.29	21.14	21.26		
3	64QAM	8	4	21.35	21.44	21.35	22.5	3
3	64QAM	8	7	21.31	21.20	21.23		
3	64QAM	15	0	21.37	21.29	21.20		
Channel				18607	18900	19193	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1850.7	1880	1909.3		
1.4	QPSK	1	0	23.84	23.72	23.73		
1.4	QPSK	1	3	23.83	23.80	23.83		
1.4	QPSK	1	5	23.86	23.81	23.71	25.5	0
1.4	QPSK	3	0	23.82	23.77	23.78		
1.4	QPSK	3	1	23.84	23.79	23.83		
1.4	QPSK	3	3	23.81	23.82	23.72		
1.4	QPSK	6	0	22.86	22.82	22.87	24.5	1
1.4	16QAM	1	0	22.95	22.81	22.60		
1.4	16QAM	1	3	22.88	22.90	22.73		
1.4	16QAM	1	5	22.74	22.83	22.67	24.5	1
1.4	16QAM	3	0	22.96	22.96	22.84		
1.4	16QAM	3	1	23.01	23.08	22.85		
1.4	16QAM	3	3	22.95	23.00	22.80		
1.4	16QAM	6	0	21.98	21.83	21.84	23.5	2
1.4	64QAM	1	0	22.14	22.16	22.06		
1.4	64QAM	1	3	22.14	22.35	22.09		
1.4	64QAM	1	5	22.09	22.18	22.00	23.5	2
1.4	64QAM	3	0	21.98	22.02	21.83		
1.4	64QAM	3	1	22.03	22.06	21.95		
1.4	64QAM	3	3	21.99	22.00	21.84		
1.4	64QAM	6	0	21.07	21.10	20.99	22.5	3

Band 4 (AWS Band)
Part 27L (only on channel required)

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				20050	20175	20300		
Frequency (MHz)				1720	1732.5	1745		
20	QPSK	1	0	23.89	24.08	24.01		
20	QPSK	1	49	23.98	23.74	23.78	25.5	0
20	QPSK	1	99	23.99	23.77	23.84		
20	QPSK	50	0	22.67	22.89	22.85		
20	QPSK	50	24	22.71	22.88	22.84	24.5	1
20	QPSK	50	50	22.62	22.83	22.82		
20	QPSK	100	0	22.64	22.84	22.83		
20	16QAM	1	0	22.94	23.14	23.12		
20	16QAM	1	49	22.93	23.15	23.03	24.5	1
20	16QAM	1	99	23.05	23.00	23.10		
20	16QAM	50	0	21.77	21.90	21.92		
20	16QAM	50	24	21.77	22.01	21.95	23.5	2
20	16QAM	50	50	21.77	21.97	21.89		
20	16QAM	100	0	21.76	21.93	21.89		
20	64QAM	1	0	21.85	21.95	22.15		
20	64QAM	1	49	21.91	22.12	22.12	23.5	2
20	64QAM	1	99	21.98	22.09	22.25		
20	64QAM	50	0	20.88	20.97	21.05		
20	64QAM	50	24	20.89	21.07	21.02	22.5	3
20	64QAM	50	50	20.88	21.03	21.01		
20	64QAM	100	0	20.83	21.08	21.05		
Channel				20025	20175	20325	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1717.5	1732.5	1747.5		
15	QPSK	1	0	23.95	24.02	24.07		
15	QPSK	1	37	23.78	24.00	24.02	25.5	0
15	QPSK	1	74	23.91	23.99	23.80		
15	QPSK	36	0	22.98	23.10	23.01		
15	QPSK	36	20	22.92	23.06	22.99	24.5	1
15	QPSK	36	39	22.89	23.04	22.96		
15	QPSK	75	0	22.96	22.98	22.96		
15	16QAM	1	0	23.47	23.64	23.64		
15	16QAM	1	37	23.31	23.70	23.50	24.5	1
15	16QAM	1	74	23.41	23.41	23.50		
15	16QAM	36	0	22.07	22.18	22.19		
15	16QAM	36	20	22.09	22.26	22.17	23.5	2
15	16QAM	36	39	22.07	22.11	22.15		
15	16QAM	75	0	22.00	22.13	22.11		
15	64QAM	1	0	22.50	22.58	22.68		
15	64QAM	1	37	22.36	22.71	22.62	23.5	2
15	64QAM	1	74	22.50	22.49	22.51		
15	64QAM	36	0	21.15	21.18	21.20		
15	64QAM	36	20	21.10	21.25	21.19	22.5	3
15	64QAM	36	39	21.07	21.11	21.16		
15	64QAM	75	0	21.15	21.28	21.17		
Channel				20000	20175	20350	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1715	1732.5	1750		
10	QPSK	1	0	24.00	24.04	23.95		
10	QPSK	1	25	23.90	23.93	24.01	25.5	0
10	QPSK	1	49	23.81	23.88	23.93		
10	QPSK	25	0	22.99	23.07	23.00		
10	QPSK	25	12	22.94	23.08	23.03	24.5	1
10	QPSK	25	25	22.90	23.03	22.94		
10	QPSK	50	0	23.02	23.06	22.99		
10	16QAM	1	0	23.43	23.51	23.53		
10	16QAM	1	25	23.49	23.63	23.56	24.5	1
10	16QAM	1	49	23.37	23.62	23.42		
10	16QAM	25	0	22.14	22.22	22.15		
10	16QAM	25	12	22.11	22.14	22.11	23.5	2
10	16QAM	25	25	22.07	22.09	22.10		
10	16QAM	50	0	22.05	22.11	22.16		
10	64QAM	1	0	22.44	22.33	22.34		
10	64QAM	1	25	22.40	22.38	22.15	23.5	2
10	64QAM	1	49	22.40	22.25	21.95		
10	64QAM	25	0	21.17	21.13	21.19		
10	64QAM	25	12	21.13	21.28	21.12	22.5	3
10	64QAM	25	25	21.08	21.23	21.13		
10	64QAM	50	0	21.04	21.23	21.10		
Channel				19975	20175	20375	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1712.5	1732.5	1752.5		
5	QPSK	1	0	23.90	24.01	23.95		
5	QPSK	1	12	23.93	23.92	23.96	25.5	0
5	QPSK	1	24	23.83	23.96	23.94		
5	QPSK	12	0	22.95	23.06	22.98		
5	QPSK	12	7	22.93	22.97	23.06	24.5	1
5	QPSK	12	13	22.92	23.04	22.91		
5	QPSK	25	0	22.95	23.03	22.87		
5	16QAM	1	0	23.30	23.56	23.50		
5	16QAM	1	12	23.08	23.42	23.45	24.5	1
5	16QAM	1	24	23.41	23.53	23.40		
5	16QAM	12	0	22.11	22.23	22.15		
5	16QAM	12	7	22.10	22.27	22.10	23.5	2
5	16QAM	12	13	22.08	22.22	22.08		
5	16QAM	25	0	22.01	22.09	22.04		
5	64QAM	1	0	22.09	22.22	22.07		
5	64QAM	1	12	22.04	22.16	22.15	23.5	2
5	64QAM	1	24	21.92	22.17	22.05		
5	64QAM	12	0	21.03	21.21	21.01		
5	64QAM	12	7	21.05	21.23	21.18	22.5	3
5	64QAM	12	13	21.05	21.18	21.06		
5	64QAM	25	0	20.95	21.12	21.10		
Channel				19965	20175	20385	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1711.5	1732.5	1753.5		
3	QPSK	1	0	23.85	23.91	23.87		
3	QPSK	1	8	23.84	23.84	23.85	25.5	0
3	QPSK	1	14	23.80	23.86	23.89		
3	QPSK	8	0	22.88	23.05	22.98		
3	QPSK	8	4	22.99	23.02	23.03	24.5	1
3	QPSK	8	7	22.84	22.95	23.01		
3	QPSK	15	0	22.88	23.03	22.92		
3	16QAM	1	0	23.38	23.52	23.47		
3	16QAM	1	8	23.37	23.59	23.45	24.5	1
3	16QAM	1	14	23.33	23.39	23.34		
3	16QAM	8	0	22.06	22.21	22.16		
3	16QAM	8	4	22.08	22.21	22.21	23.5	2
3	16QAM	8	7	21.99	22.22	22.17		
3	16QAM	15	0	22.04	22.10	22.09		
3	64QAM	1	0	21.92	22.06	22.06		
3	64QAM	1	8	22.05	22.12	22.09	23.5	2
3	64QAM	1	14	21.94	22.28	22.02		
3	64QAM	8	0	21.01	21.16	21.09		
3	64QAM	8	4	21.04	21.15	21.03	22.5	3
3	64QAM	8	7	21.06	21.05	21.01		
3	64QAM	15	0	21.07	21.23	21.12		
Channel				19957	20175	20393	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1710.7	1732.5	1754.3		
1.4	QPSK	1	0	23.80	23.85	23.82		
1.4	QPSK	1	3	23.90	24.01	23.95		
1.4	QPSK	1	5	23.83	23.93	23.84	25.5	0
1.4	QPSK	3	0	23.91	23.92	23.88		
1.4	QPSK	3	1	23.91	23.95	23.96		
1.4	QPSK	3	3	23.85	24.00	23.85		
1.4	QPSK	6	0	22.95	23.03	22.95	24.5	1
1.4	16QAM	1	0	23.20	23.25	23.22		
1.4	16QAM	1	3	23.21	23.44	23.36		
1.4	16QAM	1	5	23.19	23.39	23.30	24.5	1
1.4	16QAM	3	0	22.81	23.14	22.88		
1.4	16QAM	3	1	22.87	23.06	22.92		
1.4	16QAM	3	3	22.96	23.01	23.01		
1.4	16QAM	6	0	22.13	22.12	22.13	23.5	2
1.4	64QAM	1	0	22.00	22.23	22.11		
1.4	64QAM	1	3	22.09	22.20	22.23		
1.4	64QAM	1	5	21.94	22.12	22.03	23.5	2
1.4	64QAM	3	0	22.12	22.23	22.19		
1.4	64QAM	3	1	22.18	22.39	22.13		
1.4	64QAM	3	3	22.14	22.32	22.24		
1.4	64QAM	6	0	21.04	21.08	21.02	22.5	3

Band 5 (Celluar Band)
Part 22H(only on channel required)

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				20450	20525	20600		
Frequency (MHz)				829	836.5	844		
10	QPSK	1	0	23.98	24.04	23.91		
10	QPSK	1	25	23.79	23.96	23.89	25.5	0
10	QPSK	1	49	23.69	23.78	23.80		
10	QPSK	25	0	22.93	23.05	22.97		
10	QPSK	25	12	22.87	22.98	22.94	24.5	1
10	QPSK	25	25	22.81	22.96	22.89		
10	QPSK	50	0	22.87	23.01	22.93		
10	16QAM	1	0	23.00	23.14	23.27		
10	16QAM	1	25	23.07	23.25	23.17	24.5	1
10	16QAM	1	49	22.97	22.98	22.96		
10	16QAM	25	0	21.92	22.08	22.03		
10	16QAM	25	12	21.89	22.07	21.99	23.5	2
10	16QAM	25	25	21.86	22.01	21.96		
10	16QAM	50	0	21.88	22.05	22.00		
10	64QAM	1	0	21.91	22.08	22.18		
10	64QAM	1	25	21.99	22.09	22.02	23.5	2
10	64QAM	1	49	21.86	21.91	21.98		
10	64QAM	25	0	20.97	21.06	21.05		
10	64QAM	25	12	20.91	21.11	21.01	22.5	3
10	64QAM	25	25	20.89	21.00	20.95		
10	64QAM	50	0	20.91	21.04	21.00		
Channel				20425	20525	20625	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				826.5	836.5	846.5		
5	QPSK	1	0	23.90	23.94	24.01		
5	QPSK	1	12	24.03	24.01	23.90	25.5	0
5	QPSK	1	24	23.82	23.93	23.93		
5	QPSK	12	0	22.97	23.06	22.93		
5	QPSK	12	7	23.07	23.07	22.95	24.5	1
5	QPSK	12	13	23.04	23.02	22.89		
5	QPSK	25	0	23.05	23.05	22.94		
5	16QAM	1	0	23.15	23.15	23.26		
5	16QAM	1	12	23.25	23.25	23.12	24.5	1
5	16QAM	1	24	23.05	23.23	23.13		
5	16QAM	12	0	22.02	22.09	21.98		
5	16QAM	12	7	22.12	22.12	21.99	23.5	2
5	16QAM	12	13	22.08	22.10	21.97		
5	16QAM	25	0	22.08	22.10	21.98		
5	64QAM	1	0	22.27	22.31	22.35		
5	64QAM	1	12	22.40	22.40	22.24	23.5	2
5	64QAM	1	24	22.19	22.38	22.30		
5	64QAM	12	0	21.22	21.32	21.19		
5	64QAM	12	7	21.34	21.32	21.24	22.5	3
5	64QAM	12	13	21.27	21.25	21.18		
5	64QAM	25	0	21.31	21.32	21.21		
Channel				20415	20525	20635	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				825.5	836.5	847.5		
3	QPSK	1	0	23.91	23.95	23.88		
3	QPSK	1	8	23.85	23.99	23.96	25.5	0
3	QPSK	1	14	24.00	23.98	23.94		
3	QPSK	8	0	22.97	23.04	22.92		
3	QPSK	8	4	22.98	23.04	22.94	24.5	1
3	QPSK	8	7	23.01	23.03	22.98		
3	QPSK	15	0	23.04	23.04	22.92		
3	16QAM	1	0	23.12	23.17	23.08		
3	16QAM	1	8	23.14	23.25	23.20	24.5	1
3	16QAM	1	14	23.18	23.18	23.14		
3	16QAM	8	0	22.03	22.15	21.99		
3	16QAM	8	4	22.08	22.14	22.02	23.5	2
3	16QAM	8	7	22.10	22.10	22.06		
3	16QAM	15	0	22.11	22.12	22.01		
3	64QAM	1	0	22.25	22.31	22.26		
3	64QAM	1	8	22.26	22.39	22.31	23.5	2
3	64QAM	1	14	22.36	22.38	22.32		
3	64QAM	8	0	21.22	21.34	21.19		
3	64QAM	8	4	21.26	21.35	21.19	22.5	3
3	64QAM	8	7	21.28	21.30	21.25		
3	64QAM	15	0	21.30	21.32	21.23		
Channel				20407	20525	20643	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				824.7	836.5	848.3		
1.4	QPSK	1	0	23.80	23.93	23.91		
1.4	QPSK	1	3	23.87	23.97	23.99		
1.4	QPSK	1	5	23.79	23.90	23.86	25.5	0
1.4	QPSK	3	0	23.85	23.96	23.91		
1.4	QPSK	3	1	23.88	24.00	23.97		
1.4	QPSK	3	3	23.87	23.96	23.93		
1.4	QPSK	6	0	22.86	22.95	22.96	24.5	1
1.4	16QAM	1	0	23.04	23.13	23.07		
1.4	16QAM	1	3	23.12	23.24	23.13		
1.4	16QAM	1	5	23.04	23.12	23.09	24.5	1
1.4	16QAM	3	0	22.88	22.99	22.94		
1.4	16QAM	3	1	22.94	23.06	23.00		
1.4	16QAM	3	3	22.84	23.00	22.94		
1.4	16QAM	6	0	21.99	22.08	22.06	23.5	2
1.4	64QAM	1	0	22.15	22.30	22.22		
1.4	64QAM	1	3	22.20	22.37	22.24		
1.4	64QAM	1	5	22.12	22.31	22.26	23.5	2
1.4	64QAM	3	0	22.10	22.22	22.19		
1.4	64QAM	3	1	22.18	22.30	22.25		
1.4	64QAM	3	3	22.11	22.23	22.20		
1.4	64QAM	6	0	21.17	21.25	21.22	22.5	3

Band 7 (2600MHz Band) Part 27

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				20850	21100	21350		
Frequency (MHz)				2510	2535	2560		
20	QPSK	1	0	23.76	23.87	23.60	25.5	0
20	QPSK	1	49	23.66	23.77	23.69		
20	QPSK	1	99	23.74	23.56	23.60		
20	QPSK	50	0	22.58	22.60	22.59	24.5	1
20	QPSK	50	24	22.52	22.57	22.51		
20	QPSK	50	50	22.51	22.58	22.55		
20	QPSK	100	0	22.56	22.58	22.51		
20	16QAM	1	0	22.73	22.78	22.93	24.5	1
20	16QAM	1	49	22.68	22.81	22.99		
20	16QAM	1	99	22.59	22.73	22.90		
20	16QAM	50	0	21.58	21.73	21.71	23.5	2
20	16QAM	50	24	21.57	21.71	21.75		
20	16QAM	50	50	21.65	21.64	21.82		
20	16QAM	100	0	21.54	21.68	21.73		
20	64QAM	1	0	21.75	21.57	21.55	23.5	2
20	64QAM	1	49	21.70	21.66	21.56		
20	64QAM	1	99	21.69	21.80	21.57		
20	64QAM	50	0	20.72	20.79	20.81	22.5	3
20	64QAM	50	24	20.67	20.78	20.92		
20	64QAM	50	50	20.59	20.81	20.96		
20	64QAM	100	0	20.67	20.76	20.85		
Channel				20825	21100	21375	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2507.5	2535	2562.5		
15	QPSK	1	0	23.70	23.86	23.81	25.5	0
15	QPSK	1	37	23.69	23.83	23.87		
15	QPSK	1	74	23.83	23.67	23.66		
15	QPSK	36	0	22.85	22.84	22.99	24.5	1
15	QPSK	36	20	22.89	22.95	22.95		
15	QPSK	36	39	22.73	22.93	22.99		
15	QPSK	75	0	22.83	22.93	22.94		
15	16QAM	1	0	22.97	23.15	23.16	24.5	1
15	16QAM	1	37	22.96	23.14	23.16		
15	16QAM	1	74	23.15	23.33	23.19		
15	16QAM	36	0	21.97	21.93	22.06	23.5	2
15	16QAM	36	20	21.97	22.07	22.05		
15	16QAM	36	39	21.83	22.07	22.05		
15	16QAM	75	0	21.95	21.98	22.09		
15	64QAM	1	0	21.96	22.08	22.16	23.5	2
15	64QAM	1	37	21.92	22.02	22.10		
15	64QAM	1	74	22.01	22.22	22.08		
15	64QAM	36	0	21.01	21.03	21.02	22.5	3
15	64QAM	36	20	21.01	21.05	21.11		
15	64QAM	36	39	20.86	21.06	21.10		
15	64QAM	75	0	21.06	21.03	21.12		
Channel				20800	21100	21400	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2505	2535	2565		
10	QPSK	1	0	23.59	23.67	23.79	25.5	0
10	QPSK	1	25	23.75	23.74	23.78		
10	QPSK	1	49	23.70	23.78	23.81		
10	QPSK	25	0	22.85	22.84	22.92	24.5	1
10	QPSK	25	12	22.84	22.87	22.93		
10	QPSK	25	25	22.87	22.86	22.93		
10	QPSK	50	0	22.88	22.89	22.92		
10	16QAM	1	0	22.90	23.34	23.09	24.5	1
10	16QAM	1	25	23.38	23.12	23.12		
10	16QAM	1	49	23.27	23.24	23.07		
10	16QAM	25	0	21.94	22.02	21.99	23.5	2
10	16QAM	25	12	21.98	22.06	22.02		
10	16QAM	25	25	22.03	22.05	22.06		
10	16QAM	50	0	22.01	22.05	22.01		
10	64QAM	1	0	21.65	22.03	22.07	23.5	2
10	64QAM	1	25	21.94	22.10	22.00		
10	64QAM	1	49	21.93	22.01	22.01		
10	64QAM	25	0	20.89	20.91	20.96	22.5	3
10	64QAM	25	12	20.94	21.05	21.00		
10	64QAM	25	25	20.99	20.94	21.04		
10	64QAM	50	0	20.97	20.94	20.97		
Channel				20775	21100	21425	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2502.5	2535	2567.5		
5	QPSK	1	0	23.76	23.74	23.71	25.5	0
5	QPSK	1	12	23.80	23.72	23.81		
5	QPSK	1	24	23.78	23.71	23.74		
5	QPSK	12	0	22.85	22.82	22.84	24.5	1
5	QPSK	12	7	22.93	22.88	22.89		
5	QPSK	12	13	22.92	22.86	22.87		
5	QPSK	25	0	22.99	22.78	22.92		
5	16QAM	1	0	23.05	23.10	23.02	24.5	1
5	16QAM	1	12	23.12	23.11	23.06		
5	16QAM	1	24	23.07	23.14	23.04		
5	16QAM	12	0	21.99	21.91	21.96	23.5	2
5	16QAM	12	7	22.01	21.97	21.93		
5	16QAM	12	13	22.03	21.92	22.04		
5	16QAM	25	0	22.04	22.03	22.02		
5	64QAM	1	0	22.01	22.04	22.09	23.5	2
5	64QAM	1	12	21.96	22.22	22.28		
5	64QAM	1	24	22.01	21.84	22.00		
5	64QAM	12	0	20.90	20.88	21.01	22.5	3
5	64QAM	12	7	20.91	21.06	21.00		
5	64QAM	12	13	20.91	21.00	20.89		
5	64QAM	25	0	20.91	20.97	20.96		

Band 12

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				23060	23095	23130		
Frequency (MHz)				704	707.5	711		
10	QPSK	1	0	23.61	23.88	23.71	25	0
10	QPSK	1	25	23.65	23.72	23.69		
10	QPSK	1	49	23.76	23.72	23.76		
10	QPSK	25	0	22.74	22.85	22.71	24	1
10	QPSK	25	12	22.83	22.82	22.76		
10	QPSK	25	25	22.80	22.78	22.74		
10	QPSK	50	0	22.82	22.83	22.76		
10	16QAM	1	0	22.81	22.90	23.00	24	1
10	16QAM	1	25	22.95	23.02	22.98		
10	16QAM	1	49	23.05	22.96	22.98		
10	16QAM	25	0	21.76	21.89	21.82	23	2
10	16QAM	25	12	21.93	21.89	21.84		
10	16QAM	25	25	21.86	21.83	21.79		
10	16QAM	50	0	21.85	21.86	21.81		
10	64QAM	1	0	21.83	21.93	22.01	23	2
10	64QAM	1	25	21.97	22.05	22.01		
10	64QAM	1	49	22.04	21.99	22.00		
10	64QAM	25	0	20.87	20.98	20.92	22	3
10	64QAM	25	12	21.00	20.99	20.92		
10	64QAM	25	25	20.95	20.92	20.89		
10	64QAM	50	0	20.97	20.95	20.91		
Channel				23035	23095	23155	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				701.5	707.5	713.5		
5	QPSK	1	0	23.55	23.63	23.68	25	0
5	QPSK	1	12	23.65	23.73	23.73		
5	QPSK	1	24	23.64	23.69	23.73		
5	QPSK	12	0	22.72	22.74	22.72	24	1
5	QPSK	12	7	22.85	22.79	22.83		
5	QPSK	12	13	22.81	22.79	22.80		
5	QPSK	25	0	22.70	22.75	22.68		
5	16QAM	1	0	22.80	22.88	22.95	24	1
5	16QAM	1	12	22.95	23.01	23.04		
5	16QAM	1	24	22.95	23.04	22.97		
5	16QAM	12	0	21.81	21.86	21.76	23	2
5	16QAM	12	7	21.90	21.86	21.88		
5	16QAM	12	13	21.90	21.84	21.85		
5	16QAM	25	0	21.76	21.81	21.79		
5	64QAM	1	0	21.86	21.93	22.00	23	2
5	64QAM	1	12	21.99	22.04	22.04		
5	64QAM	1	24	21.99	22.01	21.98		
5	64QAM	12	0	20.89	20.92	20.86	22	3
5	64QAM	12	7	21.02	20.93	20.96		
5	64QAM	12	13	20.98	20.93	20.93		
5	64QAM	25	0	20.86	20.92	20.89		
Channel				23025	23095	23165	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				700.5	707.5	714.5		
3	QPSK	1	0	23.55	23.63	23.62	25	0
3	QPSK	1	8	23.50	23.63	23.67		
3	QPSK	1	14	23.60	23.70	23.69		
3	QPSK	8	0	22.64	22.80	22.82	24	1
3	QPSK	8	4	22.73	22.78	22.88		
3	QPSK	8	7	22.71	22.80	22.82		
3	QPSK	15	0	22.68	22.77	22.73		
3	16QAM	1	0	22.74	22.88	22.96	24	1
3	16QAM	1	8	22.74	22.99	22.95		
3	16QAM	1	14	22.93	22.93	22.86		
3	16QAM	8	0	21.70	21.86	21.90	23	2
3	16QAM	8	4	21.89	21.95	21.94		
3	16QAM	8	7	21.86	21.87	21.79		
3	16QAM	15	0	21.72	21.91	21.88		
3	64QAM	1	0	21.81	22.04	22.04	23	2
3	64QAM	1	8	21.77	21.92	22.00		
3	64QAM	1	14	21.86	21.98	21.95		
3	64QAM	8	0	20.80	20.98	21.01	22	3
3	64QAM	8	4	20.98	21.06	21.05		
3	64QAM	8	7	20.97	20.98	21.00		
3	64QAM	15	0	20.77	20.87	20.93		
Channel				23017	23095	23173	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				699.7	707.5	715.3		
1.4	QPSK	1	0	23.62	23.64	23.65	25	0
1.4	QPSK	1	3	23.53	23.65	23.68		
1.4	QPSK	1	5	23.63	23.65	23.63		
1.4	QPSK	3	0	23.72	23.70	23.70		
1.4	QPSK	3	1	23.71	23.71	23.65		
1.4	QPSK	3	3	23.68	23.67	23.66		
1.4	QPSK	6	0	22.71	22.75	22.76	#VALUE!	0~1
1.4	16QAM	1	0	22.79	22.86	22.79	#VALUE!	0~1
1.4	16QAM	1	3	22.92	22.95	22.82		
1.4	16QAM	1	5	23.10	22.78	22.77		
1.4	16QAM	3	0	22.84	22.80	22.79		
1.4	16QAM	3	1	22.82	22.83	22.81		
1.4	16QAM	3	3	22.82	22.84	22.78		
1.4	16QAM	6	0	21.90	21.80	21.83	#VALUE!	0~2
1.4	64QAM	1	0	22.17	22.29	22.23	#VALUE!	0~2
1.4	64QAM	1	3	22.20	22.19	22.18		
1.4	64QAM	1	5	22.19	22.12	22.24		
1.4	64QAM	3	0	22.10	22.09	22.01		
1.4	64QAM	3	1	22.17	22.13	22.12		
1.4	64QAM	3	3	22.07	22.15	22.09		
1.4	64QAM	6	0	21.26	21.22	21.14	#VALUE!	0~3

Band 17

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				23780	23790	23800		
Frequency (MHz)				709	710	711		
10	QPSK	1	0	23.74	23.86	23.68	25	0
10	QPSK	1	25	23.71	23.64	23.53		
10	QPSK	1	49	23.75	23.64	23.6		
10	QPSK	25	0	22.86	22.96	22.81	24	1
10	QPSK	25	12	22.89	22.79	22.77		
10	QPSK	25	25	22.87	22.73	22.75		
10	QPSK	50	0	22.67	22.78	22.77		
10	16QAM	1	0	22.91	22.82	22.75	24	1
10	16QAM	1	25	23.13	22.94	22.83		
10	16QAM	1	49	22.97	22.87	22.88		
10	16QAM	25	0	21.92	21.84	21.78	23	2
10	16QAM	25	12	22.04	21.87	21.86		
10	16QAM	25	25	22.01	21.81	21.84		
10	16QAM	50	0	22.04	21.85	21.8		
10	64QAM	1	0	21.81	21.66	21.58	23	2
10	64QAM	1	25	22.02	21.85	21.74		
10	64QAM	1	49	21.87	21.79	21.81		
10	64QAM	25	0	21.01	20.93	20.87	22	3
10	64QAM	25	12	21.13	20.96	20.95		
10	64QAM	25	25	21.09	20.91	20.93		
10	64QAM	50	0	21.14	20.96	20.91		
Channel				23755	23790	23825	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				706.5	710	713.5		
5	QPSK	1	0	23.46	23.62	23.68	25	0
5	QPSK	1	12	23.51	23.70	23.63		
5	QPSK	1	24	23.68	23.53	23.80		
5	QPSK	12	0	22.78	22.83	22.90	24	1
5	QPSK	12	7	22.74	22.83	22.91		
5	QPSK	12	13	22.82	22.76	22.87		
5	QPSK	25	0	22.75	22.74	22.87		
5	16QAM	1	0	22.78	22.85	22.90	24	1
5	16QAM	1	12	22.74	22.91	22.85		
5	16QAM	1	24	22.99	22.84	22.86		
5	16QAM	12	0	21.81	21.84	21.91	23	2
5	16QAM	12	7	21.86	21.94	21.93		
5	16QAM	12	13	21.94	21.88	21.90		
5	16QAM	25	0	21.75	21.84	21.88		
5	64QAM	1	0	21.71	21.76	21.81	23	2
5	64QAM	1	12	21.64	21.83	21.77		
5	64QAM	1	24	21.82	21.75	21.79		
5	64QAM	12	0	20.85	20.87	20.94	22	3
5	64QAM	12	7	20.91	20.88	20.96		
5	64QAM	12	13	20.98	20.91	20.93		
5	64QAM	25	0	20.86	20.84	20.97		

Band 26 for FCC

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				26765	26865	26965		
Frequency (MHz)				821.5	831.5	841.5		
15	QPSK	1	0	24.31	24.35	24.24	25.5	0
15	QPSK	1	37	24.29	24.27	24.26		
15	QPSK	1	74	24.17	24.15	24.12		
15	QPSK	36	0	23.34	23.38	23.27	24.5	1
15	QPSK	36	20	23.36	23.36	23.27		
15	QPSK	36	39	23.24	23.28	23.27		
15	QPSK	75	0	23.32	23.33	23.24		
15	16QAM	1	0	23.53	23.49	23.48	24.5	1
15	16QAM	1	37	23.52	23.50	23.47		
15	16QAM	1	74	23.44	23.38	23.27		
15	16QAM	36	0	22.38	22.41	22.31	23.5	2
15	16QAM	36	20	22.40	22.42	22.31		
15	16QAM	36	39	22.32	22.35	22.30		
15	16QAM	75	0	22.36	22.41	22.29		
15	64QAM	1	0	22.59	22.49	22.48	23.5	2
15	64QAM	1	37	22.53	22.55	22.50		
15	64QAM	1	74	22.44	22.38	22.28		
15	64QAM	36	0	21.51	21.51	21.41	22.5	3
15	64QAM	36	20	21.49	21.52	21.39		
15	64QAM	36	39	21.40	21.43	21.37		
15	64QAM	75	0	21.46	21.48	21.37		
Channel				26740	26865	26990	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				819	831.5	844		
10	QPSK	1	0	24.25	24.22	24.16	25.5	0
10	QPSK	1	25	24.18	24.22	24.20		
10	QPSK	1	49	24.23	24.18	24.15		
10	QPSK	25	0	23.38	23.39	23.25	24.5	1
10	QPSK	25	12	23.38	23.38	23.33		
10	QPSK	25	25	23.33	23.31	23.26		
10	QPSK	50	0	23.37	23.37	23.21		
10	16QAM	1	0	23.55	23.49	23.39	24.5	1
10	16QAM	1	25	23.42	23.49	23.43		
10	16QAM	1	49	23.50	23.39	23.28		
10	16QAM	25	0	22.43	22.46	22.27	23.5	2
10	16QAM	25	12	22.42	22.43	22.38		
10	16QAM	25	25	22.40	22.34	22.30		
10	16QAM	50	0	22.43	22.40	22.26		
10	64QAM	1	0	22.57	22.47	22.42	23.5	2
10	64QAM	1	25	22.48	22.53	22.45		
10	64QAM	1	49	22.51	22.42	22.32		
10	64QAM	25	0	21.52	21.54	21.38	22.5	3
10	64QAM	25	12	21.53	21.51	21.50		
10	64QAM	25	25	21.47	21.45	21.40		
10	64QAM	50	0	21.51	21.49	21.35		
Channel				26715	26865	27015	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				816.5	831.5	846.5		
5	QPSK	1	0	24.32	24.21	24.23	25.5	0
5	QPSK	1	12	24.31	24.22	24.19		
5	QPSK	1	24	24.21	24.25	24.28		
5	QPSK	12	0	23.38	23.35	23.24	24.5	1
5	QPSK	12	7	23.40	23.38	23.26		
5	QPSK	12	13	23.36	23.29	23.24		
5	QPSK	25	0	23.38	23.31	23.27		
5	16QAM	1	0	23.59	23.41	23.45	24.5	1
5	16QAM	1	12	23.55	23.50	23.38		
5	16QAM	1	24	23.45	23.44	23.37		
5	16QAM	12	0	22.41	22.39	22.31	23.5	2
5	16QAM	12	7	22.44	22.39	22.32		
5	16QAM	12	13	22.39	22.35	22.27		
5	16QAM	25	0	22.40	22.38	22.29		
5	64QAM	1	0	22.55	22.47	22.46	23.5	2
5	64QAM	1	12	22.56	22.51	22.41		
5	64QAM	1	24	22.44	22.48	22.38		
5	64QAM	12	0	21.51	21.46	21.39	22.5	3
5	64QAM	12	7	21.52	21.45	21.40		
5	64QAM	12	13	21.47	21.44	21.35		
5	64QAM	25	0	21.52	21.48	21.38		
Channel				26705	26865	27025	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				815.5	831.5	847.5		
3	QPSK	1	0	24.34	24.20	24.19	25.5	0
3	QPSK	1	8	24.29	24.20	24.17		
3	QPSK	1	14	24.32	24.25	24.29		
3	QPSK	8	0	23.36	23.31	23.22	24.5	1
3	QPSK	8	4	23.42	23.32	23.26		
3	QPSK	8	7	23.38	23.29	23.23		
3	QPSK	15	0	23.38	23.34	23.27		
3	16QAM	1	0	23.53	23.46	23.37	24.5	1
3	16QAM	1	8	23.56	23.53	23.30		
3	16QAM	1	14	23.54	23.44	23.36		
3	16QAM	8	0	22.41	22.40	22.30	23.5	2
3	16QAM	8	4	22.45	22.43	22.32		
3	16QAM	8	7	22.43	22.36	22.25		
3	16QAM	15	0	22.45	22.39	22.33		
3	64QAM	1	0	22.57	22.42	22.40	23.5	2
3	64QAM	1	8	22.54	22.48	22.34		
3	64QAM	1	14	22.54	22.46	22.42		
3	64QAM	8	0	21.47	21.47	21.37	22.5	3
3	64QAM	8	4	21.52	21.49	21.35		
3	64QAM	8	7	21.50	21.43	21.31		
3	64QAM	15	0	21.52	21.47	21.41		
Channel				26697	26865	27033	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				814.7	831.5	848.3		
1.4	QPSK	1	0	24.25	24.22	24.16	25.5	0
1.4	QPSK	1	3	24.34	24.27	24.21		
1.4	QPSK	1	5	24.26	24.14	24.25		
1.4	QPSK	3	0	24.33	24.25	24.16		
1.4	QPSK	3	1	24.31	24.30	24.26		
1.4	QPSK	3	3	24.31	24.25	24.17		
1.4	QPSK	6	0	23.35	23.30	23.22	#VALUE!	0~1
1.4	16QAM	1	0	23.49	23.46	23.29	#VALUE!	0~1
1.4	16QAM	1	3	23.59	23.54	23.31		
1.4	16QAM	1	5	23.50	23.40	23.32		
1.4	16QAM	3	0	23.33	23.28	23.12		
1.4	16QAM	3	1	23.38	23.33	23.16		
1.4	16QAM	3	3	23.31	23.27	23.10		
1.4	16QAM	6	0	22.46	22.41	22.34	#VALUE!	0~2
1.4	64QAM	1	0	22.50	22.50	22.34	#VALUE!	0~2
1.4	64QAM	1	3	22.53	22.52	22.35		
1.4	64QAM	1	5	22.53	22.42	22.39		
1.4	64QAM	3	0	22.43	22.38	22.27		
1.4	64QAM	3	1	22.51	22.45	22.31		
1.4	64QAM	3	3	22.47	22.39	22.25		
1.4	64QAM	6	0	21.46	21.42	21.35	#VALUE!	0~3

Band 66

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				132072	132322	132572		
Frequency (MHz)				1720	1745	1770		
20	QPSK	1	0	24.21	24.25	24.01	25.5	0
20	QPSK	1	49	24.16	23.76	23.86		
20	QPSK	1	99	24.02	23.77	23.90		
20	QPSK	50	0	23.21	23.35	23.15	24.5	1
20	QPSK	50	24	23.22	23.22	23.07		
20	QPSK	50	50	23.11	23.15	22.99		
20	QPSK	100	0	23.19	23.20	23.08		
20	16QAM	1	0	23.58	23.39	23.59	24.5	1
20	16QAM	1	49	23.32	23.51	23.49		
20	16QAM	1	99	23.50	23.46	23.21		
20	16QAM	50	0	22.44	22.33	22.31	23.5	2
20	16QAM	50	24	22.34	22.41	22.37		
20	16QAM	50	50	22.23	22.35	22.18		
20	16QAM	100	0	22.18	22.26	22.26		
20	64QAM	1	0	22.16	22.34	22.32	23.5	2
20	64QAM	1	49	22.45	22.24	22.31		
20	64QAM	1	99	22.22	22.17	22.01		
20	64QAM	50	0	21.48	21.59	21.46	22.5	3
20	64QAM	50	24	21.42	21.56	21.52		
20	64QAM	50	50	21.32	21.50	21.35		
20	64QAM	100	0	21.40	21.54	21.45		
Channel				132047	132322	132597	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1717.5	1745	1772.5		
15	QPSK	1	0	24.23	24.23	24.24	25.5	0
15	QPSK	1	37	23.94	24.12	24.08		
15	QPSK	1	74	23.87	24.09	24.08		
15	QPSK	36	0	23.21	23.17	23.19	24.5	1
15	QPSK	36	20	23.23	23.19	23.10		
15	QPSK	36	39	23.17	23.18	23.05		
15	QPSK	75	0	23.14	23.19	23.09		
15	16QAM	1	0	23.62	23.54	23.54	24.5	1
15	16QAM	1	37	23.57	23.46	23.54		
15	16QAM	1	74	23.41	23.45	23.37		
15	16QAM	36	0	22.43	22.40	22.21	23.5	2
15	16QAM	36	20	22.44	22.45	22.26		
15	16QAM	36	39	22.22	22.34	22.21		
15	16QAM	75	0	22.21	22.26	22.35		
15	64QAM	1	0	22.39	22.46	22.40	23.5	2
15	64QAM	1	37	22.33	22.15	22.09		
15	64QAM	1	74	22.38	22.35	22.02		
15	64QAM	36	0	21.31	21.32	21.25	22.5	3
15	64QAM	36	20	21.47	21.36	21.40		
15	64QAM	36	39	21.32	21.36	21.24		
15	64QAM	75	0	21.38	21.25	21.25		
Channel				132022	132322	132622	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1715	1745	1775		
10	QPSK	1	0	23.92	24.17	24.15	25.5	0
10	QPSK	1	25	24.10	24.05	24.10		
10	QPSK	1	49	24.01	23.96	23.98		
10	QPSK	25	0	23.22	23.27	23.12	24.5	1
10	QPSK	25	12	23.13	23.11	23.07		
10	QPSK	25	25	23.07	23.15	23.03		
10	QPSK	50	0	23.16	23.27	23.13		
10	16QAM	1	0	23.51	23.53	23.32	24.5	1
10	16QAM	1	25	23.53	23.43	23.40		
10	16QAM	1	49	23.46	23.44	23.27		
10	16QAM	25	0	22.28	22.34	22.27	23.5	2
10	16QAM	25	12	22.33	22.31	22.25		
10	16QAM	25	25	22.29	22.35	22.23		
10	16QAM	50	0	22.36	22.44	22.34		
10	64QAM	1	0	22.44	22.43	22.45	23.5	2
10	64QAM	1	25	22.24	22.42	22.27		
10	64QAM	1	49	22.26	22.31	22.01		
10	64QAM	25	0	21.25	21.48	21.20	22.5	3
10	64QAM	25	12	21.30	21.33	21.29		
10	64QAM	25	25	21.27	21.27	21.07		
10	64QAM	50	0	21.22	21.35	21.16		
Channel				131997	132322	132647	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1712.5	1745	1777.5		
5	QPSK	1	0	24.19	24.03	24.00	25.5	0
5	QPSK	1	12	24.13	24.08	24.00		
5	QPSK	1	24	23.94	23.96	24.04		
5	QPSK	12	0	23.10	23.17	23.10	24.5	1
5	QPSK	12	7	23.24	23.16	23.11		
5	QPSK	12	13	23.08	23.12	22.99		
5	QPSK	25	0	23.13	23.01	22.98		
5	16QAM	1	0	23.75	23.87	23.77	24.5	1
5	16QAM	1	12	23.72	23.73	23.68		
5	16QAM	1	24	23.74	23.83	23.67		
5	16QAM	12	0	22.30	22.27	22.30	23.5	2
5	16QAM	12	7	22.23	22.29	22.26		
5	16QAM	12	13	22.31	22.26	22.16		
5	16QAM	25	0	22.35	22.23	22.23		
5	64QAM	1	0	22.72	22.65	22.75	23.5	2
5	64QAM	1	12	22.80	22.69	22.63		
5	64QAM	1	24	22.81	22.56	22.52		
5	64QAM	12	0	21.23	21.16	21.10	22.5	3
5	64QAM	12	7	21.28	21.06	21.12		
5	64QAM	12	13	21.03	21.03	21.04		
5	64QAM	25	0	21.38	21.30	21.11		
Channel				131987	132322	132657	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1711.5	1745	1778.5		
3	QPSK	1	0	24.13	24.07	24.01	25.5	0
3	QPSK	1	8	24.11	24.02	24.09		
3	QPSK	1	14	24.03	24.15	23.97		
3	QPSK	8	0	23.17	23.12	23.14	24.5	1
3	QPSK	8	4	23.12	23.12	23.08		
3	QPSK	8	7	23.13	23.08	22.98		
3	QPSK	15	0	23.10	23.04	22.94		
3	16QAM	1	0	23.62	23.75	23.66	24.5	1
3	16QAM	1	8	23.72	23.68	23.63		
3	16QAM	1	14	23.60	23.56	23.54		
3	16QAM	8	0	22.35	22.31	22.17	23.5	2
3	16QAM	8	4	22.45	22.34	22.31		
3	16QAM	8	7	22.34	22.30	22.16		
3	16QAM	15	0	22.32	22.36	22.16		
3	64QAM	1	0	22.10	22.10	22.08	23.5	2
3	64QAM	1	8	22.26	22.10	22.01		
3	64QAM	1	14	22.08	22.01	21.97		
3	64QAM	8	0	21.14	21.08	21.06	22.5	3
3	64QAM	8	4	21.12	21.09	21.01		
3	64QAM	8	7	21.14	21.05	21.02		
3	64QAM	15	0	21.20	21.20	21.08		
Channel				131979	132322	132665	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1710.7	1745	1779.3		
1.4	QPSK	1	0	24.03	23.97	23.85	25.5	0
1.4	QPSK	1	3	24.07	24.08	24.04		
1.4	QPSK	1	5	24.01	24.08	23.79		
1.4	QPSK	3	0	24.04	24.04	23.96		
1.4	QPSK	3	1	24.08	24.04	24.05		
1.4	QPSK	3	3	24.14	24.07	24.02		
1.4	QPSK	6	0	23.15	23.02	23.06	#VALUE!	0~1
1.4	16QAM	1	0	23.60	23.56	23.63	#VALUE!	0~1
1.4	16QAM	1	3	23.69	23.76	23.67		
1.4	16QAM	1	5	23.61	23.54	23.53		
1.4	16QAM	3	0	23.32	23.19	23.19		
1.4	16QAM	3	1	23.27	23.22	23.20		
1.4	16QAM	3	3	23.22	23.23	23.27		
1.4	16QAM	6	0	22.50	22.40	22.34	#VALUE!	0~2
1.4	64QAM	1	0	22.30	22.37	22.19	#VALUE!	0~2
1.4	64QAM	1	3	22.44	22.34	22.40		
1.4	64QAM	1	5	22.29	22.25	22.27		
1.4	64QAM	3	0	22.28	22.30	22.21		
1.4	64QAM	3	1	22.33	22.33	22.31		
1.4	64QAM	3	3	22.27	22.22	22.18		
1.4	64QAM	6	0	21.32	21.39	21.34	#VALUE!	0~3

Band 38(only on channel required)

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				37850	38000	38150		
Frequency (MHz)				2580	2595	2610		
20	QPSK	1	0	23.86	23.97	23.86	25.5	0
20	QPSK	1	49	23.63	23.82	23.81		
20	QPSK	1	99	23.53	23.69	23.60		
20	QPSK	50	0	22.75	22.84	22.83	24.5	1
20	QPSK	50	24	22.69	22.81	22.80		
20	QPSK	50	50	22.61	22.83	22.75		
20	QPSK	100	0	22.78	22.88	22.79		
20	16QAM	1	0	23.15	22.92	23.00	24.5	1
20	16QAM	1	49	22.88	22.97	22.94		
20	16QAM	1	99	22.76	22.81	22.72		
20	16QAM	50	0	22.05	21.97	21.95	23.5	2
20	16QAM	50	24	21.93	22.02	21.92		
20	16QAM	50	50	21.85	21.94	21.83		
20	16QAM	100	0	22.00	21.98	21.88		
20	64QAM	1	0	21.70	21.51	21.59	23.5	2
20	64QAM	1	49	21.76	21.56	21.56		
20	64QAM	1	99	21.66	21.67	21.66		
20	64QAM	50	0	21.02	20.95	20.91	22.5	3
20	64QAM	50	24	20.89	21.00	20.89		
20	64QAM	50	50	20.81	20.91	20.85		
20	64QAM	100	0	20.96	20.99	20.87		
Channel				37825	38000	38175	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2577.5	2595	2612.5		
15	QPSK	1	0	23.92	23.82	23.81	25.5	0
15	QPSK	1	37	23.92	23.82	23.77		
15	QPSK	1	74	23.81	23.79	23.85		
15	QPSK	36	0	23.00	22.97	22.84	24.5	1
15	QPSK	36	20	23.04	22.90	22.85		
15	QPSK	36	39	23.06	22.87	22.78		
15	QPSK	75	0	23.14	22.98	23.01		
15	16QAM	1	0	23.04	23.09	22.78	24.5	1
15	16QAM	1	37	23.00	22.91	22.86		
15	16QAM	1	74	23.09	23.07	23.03		
15	16QAM	36	0	22.09	21.91	21.87	23.5	2
15	16QAM	36	20	22.07	22.04	21.98		
15	16QAM	36	39	21.98	21.91	21.92		
15	16QAM	75	0	22.08	22.06	22.00		
15	64QAM	1	0	21.94	21.90	21.80	23.5	2
15	64QAM	1	37	21.67	21.90	21.55		
15	64QAM	1	74	21.87	21.76	21.63		
15	64QAM	36	0	21.16	20.98	20.94	22.5	3
15	64QAM	36	20	21.22	21.01	21.05		
15	64QAM	36	39	21.13	20.98	20.99		
15	64QAM	75	0	21.22	21.09	20.93		
Channel				37800	38000	38200	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2575	2595	2615		
10	QPSK	1	0	23.92	23.88	23.86	25.5	0
10	QPSK	1	25	23.75	23.87	23.81		
10	QPSK	1	49	23.80	23.74	23.76		
10	QPSK	25	0	22.93	22.84	22.82	24.5	1
10	QPSK	25	12	22.98	22.86	22.75		
10	QPSK	25	25	22.98	22.82	22.77		
10	QPSK	50	0	22.97	22.95	22.91		
10	16QAM	1	0	23.23	22.88	22.83	24.5	1
10	16QAM	1	25	23.02	22.97	22.73		
10	16QAM	1	49	23.02	23.00	22.80		
10	16QAM	25	0	22.02	22.03	22.02	23.5	2
10	16QAM	25	12	22.17	21.97	21.88		
10	16QAM	25	25	22.06	22.11	21.86		
10	16QAM	50	0	22.14	21.94	21.99		
10	64QAM	1	0	21.80	21.87	21.73	23.5	2
10	64QAM	1	25	21.60	21.76	21.52		
10	64QAM	1	49	21.82	21.62	21.61		
10	64QAM	25	0	21.00	20.92	21.00	22.5	3
10	64QAM	25	12	21.05	21.05	20.87		
10	64QAM	25	25	21.14	21.00	20.85		
10	64QAM	50	0	21.11	21.10	20.87		
Channel				37775	38000	38225	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2572.5	2595	2617.5		
5	QPSK	1	0	23.96	23.62	23.61	25.5	0
5	QPSK	1	12	23.92	23.93	23.75		
5	QPSK	1	24	23.86	23.73	23.70		
5	QPSK	12	0	23.07	22.93	22.68	24.5	1
5	QPSK	12	7	22.99	22.86	22.79		
5	QPSK	12	13	22.95	23.02	22.74		
5	QPSK	25	0	22.94	23.00	22.83		
5	16QAM	1	0	23.10	22.81	22.69	24.5	1
5	16QAM	1	12	22.99	23.03	22.78		
5	16QAM	1	24	22.98	22.89	22.76		
5	16QAM	12	0	22.10	21.98	21.81	23.5	2
5	16QAM	12	7	22.03	22.01	21.92		
5	16QAM	12	13	21.99	21.97	21.88		
5	16QAM	25	0	22.13	21.92	21.94		
5	64QAM	1	0	21.92	21.74	21.63	23.5	2
5	64QAM	1	12	21.99	21.62	21.59		
5	64QAM	1	24	21.97	21.70	21.57		
5	64QAM	12	0	21.13	20.91	20.85	22.5	3
5	64QAM	12	7	21.06	20.95	20.88		
5	64QAM	12	13	21.11	20.99	20.81		
5	64QAM	25	0	21.11	20.99	20.91		

Band 41 (2.6G Band)

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.	Tune-up limit (dBm)	MPR (dB)
Channel				40240	40500	40770	41090		
Frequency (MHz)				2555	2581	2608	2640		
20	QPSK	1	0	23.74	23.80	23.98	23.88	25.5	0
20	QPSK	1	49	23.74	23.83	23.67	23.76		
20	QPSK	1	99	23.72	23.53	23.66	23.66		
20	QPSK	50	0	22.86	22.81	22.87	22.66	24.5	1
20	QPSK	50	24	22.85	22.79	22.76	22.62		
20	QPSK	50	50	22.79	22.72	22.64	22.56		
20	QPSK	100	0	22.82	22.77	22.83	22.59		
20	16QAM	1	0	22.89	22.96	22.88	22.87	24.5	1
20	16QAM	1	49	22.89	22.96	22.82	22.65		
20	16QAM	1	99	22.86	22.67	22.77	22.53		
20	16QAM	50	0	21.98	21.93	21.92	21.74	23.5	2
20	16QAM	50	24	21.94	21.90	21.85	21.71		
20	16QAM	50	50	21.89	21.85	21.78	21.67		
20	16QAM	100	0	21.90	21.90	21.85	21.69		
20	64QAM	1	0	21.66	21.58	21.65	21.50	23.5	2
20	64QAM	1	49	21.67	21.57	21.66	21.65		
20	64QAM	1	99	21.66	21.76	21.66	21.65		
20	64QAM	50	0	20.96	20.92	20.90	20.73	22.5	3
20	64QAM	50	24	20.94	20.92	20.84	20.72		
20	64QAM	50	50	20.89	20.82	20.78	20.64		
20	64QAM	100	0	20.92	20.88	20.84	20.66		
Channel				40215	40495	40785	41115	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2552.5	2580.5	2609.5	2642.5		
15	QPSK	1	0	23.77	23.63	23.83	23.70	25.5	0
15	QPSK	1	37	23.85	23.69	23.87	23.72		
15	QPSK	1	74	23.64	23.68	23.68	23.73		
15	QPSK	36	0	22.85	22.78	22.91	22.85	24.5	1
15	QPSK	36	20	22.97	22.77	22.99	22.80		
15	QPSK	36	39	22.89	22.76	22.93	22.81		
15	QPSK	75	0	22.99	22.79	23.05	22.86		
15	16QAM	1	0	22.97	22.96	22.99	22.99	24.5	1
15	16QAM	1	37	22.83	22.80	22.87	22.85		
15	16QAM	1	74	22.94	22.88	23.00	22.95		
15	16QAM	36	0	22.02	21.78	22.04	21.81	23.5	2
15	16QAM	36	20	21.90	21.93	21.94	21.98		
15	16QAM	36	39	21.83	21.72	21.89	21.79		
15	16QAM	75	0	22.01	21.93	22.03	21.96		
15	64QAM	1	0	22.09	22.11	22.13	22.16	23.5	2
15	64QAM	1	37	21.84	22.03	21.90	22.10		
15	64QAM	1	74	22.12	21.95	22.14	21.98		
15	64QAM	36	0	21.31	21.19	21.35	21.24	22.5	3
15	64QAM	36	20	21.39	21.14	21.45	21.21		
15	64QAM	36	39	21.38	21.17	21.40	21.20		
15	64QAM	75	0	21.37	21.30	21.41	21.35		
Channel				40190	40490	40790	41140	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2550	2580	2610	2645		
10	QPSK	1	0	23.75	23.77	23.79	23.82	25.5	0
10	QPSK	1	25	23.60	23.68	23.66	23.75		
10	QPSK	1	49	23.73	23.61	23.75	23.64		
10	QPSK	25	0	22.76	22.73	22.80	22.78	24.5	1
10	QPSK	25	12	22.83	22.67	22.89	22.74		
10	QPSK	25	25	22.91	22.69	22.93	22.72		
10	QPSK	50	0	22.80	22.84	22.84	22.89		
10	16QAM	1	0	23.08	22.69	23.14	22.76	24.5	1
10	16QAM	1	25	22.95	22.84	22.97	22.87		
10	16QAM	1	49	22.85	22.89	22.89	22.94		
10	16QAM	25	0	21.87	21.84	21.93	21.91	23.5	2
10	16QAM	25	12	22.10	21.84	22.12	21.87		
10	16QAM	25	25	21.89	22.00	21.93	22.05		
10	16QAM	50	0	21.99	21.75	22.05	21.82		
10	64QAM	1	0	22.05	22.06	22.07	22.09	23.5	2
10	64QAM	1	25	21.75	21.97	21.79	22.02		
10	64QAM	1	49	21.99	21.75	22.05	21.82		
10	64QAM	25	0	21.25	21.11	21.27	21.14	22.5	3
10	64QAM	25	12	21.20	21.26	21.24	21.31		
10	64QAM	25	25	21.31	21.13	21.37	21.20		
10	64QAM	50	0	21.36	21.29	21.38	21.32		
Channel				40165	40485	40805	41165	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2547.5	2579.5	2611.5	2647.50		
5	QPSK	1	0	23.89	23.65	23.91	23.52	25.5	0
5	QPSK	1	12	23.75	23.82	23.79	23.87		
5	QPSK	1	24	23.71	23.54	23.77	23.61		
5	QPSK	12	0	23.00	22.80	23.02	22.83	24.5	1
5	QPSK	12	7	22.82	22.75	22.86	22.80		
5	QPSK	12	13	22.80	22.83	22.86	22.90		
5	QPSK	25	0	22.87	22.87	22.89	22.90		
5	16QAM	1	0	22.93	22.70	22.97	22.75	24.5	1
5	16QAM	1	12	22.84	22.84	22.90	22.91		
5	16QAM	1	24	22.91	22.76	22.93	22.79		
5	16QAM	12	0	21.93	21.87	21.97	21.92	23.5	2
5	16QAM	12	7	21.88	21.82	21.94	21.89		
5	16QAM	12	13	21.92	21.84	21.94	21.87		
5	16QAM	25	0	21.96	21.81	22.00	21.86		
5	64QAM	1	0	22.09	21.87	22.15	21.94	23.5	2
5	64QAM	1	12	22.24	21.81	22.26	21.84		
5	64QAM	1	24	22.12	21.91	22.16	21.96		
5	64QAM	12	0	21.30	21.04	21.36	21.11	22.5	3
5	64QAM	12	7	21.31	21.14	21.33	21.17		
5	64QAM	12	13	21.26	21.20	21.30	21.25		
5	64QAM	25	0	21.28	21.12	21.34	21.19		

Full Power for ANT2

GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	32.68	32.51	32.22	34.00	23.68	23.51	23.22	25.00
GPRS 1 Tx slot	32.66	32.50	32.20	34.00	23.66	23.50	23.20	25.00
GPRS 2 Tx slots	29.53	29.54	29.06	31.00	23.53	23.54	23.06	25.00
GPRS 3 Tx slots	27.55	27.48	27.25	29.20	23.29	23.22	22.99	24.94
GPRS 4 Tx slots	25.71	26.08	25.62	27.50	22.71	23.08	22.62	24.50
EDGE 1 Tx slot	26.55	26.44	26.11	28.00	17.55	17.44	17.11	19.00
EDGE 2 Tx slots	23.41	23.21	23.12	25.00	17.41	17.21	17.12	19.00
EDGE 3 Tx slots	21.47	21.42	21.23	23.20	17.21	17.16	16.97	18.94
EDGE 4 Tx slots	20.05	19.97	19.56	21.50	17.05	16.97	16.56	18.50

GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	30.26	30.24	30.45	31.50	21.26	21.24	21.45	22.50
GPRS 1 Tx slot	30.25	30.43	30.42	31.50	21.25	21.43	21.42	22.50
GPRS 2 Tx slots	26.65	26.62	26.73	28.00	20.65	20.62	20.73	22.00
GPRS 3 Tx slots	24.80	24.60	25.00	26.20	20.54	20.34	20.74	21.94
GPRS 4 Tx slots	23.38	23.26	23.56	25.00	20.38	20.26	20.56	22.00
EDGE 1 Tx slot	26.05	25.76	25.87	27.00	17.05	16.76	16.87	18.00
EDGE 2 Tx slots	22.59	22.68	22.74	24.00	16.59	16.68	16.74	18.00
EDGE 3 Tx slots	21.14	20.78	20.94	22.20	16.88	16.52	16.68	17.94
EDGE 4 Tx slots	19.40	19.03	19.32	21.00	16.40	16.03	16.32	18.00

Band		WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA V			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel		9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	24.00	23.76	23.75	25.20	23.66	23.80	23.70	25.20	23.84	23.90	23.82	25.50
3GPP Rel 99	RMC 12.2Kbps	24.05	24.06	23.76	25.20	23.68	23.81	23.72	25.20	23.86	23.92	23.83	25.50
3GPP Rel 6	HSDPA Subtest-1	23.02	22.93	22.93	24.20	22.98	22.99	23.05	24.20	23.04	23.08	22.98	24.50
3GPP Rel 6	HSDPA Subtest-2	23.05	22.94	22.94	24.20	23.02	23.01	23.07	24.20	23.06	23.01	23.02	24.50
3GPP Rel 6	HSDPA Subtest-3	22.56	22.46	22.44	23.70	22.53	22.52	22.58	23.70	22.57	22.56	22.50	24.00
3GPP Rel 6	HSDPA Subtest-4	22.56	22.44	22.43	23.70	22.48	22.52	22.56	23.70	22.55	22.58	22.50	24.00
3GPP Rel 8	DC-HSDPA Subtest-1	22.61	22.44	22.48	24.20	22.30	22.26	22.28	24.20	22.57	22.66	22.54	24.50
3GPP Rel 8	DC-HSDPA Subtest-2	22.65	22.40	22.53	24.20	22.33	22.34	22.26	24.20	22.61	22.74	22.57	24.50
3GPP Rel 8	DC-HSDPA Subtest-3	22.17	21.95	21.98	23.70	21.81	21.81	21.77	23.70	22.12	22.13	22.08	24.00
3GPP Rel 8	DC-HSDPA Subtest-4	22.11	21.95	22.02	23.70	21.82	21.78	21.79	23.70	22.12	22.20	22.07	24.00
3GPP Rel 6	HSUPA Subtest-1	22.99	22.85	22.89	24.20	22.94	22.93	23.01	24.20	22.96	23.00	22.97	24.50
3GPP Rel 6	HSUPA Subtest-2	21.01	20.87	20.87	22.20	20.93	20.97	21.01	22.20	20.98	20.96	20.94	22.50
3GPP Rel 6	HSUPA Subtest-3	22.01	21.86	21.90	23.20	21.95	21.96	22.03	23.20	21.99	21.97	21.99	23.50
3GPP Rel 6	HSUPA Subtest-4	20.99	20.87	20.87	22.20	20.96	20.97	20.99	22.20	20.97	20.99	21.00	22.50
3GPP Rel 6	HSUPA Subtest-5	23.00	22.90	22.90	24.20	23.00	23.00	23.00	24.20	23.00	23.00	23.00	24.50

Band 2 (1900MHz Band)
Part 24E

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				18700	18900	19100		
Frequency (MHz)				1860	1880	1900		
20	QPSK	1	0	24.14	24.30	24.16	25.7	0
20	QPSK	1	49	24.16	24.29	24.24		
20	QPSK	1	99	24.24	24.19	24.22		
20	QPSK	50	0	23.17	23.27	23.22	24.7	1
20	QPSK	50	24	23.22	23.20	23.21		
20	QPSK	50	50	23.25	23.22	23.21		
20	QPSK	100	0	23.19	23.25	23.20		
20	16QAM	1	0	23.58	23.60	23.58	24.7	1
20	16QAM	1	49	23.50	23.70	23.52		
20	16QAM	1	99	23.50	23.55	23.47		
20	16QAM	50	0	22.33	22.43	22.34	23.7	2
20	16QAM	50	24	22.36	22.46	22.33		
20	16QAM	50	50	22.41	22.38	22.38		
20	16QAM	100	0	22.41	22.39	22.26		
20	64QAM	1	0	22.52	22.62	22.54	23.7	2
20	64QAM	1	49	22.49	22.51	22.44		
20	64QAM	1	99	22.60	22.51	22.45		
20	64QAM	50	0	21.37	21.42	21.30	22.7	3
20	64QAM	50	24	21.37	21.46	21.36		
20	64QAM	50	50	21.41	21.43	21.39		
20	64QAM	100	0	21.46	21.42	21.29		
Channel				18675	18900	19125	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1857.5	1880	1902.5		
15	QPSK	1	0	24.14	24.12	24.14	25.7	0
15	QPSK	1	37	24.04	24.13	23.98		
15	QPSK	1	74	24.02	24.13	24.10		
15	QPSK	36	0	23.21	23.36	23.25	24.7	1
15	QPSK	36	20	23.16	23.36	23.15		
15	QPSK	36	39	23.16	23.32	23.13		
15	QPSK	75	0	23.17	23.31	23.10		
15	16QAM	1	0	23.48	23.54	23.36	24.7	1
15	16QAM	1	37	23.28	23.38	23.21		
15	16QAM	1	74	23.25	23.32	23.18		
15	16QAM	36	0	22.34	22.50	22.37	23.7	2
15	16QAM	36	20	22.42	22.52	22.28		
15	16QAM	36	39	22.31	22.49	22.28		
15	16QAM	75	0	22.30	22.46	22.22		
15	64QAM	1	0	22.73	22.70	22.42	23.7	2
15	64QAM	1	37	22.45	22.46	22.27		
15	64QAM	1	74	22.53	22.41	22.35		
15	64QAM	36	0	21.50	21.65	21.42	22.7	3
15	64QAM	36	20	21.57	21.71	21.42		
15	64QAM	36	39	21.45	21.64	21.42		
15	64QAM	75	0	21.44	21.61	21.37		
Channel				18650	18900	19150	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1855	1880	1905		
10	QPSK	1	0	24.12	24.11	24.17	25.7	0
10	QPSK	1	25	24.10	24.16	24.15		
10	QPSK	1	49	24.15	24.19	24.11		
10	QPSK	25	0	23.20	23.37	23.12	24.7	1
10	QPSK	25	12	23.24	23.42	23.19		
10	QPSK	25	25	23.03	23.32	23.15		
10	QPSK	50	0	23.07	23.23	23.16		
10	16QAM	1	0	23.40	23.52	23.16	24.7	1
10	16QAM	1	25	23.35	23.43	23.22		
10	16QAM	1	49	23.33	23.40	23.20		
10	16QAM	25	0	22.40	22.56	22.30	23.7	2
10	16QAM	25	12	22.33	22.51	22.27		
10	16QAM	25	25	22.32	22.53	22.37		
10	16QAM	50	0	22.23	22.53	22.23		
10	64QAM	1	0	22.56	22.81	22.32	23.7	2
10	64QAM	1	25	22.41	22.60	22.38		
10	64QAM	1	49	22.48	22.56	22.33		
10	64QAM	25	0	21.51	21.71	21.34	22.7	3
10	64QAM	25	12	21.57	21.65	21.41		
10	64QAM	25	25	21.45	21.67	21.41		
10	64QAM	50	0	21.33	21.69	21.29		
Channel				18625	18900	19175	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1852.5	1880	1907.5		
5	QPSK	1	0	24.17	24.25	24.10	25.7	0
5	QPSK	1	12	24.26	24.27	24.14		
5	QPSK	1	24	24.23	24.12	24.21		
5	QPSK	12	0	23.28	23.40	23.17	24.7	1
5	QPSK	12	7	23.34	23.22	23.23		
5	QPSK	12	13	23.18	23.28	23.18		
5	QPSK	25	0	23.14	23.38	23.18		
5	16QAM	1	0	23.44	23.28	23.14	24.7	1
5	16QAM	1	12	23.40	23.32	23.24		
5	16QAM	1	24	23.25	23.49	23.20		
5	16QAM	12	0	22.45	22.48	22.37	23.7	2
5	16QAM	12	7	22.41	22.53	22.35		
5	16QAM	12	13	22.47	22.43	22.23		
5	16QAM	25	0	22.46	22.59	22.23		
5	64QAM	1	0	22.49	22.57	22.59	23.7	2
5	64QAM	1	12	22.55	22.69	22.67		
5	64QAM	1	24	22.41	22.57	22.55		
5	64QAM	12	0	21.51	21.66	21.36	22.7	3
5	64QAM	12	7	21.57	21.60	21.44		
5	64QAM	12	13	21.53	21.56	21.37		
5	64QAM	25	0	21.59	21.63	21.43		
Channel				18615	18900	19185	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1851.5	1880	1908.5		
3	QPSK	1	0	24.16	24.28	24.05	25.7	0
3	QPSK	1	8	24.20	24.12	24.16		
3	QPSK	1	14	24.21	24.27	24.08		
3	QPSK	8	0	23.17	23.14	23.14	24.7	1
3	QPSK	8	4	23.23	23.13	23.11		
3	QPSK	8	7	23.18	23.20	22.99		
3	QPSK	15	0	23.18	23.24	23.05		
3	16QAM	1	0	23.14	23.23	23.15	24.7	1
3	16QAM	1	8	23.24	23.35	23.17		
3	16QAM	1	14	23.20	23.45	23.13		
3	16QAM	8	0	22.45	22.45	22.26	23.7	2
3	16QAM	8	4	22.41	22.46	22.36		
3	16QAM	8	7	22.47	22.60	22.31		
3	16QAM	15	0	22.46	22.42	22.39		
3	64QAM	1	0	22.49	22.57	22.26	23.7	2
3	64QAM	1	8	22.55	22.65	22.63		
3	64QAM	1	14	22.41	22.51	22.31		
3	64QAM	8	0	21.51	21.36	21.48	22.7	3
3	64QAM	8	4	21.57	21.66	21.57		
3	64QAM	8	7	21.53	21.42	21.45		
3	64QAM	15	0	21.59	21.51	21.42		
Channel				18607	18900	19193	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1850.7	1880	1909.3		
1.4	QPSK	1	0	24.06	23.94	23.95	25.7	0
1.4	QPSK	1	3	24.05	24.02	24.05		
1.4	QPSK	1	5	24.08	24.03	23.93		
1.4	QPSK	3	0	24.04	23.99	24.00		
1.4	QPSK	3	1	24.06	24.01	24.05		
1.4	QPSK	3	3	24.03	24.04	23.94		
1.4	QPSK	6	0	23.08	23.04	23.09	24.7	1
1.4	16QAM	1	0	23.17	23.03	22.82	24.7	1
1.4	16QAM	1	3	23.10	23.12	22.95		
1.4	16QAM	1	5	22.96	23.05	22.89		
1.4	16QAM	3	0	23.18	23.18	23.06		
1.4	16QAM	3	1	23.23	23.30	23.07		
1.4	16QAM	3	3	23.17	23.22	23.02		
1.4	16QAM	6	0	22.20	22.05	22.06	23.7	2
1.4	64QAM	1	0	22.36	22.38	22.28	23.7	2
1.4	64QAM	1	3	22.36	22.57	22.31		
1.4	64QAM	1	5	22.31	22.40	22.22		
1.4	64QAM	3	0	22.20	22.24	22.05		
1.4	64QAM	3	1	22.25	22.28	22.17		
1.4	64QAM	3	3	22.21	22.22	22.06		
1.4	64QAM	6	0	21.29	21.32	21.21	22.7	3

Band 4 (AWS Band)
Part 27L (only on channel required)

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				20050	20175	20300		
Frequency (MHz)				1720	1732.5	1745		
20	QPSK	1	0	23.94	24.18	24.07	25.7	0
20	QPSK	1	49	23.86	24.04	24.10		
20	QPSK	1	99	23.89	24.04	24.11		
20	QPSK	50	0	22.99	23.09	23.08	24.7	1
20	QPSK	50	24	23.00	23.07	23.07		
20	QPSK	50	50	22.94	23.03	23.02		
20	QPSK	100	0	22.99	23.10	23.02		
20	16QAM	1	0	23.25	23.34	23.51	24.7	1
20	16QAM	1	49	23.18	23.34	23.39		
20	16QAM	1	99	23.25	23.41	23.49		
20	16QAM	50	0	22.07	22.18	22.23	23.7	2
20	16QAM	50	24	22.05	22.28	22.26		
20	16QAM	50	50	22.08	22.24	22.19		
20	16QAM	100	0	22.06	22.23	22.23		
20	64QAM	1	0	22.20	22.31	22.32	23.7	2
20	64QAM	1	49	22.06	22.46	22.32		
20	64QAM	1	99	22.20	22.30	22.51		
20	64QAM	50	0	21.08	21.22	21.28	22.7	3
20	64QAM	50	24	21.12	21.31	21.26		
20	64QAM	50	50	21.12	21.24	21.24		
20	64QAM	100	0	21.09	21.23	21.24		
Channel				20025	20175	20325	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1717.5	1732.5	1747.5		
15	QPSK	1	0	24.16	24.13	24.10	25.7	0
15	QPSK	1	37	23.99	24.12	24.12		
15	QPSK	1	74	24.12	24.11	24.01		
15	QPSK	36	0	23.19	23.31	23.22	24.7	1
15	QPSK	36	20	23.13	23.27	23.20		
15	QPSK	36	39	23.10	23.25	23.17		
15	QPSK	75	0	23.17	23.19	23.17		
15	16QAM	1	0	23.68	23.85	23.85	24.7	1
15	16QAM	1	37	23.62	23.91	23.71		
15	16QAM	1	74	23.62	23.62	23.71		
15	16QAM	36	0	22.28	22.39	22.40	23.7	2
15	16QAM	36	20	22.30	22.47	22.38		
15	16QAM	36	39	22.28	22.32	22.36		
15	16QAM	75	0	22.21	22.34	22.32		
15	64QAM	1	0	22.71	22.79	22.89	23.7	2
15	64QAM	1	37	22.57	22.92	22.83		
15	64QAM	1	74	22.71	22.70	22.72		
15	64QAM	36	0	21.36	21.39	21.41	22.7	3
15	64QAM	36	20	21.31	21.46	21.40		
15	64QAM	36	39	21.28	21.32	21.37		
15	64QAM	75	0	21.36	21.49	21.38		
Channel				20000	20175	20350	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1715	1732.5	1750		
10	QPSK	1	0	24.12	24.10	24.16	25.7	0
10	QPSK	1	25	24.11	24.14	24.12		
10	QPSK	1	49	24.02	24.09	24.14		
10	QPSK	25	0	23.20	23.28	23.21	24.7	1
10	QPSK	25	12	23.15	23.29	23.24		
10	QPSK	25	25	23.11	23.24	23.15		
10	QPSK	50	0	23.23	23.27	23.20		
10	16QAM	1	0	23.64	23.72	23.74	24.7	1
10	16QAM	1	25	23.70	23.84	23.77		
10	16QAM	1	49	23.58	23.83	23.63		
10	16QAM	25	0	22.35	22.43	22.36	23.7	2
10	16QAM	25	12	22.32	22.35	22.32		
10	16QAM	25	25	22.28	22.30	22.31		
10	16QAM	50	0	22.26	22.32	22.37		
10	64QAM	1	0	22.65	22.54	22.55	23.7	2
10	64QAM	1	25	22.61	22.59	22.36		
10	64QAM	1	49	22.61	22.46	22.16		
10	64QAM	25	0	21.38	21.34	21.40	22.7	3
10	64QAM	25	12	21.34	21.49	21.33		
10	64QAM	25	25	21.29	21.44	21.34		
10	64QAM	50	0	21.25	21.44	21.31		
Channel				19975	20175	20375	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1712.5	1732.5	1752.5		
5	QPSK	1	0	24.11	24.11	24.16	25.7	0
5	QPSK	1	12	24.14	24.13	24.17		
5	QPSK	1	24	24.04	24.17	24.15		
5	QPSK	12	0	23.16	23.27	23.19	24.7	1
5	QPSK	12	7	23.14	23.18	23.27		
5	QPSK	12	13	23.13	23.25	23.12		
5	QPSK	25	0	23.16	23.24	23.08		
5	16QAM	1	0	23.51	23.77	23.71	24.7	1
5	16QAM	1	12	23.29	23.63	23.66		
5	16QAM	1	24	23.62	23.74	23.61		
5	16QAM	12	0	22.32	22.44	22.36	23.7	2
5	16QAM	12	7	22.31	22.48	22.31		
5	16QAM	12	13	22.29	22.43	22.29		
5	16QAM	25	0	22.22	22.30	22.25		
5	64QAM	1	0	22.30	22.43	22.28	23.7	2
5	64QAM	1	12	22.25	22.37	22.36		
5	64QAM	1	24	22.13	22.38	22.26		
5	64QAM	12	0	21.24	21.42	21.22	22.7	3
5	64QAM	12	7	21.26	21.44	21.39		
5	64QAM	12	13	21.26	21.39	21.27		
5	64QAM	25	0	21.16	21.33	21.31		
Channel				19965	20175	20385	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1711.5	1732.5	1753.5		
3	QPSK	1	0	24.06	24.12	24.08	25.7	0
3	QPSK	1	8	24.05	24.05	24.06		
3	QPSK	1	14	24.01	24.07	24.10		
3	QPSK	8	0	23.09	23.26	23.19	24.7	1
3	QPSK	8	4	23.20	23.23	23.24		
3	QPSK	8	7	23.05	23.16	23.22		
3	QPSK	15	0	23.09	23.24	23.13		
3	16QAM	1	0	23.59	23.73	23.68	24.7	1
3	16QAM	1	8	23.58	23.80	23.66		
3	16QAM	1	14	23.54	23.60	23.55		
3	16QAM	8	0	22.27	22.42	22.37	23.7	2
3	16QAM	8	4	22.29	22.42	22.42		
3	16QAM	8	7	22.20	22.43	22.38		
3	16QAM	15	0	22.25	22.31	22.30		
3	64QAM	1	0	22.13	22.27	22.27	23.7	2
3	64QAM	1	8	22.26	22.33	22.30		
3	64QAM	1	14	22.15	22.49	22.23		
3	64QAM	8	0	21.22	21.37	21.30	22.7	3
3	64QAM	8	4	21.25	21.36	21.24		
3	64QAM	8	7	21.27	21.26	21.22		
3	64QAM	15	0	21.28	21.44	21.33		
Channel				19957	20175	20393	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1710.7	1732.5	1754.3		
1.4	QPSK	1	0	24.01	24.06	24.03	25.7	0
1.4	QPSK	1	3	24.11	24.12	24.16		
1.4	QPSK	1	5	24.04	24.14	24.05		
1.4	QPSK	3	0	24.12	24.13	24.09		
1.4	QPSK	3	1	24.12	24.16	24.17		
1.4	QPSK	3	3	24.06	24.12	24.06		
1.4	QPSK	6	0	23.16	23.24	23.16	24.7	1
1.4	16QAM	1	0	23.41	23.46	23.43	24.7	1
1.4	16QAM	1	3	23.42	23.65	23.57		
1.4	16QAM	1	5	23.40	23.60	23.51		
1.4	16QAM	3	0	23.02	23.35	23.09		
1.4	16QAM	3	1	23.08	23.27	23.13		
1.4	16QAM	3	3	23.17	23.22	23.22		
1.4	16QAM	6	0	22.34	22.33	22.34	23.7	2
1.4	64QAM	1	0	22.21	22.44	22.32	23.7	2
1.4	64QAM	1	3	22.30	22.41	22.44		
1.4	64QAM	1	5	22.15	22.33	22.24		
1.4	64QAM	3	0	22.33	22.44	22.40		
1.4	64QAM	3	1	22.39	22.60	22.34		
1.4	64QAM	3	3	22.35	22.53	22.45		
1.4	64QAM	6	0	21.25	21.29	21.23	22.7	3

Band 5 (Cellular Band)
Part 22H(only on channel required)

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				20450	20525	20600		
Frequency (MHz)				829	836.5	844		
10	QPSK	1	0	23.96	24.12	24.09	25.7	0
10	QPSK	1	25	23.98	24.09	23.99		
10	QPSK	1	49	23.82	23.86	23.95		
10	QPSK	25	0	23.06	23.15	23.07	24.7	1
10	QPSK	25	12	23.02	23.11	23.07		
10	QPSK	25	25	22.97	23.10	23.01		
10	QPSK	50	0	22.99	23.13	23.07		
10	16QAM	1	0	23.16	23.27	23.37	24.7	1
10	16QAM	1	25	23.22	23.42	23.16		
10	16QAM	1	49	23.08	23.14	23.14		
10	16QAM	25	0	22.10	22.21	22.16	23.7	2
10	16QAM	25	12	22.10	22.23	22.14		
10	16QAM	25	25	22.01	22.10	22.07		
10	16QAM	50	0	22.09	22.16	22.09		
10	64QAM	1	0	22.12	22.28	22.31	23.7	2
10	64QAM	1	25	22.05	22.22	22.23		
10	64QAM	1	49	22.08	22.07	22.08		
10	64QAM	25	0	21.12	21.19	21.13	22.7	3
10	64QAM	25	12	21.08	21.21	21.17		
10	64QAM	25	25	21.01	21.17	21.10		
10	64QAM	50	0	21.07	21.20	21.10		
Channel				20425	20525	20625	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				826.5	836.5	846.5		
5	QPSK	1	0	23.98	24.02	24.09	25.7	0
5	QPSK	1	12	24.11	24.09	23.98		
5	QPSK	1	24	23.90	24.01	24.01		
5	QPSK	12	0	23.05	23.14	23.01	24.7	1
5	QPSK	12	7	23.15	23.15	23.03		
5	QPSK	12	13	23.12	23.10	22.97		
5	QPSK	25	0	23.13	23.13	23.02		
5	16QAM	1	0	23.23	23.23	23.34	24.7	1
5	16QAM	1	12	23.33	23.33	23.20		
5	16QAM	1	24	23.13	23.31	23.21		
5	16QAM	12	0	22.10	22.17	22.06	23.7	2
5	16QAM	12	7	22.20	22.20	22.07		
5	16QAM	12	13	22.16	22.18	22.05		
5	16QAM	25	0	22.16	22.18	22.06		
5	64QAM	1	0	22.35	22.39	22.43	23.7	2
5	64QAM	1	12	22.48	22.48	22.32		
5	64QAM	1	24	22.27	22.46	22.38		
5	64QAM	12	0	21.30	21.40	21.27	22.7	3
5	64QAM	12	7	21.42	21.40	21.32		
5	64QAM	12	13	21.35	21.33	21.26		
5	64QAM	25	0	21.39	21.40	21.29		
Channel				20415	20525	20635	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				825.5	836.5	847.5		
3	QPSK	1	0	23.99	24.03	23.96	25.7	0
3	QPSK	1	8	23.93	24.07	24.04		
3	QPSK	1	14	24.08	24.06	24.02		
3	QPSK	8	0	23.05	23.12	23.00	24.7	1
3	QPSK	8	4	23.06	23.12	23.02		
3	QPSK	8	7	23.09	23.11	23.06		
3	QPSK	15	0	23.12	23.12	23.00		
3	16QAM	1	0	23.20	23.25	23.16	24.7	1
3	16QAM	1	8	23.22	23.33	23.28		
3	16QAM	1	14	23.26	23.26	23.22		
3	16QAM	8	0	22.11	22.23	22.07	23.7	2
3	16QAM	8	4	22.16	22.22	22.10		
3	16QAM	8	7	22.18	22.18	22.14		
3	16QAM	15	0	22.19	22.20	22.09		
3	64QAM	1	0	22.33	22.39	22.34	23.7	2
3	64QAM	1	8	22.34	22.47	22.39		
3	64QAM	1	14	22.44	22.46	22.40		
3	64QAM	8	0	21.30	21.42	21.27	22.7	3
3	64QAM	8	4	21.34	21.43	21.27		
3	64QAM	8	7	21.36	21.38	21.33		
3	64QAM	15	0	21.38	21.40	21.31		
Channel				20407	20525	20643	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				824.7	836.5	848.3		
1.4	QPSK	1	0	23.88	24.01	23.99	25.7	0
1.4	QPSK	1	3	23.95	24.05	24.07		
1.4	QPSK	1	5	23.87	23.98	23.94		
1.4	QPSK	3	0	23.93	24.04	23.99		
1.4	QPSK	3	1	23.96	24.11	24.05		
1.4	QPSK	3	3	23.95	24.04	24.01		
1.4	QPSK	6	0	22.94	23.03	23.04	24.7	1
1.4	16QAM	1	0	23.12	23.21	23.15	24.7	1
1.4	16QAM	1	3	23.20	23.32	23.21		
1.4	16QAM	1	5	23.12	23.20	23.17		
1.4	16QAM	3	0	22.96	23.07	23.02		
1.4	16QAM	3	1	23.02	23.14	23.08		
1.4	16QAM	3	3	22.92	23.08	23.02		
1.4	16QAM	6	0	22.07	22.16	22.14	23.7	2
1.4	64QAM	1	0	22.23	22.38	22.30	23.7	2
1.4	64QAM	1	3	22.28	22.45	22.32		
1.4	64QAM	1	5	22.20	22.39	22.34		
1.4	64QAM	3	0	22.18	22.30	22.27		
1.4	64QAM	3	1	22.26	22.38	22.33		
1.4	64QAM	3	3	22.19	22.31	22.28		
1.4	64QAM	6	0	21.25	21.33	21.30	22.7	3

Band 7 (2600MHz Band)
Part 27

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				20850	21100	21350		
Frequency (MHz)				2510	2535	2560		
20	QPSK	1	0	23.93	24.25	24.17	25.7	0
20	QPSK	1	49	23.99	24.12	24.24		
20	QPSK	1	99	23.81	24.09	24.12		
20	QPSK	50	0	22.97	23.16	23.10	24.7	1
20	QPSK	50	24	22.93	23.15	23.15		
20	QPSK	50	50	22.92	23.14	23.11		
20	QPSK	100	0	22.92	23.17	23.14		
20	16QAM	1	0	23.13	23.37	23.50	24.7	1
20	16QAM	1	49	23.24	23.43	23.56		
20	16QAM	1	99	23.14	23.37	23.40		
20	16QAM	50	0	22.08	22.29	22.25	23.7	2
20	16QAM	50	24	22.07	22.29	22.30		
20	16QAM	50	50	21.99	22.27	22.40		
20	16QAM	100	0	22.04	22.24	22.27		
20	64QAM	1	0	22.17	22.32	22.51	23.7	2
20	64QAM	1	49	22.15	22.35	22.51		
20	64QAM	1	99	22.12	22.34	22.31		
20	64QAM	50	0	21.10	21.27	21.27	22.7	3
20	64QAM	50	24	21.05	21.27	21.31		
20	64QAM	50	50	21.04	21.26	21.37		
20	64QAM	100	0	21.03	21.21	21.28		
Channel				20825	21100	21375	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2507.5	2535	2562.5		
15	QPSK	1	0	23.98	24.13	24.07	25.7	0
15	QPSK	1	37	23.98	24.08	24.17		
15	QPSK	1	74	24.11	24.22	24.12		
15	QPSK	36	0	23.14	23.13	23.24	24.7	1
15	QPSK	36	20	23.17	23.23	23.22		
15	QPSK	36	39	23.02	23.22	23.24		
15	QPSK	75	0	23.12	23.18	23.20		
15	16QAM	1	0	23.24	23.41	23.46	24.7	1
15	16QAM	1	37	23.21	23.44	23.41		
15	16QAM	1	74	23.44	23.58	23.46		
15	16QAM	36	0	22.25	22.20	22.31	23.7	2
15	16QAM	36	20	22.26	22.34	22.31		
15	16QAM	36	39	22.11	22.32	22.35		
15	16QAM	75	0	22.24	22.23	22.39		
15	64QAM	1	0	22.23	22.34	22.42	23.7	2
15	64QAM	1	37	22.17	22.32	22.40		
15	64QAM	1	74	22.29	22.49	22.34		
15	64QAM	36	0	21.30	21.28	21.32	22.7	3
15	64QAM	36	20	21.29	21.32	21.37		
15	64QAM	36	39	21.15	21.31	21.40		
15	64QAM	75	0	21.33	21.29	21.38		
Channel				20800	21100	21400	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2505	2535	2565		
10	QPSK	1	0	23.87	23.94	24.05	25.7	0
10	QPSK	1	25	24.04	23.99	24.08		
10	QPSK	1	49	23.98	24.21	24.08		
10	QPSK	25	0	23.14	23.13	23.17	24.7	1
10	QPSK	25	12	23.12	23.15	23.20		
10	QPSK	25	25	23.16	23.15	23.18		
10	QPSK	50	0	23.17	23.14	23.18		
10	16QAM	1	0	23.17	23.60	23.39	24.7	1
10	16QAM	1	25	23.63	23.42	23.37		
10	16QAM	1	49	23.56	23.49	23.34		
10	16QAM	25	0	22.22	22.29	22.24	23.7	2
10	16QAM	25	12	22.27	22.33	22.28		
10	16QAM	25	25	22.31	22.30	22.36		
10	16QAM	50	0	22.30	22.30	22.31		
10	64QAM	1	0	21.92	22.29	22.33	23.7	2
10	64QAM	1	25	22.19	22.40	22.30		
10	64QAM	1	49	22.21	22.28	22.27		
10	64QAM	25	0	21.18	21.16	21.26	22.7	3
10	64QAM	25	12	21.22	21.32	21.26		
10	64QAM	25	25	21.28	21.19	21.34		
10	64QAM	50	0	21.24	21.20	21.23		
Channel				20775	21100	21425	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2502.5	2535	2567.5		
5	QPSK	1	0	24.04	24.01	23.97	25.7	0
5	QPSK	1	12	24.09	23.97	24.11		
5	QPSK	1	24	24.06	23.99	24.01		
5	QPSK	12	0	23.14	23.11	23.09	24.7	1
5	QPSK	12	7	23.21	23.16	23.16		
5	QPSK	12	13	23.21	23.15	23.12		
5	QPSK	25	0	23.28	23.03	23.18		
5	16QAM	1	0	23.32	23.36	23.32	24.7	1
5	16QAM	1	12	23.37	23.41	23.31		
5	16QAM	1	24	23.36	23.39	23.31		
5	16QAM	12	0	22.27	22.18	22.21	23.7	2
5	16QAM	12	7	22.30	22.24	22.19		
5	16QAM	12	13	22.31	22.17	22.34		
5	16QAM	25	0	22.33	22.28	22.32		
5	64QAM	1	0	22.28	22.30	22.35	23.7	2
5	64QAM	1	12	22.21	22.52	22.58		
5	64QAM	1	24	22.29	22.11	22.26		
5	64QAM	12	0	21.19	21.13	21.31	22.7	3
5	64QAM	12	7	21.19	21.33	21.26		
5	64QAM	12	13	21.20	21.25	21.19		
5	64QAM	25	0	21.18	21.23	21.22		

Band 12

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				23060	23095	23130		
Frequency (MHz)				704	707.5	711		
10	QPSK	1	0	23.96	24.15	24.03	25.5	0
10	QPSK	1	25	23.89	24.04	23.93		
10	QPSK	1	49	24.05	24.03	24.12		
10	QPSK	25	0	22.95	23.17	23.10	24.5	1
10	QPSK	25	12	23.16	23.06	23.07		
10	QPSK	25	25	23.09	23.09	23.07		
10	QPSK	50	0	23.07	23.14	23.11		
10	16QAM	1	0	23.31	23.40	23.48	24.5	1
10	16QAM	1	25	23.46	23.63	23.50		
10	16QAM	1	49	23.54	23.49	23.57		
10	16QAM	25	0	22.12	22.14	22.17	23.5	2
10	16QAM	25	12	22.23	22.18	22.14		
10	16QAM	25	25	22.20	22.17	22.16		
10	16QAM	50	0	22.15	22.21	22.18		
10	64QAM	1	0	22.33	22.30	22.50	23.5	2
10	64QAM	1	25	22.49	22.16	22.53		
10	64QAM	1	49	22.46	22.54	22.54		
10	64QAM	25	0	21.11	21.29	21.22	22.5	3
10	64QAM	25	12	21.20	21.28	21.18		
10	64QAM	25	25	21.23	21.21	21.18		
10	64QAM	50	0	21.28	21.23	21.20		
Channel				23035	23095	23155	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				701.5	707.5	713.5		
5	QPSK	1	0	23.85	23.92	23.91	25.5	0
5	QPSK	1	12	24.01	23.99	24.03		
5	QPSK	1	24	23.98	24.07	24.09		
5	QPSK	12	0	23.04	23.14	22.97	24.5	1
5	QPSK	12	7	23.20	23.15	23.12		
5	QPSK	12	13	23.13	23.03	23.07		
5	QPSK	25	0	22.98	23.09	23.01		
5	16QAM	1	0	23.33	23.40	23.47	24.5	1
5	16QAM	1	12	23.49	23.58	23.52		
5	16QAM	1	24	23.47	23.56	23.49		
5	16QAM	12	0	22.04	22.12	22.07	23.5	2
5	16QAM	12	7	22.20	22.13	22.13		
5	16QAM	12	13	22.15	22.14	22.09		
5	16QAM	25	0	22.07	22.19	22.13		
5	64QAM	1	0	22.39	22.46	22.56	23.5	2
5	64QAM	1	12	22.43	22.62	22.56		
5	64QAM	1	24	22.48	22.56	22.52		
5	64QAM	12	0	21.11	21.07	21.03	22.5	3
5	64QAM	12	7	21.15	21.08	21.09		
5	64QAM	12	13	21.11	21.09	21.05		
5	64QAM	25	0	21.11	21.23	21.16		
Channel				23025	23095	23165	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				700.5	707.5	714.5		
3	QPSK	1	0	23.85	23.96	24.02	25.5	0
3	QPSK	1	8	23.84	24.03	23.98		
3	QPSK	1	14	23.90	24.05	23.99		
3	QPSK	8	0	22.77	23.00	23.04	24.5	1
3	QPSK	8	4	22.95	23.03	23.11		
3	QPSK	8	7	22.98	22.99	23.09		
3	QPSK	15	0	22.90	23.03	23.00		
3	16QAM	1	0	23.19	23.52	23.41	24.5	1
3	16QAM	1	8	23.36	23.50	23.44		
3	16QAM	1	14	23.44	23.54	23.38		
3	16QAM	8	0	21.96	22.16	22.22	23.5	2
3	16QAM	8	4	22.04	22.15	22.19		
3	16QAM	8	7	22.09	22.13	22.17		
3	16QAM	15	0	22.04	22.20	22.20		
3	64QAM	1	0	22.33	22.50	22.51	23.5	2
3	64QAM	1	8	22.36	22.61	22.54		
3	64QAM	1	14	22.45	22.66	22.55		
3	64QAM	8	0	20.93	21.10	21.19	22.5	3
3	64QAM	8	4	21.10	21.14	21.16		
3	64QAM	8	7	21.07	21.12	21.06		
3	64QAM	15	0	21.06	21.14	21.15		
Channel				23017	23095	23173	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				699.7	707.5	715.3		
1.4	QPSK	1	0	23.76	23.89	23.89	25.5	0
1.4	QPSK	1	3	23.83	24.02	24.11		
1.4	QPSK	1	5	23.83	23.97	24.00		
1.4	QPSK	3	0	23.86	23.96	23.95		
1.4	QPSK	3	1	23.90	24.01	24.02		
1.4	QPSK	3	3	23.81	23.98	23.95		
1.4	QPSK	6	0	22.81	23.00	22.99	#VALUE!	0~1
1.4	16QAM	1	0	23.20	23.44	23.37	#VALUE!	0~1
1.4	16QAM	1	3	23.31	23.55	23.44		
1.4	16QAM	1	5	23.17	23.47	23.32		
1.4	16QAM	3	0	22.86	23.09	23.12		
1.4	16QAM	3	1	22.94	23.15	23.13		
1.4	16QAM	3	3	22.86	23.11	23.07		
1.4	16QAM	6	0	22.03	22.20	22.15	#VALUE!	0~2
1.4	64QAM	1	0	21.83	22.12	22.03	#VALUE!	0~2
1.4	64QAM	1	3	21.98	22.18	22.14		
1.4	64QAM	1	5	21.88	22.14	22.06		
1.4	64QAM	3	0	21.95	22.20	22.17		
1.4	64QAM	3	1	21.91	22.15	22.08		
1.4	64QAM	3	3	21.92	22.11	22.10		
1.4	64QAM	6	0	20.96	21.17	21.22	#VALUE!	0~3

Band 17

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				23780	23790	23800		
Frequency (MHz)				709	710	711		
10	QPSK	1	0	23.72	24.01	23.80	25.5	0
10	QPSK	1	25	23.98	23.99	23.89		
10	QPSK	1	49	23.89	23.92	23.93		
10	QPSK	25	0	22.99	23.16	23.13	24.5	1
10	QPSK	25	12	23.15	23.07	23.09		
10	QPSK	25	25	23.12	23.14	23.07		
10	QPSK	50	0	23.14	23.15	23.10		
10	16QAM	1	0	23.01	23.12	22.97	24.5	1
10	16QAM	1	25	23.22	23.26	23.17		
10	16QAM	1	49	23.06	23.15	23.19		
10	16QAM	25	0	22.02	22.11	22.08	23.5	2
10	16QAM	25	12	22.18	22.13	22.15		
10	16QAM	25	25	22.14	22.10	22.05		
10	16QAM	50	0	22.10	22.18	22.11		
10	64QAM	1	0	21.84	21.97	21.84	23.5	2
10	64QAM	1	25	22.12	22.10	21.93		
10	64QAM	1	49	21.97	22.00	22.05		
10	64QAM	25	0	21.02	21.20	21.12	22.5	3
10	64QAM	25	12	21.18	21.16	21.27		
10	64QAM	25	25	21.14	21.13	21.19		
10	64QAM	50	0	21.22	21.22	21.16		
Channel				23755	23790	23825	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				706.5	710	713.5		
5	QPSK	1	0	23.86	23.85	23.99	25.5	0
5	QPSK	1	12	23.85	23.97	23.97		
5	QPSK	1	24	23.99	23.84	23.95		
5	QPSK	12	0	23.03	23.15	23.21	24.5	1
5	QPSK	12	7	23.08	23.20	23.24		
5	QPSK	12	13	23.21	23.14	23.19		
5	QPSK	25	0	23.02	23.09	23.20		
5	16QAM	1	0	23.08	23.17	23.19	24.5	1
5	16QAM	1	12	23.16	23.28	23.20		
5	16QAM	1	24	23.29	23.05	23.25		
5	16QAM	12	0	22.15	22.17	22.23	23.5	2
5	16QAM	12	7	22.10	22.22	22.28		
5	16QAM	12	13	22.24	22.15	22.23		
5	16QAM	25	0	22.02	22.09	22.21		
5	64QAM	1	0	21.96	22.03	22.07	23.5	2
5	64QAM	1	12	21.92	22.04	22.07		
5	64QAM	1	24	22.16	21.92	22.13		
5	64QAM	12	0	21.14	21.15	21.22	22.5	3
5	64QAM	12	7	21.19	21.20	21.27		
5	64QAM	12	13	21.22	21.13	21.22		
5	64QAM	25	0	21.07	21.13	21.17		

Band 26 for FCC

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				26765	26865	26965		
Frequency (MHz)				821.5	831.5	841.5		
15	QPSK	1	0	24.54	24.58	24.44	25.7	0
15	QPSK	1	37	24.50	24.48	24.48		
15	QPSK	1	74	24.36	24.36	24.31		
15	QPSK	36	0	23.58	23.70	23.47	24.7	1
15	QPSK	36	20	23.60	23.60	23.46		
15	QPSK	36	39	23.49	23.49	23.44		
15	QPSK	75	0	23.54	23.56	23.48		
15	16QAM	1	0	23.76	23.72	23.67	24.7	1
15	16QAM	1	37	23.79	23.71	23.72		
15	16QAM	1	74	23.67	23.61	23.48		
15	16QAM	36	0	22.63	22.65	22.53	23.7	2
15	16QAM	36	20	22.63	22.65	22.52		
15	16QAM	36	39	22.55	22.55	22.50		
15	16QAM	75	0	22.61	22.60	22.47		
15	64QAM	1	0	22.73	22.68	22.64	23.7	2
15	64QAM	1	37	22.77	22.72	22.68		
15	64QAM	1	74	22.61	22.56	22.47		
15	64QAM	36	0	21.68	21.68	21.59	22.7	3
15	64QAM	36	20	21.66	21.69	21.56		
15	64QAM	36	39	21.62	21.59	21.54		
15	64QAM	75	0	21.63	21.65	21.53		
Channel				26740	26865	26990	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				819	831.5	844		
10	QPSK	1	0	24.53	24.43	24.37	25.7	0
10	QPSK	1	25	24.42	24.42	24.44		
10	QPSK	1	49	24.45	24.38	24.36		
10	QPSK	25	0	23.61	23.58	23.47	24.7	1
10	QPSK	25	12	23.62	23.57	23.53		
10	QPSK	25	25	23.55	23.50	23.49		
10	QPSK	50	0	23.56	23.55	23.40		
10	16QAM	1	0	23.74	23.69	23.66	24.7	1
10	16QAM	1	25	23.66	23.70	23.64		
10	16QAM	1	49	23.70	23.62	23.50		
10	16QAM	25	0	22.64	22.64	22.48	23.7	2
10	16QAM	25	12	22.66	22.64	22.59		
10	16QAM	25	25	22.58	22.55	22.52		
10	16QAM	50	0	22.60	22.60	22.47		
10	64QAM	1	0	22.72	22.62	22.60	23.7	2
10	64QAM	1	25	22.61	22.68	22.57		
10	64QAM	1	49	22.68	22.60	22.48		
10	64QAM	25	0	21.67	21.66	21.53	22.7	3
10	64QAM	25	12	21.71	21.69	21.62		
10	64QAM	25	25	21.62	21.60	21.58		
10	64QAM	50	0	21.66	21.63	21.50		
Channel				26715	26865	27015	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				816.5	831.5	846.5		
5	QPSK	1	0	24.56	24.42	24.44	25.7	0
5	QPSK	1	12	24.51	24.47	24.39		
5	QPSK	1	24	24.40	24.44	24.47		
5	QPSK	12	0	23.59	23.55	23.48	24.7	1
5	QPSK	12	7	23.62	23.53	23.49		
5	QPSK	12	13	23.57	23.50	23.41		
5	QPSK	25	0	23.61	23.55	23.50		
5	16QAM	1	0	23.76	23.63	23.66	24.7	1
5	16QAM	1	12	23.76	23.71	23.58		
5	16QAM	1	24	23.70	23.66	23.56		
5	16QAM	12	0	22.65	22.61	22.52	23.7	2
5	16QAM	12	7	22.66	22.61	22.49		
5	16QAM	12	13	22.63	22.55	22.43		
5	16QAM	25	0	22.64	22.60	22.49		
5	64QAM	1	0	22.79	22.59	22.59	23.7	2
5	64QAM	1	12	22.74	22.67	22.51		
5	64QAM	1	24	22.64	22.64	22.56		
5	64QAM	12	0	21.66	21.65	21.54	22.7	3
5	64QAM	12	7	21.71	21.64	21.54		
5	64QAM	12	13	21.67	21.60	21.48		
5	64QAM	25	0	21.69	21.65	21.53		
Channel				26705	26865	27025	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				815.5	831.5	847.5		
3	QPSK	1	0	24.56	24.38	24.38	25.7	0
3	QPSK	1	8	24.53	24.43	24.37		
3	QPSK	1	14	24.52	24.44	24.50		
3	QPSK	8	0	23.58	23.52	23.44	24.7	1
3	QPSK	8	4	23.59	23.54	23.48		
3	QPSK	8	7	23.58	23.52	23.43		
3	QPSK	15	0	23.60	23.53	23.45		
3	16QAM	1	0	23.76	23.62	23.59	24.7	1
3	16QAM	1	8	23.76	23.68	23.53		
3	16QAM	1	14	23.73	23.68	23.57		
3	16QAM	8	0	22.65	22.61	22.51	23.7	2
3	16QAM	8	4	22.68	22.64	22.53		
3	16QAM	8	7	22.64	22.59	22.46		
3	16QAM	15	0	22.66	22.61	22.52		
3	64QAM	1	0	22.73	22.58	22.59	23.7	2
3	64QAM	1	8	22.71	22.69	22.52		
3	64QAM	1	14	22.70	22.62	22.56		
3	64QAM	8	0	21.67	21.65	21.52	22.7	3
3	64QAM	8	4	21.70	21.65	21.54		
3	64QAM	8	7	21.67	21.56	21.49		
3	64QAM	15	0	21.67	21.64	21.55		
Channel				26697	26865	27033	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				814.7	831.5	848.3		
1.4	QPSK	1	0	24.46	24.41	24.33	25.7	0
1.4	QPSK	1	3	24.44	24.44	24.41		
1.4	QPSK	1	5	24.47	24.38	24.44		
1.4	QPSK	3	0	24.51	24.44	24.35		
1.4	QPSK	3	1	24.57	24.48	24.40		
1.4	QPSK	3	3	24.49	24.42	24.35		
1.4	QPSK	6	0	23.54	23.46	23.41	25.7	0
1.4	16QAM	1	0	23.70	23.61	23.49	25.7	0
1.4	16QAM	1	3	23.74	23.72	23.53		
1.4	16QAM	1	5	23.69	23.67	23.51		
1.4	16QAM	3	0	23.50	23.48	23.32		
1.4	16QAM	3	1	23.58	23.49	23.37		
1.4	16QAM	3	3	23.53	23.45	23.28		
1.4	16QAM	6	0	22.65	22.61	22.51	25.7	0
1.4	64QAM	1	0	22.65	22.61	22.46	25.7	0
1.4	64QAM	1	3	22.73	22.67	22.46		
1.4	64QAM	1	5	22.62	22.56	22.50		
1.4	64QAM	3	0	22.61	22.59	22.43		
1.4	64QAM	3	1	22.67	22.57	22.45		
1.4	64QAM	3	3	22.59	22.54	22.42		
1.4	64QAM	6	0	21.65	21.58	21.49	25.7	0

Band 66

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				132072	132322	132572		
Frequency (MHz)				1720	1745	1770		
20	QPSK	1	0	24.29	24.45	24.35	25.7	0
20	QPSK	1	49	24.22	24.32	24.26		
20	QPSK	1	99	24.40	24.40	24.42		
20	QPSK	50	0	23.43	23.57	23.51	24.7	1
20	QPSK	50	24	23.33	23.56	23.39		
20	QPSK	50	50	23.39	23.36	23.33		
20	QPSK	100	0	23.43	23.55	23.34		
20	16QAM	1	0	23.79	24.01	23.92	24.7	1
20	16QAM	1	49	23.87	23.88	23.83		
20	16QAM	1	99	23.90	23.98	23.82		
20	16QAM	50	0	22.45	22.42	22.45	23.7	2
20	16QAM	50	24	22.38	22.44	22.41		
20	16QAM	50	50	22.46	22.41	22.31		
20	16QAM	100	0	22.50	22.58	22.38		
20	64QAM	1	0	22.55	22.57	22.63	23.7	2
20	64QAM	1	49	22.78	22.58	22.65		
20	64QAM	1	99	22.54	22.51	22.65		
20	64QAM	50	0	21.62	21.72	21.61	22.7	3
20	64QAM	50	24	21.68	21.62	21.74		
20	64QAM	50	50	21.65	21.70	21.60		
20	64QAM	100	0	21.65	21.71	21.59		
Channel				132047	132322	132597	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1717.5	1745	1772.5		
15	QPSK	1	0	24.42	24.36	24.42	25.7	0
15	QPSK	1	37	24.42	24.44	24.41		
15	QPSK	1	74	24.33	24.25	24.24		
15	QPSK	36	0	23.51	23.40	23.52	24.7	1
15	QPSK	36	20	23.47	23.50	23.53		
15	QPSK	36	39	23.38	23.36	23.41		
15	QPSK	75	0	23.51	23.36	23.43		
15	16QAM	1	0	23.58	23.63	23.61	24.7	1
15	16QAM	1	37	23.49	23.76	23.48		
15	16QAM	1	74	23.52	23.47	23.39		
15	16QAM	36	0	22.67	22.61	22.64	23.7	2
15	16QAM	36	20	22.66	22.59	22.68		
15	16QAM	36	39	22.57	22.60	22.45		
15	16QAM	75	0	22.54	22.67	22.56		
15	64QAM	1	0	22.67	22.50	22.82	23.7	2
15	64QAM	1	37	22.78	22.69	22.67		
15	64QAM	1	74	22.60	22.51	22.57		
15	64QAM	36	0	21.66	21.66	21.65	22.7	3
15	64QAM	36	20	21.76	21.64	21.68		
15	64QAM	36	39	21.66	21.66	21.55		
15	64QAM	75	0	21.78	21.67	21.70		
Channel				132022	132322	132622	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1715	1745	1775		
10	QPSK	1	0	24.17	24.19	24.05	25.7	0
10	QPSK	1	25	24.25	24.20	24.25		
10	QPSK	1	49	24.13	24.11	24.13		
10	QPSK	25	0	23.37	23.42	23.27	24.7	1
10	QPSK	25	12	23.28	23.26	23.22		
10	QPSK	25	25	23.22	23.30	23.18		
10	QPSK	50	0	23.51	23.42	23.18		
10	16QAM	1	0	23.66	23.68	23.58	24.7	1
10	16QAM	1	25	23.68	23.56	23.55		
10	16QAM	1	49	23.61	23.59	23.42		
10	16QAM	25	0	22.43	22.49	22.42	23.7	2
10	16QAM	25	12	22.48	22.46	22.40		
10	16QAM	25	25	22.44	22.50	22.38		
10	16QAM	50	0	22.51	22.59	22.49		
10	64QAM	1	0	22.59	22.51	22.53	23.7	2
10	64QAM	1	25	22.39	22.57	22.42		
10	64QAM	1	49	22.41	22.46	22.16		
10	64QAM	25	0	21.40	21.63	21.35	22.7	3
10	64QAM	25	12	21.45	21.48	21.44		
10	64QAM	25	25	21.42	21.42	21.22		
10	64QAM	50	0	21.37	21.50	21.31		
Channel				131997	132322	132647	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1712.5	1745	1777.5		
5	QPSK	1	0	24.19	24.18	24.15	25.7	0
5	QPSK	1	12	24.18	24.19	24.15		
5	QPSK	1	24	24.09	24.11	24.19		
5	QPSK	12	0	23.29	23.32	23.25	24.7	1
5	QPSK	12	7	23.39	23.31	23.26		
5	QPSK	12	13	23.23	23.27	23.14		
5	QPSK	25	0	23.28	23.00	23.13		
5	16QAM	1	0	23.48	23.59	23.56	24.7	1
5	16QAM	1	12	23.51	23.59	23.47		
5	16QAM	1	24	23.60	23.42	23.48		
5	16QAM	12	0	22.45	22.63	22.46	23.7	2
5	16QAM	12	7	22.62	22.64	22.60		
5	16QAM	12	13	22.49	22.47	22.55		
5	16QAM	25	0	22.55	22.57	22.50		
5	64QAM	1	0	22.87	22.80	22.90	23.7	2
5	64QAM	1	12	22.96	22.84	22.78		
5	64QAM	1	24	22.96	22.71	22.67		
5	64QAM	12	0	21.38	21.31	21.25	22.7	3
5	64QAM	12	7	21.53	21.21	21.27		
5	64QAM	12	13	21.18	21.18	21.19		
5	64QAM	25	0	21.33	21.36	21.26		
Channel				131987	132322	132657	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1711.5	1745	1778.5		
3	QPSK	1	0	24.28	24.22	24.16	25.7	0
3	QPSK	1	8	24.26	24.17	24.24		
3	QPSK	1	14	24.18	24.30	24.12		
3	QPSK	8	0	23.32	23.27	23.29	24.7	1
3	QPSK	8	4	23.27	23.27	23.23		
3	QPSK	8	7	23.28	23.23	23.13		
3	QPSK	15	0	23.25	23.19	23.09		
3	16QAM	1	0	23.77	23.90	23.81	24.7	1
3	16QAM	1	8	23.87	23.83	23.78		
3	16QAM	1	14	23.75	23.71	23.69		
3	16QAM	8	0	22.50	22.48	22.32	23.7	2
3	16QAM	8	4	22.60	22.49	22.46		
3	16QAM	8	7	22.49	22.45	22.31		
3	16QAM	15	0	22.47	22.51	22.31		
3	64QAM	1	0	22.25	22.25	22.23	23.7	2
3	64QAM	1	8	22.41	22.25	22.16		
3	64QAM	1	14	22.23	22.16	22.12		
3	64QAM	8	0	21.29	21.23	21.21	22.7	3
3	64QAM	8	4	21.27	21.24	21.16		
3	64QAM	8	7	21.29	21.20	21.17		
3	64QAM	15	0	21.35	21.35	21.23		
Channel				131979	132322	132665	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1710.7	1745	1779.3		
1.4	QPSK	1	0	24.08	24.05	24.00	25.7	0
1.4	QPSK	1	3	24.22	24.00	24.19		
1.4	QPSK	1	5	24.06	24.11	23.94		
1.4	QPSK	3	0	24.19	24.19	24.11		
1.4	QPSK	3	1	24.23	24.19	24.20		
1.4	QPSK	3	3	24.29	24.22	24.17		
1.4	QPSK	6	0	23.30	23.17	23.21	#VALUE!	0~1
1.4	16QAM	1	0	23.75	23.71	23.78	#VALUE!	0~1
1.4	16QAM	1	3	23.91	23.81	23.82		
1.4	16QAM	1	5	23.89	23.69	23.83		
1.4	16QAM	3	0	23.47	23.34	23.34		
1.4	16QAM	3	1	23.42	23.37	23.35		
1.4	16QAM	3	3	23.37	23.38	23.42		
1.4	16QAM	6	0	22.65	22.55	22.49	#VALUE!	0~2
1.4	64QAM	1	0	22.45	22.52	22.34	#VALUE!	0~2
1.4	64QAM	1	3	22.59	22.49	22.55		
1.4	64QAM	1	5	22.44	22.40	22.42		
1.4	64QAM	3	0	22.43	22.45	22.36		
1.4	64QAM	3	1	22.48	22.48	22.46		
1.4	64QAM	3	3	22.42	22.37	22.33		
1.4	64QAM	6	0	21.35	21.34	21.43	#VALUE!	0~3

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Band 38(only on channel required)

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				37850	38000	38150		
Frequency (MHz)				2580	2595	2610		
20	QPSK	1	0	24.24	24.25	24.07	25.7	0
20	QPSK	1	49	24.02	24.04	24.05		
20	QPSK	1	99	23.86	23.94	23.87		
20	QPSK	50	0	23.23	23.24	23.05	24.7	1
20	QPSK	50	24	23.06	23.14	23.01		
20	QPSK	50	50	22.99	23.07	22.97		
20	QPSK	100	0	23.15	23.16	23.02		
20	16QAM	1	0	23.41	23.18	23.22	24.7	1
20	16QAM	1	49	23.15	23.20	23.17		
20	16QAM	1	99	22.99	23.07	22.99		
20	16QAM	50	0	22.35	22.24	22.19	23.7	2
20	16QAM	50	24	22.19	22.25	22.14		
20	16QAM	50	50	22.11	22.18	22.05		
20	16QAM	100	0	22.28	22.23	22.12		
20	64QAM	1	0	22.01	22.21	21.85	23.7	2
20	64QAM	1	49	22.12	22.12	22.13		
20	64QAM	1	99	22.21	22.12	22.21		
20	64QAM	50	0	21.31	21.17	21.15	22.7	3
20	64QAM	50	24	21.16	21.21	21.11		
20	64QAM	50	50	21.05	21.14	21.06		
20	64QAM	100	0	21.28	21.21	21.09		
Channel				37825	38000	38175	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2577.5	2595	2612.5		
15	QPSK	1	0	24.13	24.03	24.02	25.7	0
15	QPSK	1	37	24.13	24.03	23.98		
15	QPSK	1	74	24.02	24.00	24.06		
15	QPSK	36	0	23.21	23.18	23.05	24.7	1
15	QPSK	36	20	23.25	23.11	23.06		
15	QPSK	36	39	23.27	23.08	22.99		
15	QPSK	75	0	23.35	23.19	23.22		
15	16QAM	1	0	23.25	23.30	22.99	24.7	1
15	16QAM	1	37	23.21	23.12	23.07		
15	16QAM	1	74	23.30	23.28	23.24		
15	16QAM	36	0	22.30	22.12	22.08	23.7	2
15	16QAM	36	20	22.28	22.25	22.19		
15	16QAM	36	39	22.19	22.12	22.13		
15	16QAM	75	0	22.29	22.27	22.21		
15	64QAM	1	0	22.15	22.11	22.01	23.7	2
15	64QAM	1	37	21.88	22.11	22.21		
15	64QAM	1	74	22.08	21.97	21.84		
15	64QAM	36	0	21.37	21.19	21.15	22.7	3
15	64QAM	36	20	21.43	21.22	21.26		
15	64QAM	36	39	21.34	21.19	21.20		
15	64QAM	75	0	21.43	21.30	21.14		
Channel				37800	38000	38200	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2575	2595	2615		
10	QPSK	1	0	24.13	24.09	24.07	25.7	0
10	QPSK	1	25	23.96	24.08	24.02		
10	QPSK	1	49	24.01	23.95	23.97		
10	QPSK	25	0	23.14	23.05	23.03	24.7	1
10	QPSK	25	12	23.19	23.07	22.96		
10	QPSK	25	25	23.19	23.03	22.98		
10	QPSK	50	0	23.18	23.16	23.12		
10	16QAM	1	0	23.44	23.09	23.04	24.7	1
10	16QAM	1	25	23.23	23.18	22.94		
10	16QAM	1	49	23.23	23.21	23.01		
10	16QAM	25	0	22.23	22.24	22.23	23.7	2
10	16QAM	25	12	22.38	22.18	22.09		
10	16QAM	25	25	22.27	22.32	22.07		
10	16QAM	50	0	22.35	22.15	22.20		
10	64QAM	1	0	22.01	22.08	21.94	23.7	2
10	64QAM	1	25	21.81	21.97	21.89		
10	64QAM	1	49	22.03	21.83	21.82		
10	64QAM	25	0	21.21	21.13	21.21	22.7	3
10	64QAM	25	12	21.26	21.26	21.08		
10	64QAM	25	25	21.35	21.21	21.06		
10	64QAM	50	0	21.32	21.31	21.08		
Channel				37775	38000	38225	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2572.5	2595	2617.5		
5	QPSK	1	0	24.17	23.83	23.82	25.7	0
5	QPSK	1	12	24.13	24.14	23.96		
5	QPSK	1	24	24.07	23.94	23.91		
5	QPSK	12	0	23.28	23.14	22.89	24.7	1
5	QPSK	12	7	23.20	23.07	23.00		
5	QPSK	12	13	23.16	23.23	22.95		
5	QPSK	25	0	23.15	23.21	23.04		
5	16QAM	1	0	23.31	23.02	22.90	24.7	1
5	16QAM	1	12	23.20	23.24	22.99		
5	16QAM	1	24	23.19	23.10	22.97		
5	16QAM	12	0	22.31	22.19	22.02	23.7	2
5	16QAM	12	7	22.24	22.22	22.13		
5	16QAM	12	13	22.20	22.18	22.09		
5	16QAM	25	0	22.34	22.13	22.15		
5	64QAM	1	0	22.13	21.95	21.84	23.7	2
5	64QAM	1	12	22.20	21.83	21.80		
5	64QAM	1	24	22.18	21.91	21.83		
5	64QAM	12	0	21.34	21.12	21.06	22.7	3
5	64QAM	12	7	21.27	21.16	21.09		
5	64QAM	12	13	21.32	21.20	21.02		
5	64QAM	25	0	21.32	21.20	21.12		

Band 41 (2.6G Band)

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.	Tune-up limit (dBm)	MPR (dB)
Channel				40240	40500	40770	41090		
Frequency (MHz)				2555	2581	2608	2640		
20	QPSK	1	0	24.16	24.20	24.26	23.99	25.7	0
20	QPSK	1	49	24.19	24.18	23.96	23.81		
20	QPSK	1	99	24.17	23.85	23.93	23.98		
20	QPSK	50	0	23.29	23.22	23.30	22.92	24.7	1
20	QPSK	50	24	23.29	23.16	23.03	22.91		
20	QPSK	50	50	23.23	23.09	22.94	22.82		
20	QPSK	100	0	22.97	22.94	22.98	22.85		
20	16QAM	1	0	23.31	23.38	23.16	23.15	24.7	1
20	16QAM	1	49	23.34	23.36	23.11	22.95		
20	16QAM	1	99	23.29	23.00	23.03	22.99		
20	16QAM	50	0	22.41	22.33	22.18	22.06	23.7	2
20	16QAM	50	24	22.37	22.26	22.16	21.99		
20	16QAM	50	50	22.34	22.19	22.07	21.96		
20	16QAM	100	0	22.38	22.24	22.13	21.99		
20	64QAM	1	0	21.92	21.96	21.78	21.80	23.7	2
20	64QAM	1	49	21.94	21.92	21.72	21.98		
20	64QAM	1	99	21.90	21.88	21.87	21.78		
20	64QAM	50	0	21.40	21.30	21.18	21.03	22.7	3
20	64QAM	50	24	21.37	21.26	21.12	21.00		
20	64QAM	50	50	21.33	21.18	21.06	20.90		
20	64QAM	100	0	21.36	21.24	21.11	20.96		
Channel				40215	40495	40785	41115	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2552.5	2580.5	2609.5	2642.5		
15	QPSK	1	0	24.00	23.86	24.06	23.93	25.7	0
15	QPSK	1	37	24.08	23.92	24.10	23.95		
15	QPSK	1	74	23.87	23.91	23.91	23.96		
15	QPSK	36	0	23.08	23.01	23.14	23.08	24.7	1
15	QPSK	36	20	23.20	23.00	23.22	23.03		
15	QPSK	36	39	23.12	22.99	23.16	23.04		
15	QPSK	75	0	23.22	23.02	23.28	23.09		
15	16QAM	1	0	23.20	23.19	23.22	23.22	24.7	1
15	16QAM	1	37	23.06	23.03	23.10	23.08		
15	16QAM	1	74	23.17	23.11	23.23	23.18		
15	16QAM	36	0	22.25	22.01	22.27	22.04	23.7	2
15	16QAM	36	20	22.13	22.16	22.17	22.21		
15	16QAM	36	39	22.06	21.95	22.12	22.02		
15	16QAM	75	0	22.24	22.16	22.26	22.19		
15	64QAM	1	0	22.32	22.34	22.36	22.39	23.7	2
15	64QAM	1	37	22.07	22.26	22.13	22.33		
15	64QAM	1	74	22.35	22.18	22.37	22.21		
15	64QAM	36	0	21.54	21.42	21.58	21.47	22.7	3
15	64QAM	36	20	21.62	21.37	21.68	21.44		
15	64QAM	36	39	21.61	21.40	21.63	21.43		
15	64QAM	75	0	21.60	21.53	21.64	21.58		
Channel				40190	40490	40790	41140	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2550	2580	2610	2645		
10	QPSK	1	0	23.98	24.00	24.02	24.05	25.7	0
10	QPSK	1	25	23.83	23.91	23.89	23.98		
10	QPSK	1	49	23.96	23.84	23.98	23.87		
10	QPSK	25	0	22.99	22.96	23.03	23.01	24.7	1
10	QPSK	25	12	23.06	22.90	23.12	22.97		
10	QPSK	25	25	23.14	22.92	23.16	22.95		
10	QPSK	50	0	23.03	23.07	23.07	23.12		
10	16QAM	1	0	23.31	22.92	23.37	22.99	24.7	1
10	16QAM	1	25	23.18	23.07	23.20	23.10		
10	16QAM	1	49	23.08	23.12	23.12	23.17		
10	16QAM	25	0	22.10	22.07	22.16	22.14	23.7	2
10	16QAM	25	12	22.33	22.07	22.35	22.10		
10	16QAM	25	25	22.12	22.23	22.16	22.28		
10	16QAM	50	0	22.22	21.98	22.28	22.05		
10	64QAM	1	0	22.28	22.29	22.30	22.32	23.7	2
10	64QAM	1	25	21.98	22.20	22.02	22.25		
10	64QAM	1	49	22.22	21.98	22.28	22.05		
10	64QAM	25	0	21.48	21.34	21.50	21.37	22.7	3
10	64QAM	25	12	21.43	21.49	21.47	21.54		
10	64QAM	25	25	21.54	21.36	21.60	21.43		
10	64QAM	50	0	21.59	21.52	21.61	21.55		
Channel				40165	40485	40805	41165	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2547.5	2579.5	2611.5	2647.50		
5	QPSK	1	0	24.12	23.72	24.14	23.75	25.7	0
5	QPSK	1	12	23.98	24.05	24.02	24.10		
5	QPSK	1	24	23.94	23.77	24.00	23.84		
5	QPSK	12	0	23.23	23.03	23.25	23.06	24.7	1
5	QPSK	12	7	23.05	22.98	23.09	23.03		
5	QPSK	12	13	23.03	23.06	23.09	23.13		
5	QPSK	25	0	23.10	23.10	23.12	23.13		
5	16QAM	1	0	23.16	22.93	23.20	22.98	24.7	1
5	16QAM	1	12	23.07	23.07	23.13	23.14		
5	16QAM	1	24	23.14	22.99	23.16	23.02		
5	16QAM	12	0	22.16	22.10	22.20	22.15	23.7	2
5	16QAM	12	7	22.11	22.05	22.17	22.12		
5	16QAM	12	13	22.15	22.07	22.17	22.10		
5	16QAM	25	0	22.19	22.04	22.23	22.09		
5	64QAM	1	0	22.32	22.10	22.38	22.17	23.7	2
5	64QAM	1	12	22.47	22.04	22.49	22.07		
5	64QAM	1	24	22.35	22.14	22.39	22.19		
5	64QAM	12	0	21.53	21.27	21.59	21.34	22.7	3
5	64QAM	12	7	21.54	21.37	21.56	21.40		
5	64QAM	12	13	21.49	21.43	21.53	21.48		
5	64QAM	25	0	21.51	21.35	21.57	21.42		

Reduced Power DSI 1 for Head/DSI 5 for Hotspot/DSI 3 for extremity

Ant 2 DSI 1/5									
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	27.89	28.20	27.90	30.00	18.89	19.20	18.90	21.00
GPRS 1 Tx slot	27.85	28.10	27.87	30.00	18.85	19.10	18.87	21.00
GPRS 2 Tx slots	25.09	25.15	25.10	27.00	19.09	19.15	19.10	21.00
GPRS 3 Tx slots	23.46	23.72	23.82	25.20	19.20	19.46	19.56	20.94
GPRS 4 Tx slots	22.32	22.51	22.76	23.50	19.32	19.51	19.76	20.50
EDGE 1 Tx slot	21.97	21.84	21.96	24.00	12.97	12.84	12.96	15.00
EDGE 2 Tx slots	18.96	18.74	18.91	21.00	12.96	12.74	12.91	15.00
EDGE 3 Tx slots	16.85	16.71	16.93	19.20	12.59	12.45	12.67	14.94
EDGE 4 Tx slots	15.78	15.74	15.95	17.50	12.78	12.74	12.95	14.50

Ant 2 DSI 3								
GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	128	189	251		128	189	251	
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8	
GSM 1 Tx slot	31.20	31.33	31.23	33.00	22.20	22.33	22.23	24.00
GPRS 1 Tx slot	31.30	31.39	31.29	33.00	22.30	22.39	22.29	24.00
GPRS 2 Tx slots	28.43	28.56	28.25	30.00	22.43	22.56	22.25	24.00
GPRS 3 Tx slots	26.45	26.36	26.33	28.20	22.19	22.10	22.07	23.94
GPRS 4 Tx slots	24.53	24.94	24.61	26.50	21.53	21.94	21.61	23.50
EDGE 1 Tx slot	25.49	25.47	25.11	27.00	16.49	16.47	16.11	18.00
EDGE 2 Tx slots	22.45	22.26	22.09	24.00	16.45	16.26	16.09	18.00
EDGE 3 Tx slots	20.49	20.39	20.26	22.20	16.23	16.13	16.00	17.94
EDGE 4 Tx slots	18.88	18.87	18.52	20.50	15.88	15.87	15.52	17.50

Ant 1 DSI 5								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	24.93	25.16	25.02	26.00	15.93	16.16	16.02	17.00
GPRS 1 Tx slot	25.08	25.13	25.04	26.00	16.08	16.13	16.04	17.00
GPRS 2 Tx slots	22.24	22.37	22.22	22.50	13.24	16.37	16.22	16.50
GPRS 3 Tx slots	20.15	20.33	20.27	20.70	11.15	16.07	16.01	16.44
GPRS 4 Tx slots	19.34	19.47	19.31	19.50	10.34	16.47	16.31	16.50
EDGE 1 Tx slot	20.27	20.19	20.17	21.50	11.27	11.19	11.17	12.50
EDGE 2 Tx slots	17.12	17.05	16.94	18.50	8.12	11.05	10.94	12.50
EDGE 3 Tx slots	15.26	15.24	15.15	16.70	6.26	10.98	10.89	12.44
EDGE 4 Tx slots	14.45	14.48	14.31	15.50	5.45	11.48	11.31	12.50

Ant 2 DSI 1/5								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	25.31	25.28	25.19	26.50	16.31	16.28	16.19	17.50
GPRS 1 Tx slot	25.24	25.37	25.22	26.50	16.24	16.37	16.22	17.50
GPRS 2 Tx slots	22.51	22.64	22.58	23.00	16.51	16.64	16.58	17.00
GPRS 3 Tx slots	20.63	20.70	20.72	21.20	16.37	16.44	16.46	16.94
GPRS 4 Tx slots	18.87	18.90	18.77	20.00	15.87	15.90	15.77	17.00
EDGE 1 Tx slot	21.02	20.69	20.62	22.00	12.02	11.69	11.62	13.00
EDGE 2 Tx slots	17.44	17.53	17.48	19.00	11.44	11.53	11.48	13.00
EDGE 3 Tx slots	16.10	15.64	15.74	17.20	11.84	11.38	11.48	12.94
EDGE 4 Tx slots	14.50	14.53	14.55	16.00	11.50	11.53	11.55	13.00

Ant 2 DSI 3								
GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)
TX Channel	512	661	810		512	661	810	
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8	
GSM 1 Tx slot	27.31	27.55	27.49	28.50	18.31	18.55	18.49	19.50
GPRS 1 Tx slot	27.57	27.62	27.49	28.50	18.41	18.62	18.41	19.50
GPRS 2 Tx slots	23.73	23.82	23.63	25.00	17.73	17.82	17.63	19.00
GPRS 3 Tx slots	22.62	22.76	22.57	23.20	18.36	18.50	18.31	18.94
GPRS 4 Tx slots	21.30	21.40	21.39	22.00	18.30	18.40	18.39	19.00
EDGE 1 Tx slot	23.13	22.86	22.93	24.00	14.13	13.86	13.93	15.00
EDGE 2 Tx slots	19.66	19.60	19.81	21.00	13.66	13.60	13.81	15.00
EDGE 3 Tx slots	18.16	17.86	17.99	19.20	13.90	13.60	13.73	14.94
EDGE 4 Tx slots	16.31	16.22	16.44	18.00	13.31	13.22	13.44	15.00

		Ant 1 DSI 3				Ant 1 DSI 5				Ant 1 DSI 3				Ant 1 DSI 5			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		9262	9400	9538		1312	1413	1513		1312	1413	1513	
Rx Channel		9662	9800	9938		9662	9800	9938		1537	1638	1738		1537	1638	1738	
Frequency (MHz)		1852.4	1880	1907.6		1852.4	1880	1907.6		1712.4	1732.6	1752.6		1712.4	1732.6	1752.6	
3GPP Rel 99	AMR 12.2Kbps	19.00	18.95	18.91	20.50	17.21	17.36	17.34	19.00	20.41	20.50	20.53	22.00	19.41	19.52	19.54	21.00
3GPP Rel 99	RMC 12.2Kbps	19.01	19.02	18.92	20.50	17.23	17.37	17.35	19.00	20.44	20.51	20.58	22.00	19.42	19.57	19.56	21.00
3GPP Rel 6	HSDPA Subtest-1	18.21	18.07	17.99	19.50	16.70	16.56	16.47	18.00	19.61	19.61	19.69	21.00	18.59	18.66	18.69	20.00
3GPP Rel 6	HSDPA Subtest-2	18.26	18.10	18.12	19.50	16.72	16.54	16.50	18.00	19.61	19.62	19.69	21.00	18.59	18.67	18.68	20.00
3GPP Rel 6	HSDPA Subtest-3	17.75	17.61	17.50	19.00	16.19	16.10	15.97	17.50	19.11	19.12	19.20	20.50	18.08	18.13	18.18	19.50
3GPP Rel 6	HSDPA Subtest-4	17.73	17.60	17.52	19.00	16.19	16.08	15.98	17.50	19.08	19.14	19.13	20.50	18.10	18.15	18.18	19.50
3GPP Rel 8	DC-HSDPA Subtest-1	18.56	18.58	18.44	19.50	16.78	16.76	16.71	18.00	19.79	19.75	19.82	21.00	18.82	18.88	18.93	20.00
3GPP Rel 8	DC-HSDPA Subtest-2	18.64	18.40	18.47	19.50	16.82	16.61	16.64	18.00	19.72	19.88	19.79	21.00	18.65	18.75	18.84	20.00
3GPP Rel 8	DC-HSDPA Subtest-3	17.98	18.23	18.12	19.00	16.29	16.35	16.31	17.50	19.31	19.52	19.39	20.50	18.36	18.46	18.34	19.50
3GPP Rel 8	DC-HSDPA Subtest-4	18.19	18.09	18.22	19.00	16.47	16.41	16.20	17.50	19.06	19.35	19.30	20.50	18.14	18.33	18.38	19.50
3GPP Rel 6	HSUPA Subtest-1	18.25	18.07	18.11	19.50	16.73	16.57	16.52	18.00	19.51	19.55	19.65	21.00	18.52	18.54	18.62	20.00
3GPP Rel 6	HSUPA Subtest-2	16.22	16.16	16.05	17.50	14.75	14.51	14.46	16.00	17.51	17.60	17.62	19.00	16.53	16.63	16.63	18.00
3GPP Rel 6	HSUPA Subtest-3	17.26	17.05	17.01	18.50	15.72	15.59	15.53	17.00	18.51	18.58	18.64	20.00	17.50	17.55	17.65	19.00
3GPP Rel 6	HSUPA Subtest-4	16.14	16.03	16.08	19.50	14.73	14.51	14.49	16.00	17.55	17.58	17.62	19.00	16.51	16.57	16.52	18.00
3GPP Rel 6	HSUPA Subtest-5	18.17	18.07	18.11	19.50	16.67	16.63	16.62	18.00	19.50	19.60	19.60	21.00	18.52	18.63	18.63	20.00

		Ant 2 DSI 1/5				Ant 2 DSI 3				Ant 2 DSI 1/5				Ant 2 DSI 3			
Band		WCDMA II			Tune-up Limit (dBm)	WCDMA II			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)	WCDMA IV			Tune-up Limit (dBm)
TX Channel		9262	9400	9538		9262	9400	9538		1312	1413	1513		1312	1413	1513	
Rx Channel		9662	9800	9938		9662	9800	9938		1537	1638	1738		1537	1638	1738	
Frequency (MHz)		1852.4	1880	1907.6		1852.4	1880	1907.6		1712.4	1732.6	1752.6		1712.4	1732.6	1752.6	
3GPP Rel 99	AMR 12.2Kbps	15.70	15.73	15.67	17.20	19.87	19.69	19.67	21.20	13.71	13.78	13.74	15.20	18.74	18.77	18.81	20.20
3GPP Rel 99	RMC 12.2Kbps	15.71	15.74	15.68	17.20	19.89	19.70	19.68	21.20	13.72	13.79	13.75	15.20	18.75	18.80	18.83	20.20
3GPP Rel 6	HSDPA Subtest-1	14.96	14.84	14.86	16.20	18.94	18.84	18.83	20.20	12.87	12.87	12.97	14.20	17.96	17.85	17.93	19.20
3GPP Rel 6	HSDPA Subtest-2	14.96	14.88	14.85	16.20	18.97	18.88	18.85	20.20	12.92	12.89	12.98	14.20	17.94	17.89	17.94	19.20
3GPP Rel 6	HSDPA Subtest-3	14.48	14.37	14.40	15.70	18.47	18.33	18.39	19.70	12.36	12.38	12.47	13.70	17.49	17.38	17.46	18.70
3GPP Rel 6	HSDPA Subtest-4	14.44	14.40	14.39	15.70	18.45	18.34	18.34	19.70	12.40	12.40	12.44	13.70	17.49	17.33	17.43	18.70
3GPP Rel 8	DC-HSDPA Subtest-1	14.73	14.53	14.67	16.20	18.71	18.53	18.65	20.20	12.34	12.23	12.30	14.20	17.30	17.38	17.31	19.20
3GPP Rel 8	DC-HSDPA Subtest-2	14.57	14.59	14.53	16.20	18.72	18.50	18.63	20.20	12.26	12.30	12.19	14.20	17.24	17.35	17.15	19.20
3GPP Rel 8	DC-HSDPA Subtest-3	14.20	14.18	14.18	15.70	18.17	18.02	18.13	19.70	11.91	11.84	11.87	13.70	16.79	16.77	16.81	18.70
3GPP Rel 8	DC-HSDPA Subtest-4	14.09	14.00	14.11	15.70	18.21	18.02	18.03	19.70	11.81	11.73	11.75	13.70	16.75	16.77	16.81	18.70
3GPP Rel 6	HSUPA Subtest-1	14.93	14.89	14.92	16.20	18.95	18.78	18.83	20.20	12.90	12.71	12.82	14.20	17.94	17.87	17.96	19.20
3GPP Rel 6	HSUPA Subtest-2	12.92	12.83	12.87	14.20	16.97	16.81	16.86	18.20	10.91	10.75	10.78	12.20	15.84	15.82	15.94	17.20
3GPP Rel 6	HSUPA Subtest-3	13.69	13.85	13.82	15.20	17.89	17.79	17.84	19.20	12.04	11.75	11.78	13.20	16.77	16.85	16.98	18.20
3GPP Rel 6	HSUPA Subtest-4	12.96	12.87	12.92	14.20	16.92	16.82	16.87	18.20	11.04	10.72	10.85	12.20	15.81	15.85	15.93	17.20
3GPP Rel 6	HSUPA Subtest-5	15.00	14.90	14.90	16.20	19.00	18.80	18.80	20.20	12.95	12.78	12.77	14.20	17.90	17.90	17.90	19.20

		Ant 2 DSI 1/5			
Band		WCDMA V			Tune-up Limit (dBm)
TX Channel		4132	4182	4233	
Rx Channel		4357	4407	4458	
Frequency (MHz)		826.4	836.4	846.6	
3GPP Rel 99	AMR 12.2Kbps	20.91	20.93	20.87	22.50
3GPP Rel 99	RMC 12.2Kbps	20.93	20.94	20.89	22.50
3GPP Rel 6	HSDPA Subtest-1	19.78	19.77	19.75	21.50
3GPP Rel 6	HSDPA Subtest-2	19.77	19.75	19.79	21.50
3GPP Rel 8	HSDPA Subtest-3	19.30	19.24	19.32	21.00
3GPP Rel 8	HSDPA Subtest-4	19.30	19.27	19.18	21.00
3GPP Rel 8	DC-HSDPA Subtest-1	19.64	19.76	19.75	21.50
3GPP Rel 8	DC-HSDPA Subtest-2	19.65	19.60	19.66	21.50
3GPP Rel 8	DC-HSDPA Subtest-3	19.34	19.14	19.11	21.00
3GPP Rel 8	DC-HSDPA Subtest-4	19.27	19.23	19.22	21.00
3GPP Rel 6	HSUPA Subtest-1	19.64	19.64	19.65	21.50
3GPP Rel 6	HSUPA Subtest-2	17.68	17.63	17.64	19.50
3GPP Rel 6	HSUPA Subtest-3	18.65	18.67	18.65	20.50
3GPP Rel 6	HSUPA Subtest-4	17.70	17.65	17.65	19.50
3GPP Rel 6	HSUPA Subtest-5	19.72	19.75	19.66	21.50

Band 2 _Ant 1_DSI 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				18700	18900	19100		
Frequency (MHz)				1860	1880	1900		
20	QPSK	1	0	19.41	19.53	19.37	21	0
20	QPSK	1	49	19.42	19.46	19.48		
20	QPSK	1	99	19.47	19.41	19.32		
20	QPSK	50	0	19.41	19.50	19.39	21	0
20	QPSK	50	24	19.43	19.49	19.39		
20	QPSK	50	50	19.49	19.42	19.41		
20	QPSK	100	0	19.46	19.49	19.38		
20	16QAM	1	0	19.43	19.48	19.41	21	0
20	16QAM	1	49	19.51	19.50	19.45		
20	16QAM	1	99	19.41	19.52	19.51		
20	16QAM	50	0	19.38	19.43	19.29	21	0
20	16QAM	50	24	19.39	19.45	19.30		
20	16QAM	50	50	19.45	19.41	19.34		
20	16QAM	100	0	19.47	19.38	19.26		
20	64QAM	1	0	19.43	19.43	19.51	21	0
20	64QAM	1	49	19.46	19.46	19.45		
20	64QAM	1	99	19.48	19.38	19.40		
20	64QAM	50	0	19.42	19.49	19.32	21	0
20	64QAM	50	24	19.45	19.49	19.30		
20	64QAM	50	50	19.42	19.41	19.34		
20	64QAM	100	0	19.47	19.45	19.24		
Channel				18675	18900	19125	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1857.5	1880	1902.5		
15	QPSK	1	0	19.32	19.48	19.37	21	0
15	QPSK	1	37	19.31	19.51	19.42		
15	QPSK	1	74	19.28	19.40	19.37		
15	QPSK	36	0	19.37	19.44	19.38	21	0
15	QPSK	36	20	19.39	19.43	19.51		
15	QPSK	36	39	19.34	19.49	19.46		
15	QPSK	75	0	19.34	19.49	19.37		
15	16QAM	1	0	19.38	19.51	19.38	21	0
15	16QAM	1	37	19.44	19.51	19.40		
15	16QAM	1	74	19.31	19.46	19.43		
15	16QAM	36	0	19.34	19.47	19.29	21	0
15	16QAM	36	20	19.36	19.50	19.42		
15	16QAM	36	39	19.29	19.43	19.41		
15	16QAM	75	0	19.35	19.46	19.29		
15	64QAM	1	0	19.43	19.45	19.41	21	0
15	64QAM	1	37	19.27	19.52	19.33		
15	64QAM	1	74	19.21	19.34	19.32		
15	64QAM	36	0	19.20	19.32	19.16	21	0
15	64QAM	36	20	19.27	19.36	19.24		
15	64QAM	36	39	19.20	19.31	19.26		
15	64QAM	75	0	19.16	19.30	19.08		
Channel				18650	18900	19150	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1855	1880	1905		
10	QPSK	1	0	19.12	19.28	19.17	21	0
10	QPSK	1	25	19.11	19.31	19.22		
10	QPSK	1	49	19.08	19.20	19.17		
10	QPSK	25	0	19.17	19.34	19.18	21	0
10	QPSK	25	12	19.19	19.37	19.31		
10	QPSK	25	25	19.14	19.29	19.26		
10	QPSK	50	0	19.14	19.29	19.17		
10	16QAM	1	0	19.38	19.51	19.38	21	0
10	16QAM	1	25	19.44	19.51	19.40		
10	16QAM	1	49	19.31	19.46	19.43		
10	16QAM	25	0	19.34	19.47	19.29	21	0
10	16QAM	25	12	19.36	19.50	19.42		
10	16QAM	25	25	19.29	19.43	19.41		
10	16QAM	50	0	19.35	19.46	19.29		
10	64QAM	1	0	19.43	19.45	19.41	21	0
10	64QAM	1	25	19.27	19.52	19.33		
10	64QAM	1	49	19.21	19.34	19.32		
10	64QAM	25	0	19.20	19.32	19.16	21	0
10	64QAM	25	12	19.27	19.36	19.24		
10	64QAM	25	25	19.20	19.31	19.26		
10	64QAM	50	0	19.16	19.30	19.08		
Channel				18625	18900	19175	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1852.5	1880	1907.5		
5	QPSK	1	0	19.28	19.27	19.29	21	0
5	QPSK	1	12	19.35	19.31	19.25		
5	QPSK	1	24	19.26	19.26	19.24		
5	QPSK	12	0	19.29	19.39	19.25	21	0
5	QPSK	12	7	19.35	19.37	19.30		
5	QPSK	12	13	19.28	19.32	19.24		
5	QPSK	25	0	19.31	19.31	19.26		
5	16QAM	1	0	19.52	19.50	19.46	21	0
5	16QAM	1	12	19.51	19.46	19.52		
5	16QAM	1	24	19.37	19.47	19.40		
5	16QAM	12	0	19.46	19.44	19.45	21	0
5	16QAM	12	7	19.51	19.40	19.46		
5	16QAM	12	13	19.46	19.49	19.50		
5	16QAM	25	0	19.44	19.49	19.39		
5	64QAM	1	0	19.49	19.51	19.41	21	0
5	64QAM	1	12	19.50	19.49	19.40		
5	64QAM	1	24	19.46	19.44	19.24		
5	64QAM	12	0	19.36	19.42	19.28	21	0
5	64QAM	12	7	19.41	19.37	19.28		
5	64QAM	12	13	19.32	19.35	19.21		
5	64QAM	25	0	19.28	19.29	19.22		
Channel				18615	18900	19185	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1851.5	1880	1908.5		
3	QPSK	1	0	19.29	19.32	19.25	21	0
3	QPSK	1	8	19.31	19.32	19.22		
3	QPSK	1	14	19.24	19.26	19.15		
3	QPSK	8	0	19.33	19.38	19.29	21	0
3	QPSK	8	4	19.38	19.37	19.27		
3	QPSK	8	7	19.32	19.35	19.29		
3	QPSK	15	0	19.25	19.31	19.26		
3	16QAM	1	0	19.43	19.52	19.36	21	0
3	16QAM	1	8	19.45	19.50	19.45		
3	16QAM	1	14	19.50	19.44	19.43		
3	16QAM	8	0	19.43	19.46	19.45	21	0
3	16QAM	8	4	19.51	19.48	19.49		
3	16QAM	8	7	19.50	19.51	19.47		
3	16QAM	15	0	19.41	19.47	19.43		
3	64QAM	1	0	19.51	19.51	19.47	21	0
3	64QAM	1	8	19.49	19.50	19.44		
3	64QAM	1	14	19.40	19.40	19.33		
3	64QAM	8	0	19.37	19.38	19.25	21	0
3	64QAM	8	4	19.40	19.42	19.29		
3	64QAM	8	7	19.34	19.41	19.25		
3	64QAM	15	0	19.32	19.30	19.20		
Channel				18607	18900	19193	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1850.7	1880	1909.3		
1.4	QPSK	1	0	19.22	19.27	19.15	21	0
1.4	QPSK	1	3	19.25	19.34	19.21		
1.4	QPSK	1	5	19.22	19.23	19.15		
1.4	QPSK	3	0	19.24	19.27	19.16		
1.4	QPSK	3	1	19.25	19.30	19.23		
1.4	QPSK	3	3	19.27	19.27	19.23		
1.4	QPSK	6	0	19.18	19.27	19.19	21	0
1.4	16QAM	1	0	19.44	19.41	19.34	21	0
1.4	16QAM	1	3	19.43	19.46	19.51		
1.4	16QAM	1	5	19.35	19.42	19.33		
1.4	16QAM	3	0	19.40	19.47	19.26		
1.4	16QAM	3	1	19.47	19.41	19.35		
1.4	16QAM	3	3	19.39	19.39	19.33		
1.4	16QAM	6	0	19.48	19.50	19.39	21	0
1.4	64QAM	1	0	19.36	19.48	19.35	21	0
1.4	64QAM	1	3	19.42	19.37	19.29		
1.4	64QAM	1	5	19.27	19.21	19.26		
1.4	64QAM	3	0	19.23	19.27	19.15		
1.4	64QAM	3	1	19.23	19.27	19.25		
1.4	64QAM	3	3	19.19	19.26	19.12		
1.4	64QAM	6	0	19.16	19.23	19.12	21	0

Band 2_Ant 1_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				18700	18900	19100		
Frequency (MHz)				1860	1880	1900		
20	QPSK	1	0	17.06	17.15	17.01	18.5	0
20	QPSK	1	49	17.01	17.12	17.03		
20	QPSK	1	99	17.04	17.01	16.95		
20	QPSK	50	0	16.98	17.12	16.97	18.5	0
20	QPSK	50	24	17.04	17.11	16.97		
20	QPSK	50	50	17.11	17.08	17.04		
20	QPSK	100	0	17.02	17.06	16.96		
20	16QAM	1	0	17.02	17.07	16.95	18.5	0
20	16QAM	1	49	16.97	17.02	16.94		
20	16QAM	1	99	17.05	16.90	16.87		
20	16QAM	50	0	16.95	17.01	16.90	18.5	0
20	16QAM	50	24	16.95	17.00	16.88		
20	16QAM	50	50	17.03	16.94	16.91		
20	16QAM	100	0	16.98	16.97	16.85		
20	64QAM	1	0	17.05	17.08	16.97	18.5	0
20	64QAM	1	49	16.94	17.02	16.94		
20	64QAM	1	99	16.89	16.97	16.84		
20	64QAM	50	0	16.77	16.84	16.71	18.5	0
20	64QAM	50	24	16.77	16.83	16.70		
20	64QAM	50	50	16.83	16.79	16.72		
20	64QAM	100	0	16.81	16.79	16.67		
Channel				18675	18900	19125	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1857.5	1880	1902.5		
15	QPSK	1	0	16.74	16.90	16.78	18.5	0
15	QPSK	1	37	16.71	16.89	16.80		
15	QPSK	1	74	16.66	16.79	16.74		
15	QPSK	36	0	16.77	16.92	16.84	18.5	0
15	QPSK	36	20	16.78	16.95	16.90		
15	QPSK	36	39	16.75	16.93	16.86		
15	QPSK	75	0	16.73	16.92	16.79		
15	16QAM	1	0	16.95	16.97	16.83	18.5	0
15	16QAM	1	37	16.94	16.95	16.89		
15	16QAM	1	74	16.98	17.01	16.88		
15	16QAM	36	0	16.91	17.01	16.84	18.5	0
15	16QAM	36	20	16.94	17.08	16.99		
15	16QAM	36	39	16.86	17.03	16.97		
15	16QAM	75	0	16.86	16.99	16.85		
15	64QAM	1	0	16.98	17.12	16.99	18.5	0
15	64QAM	1	37	16.85	16.96	16.87		
15	64QAM	1	74	16.77	16.91	16.88		
15	64QAM	36	0	16.75	16.83	16.69	18.5	0
15	64QAM	36	20	16.77	16.90	16.83		
15	64QAM	36	39	16.69	16.87	16.79		
15	64QAM	75	0	16.68	16.84	16.68		
Channel				18650	18900	19150	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1855	1880	1905		
10	QPSK	1	0	16.86	17.04	16.86	18.5	0
10	QPSK	1	25	16.80	16.93	16.85		
10	QPSK	1	49	16.78	16.94	16.79		
10	QPSK	25	0	16.73	16.95	16.88	18.5	0
10	QPSK	25	12	16.82	16.96	16.88		
10	QPSK	25	25	16.73	16.90	16.85		
10	QPSK	50	0	16.76	16.93	16.88		
10	16QAM	1	0	16.99	17.12	17.06	18.5	0
10	16QAM	1	25	17.01	17.06	17.06		
10	16QAM	1	49	16.89	17.09	16.91		
10	16QAM	25	0	16.89	17.03	16.99	18.5	0
10	16QAM	25	12	16.94	17.04	17.00		
10	16QAM	25	25	16.88	17.02	16.99		
10	16QAM	50	0	16.90	17.01	16.92		
10	64QAM	1	0	17.08	17.10	16.98	18.5	0
10	64QAM	1	25	16.93	16.98	16.96		
10	64QAM	1	49	16.88	17.03	16.92		
10	64QAM	25	0	16.77	16.88	16.80	18.5	0
10	64QAM	25	12	16.74	16.93	16.81		
10	64QAM	25	25	16.70	16.78	16.79		
10	64QAM	50	0	16.68	16.83	16.76		
Channel				18625	18900	19175	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1852.5	1880	1907.5		
5	QPSK	1	0	16.88	16.92	16.82	18.5	0
5	QPSK	1	12	16.88	16.90	16.82		
5	QPSK	1	24	16.78	16.88	16.76		
5	QPSK	12	0	16.92	16.93	16.87	18.5	0
5	QPSK	12	7	16.86	16.99	16.87		
5	QPSK	12	13	16.87	16.94	16.83		
5	QPSK	25	0	16.86	16.89	16.82		
5	16QAM	1	0	17.11	17.06	16.88	18.5	0
5	16QAM	1	12	17.06	17.12	17.02		
5	16QAM	1	24	16.99	17.02	16.92		
5	16QAM	12	0	17.04	17.02	16.94	18.5	0
5	16QAM	12	7	17.06	17.07	16.98		
5	16QAM	12	13	17.01	17.03	16.95		
5	16QAM	25	0	17.01	17.00	16.92		
5	64QAM	1	0	17.12	17.11	17.06	18.5	0
5	64QAM	1	12	16.98	17.06	16.92		
5	64QAM	1	24	17.01	16.93	16.90		
5	64QAM	12	0	16.88	16.90	16.80	18.5	0
5	64QAM	12	7	16.93	16.90	16.80		
5	64QAM	12	13	16.85	16.87	16.76		
5	64QAM	25	0	16.80	16.82	16.73		
Channel				18615	18900	19185	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1851.5	1880	1908.5		
3	QPSK	1	0	16.82	16.81	16.78	18.5	0
3	QPSK	1	8	16.82	16.91	16.79		
3	QPSK	1	14	16.79	16.86	16.73		
3	QPSK	8	0	16.85	16.89	16.80	18.5	0
3	QPSK	8	4	16.87	16.91	16.86		
3	QPSK	8	7	16.82	16.87	16.80		
3	QPSK	15	0	16.82	16.87	16.79		
3	16QAM	1	0	16.95	16.98	16.94	18.5	0
3	16QAM	1	8	17.03	17.03	16.92		
3	16QAM	1	14	16.93	17.02	16.98		
3	16QAM	8	0	17.04	17.01	16.95	18.5	0
3	16QAM	8	4	17.07	17.11	17.01		
3	16QAM	8	7	17.02	17.01	16.96		
3	16QAM	15	0	16.97	16.97	16.90		
3	64QAM	1	0	17.00	16.96	16.93	18.5	0
3	64QAM	1	8	16.80	16.90	16.83		
3	64QAM	1	14	16.88	16.91	16.81		
3	64QAM	8	0	16.81	16.79	16.72	18.5	0
3	64QAM	8	4	16.87	16.81	16.78		
3	64QAM	8	7	16.81	16.79	16.71		
3	64QAM	15	0	16.72	16.73	16.69		
Channel				18607	18900	19193	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1850.7	1880	1909.3		
1.4	QPSK	1	0	16.74	16.78	16.73	18.5	0
1.4	QPSK	1	3	16.80	16.84	16.78		
1.4	QPSK	1	5	16.71	16.77	16.71		
1.4	QPSK	3	0	16.77	16.83	16.71		
1.4	QPSK	3	1	16.81	16.88	16.76		
1.4	QPSK	3	3	16.77	16.83	16.74		
1.4	QPSK	6	0	16.73	16.81	16.69	18.5	0
1.4	16QAM	1	0	16.92	17.00	16.92	18.5	0
1.4	16QAM	1	3	17.09	16.99	16.84		
1.4	16QAM	1	5	16.78	16.94	16.89		
1.4	16QAM	3	0	16.93	16.87	16.76		
1.4	16QAM	3	1	16.99	16.92	16.89		
1.4	16QAM	3	3	16.90	16.89	16.87		
1.4	16QAM	6	0	17.00	16.96	16.87	18.5	0
1.4	64QAM	1	0	16.79	16.99	16.88	18.5	0
1.4	64QAM	1	3	16.82	16.99	16.86		
1.4	64QAM	1	5	16.79	16.92	16.85		
1.4	64QAM	3	0	16.77	16.87	16.81		
1.4	64QAM	3	1	16.81	16.86	16.76		
1.4	64QAM	3	3	16.72	16.90	16.74		
1.4	64QAM	6	0	16.71	16.69	16.62	18.5	0

Band 2_Ant 2_DSI 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				18700	18900	19100		
Frequency (MHz)				1860	1880	1900		
20	QPSK	1	0	19.17	19.36	19.16	20.7	0
20	QPSK	1	49	19.10	19.20	19.17		
20	QPSK	1	99	19.15	19.14	19.14		
20	QPSK	50	0	19.10	19.17	19.09	20.7	0
20	QPSK	50	24	19.12	19.12	19.11		
20	QPSK	50	50	19.15	19.14	19.17		
20	QPSK	100	0	19.17	19.19	19.06		
20	16QAM	1	0	19.26	19.25	19.21	20.7	0
20	16QAM	1	49	19.17	19.31	19.30		
20	16QAM	1	99	19.34	19.26	19.35		
20	16QAM	50	0	19.24	19.34	19.20	20.7	0
20	16QAM	50	24	19.27	19.31	19.22		
20	16QAM	50	50	19.29	19.34	19.30		
20	16QAM	100	0	19.31	19.31	19.17		
20	64QAM	1	0	19.32	19.32	19.24	20.7	0
20	64QAM	1	49	19.15	19.21	19.20		
20	64QAM	1	99	19.24	19.22	19.16		
20	64QAM	50	0	19.21	19.31	19.17	20.7	0
20	64QAM	50	24	19.23	19.34	19.21		
20	64QAM	50	50	19.28	19.25	19.29		
20	64QAM	100	0	19.26	19.27	19.21		
Channel				18675	18900	19125	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1857.5	1880	1902.5		
15	QPSK	1	0	18.96	19.09	19.08	20.7	0
15	QPSK	1	37	18.97	19.17	19.16		
15	QPSK	1	74	18.87	19.10	19.13		
15	QPSK	36	0	18.98	19.22	19.10	20.7	0
15	QPSK	36	20	19.05	19.23	19.25		
15	QPSK	36	39	18.98	19.19	19.18		
15	QPSK	75	0	18.98	19.19	19.13		
15	16QAM	1	0	19.06	19.29	19.23	20.7	0
15	16QAM	1	37	19.25	19.23	19.29		
15	16QAM	1	74	19.08	19.34	19.21		
15	16QAM	36	0	19.15	19.33	19.18	20.7	0
15	16QAM	36	20	19.17	19.35	19.27		
15	16QAM	36	39	19.11	19.31	19.35		
15	16QAM	75	0	19.14	19.32	19.21		
15	64QAM	1	0	19.25	19.26	19.31	20.7	0
15	64QAM	1	37	19.07	19.26	19.18		
15	64QAM	1	74	19.11	19.27	19.20		
15	64QAM	36	0	19.24	19.26	19.27	20.7	0
15	64QAM	36	20	19.25	19.31	19.33		
15	64QAM	36	39	19.19	19.24	19.32		
15	64QAM	75	0	19.18	19.34	19.21		
Channel				18650	18900	19150	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1855	1880	1905		
10	QPSK	1	0	19.10	19.28	19.23	20.7	0
10	QPSK	1	25	18.97	19.20	19.21		
10	QPSK	1	49	19.04	19.21	19.16		
10	QPSK	25	0	19.00	19.21	19.16	20.7	0
10	QPSK	25	12	19.04	19.24	19.20		
10	QPSK	25	25	19.00	19.17	19.17		
10	QPSK	50	0	19.00	19.22	19.21		
10	16QAM	1	0	19.30	19.23	19.21	20.7	0
10	16QAM	1	25	19.29	19.21	19.33		
10	16QAM	1	49	19.20	19.31	19.32		
10	16QAM	25	0	19.17	19.33	19.33	20.7	0
10	16QAM	25	12	19.20	19.26	19.33		
10	16QAM	25	25	19.12	19.33	19.30		
10	16QAM	50	0	19.12	19.34	19.34		
10	64QAM	1	0	19.35	19.21	19.35	20.7	0
10	64QAM	1	25	19.15	19.31	19.35		
10	64QAM	1	49	19.19	19.32	19.27		
10	64QAM	25	0	19.22	19.35	19.31	20.7	0
10	64QAM	25	12	19.19	19.27	19.26		
10	64QAM	25	25	19.13	19.31	19.32		
10	64QAM	50	0	19.17	19.33	19.32		
Channel				18625	18900	19175	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1852.5	1880	1907.5		
5	QPSK	1	0	19.13	19.15	19.19	20.7	0
5	QPSK	1	12	19.09	19.18	19.16		
5	QPSK	1	24	19.07	19.13	19.15		
5	QPSK	12	0	19.12	19.23	19.20	20.7	0
5	QPSK	12	7	19.19	19.21	19.24		
5	QPSK	12	13	19.16	19.19	19.18		
5	QPSK	25	0	19.11	19.16	19.18		
5	16QAM	1	0	19.26	19.27	19.25	20.7	0
5	16QAM	1	12	19.26	19.34	19.26		
5	16QAM	1	24	19.25	19.27	19.30		
5	16QAM	12	0	19.33	19.25	19.33	20.7	0
5	16QAM	12	7	19.28	19.31	19.33		
5	16QAM	12	13	19.25	19.33	19.25		
5	16QAM	25	0	19.30	19.33	19.30		
5	64QAM	1	0	19.31	19.34	19.26	20.7	0
5	64QAM	1	12	19.26	19.32	19.22		
5	64QAM	1	24	19.25	19.30	19.18		
5	64QAM	12	0	19.19	19.19	19.13	20.7	0
5	64QAM	12	7	19.18	19.23	19.22		
5	64QAM	12	13	19.14	19.22	19.19		
5	64QAM	25	0	19.10	19.15	19.13		
Channel				18615	18900	19185	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1851.5	1880	1908.5		
3	QPSK	1	0	19.09	19.18	19.20	20.7	0
3	QPSK	1	8	19.11	19.19	19.15		
3	QPSK	1	14	19.08	19.15	19.13		
3	QPSK	8	0	19.13	19.20	19.17	20.7	0
3	QPSK	8	4	19.17	19.21	19.23		
3	QPSK	8	7	19.15	19.20	19.17		
3	QPSK	15	0	19.12	19.18	19.16		
3	16QAM	1	0	19.25	19.25	19.25	20.7	0
3	16QAM	1	8	19.28	19.24	19.31		
3	16QAM	1	14	19.34	19.26	19.27		
3	16QAM	8	0	19.34	19.22	19.34	20.7	0
3	16QAM	8	4	19.25	19.23	19.31		
3	16QAM	8	7	19.29	19.23	19.25		
3	16QAM	15	0	19.25	19.33	19.29		
3	64QAM	1	0	19.33	19.30	19.26	20.7	0
3	64QAM	1	8	19.26	19.26	19.23		
3	64QAM	1	14	19.32	19.32	19.25		
3	64QAM	8	0	19.16	19.17	19.12	20.7	0
3	64QAM	8	4	19.19	19.24	19.19		
3	64QAM	8	7	19.14	19.21	19.15		
3	64QAM	15	0	19.08	19.15	19.12		
Channel				18607	18900	19193	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1850.7	1880	1909.3		
1.4	QPSK	1	0	19.03	19.11	19.08	20.7	0
1.4	QPSK	1	3	19.01	19.18	19.14		
1.4	QPSK	1	5	18.99	19.07	19.04		
1.4	QPSK	3	0	19.00	19.10	19.12		
1.4	QPSK	3	1	19.06	19.15	19.13		
1.4	QPSK	3	3	19.03	19.13	19.11		
1.4	QPSK	6	0	19.05	19.07	19.07	20.7	0
1.4	16QAM	1	0	19.30	19.27	19.24	20.7	0
1.4	16QAM	1	3	19.21	19.23	19.25		
1.4	16QAM	1	5	19.20	19.34	19.26		
1.4	16QAM	3	0	19.15	19.23	19.19		
1.4	16QAM	3	1	19.30	19.32	19.32		
1.4	16QAM	3	3	19.22	19.26	19.18		
1.4	16QAM	6	0	19.28	19.31	19.30	20.7	0
1.4	64QAM	1	0	19.23	19.24	19.28	20.7	0
1.4	64QAM	1	3	19.29	19.26	19.27		
1.4	64QAM	1	5	19.20	19.29	19.23		
1.4	64QAM	3	0	19.10	19.19	19.18		
1.4	64QAM	3	1	19.18	19.28	19.19		
1.4	64QAM	3	3	19.11	19.20	19.20		
1.4	64QAM	6	0	19.08	19.11	19.07	20.7	0

Band 2_Ant 2_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				18700	18900	19100		
Frequency (MHz)				1860	1880	1900		
20	QPSK	1	0	16.32	16.46	16.32	17.7	0
20	QPSK	1	49	16.35	16.40	16.43		
20	QPSK	1	99	16.35	16.35	16.37		
20	QPSK	50	0	16.11	16.29	16.11	17.7	0
20	QPSK	50	24	16.18	16.28	16.18		
20	QPSK	50	50	16.21	16.20	16.23		
20	QPSK	100	0	16.02	16.02	15.93		
20	16QAM	1	0	16.26	16.36	16.37	17.7	0
20	16QAM	1	49	16.28	16.35	16.40		
20	16QAM	1	99	16.35	16.37	16.34		
20	16QAM	50	0	16.23	16.34	16.29	17.7	0
20	16QAM	50	24	16.26	16.40	16.29		
20	16QAM	50	50	16.36	16.35	16.32		
20	16QAM	100	0	16.34	16.34	16.22		
20	64QAM	1	0	16.40	16.43	16.30	17.7	0
20	64QAM	1	49	16.27	16.32	16.33		
20	64QAM	1	99	16.31	16.23	16.25		
20	64QAM	50	0	16.26	16.34	16.26	17.7	0
20	64QAM	50	24	16.29	16.38	16.29		
20	64QAM	50	50	16.34	16.32	16.32		
20	64QAM	100	0	16.32	16.33	16.22		
Channel				18675	18900	19125	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1857.5	1880	1902.5		
15	QPSK	1	0	16.19	16.39	16.30	17.7	0
15	QPSK	1	37	16.17	16.38	16.42		
15	QPSK	1	74	16.16	16.39	16.32		
15	QPSK	36	0	16.04	16.24	16.13	17.7	0
15	QPSK	36	20	16.09	16.28	16.28		
15	QPSK	36	39	16.00	16.23	16.25		
15	QPSK	75	0	15.83	16.02	15.95		
15	16QAM	1	0	16.15	16.34	16.28	17.7	0
15	16QAM	1	37	16.18	16.42	16.45		
15	16QAM	1	74	16.10	16.35	16.35		
15	16QAM	36	0	16.16	16.35	16.22	17.7	0
15	16QAM	36	20	16.18	16.44	16.44		
15	16QAM	36	39	16.11	16.40	16.37		
15	16QAM	75	0	16.16	16.36	16.27		
15	64QAM	1	0	16.28	16.43	16.45	17.7	0
15	64QAM	1	37	16.08	16.32	16.20		
15	64QAM	1	74	16.06	16.29	16.27		
15	64QAM	36	0	16.18	16.36	16.27	17.7	0
15	64QAM	36	20	16.24	16.37	16.40		
15	64QAM	36	39	16.15	16.31	16.31		
15	64QAM	75	0	16.15	16.32	16.23		
Channel				18650	18900	19150	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1855	1880	1905		
10	QPSK	1	0	16.41	16.41	16.44	17.7	0
10	QPSK	1	25	16.24	16.43	16.45		
10	QPSK	1	49	16.26	16.41	16.37		
10	QPSK	25	0	16.00	16.26	16.26	17.7	0
10	QPSK	25	12	16.08	16.26	16.25		
10	QPSK	25	25	16.02	16.20	16.22		
10	QPSK	50	0	15.95	16.01	16.04		
10	16QAM	1	0	16.42	16.45	16.43	17.7	0
10	16QAM	1	25	16.22	16.41	16.42		
10	16QAM	1	49	16.34	16.43	16.43		
10	16QAM	25	0	16.23	16.39	16.41	17.7	0
10	16QAM	25	12	16.21	16.39	16.42		
10	16QAM	25	25	16.17	16.38	16.37		
10	16QAM	50	0	16.16	16.37	16.35		
10	64QAM	1	0	16.28	16.43	16.30	17.7	0
10	64QAM	1	25	16.15	16.33	16.30		
10	64QAM	1	49	16.22	16.34	16.32		
10	64QAM	25	0	16.19	16.40	16.36	17.7	0
10	64QAM	25	12	16.23	16.36	16.37		
10	64QAM	25	25	16.12	16.33	16.36		
10	64QAM	50	0	16.17	16.36	16.38		
Channel				18625	18900	19175	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1852.5	1880	1907.5		
5	QPSK	1	0	16.38	16.43	16.40	17.7	0
5	QPSK	1	12	16.40	16.45	16.44		
5	QPSK	1	24	16.35	16.40	16.38		
5	QPSK	12	0	16.24	16.24	16.24	17.7	0
5	QPSK	12	7	16.22	16.29	16.24		
5	QPSK	12	13	16.19	16.22	16.21		
5	QPSK	25	0	15.96	15.98	16.02		
5	16QAM	1	0	16.37	16.38	16.43	17.7	0
5	16QAM	1	12	16.40	16.38	16.36		
5	16QAM	1	24	16.38	16.32	16.40		
5	16QAM	12	0	16.38	16.38	16.35	17.7	0
5	16QAM	12	7	16.34	16.43	16.36		
5	16QAM	12	13	16.32	16.41	16.37		
5	16QAM	25	0	16.30	16.34	16.37		
5	64QAM	1	0	16.27	16.44	16.21	17.7	0
5	64QAM	1	12	16.26	16.38	16.29		
5	64QAM	1	24	16.30	16.29	16.31		
5	64QAM	12	0	16.41	16.44	16.40	17.7	0
5	64QAM	12	7	16.40	16.44	16.41		
5	64QAM	12	13	16.36	16.42	16.37		
5	64QAM	25	0	16.28	16.33	16.32		
Channel				18615	18900	19185	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1851.5	1880	1908.5		
3	QPSK	1	0	16.32	16.43	16.35	17.7	0
3	QPSK	1	8	16.39	16.41	16.40		
3	QPSK	1	14	16.34	16.40	16.39		
3	QPSK	8	0	16.20	16.23	16.23	17.7	0
3	QPSK	8	4	16.20	16.28	16.25		
3	QPSK	8	7	16.20	16.26	16.25		
3	QPSK	15	0	15.93	16.01	16.01		
3	16QAM	1	0	16.35	16.40	16.41	17.7	0
3	16QAM	1	8	16.38	16.43	16.43		
3	16QAM	1	14	16.34	16.28	16.33		
3	16QAM	8	0	16.39	16.41	16.39	17.7	0
3	16QAM	8	4	16.38	16.42	16.42		
3	16QAM	8	7	16.36	16.44	16.35		
3	16QAM	15	0	16.26	16.39	16.34		
3	64QAM	1	0	16.28	16.34	16.34	17.7	0
3	64QAM	1	8	16.23	16.29	16.34		
3	64QAM	1	14	16.29	16.25	16.35		
3	64QAM	8	0	16.33	16.43	16.37	17.7	0
3	64QAM	8	4	16.39	16.43	16.42		
3	64QAM	8	7	16.38	16.39	16.36		
3	64QAM	15	0	16.31	16.29	16.34		
Channel				18607	18900	19193	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1850.7	1880	1909.3		
1.4	QPSK	1	0	16.30	16.29	16.30	17.7	0
1.4	QPSK	1	3	16.29	16.41	16.42		
1.4	QPSK	1	5	16.23	16.29	16.31		
1.4	QPSK	3	0	16.09	16.13	16.12		
1.4	QPSK	3	1	16.11	16.22	16.17		
1.4	QPSK	3	3	16.09	16.21	16.16		
1.4	QPSK	6	0	16.06	16.14	16.11	17.7	0
1.4	16QAM	1	0	16.21	16.28	16.27	17.7	0
1.4	16QAM	1	3	16.32	16.43	16.36		
1.4	16QAM	1	5	16.26	16.39	16.21		
1.4	16QAM	3	0	16.19	16.30	16.24		
1.4	16QAM	3	1	16.27	16.36	16.30		
1.4	16QAM	3	3	16.20	16.26	16.28		
1.4	16QAM	6	0	16.29	16.28	16.33	17.7	0
1.4	64QAM	1	0	16.17	16.19	16.07	17.7	0
1.4	64QAM	1	3	16.22	16.25	16.22		
1.4	64QAM	1	5	16.15	16.24	16.08		
1.4	64QAM	3	0	16.33	16.38	16.33		
1.4	64QAM	3	1	16.29	16.36	16.35		
1.4	64QAM	3	3	16.27	16.35	16.24		
1.4	64QAM	6	0	16.15	16.27	16.25	17.7	0

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				20050	20175	20300		
Frequency (MHz)				1720	1732.5	1745		
20	QPSK	1	0	19.96	20.15	20.10	21.5	0
20	QPSK	1	49	19.83	19.83	19.81		
20	QPSK	1	99	19.85	19.80	19.86		
20	QPSK	50	0	19.69	19.90	19.86	21.5	0
20	QPSK	50	24	19.74	19.89	19.87		
20	QPSK	50	50	19.67	19.86	19.84		
20	QPSK	100	0	19.88	19.97	19.66		
20	16QAM	1	0	19.91	19.91	19.94	21.5	0
20	16QAM	1	49	19.67	19.91	20.02		
20	16QAM	1	99	19.81	20.00	20.01		
20	16QAM	50	0	19.80	19.91	19.99	21.5	0
20	16QAM	50	24	19.83	20.01	20.02		
20	16QAM	50	50	19.76	19.95	19.93		
20	16QAM	100	0	19.76	19.98	19.96		
20	64QAM	1	0	19.93	20.10	20.01	21.5	0
20	64QAM	1	49	19.82	20.02	20.11		
20	64QAM	1	99	19.79	20.01	20.01		
20	64QAM	50	0	19.82	19.90	19.99	21.5	0
20	64QAM	50	24	19.77	20.02	20.01		
20	64QAM	50	50	19.78	19.98	19.96		
20	64QAM	100	0	19.81	19.97	19.96		
Channel				20025	20175	20325	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1717.5	1732.5	1747.5		
15	QPSK	1	0	19.86	20.11	20.02	21.5	0
15	QPSK	1	37	19.75	20.07	20.06		
15	QPSK	1	74	19.76	19.97	20.07		
15	QPSK	36	0	19.67	19.75	19.89	21.5	0
15	QPSK	36	20	19.68	19.93	19.89		
15	QPSK	36	39	19.66	19.89	19.83		
15	QPSK	75	0	19.70	19.89	19.87		
15	16QAM	1	0	19.77	19.96	20.00	21.5	0
15	16QAM	1	37	19.66	20.05	19.97		
15	16QAM	1	74	19.75	19.90	20.03		
15	16QAM	36	0	19.81	19.86	19.96	21.5	0
15	16QAM	36	20	19.81	20.03	19.96		
15	16QAM	36	39	19.81	19.98	19.91		
15	16QAM	75	0	19.79	19.94	19.91		
15	64QAM	1	0	19.95	20.04	20.09	21.5	0
15	64QAM	1	37	19.59	19.93	19.92		
15	64QAM	1	74	19.69	19.83	19.91		
15	64QAM	36	0	19.81	19.92	19.99	21.5	0
15	64QAM	36	20	19.83	20.06	20.02		
15	64QAM	36	39	19.80	19.97	19.95		
15	64QAM	75	0	19.80	19.95	19.95		
Channel				20000	20175	20350	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1715	1732.5	1750		
10	QPSK	1	0	19.90	20.05	20.01	21.5	0
10	QPSK	1	25	19.83	19.85	19.88		
10	QPSK	1	49	19.83	19.82	19.91		
10	QPSK	25	0	19.67	19.74	19.86	21.5	0
10	QPSK	25	12	19.74	19.90	19.86		
10	QPSK	25	25	19.67	19.86	19.80		
10	QPSK	50	0	19.65	19.88	19.86		
10	16QAM	1	0	19.81	19.94	20.06	21.5	0
10	16QAM	1	25	19.85	19.95	20.02		
10	16QAM	1	49	19.69	19.96	20.11		
10	16QAM	25	0	19.80	19.89	19.97	21.5	0
10	16QAM	25	12	19.84	19.99	19.95		
10	16QAM	25	25	19.77	19.92	19.91		
10	16QAM	50	0	19.78	19.96	19.93		
10	64QAM	1	0	19.87	19.85	19.91	21.5	0
10	64QAM	1	25	19.74	19.91	19.95		
10	64QAM	1	49	19.68	19.95	19.96		
10	64QAM	25	0	19.80	19.87	19.98	21.5	0
10	64QAM	25	12	19.84	19.99	19.96		
10	64QAM	25	25	19.80	19.93	19.92		
10	64QAM	50	0	19.79	19.98	19.95		
Channel				19975	20175	20375	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1712.5	1732.5	1752.5		
5	QPSK	1	0	19.63	20.01	19.82	21.5	0
5	QPSK	1	12	19.68	19.84	19.82		
5	QPSK	1	24	19.64	19.85	19.89		
5	QPSK	12	0	19.72	19.76	19.88	21.5	0
5	QPSK	12	7	19.75	19.91	19.86		
5	QPSK	12	13	19.66	19.87	19.86		
5	QPSK	25	0	19.69	19.86	19.87		
5	16QAM	1	0	20.04	20.09	20.11	21.5	0
5	16QAM	1	12	19.95	20.11	20.01		
5	16QAM	1	24	19.95	20.08	20.04		
5	16QAM	12	0	19.82	19.88	19.91	21.5	0
5	16QAM	12	7	19.85	19.98	19.90		
5	16QAM	12	13	19.81	20.01	19.97		
5	16QAM	25	0	19.77	19.97	19.90		
5	64QAM	1	0	19.90	19.99	20.07	21.5	0
5	64QAM	1	12	19.90	20.12	20.12		
5	64QAM	1	24	19.89	20.10	20.01		
5	64QAM	12	0	19.86	19.90	19.98	21.5	0
5	64QAM	12	7	19.88	20.08	20.01		
5	64QAM	12	13	19.81	19.99	20.00		
5	64QAM	25	0	19.80	19.96	19.94		
Channel				19965	20175	20385	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1711.5	1732.5	1753.5		
3	QPSK	1	0	19.87	19.95	20.02	21.5	0
3	QPSK	1	8	19.85	20.01	20.12		
3	QPSK	1	14	19.79	20.01	20.08		
3	QPSK	8	0	19.68	19.87	19.87	21.5	0
3	QPSK	8	4	19.72	19.88	19.89		
3	QPSK	8	7	19.67	19.85	19.93		
3	QPSK	15	0	19.69	19.88	19.81		
3	16QAM	1	0	19.86	19.80	19.88	21.5	0
3	16QAM	1	8	19.79	20.02	20.05		
3	16QAM	1	14	19.76	19.89	20.06		
3	16QAM	8	0	19.83	20.04	20.01	21.5	0
3	16QAM	8	4	19.87	20.04	20.03		
3	16QAM	8	7	19.80	20.01	20.08		
3	16QAM	15	0	19.81	19.97	19.90		
3	64QAM	1	0	19.94	19.97	20.04	21.5	0
3	64QAM	1	8	19.99	20.07	20.07		
3	64QAM	1	14	19.88	20.04	20.10		
3	64QAM	8	0	19.82	20.05	19.94	21.5	0
3	64QAM	8	4	19.86	20.05	19.97		
3	64QAM	8	7	19.82	19.97	20.08		
3	64QAM	15	0	19.81	19.93	19.92		
Channel				19957	20175	20393	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1710.7	1732.5	1754.3		
1.4	QPSK	1	0	19.71	19.83	20.05	21.5	0
1.4	QPSK	1	3	19.84	20.00	20.11		
1.4	QPSK	1	5	19.72	19.92	19.99		
1.4	QPSK	3	0	19.57	19.66	19.86		
1.4	QPSK	3	1	19.65	19.87	19.88		
1.4	QPSK	3	3	19.59	19.80	19.88		
1.4	QPSK	6	0	19.59	19.77	19.85	21.5	0
1.4	16QAM	1	0	19.77	19.89	20.05	21.5	0
1.4	16QAM	1	3	19.84	19.95	20.09		
1.4	16QAM	1	5	19.74	19.85	19.99		
1.4	16QAM	3	0	19.66	19.83	19.98		
1.4	16QAM	3	1	19.71	19.95	20.02		
1.4	16QAM	3	3	19.75	19.91	19.98		
1.4	16QAM	6	0	19.79	19.89	20.02	21.5	0
1.4	64QAM	1	0	19.85	19.91	19.97	21.5	0
1.4	64QAM	1	3	19.85	19.80	19.77		
1.4	64QAM	1	5	19.83	20.00	19.97		
1.4	64QAM	3	0	19.74	19.88	19.98		
1.4	64QAM	3	1	19.83	19.96	20.06		
1.4	64QAM	3	3	19.72	19.91	20.03		
1.4	64QAM	6	0	19.75	19.84	19.92	21.5	0

Band 4 _Ant 2_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				20050	20175	20300		
Frequency (MHz)				1720	1732.5	1745		
20	QPSK	1	0	14.15	14.40	14.35	15.7	0
20	QPSK	1	49	14.01	14.19	14.31		
20	QPSK	1	99	14.03	14.29	14.37		
20	QPSK	50	0	14.00	14.19	14.09	15.7	0
20	QPSK	50	24	13.98	14.18	14.17		
20	QPSK	50	50	13.92	14.15	14.14		
20	QPSK	100	0	13.99	14.15	14.14		
20	16QAM	1	0	14.30	14.33	14.33	15.7	0
20	16QAM	1	49	14.10	14.13	14.23		
20	16QAM	1	99	13.98	14.10	14.34		
20	16QAM	50	0	14.01	14.17	14.27	15.7	0
20	16QAM	50	24	14.12	14.28	14.25		
20	16QAM	50	50	14.07	14.24	14.22		
20	16QAM	100	0	14.04	14.20	14.22		
20	64QAM	1	0	14.21	14.25	14.35	15.7	0
20	64QAM	1	49	14.06	14.29	14.34		
20	64QAM	1	99	14.11	14.26	14.31		
20	64QAM	50	0	14.09	14.18	14.22	15.7	0
20	64QAM	50	24	14.10	14.22	14.26		
20	64QAM	50	50	14.03	14.22	14.21		
20	64QAM	100	0	14.04	14.21	14.18		
Channel				20025	20175	20325	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1717.5	1732.5	1747.5		
15	QPSK	1	0	14.16	14.30	14.36	15.7	0
15	QPSK	1	37	14.04	14.28	14.32		
15	QPSK	1	74	14.05	14.25	14.37		
15	QPSK	36	0	14.03	14.06	14.15	15.7	0
15	QPSK	36	20	13.98	14.18	14.21		
15	QPSK	36	39	13.98	14.16	14.16		
15	QPSK	75	0	13.98	14.19	14.15		
15	16QAM	1	0	14.06	14.20	14.14	15.7	0
15	16QAM	1	37	14.04	14.23	14.27		
15	16QAM	1	74	13.97	14.17	14.31		
15	16QAM	36	0	14.07	14.13	14.18	15.7	0
15	16QAM	36	20	14.09	14.28	14.25		
15	16QAM	36	39	14.05	14.21	14.17		
15	16QAM	75	0	14.07	14.24	14.20		
15	64QAM	1	0	14.05	14.16	14.16	15.7	0
15	64QAM	1	37	13.93	14.20	14.13		
15	64QAM	1	74	13.79	14.09	14.15		
15	64QAM	36	0	14.08	14.12	14.18	15.7	0
15	64QAM	36	20	14.11	14.27	14.24		
15	64QAM	36	39	14.05	14.20	14.19		
15	64QAM	75	0	14.07	14.22	14.23		
Channel				20000	20175	20350	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1715	1732.5	1750		
10	QPSK	1	0	14.32	14.27	14.35	15.7	0
10	QPSK	1	25	14.27	14.40	14.36		
10	QPSK	1	49	14.11	14.31	14.32		
10	QPSK	25	0	14.14	14.08	14.22	15.7	0
10	QPSK	25	12	14.04	14.23	14.19		
10	QPSK	25	25	13.99	14.17	14.15		
10	QPSK	50	0	14.00	14.20	14.20		
10	16QAM	1	0	14.24	14.27	14.35	15.7	0
10	16QAM	1	25	14.22	14.37	14.20		
10	16QAM	1	49	14.05	14.28	14.32		
10	16QAM	25	0	14.12	14.16	14.29	15.7	0
10	16QAM	25	12	14.14	14.28	14.24		
10	16QAM	25	25	14.12	14.28	14.22		
10	16QAM	50	0	14.12	14.25	14.25		
10	64QAM	1	0	14.29	14.30	14.38	15.7	0
10	64QAM	1	25	14.24	14.31	14.35		
10	64QAM	1	49	14.18	14.37	14.33		
10	64QAM	25	0	14.10	14.16	14.24	15.7	0
10	64QAM	25	12	14.15	14.28	14.25		
10	64QAM	25	25	14.10	14.26	14.25		
10	64QAM	50	0	14.10	14.25	14.24		
Channel				19975	20175	20375	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1712.5	1732.5	1752.5		
5	QPSK	1	0	14.30	14.19	14.35	15.7	0
5	QPSK	1	12	14.31	14.32	14.30		
5	QPSK	1	24	14.14	14.28	14.32		
5	QPSK	12	0	14.14	14.03	14.17	15.7	0
5	QPSK	12	7	14.17	14.21	14.15		
5	QPSK	12	13	14.09	14.18	14.16		
5	QPSK	25	0	14.00	14.17	14.11		
5	16QAM	1	0	14.11	14.16	14.17	15.7	0
5	16QAM	1	12	14.20	14.23	14.33		
5	16QAM	1	24	14.02	14.22	14.33		
5	16QAM	12	0	14.10	14.14	14.19	15.7	0
5	16QAM	12	7	14.15	14.27	14.24		
5	16QAM	12	13	14.13	14.25	14.20		
5	16QAM	25	0	14.09	14.23	14.22		
5	64QAM	1	0	14.06	14.07	14.11	15.7	0
5	64QAM	1	12	13.95	14.12	14.15		
5	64QAM	1	24	13.97	14.11	14.12		
5	64QAM	12	0	14.08	14.09	14.20	15.7	0
5	64QAM	12	7	14.13	14.25	14.20		
5	64QAM	12	13	14.09	14.21	14.19		
5	64QAM	25	0	14.10	14.22	14.18		
Channel				19965	20175	20385	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1711.5	1732.5	1753.5		
3	QPSK	1	0	14.23	14.08	14.40	15.7	0
3	QPSK	1	8	14.23	14.34	14.21		
3	QPSK	1	14	14.24	14.28	14.31		
3	QPSK	8	0	14.14	13.96	14.15	15.7	0
3	QPSK	8	4	14.05	14.23	14.17		
3	QPSK	8	7	13.98	14.21	14.16		
3	QPSK	15	0	14.07	14.16	14.02		
3	16QAM	1	0	14.20	14.02	14.13	15.7	0
3	16QAM	1	8	14.21	14.09	14.34		
3	16QAM	1	14	14.04	14.26	14.18		
3	16QAM	8	0	14.17	14.08	14.29	15.7	0
3	16QAM	8	4	14.11	14.20	14.23		
3	16QAM	8	7	14.14	14.35	14.05		
3	16QAM	15	0	13.95	14.31	14.33		
3	64QAM	1	0	14.09	13.95	13.97	15.7	0
3	64QAM	1	8	13.92	14.05	14.11		
3	64QAM	1	14	13.88	14.11	14.20		
3	64QAM	8	0	14.10	14.14	14.16	15.7	0
3	64QAM	8	4	14.01	14.15	14.16		
3	64QAM	8	7	14.04	14.08	14.18		
3	64QAM	15	0	14.13	14.19	14.23		
Channel				19957	20175	20393	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1710.7	1732.5	1754.3		
1.4	QPSK	1	0	14.13	14.12	14.33	15.7	0
1.4	QPSK	1	3	14.27	14.26	14.33		
1.4	QPSK	1	5	14.13	14.24	14.31		
1.4	QPSK	3	0	14.05	13.93	14.16		
1.4	QPSK	3	1	14.08	14.11	14.16		
1.4	QPSK	3	3	13.99	14.06	14.16		
1.4	QPSK	6	0	14.04	14.08	14.14	15.7	0
1.4	16QAM	1	0	14.22	13.96	14.27	15.7	0
1.4	16QAM	1	3	14.25	14.25	14.30		
1.4	16QAM	1	5	14.08	14.10	14.20		
1.4	16QAM	3	0	14.14	14.05	14.25		
1.4	16QAM	3	1	14.14	14.21	14.26		
1.4	16QAM	3	3	14.14	14.07	14.21		
1.4	16QAM	6	0	14.22	14.27	14.25	15.7	0
1.4	64QAM	1	0	14.05	13.93	14.03	15.7	0
1.4	64QAM	1	3	14.05	13.99	14.16		
1.4	64QAM	1	5	14.03	14.07	14.12		
1.4	64QAM	3	0	14.05	14.04	14.31		
1.4	64QAM	3	1	14.21	14.24	14.30		
1.4	64QAM	3	3	14.07	14.19	14.24		
1.4	64QAM	6	0	14.05	14.11	14.22	15.7	0

Band 4 _Ant 2_DSI 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				20050	20175	20300		
Frequency (MHz)				1720	1732.5	1745		
20	QPSK	1	0	18.17	18.28	18.22	19.7	0
20	QPSK	1	49	18.02	18.21	18.19		
20	QPSK	1	99	18.06	18.23	18.16		
20	QPSK	50	0	17.98	18.15	18.09	19.7	0
20	QPSK	50	24	17.99	18.09	18.13		
20	QPSK	50	50	17.89	18.10	18.07		
20	QPSK	100	0	17.94	18.10	18.09		
20	16QAM	1	0	18.10	18.11	18.23	19.7	0
20	16QAM	1	49	17.99	18.09	18.19		
20	16QAM	1	99	17.96	18.15	18.06		
20	16QAM	50	0	18.07	18.16	18.21	19.7	0
20	16QAM	50	24	18.11	18.27	18.19		
20	16QAM	50	50	18.05	18.21	18.19		
20	16QAM	100	0	18.01	18.20	18.15		
20	64QAM	1	0	17.99	18.02	18.16	19.7	0
20	64QAM	1	49	17.89	18.03	18.08		
20	64QAM	1	99	17.88	18.05	18.15		
20	64QAM	50	0	18.06	18.15	18.20	19.7	0
20	64QAM	50	24	18.09	18.22	18.19		
20	64QAM	50	50	18.02	18.21	18.15		
20	64QAM	100	0	18.02	18.17	18.16		
Channel				20025	20175	20325	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1717.5	1732.5	1747.5		
15	QPSK	1	0	18.14	18.16	18.26	19.7	0
15	QPSK	1	37	18.06	18.23	18.22		
15	QPSK	1	74	18.06	18.24	18.25		
15	QPSK	36	0	17.98	17.99	18.10	19.7	0
15	QPSK	36	20	17.95	18.17	18.15		
15	QPSK	36	39	17.89	18.07	18.10		
15	QPSK	75	0	17.97	18.10	18.11		
15	16QAM	1	0	18.03	17.89	17.99	19.7	0
15	16QAM	1	37	17.88	18.10	18.04		
15	16QAM	1	74	17.82	17.95	18.15		
15	16QAM	36	0	18.10	18.14	18.18	19.7	0
15	16QAM	36	20	18.06	18.26	18.20		
15	16QAM	36	39	17.99	18.21	18.18		
15	16QAM	75	0	18.04	18.25	18.19		
15	64QAM	1	0	18.03	18.04	18.10	19.7	0
15	64QAM	1	37	17.81	18.15	18.03		
15	64QAM	1	74	17.91	18.11	18.13		
15	64QAM	36	0	18.07	18.16	18.18	19.7	0
15	64QAM	36	20	18.08	18.26	18.24		
15	64QAM	36	39	18.02	18.18	18.20		
15	64QAM	75	0	18.06	18.19	18.22		
Channel				20000	20175	20350	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1715	1732.5	1750		
10	QPSK	1	0	18.17	18.17	18.22	19.7	0
10	QPSK	1	25	18.16	18.19	18.26		
10	QPSK	1	49	18.00	18.25	18.23		
10	QPSK	25	0	17.97	17.97	18.13	19.7	0
10	QPSK	25	12	18.00	18.12	18.09		
10	QPSK	25	25	17.95	18.10	18.04		
10	QPSK	50	0	17.94	18.12	18.10		
10	16QAM	1	0	18.19	18.26	18.25	19.7	0
10	16QAM	1	25	18.12	18.24	18.23		
10	16QAM	1	49	17.91	18.18	18.26		
10	16QAM	25	0	18.13	18.14	18.19	19.7	0
10	16QAM	25	12	18.14	18.23	18.24		
10	16QAM	25	25	18.05	18.21	18.21		
10	16QAM	50	0	18.05	18.23	18.16		
10	64QAM	1	0	17.95	18.08	18.15	19.7	0
10	64QAM	1	25	18.01	18.20	18.13		
10	64QAM	1	49	17.80	18.09	18.20		
10	64QAM	25	0	18.11	18.17	18.22	19.7	0
10	64QAM	25	12	18.11	18.23	18.27		
10	64QAM	25	25	18.06	18.21	18.24		
10	64QAM	50	0	18.04	18.23	18.19		
Channel				19975	20175	20375	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1712.5	1732.5	1752.5		
5	QPSK	1	0	18.17	18.18	18.25	19.7	0
5	QPSK	1	12	18.16	18.25	18.27		
5	QPSK	1	24	18.13	18.22	18.21		
5	QPSK	12	0	17.95	17.96	18.12	19.7	0
5	QPSK	12	7	18.02	18.13	18.16		
5	QPSK	12	13	17.99	18.09	18.06		
5	QPSK	25	0	17.96	18.08	18.06		
5	16QAM	1	0	18.10	18.17	18.25	19.7	0
5	16QAM	1	12	18.17	18.15	18.17		
5	16QAM	1	24	18.07	18.21	18.25		
5	16QAM	12	0	18.14	18.12	18.17	19.7	0
5	16QAM	12	7	18.13	18.22	18.24		
5	16QAM	12	13	18.08	18.22	18.16		
5	16QAM	25	0	18.05	18.20	18.22		
5	64QAM	1	0	18.06	18.03	18.14	19.7	0
5	64QAM	1	12	18.09	18.26	18.15		
5	64QAM	1	24	18.01	18.25	18.23		
5	64QAM	12	0	18.18	18.13	18.24	19.7	0
5	64QAM	12	7	18.16	18.26	18.22		
5	64QAM	12	13	18.13	18.18	18.23		
5	64QAM	25	0	18.07	18.20	18.25		
Channel				19965	20175	20385	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1711.5	1732.5	1753.5		
3	QPSK	1	0	18.16	18.12	18.27	19.7	0
3	QPSK	1	8	18.18	18.23	18.20		
3	QPSK	1	14	18.13	18.23	18.23		
3	QPSK	8	0	17.97	18.10	18.07	19.7	0
3	QPSK	8	4	18.04	18.14	18.13		
3	QPSK	8	7	17.98	18.12	18.16		
3	QPSK	15	0	18.00	18.09	18.05		
3	16QAM	1	0	18.16	18.19	18.23	19.7	0
3	16QAM	1	8	18.10	18.22	18.26		
3	16QAM	1	14	18.05	18.25	18.21		
3	16QAM	8	0	18.13	18.27	18.24	19.7	0
3	16QAM	8	4	18.20	18.25	18.27		
3	16QAM	8	7	18.17	18.26	18.19		
3	16QAM	15	0	18.12	18.21	18.17		
3	64QAM	1	0	18.06	18.10	18.09	19.7	0
3	64QAM	1	8	18.10	18.26	18.25		
3	64QAM	1	14	18.10	18.16	18.26		
3	64QAM	8	0	18.12	18.22	18.24	19.7	0
3	64QAM	8	4	18.21	18.24	18.27		
3	64QAM	8	7	18.18	18.26	18.19		
3	64QAM	15	0	18.12	18.26	18.22		
Channel				19957	20175	20393	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1710.7	1732.5	1754.3		
1.4	QPSK	1	0	18.08	18.04	18.25	19.7	0
1.4	QPSK	1	3	18.02	18.27	18.24		
1.4	QPSK	1	5	18.04	18.17	18.24		
1.4	QPSK	3	0	17.89	17.94	18.13		
1.4	QPSK	3	1	17.96	18.08	18.14		
1.4	QPSK	3	3	17.89	18.04	18.11		
1.4	QPSK	6	0	17.89	18.04	18.08	19.7	0
1.4	16QAM	1	0	17.98	18.15	18.26	19.7	0
1.4	16QAM	1	3	18.19	18.24	18.25		
1.4	16QAM	1	5	17.99	18.25	18.26		
1.4	16QAM	3	0	18.10	18.08	18.22		
1.4	16QAM	3	1	18.07	18.16	18.26		
1.4	16QAM	3	3	18.03	18.21	18.16		
1.4	16QAM	6	0	18.09	18.24	18.21	19.7	0
1.4	64QAM	1	0	17.88	17.96	18.14	19.7	0
1.4	64QAM	1	3	17.94	18.08	18.23		
1.4	64QAM	1	5	17.94	18.08	18.25		
1.4	64QAM	3	0	18.08	18.07	18.23		
1.4	64QAM	3	1	18.13	18.21	18.23		
1.4	64QAM	3	3	18.04	18.22	18.27		
1.4	64QAM	6	0	18.06	18.14	18.24	19.7	0

Band 5 _Ant 2_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				20450	20525	20600		
Frequency (MHz)				829	836.5	844		
10	QPSK	1	0	21.14	21.29	21.19	22.7	0
10	QPSK	1	25	21.13	21.21	21.15		
10	QPSK	1	49	21.05	21.09	21.12		
10	QPSK	25	0	21.04	21.17	21.11	22.7	0
10	QPSK	25	12	21.05	21.14	21.08		
10	QPSK	25	25	20.94	21.05	21.04		
10	QPSK	50	0	21.03	21.15	21.04		
10	16QAM	1	0	21.01	21.13	21.21	22.7	0
10	16QAM	1	25	21.08	21.21	21.10		
10	16QAM	1	49	20.96	20.98	21.11		
10	16QAM	25	0	21.11	21.24	21.19	22.7	0
10	16QAM	25	12	21.11	21.25	21.15		
10	16QAM	25	25	21.03	21.17	21.12		
10	16QAM	50	0	21.08	21.19	21.12		
10	64QAM	1	0	20.94	21.03	21.09	22.7	0
10	64QAM	1	25	21.00	21.12	21.05		
10	64QAM	1	49	20.96	20.91	20.92		
10	64QAM	25	0	21.10	21.26	21.20	22.7	0
10	64QAM	25	12	21.10	21.19	21.13		
10	64QAM	25	25	21.04	21.16	21.08		
10	64QAM	50	0	21.07	21.18	21.09		
Channel				20425	20525	20625	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				826.5	836.5	846.5		
5	QPSK	1	0	21.12	21.23	21.17	22.7	0
5	QPSK	1	12	21.17	21.26	21.16		
5	QPSK	1	24	21.15	21.23	21.11		
5	QPSK	12	0	21.02	21.15	21.03	22.7	0
5	QPSK	12	7	21.08	21.11	21.02		
5	QPSK	12	13	21.01	21.12	21.01		
5	QPSK	25	0	21.05	21.08	21.02		
5	16QAM	1	0	21.09	21.09	21.13	22.7	0
5	16QAM	1	12	21.14	21.25	21.09		
5	16QAM	1	24	21.08	21.11	20.99		
5	16QAM	12	0	21.09	21.26	21.10	22.7	0
5	16QAM	12	7	21.17	21.19	21.09		
5	16QAM	12	13	21.12	21.17	21.08		
5	16QAM	25	0	21.10	21.20	21.06		
5	64QAM	1	0	20.95	21.03	21.01	22.7	0
5	64QAM	1	12	20.98	21.10	21.00		
5	64QAM	1	24	20.94	21.07	20.98		
5	64QAM	12	0	21.09	21.16	21.08	22.7	0
5	64QAM	12	7	21.16	21.20	21.11		
5	64QAM	12	13	21.09	21.12	21.03		
5	64QAM	25	0	21.11	21.21	21.07		
Channel				20415	20525	20635	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				825.5	836.5	847.5		
3	QPSK	1	0	21.13	21.19	21.19	22.7	0
3	QPSK	1	8	21.19	21.24	21.13		
3	QPSK	1	14	21.14	21.23	21.08		
3	QPSK	8	0	21.04	21.11	20.99	22.7	0
3	QPSK	8	4	21.02	21.15	20.99		
3	QPSK	8	7	20.99	21.09	20.99		
3	QPSK	15	0	21.02	21.10	20.99		
3	16QAM	1	0	21.06	21.20	21.08	22.7	0
3	16QAM	1	8	21.13	21.14	21.15		
3	16QAM	1	14	21.12	21.19	20.95		
3	16QAM	8	0	21.19	21.24	21.10	22.7	0
3	16QAM	8	4	21.16	21.28	21.13		
3	16QAM	8	7	21.09	21.21	21.12		
3	16QAM	15	0	21.09	21.19	21.08		
3	64QAM	1	0	20.91	20.97	20.98	22.7	0
3	64QAM	1	8	21.00	21.09	20.95		
3	64QAM	1	14	20.94	21.07	20.94		
3	64QAM	8	0	21.15	21.20	21.07	22.7	0
3	64QAM	8	4	21.17	21.23	21.09		
3	64QAM	8	7	21.14	21.22	21.07		
3	64QAM	15	0	21.08	21.18	21.05		
Channel				20407	20525	20643	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				824.7	836.5	848.3		
1.4	QPSK	1	0	21.02	21.20	21.10	22.7	0
1.4	QPSK	1	3	21.08	21.23	21.12		
1.4	QPSK	1	5	21.14	21.17	21.00		
1.4	QPSK	3	0	20.83	21.05	20.91	22.7	0
1.4	QPSK	3	1	20.88	21.06	20.92		
1.4	QPSK	3	3	21.00	21.02	20.91		
1.4	QPSK	6	0	20.95	21.02	20.87		
1.4	16QAM	1	0	20.95	21.06	21.03	22.7	0
1.4	16QAM	1	3	21.05	21.23	21.09		
1.4	16QAM	1	5	21.03	21.05	21.01		
1.4	16QAM	3	0	20.89	21.18	20.96	22.7	0
1.4	16QAM	3	1	20.98	21.11	21.03		
1.4	16QAM	3	3	20.97	21.06	20.98		
1.4	16QAM	6	0	21.12	21.19	21.07		
1.4	64QAM	1	0	20.82	20.91	20.87	22.7	0
1.4	64QAM	1	3	20.93	21.00	20.91		
1.4	64QAM	1	5	20.85	20.98	20.80		
1.4	64QAM	3	0	20.98	21.11	20.99	22.7	0
1.4	64QAM	3	1	20.99	21.18	21.06		
1.4	64QAM	3	3	20.99	21.14	20.92		
1.4	64QAM	6	0	20.99	21.09	20.99		

Band 7 _Ant 1_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				20850	21100	21350		
Frequency (MHz)				2510	2535	2560		
20	QPSK	1	0	21.08	21.30	21.05	22.5	0
20	QPSK	1	49	21.18	21.18	21.22		
20	QPSK	1	99	21.15	21.19	21.22		
20	QPSK	50	0	21.20	21.28	21.08	22.5	0
20	QPSK	50	24	21.16	21.14	21.13		
20	QPSK	50	50	21.11	21.12	21.16		
20	QPSK	100	0	21.09	21.13	21.12		
20	16QAM	1	0	21.15	21.23	21.23	22.5	0
20	16QAM	1	49	21.14	21.17	21.12		
20	16QAM	1	99	21.27	21.15	21.15		
20	16QAM	50	0	21.03	21.07	20.93	22.5	0
20	16QAM	50	24	21.09	21.11	21.05		
20	16QAM	50	50	21.04	21.09	21.09		
20	16QAM	100	0	21.01	21.04	21.02		
20	64QAM	1	0	21.18	21.19	21.17	22.5	0
20	64QAM	1	49	21.30	21.30	21.09		
20	64QAM	1	99	21.28	21.23	21.08		
20	64QAM	50	0	21.13	21.15	21.03	22.5	0
20	64QAM	50	24	21.13	21.19	21.14		
20	64QAM	50	50	21.10	21.16	21.23		
20	64QAM	100	0	21.15	21.14	21.10		
Channel				20825	21100	21375	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2507.5	2535	2562.5		
15	QPSK	1	0	21.11	21.28	21.16	22.5	0
15	QPSK	1	37	21.21	21.17	21.23		
15	QPSK	1	74	21.21	21.25	21.27		
15	QPSK	36	0	21.22	21.26	21.18	22.5	0
15	QPSK	36	20	21.15	21.13	21.22		
15	QPSK	36	39	21.12	21.11	21.14		
15	QPSK	75	0	21.15	21.15	21.10		
15	16QAM	1	0	21.23	21.18	21.27	22.5	0
15	16QAM	1	37	21.16	21.15	21.04		
15	16QAM	1	74	21.19	21.13	21.15		
15	16QAM	36	0	21.06	21.09	21.02	22.5	0
15	16QAM	36	20	21.09	21.06	21.13		
15	16QAM	36	39	21.08	21.04	21.12		
15	16QAM	75	0	21.07	21.08	21.00		
15	64QAM	1	0	21.21	21.17	21.28	22.5	0
15	64QAM	1	37	21.29	21.29	21.08		
15	64QAM	1	74	21.25	21.22	21.09		
15	64QAM	36	0	21.17	21.16	21.12	22.5	0
15	64QAM	36	20	21.18	21.17	21.22		
15	64QAM	36	39	21.15	21.14	21.20		
15	64QAM	75	0	21.15	21.17	21.12		
Channel				20800	21100	21400	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2505	2535	2565		
10	QPSK	1	0	21.19	21.28	21.20	22.5	0
10	QPSK	1	25	21.19	21.15	21.19		
10	QPSK	1	49	21.28	21.20	21.17		
10	QPSK	25	0	21.23	21.20	21.20	22.5	0
10	QPSK	25	12	21.23	21.13	21.12		
10	QPSK	25	25	21.21	21.12	21.12		
10	QPSK	50	0	21.22	21.13	21.11		
10	16QAM	1	0	21.24	21.11	21.21	22.5	0
10	16QAM	1	25	21.13	21.10	21.00		
10	16QAM	1	49	21.22	21.10	21.06		
10	16QAM	25	0	21.08	21.05	21.06	22.5	0
10	16QAM	25	12	21.13	21.06	21.04		
10	16QAM	25	25	21.13	21.01	21.02		
10	16QAM	50	0	21.16	21.01	21.03		
10	64QAM	1	0	21.23	21.13	21.29	22.5	0
10	64QAM	1	25	21.28	21.28	21.00		
10	64QAM	1	49	21.17	21.18	21.01		
10	64QAM	25	0	21.11	21.11	21.16	22.5	0
10	64QAM	25	12	21.27	21.12	21.18		
10	64QAM	25	25	21.21	21.11	21.15		
10	64QAM	50	0	21.23	21.09	21.10		
Channel				20775	21100	21425	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2502.5	2535	2567.5		
5	QPSK	1	0	21.23	21.26	21.17	22.5	0
5	QPSK	1	12	21.19	21.16	21.17		
5	QPSK	1	24	21.20	21.16	21.14		
5	QPSK	12	0	21.23	21.16	21.22	22.5	0
5	QPSK	12	7	21.15	21.11	21.14		
5	QPSK	12	13	21.17	21.10	21.12		
5	QPSK	25	0	21.11	21.07	21.12		
5	16QAM	1	0	21.24	21.11	21.26	22.5	0
5	16QAM	1	12	21.13	21.13	20.98		
5	16QAM	1	24	21.29	21.06	21.01		
5	16QAM	12	0	21.02	21.02	21.03	22.5	0
5	16QAM	12	7	21.12	21.05	21.03		
5	16QAM	12	13	21.08	21.01	21.03		
5	16QAM	25	0	21.03	21.01	21.02		
5	64QAM	1	0	21.23	21.08	21.23	22.5	0
5	64QAM	1	12	21.24	21.23	20.98		
5	64QAM	1	24	21.24	21.14	20.92		
5	64QAM	12	0	21.12	21.11	21.10	22.5	0
5	64QAM	12	7	21.18	21.16	21.14		
5	64QAM	12	13	21.15	21.12	21.11		
5	64QAM	25	0	21.12	21.12	21.10		

Band 7 _Ant 2_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				20850	21100	21350		
Frequency (MHz)				2510	2535	2560		
20	QPSK	1	0	17.05	17.27	17.19	18.7	0
20	QPSK	1	49	17.12	17.17	17.24		
20	QPSK	1	99	17.05	17.20	17.18		
20	QPSK	50	0	16.96	17.19	17.06	18.7	0
20	QPSK	50	24	16.96	17.12	17.14		
20	QPSK	50	50	16.97	17.13	17.16		
20	QPSK	100	0	17.00	17.16	17.15		
20	16QAM	1	0	17.16	17.13	17.25	18.7	0
20	16QAM	1	49	17.11	17.18	17.23		
20	16QAM	1	99	17.11	17.24	17.25		
20	16QAM	50	0	17.12	17.22	17.20	18.7	0
20	16QAM	50	24	17.12	17.25	17.25		
20	16QAM	50	50	17.06	17.18	17.22		
20	16QAM	100	0	17.06	17.22	17.25		
20	64QAM	1	0	16.93	17.04	17.22	18.7	0
20	64QAM	1	49	16.98	17.12	17.25		
20	64QAM	1	99	16.96	17.13	17.08		
20	64QAM	50	0	17.09	17.24	17.23	18.7	0
20	64QAM	50	24	17.10	17.23	17.19		
20	64QAM	50	50	17.06	17.21	17.17		
20	64QAM	100	0	17.08	17.21	17.26		
Channel				20825	21100	21375	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2507.5	2535	2562.5		
15	QPSK	1	0	17.10	17.15	17.20	18.7	0
15	QPSK	1	37	17.12	17.22	17.21		
15	QPSK	1	74	17.14	17.18	17.24		
15	QPSK	36	0	16.96	17.07	17.15	18.7	0
15	QPSK	36	20	17.02	17.12	17.24		
15	QPSK	36	39	17.00	17.06	17.13		
15	QPSK	75	0	16.98	17.11	17.11		
15	16QAM	1	0	17.08	17.22	17.19	18.7	0
15	16QAM	1	37	17.10	17.22	17.25		
15	16QAM	1	74	17.12	17.18	17.25		
15	16QAM	36	0	17.14	17.22	17.26	18.7	0
15	16QAM	36	20	17.14	17.23	17.23		
15	16QAM	36	39	17.10	17.19	17.11		
15	16QAM	75	0	17.07	17.17	17.22		
15	64QAM	1	0	16.98	17.04	17.19	18.7	0
15	64QAM	1	37	17.07	17.14	17.17		
15	64QAM	1	74	17.04	17.20	17.20		
15	64QAM	36	0	17.15	17.25	17.24	18.7	0
15	64QAM	36	20	17.13	17.24	17.26		
15	64QAM	36	39	17.12	17.22	17.24		
15	64QAM	75	0	17.17	17.22	17.25		
Channel				20800	21100	21400	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2505	2535	2565		
10	QPSK	1	0	17.15	17.13	17.25	18.7	0
10	QPSK	1	25	17.13	17.24	17.22		
10	QPSK	1	49	17.20	17.25	17.25		
10	QPSK	25	0	16.94	17.07	17.18	18.7	0
10	QPSK	25	12	17.05	17.07	17.17		
10	QPSK	25	25	17.05	17.07	17.17		
10	QPSK	50	0	17.10	17.06	17.15		
10	16QAM	1	0	17.25	17.21	17.22	18.7	0
10	16QAM	1	25	17.18	17.21	17.23		
10	16QAM	1	49	17.11	17.18	17.24		
10	16QAM	25	0	17.04	17.21	17.23	18.7	0
10	16QAM	25	12	17.21	17.25	17.21		
10	16QAM	25	25	17.20	17.17	17.25		
10	16QAM	50	0	17.22	17.22	17.26		
10	64QAM	1	0	17.02	17.04	17.23	18.7	0
10	64QAM	1	25	17.09	17.15	17.24		
10	64QAM	1	49	17.14	17.21	17.21		
10	64QAM	25	0	17.13	17.18	17.24	18.7	0
10	64QAM	25	12	17.25	17.19	17.16		
10	64QAM	25	25	17.19	17.21	17.23		
10	64QAM	50	0	17.21	17.16	17.24		
Channel				20775	21100	21425	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2502.5	2535	2567.5		
5	QPSK	1	0	17.12	17.10	17.15	18.7	0
5	QPSK	1	12	17.15	17.21	17.21		
5	QPSK	1	24	17.08	17.21	17.26		
5	QPSK	12	0	16.93	17.08	17.14	18.7	0
5	QPSK	12	7	17.01	17.08	17.17		
5	QPSK	12	13	16.94	17.06	17.12		
5	QPSK	25	0	16.96	17.04	17.10		
5	16QAM	1	0	17.09	17.14	17.26	18.7	0
5	16QAM	1	12	17.16	17.23	17.22		
5	16QAM	1	24	17.17	17.17	17.21		
5	16QAM	12	0	17.10	17.16	17.19	18.7	0
5	16QAM	12	7	17.09	17.26	17.24		
5	16QAM	12	13	17.10	17.23	17.24		
5	16QAM	25	0	17.06	17.17	17.22		
5	64QAM	1	0	17.04	16.95	17.22	18.7	0
5	64QAM	1	12	17.07	17.09	17.21		
5	64QAM	1	24	16.94	17.08	17.16		
5	64QAM	12	0	17.15	17.23	17.21	18.7	0
5	64QAM	12	7	17.14	17.23	17.22		
5	64QAM	12	13	17.16	17.23	17.19		
5	64QAM	25	0	17.07	17.16	17.24		

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				20850	21100	21350		
Frequency (MHz)				2510	2535	2560		
20	QPSK	1	0	19.18	19.28	19.17	20.7	0
20	QPSK	1	49	19.11	19.12	19.24		
20	QPSK	1	99	19.05	19.09	19.12		
20	QPSK	50	0	19.14	19.16	19.15	20.7	0
20	QPSK	50	24	19.03	19.15	19.11		
20	QPSK	50	50	19.05	19.14	19.12		
20	QPSK	100	0	18.92	19.17	19.14		
20	16QAM	1	0	19.13	19.17	19.15	20.7	0
20	16QAM	1	49	19.24	19.23	19.21		
20	16QAM	1	99	19.14	19.22	19.05		
20	16QAM	50	0	19.08	19.19	19.20	20.7	0
20	16QAM	50	24	19.07	19.19	19.15		
20	16QAM	50	50	18.99	19.17	19.20		
20	16QAM	100	0	19.04	19.24	19.20		
20	64QAM	1	0	19.17	19.20	19.16	20.7	0
20	64QAM	1	49	19.15	19.23	19.16		
20	64QAM	1	99	19.12	19.22	19.19		
20	64QAM	50	0	19.10	19.19	19.19	20.7	0
20	64QAM	50	24	19.05	19.19	19.23		
20	64QAM	50	50	19.04	19.18	19.22		
20	64QAM	100	0	19.03	19.21	19.20		
Channel				20825	21100	21375	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2507.5	2535	2562.5		
15	QPSK	1	0	18.98	19.13	19.07	20.7	0
15	QPSK	1	37	18.98	19.08	19.17		
15	QPSK	1	74	19.11	19.22	19.12		
15	QPSK	36	0	19.14	19.13	19.24	20.7	0
15	QPSK	36	20	19.17	19.23	19.12		
15	QPSK	36	39	19.02	19.22	19.14		
15	QPSK	75	0	19.12	19.18	19.10		
15	16QAM	1	0	19.24	19.21	19.11	20.7	0
15	16QAM	1	37	19.21	19.24	19.06		
15	16QAM	1	74	19.21	19.13	19.11		
15	16QAM	36	0	19.14	19.10	19.18	20.7	0
15	16QAM	36	20	19.16	19.24	19.16		
15	16QAM	36	39	19.11	19.22	19.15		
15	16QAM	75	0	19.24	19.23	19.22		
15	64QAM	1	0	19.23	19.22	19.07	20.7	0
15	64QAM	1	37	19.17	19.20	19.05		
15	64QAM	1	74	19.19	19.17	19.22		
15	64QAM	36	0	19.20	19.20	19.24	20.7	0
15	64QAM	36	20	19.20	19.24	19.19		
15	64QAM	36	39	19.15	19.23	19.15		
15	64QAM	75	0	19.12	19.18	19.14		
Channel				20800	21100	21400	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2505	2535	2565		
10	QPSK	1	0	18.87	18.94	19.05	20.7	0
10	QPSK	1	25	19.04	18.99	19.08		
10	QPSK	1	49	18.98	19.21	19.08		
10	QPSK	25	0	19.14	19.13	19.17	20.7	0
10	QPSK	25	12	19.12	19.15	19.10		
10	QPSK	25	25	19.16	19.15	19.08		
10	QPSK	50	0	19.17	19.14	19.08		
10	16QAM	1	0	19.17	19.24	19.04	20.7	0
10	16QAM	1	25	19.13	19.22	19.02		
10	16QAM	1	49	19.16	19.24	19.09		
10	16QAM	25	0	19.22	19.19	19.19	20.7	0
10	16QAM	25	12	19.27	19.23	19.13		
10	16QAM	25	25	19.21	19.20	19.16		
10	16QAM	50	0	19.25	19.24	19.24		
10	64QAM	1	0	18.92	19.17	18.98	20.7	0
10	64QAM	1	25	19.19	19.22	18.95		
10	64QAM	1	49	19.21	19.16	19.15		
10	64QAM	25	0	19.18	19.08	19.18	20.7	0
10	64QAM	25	12	19.22	19.24	19.18		
10	64QAM	25	25	19.18	19.11	19.19		
10	64QAM	50	0	19.24	19.20	19.15		
Channel				20775	21100	21425	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2502.5	2535	2567.5		
5	QPSK	1	0	19.04	19.01	18.97	20.7	0
5	QPSK	1	12	19.09	18.97	19.11		
5	QPSK	1	24	19.06	18.99	19.01		
5	QPSK	12	0	19.14	19.11	19.09	20.7	0
5	QPSK	12	7	19.21	19.16	19.06		
5	QPSK	12	13	19.21	19.15	19.02		
5	QPSK	25	0	19.18	19.03	19.08		
5	16QAM	1	0	19.23	19.16	18.97	20.7	0
5	16QAM	1	12	19.17	19.21	18.96		
5	16QAM	1	24	19.16	19.24	18.96		
5	16QAM	12	0	19.27	19.08	19.16	20.7	0
5	16QAM	12	7	19.20	19.14	19.04		
5	16QAM	12	13	19.21	19.07	19.14		
5	16QAM	25	0	19.23	19.18	19.25		
5	64QAM	1	0	19.14	19.18	19.00	20.7	0
5	64QAM	1	12	19.21	19.24	19.23		
5	64QAM	1	24	19.16	18.99	19.14		
5	64QAM	12	0	19.19	19.05	19.23	20.7	0
5	64QAM	12	7	19.19	19.25	19.18		
5	64QAM	12	13	19.20	19.17	19.04		
5	64QAM	25	0	19.18	19.23	19.14		

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				132072	132322	132572		
Frequency (MHz)				1720	1745	1770		
20	QPSK	1	0	18.87	19.09	18.91	20.5	0
20	QPSK	1	49	18.81	18.97	18.97		
20	QPSK	1	99	18.74	18.89	18.67		
20	QPSK	50	0	18.75	18.89	18.75	20.5	0
20	QPSK	50	24	18.70	18.87	18.76		
20	QPSK	50	50	18.66	18.81	18.63		
20	QPSK	100	0	18.70	18.87	18.71		
20	16QAM	1	0	18.96	19.02	18.99	20.5	0
20	16QAM	1	49	18.94	19.07	19.02		
20	16QAM	1	99	18.81	18.96	18.81		
20	16QAM	50	0	18.66	18.79	18.68	20.5	0
20	16QAM	50	24	18.65	18.67	18.65		
20	16QAM	50	50	18.60	18.65	18.57		
20	16QAM	100	0	18.63	18.68	18.59		
20	64QAM	1	0	18.84	18.81	18.85	20.5	0
20	64QAM	1	49	18.80	18.83	18.87		
20	64QAM	1	99	18.67	18.71	18.65		
20	64QAM	50	0	18.86	18.93	18.84	20.5	0
20	64QAM	50	24	18.85	18.89	18.83		
20	64QAM	50	50	18.78	18.84	18.80		
20	64QAM	100	0	18.86	18.86	18.84		
Channel				132047	132322	132597	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1717.5	1745	1772.5		
15	QPSK	1	0	18.67	18.66	18.87	20.5	0
15	QPSK	1	37	18.63	18.75	18.74		
15	QPSK	1	74	18.57	18.70	18.66		
15	QPSK	36	0	18.69	18.77	18.68	20.5	0
15	QPSK	36	20	18.69	18.78	18.69		
15	QPSK	36	39	18.65	18.73	18.60		
15	QPSK	75	0	18.65	18.77	18.65		
15	16QAM	1	0	18.93	18.87	19.04	20.5	0
15	16QAM	1	37	18.90	18.97	18.90		
15	16QAM	1	74	18.83	18.93	18.79		
15	16QAM	36	0	18.60	18.70	18.62	20.5	0
15	16QAM	36	20	18.62	18.69	18.62		
15	16QAM	36	39	18.58	18.65	18.57		
15	16QAM	75	0	18.60	18.69	18.60		
15	64QAM	1	0	18.78	18.82	18.92	20.5	0
15	64QAM	1	37	18.75	18.89	18.80		
15	64QAM	1	74	18.73	18.83	18.67		
15	64QAM	36	0	18.83	18.92	18.84	20.5	0
15	64QAM	36	20	18.85	18.90	18.84		
15	64QAM	36	39	18.79	18.86	18.76		
15	64QAM	75	0	18.78	18.86	18.80		
Channel				132022	132322	132622	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1715	1745	1775		
10	QPSK	1	0	18.80	18.67	18.83	20.5	0
10	QPSK	1	25	18.73	18.74	18.75		
10	QPSK	1	49	18.65	18.67	18.65		
10	QPSK	25	0	18.80	18.77	18.82	20.5	0
10	QPSK	25	12	18.81	18.81	18.67		
10	QPSK	25	25	18.74	18.73	18.63		
10	QPSK	50	0	18.77	18.77	18.68		
10	16QAM	1	0	19.01	18.96	18.97	20.5	0
10	16QAM	1	25	18.86	18.99	18.90		
10	16QAM	1	49	18.81	18.90	18.80		
10	16QAM	25	0	18.62	18.71	18.63	20.5	0
10	16QAM	25	12	18.63	18.73	18.62		
10	16QAM	25	25	18.54	18.68	18.59		
10	16QAM	50	0	18.60	18.70	18.62		
10	64QAM	1	0	18.82	18.79	18.86	20.5	0
10	64QAM	1	25	18.73	18.83	18.75		
10	64QAM	1	49	18.70	18.80	18.66		
10	64QAM	25	0	18.82	18.90	18.85	20.5	0
10	64QAM	25	12	18.83	18.93	18.85		
10	64QAM	25	25	18.76	18.87	18.79		
10	64QAM	50	0	18.80	18.88	18.82		
Channel				131997	132322	132647	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1712.5	1745	1777.5		
5	QPSK	1	0	18.64	18.73	18.74	20.5	0
5	QPSK	1	12	18.67	18.73	18.73		
5	QPSK	1	24	18.63	18.71	18.67		
5	QPSK	12	0	18.68	18.80	18.70	20.5	0
5	QPSK	12	7	18.72	18.81	18.71		
5	QPSK	12	13	18.69	18.75	18.65		
5	QPSK	25	0	18.65	18.76	18.67		
5	16QAM	1	0	18.88	18.96	18.86	20.5	0
5	16QAM	1	12	18.89	18.97	18.90		
5	16QAM	1	24	18.86	18.92	18.84		
5	16QAM	12	0	18.67	18.71	18.64	20.5	0
5	16QAM	12	7	18.70	18.75	18.67		
5	16QAM	12	13	18.66	18.70	18.61		
5	16QAM	25	0	18.63	18.69	18.61		
5	64QAM	1	0	18.78	18.85	18.75	20.5	0
5	64QAM	1	12	18.79	18.84	18.79		
5	64QAM	1	24	18.74	18.80	18.91		
5	64QAM	12	0	18.87	18.92	18.95	20.5	0
5	64QAM	12	7	18.85	18.94	18.83		
5	64QAM	12	13	18.81	18.90	18.81		
5	64QAM	25	0	18.81	18.91	18.77		
Channel				131987	132322	132657	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1711.5	1745	1778.5		
3	QPSK	1	0	18.64	18.62	18.32	20.5	0
3	QPSK	1	8	18.58	18.48	18.38		
3	QPSK	1	14	18.51	18.66	18.18		
3	QPSK	8	0	18.66	18.60	18.30	20.5	0
3	QPSK	8	4	18.61	18.68	18.31		
3	QPSK	8	7	18.57	18.72	18.35		
3	QPSK	15	0	18.61	18.68	18.26		
3	16QAM	1	0	19.08	19.04	18.75	20.5	0
3	16QAM	1	8	19.06	19.02	18.78		
3	16QAM	1	14	18.93	19.03	18.75		
3	16QAM	8	0	18.78	18.79	18.44	20.5	0
3	16QAM	8	4	18.77	18.79	18.41		
3	16QAM	8	7	18.72	18.77	18.33		
3	16QAM	15	0	18.75	18.80	18.35		
3	64QAM	1	0	18.69	18.93	18.61	20.5	0
3	64QAM	1	8	18.92	18.95	18.63		
3	64QAM	1	14	18.79	18.83	18.51		
3	64QAM	8	0	18.77	18.84	18.39	20.5	0
3	64QAM	8	4	18.76	18.80	18.38		
3	64QAM	8	7	18.69	18.75	18.35		
3	64QAM	15	0	18.77	18.77	18.39		
Channel				131979	132322	132665	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1710.7	1745	1779.3		
1.4	QPSK	1	0	18.52	18.58	18.56	20.5	0
1.4	QPSK	1	3	18.46	18.62	18.62		
1.4	QPSK	1	5	18.39	18.54	18.32		
1.4	QPSK	3	0	18.54	18.68	18.54		
1.4	QPSK	3	1	18.49	18.66	18.55		
1.4	QPSK	3	3	18.45	18.60	18.42		
1.4	QPSK	6	0	18.49	18.66	18.50	19.5	1
1.4	16QAM	1	0	18.96	19.02	18.99	19.5	1
1.4	16QAM	1	3	18.94	19.07	19.02		
1.4	16QAM	1	5	18.81	18.96	18.81		
1.4	16QAM	3	0	18.66	18.79	18.68		
1.4	16QAM	3	1	18.65	18.67	18.65		
1.4	16QAM	3	3	18.60	18.65	18.57		
1.4	16QAM	6	0	18.63	18.68	18.59	18.5	2
1.4	64QAM	1	0	18.84	18.81	18.85	18.5	2
1.4	64QAM	1	3	18.80	18.83	18.87		
1.4	64QAM	1	5	18.67	18.71	18.65		
1.4	64QAM	3	0	18.65	18.72	18.63		
1.4	64QAM	3	1	18.64	18.68	18.62		
1.4	64QAM	3	3	18.57	18.63	18.59		
1.4	64QAM	6	0	18.65	18.65	18.63	17.5	3

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				132072	132322	132572		
Frequency (MHz)				1720	1745	1770		
20	QPSK	1	0	16.73	16.81	16.78	17.7	0
20	QPSK	1	49	16.67	16.63	16.63		
20	QPSK	1	99	16.44	16.50	16.43		
20	QPSK	50	0	16.69	16.73	16.64	17.7	0
20	QPSK	50	24	16.64	16.70	16.61		
20	QPSK	50	50	16.57	16.51	16.56		
20	QPSK	100	0	16.65	16.66	16.62		
20	16QAM	1	0	16.73	16.64	16.73	17.7	0
20	16QAM	1	49	16.64	16.64	16.73		
20	16QAM	1	99	16.64	16.74	16.64		
20	16QAM	50	0	16.52	16.41	16.52	17.7	0
20	16QAM	50	24	16.52	16.35	16.47		
20	16QAM	50	50	16.46	16.38	16.34		
20	16QAM	100	0	16.47	16.38	16.44		
20	64QAM	1	0	16.73	16.76	16.73	17.7	0
20	64QAM	1	49	16.64	16.64	16.73		
20	64QAM	1	99	16.73	16.68	16.64		
20	64QAM	50	0	16.49	16.40	16.54	17.7	0
20	64QAM	50	24	16.50	16.44	16.48		
20	64QAM	50	50	16.44	16.38	16.45		
20	64QAM	100	0	16.56	16.39	16.52		
Channel				132047	132322	132597	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1717.5	1745	1772.5		
15	QPSK	1	0	16.39	16.34	16.40	17.7	0
15	QPSK	1	37	16.36	16.33	16.31		
15	QPSK	1	74	16.32	16.29	16.28		
15	QPSK	36	0	16.52	16.45	16.42	17.7	0
15	QPSK	36	20	16.52	16.48	16.33		
15	QPSK	36	39	16.44	16.30	16.29		
15	QPSK	75	0	16.39	16.34	16.41		
15	16QAM	1	0	16.73	16.73	16.73	17.7	0
15	16QAM	1	37	16.73	16.73	16.61		
15	16QAM	1	74	16.64	16.64	16.73		
15	16QAM	36	0	16.55	16.46	16.52	17.7	0
15	16QAM	36	20	16.56	16.49	16.46		
15	16QAM	36	39	16.42	16.34	16.48		
15	16QAM	75	0	16.43	16.42	16.48		
15	64QAM	1	0	16.59	16.44	16.64	17.7	0
15	64QAM	1	37	16.64	16.64	16.52		
15	64QAM	1	74	16.64	16.41	16.80		
15	64QAM	36	0	16.55	16.40	16.54	17.7	0
15	64QAM	36	20	16.56	16.44	16.55		
15	64QAM	36	39	16.39	16.35	16.38		
15	64QAM	75	0	16.47	16.50	16.53		
Channel				132022	132322	132622	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1715	1745	1775		
10	QPSK	1	0	16.41	16.28	16.39	17.7	0
10	QPSK	1	25	16.42	16.34	16.30		
10	QPSK	1	49	16.32	16.28	16.18		
10	QPSK	25	0	16.49	16.43	16.32	17.7	0
10	QPSK	25	12	16.46	16.34	16.35		
10	QPSK	25	25	16.39	16.32	16.31		
10	QPSK	50	0	16.42	16.41	16.29		
10	16QAM	1	0	16.65	16.64	16.64	17.7	0
10	16QAM	1	25	16.68	16.70	16.64		
10	16QAM	1	49	16.61	16.73	16.57		
10	16QAM	25	0	16.49	16.43	16.43	17.7	0
10	16QAM	25	12	16.49	16.35	16.45		
10	16QAM	25	25	16.49	16.30	16.41		
10	16QAM	50	0	16.48	16.36	16.43		
10	64QAM	1	0	16.48	16.21	16.52	17.7	0
10	64QAM	1	25	16.40	16.41	16.34		
10	64QAM	1	49	16.48	16.32	16.26		
10	64QAM	25	0	16.54	16.30	16.36	17.7	0
10	64QAM	25	12	16.53	16.33	16.38		
10	64QAM	25	25	16.55	16.30	16.34		
10	64QAM	50	0	16.44	16.34	16.38		
Channel				131997	132322	132647	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1712.5	1745	1777.5		
5	QPSK	1	0	16.37	16.30	16.30	17.7	0
5	QPSK	1	12	16.39	16.44	16.30		
5	QPSK	1	24	16.33	16.24	16.18		
5	QPSK	12	0	16.51	16.45	16.36	17.7	0
5	QPSK	12	7	16.52	16.47	16.39		
5	QPSK	12	13	16.46	16.44	16.34		
5	QPSK	25	0	16.42	16.40	16.28		
5	16QAM	1	0	16.75	16.76	16.64	17.7	0
5	16QAM	1	12	16.65	16.69	16.61		
5	16QAM	1	24	16.61	16.60	16.51		
5	16QAM	12	0	16.57	16.50	16.49	17.7	0
5	16QAM	12	7	16.59	16.62	16.51		
5	16QAM	12	13	16.53	16.48	16.47		
5	16QAM	25	0	16.46	16.40	16.39		
5	64QAM	1	0	16.47	16.44	16.34	17.7	0
5	64QAM	1	12	16.49	16.43	16.30		
5	64QAM	1	24	16.34	16.35	16.32		
5	64QAM	12	0	16.45	16.50	16.36	17.7	0
5	64QAM	12	7	16.47	16.52	16.48		
5	64QAM	12	13	16.41	16.38	16.34		
5	64QAM	25	0	16.41	16.47	16.32		
Channel				131987	132322	132657	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1711.5	1745	1778.5		
3	QPSK	1	0	16.36	16.27	16.19	17.7	0
3	QPSK	1	8	16.28	16.29	16.28		
3	QPSK	1	14	16.28	16.25	16.22		
3	QPSK	8	0	16.46	16.41	16.35	17.7	0
3	QPSK	8	4	16.49	16.44	16.40		
3	QPSK	8	7	16.42	16.40	16.30		
3	QPSK	15	0	16.47	16.45	16.40		
3	16QAM	1	0	16.59	16.62	16.60	17.7	0
3	16QAM	1	8	16.60	16.67	16.53		
3	16QAM	1	14	16.67	16.62	16.64		
3	16QAM	8	0	16.60	16.62	16.53	17.7	0
3	16QAM	8	4	16.62	16.53	16.60		
3	16QAM	8	7	16.57	16.60	16.51		
3	16QAM	15	0	16.45	16.49	16.42		
3	64QAM	1	0	16.35	16.38	16.33	17.7	0
3	64QAM	1	8	16.39	16.40	16.30		
3	64QAM	1	14	16.40	16.38	16.38		
3	64QAM	8	0	16.43	16.47	16.42	17.7	0
3	64QAM	8	4	16.46	16.41	16.36		
3	64QAM	8	7	16.40	16.37	16.39		
3	64QAM	15	0	16.46	16.33	16.38		
Channel				131979	132322	132665	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1710.7	1745	1779.3		
1.4	QPSK	1	0	16.33	16.36	16.29	17.7	0
1.4	QPSK	1	3	16.39	16.34	16.32		
1.4	QPSK	1	5	16.32	16.26	16.18		
1.4	QPSK	3	0	16.34	16.35	16.21		
1.4	QPSK	3	1	16.36	16.36	16.31		
1.4	QPSK	3	3	16.33	16.37	16.32		
1.4	QPSK	6	0	16.41	16.32	16.25	17.7	0
1.4	16QAM	1	0	16.55	16.64	16.40	17.7	0
1.4	16QAM	1	3	16.60	16.43	16.46		
1.4	16QAM	1	5	16.55	16.45	16.43		
1.4	16QAM	3	0	16.47	16.30	16.20		
1.4	16QAM	3	1	16.52	16.36	16.51		
1.4	16QAM	3	3	16.59	16.21	16.18		
1.4	16QAM	6	0	16.60	16.41	16.37	17.7	0
1.4	64QAM	1	0	16.38	16.32	16.51	17.7	0
1.4	64QAM	1	3	16.19	16.30	16.55		
1.4	64QAM	1	5	16.37	16.33	16.25		
1.4	64QAM	3	0	16.36	16.30	16.19		
1.4	64QAM	3	1	16.40	16.34	16.30		
1.4	64QAM	3	3	16.26	16.32	16.37		
1.4	64QAM	6	0	16.40	16.40	16.35	17.7	0

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BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				132072	132322	132572		
Frequency (MHz)				1720	1745	1770		
20	QPSK	1	0	19.21	19.38	19.25	20.7	0
20	QPSK	1	49	18.97	19.01	18.90		
20	QPSK	1	99	18.93	18.99	18.95		
20	QPSK	50	0	19.03	19.10	18.99	20.7	0
20	QPSK	50	24	19.03	19.03	18.95		
20	QPSK	50	50	18.96	18.93	18.92		
20	QPSK	100	0	18.76	18.84	18.71		
20	16QAM	1	0	19.03	19.24	19.31	20.7	0
20	16QAM	1	49	19.04	19.08	19.30		
20	16QAM	1	99	18.90	18.89	19.24		
20	16QAM	50	0	19.04	19.05	18.97	20.7	0
20	16QAM	50	24	18.97	19.01	18.90		
20	16QAM	50	50	18.88	18.95	18.88		
20	16QAM	100	0	18.78	18.91	18.89		
20	64QAM	1	0	19.23	19.08	19.02	20.7	0
20	64QAM	1	49	19.14	19.12	19.10		
20	64QAM	1	99	18.92	19.01	19.19		
20	64QAM	50	0	18.96	18.87	18.90	20.7	0
20	64QAM	50	24	18.90	18.96	18.94		
20	64QAM	50	50	18.81	18.89	18.82		
20	64QAM	100	0	18.92	18.89	18.92		
Channel				132047	132322	132597	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1717.5	1745	1772.5		
15	QPSK	1	0	18.88	18.70	18.81	20.7	0
15	QPSK	1	37	18.82	18.67	18.83		
15	QPSK	1	74	18.70	18.71	18.71		
15	QPSK	36	0	18.95	18.77	18.84	20.7	0
15	QPSK	36	20	18.84	18.81	18.72		
15	QPSK	36	39	18.81	18.78	18.62		
15	QPSK	75	0	18.80	18.80	18.67		
15	16QAM	1	0	19.04	19.20	19.16	20.7	0
15	16QAM	1	37	18.85	19.16	19.20		
15	16QAM	1	74	18.75	19.15	18.90		
15	16QAM	36	0	19.03	18.96	18.87	20.7	0
15	16QAM	36	20	18.98	18.92	18.96		
15	16QAM	36	39	18.81	18.91	18.86		
15	16QAM	75	0	18.89	18.89	18.99		
15	64QAM	1	0	19.21	19.21	19.13	20.7	0
15	64QAM	1	37	19.08	19.25	18.90		
15	64QAM	1	74	18.84	19.03	19.28		
15	64QAM	36	0	18.92	18.96	18.87	20.7	0
15	64QAM	36	20	18.94	18.91	18.83		
15	64QAM	36	39	18.84	18.94	18.84		
15	64QAM	75	0	18.83	18.93	18.93		
Channel				132022	132322	132622	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1715	1745	1775		
10	QPSK	1	0	18.96	18.72	18.96	20.7	0
10	QPSK	1	25	18.93	18.80	18.81		
10	QPSK	1	49	18.82	18.71	18.70		
10	QPSK	25	0	18.86	18.80	18.74	20.7	0
10	QPSK	25	12	18.83	18.71	18.84		
10	QPSK	25	25	18.77	18.68	18.78		
10	QPSK	50	0	18.89	18.79	18.78		
10	16QAM	1	0	19.04	19.02	19.02	20.7	0
10	16QAM	1	25	19.08	19.08	19.13		
10	16QAM	1	49	19.10	19.02	19.02		
10	16QAM	25	0	19.09	18.98	18.98	20.7	0
10	16QAM	25	12	19.08	18.91	18.88		
10	16QAM	25	25	18.93	18.87	18.87		
10	16QAM	50	0	19.02	18.96	18.88		
10	64QAM	1	0	19.17	19.32	19.18	20.7	0
10	64QAM	1	25	19.15	19.01	19.37		
10	64QAM	1	49	19.31	19.02	19.28		
10	64QAM	25	0	19.01	18.91	18.87	20.7	0
10	64QAM	25	12	18.99	18.94	18.93		
10	64QAM	25	25	18.87	18.90	18.84		
10	64QAM	50	0	18.92	18.87	18.85		
Channel				131997	132322	132647	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1712.5	1745	1777.5		
5	QPSK	1	0	18.83	18.59	18.83	20.7	0
5	QPSK	1	12	18.80	18.67	18.68		
5	QPSK	1	24	18.69	18.58	18.57		
5	QPSK	12	0	18.73	18.67	18.61	20.7	0
5	QPSK	12	7	18.70	18.58	18.71		
5	QPSK	12	13	18.64	18.55	18.65		
5	QPSK	25	0	18.76	18.66	18.65		
5	16QAM	1	0	18.90	19.27	19.05	20.7	0
5	16QAM	1	12	19.06	19.05	19.04		
5	16QAM	1	24	18.97	19.26	19.30		
5	16QAM	12	0	18.96	18.85	18.85	20.7	0
5	16QAM	12	7	18.95	18.78	18.75		
5	16QAM	12	13	18.80	18.74	18.74		
5	16QAM	25	0	18.89	18.83	18.75		
5	64QAM	1	0	19.04	19.19	19.33	20.7	0
5	64QAM	1	12	19.32	18.88	19.24		
5	64QAM	1	24	19.18	19.28	19.15		
5	64QAM	12	0	18.88	18.78	18.74	20.7	0
5	64QAM	12	7	18.86	18.81	18.80		
5	64QAM	12	13	18.74	18.77	18.71		
5	64QAM	25	0	18.79	18.74	18.72		
Channel				131987	132322	132657	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1711.5	1745	1778.5		
3	QPSK	1	0	19.07	18.83	19.07	20.7	0
3	QPSK	1	8	19.04	18.91	18.92		
3	QPSK	1	14	18.93	18.82	18.81		
3	QPSK	8	0	18.97	18.91	18.85	20.7	0
3	QPSK	8	4	18.94	18.82	18.95		
3	QPSK	8	7	18.88	18.79	18.89		
3	QPSK	15	0	19.00	18.90	18.89		
3	16QAM	1	0	19.05	19.18	19.04	20.7	0
3	16QAM	1	8	19.07	19.09	19.14		
3	16QAM	1	14	19.21	19.26	19.25		
3	16QAM	8	0	19.20	19.09	19.09	20.7	0
3	16QAM	8	4	19.19	19.02	18.99		
3	16QAM	8	7	19.04	18.98	18.98		
3	16QAM	15	0	19.13	19.07	18.99		
3	64QAM	1	0	19.18	19.18	19.18	20.7	0
3	64QAM	1	8	19.26	19.12	19.18		
3	64QAM	1	14	19.02	19.18	19.02		
3	64QAM	8	0	19.12	19.02	18.98	20.7	0
3	64QAM	8	4	19.10	19.05	19.04		
3	64QAM	8	7	18.98	19.01	18.95		
3	64QAM	15	0	19.03	18.98	18.96		
Channel				131979	132322	132665	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1710.7	1745	1779.3		
1.4	QPSK	1	0	18.86	18.62	18.86	20.7	0
1.4	QPSK	1	3	18.83	18.70	18.71		
1.4	QPSK	1	5	18.72	18.61	18.60		
1.4	QPSK	3	0	18.76	18.70	18.64		
1.4	QPSK	3	1	18.73	18.61	18.74		
1.4	QPSK	3	3	18.67	18.58	18.68		
1.4	QPSK	6	0	18.79	18.69	18.68	19.7	1
1.4	16QAM	1	0	19.35	19.30	19.02	19.7	1
1.4	16QAM	1	3	19.18	19.18	19.18		
1.4	16QAM	1	5	19.00	19.29	19.33		
1.4	16QAM	3	0	18.99	18.88	18.88		
1.4	16QAM	3	1	18.98	18.81	18.78		
1.4	16QAM	3	3	18.83	18.77	18.77		
1.4	16QAM	6	0	18.92	18.86	18.78	18.7	2
1.4	64QAM	1	0	19.17	19.22	19.36	18.7	2
1.4	64QAM	1	3	19.25	18.91	19.27		
1.4	64QAM	1	5	19.21	19.31	19.18		
1.4	64QAM	3	0	18.91	18.81	18.77		
1.4	64QAM	3	1	18.89	18.84	18.83		
1.4	64QAM	3	3	18.77	18.80	18.74		
1.4	64QAM	6	0	18.82	18.77	18.75	17.7	3