

D1950V3 - SN: 1229 Extended Dipole Calibrations

Referring to KDB 865664 D01, 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.

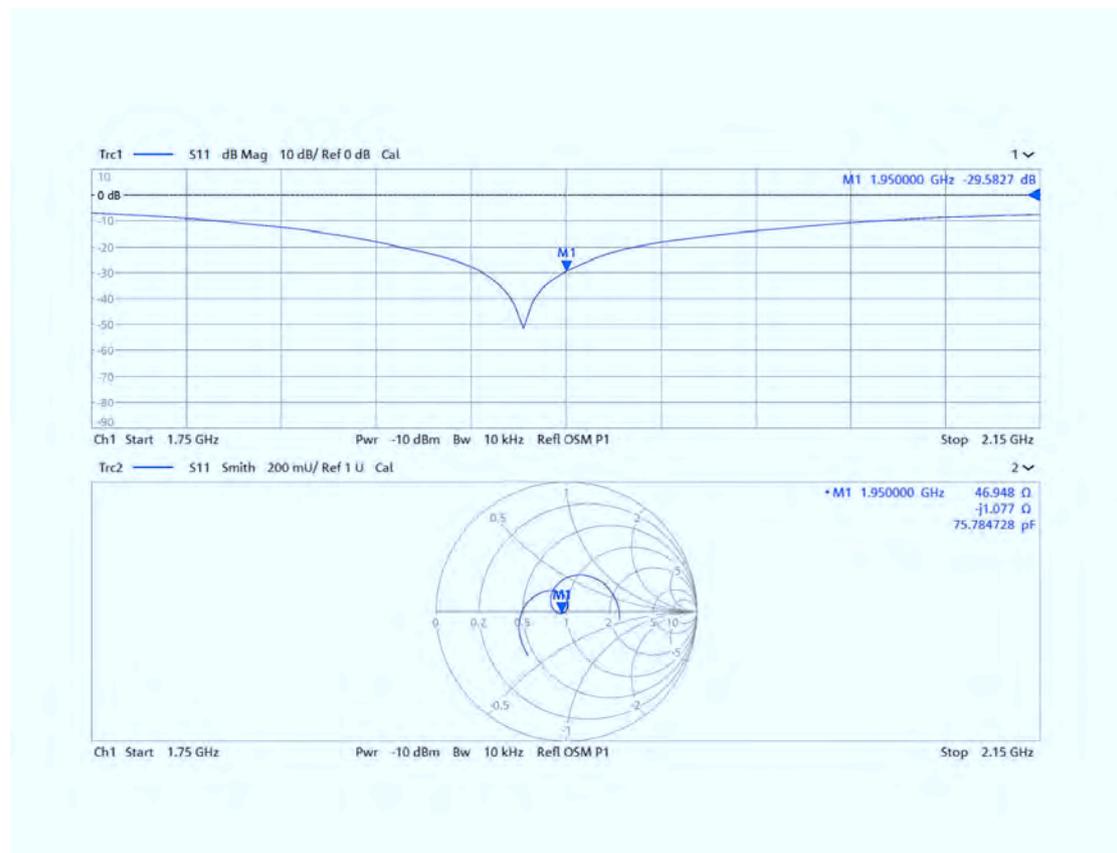
D1950V3 - SN: 1229						
1950MHz Head						
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)
10.28.2021	-33		50.5		2.19	
10.27.2022	-29.58	-10.36	46.95	-3.55	-1.08	-3.27
10.26.2023	-28.50	-13.63	46.77	-3.73	3.33	1.14

<Justification of the extended calibration>

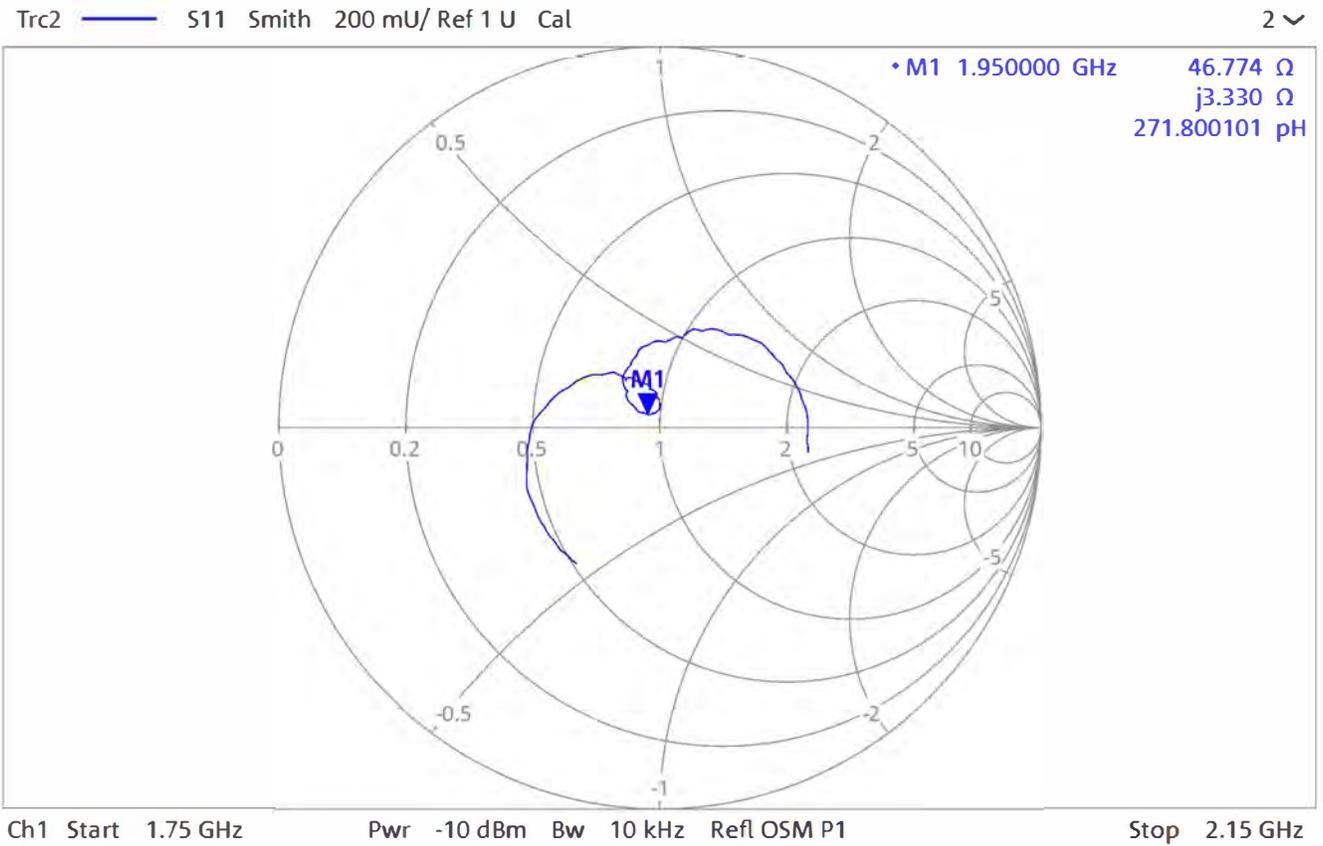
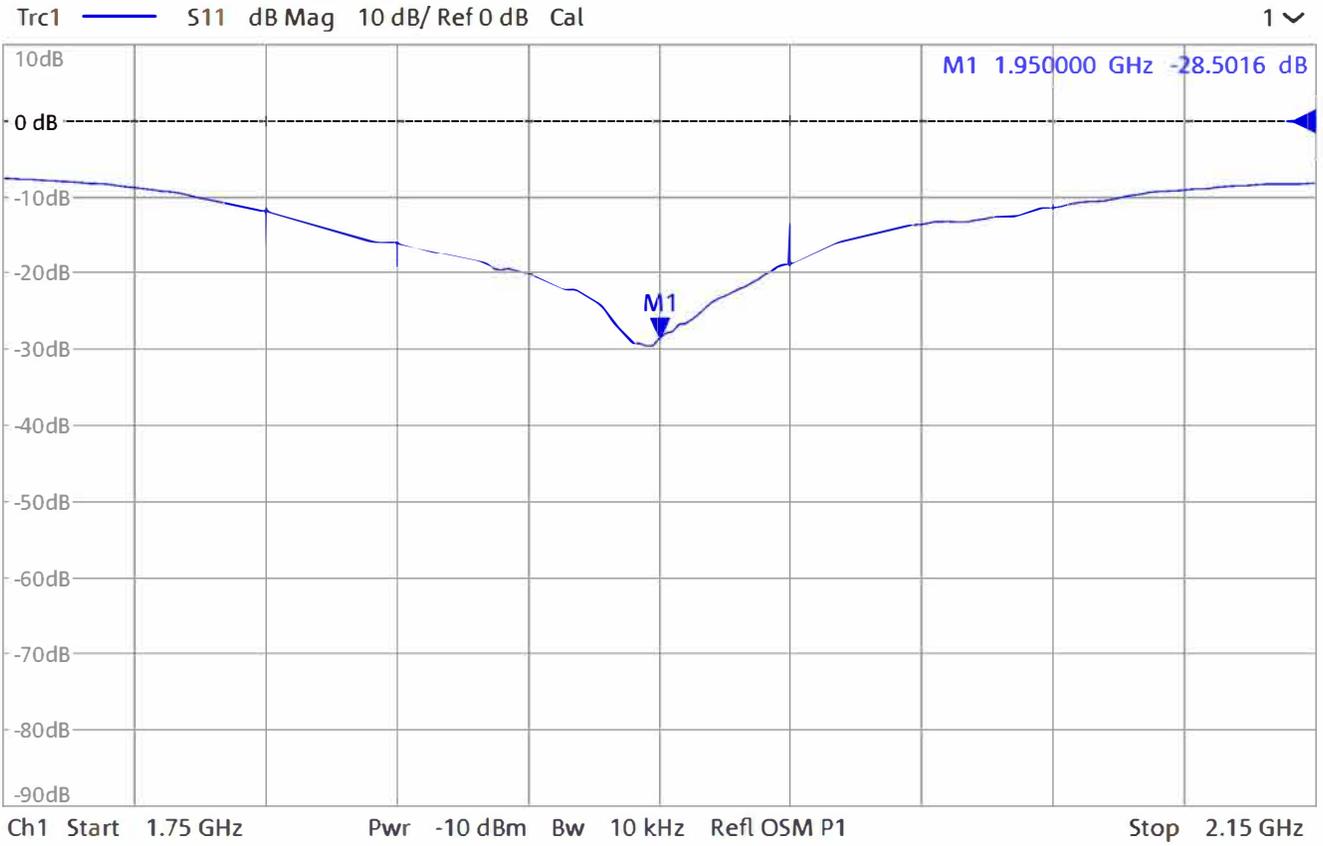
The return loss is < -20dB, within 20% of prior calibration; the impedance is within 5 ohm of prior calibration. Therefore the verification result should support extended calibration.

<Dipole Verification Data>

Head 1950MHz_2022.10.27



<Dipole Verification Data>
Head 1950MHz_2023.10.26





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中国认可
国际互认
校准
CALIBRATION
CNAS L0570

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Client **7layers**

Certificate No: **Z21-60425**

CALIBRATION CERTIFICATE

Object **D2450V2 - SN: 1048**

Calibration Procedure(s) **FF-Z11-003-01**
Calibration Procedures for dipole validation kits

Calibration date: **October 21, 2021**

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 (Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	106277	24-Sep-21 (CTTL, No.J21X08326)	Sep-22
Power sensor NRP8S	104291	24-Sep-21 (CTTL, No.J21X08326)	Sep-22
Reference Probe EX3DV4	SN 7517	03-Feb-21(CTTL-SPEAG,No.Z21-60001)	Feb-22
DAE4	SN 1556	15-Jan-21(SPEAG,No.DAE4-1556_Jan21)	Jan-22
Secondary Standards	ID #	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
Signal Generator E4438C	MY49071430	01-Feb-21 (CTTL, No.J21X00593)	Jan-22
NetworkAnalyzer E5071C	MY46110673	14-Jan-21 (CTTL, No.J21X00232)	Jan-22

	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: October 27, 2021

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



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:

- 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
- 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
- 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
- KDB865664, SAR Measurement Requirements for 100 MHz to 6 GHz

Additional Documentation:

- 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	V52.10.4
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	39.5 ± 6 %	1.81 mho/m ± 6 %
Head TSL temperature change during test	<1.0 °C	----	----

SAR result with Head TSL

SAR averaged over 1 cm³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	13.2 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	52.8 W/kg ± 18.8 % (k=2)
SAR averaged over 10 cm³ (10 g) of Head TSL	Condition	
SAR measured	250 mW input power	6.05 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	24.2 W/kg ± 18.7 % (k=2)



Appendix (Additional assessments outside the scope of CNAS L0570)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	50.6Ω+ 8.39jΩ
Return Loss	- 21.6dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.057 ns
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After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

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

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

Additional EUT Data

Manufactured by	SPEAG
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DASY5 Validation Report for Head TSL

Date: 10.21.2021

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 1048

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

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.809$ S/m; $\epsilon_r = 39.51$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7517; ConvF(7.34, 7.34, 7.34) @ 2450 MHz; Calibrated: 2021-02-03
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1556; Calibrated: 2021-01-15
- Phantom: MFP_V5.1C (20deg probe tilt); Type: QD 000 P51 Cx; Serial: 1062
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

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

Reference Value = 108.6 V/m; Power Drift = -0.02 dB

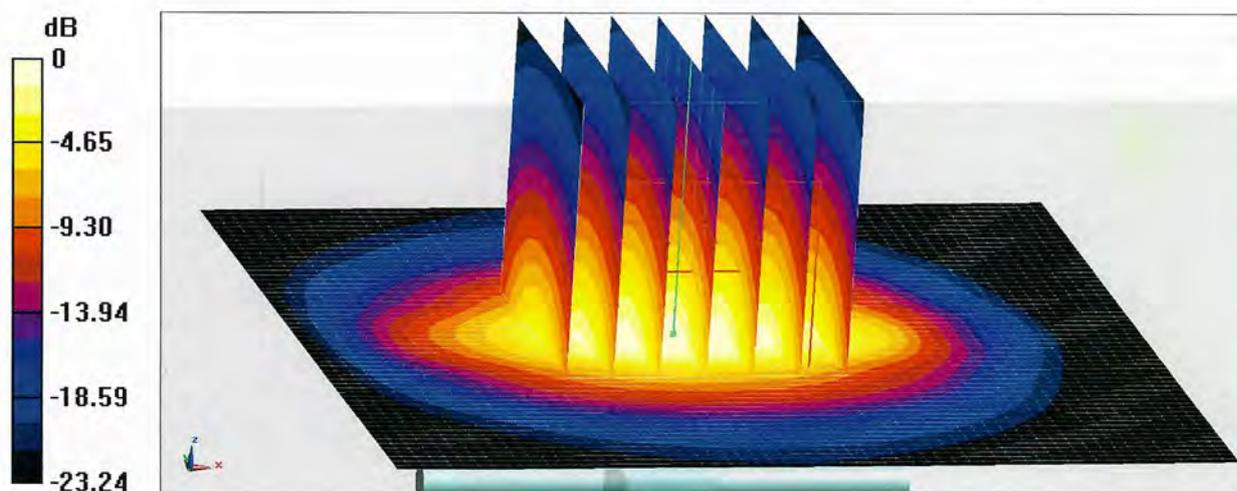
Peak SAR (extrapolated) = 28.0 W/kg

SAR(1 g) = 13.2 W/kg; SAR(10 g) = 6.05 W/kg

Smallest distance from peaks to all points 3 dB below = 9 mm

Ratio of SAR at M2 to SAR at M1 = 47.1%

Maximum value of SAR (measured) = 22.5 W/kg

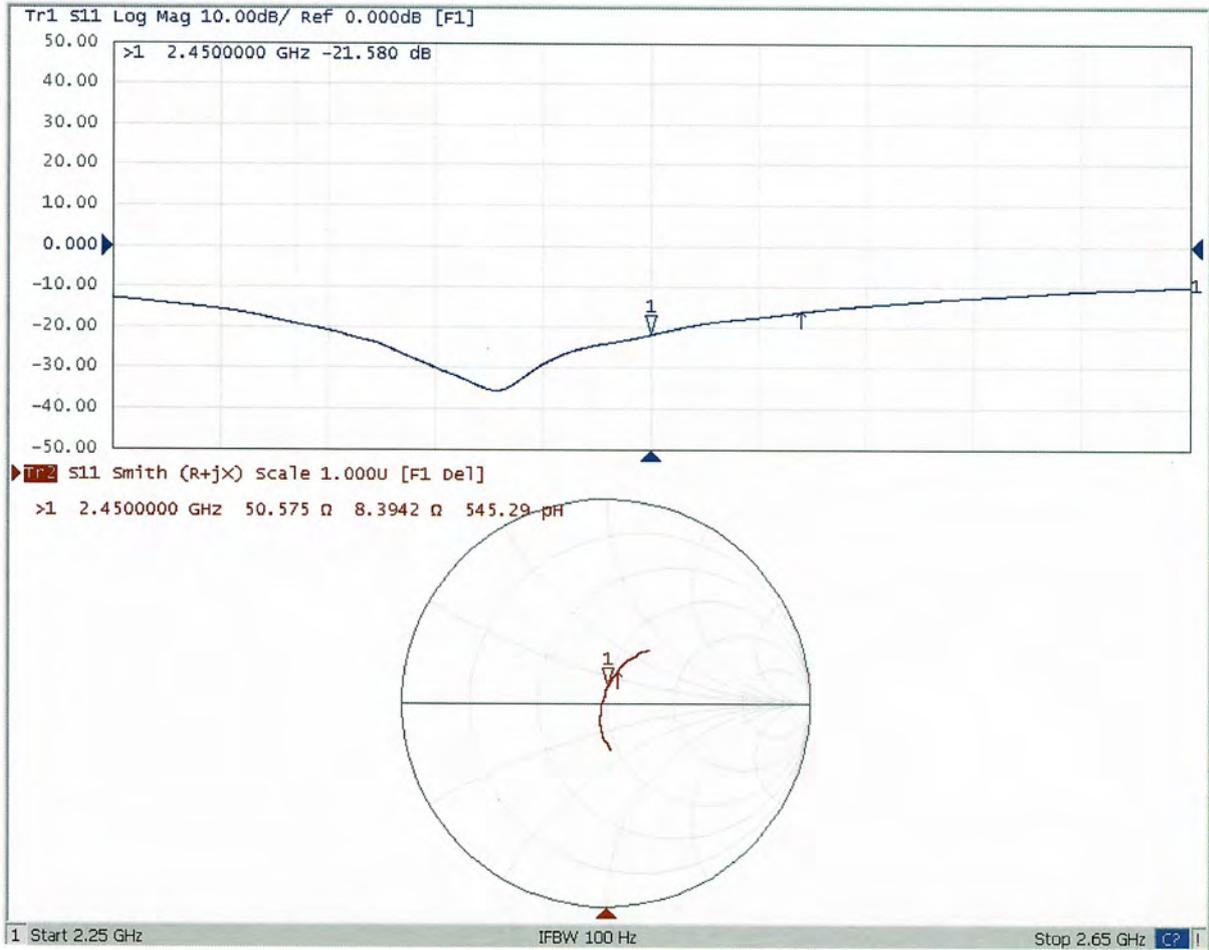


0 dB = 22.5 W/kg = 13.52 dBW/kg



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Impedance Measurement Plot for Head TSL



D2450V2 - SN: 1048 Extended Dipole Calibrations

Referring to KDB 865664 D01, 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.

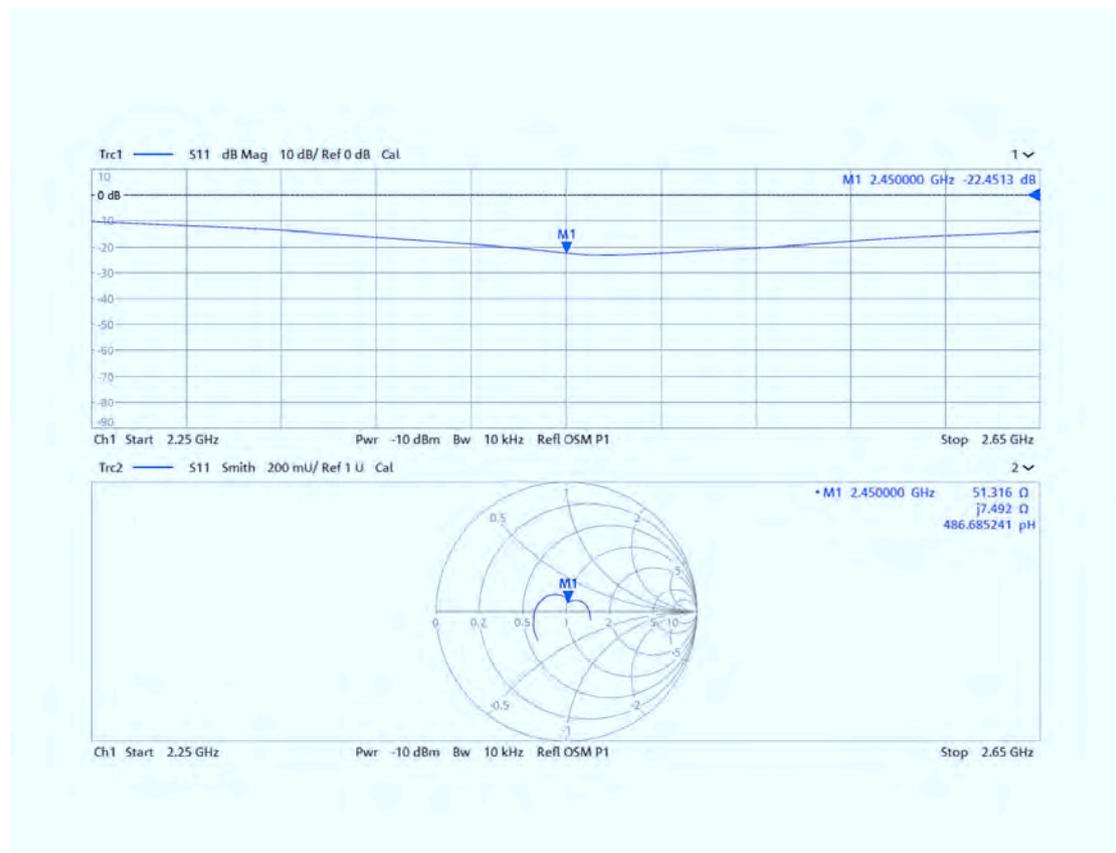
D2450V2 - SN: 1048						
2450MHz Head						
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)
10.21.2021	-21.6		50.6		8.39	
10.20.2022	-22.45	3.94	51.32	0.72	7.49	-0.90
10.19.2023	-24.13	11.71	47.08	-3.52	5.46	-2.93

<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>

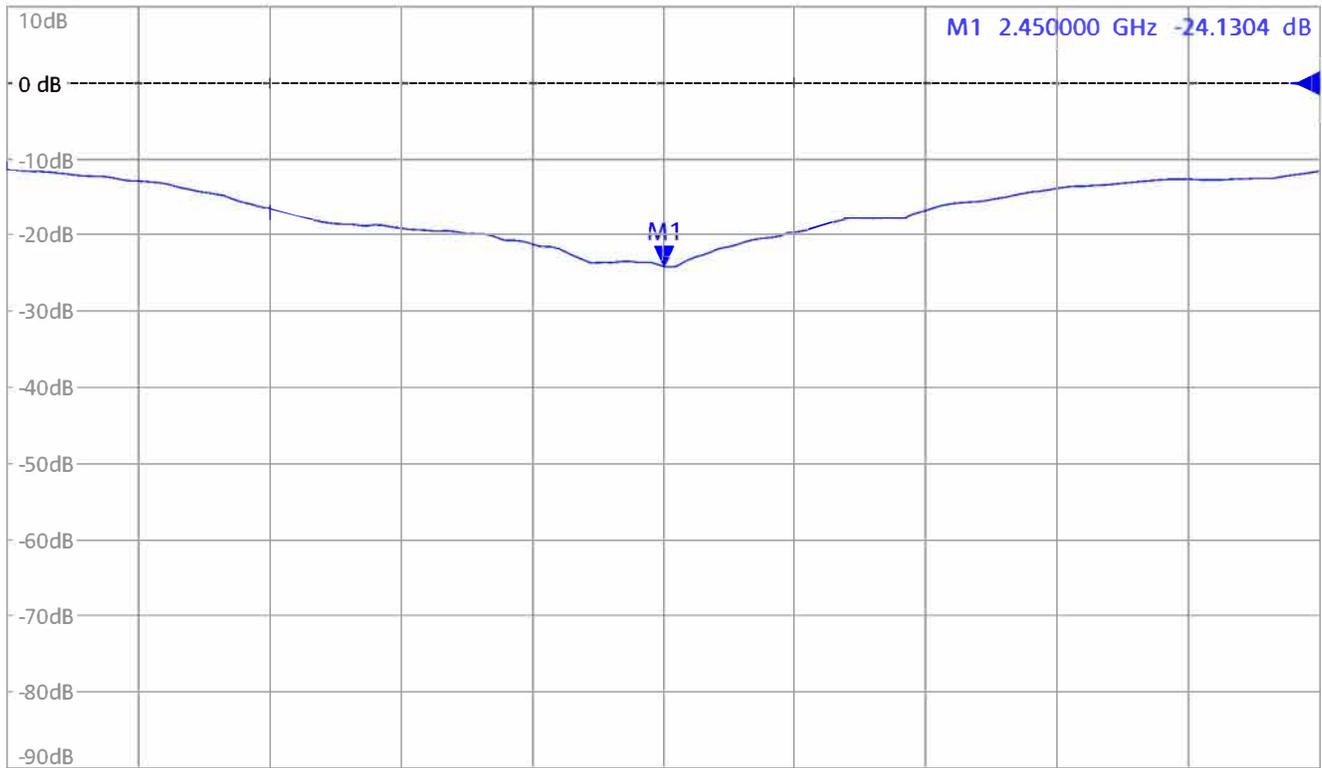
Head 2450MHz_2022.10.20



<Dipole Verification Data>
Head 2450MHz_2023.10.19

Trc1 — S11 dB Mag 10 dB/ Ref 0 dB Cal

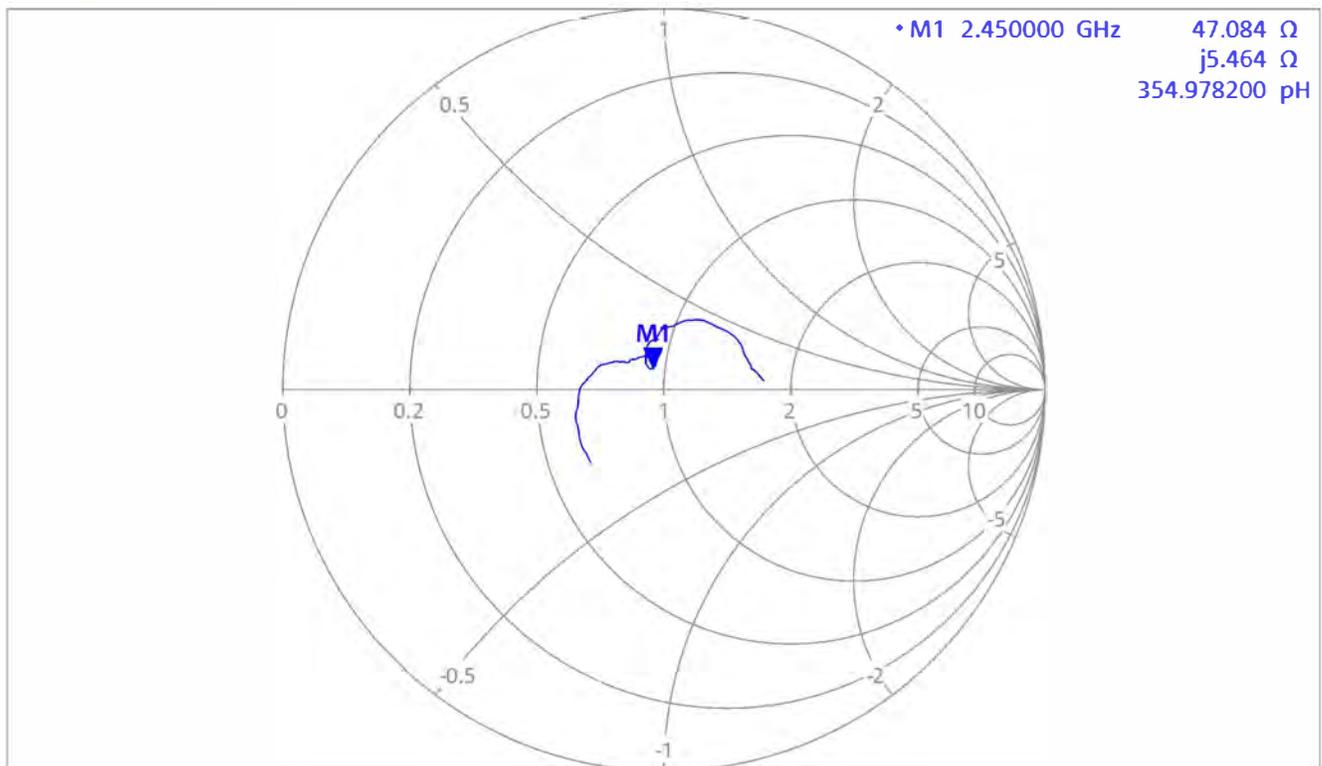
1



Ch1 Start 2.25 GHz Pwr -10 dBm Bw 10 kHz Refl OSM P1 Stop 2.65 GHz

Trc2 — S11 Smith 200 mU/ Ref 1 U Cal

2



Ch1 Start 2.25 GHz Pwr -10 dBm Bw 10 kHz Refl OSM P1 Stop 2.65 GHz

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Client: B.V.ADT

Certificate No: 24J02Z000330

CALIBRATION CERTIFICATE

Object D2600V2 - SN: 1110

Calibration Procedure(s) FF-Z11-003-01
Calibration Procedures for dipole validation kits

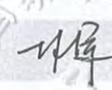
Calibration date: June 17, 2024

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 (Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	106276	17-May-24 (CTTL, No. J24X04107)	May-25
Power sensor NRP6A	101369	17-May-24 (CTTL, No. J24X04107)	May-25
Reference Probe EX3DV4	SN 7307	28-May-24(SPEAG, No. EX-7307_May24)	May-25
DAE4	SN 1556	03-Jan-24(CTTL-SPEAG, No.24J02Z80002)	Jan-25
Secondary Standards	ID #	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
Signal Generator E4438C	MY49071430	25-Dec-23 (CTTL, No. J23X13426)	Dec-24
NetworkAnalyzer E5071C	MY46110673	25-Dec-23 (CTTL, No. J23X13425)	Dec-24
OCP DAK-3.5(weighted)	1040	22-Jan-24(SPEAG, No.OCP-DAK3.5-1040_Jan24)	Jan-25

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

Issued: June 22, 2024

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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) IEC/IEEE 62209-1528, "Measurement Procedure for The Assessment of Specific Absorption Rate of Human Exposure to Radio Frequency Fields from Hand-held and Body-mounted Wireless Communication Devices- Part 1528: Human Models, Instrumentation and Procedures (Frequency range of 4 MHz to 10 GHz)", October 2020
- b) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

- c) 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	52.10.4
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	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	39.2 ± 6 %	1.98 mho/m ± 6 %
Head TSL temperature change during test	<1.0 °C	----	----

SAR result with Head TSL

SAR averaged over 1 cm³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	14.0 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	55.9 W/kg ± 18.8 % (k=2)
SAR averaged over 10 cm³ (10 g) of Head TSL	Condition	
SAR measured	250 mW input power	6.36 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	25.4 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	47.6Ω- 4.56jΩ
Return Loss	- 25.6dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.057 ns
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After long term use with 100W radiated power, only a slight warming of the dipole near the feed-point 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 feed-point may be damaged.

Additional EUT Data

Manufactured by	SPEAG
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DASY5 Validation Report for Head TSL

Date: 2024-06-17

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN: 1110

Communication System: UID 0, CW; Frequency: 2600 MHz

Medium parameters used: $f = 2600$ MHz; $\sigma = 1.976$ S/m; $\epsilon_r = 39.22$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN7307; ConvF(7.22, 7.19, 7.78) @ 2600 MHz; Calibrated: 2024-05-28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1556; Calibrated: 2024-01-03
- Phantom: MFP_V5.1C (20deg probe tilt); Type: QD 000 P51 Cx; Serial: 1062
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

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

Reference Value = 101.3 V/m; Power Drift = -0.04 dB

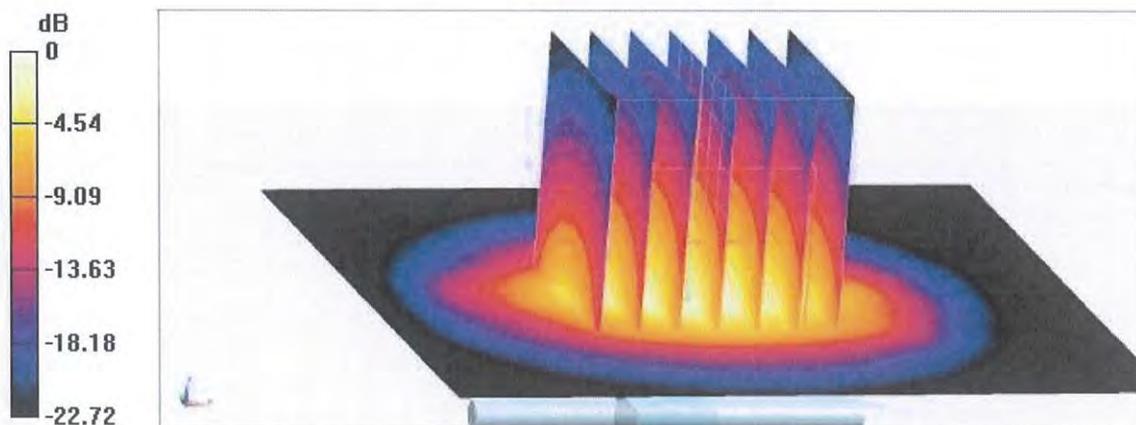
Peak SAR (extrapolated) = 28.4 W/kg

SAR(1 g) = 14 W/kg; SAR(10 g) = 6.36 W/kg

Smallest distance from peaks to all points 3 dB below = 8.1 mm

Ratio of SAR at M2 to SAR at M1 = 50.1%

Maximum value of SAR (measured) = 23.4 W/kg

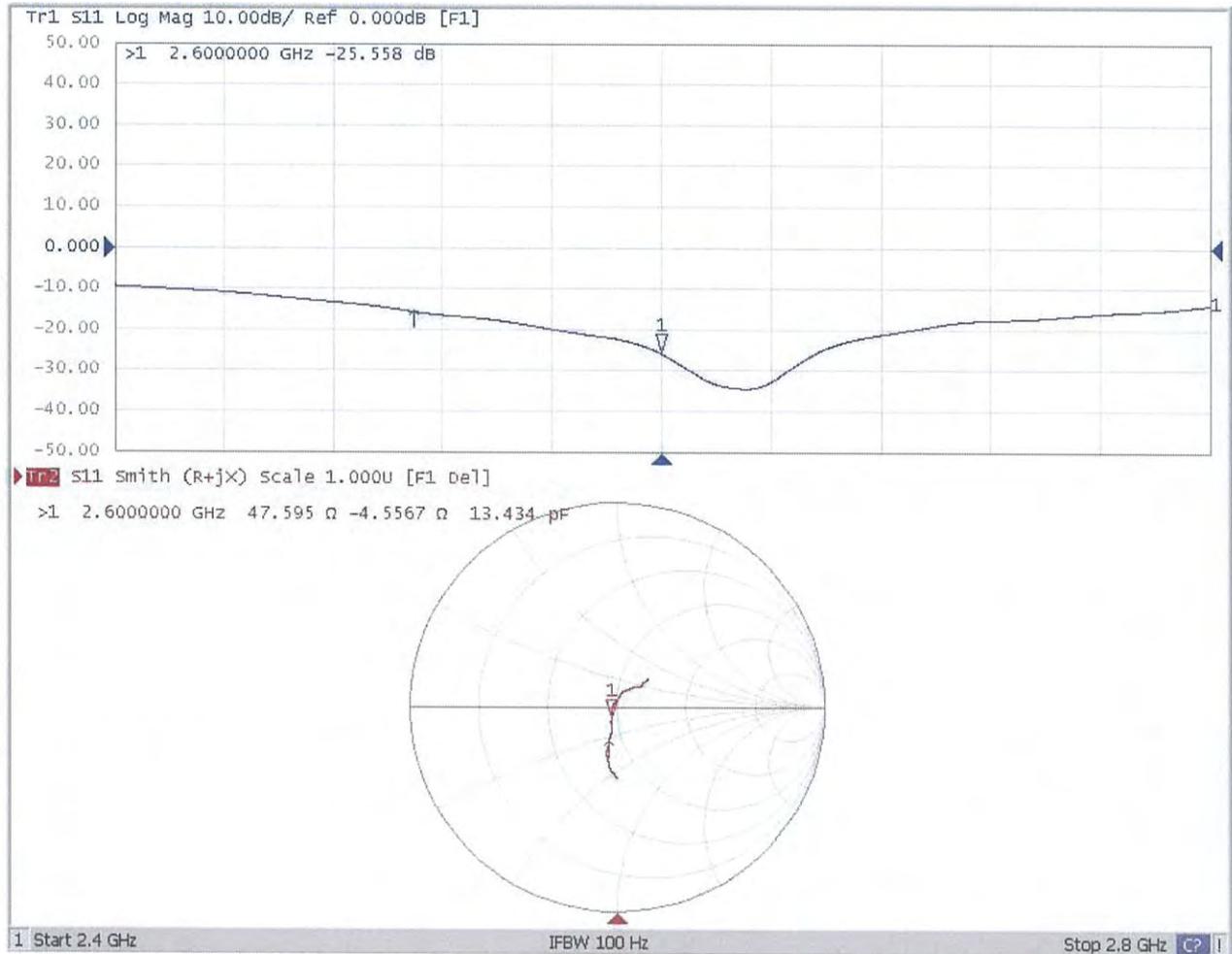


0 dB = 23.4 W/kg = 13.69 dBW/kg



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Impedance Measurement Plot for Head TSL





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Client

7layers

Certificate No: Z21-60431

CALIBRATION CERTIFICATE

Object D5GHzV2 - SN: 1315

Calibration Procedure(s) FF-Z11-003-01
Calibration Procedures for dipole validation kits

Calibration date: October 22, 2021

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 (Calibrated by, Certificate No.)	Scheduled Calibration
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Power sensor NRP8S	104291	24-Sep-21 (CTTL, No.J21X08326)	Sep-22
ReferenceProbe EX3DV4	SN 7517	03-Feb-21(CTTL-SPEAG,No.Z21-60001)	Feb-22
DAE4	SN 1556	15-Jan-21(SPEAG,No.DAE4-1556_Jan21)	Jan-22
Secondary Standards	ID #	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
Signal Generator E4438C	MY49071430	01-Feb-21 (CTTL, No.J21X00593)	Jan-22
NetworkAnalyzerE5071C	MY46110673	14-Jan-21 (CTTL, No.J21X00232)	Jan-22

	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: October 27, 2021

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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 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.
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Measurement Conditions

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

DASY Version	DASY52	V52.10.4
Extrapolation	Advanced Extrapolation	
Phantom	Triple Flat Phantom 5.1C	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy = 4 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	36.6 ± 6 %	4.70 mho/m ± 6 %
Head TSL temperature change during test	<1.0 °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	7.66 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	76.9 W/kg ± 24.4 % (k=2)
SAR averaged over 10 cm³ (10 g) of Head TSL	Condition	
SAR measured	100 mW input power	2.20 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	22.1 W/kg ± 24.2 % (k=2)



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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	36.0 ± 6 %	5.08 mho/m ± 6 %
Head TSL temperature change during test	<1.0 °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	8.17 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	81.9 W/kg ± 24.4 % (k=2)
SAR averaged over 10 cm³ (10 g) of Head TSL	Condition	
SAR measured	100 mW input power	2.34 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	23.5 W/kg ± 24.2 % (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	35.8 ± 6 %	5.25 mho/m ± 6 %
Head TSL temperature change during test	<1.0 °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	7.59 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	76.1 W/kg ± 24.4 % (k=2)
SAR averaged over 10 cm³ (10 g) of Head TSL	Condition	
SAR measured	100 mW input power	2.16 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	21.7 W/kg ± 24.2 % (k=2)



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Appendix (Additional assessments outside the scope of CNAS L0570)

Antenna Parameters with Head TSL at 5250 MHz

Impedance, transformed to feed point	50.5Ω - 3.27jΩ
Return Loss	- 29.7dB

Antenna Parameters with Head TSL at 5600 MHz

Impedance, transformed to feed point	54.2Ω + 0.81jΩ
Return Loss	- 27.8dB

Antenna Parameters with Head TSL at 5750 MHz

Impedance, transformed to feed point	49.4Ω + 1.99jΩ
Return Loss	- 33.6dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.098 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: 10.22.2021

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 5GHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1315

Communication System: CW; Frequency: 5250 MHz, Frequency: 5600 MHz,
Frequency: 5750 MHz,

Medium parameters used: $f = 5250$ MHz; $\sigma = 4.704$ S/m; $\epsilon_r = 36.62$; $\rho = 1000$ kg/m³,
Medium parameters used: $f = 5600$ MHz; $\sigma = 5.084$ S/m; $\epsilon_r = 36$; $\rho = 1000$ kg/m³,
Medium parameters used: $f = 5750$ MHz; $\sigma = 5.248$ S/m; $\epsilon_r = 35.78$; $\rho = 1000$ kg/m³,

Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7517; ConvF(5.42, 5.42, 5.42) @ 5250 MHz; ConvF(4.75, 4.75, 4.75) @ 5600 MHz; ConvF(4.82, 4.82, 4.82) @ 5750 MHz; Calibrated: 2021-02-03
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1556; Calibrated: 2021-01-15
- Phantom: MFP_V5.1C (20deg probe tilt); Type: QD 000 P51 Cx; Serial: 1062
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

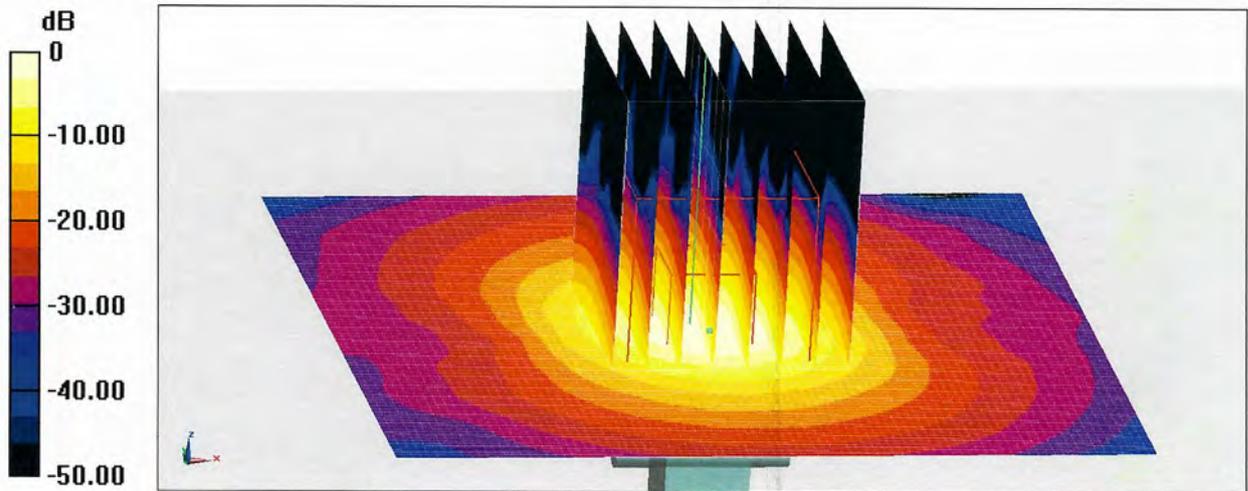
Dipole Calibration /Pin=100mW, d=10mm, f=5250 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 70.32 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 31.0 W/kg
SAR(1 g) = 7.66 W/kg; SAR(10 g) = 2.2 W/kg
Smallest distance from peaks to all points 3 dB below = 7.4 mm
Ratio of SAR at M2 to SAR at M1 = 65%
Maximum value of SAR (measured) = 18.2 W/kg

Dipole Calibration /Pin=100mW, d=10mm, f=5600 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 71.09 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 34.9 W/kg
SAR(1 g) = 8.17 W/kg; SAR(10 g) = 2.34 W/kg
Smallest distance from peaks to all points 3 dB below = 7.4 mm
Ratio of SAR at M2 to SAR at M1 = 63.3%
Maximum value of SAR (measured) = 19.9 W/kg



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Dipole Calibration /Pin=100mW, d=10mm, f=5750 MHz/Zoom Scan,
dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 67.72 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 33.5 W/kg
SAR(1 g) = 7.59 W/kg; SAR(10 g) = 2.16 W/kg
Smallest distance from peaks to all points 3 dB below = 7.2 mm
Ratio of SAR at M2 to SAR at M1 = 62.4%
Maximum value of SAR (measured) = 18.6 W/kg

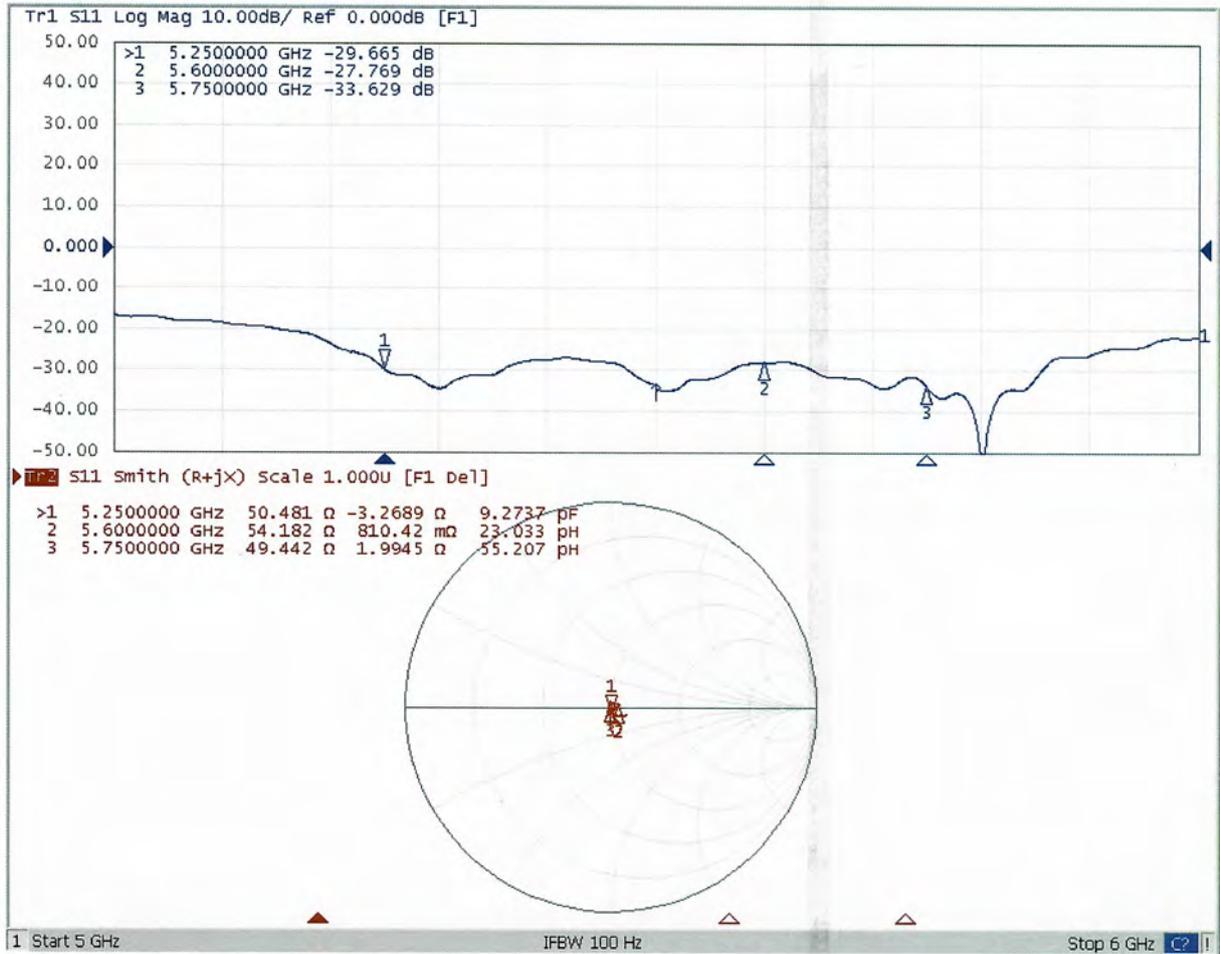


0 dB = 18.6 W/kg = 12.70 dBW/kg



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Impedance Measurement Plot for Head TSL



D5GHzV2 - SN: 1315 Extended Dipole Calibrations

Referring to KDB 865664 D01, 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 - SN: 1315						
5250MHz Head						
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)
10.22.2021	-29.7		50.5		-3.27	
10.21.2022	-34.53	16.26	51.16	0.66	1.56	4.83
10.20.2023	-25.84	-12.98	54.50	4.00	-2.96	0.31

D5GHzV2 - SN: 1315						
5600MHz Head						
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)
10.22.2021	-27.8		54.2		0.81	
10.21.2022	-31.03	11.63	49.59	-4.61	-2.79	-3.60
10.20.2023	-26.15	-5.95	54.92	0.71	-1.82	-2.63

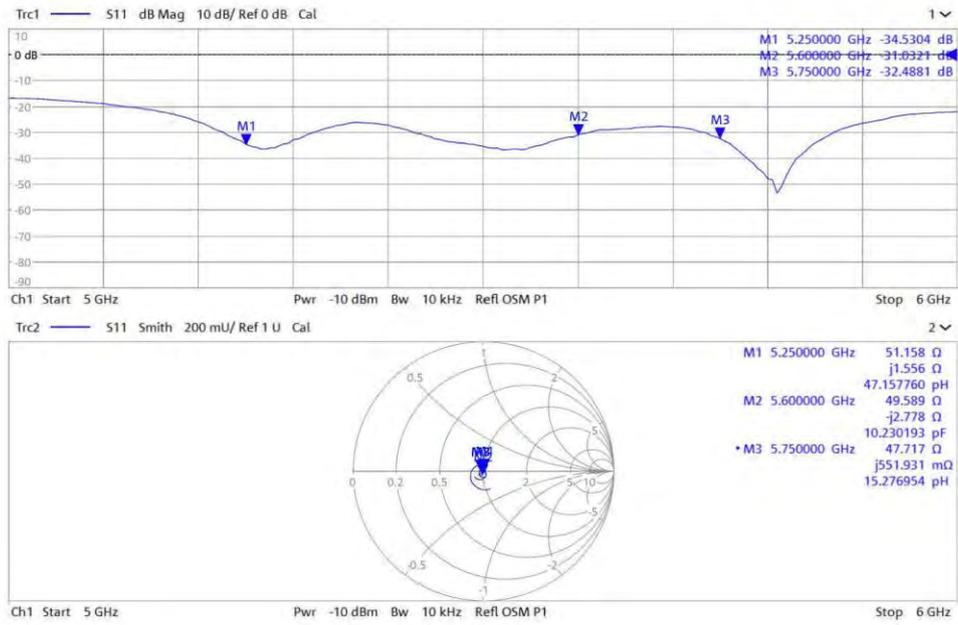
D5GHzV2 - SN: 1315						
5750MHz Head						
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)
10.22.2021	-33.6		49.4		1.99	
10.21.2022	-32.49	-3.31	47.72	-1.68	0.55	-1.44
10.20.2023	-36.43	8.41	50.87	1.47	1.34	-0.65

<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>

Head 5250-5750MHz _2022.10.21

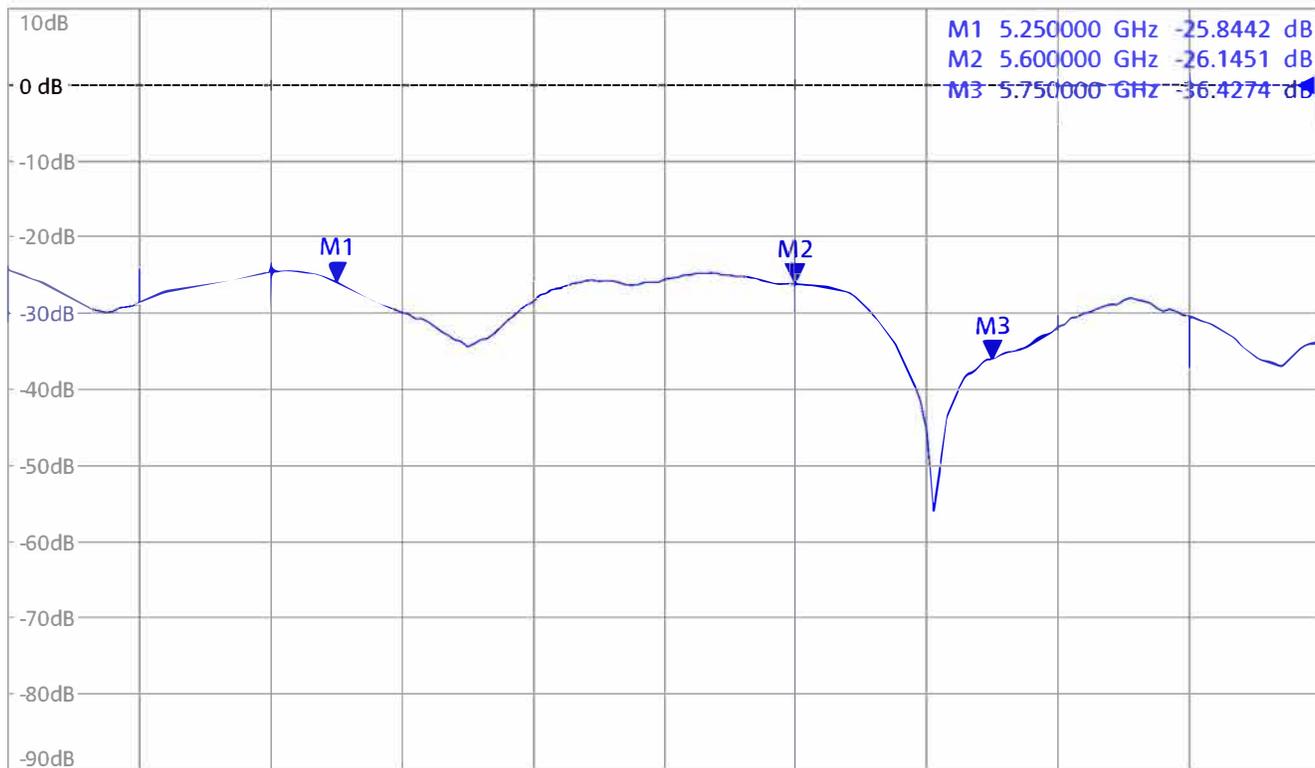


<Dipole Verification Data>

Head 5250-5750MHz_2023.10.20

Trc1 — S11 dB Mag 10 dB/ Ref 0 dB Cal

1

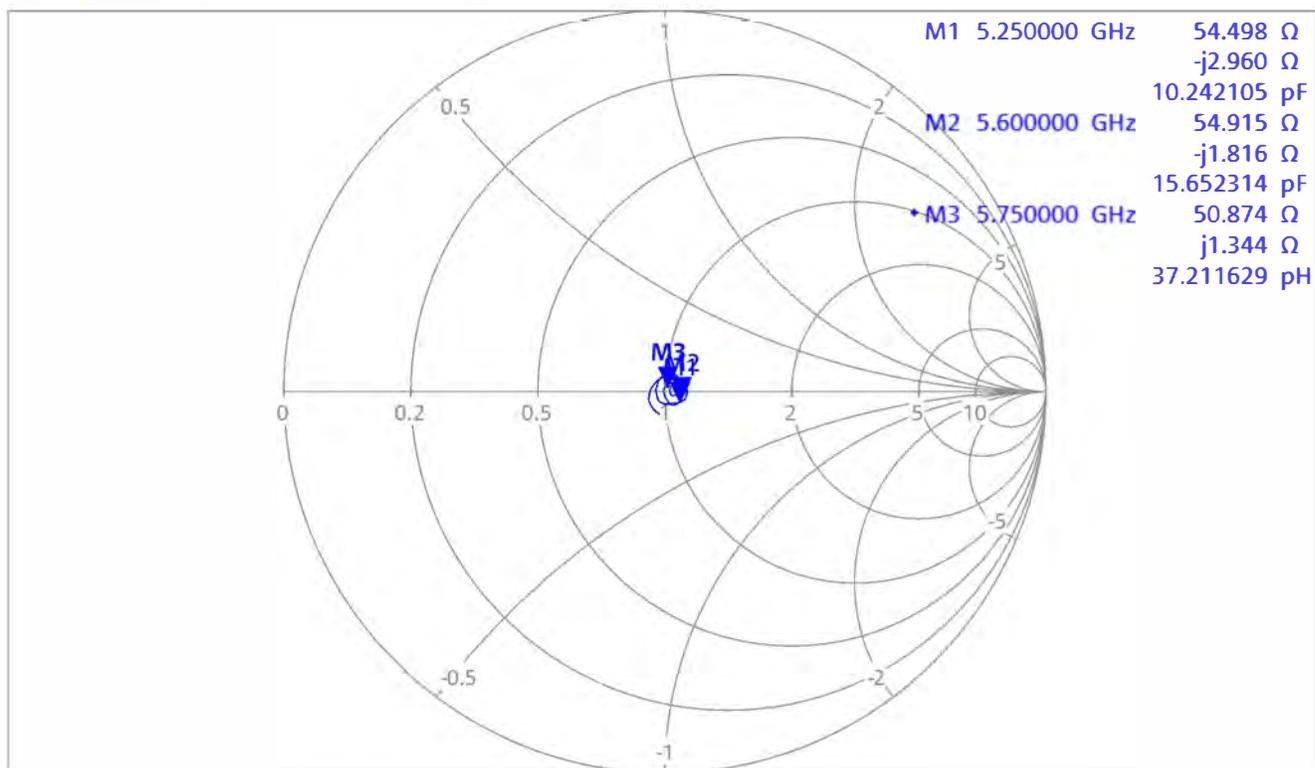


Ch1 Start 5 GHz Pwr -10 dBm Bw 10 kHz Refl OSM P1

Stop 6 GHz

Trc2 — S11 Smith 200 mU/ Ref 1 U Cal

2



Ch1 Start 5 GHz Pwr -10 dBm Bw 10 kHz Refl OSM P1

Stop 6 GHz

Appendix D. Conducted RF Output Power Table

The detailed power table are shown as follows.

Default Power Ant1

Band	GSM850				GSM1900				
	Channel	128	189	251	Max. Tune-up Power (dBm)	512	661	810	Max. Tune-up Power (dBm)
Frequency (MHz)	824.2	836.4	848.8		1850.2	1880	1909.8		
GSM	32.22	32.28	32.35	33.50	29.41	29.42	29.31	30.50	
GPRS 1Tx Slot	32.20	32.30	32.36	33.50	29.36	29.40	29.30	30.50	
GPRS 2Tx Slot	28.87	29.02	29.11	30.00	25.75	25.89	25.96	26.70	
GPRS 3Tx Slot	27.41	27.56	27.67	28.50	23.92	24.10	24.22	25.00	
GPRS 4Tx Slot	26.40	26.51	26.64	27.50	22.95	23.13	23.28	24.00	
EDGE 1Tx Slot	26.96	27.01	26.97	28.00	25.83	26.08	26.11	27.00	
EDGE 2Tx Slot	23.52	23.82	23.69	25.00	22.81	22.98	23.14	24.00	
EDGE 3Tx Slot	21.77	22.04	21.91	23.00	20.96	21.23	21.37	22.00	
EDGE 4Tx Slot	20.96	21.00	20.99	22.00	19.99	20.04	20.20	21.00	

Source-Based Time-Averaged Power								
Band	GSM850			Max. Tune-up Power (dBm)	GSM1900			Max. Tune-up Power (dBm)
	Channel	128	189		251	512	661	
GSM	23.22	23.28	23.35	24.50	20.41	20.42	20.31	21.50
GPRS 1Tx Slot	23.20	23.30	23.36	24.50	20.36	20.40	20.30	21.50
GPRS 2Tx Slot	22.87	23.02	23.11	24.00	19.75	19.89	19.96	20.70
GPRS 3Tx Slot	23.15	23.30	23.41	24.24	19.66	19.84	19.96	20.74
GPRS 4Tx Slot	23.40	23.51	23.64	24.50	19.95	20.13	20.28	21.00
EDGE 1Tx Slot	17.96	18.01	17.97	19.00	16.83	17.08	17.11	18.00
EDGE 2Tx Slot	17.52	17.82	17.69	19.00	16.81	16.98	17.14	18.00
EDGE 3Tx Slot	17.51	17.78	17.65	18.74	16.70	16.97	17.11	17.74
EDGE 4Tx Slot	17.96	18.00	17.99	19.00	16.99	17.04	17.20	18.00

Band	WCDMA II			WCDMA II	WCDMA IV			WCDMA IV	WCDMA V			WCDMA V
	TX Channel	9262	9400		9538	Max. Tune-up Power (dBm)	1312		1413	1513	Max. Tune-up Power (dBm)	
Rx Channel	9662	9800	9938		1537	1638	1738		4357	4407	4458	Max. Tune-up Power (dBm)
Frequency (MHz)	1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
RMC 12.2K	24.42	24.45	24.35	25.50	24.61	24.63	24.69	25.50	24.72	24.69	24.67	25.50
HSDPA Subtest-1	23.59	23.60	23.46	24.00	23.72	23.81	23.75	24.00	23.79	23.75	23.83	24.00
HSDPA Subtest-2	23.59	23.60	23.49	24.00	23.79	23.77	23.70	24.00	23.76	23.80	23.79	24.00
HSDPA Subtest-3	23.05	23.10	22.98	24.00	23.24	23.30	23.29	24.00	23.32	23.34	23.33	24.00
HSDPA Subtest-4	23.12	23.07	23.04	24.00	23.32	23.35	23.37	24.00	23.35	23.33	23.28	24.00
DC-HSDPA Subtest-1	23.54	23.59	23.49	24.00	23.82	23.78	23.78	24.00	23.86	23.82	23.86	24.00
DC-HSDPA Subtest-2	23.54	23.57	23.47	24.00	23.80	23.83	23.88	24.00	23.91	23.88	23.86	24.00
DC-HSDPA Subtest-3	23.04	23.14	22.97	24.00	23.30	23.30	23.33	24.00	23.31	23.32	23.33	24.00
DC-HSDPA Subtest-4	23.07	23.12	23.01	24.00	23.30	23.28	23.38	24.00	23.36	23.33	23.35	24.00
HSUPA Subtest-1	21.74	21.75	21.72	23.00	21.93	21.97	22.09	23.00	22.11	21.99	22.00	23.00
HSUPA Subtest-2	21.50	21.47	21.41	23.00	21.63	21.66	21.74	23.00	21.74	21.79	21.77	23.00
HSUPA Subtest-3	22.33	22.37	22.26	23.00	22.54	22.61	22.65	23.00	22.68	22.61	22.64	23.00
HSUPA Subtest-4	21.12	21.07	21.01	23.00	21.28	21.32	21.28	23.00	21.68	21.58	21.56	23.00
HSUPA Subtest-5	22.36	22.36	22.29	23.00	22.59	22.56	22.66	23.00	22.63	22.59	22.62	23.00
HSPA+ Subtest-1	21.65	21.69	21.54	23.00	21.91	21.87	21.94	23.00	22.00	21.89	21.93	23.00

LTE Band 2									
BW	Modulation	RB Size		RB Offset	Channel			SPP	Max. Throughput (dBm)
		RB Size	RB Offset		Low	Mid	High		
20M	QPSK	1	0	24.15	24.14	24.14	0	25.5	
		1	50	24.43	24.42	24.42	0	25.5	
		1	99	24.71	24.70	24.70	0	25.5	
		50	0	23.45	23.47	23.55	1	24.5	
		50	25	23.52	23.49	23.57	1	24.5	
		50	50	23.60	23.46	23.41	1	24.5	
	16QAM	100	0	23.47	23.48	23.52	1	24.5	
		1	0	23.54	23.38	23.42	1	24.5	
		1	50	23.87	23.77	23.66	1	24.5	
		1	99	24.41	24.40	24.41	1	24.5	
		50	0	22.92	22.91	22.94	2	23.5	
		50	25	22.84	22.96	22.93	2	23.5	
64QAM	100	0	22.96	22.96	22.97	2	23.5		
	100	0	22.91	22.94	22.97	2	23.5		
	1	0	22.45	22.41	22.38	2	23.5		
	1	50	22.72	22.76	22.62	2	23.5		
	1	99	22.98	22.93	22.44	2	23.5		
	50	0	21.49	21.54	21.54	3	22.5		
30M	QPSK	1	0	24.43	24.43	24.43	0	25.5	
		1	37	24.36	24.29	24.41	0	25.5	
		1	74	24.04	24.01	24.41	0	25.5	
		36	0	23.38	23.45	23.46	1	24.5	
		36	18	23.38	23.34	23.49	1	24.5	
		36	36	23.32	23.59	23.36	1	24.5	
	16QAM	75	0	23.43	23.41	23.35	1	24.5	
		1	0	22.98	22.97	22.99	1	24.5	
		1	37	23.85	23.85	23.87	1	24.5	
		1	74	23.38	23.31	23.26	1	24.5	
		36	0	22.38	22.36	22.51	2	23.5	
		36	18	22.41	22.48	22.41	2	23.5	
64QAM	36	39	22.39	22.58	22.34	2	23.5		
	75	0	22.43	22.39	22.45	2	23.5		
	1	0	22.98	22.97	22.99	2	23.5		
	1	37	22.69	22.66	22.60	2	23.5		
	1	74	22.37	22.31	22.32	2	23.5		
	36	0	21.42	21.44	21.42	3	22.5		
40M	QPSK	1	0	24.15	24.15	24.15	0	25.5	
		1	37	24.08	24.01	24.13	0	25.5	
		1	74	23.76	23.73	24.13	0	25.5	
		36	0	23.12	23.19	23.21	1	24.5	
		36	18	23.12	23.08	23.34	1	24.5	
		36	36	23.06	23.33	23.10	1	24.5	
	16QAM	75	0	23.18	23.16	23.10	1	24.5	
		1	0	22.73	22.72	22.74	1	24.5	
		1	37	23.60	23.60	23.62	1	24.5	
		1	74	23.13	23.06	22.91	1	24.5	
		36	0	22.14	22.16	22.24	2	23.5	
		36	18	22.14	22.16	22.24	2	23.5	
64QAM	36	39	22.15	22.36	22.12	2	23.5		
	75	0	21.95	21.88	22.02	2	23.5		
	1	0	21.49	21.49	21.49	3	22.5		
	1	37	22.21	22.13	22.32	2	23.5		
	1	74	21.92	21.81	21.88	2	23.5		
	36	0	20.94	20.97	20.93	3	22.5		
50M	QPSK	1	0	23.74	23.76	23.87	0	25.5	
		1	37	23.65	23.61	23.97	0	25.5	
		1	74	23.78	23.83	23.73	0	25.5	
		36	0	23.08	22.98	23.07	1	24.5	
		36	18	23.01	23.20	23.04	1	24.5	
		36	36	23.02	23.10	23.12	1	24.5	
	16QAM	75	0	22.95	23.18	23.07	1	24.5	
		1	0	22.78	22.86	22.87	1	24.5	
		1	37	23.33	23.35	23.31	1	24.5	
		1	74	23.13	23.05	22.91	1	24.5	
		36	0	22.04	21.99	22.04	2	23.5	
		36	18	22.04	22.05	22.09	2	23.5	
64QAM	36	39	22.05	21.96	21.96	2	23.5		
	75	0	21.95	21.88	22.02	2	23.5		
	1	0	21.49	21.49	21.49	3	22.5		
	1	37	22.21	22.13	22.32	2	23.5		
	1	74	21.92	21.81	21.88	2	23.5		
	36	0	20.94	20.97	20.93	3	22.5		
60M	QPSK	1	0	23.74	23.76	23.87	0	25.5	
		1	37	23.65	23.61	23.97	0	25.5	
		1	74	23.78	23.83	23.73	0	25.5	
		36	0	23.08	22.98	23.07	1	24.5	
		36	18	23.01	23.20	23.04	1	24.5	
		36	36	23.02	23.10	23.12	1	24.5	
	16QAM	75	0	22.95	23.18	23.07	1	24.5	
		1	0	22.78	22.86	22.87	1	24.5	
		1	37	23.33	23.35	23.31	1	24.5	
		1	74	23.13	23.05	22.91	1	24.5	
		36	0	22.04	21.99	22.04	2	23.5	
		36	18	22.04	22.05	22.09	2	23.5	
64QAM	36	39	22.05	21.96	21.96	2	23.5		
	75	0	21.95	21.88	22.02	2	23.5		
	1	0	21.49	21.49	21.49	3	22.5		
	1	37	22.21	22.13	22.32	2	23.5		
	1	74	21.92	21.81	21.88	2	23.5		
	36	0	20.94	20.97	20.93	3	22.5		
70M	QPSK	1	0	23.74	23.76	23.87	0	25.5	
		1	37	23.65	23.61	23.97	0	25.5	
		1	74	23.78	23.83	23.73	0	25.5	
		36	0	23.08	22.98	23.07	1	24.5	
		36	18	23.01	23.20	23.04	1	24.5	
		36	36	23.02	23.10	23.12	1	24.5	
	16QAM	75	0	22.95	23.18	23.07	1	24.5	
		1	0	22.78	22.86	22.87	1	24.5	
		1	37	23.33	23.35	23.31	1	24.5	
		1	74	23.13	23.05	22.91	1	24.5	
		36	0	22.04	21.99	22.04	2	23.5	
		36	18	22.04	22.05	22.09	2	23.5	
64QAM	36	39	22.05	21.96	21.96	2	23.5		
	75	0	21.95	21.88	22.02	2	23.5		
	1	0	21.49	21.49	21.49	3	22.5		
	1	37	22.21	22.13	22.32	2	23.5		
	1	74	21.92	21.81	21.88	2	23.5		
	36	0	20.94	20.97	20.93	3	22.5		
80M	QPSK	1	0	23.74	23.76	23.87	0	25.5	
		1	37	23.65	23.61	23.97	0	25.5	
		1	74	23.78	23.83	23.73	0	25.5	
		36	0	23.08	22.98	23.07	1	24.5	
		36	18	23.01	23.20	23.04	1	24.5	
		36	36	23.02	23.10	23.12	1	24.5	
	16QAM	75	0	22.95	23.18	23.07	1	24.5	
		1	0	22.78	22.86	22.87	1	24.5	
		1	37	23.33	23.35	23.31	1	24.5	
		1	74	23.13	23.05	22.91	1	24.5	
		36	0	22.04	21.99	22.04	2	23.5	
		36	18	22.04	22.05	22.09	2	23.5	
64QAM	36	39	22.05	21.96	21.96	2	23.5		
	75	0	21.95	21.88	22.02	2	23.5		
	1	0	21.49	21.49	21.49	3	22.5		
	1	37	22.21	22.13	22.32	2	23.5		
	1	74	21.92	21.81	21.88	2	23.5		
	36	0	20.94	20.97	20.93	3	22.5		
90M	QPSK	1	0	23.74	23.76	23.87	0	25.5	
		1	37	23.65	23.61	23.97	0	25.5	
		1	74	23.78	23.83	23.73	0	25.5	
		36	0	23.08	22.98	23.07	1	24.5	
		36	18	23.01	23.20	23.04	1	24.5	
		36	36	23.02	23.10	23.12	1	24.5	
	16QAM	75	0	22.95	23.18	23.07	1	24.5	
		1	0	22.78	22.86	22.87	1	24.5	
		1	37	23.33	23.35	23.31	1	24.5	
		1	74	23.13	23.05	22.91	1	24.5	
		36	0	22.04	21.99	22.04	2	23.5	
		36	18	22.04	22.05	22.09	2	23.5	
64QAM	36	39	22.05	21.96	21.96	2	23.5		
	75	0	21.95	21.88	22.02	2	23.5		
	1	0	21.49	21.49	21.49	3	22.5		
	1	37	22.21	22.13	22.32	2	23.5		
	1	74	21.92	21.81	21.88	2	23.5		
	36	0	20.94	20.97	20.93	3	22.5		

LTE Band 4									
BW	Modulation	RB Size		RB Offset	Channel			SPP	Max. Throughput (dBm)
		RB Size	RB Offset		Low	Mid	High		
20M	QPSK	1	0	23.76	23.59	23.69	0	25.5	
		1	50	24.00	24.10	24.10	0	25.5	
		1	99	23.80	23.80	23.80	0	25.5	
		50	0	23.16	23.07	23.11	1	24.5	
		50	25	23.13	23.27	23.17	1	24.5	
		50	50	23.14	23.18	23.21	1	24.5	
	16QAM	100	0	22.98	23.24	23.20	1	24.5	
		1	0	22.91	23.11	22.97	1	24.5	
		1	50	23.35	23.41	23.34	1	24.5	
		1	99	23.56	23.56	23.56	1	24.5	
		50	0	22.18	22.01	22.09	2	23.5	
		50	25	22.26	22.15	22.13	2	23.5	
64QAM	100	0	22.10	21.98	22.03	2	23.5		
	1	0	21.90	22.03	21.96	2	23.5		
	1	50	22.52	22.26	22.28	2	23.5		
	1	99	22.60	22.60	22.60	2	23		

LTE Band 7									
BW	Modulation	RB Size		Low	Mid	High	SCPP	Max. Twp-up	Max. MPR
		Channel	RB Offset						
20M	QPSK	1	0	23.55	23.67	23.79	0	25	
		1	50	24.23	24.02	24.19	0	25	
		1	99	23.91	23.68	23.87	0	25	
		50	0	23.07	22.83	23.02	1	24	
		50	25	23.14	22.91	23.08	1	24	
		50	50	23.12	22.82	22.97	1	24	
	16QAM	100	0	23.10	22.75	23.09	1	24	
		1	0	23.02	22.72	23.35	1	24	
		1	50	23.29	23.03	23.60	1	24	
		1	99	23.01	22.77	23.21	1	24	
		50	0	22.05	21.67	21.93	2	23	
		50	25	22.12	21.75	21.98	2	23	
64QAM	50	50	22.09	21.62	21.90	2	23		
	100	0	22.05	21.68	21.93	2	23		
	1	0	22.13	22.02	21.58	2	23		
	1	50	22.49	22.35	21.97	2	23		
	1	99	22.05	21.96	21.62	2	23		
	50	0	21.05	21.08	20.98	3	22		
5M	QPSK	1	0	21.15	21.17	21.05	3	22	
		50	50	21.13	21.04	20.97	3	22	
		100	0	21.04	21.06	21.03	3	22	
		1	0	21.05	21.08	20.98	3	22	
		1	50	22.49	22.35	21.97	2	23	
		1	99	22.05	21.96	21.62	2	23	
	16QAM	50	0	21.05	21.08	20.98	3	22	
		50	25	21.15	21.17	21.05	3	22	
		50	50	21.13	21.04	20.97	3	22	
		100	0	21.04	21.06	21.03	3	22	
		1	0	21.05	21.08	20.98	3	22	
		1	50	22.49	22.35	21.97	2	23	
BW	Modulation	Channel	2825	2110	2195	SCPP	Max. Twp-up	Max. MPR	
		Frequency (MHz)	2825	2835	2845	(dB)	(dB)		
	QPSK	1	37	24.23	23.99	24.10	0	25	
		1	74	23.86	23.53	23.86	0	25	
		36	0	23.02	22.70	22.88	1	24	
		36	18	23.07	22.87	23.21	1	24	
		36	36	23.11	22.89	23.06	1	24	
		75	0	22.97	22.62	22.96	1	24	
	16QAM	1	0	22.84	22.54	23.09	0	25	
		1	37	23.30	22.88	23.07	1	24	
		1	74	22.86	22.63	23.20	1	24	
		36	0	22.04	21.62	21.97	2	23	
36		18	21.07	21.74	21.97	2	23		
36		36	22.01	21.59	21.78	2	23		
64QAM	75	0	22.00	21.58	21.92	2	23		
	1	0	22.09	21.81	21.52	2	23		
	1	37	22.42	22.28	21.89	2	23		
	1	74	22.00	21.95	21.60	2	23		
	36	0	20.99	21.05	20.84	3	22		
	36	18	21.00	21.04	21.04	3	22		
BW	Modulation	Channel	2895	2110	2180	SCPP	Max. Twp-up	Max. MPR	
		Frequency (MHz)	2895	2895	2895	(dB)	(dB)		
	QPSK	1	0	23.58	23.63	23.67	0	25	
		1	24	24.25	23.99	24.14	0	25	
		1	48	23.76	23.94	23.72	0	25	
		15	0	22.97	22.78	22.89	1	24	
		15	12	23.13	22.84	22.78	1	24	
		15	25	23.05	22.79	23.02	1	24	
	16QAM	30	0	22.56	22.58	23.06	1	24	
		1	0	22.91	22.63	23.23	1	24	
		1	24	23.33	23.02	23.48	1	24	
		1	48	23.03	22.56	23.13	1	24	
25		0	22.97	21.59	21.89	2	23		
25		12	22.11	21.69	21.88	2	23		
64QAM	25	25	21.98	21.50	21.85	2	23		
	30	0	21.85	21.54	21.86	2	23		
	1	0	21.98	21.91	21.52	2	23		
	1	24	22.45	22.34	21.96	2	23		
	1	48	21.93	21.85	21.56	2	23		
	25	0	20.92	20.99	20.96	3	22		
BW	Modulation	Channel	2975	2110	21425	SCPP	Max. Twp-up	Max. MPR	
		Frequency (MHz)	2975	2985	2987.5	(dB)	(dB)		
	QPSK	1	0	23.94	23.56	23.70	0	25	
		1	12	24.18	23.95	24.07	0	25	
		1	24	23.86	23.61	23.86	0	25	
		12	0	23.02	22.71	22.87	1	24	
		12	6	23.08	22.85	22.74	1	24	
		12	13	22.99	22.77	23.03	1	24	
	16QAM	25	0	23.06	22.64	23.00	1	24	
		1	0	22.99	22.69	23.20	1	24	
		1	12	23.30	23.02	23.50	1	24	
		1	24	22.87	22.64	23.10	1	24	
12		0	22.02	21.64	21.90	2	23		
12		6	22.07	21.70	21.84	2	23		
64QAM	12	13	22.02	21.57	21.90	2	23		
	25	0	21.99	21.63	21.82	2	23		
	1	0	22.09	21.98	21.56	2	23		
	1	12	22.44	22.25	21.84	2	23		
	1	24	22.05	21.87	21.59	2	23		
	12	6	21.00	21.02	20.94	3	22		
BW	Modulation	Channel	2875	2110	21425	SCPP	Max. Twp-up	Max. MPR	
		Frequency (MHz)	2875	2885	2887.5	(dB)	(dB)		
	QPSK	1	0	23.94	23.56	23.70	0	25	
		1	12	24.18	23.95	24.07	0	25	
		1	24	23.86	23.61	23.86	0	25	
		12	0	23.02	22.71	22.87	1	24	
		12	6	23.08	22.85	22.74	1	24	
		12	13	22.99	22.77	23.03	1	24	
	16QAM	25	0	23.06	22.64	23.00	1	24	
		1	0	22.99	22.69	23.20	1	24	
		1	12	23.30	23.02	23.50	1	24	
		1	24	22.87	22.64	23.10	1	24	
12		0	22.02	21.64	21.90	2	23		
12		6	22.07	21.70	21.84	2	23		
64QAM	12	13	22.02	21.57	21.90	2	23		
	25	0	21.99	21.63	21.82	2	23		
	1	0	22.09	21.98	21.56	2	23		
	1	12	22.44	22.25	21.84	2	23		
	1	24	22.05	21.87	21.59	2	23		
	12	6	21.00	21.02	20.94	3	22		

LTE Band 13									
BW	Modulation	RB Size		Low	Mid	High	SCPP	Max. Twp-up	Max. MPR
		Channel	RB Offset						
10M	QPSK	1	0	24.45			0	25.5	
		1	24	24.54			0	25.5	
		1	49	24.50			0	25.5	
		25	0	23.61			1	24.5	
		25	12	23.63			1	24.5	
		25	25	23.56			1	24.5	
	16QAM	50	0	23.53			1	24.5	
		1	0	23.46			1	24.5	
		1	24	23.74			1	24.5	
		1	49	23.51			1	24.5	
		25	0	22.51			2	23.5	
		25	12	22.52			2	23.5	
64QAM	25	25	21.47			3	22.5		
	50	0	22.55			2	23.5		
	1	0	22.56			2	23.5		
	1	24	22.78			2	23.5		
	1	49	22.59			2	23.5		
	25	0	21.49			3	22.5		
5M	QPSK	1	0	24.35	24.30	24.42	0	25.5	
		1	12	24.53	24.42	24.48	0	25.5	
		1	24	24.37	24.35	24.26	0	25.5	
		12	0	23.37	23.40	23.41	1	24.5	
		12	6	23.50	23.51	23.49	1	24.5	
		12	13	23.54	23.45	23.50	1	24.5	
	16QAM	25	0	23.48	23.51	23.42	1	24.5	
		1	0	22.45	22.54	22.44	1	24.5	
		1	12	23.73	23.73	23.70	1	24.5	
		1	24	23.45	23.42	23.44	1	24.5	
		12	0	22.41	22.49	22.45	2	23.5	
		12	6	22.45	22.44	22.39	2	23.5	
64QAM	12	13	22.38	22.37	22.41	2	23.5		
	25	0	22.49	22.40	22.53	2	23.5		
	1	0	22.45	22.54	22.43	2	23.5		
	1	12	22.73	22.72	22.72	2	23.5		
	1	24	22.45	22.48	22.50	2	23.5		
	12	0	21.40	21.38	21.44	3	22.5		
BW	Modulation	Channel	2320	2320	2320	SCPP	Max. Twp-up	Max. MPR	
		Frequency (MHz)	2320	2320	2320	(dB)	(dB)		
	QPSK	1	0	24.35	24.30	24.42	0	25.5	
		1	12	24.53	24.42	24.48	0	25.5	
		1	24	24.37	24.35	24.26	0	25.5	
		12	0	23.37	23.40	23.41	1	24.5	
		12	6	23.50	23.51	23.49	1	24.5	
		12	13	23.54	23.45	23.50	1	24.5	

LTE Band 38									
BW	Modulation	RB Size		Low	Mid	High	SCPP	Max.	
		Channel	Offset						
Frequency (MHz)									
10M	QPSK	1	0	23.67	23.65	23.65	0	25	
		1	0	24.14	24.14	24.14	0	25	
		1	99	23.65	23.62	23.65	0	25	
		50	0	23.62	23.13	23.13	1	24	
		50	0	23.67	23.61	23.61	1	24	
		50	0	23.67	23.12	23.10	1	24	
		100	0	23.67	23.12	23.10	1	24	
		1	0	23.78	23.78	23.78	0	25	
		1	50	23.33	23.33	23.33	0	24	
		1	99	23.88	23.78	23.73	1	24	
20M	16QAM	1	0	22.09	22.09	22.12	2	23	
		50	0	22.15	22.08	22.11	2	23	
		100	0	22.09	22.09	22.12	2	23	
		1	0	21.78	21.61	21.61	2	23	
		1	50	22.50	22.27	21.93	2	23	
		1	99	21.62	21.69	21.62	2	23	
		50	0	20.96	20.94	21.04	3	22	
		50	25	21.06	20.97	21.05	3	22	
		50	50	20.97	20.96	20.96	3	22	
		100	0	20.95	21.01	20.98	3	22	
30M	64QAM	1	0	20.95	21.01	20.98	3	22	
		1	0	21.77	21.84	21.67	2	23	
		1	0	21.68	21.29	21.67	2	23	
		1	74	21.51	21.57	21.75	2	23	
		36	19	20.86	20.82	20.99	3	22	
		36	19	21.02	20.83	20.93	3	22	
		36	39	20.82	20.88	20.87	3	22	
		75	0	20.86	20.89	20.92	3	22	
		1	0	21.77	21.84	21.67	2	23	
		1	0	21.77	21.84	21.67	2	23	
40M	QPSK	1	0	23.72	23.69	23.78	0	25	
		1	24	24.17	24.28	24.14	0	25	
		1	48	23.61	23.63	23.67	0	25	
		25	0	22.60	22.59	22.50	1	24	
		25	12	22.59	23.13	23.01	1	24	
		25	25	22.59	23.08	23.01	1	24	
		50	0	22.58	23.00	23.08	1	24	
		1	0	22.82	23.00	22.88	1	24	
		1	49	22.74	22.68	22.66	1	24	
		25	0	22.69	23.07	22.14	2	23	
50M	16QAM	1	0	21.72	21.90	21.89	2	23	
		1	24	21.69	21.94	21.91	2	23	
		1	49	21.57	21.54	21.54	2	23	
		25	0	20.80	20.82	21.03	3	22	
		25	12	20.84	20.89	21.03	3	22	
		25	25	20.84	20.84	20.86	3	22	
		50	0	20.84	20.93	20.84	3	22	
		1	0	21.72	21.90	21.89	2	23	
		1	0	21.72	21.90	21.89	2	23	
		1	0	21.72	21.90	21.89	2	23	
60M	QPSK	1	0	23.84	23.84	23.84	0	25	
		1	12	24.21	24.23	24.09	0	25	
		1	24	23.80	23.83	23.81	0	25	
		12	0	23.01	23.05	23.12	1	24	
		12	6	23.07	23.10	23.19	1	24	
		12	13	23.05	23.01	23.01	1	24	
		25	0	23.09	23.07	23.01	1	24	
		1	0	22.83	22.89	22.86	1	24	
		1	12	23.38	23.38	23.07	1	24	
		1	24	22.74	22.73	22.67	1	24	
70M	16QAM	1	0	21.67	21.92	22.04	2	23	
		12	6	21.69	21.97	22.00	2	23	
		12	13	22.13	21.95	21.98	2	23	
		25	0	21.68	21.96	21.98	2	23	
		1	0	21.68	21.96	21.98	2	23	
		1	12	21.98	22.14	21.87	2	23	
		1	24	21.55	21.51	21.69	2	23	
		12	0	20.82	20.85	21.00	3	22	
		12	6	21.00	20.87	21.01	3	22	
		12	13	20.94	20.93	20.91	3	22	
25	0	20.95	20.97	20.91	3	22			

LTE Band 41 (2486 - 2600MHz)										
BW	Modulation	RB Size		Low	Mid	High	SCPP	Max.		
		Channel	Offset							4098
Frequency (MHz)										
10M	QPSK	1	0	23.73	23.65	23.75	0	25		
		1	99	23.72	23.75	23.64	23.61	0	25	
		50	0	22.78	23.01	22.77	22.88	22.78	1	24
		50	25	22.80	22.82	22.77	22.88	22.81	1	24
		50	50	22.89	22.97	22.72	22.84	22.88	1	24
		100	0	22.92	23.10	22.84	22.99	22.87	1	24
		1	0	23.70	23.68	23.68	23.68	23.68	0	25
		1	50	23.13	23.25	22.90	23.09	23.00	1	24
		1	99	22.80	22.80	22.58	22.72	22.59	1	24
		1	99	21.58	21.37	21.38	21.69	21.62	2	23
20M	16QAM	1	0	21.66	22.01	21.67	21.68	2	23	
		50	25	22.93	22.13	21.86	21.96	21.88	2	23
		50	50	22.00	22.05	21.78	21.90	21.73	2	23
		100	0	21.66	22.01	21.67	21.68	2	23	
		1	0	21.66	21.63	21.68	21.62	2	23	
		1	50	21.71	21.80	21.57	21.64	21.56	2	23
		1	99	21.58	21.37	21.38	21.69	21.62	2	23
		50	0	20.72	21.02	20.79	20.82	20.83	3	22
		50	25	20.89	21.05	20.81	20.89	20.85	3	22
		50	50	20.88	20.88	20.73	20.84	20.89	3	22
30M	64QAM	1	0	20.87	21.06	20.74	20.88	3	22	
		1	0	21.67	21.74	21.57	21.69	21.62	2	23
		1	49	21.62	21.62	21.57	21.65	21.53	2	23
		36	19	20.89	21.01	20.70	20.71	20.78	3	22
		36	19	20.82	20.91	20.80	20.80	20.74	3	22
		36	39	20.88	20.96	20.69	20.77	20.71	3	22
		75	0	20.76	21.05	20.70	20.74	20.67	3	22
		1	0	21.67	21.74	21.57	21.69	21.62	2	23
		1	0	21.67	21.74	21.57	21.69	21.62	2	23
		1	0	21.67	21.74	21.57	21.69	21.62	2	23
40M	QPSK	1	0	23.71	23.67	23.63	23.60	23.66	0	25
		1	24	24.02	24.21	23.95	24.00	23.88	0	25
		1	48	23.62	23.63	23.69	23.62	23.67	0	25
		25	0	22.66	22.66	22.74	22.60	22.77	1	24
		25	12	22.68	23.02	22.69	22.67	22.78	1	24
		25	25	22.66	22.69	22.62	22.76	22.63	1	24
		50	0	22.65	23.00	22.83	22.85	22.80	1	24
		1	0	22.61	22.64	22.65	22.63	22.69	1	24
		1	49	22.68	22.76	22.47	22.58	22.48	1	24
		25	0	21.73	21.98	21.79	21.89	21.79	2	23
50M	16QAM	25	12	21.83	21.99	21.72	21.89	21.80	2	23
		25	25	21.88	21.85	21.66	21.83	21.68	2	23
		50	0	21.92	22.03	21.79	21.89	21.79	2	23
		1	0	21.98	21.68	21.69	21.67	21.49	2	23
		1	24	21.70	21.68	21.52	21.69	21.42	2	23
		1	49	21.44	21.36	21.52	21.16	21.59	2	23
		25	0	20.62	20.80	20.73	20.80	20.68	3	22
		25	12	20.77	20.84	20.70	20.88	20.70	3	22
		25	25	20.76	20.81	20.64	20.85	20.65	3	22
		50	0	20.84	21.04	20.62	20.84	20.77	3	22
60M	QPSK	1	0	23.70	23.65	23.68	23.68	0	25	
		1	12	23.03	24.17	23.89	24.01	23.88	0	25
		1	24	23.64	23.63	23.65	23.63	23.45	0	25
		12	0	22.70	22.64	22.74	22.67	22.66	1	24
		12	6	22.69	22.67	22.73	22.63	22.74	1	24
		12	13	23.08	22.65	22.79	22.59	22.59	1	24
		25	0	22.65	23.02	22.67	22.64	22.80	1	24
		1	0	22.69	22.83	22.68	22.81	22.69	1	24
		1	12	23.07	23.21	22.93	22.97	22.99	1	24
		1	24	22.77	22.73	22.42	22.69	22.54	1	24
70M	16QAM	12	0	21.84	21.85	21.82	21.85	21.76	2	23
		12	6	21.78	22.07	21.75	21.89	21.76	2	23
		12	13	21.98	22.03	21.84	21.89	21.67	2	23
		25	0	21.80	22.02	21.77	21.86	21.65	2	23
		1	0	21.84	22.02	21.77	21.87	21.67	2	23
		1	12	21.65	21.76	21.50	21.63	21.42	2	23
		1	24	21.44	21.34	21.53	21.50	21.50	2	23
		12	0	20.88	20.88	20.69	20.75	20.69	3	22
		12								

GSM&WCDMA_DSI-1

Ant1

Band	GSM850				GSM1900			
	Channel	128	189	251	Max. Tune-up Power (dBm)	512	661	810
Frequency (MHz)	824.2	836.4	848.8		1850.2	1880	1909.8	
GSM	32.22	32.28	32.35	33.50	29.41	29.42	29.31	30.50
GPRS 1Tx Slot	32.20	32.30	32.36	33.50	29.36	29.40	29.30	30.50
GPRS 2Tx Slot	28.87	29.02	29.11	30.00	25.75	25.89	25.96	26.70
GPRS 3Tx Slot	27.41	27.56	27.67	28.50	23.92	24.10	24.22	25.00
GPRS 4Tx Slot	26.40	26.51	26.64	27.50	22.95	23.13	23.28	24.00
EDGE 1Tx Slot	26.96	27.01	26.97	28.00	25.83	26.08	26.11	27.00
EDGE 2Tx Slot	23.52	23.82	23.69	25.00	22.81	22.98	23.14	24.00
EDGE 3Tx Slot	21.77	22.04	21.91	23.00	20.96	21.23	21.37	22.00
EDGE 4Tx Slot	20.96	21.00	20.99	22.00	19.99	20.04	20.20	21.00

Source-Based Time-Averaged Power								
Band	GSM850			Max. Tune-up Power (dBm)	GSM1900			Max. Tune-up Power (dBm)
	Channel	128	189		251	512	661	
GSM	23.22	23.28	23.35	24.50	20.41	20.42	20.31	21.50
GPRS 1Tx Slot	23.20	23.30	23.36	24.50	20.36	20.40	20.30	21.50
GPRS 2Tx Slot	22.87	23.02	23.11	24.00	19.75	19.89	19.96	20.70
GPRS 3Tx Slot	23.15	23.30	23.41	24.24	19.66	19.84	19.96	20.74
GPRS 4Tx Slot	23.40	23.51	23.64	24.50	19.95	20.13	20.28	21.00
EDGE 1Tx Slot	17.96	18.01	17.97	19.00	16.83	17.08	17.11	18.00
EDGE 2Tx Slot	17.52	17.82	17.69	19.00	16.81	16.98	17.14	18.00
EDGE 3Tx Slot	17.51	17.78	17.65	18.74	16.70	16.97	17.11	17.74
EDGE 4Tx Slot	17.96	18.00	17.99	19.00	16.99	17.04	17.20	18.00

Band	WCDMA II			WCDMA II	WCDMA IV			WCDMA IV	WCDMA V			WCDMA V
	TX Channel	9262	9400		9538	1312	1413		1513	4132	4182	
Rx Channel	9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)	1852.4	1880	1907.6	Max. Tune-up Power (dBm)	1712.4	1732.6	1752.6	Max. Tune-up Power (dBm)	826.4	836.4	846.6	Max. Tune-up Power (dBm)
RMC 12.2K	24.42	24.45	24.35	25.50	24.61	24.63	24.69	25.50	24.72	24.69	24.67	25.50
HSDPA Subtest-1	23.59	23.60	23.46	24.00	23.72	23.81	23.75	24.00	23.79	23.75	23.83	24.00
HSDPA Subtest-2	23.59	23.60	23.49	24.00	23.79	23.77	23.70	24.00	23.76	23.80	23.79	24.00
HSDPA Subtest-3	23.05	23.10	22.98	24.00	23.24	23.30	23.29	24.00	23.32	23.34	23.33	24.00
HSDPA Subtest-4	23.12	23.07	23.04	24.00	23.32	23.35	23.37	24.00	23.35	23.33	23.28	24.00
DC-HSDPA Subtest-1	23.54	23.59	23.49	24.00	23.82	23.78	23.78	24.00	23.86	23.82	23.86	24.00
DC-HSDPA Subtest-2	23.54	23.57	23.47	24.00	23.80	23.83	23.88	24.00	23.91	23.88	23.86	24.00
DC-HSDPA Subtest-3	23.04	23.14	22.97	24.00	23.30	23.30	23.33	24.00	23.31	23.32	23.33	24.00
DC-HSDPA Subtest-4	23.07	23.12	23.01	24.00	23.30	23.28	23.38	24.00	23.36	23.33	23.35	24.00
HSUPA Subtest-1	21.74	21.75	21.72	23.00	21.93	21.97	22.09	23.00	22.11	21.99	22.00	23.00
HSUPA Subtest-2	21.50	21.47	21.41	23.00	21.63	21.66	21.74	23.00	21.74	21.79	21.77	23.00
HSUPA Subtest-3	22.33	22.37	22.26	23.00	22.54	22.61	22.65	23.00	22.68	22.61	22.64	23.00
HSUPA Subtest-4	21.12	21.07	21.01	23.00	21.28	21.32	21.28	23.00	21.68	21.58	21.56	23.00
HSUPA Subtest-5	22.36	22.36	22.29	23.00	22.59	22.56	22.66	23.00	22.63	22.59	22.62	23.00
HSPA+ Subtest-1	21.65	21.69	21.54	23.00	21.91	21.87	21.94	23.00	22.00	21.89	21.93	23.00

GSM&WCDMA_DSI-2

Ant1

Band	GSM850				GSM1900				
	Channel	128	189	251	Max. Tune-up Power (dBm)	512	661	810	Max. Tune-up Power (dBm)
Frequency (MHz)	824.2	836.4	848.8		1850.2	1880	1909.8		
GSM	32.22	32.28	32.35	33.50	29.41	29.42	29.31	30.50	
GPRS 1Tx Slot	32.20	32.30	32.36	33.50	29.36	29.40	29.30	30.50	
GPRS 2Tx Slot	28.87	29.02	29.11	30.00	25.75	25.89	25.96	26.70	
GPRS 3Tx Slot	27.41	27.56	27.67	28.50	23.92	24.10	24.22	25.00	
GPRS 4Tx Slot	26.40	26.51	26.64	27.50	22.95	23.13	23.28	24.00	
EDGE 1Tx Slot	26.96	27.01	26.97	28.00	25.83	26.08	26.11	27.00	
EDGE 2Tx Slot	23.52	23.82	23.69	25.00	22.81	22.98	23.14	24.00	
EDGE 3Tx Slot	21.77	22.04	21.91	23.00	20.96	21.23	21.37	22.00	
EDGE 4Tx Slot	20.96	21.00	20.99	22.00	19.99	20.04	20.20	21.00	

Source-Based Time-Averaged Power								
Band	GSM850			Max. Tune-up Power (dBm)	GSM1900			Max. Tune-up Power (dBm)
	Channel	128	189		251	512	661	
GSM	23.22	23.28	23.35	24.50	20.41	20.42	20.31	21.50
GPRS 1Tx Slot	23.20	23.30	23.36	24.50	20.36	20.40	20.30	21.50
GPRS 2Tx Slot	22.87	23.02	23.11	24.00	19.75	19.89	19.96	20.70
GPRS 3Tx Slot	23.15	23.30	23.41	24.24	19.66	19.84	19.96	20.74
GPRS 4Tx Slot	23.40	23.51	23.64	24.50	19.95	20.13	20.28	21.00
EDGE 1Tx Slot	17.96	18.01	17.97	19.00	16.83	17.08	17.11	18.00
EDGE 2Tx Slot	17.52	17.82	17.69	19.00	16.81	16.98	17.14	18.00
EDGE 3Tx Slot	17.51	17.78	17.65	18.74	16.70	16.97	17.11	17.74
EDGE 4Tx Slot	17.96	18.00	17.99	19.00	16.99	17.04	17.20	18.00

Band	WCDMA II			WCDMA II	WCDMA IV			WCDMA IV	WCDMA V			WCDMA V
	TX Channel	9262	9400		9538	Max. Tune-up Power (dBm)	1312		1413	1513	Max. Tune-up Power (dBm)	
Rx Channel	9662	9800	9938		1537	1638	1738		4357	4407	4458	Max. Tune-up Power (dBm)
Frequency (MHz)	1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.4	846.6	
RMC 12.2K	24.42	24.45	24.35	25.50	24.61	24.63	24.69	25.50	24.72	24.69	24.67	25.50
HSDPA Subtest-1	23.59	23.60	23.46	24.00	23.72	23.81	23.75	24.00	23.79	23.75	23.83	24.00
HSDPA Subtest-2	23.59	23.60	23.49	24.00	23.79	23.77	23.70	24.00	23.76	23.80	23.79	24.00
HSDPA Subtest-3	23.05	23.10	22.98	24.00	23.24	23.30	23.29	24.00	23.32	23.34	23.33	24.00
HSDPA Subtest-4	23.12	23.07	23.04	24.00	23.32	23.35	23.37	24.00	23.35	23.33	23.28	24.00
DC-HSDPA Subtest-1	23.54	23.59	23.49	24.00	23.82	23.78	23.78	24.00	23.86	23.82	23.86	24.00
DC-HSDPA Subtest-2	23.54	23.57	23.47	24.00	23.80	23.83	23.88	24.00	23.91	23.88	23.86	24.00
DC-HSDPA Subtest-3	23.04	23.14	22.97	24.00	23.30	23.30	23.33	24.00	23.31	23.32	23.33	24.00
DC-HSDPA Subtest-4	23.07	23.12	23.01	24.00	23.30	23.28	23.38	24.00	23.36	23.33	23.35	24.00
HSUPA Subtest-1	21.74	21.75	21.72	23.00	21.93	21.97	22.09	23.00	22.11	21.99	22.00	23.00
HSUPA Subtest-2	21.50	21.47	21.41	23.00	21.63	21.66	21.74	23.00	21.74	21.79	21.77	23.00
HSUPA Subtest-3	22.33	22.37	22.26	23.00	22.54	22.61	22.65	23.00	22.68	22.61	22.64	23.00
HSUPA Subtest-4	21.12	21.07	21.01	23.00	21.28	21.32	21.28	23.00	21.68	21.58	21.56	23.00
HSUPA Subtest-5	22.36	22.36	22.29	23.00	22.59	22.56	22.66	23.00	22.63	22.59	22.62	23.00
HSPA+ Subtest-1	21.65	21.69	21.54	23.00	21.91	21.87	21.94	23.00	22.00	21.89	21.93	23.00

GSM&WCDMA_DSI3&4

Ant1

Band	GSM850				GSM1900			
	Channel	128	189	251	Max. Tune-up Power (dBm)	512	661	810
Frequency (MHz)	824.2	836.4	848.8		1850.2	1880	1909.8	
GSM	32.22	32.28	32.35	33.50	29.41	29.42	29.31	30.50
GPRS 1Tx Slot	32.20	32.30	32.36	33.50	29.36	29.40	29.30	30.50
GPRS 2Tx Slot	28.87	29.02	29.11	30.00	25.75	25.89	25.96	26.70
GPRS 3Tx Slot	27.41	27.56	27.67	28.50	23.92	24.10	24.22	25.00
GPRS 4Tx Slot	26.40	26.51	26.64	27.50	22.95	23.13	23.28	24.00
EDGE 1Tx Slot	26.96	27.01	26.97	28.00	25.83	26.08	26.11	27.00
EDGE 2Tx Slot	23.52	23.82	23.69	25.00	22.81	22.98	23.14	24.00
EDGE 3Tx Slot	21.77	22.04	21.91	23.00	20.96	21.23	21.37	22.00
EDGE 4Tx Slot	20.96	21.00	20.99	22.00	19.99	20.04	20.20	21.00

Source-Based Time-Averaged Power								
Band	GSM850			Max. Tune-up Power (dBm)	GSM1900			Max. Tune-up Power (dBm)
	Channel	128	189		251	512	661	
GSM	23.22	23.28	23.35	24.50	20.41	20.42	20.31	21.50
GPRS 1Tx Slot	23.20	23.30	23.36	24.50	20.36	20.40	20.30	21.50
GPRS 2Tx Slot	22.87	23.02	23.11	24.00	19.75	19.89	19.96	20.70
GPRS 3Tx Slot	23.15	23.30	23.41	24.24	19.66	19.84	19.96	20.74
GPRS 4Tx Slot	23.40	23.51	23.64	24.50	19.95	20.13	20.28	21.00
EDGE 1Tx Slot	17.96	18.01	17.97	19.00	16.83	17.08	17.11	18.00
EDGE 2Tx Slot	17.52	17.82	17.69	19.00	16.81	16.98	17.14	18.00
EDGE 3Tx Slot	17.51	17.78	17.65	18.74	16.70	16.97	17.11	17.74
EDGE 4Tx Slot	17.96	18.00	17.99	19.00	16.99	17.04	17.20	18.00

Band	WCDMA II			WCDMA II	WCDMA IV			WCDMA IV	WCDMA V			WCDMA V
	TX Channel	9262	9400		9538	1312	1413		1513	4132	4182	
Rx Channel	9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)	1852.4	1880	1907.6	Max. Tune-up Power (dBm)	1712.4	1732.6	1752.6	Max. Tune-up Power (dBm)	826.4	836.4	846.6	Max. Tune-up Power (dBm)
RMC 12.2K	21.80	21.87	21.76	23.00	21.36	21.48	21.56	22.50	24.72	24.69	24.67	25.50
HSDPA Subtest-1	21.04	21.08	20.87	21.50	20.62	20.67	20.60	21.00	23.79	23.75	23.83	24.00
HSDPA Subtest-2	21.01	21.05	20.99	21.50	20.69	20.60	20.54	21.00	23.76	23.80	23.79	24.00
HSDPA Subtest-3	20.46	20.54	20.38	21.50	20.15	20.27	20.04	21.00	23.32	23.34	23.33	24.00
HSDPA Subtest-4	20.46	20.40	20.36	21.50	20.17	20.12	20.20	21.00	23.35	23.33	23.28	24.00
DC-HSDPA Subtest-1	20.88	21.03	21.05	21.50	20.76	20.73	20.68	21.00	23.86	23.82	23.86	24.00
DC-HSDPA Subtest-2	21.06	21.06	21.02	21.50	20.59	20.67	20.67	21.00	23.91	23.88	23.86	24.00
DC-HSDPA Subtest-3	20.42	20.47	20.39	21.50	20.12	20.10	20.16	21.00	23.31	23.32	23.33	24.00
DC-HSDPA Subtest-4	20.55	20.55	20.41	21.50	20.19	20.16	20.20	21.00	23.36	23.33	23.35	24.00
HSUPA Subtest-1	19.19	19.11	19.14	20.50	18.74	18.84	18.82	20.00	22.11	21.99	22.00	23.00
HSUPA Subtest-2	18.91	18.95	18.88	20.50	18.49	18.40	18.58	20.00	21.74	21.79	21.77	23.00
HSUPA Subtest-3	19.77	19.88	19.62	20.50	19.45	19.48	19.44	20.00	22.68	22.61	22.64	23.00
HSUPA Subtest-4	18.68	18.73	18.65	20.50	18.37	18.21	18.28	20.00	21.68	21.58	21.56	23.00
HSUPA Subtest-5	19.86	19.78	19.80	20.50	19.53	19.50	19.49	20.00	22.63	22.59	22.62	23.00
HSPA+ Subtest-1	18.98	19.08	19.01	20.50	18.65	18.77	18.70	20.00	22.00	21.89	21.93	23.00

LTE_DSI-1 Ant1

		LTE Band 2					
BW	Modulation	Channel		Low	Mid	High	Max. Tune-up (dBm)
		RB Size	RB Offset				
20M	QPSK	1	0	24.18	24.14	24.14	25.5
		1	50	24.43	24.42	24.82	25.5
		1	99	24.17	24.12	24.15	25.5
		50	0	23.45	23.47	23.55	24.5
		50	25	23.63	23.49	23.57	24.5
		50	50	23.44	23.46	23.41	24.5
	16QAM	100	0	23.47	23.48	23.52	24.5
		1	0	23.54	23.38	23.42	24.5
		1	50	23.87	23.77	23.86	24.5
		1	99	23.44	23.46	23.37	24.5
		50	0	22.52	22.51	22.54	23.5
		50	25	22.64	22.56	22.53	23.5
64QAM	100	0	22.51	22.54	22.47	23.5	
	1	0	22.85	22.81	22.38	23.5	
	1	50	22.72	22.76	22.82	23.5	
	1	99	22.38	22.37	22.44	23.5	
	50	0	21.49	21.54	21.54	22.5	
	50	25	21.53	21.53	21.57	22.5	
15M	QPSK	1	0	23.49	23.32	23.38	24.5
		1	37	23.38	23.31	23.35	24.5
		1	74	24.04	24.01	24.11	25.5
		36	0	23.38	23.45	23.46	24.5
		36	19	23.51	23.34	23.49	24.5
		36	39	23.32	23.59	23.36	24.5
	16QAM	75	0	23.43	23.41	23.35	24.5
		1	0	23.49	23.32	23.38	24.5
		1	37	23.38	23.35	23.57	24.5
		1	74	23.38	23.31	23.26	24.5
		36	0	22.38	22.36	22.51	23.5
		36	19	22.51	22.49	22.41	23.5
64QAM	36	39	22.39	22.58	22.34	23.5	
	75	0	22.43	22.39	22.45	23.5	
	1	0	22.32	22.37	22.35	23.5	
	1	37	22.89	22.86	22.80	23.5	
	1	74	22.37	22.31	22.39	23.5	
	36	0	21.42	21.44	21.42	22.5	
10M	QPSK	1	0	23.49	23.32	23.38	24.5
		1	24	24.36	24.33	24.39	25.5
		1	49	24.11	24.02	24.07	25.5
		25	0	23.38	23.37	23.51	24.5
		25	12	23.45	23.34	23.50	24.5
		25	25	23.32	23.53	23.29	24.5
	16QAM	50	0	23.32	23.39	23.34	24.5
		1	0	23.43	23.35	23.31	24.5
		1	24	23.80	23.62	23.60	24.5
		1	49	23.38	23.42	23.23	24.5
		25	0	22.47	22.42	22.43	23.5
		25	12	22.51	22.41	22.41	23.5
64QAM	25	25	22.43	22.62	22.33	23.5	
	50	0	22.43	22.53	22.35	23.5	
	1	0	22.33	22.34	22.27	23.5	
	1	24	22.67	22.62	22.53	23.5	
	1	49	22.37	22.32	22.39	23.5	
	25	0	21.41	21.49	21.50	22.5	
5M	QPSK	25	12	21.41	21.43	21.50	22.5
		25	25	21.38	21.47	21.31	22.5
		50	0	21.37	21.45	21.43	22.5
		1	0	24.04	24.02	23.99	25.5
		1	24	24.36	24.33	24.39	25.5
		1	49	24.11	24.02	24.07	25.5
	16QAM	25	0	23.38	23.37	23.51	24.5
		25	12	23.45	23.34	23.50	24.5
		25	25	23.32	23.53	23.29	24.5
		50	0	23.32	23.39	23.34	24.5
		1	0	23.43	23.35	23.31	24.5
		1	24	23.80	23.62	23.60	24.5
64QAM	1	49	23.38	23.42	23.23	24.5	
	12	0	22.51	22.47	22.52	23.5	
	12	6	22.60	22.43	22.52	23.5	
	12	13	22.41	22.57	22.33	23.5	
	25	0	22.38	22.47	22.38	23.5	
	1	0	22.40	22.36	22.23	23.5	
3M	QPSK	1	12	22.61	22.65	22.47	23.5
		1	24	22.37	22.29	22.30	23.5
		12	0	21.47	21.40	21.42	22.5
		12	6	21.50	21.41	21.50	22.5
		12	13	21.40	21.50	21.24	22.5
		25	0	21.44	21.49	21.34	22.5
	16QAM	1	0	24.04	24.04	24.10	25.5
		1	24	24.36	24.40	24.46	25.5
		1	5	24.04	24.23	24.36	25.5
		3	1	24.29	24.23	24.24	25.5
		3	3	24.21	24.30	24.18	25.5
		6	0	23.38	23.33	23.50	24.5
64QAM	1	0	23.51	23.32	23.29	24.5	
	1	24	23.86	23.64	23.60	24.5	
	1	5	23.39	23.32	23.23	24.5	
	3	0	23.22	23.27	23.35	24.5	
	3	1	23.31	23.23	23.32	24.5	
	3	3	23.27	23.42	23.08	24.5	
1.4M	QPSK	6	0	22.42	22.48	22.44	23.5
		1	0	22.43	22.26	22.27	23.5
		1	2	22.70	22.63	22.53	23.5
		1	5	22.35	22.22	22.31	23.5
		3	0	22.21	22.31	22.29	23.5
		3	3	22.31	22.21	22.29	23.5
	16QAM	3	3	22.17	22.32	22.05	23.5
		6	0	21.40	21.50	21.29	22.5
		1	0	23.66	23.62	23.69	25.5
		1	5	23.76	23.89	23.77	25.5
		3	0	23.84	23.82	23.80	25.5
		3	1	23.82	24.03	23.85	25.5
64QAM	3	3	23.84	23.93	23.83	25.5	
	6	0	22.88	23.20	23.13	24.5	
	1	0	22.81	22.97	22.89	24.5	
	1	2	23.30	23.53	23.31	24.5	
	1	5	23.20	23.09	22.92	24.5	
	3	0	22.88	22.71	22.89	24.5	
3M	QPSK	3	1	23.05	22.95	22.84	24.5
		3	3	23.00	22.88	22.71	24.5
		6	0	22.83	22.86	22.88	24.5
		1	0	21.85	21.88	21.87	23.5
		1	2	22.19	22.24	22.32	23.5
		1	5	21.93	21.93	21.98	23.5
	16QAM	3	0	21.73	21.77	21.78	23.5
		3	1	21.80	21.80	21.88	23.5
		3	3	21.81	21.77	21.75	23.5
		6	0	20.85	21.01	20.91	22.5
		1	0	23.82	23.81	23.87	25.5
		1	12	23.95	24.17	24.04	25.5
10M	QPSK	1	24	24.00	24.07	23.99	25.5
		1	49	23.83	23.86	23.85	25.5
		25	0	23.15	22.97	22.96	24.5
		25	12	23.07	23.21	23.11	24.5
		25	25	22.79	22.98	22.90	24.5
		50	0	22.90	23.14	23.18	24.5
	16QAM	1	0	22.79	22.98	22.94	24.5
		1	24	23.24	23.32	23.30	24.5
		1	49	23.24	23.11	22.87	24.5
		25	0	22.91	23.16	23.10	24.5
		25	12	22.12	22.05	22.06	23.5
		25	25	22.14	21.93	21.96	23.5
64QAM	50	0	21.97	21.87	21.94	23.5	
	1	0	21.85	21.98	21.93	23.5	
	1	24	22.25	22.18	22.26	23.5	
	1	49	21.89	21.90	21.90	23.5	
	25	0	20.88	20.85	20.93	22.5	
	25	12	20.95	21.05	20.95	22.5	
5M	QPSK	25	25	20.83	21.05	21.01	22.5
		50	0	20.80	20.92	20.86	22.5
		1	0	23.66	23.81	23.67	25.5
		1	12	23.95	24.17	24.04	25.5
		1	24	23.76	23.97	23.79	25.5
		12	0	22.97	22.97	22.97	24.5
	16QAM	12	6	23.12	23.20	23.09	24.5
		12	13	23.12	23.15	23.13	24.5
		25	0	22.93	23.21	23.05	24.5
		1	0	22.83	23.02	22.92	24.5
		1	12	23.29	23.37	23.21	24.5
		1	24	23.25	23.12	22.93	24.5
64QAM	12	0	22.67	21.99	22.01	23.5	
	12	6	22.22	22.09	21.99	23.5	
	12	13	22.10	21.86	21.95	23.5	
	25	0	22.95	21.93	21.94	23.5	
	1	0	21.88	21.91	21.82	23.5	
	1	12	22.21	22.18	22.23	23.5	
3M	QPSK	1	24	21.92	22.01	22.00	23.5
		12	0	20.87	20.92	20.92	22.5
		12	6	21.01	21.05	20.91	22.5
		12	13	20.94	20.99	21.03	22.5
		25	0	20.82	20.92	20.83	22.5
		1	0	22.85	23.01	22.92	24.5
	16QAM	1	7	23.21	23.32	23.32	24.5
		1	14	23.19	23.04	22.85	24.5
		8	0	22.85	22.80	22.96	23.5
		8	3	22.12	22.11	22.03	23.5
		8	7	22.16	21.88	21.95	23.5
		15	0	22.68	21.89	21.99	23.5
64QAM	1	0	21.78	21.90	21.89	23.5	
	1	7	22.31	22.20	22.35	23.5	
	1	14	21.99	21.87	21.98	23.5	
	8	0	20.91	20.94	20.93	22.5	
	8	3	20.86	20.99	20.96	22.5	
	8	7	21.01	20.98	21.05	22.5	
1.4M	QPSK	8	7	21.01	20.98	21.04	22.5
		15	0	20.85	21.00	20.84	22.5
		1	0	23.72	23.79	23.59	25.5
		1	2	23.98	24.08	24.01	25.5
		1	5	23.76	23.89	23.77	25.5
		3	0	23.84	23.82	23.	

LTE Band 7							
BW	Modulation	RB Size	RB Offset	Low	Mid	High	Max. Tune-up (dBm)
		Channel		2085	2100	2135	
20M	QPSK	1	0	22.55	22.57	22.60	24
		1	50	23.24	22.90	23.96	24
		1	99	22.77	22.41	22.74	24
		50	0	22.68	22.56	22.63	24
		50	25	22.86	22.67	22.82	24
		50	50	22.78	22.51	22.64	24
		100	0	22.78	22.41	22.77	24
		1	0	22.68	22.45	22.59	24
		1	50	23.10	22.84	22.77	24
		1	99	22.66	22.48	22.84	24
	16QAM	50	25	22.04	21.85	21.76	23
		50	50	21.92	21.42	21.71	23
		100	0	21.89	21.59	21.75	23
		1	0	22.04	21.93	21.34	23
		1	50	22.28	22.07	21.70	23
		1	99	21.91	21.85	21.46	23
		50	0	20.79	20.67	20.79	22
		50	25	21.06	21.00	20.97	22
		50	50	20.98	20.96	20.78	22
		100	0	21.00	20.95	20.84	22
	64QAM	1	0	22.04	21.93	21.34	23
		1	50	22.28	22.07	21.70	23
		1	99	21.91	21.85	21.46	23
		50	0	20.79	20.67	20.79	22
		50	25	21.06	21.00	20.97	22
		50	50	20.98	20.96	20.78	22
		100	0	21.00	20.95	20.84	22
		1	0	22.04	21.93	21.34	23
		1	50	22.28	22.07	21.70	23
		1	99	21.91	21.85	21.46	23
15M	QPSK	1	0	22.75	22.42	22.59	24
		1	37	23.19	22.87	22.86	24
		1	74	22.74	22.30	22.68	24
		36	0	22.57	22.41	22.59	24
		36	19	22.75	22.65	22.76	24
		36	39	22.76	22.45	22.57	24
		75	0	22.73	22.40	22.75	24
		1	0	22.60	22.30	22.54	24
		1	37	23.02	22.83	22.71	24
		1	74	22.61	22.37	22.77	24
	16QAM	36	0	21.77	21.50	21.68	23
		36	19	22.01	21.51	21.70	23
		36	39	21.77	21.33	21.64	23
		75	0	21.85	21.50	21.54	23
		1	0	21.96	21.84	21.24	23
		1	37	22.13	21.96	21.61	23
		1	74	21.76	21.76	21.35	23
		36	0	20.72	20.75	20.66	22
		36	19	20.94	21.08	20.85	22
		36	39	20.94	20.95	20.79	22
	64QAM	75	0	20.88	20.90	20.70	22
		1	0	22.75	22.56	22.53	24
		1	24	23.09	22.80	22.85	24
		12	0	22.87	22.49	22.50	24
		12	6	22.80	22.54	22.81	24
		12	13	22.68	22.40	22.54	24
		25	0	22.71	22.28	22.73	24
		1	0	22.63	22.31	22.47	24
		1	12	23.09	22.80	22.67	24
		1	24	22.51	22.38	22.75	24
10M	16QAM	12	0	21.76	21.40	21.75	23
		12	6	21.89	21.51	21.75	23
		12	13	21.79	21.34	21.58	23
		25	0	21.85	21.52	21.69	23
		1	0	22.02	21.83	21.23	23
		1	12	22.22	21.92	21.61	23
		1	24	21.82	21.82	21.33	23
		12	0	20.78	20.72	20.72	22
		12	6	20.98	20.96	20.83	22
		12	13	20.84	20.91	20.65	22
5M	QPSK	1	0	22.74	22.56	22.58	24
		1	12	23.20	22.82	22.87	24
		1	24	22.82	22.26	22.85	24
		12	0	22.87	22.49	22.50	24
		12	6	22.80	22.41	22.80	24
		12	13	22.68	22.40	22.54	24
		25	0	22.71	22.28	22.73	24
		1	0	22.63	22.31	22.47	24
		1	12	23.09	22.80	22.67	24
		1	24	22.51	22.38	22.75	24
	16QAM	12	0	21.76	21.40	21.75	23
		12	6	21.89	21.51	21.75	23
		12	13	21.79	21.34	21.58	23
		25	0	21.85	21.52	21.69	23
		1	0	22.02	21.83	21.23	23
		1	12	22.22	21.92	21.61	23
		1	24	21.82	21.82	21.33	23
		12	0	20.78	20.72	20.72	22
		12	6	20.98	20.96	20.83	22
		12	13	20.84	20.91	20.65	22
	64QAM	25	0	20.92	20.82	20.72	22
		1	0	22.75	22.56	22.53	24
		1	24	23.09	22.80	22.85	24
		12	0	22.87	22.49	22.50	24
		12	6	22.80	22.54	22.81	24
		12	13	22.68	22.40	22.54	24
		25	0	22.71	22.28	22.73	24
		1	0	22.63	22.31	22.47	24
		1	12	23.09	22.80	22.67	24
		1	24	22.51	22.38	22.75	24
10M	QPSK	1	0	24.35	24.30	24.42	25.5
		1	12	24.53	24.42	24.48	25.5
		1	24	24.37	24.35	24.28	25.5
		12	0	23.37	23.40	23.41	24.5
		12	6	23.50	23.51	23.49	24.5
		12	13	23.54	23.45	23.50	24.5
		25	0	23.48	23.51	23.42	24.5
		1	0	23.36	23.35	23.44	24.5
		1	12	23.73	23.73	23.70	24.5
		1	24	23.45	23.42	23.44	24.5
	16QAM	12	0	22.41	22.49	22.45	23.5
		12	6	22.45	22.44	22.39	23.5
		12	13	22.38	22.37	22.41	23.5
		25	0	22.49	22.40	22.53	23.5
		1	0	22.45	22.54	22.43	23.5
		1	12	22.73	22.67	22.72	23.5
		1	24	22.45	22.46	22.50	23.5
		12	0	21.40	21.38	21.44	22.5
		12	6	21.39	21.44	21.38	22.5
		12	13	21.39	21.44	21.38	22.5
	64QAM	25	0	21.39	21.47	21.47	22.5
		1	0	24.35	24.30	24.42	25.5
		1	12	24.53	24.42	24.48	25.5
		1	24	24.37	24.35	24.28	25.5
		12	0	23.37	23.40	23.41	24.5
		12	6	23.50	23.51	23.49	24.5
		12	13	23.54	23.45	23.50	24.5
		25	0	23.48	23.51	23.42	24.5
		1	0	23.36	23.35	23.44	24.5
		1	12	23.73	23.73	23.70	24.5
5M	QPSK	1	0	24.35	24.30	24.42	25.5
		1	12	24.53	24.42	24.48	25.5
		1	24	24.37	24.35	24.28	25.5
		12	0	23.37	23.40	23.41	24.5
		12	6	23.50	23.51	23.49	24.5
		12	13	23.54	23.45	23.50	24.5
		25	0	23.48	23.51	23.42	24.5
		1	0	23.36	23.35	23.44	24.5
		1	12	23.73	23.73	23.70	24.5
		1	24	23.45	23.42	23.44	24.5
	16QAM	12	0	22.41	22.49	22.45	23.5
		12	6	22.45	22.44	22.39	23.5
		12	13	22.38	22.37	22.41	23.5
		25	0	22.49	22.40	22.53	23.5
		1	0	22.45	22.54	22.43	23.5
		1	12	22.73	22.67	22.72	23.5
		1	24	22.45	22.46	22.50	23.5
		12	0	21.40	21.38	21.44	22.5
		12	6	21.39	21.44	21.38	22.5
		12	13	21.39	21.44	21.38	22.5
	64QAM	25	0	21.39	21.47	21.47	22.5
		1	0	24.35	24.30	24.42	25.5
		1	12	24.53	24.42	24.48	25.5
		1	24	24.37	24.35	24.28	25.5
		12	0	23.37	23.40	23.41	24.5
		12	6	23.50	23.51	23.49	24.5
		12	13	23.54	23.45	23.50	24.5
		25	0	23.48	23.51	23.42	24.5
		1	0	23.36	23.35	23.44	24.5
		1	12	23.73	23.73	23.70	24.5
15M	QPSK	1	0	24.35	24.30	24.42	25.5
		1	12	24.53	24.42	24.48	25.5
		1	24	24.37	24.35	24.28	25.5
		12	0	23.37	23.40	23.41	24.5
		12	6	23.50	23.51	23.49	24.5
		12	13	23.54	23.45	23.50	24.5
		25	0	23.48	23.51	23.42	24.5
		1	0	23.36	23.35	23.44	24.5
		1	12	23.73	23.73	23.70	24.5
		1	24	23.45	23.42	23.44	24.5
	16QAM	12	0	22.41	22.49	22.45	23.5
		12	6	22.45	22.44	22.39	23.5
		12	13	22.38	22.37	22.41	23.5
		25	0	22.49	22.40	22.53	23.5
		1	0	22.45	22.54	22.43	23.5
		1	12	22.73	22.67	22.72	23.5
		1	24	22.45	22.46	22.50	23.5
		12	0	21.40	21.38	21.44	22.5
		12	6	21.39	21.44	21.38	22.5
		12	13	21.39	21.44	21.38	22.5
	64QAM	25	0	21.39	21.47	21.47	22.5
		1	0	24.35	24.30	24.42	25.5
		1	12	24.53	24.42	24.48	25.5
		1	24	24.37	24.35	24.28	25.5
		12	0	23.37	23.40	23.41	24.5
		12					

LTE_DSI-2 Ant1

LTE Band 2									
BW	Modulation	RB Size		Low	Mid	High	Max. Time-up (dBm)	Channel	
		RB Offset	Channel					1910	1910
20M	QPSK	1	50	24.13	24.14	24.14	25.5	24.13	24.14
				24.43	24.42	24.42	25.5		
		1	99	24.17	24.12	24.15	25.5	24.17	24.12
				23.45	23.47	23.55	24.5		
		50	25	23.52	23.49	23.57	24.5	23.52	23.49
				23.44	23.41	23.41	24.5		
	16QAM	1	50	23.54	23.38	23.42	24.5	23.54	23.38
				23.87	23.77	23.66	24.5		
		1	99	23.44	23.45	23.37	24.5	23.44	23.45
				22.38	22.37	22.44	23.5		
		50	25	22.64	22.56	22.53	23.5	22.64	22.56
				22.49	22.86	22.37	23.5		
	100	50	22.51	22.54	22.47	23.5	22.51	22.54	
			22.45	22.41	22.38	23.5			
	64QAM	1	50	22.72	22.76	22.62	23.5	22.72	22.76
				21.49	21.54	21.54	22.5		
		50	25	21.53	21.83	21.57	22.5	21.53	21.83
				21.43	21.59	21.37	22.5		
100		50	21.45	21.55	21.44	22.5	21.45	21.55	
			21.40	21.42	21.41	22.5			
15M	QPSK	1	37	24.03	24.07	24.07	25.5	24.03	24.07
				24.36	24.29	24.41	25.5		
		1	74	24.04	24.01	24.11	25.5	24.04	24.01
				23.38	23.45	23.46	24.5		
		36	19	23.32	23.39	23.38	24.5	23.32	23.39
				23.32	23.59	23.36	24.5		
	75	0	23.43	23.41	23.35	24.5	23.43	23.41	
			23.49	23.32	23.35	24.5			
	16QAM	1	37	23.85	23.65	23.57	24.5	23.85	23.65
				23.38	23.31	23.26	24.5		
		1	74	23.38	23.31	23.26	24.5	23.38	23.31
				22.39	22.42	22.41	23.5		
		36	19	22.51	22.49	22.41	23.5	22.51	22.49
				22.39	22.58	22.34	23.5		
	75	0	22.43	22.39	22.45	23.5	22.43	22.39	
			22.32	22.37	22.25	23.5			
	64QAM	1	37	22.99	22.85	22.80	23.5	22.99	22.85
				22.37	22.31	22.30	23.5		
1		74	22.37	22.31	22.30	23.5	22.37	22.31	
			21.42	21.44	21.42	22.5			
36		19	21.49	21.52	21.54	22.5	21.49	21.52	
			21.41	21.47	21.29	22.5			
75	0	21.38	21.32	21.29	22.5	21.38	21.32		
		21.38	21.32	21.29	22.5				
10M	QPSK	1	24	24.02	23.99	23.99	25.5	24.02	23.99
				24.36	24.33	24.39	25.5		
		1	49	24.11	24.02	24.07	25.5	24.11	24.02
				23.38	23.37	23.51	24.5		
		25	12	23.44	23.42	23.46	24.5	23.44	23.42
				23.32	23.53	23.29	24.5		
	50	25	23.32	23.39	23.34	24.5	23.32	23.39	
			23.43	23.35	23.31	24.5			
	16QAM	1	24	23.80	23.62	23.60	24.5	23.80	23.62
				23.38	23.42	23.23	24.5		
		1	49	23.38	23.42	23.23	24.5	23.38	23.42
				22.51	22.41	22.41	23.5		
		25	12	22.51	22.41	22.41	23.5	22.51	22.41
				22.43	22.62	22.33	23.5		
	50	25	22.43	22.53	22.35	23.5	22.43	22.53	
			22.33	22.34	22.27	23.5			
	64QAM	1	24	22.99	22.85	22.80	23.5	22.99	22.85
				22.37	22.31	22.30	23.5		
1		49	22.37	22.31	22.30	23.5	22.37	22.31	
			21.49	21.50	21.50	22.5			
25		12	21.41	21.43	21.50	22.5	21.41	21.43	
			21.36	21.47	21.31	22.5			
50	25	21.37	21.45	21.43	22.5	21.37	21.45		
		21.37	21.45	21.43	22.5				
5M	QPSK	1	12	24.01	24.01	23.99	25.5	24.01	24.01
				24.37	24.31	24.42	25.5		
		1	24	24.09	23.97	24.03	25.5	24.09	23.97
				23.43	23.35	23.46	24.5		
		12	6	23.44	23.46	23.41	24.5	23.44	23.46
				23.30	23.58	23.36	24.5		
	25	13	23.44	23.37	23.43	24.5	23.44	23.37	
			23.48	23.28	23.32	24.5			
	16QAM	1	12	23.77	23.72	23.64	24.5	23.77	23.72
				24.38	24.27	24.34	24.5		
		1	24	23.38	23.42	23.34	24.5	23.38	23.42
				22.51	22.47	22.52	23.5		
		12	6	22.60	22.43	22.52	23.5	22.60	22.43
				22.41	22.57	22.33	23.5		
	25	13	22.38	22.47	22.38	23.5	22.38	22.47	
			22.40	22.36	22.23	23.5			
	64QAM	1	12	22.61	22.63	22.67	23.5	22.61	22.63
				22.37	22.29	22.30	23.5		
1		24	22.37	22.29	22.30	23.5	22.37	22.29	
			21.40	21.40	21.44	22.5			
12		6	21.50	21.41	21.50	22.5	21.50	21.41	
			21.40	21.50	21.24	22.5			
25	13	21.44	21.42	21.41	22.5	21.44	21.42		
		21.44	21.42	21.41	22.5				
3M	QPSK	1	7	24.05	24.10	24.10	25.5	24.05	24.10
				24.35	24.29	24.43	25.5		
		1	14	24.09	24.04	24.02	25.5	24.09	24.04
				23.47	23.49	23.51	24.5		
		8	3	23.48	23.46	23.51	24.5	23.48	23.46
				23.40	23.51	23.35	24.5		
	15	0	23.46	23.50	23.41	24.5	23.46	23.50	
			23.41	23.33	23.32	24.5			
	16QAM	1	7	23.73	23.71	23.55	24.5	23.73	23.71
				23.37	23.38	23.21	24.5		
		8	3	22.51	22.39	22.52	23.5	22.51	22.39
				22.62	22.55	22.48	23.5		
		8	7	22.34	22.64	22.25	23.5	22.34	22.64
				22.42	22.45	22.43	23.5		
	64QAM	1	7	22.42	22.39	22.29	23.5	22.42	22.39
				22.68	22.72	22.57	23.5		
		1	14	22.31	22.24	22.43	23.5	22.31	22.24
				21.40	21.48	21.43	22.5		
8		3	21.42	21.50	21.49	22.5	21.42	21.50	
			21.41	21.52	21.23	22.5			
15	0	21.42	21.42	21.41	22.5	21.42	21.42		
		21.42	21.42	21.41	22.5				
1.4M	QPSK	1	2	24.04	24.04	24.10	25.5	24.04	24.04
				24.36	24.40	24.46	25.5		
		1	5	24.04	23.98	24.10	25.5	24.04	23.98
				24.24	24.22	24.26	25.5		
		3	1	24.29	24.23	24.24	25.5	24.29	24.23
				24.21	24.30	24.18	25.5		
	6	0	23.38	23.33	23.29	24.5	23.38	23.33	
			23.51	23.32	23.29	24.5			
	16QAM	1	2	23.86	23.85	23.80	24.5	23.86	23.85
				23.36	23.35	23.23	24.5		
		3	0	23.22	23.27	23.35	24.5	23.22	23.27
				23.31	23.23	23.32	24.5		
		3	3	23.27	23.42	23.08	24.5	23.27	23.42
				22.42	22.48	22.44	23.5		
	64QAM	1	2	22.43	22.39	22.27	23.5	22.43	22.39
				22.70	22.63	22.53	23.5		
		1	5	22.35	22.22	22.31	23.5	22.35	22.22
				22.21	22.31	22.29	23.5		
3		1	22.31	22.21	22.29	23.5	22.31	22.21	
			22.17	22.32	22.05	23.5			
6	0	21.40	21.50	21.39	22.5	21.40	21.50		
		21.40	21.50	21.39	22.5				

LTE Band 4									
BW	Modulation	RB Size		Low	Mid	High	Max. Time-up (dBm)	Channel	
		RB Offset	Channel					2090	2075
20M	QPSK	1	50	23.76	23.85	23.69	25.5	23.76	23.85
				24.09	24.19	24.10	25.5		
		1	99	23.90	23.95	23.88	25.5	23.90	23.95
				23.16	23.07	23.11	24.5		
		50	25	23.13	23.23	23.17	24.5	23.13	23.23
				23.14	23.18	23.21	24.5		
	16QAM	1	50	22.98	23.24	23.20	24.5	22.98	23.24
				22.91	23.11	22.97	24.5		
		1	99	23.26	23.14	22.96	24.5	23.26	23.14
				22.20	22.15	22.13	23.5		
		50	25	22.24	22.01	22.01	23.5	22.24	22.01
				22.10	21.98	22.03	23.5		
	64QAM	1	50	22.03	22.03	21.95	23.5	22.03	22.03
				22.32	22.28	22.38	23.5		
		1	99	22.00	22.02	22.02	23.5	22.00	22.02
				20.99	21.00	21.04	22.5		
		50	25	21.02	21.08	21.06	22.5	21.02	21.08
				21.03	21.06	21.07	22.5		
100	50	20.92	21.05	20.96	22.5	20.92	21.05		
		20.92	21.05	20.96	22.5				
15M	QPSK	1	37	23.74	23.76	23.57	25.5	23.74	23.76
				24.05	24.11	23.97	25.5		
		1	74	23.76	23.63	23.73	25.5	23.76	23.63
				23.06	22.98	23.07	24.5		
		36	19	23.06	22.98	23.07	24.5	23.06	

LTE Band 7								
BW	Modulation	RB Size	RB Offset	Low	Mid	High	Max. Tune-up (dBm)	
		Channel		2880	2100	2130		
20M	QPSK	1	0	22.85	22.57	22.60	24	
		1	50	22.24	22.90	22.96	24	
		1	99	22.77	22.41	22.74	24	
		50	0	22.68	22.56	22.63	24	
		50	25	22.86	22.67	22.82	24	
		50	50	22.79	22.51	22.64	24	
		100	0	22.78	22.41	22.77	24	
		1	0	22.68	22.45	22.59	24	
		1	50	23.10	22.84	22.77	24	
		1	99	22.66	22.46	22.84	24	
		50	0	21.81	21.51	21.82	23	
		50	25	22.04	21.65	21.76	23	
	50	50	21.92	21.62	21.71	23		
	100	0	21.86	21.56	21.75	23		
	1	0	22.04	21.93	21.34	23		
	1	50	22.28	22.07	21.70	23		
	1	99	21.91	21.85	21.46	23		
	50	0	20.79	20.67	20.79	22		
	50	25	21.06	21.09	20.97	22		
	50	50	20.98	20.95	20.78	22		
	100	0	21.00	20.95	20.84	22		
	15M	QPSK	1	0	22.82	2100	2175	Max. Tune-up (dBm)
			1	0	22.82	2100	2175	Max. Tune-up (dBm)
			1	0	22.79	22.42	22.59	24
1			37	23.19	22.87	22.86	24	
1			74	22.74	22.30	22.68	24	
36			0	22.57	22.41	22.59	24	
36			19	22.75	22.65	22.76	24	
36			39	22.76	22.45	22.57	24	
75			0	22.73	22.40	22.75	24	
1			0	22.80	22.39	22.54	24	
1			37	23.02	22.83	22.71	24	
1			74	22.61	22.37	22.77	24	
36		0	21.77	21.50	21.68	23		
36		19	22.01	21.51	21.70	23		
36		39	21.77	21.33	21.64	23		
75		0	21.85	21.50	21.70	23		
1		0	21.96	21.84	21.24	23		
1		37	22.13	21.96	21.33	23		
1		74	21.78	21.78	21.35	23		
36		0	20.72	20.75	20.66	22		
36		19	20.94	21.08	20.85	22		
36		39	20.94	20.95	20.73	22		
75		0	20.88	20.90	20.70	22		
10M		QPSK	1	0	22.75	2100	2160	Max. Tune-up (dBm)
	1		0	22.75	2100	2160	Max. Tune-up (dBm)	
	1		0	22.75	22.56	22.53	24	
	1		24	23.09	22.80	22.85	24	
	1		49	22.70	22.30	22.64	24	
	25		0	22.66	22.41	22.59	24	
	25		12	22.85	22.65	22.67	24	
	25		25	22.74	22.39	22.65	24	
	50		0	22.66	22.39	22.65	24	
	1		0	22.66	22.36	22.48	24	
	1		24	23.03	22.71	22.71	24	
	1		49	22.63	22.38	22.82	24	
	25	0	21.68	21.45	21.80	23		
	25	12	21.96	21.64	21.73	23		
	25	25	21.79	21.27	21.61	23		
	50	0	21.77	21.49	21.60	23		
	1	0	22.01	21.83	21.30	23		
	1	24	22.24	21.96	21.61	23		
	1	49	21.79	21.75	21.42	23		
	25	0	20.67	20.78	20.71	22		
	25	12	20.95	21.00	20.89	22		
	25	25	20.89	20.91	20.70	22		
	50	0	20.87	20.87	20.75	22		
	5M	QPSK	1	0	22.74	2100	2142	Max. Tune-up (dBm)
1			0	22.74	2100	2142	Max. Tune-up (dBm)	
1			0	22.74	22.55	22.58	24	
1			12	23.20	22.82	22.87	24	
1			24	22.62	22.26	22.65	24	
12			0	22.67	22.49	22.50	24	
12			6	22.80	22.54	22.81	24	
12			13	22.68	22.40	22.54	24	
25			0	22.71	22.28	22.73	24	
1			0	22.63	22.31	22.47	24	
1			12	23.09	22.80	22.67	24	
1			24	22.51	22.38	22.75	24	
12		0	21.76	21.40	21.75	23		
12		6	21.89	21.51	21.75	23		
12		13	21.79	21.34	21.58	23		
25		0	21.85	21.52	21.69	23		
1		0	22.02	21.83	21.23	23		
1		12	22.22	21.92	21.61	23		
1		24	21.82	21.82	21.33	23		
12		0	20.78	20.72	20.72	22		
12		6	20.98	20.90	20.83	22		
12		13	20.84	20.91	20.85	22		
25		0	20.82	20.82	20.72	22		

LTE Band 13								
BW	Modulation	RB Size	RB Offset	Low	Mid	High	Max. Tune-up (dBm)	
		Channel		2320	2320	2320		
10M	QPSK	1	0	24.42	24.36	24.40	25.5	
		1	24	24.42	24.36	24.40	25.5	
		1	49	24.40	24.40	24.40	25.5	
		25	0	23.51	23.51	23.51	24.5	
		25	12	23.63	23.63	23.63	24.5	
		25	25	23.56	23.56	23.56	24.5	
		50	0	23.53	23.53	23.53	24.5	
		1	0	23.48	23.48	23.48	24.5	
		1	24	23.74	23.74	23.74	24.5	
		1	49	23.56	23.56	23.56	24.5	
		25	0	22.51	22.51	22.51	23.5	
		25	12	22.52	22.52	22.52	23.5	
	25	25	22.49	22.49	22.49	23.5		
	50	0	22.55	22.55	22.55	23.5		
	1	0	22.58	22.58	22.58	23.5		
	1	24	22.78	22.78	22.78	23.5		
	1	49	22.59	22.59	22.59	23.5		
	25	0	21.49	21.49	21.49	22.5		
	25	12	21.48	21.48	21.48	22.5		
	25	25	21.47	21.47	21.47	22.5		
	50	0	21.51	21.51	21.51	22.5		
	5M	QPSK	1	0	24.35	24.30	24.42	25.5
			1	12	24.53	24.42	24.48	25.5
			1	24	24.37	24.36	24.26	25.5
12			0	23.37	23.40	23.41	24.5	
12			6	23.50	23.51	23.49	24.5	
12			13	23.54	23.45	23.50	24.5	
25			0	23.48	23.51	23.42	24.5	
1			0	23.36	23.35	23.44	24.5	
1			12	23.73	23.73	23.70	24.5	
1			24	23.45	23.42	23.44	24.5	
12			0	22.41	22.49	22.45	23.5	
12			6	22.45	22.44	22.39	23.5	
12		13	22.38	22.37	22.41	23.5		
25		0	22.49	22.40	22.53	23.5		
1		0	22.45	22.54	22.43	23.5		
1		12	22.73	22.67	22.72	23.5		
1		24	22.45	22.48	22.50	23.5		
12		0	21.40	21.38	21.44	22.5		
12		6	21.39	21.44	21.39	22.5		
12		13	21.39	21.44	21.36	22.5		
25		0	21.39	21.47	21.47	22.5		

LTE Band 26								
BW	Modulation	RB Size	RB Offset	Low	Mid	High	Max. Tune-up (dBm)	
		Channel		2676	2685	2686		
15M	QPSK	1	0	24.42	24.36	24.40	25.5	
		1	37	24.68	24.66	24.64	25.5	
		1	74	24.43	24.41	24.36	25.5	
		36	0	23.52	23.54	23.55	24.5	
		36	19	23.61	23.58	23.57	24.5	
		36	39	23.49	23.57	23.54	24.5	
		75	0	23.56	23.56	23.56	24.5	
		1	0	23.59	23.65	23.56	24.5	
		1	37	23.82	23.78	23.87	24.5	
		1	74	23.67	23.70	23.66	24.5	
		36	0	22.55	22.64	22.54	23.5	
		36	19	22.60	22.62	22.56	23.5	
	36	39	22.52	22.65	22.57	23.5		
	75	0	22.54	22.67	22.58	23.5		
	1	0	22.73	22.63	22.64	23.5		
	1	37	22.90	22.83	22.86	23.5		
	1	74	22.64	22.56	22.67	23.5		
	36	0	21.61	21.61	21.56	22.5		
	36	19	21.61	21.62	21.58	22.5		
	36	39	21.53	21.58	21.52	22.5		
	75	0	21.51	21.51	21.53	22.5		
	10M	QPSK	1	0	24.39	24.31	24.35	25.5
			1	24	24.57	24.53	24.55	25.5
			1	49	24.36	24.28	24.27	25.5
25			0	23.50	23.57	23.50	24.5	
25			12	23.43	23.53	23.53	24.5	
25			25	23.43	23.45	23.40	24.5	
50			0	23.37	23.49	23.46	24.5	
1			0	23.53	23.50	23.51	24.5	
1			24	23.75	23.75	23.63	24.5	
1			49	23.57	23.69	23.56	24.5	
25			0	22.40	22.56	22.43	23.5	
25			12	22.59	22.59	22.55	23.5	
25		25	22.48	22.52	22.44	23.5		
50		0	22.50	22.60	22.51	23.5		
1		0	22.58	22.60	22.60	23.5		
1		24	22.88	22.88	22.76	23.5		
1		49	22.50	22.50	22.50	23.5		
25		0	21.50	21.58	21.48	22.5		
25		12	21.53	21.58	21.47	22.5		
25		25	21.47	21.51	21.42	22.5		
50		0	21.36	21.53	21.38	22.5		
5M		QPSK	1	0	24.37	24.30	24.47	25.5
			1	12	24.58	24.56	24.60	25.5
			1	24	24.40	24.37	24.25	25.5
	12		0	23.48	23.56	23.42	24.5	
	12		6	23.42	23.58	23.42	24.5	
	12		13	23.48	23.47	23.41	24.5	

LTE Band 38										
BW	Modulation	RB Size	RB Offset	Channel			Low	Mid	High	Max. Turn-up (dBm)
				3875	3985	4095				
20M	QPSK	50	0	23.87	23.95	23.85	25			
			1	50	24.25	24.28	24.22	25		
			1	99	23.95	23.92	23.95	25		
			50	0	23.02	23.13	23.13	24		
			50	25	23.10	23.19	23.15	24		
			50	50	23.07	23.11	23.08	24		
	16QAM	1	0	22.95	23.02	22.71	24			
		1	50	23.33	23.33	23.10	24			
		1	99	22.88	22.78	22.73	24			
		50	0	22.03	22.01	21.78	23			
		50	25	22.13	22.11	22.14	23			
		50	50	22.15	22.06	22.11	23			
64QAM	1	0	22.08	22.02	22.12	23				
	1	0	21.78	21.95	21.61	23				
	1	50	22.00	22.27	21.93	23				
	1	99	21.62	21.63	21.52	23				
	50	0	20.96	20.94	21.04	22				
	50	25	21.06	20.97	21.05	22				
15M	QPSK	36	0	22.97	23.01	23.00	24			
			1	0	22.91	22.94	22.97	24		
			1	37	23.26	23.27	23.03	24		
			1	74	22.62	22.63	22.65	24		
			36	0	21.86	21.97	22.04	23		
			36	39	23.01	23.00	22.98	24		
	16QAM	75	0	22.97	23.01	23.00	24			
		1	0	22.91	22.94	22.97	24			
		1	37	23.26	23.27	23.03	24			
		1	74	22.62	22.63	22.65	24			
		36	0	21.86	21.97	22.04	23			
		36	39	23.01	23.00	22.98	24			
64QAM	75	0	22.97	23.01	23.00	24				
	1	0	22.91	22.94	22.97	24				
	1	37	23.26	23.27	23.03	24				
	1	74	22.62	22.63	22.65	24				
	36	0	21.86	21.97	22.04	23				
	36	39	23.01	23.00	22.98	24				
10M	QPSK	25	0	22.97	23.01	23.00	24			
			1	0	22.91	22.94	22.97	24		
			1	37	23.26	23.27	23.03	24		
			1	74	22.62	22.63	22.65	24		
			25	0	21.86	21.97	22.04	23		
			25	25	23.03	23.02	23.01	24		
	16QAM	50	0	22.98	23.00	23.08	24			
		1	0	22.92	23.00	22.68	24			
		1	24	23.28	23.26	23.29	24			
		1	49	22.74	22.68	22.86	24			
		25	0	21.86	21.97	22.04	23			
		25	25	23.03	23.02	23.01	24			
64QAM	50	0	22.98	23.00	23.08	24				
	1	0	22.92	23.00	22.68	24				
	1	24	23.28	23.26	23.29	24				
	1	49	22.74	22.68	22.86	24				
	25	0	21.86	21.97	22.04	23				
	25	25	23.03	23.02	23.01	24				
5M	QPSK	12	0	23.84	23.94	23.84	25			
			1	12	24.21	24.23	24.09	25		
			1	24	23.80	23.83	23.81	25		
			12	0	23.01	23.05	23.12	24		
			12	6	23.07	23.10	23.13	24		
			12	13	23.05	23.01	23.01	24		
	16QAM	25	0	23.08	23.07	23.00	24			
		1	0	22.83	22.93	22.66	24			
		1	12	23.28	23.28	23.27	24			
		1	24	22.74	22.73	22.67	24			
		12	0	21.97	21.92	22.04	23			
		12	6	21.99	21.97	22.00	23			
64QAM	12	0	21.98	21.95	21.98	23				
	1	0	21.98	21.90	21.98	23				
	1	0	21.68	21.90	21.53	23				
	1	12	21.98	22.14	21.97	23				
	1	24	21.55	21.51	21.69	23				
	12	0	20.92	20.85	21.00	22				
BW	QPSK	Channel	Frequency (MHz)	3875.5	3985	4095.5	Max. Turn-up (dBm)			
				1	0	23.84	23.94	23.84	25	
				1	12	24.21	24.23	24.09	25	
				1	24	23.80	23.83	23.81	25	
				12	0	23.01	23.05	23.12	24	
				12	6	23.07	23.10	23.13	24	
	16QAM	25	0	23.08	23.07	23.00	24			
		1	0	22.83	22.93	22.66	24			
		1	12	23.28	23.28	23.27	24			
		1	24	22.74	22.73	22.67	24			
		12	0	21.97	21.92	22.04	23			
		12	6	21.99	21.97	22.00	23			
64QAM	12	0	21.98	21.95	21.98	23				
	1	0	21.98	21.90	21.98	23				
	1	0	21.68	21.90	21.53	23				
	1	12	21.98	22.14	21.97	23				
	1	24	21.55	21.51	21.69	23				
	12	0	20.92	20.85	21.00	22				

LTE Band 41 (2486 - 2690MHz)										
BW	Modulation	RB Size	RB Offset	Channel			Low	Mid	High	Max. Turn-up (dBm)
				2486	2546	2606				
20M	QPSK	50	0	23.73	23.95	23.75	25			
			1	50	24.04	24.22	24.00	25		
			1	99	23.72	23.75	23.64	25		
			50	0	22.76	23.01	22.77	24		
			50	25	22.90	23.08	22.81	24		
			50	50	22.89	22.97	22.84	24		
	16QAM	1	0	22.70	22.96	22.78	24			
		1	50	23.13	23.25	22.99	24			
		1	99	22.80	22.80	22.56	24			
		50	0	21.85	22.03	21.83	23			
		50	25	21.93	22.10	21.90	23			
		50	50	22.00	22.05	21.78	23			
64QAM	1	0	21.85	22.10	21.82	23				
	1	0	21.66	21.53	21.68	23				
	1	50	21.71	21.80	21.57	23				
	1	99	21.59	21.37	21.58	23				
	50	0	20.72	21.02	20.79	22				
	50	25	20.89	21.05	20.89	22				
15M	QPSK	36	0	23.63	23.62	23.68	25			
			1	37	23.99	24.13	23.89	25		
			1	74	23.65	23.68	23.56	25		
			36	0	22.67	22.95	22.71	24		
			36	19	22.78	22.88	22.77	24		
			36	39	22.88	22.88	22.61	24		
	16QAM	75	0	22.79	23.08	22.77	24			
		1	0	22.63	22.92	22.65	24			
		1	37	23.11	23.10	22.89	24			
		1	74	22.70	22.70	22.42	24			
		36	0	21.73	21.96	21.86	23			
		36	19	21.87	22.06	21.78	23			
64QAM	75	0	22.79	23.08	22.77	24				
	1	0	22.63	22.92	22.65	24				
	1	37	23.11	23.10	22.89	24				
	1	74	22.70	22.70	22.42	24				
	36	0	21.73	21.96	21.86	23				
	36	19	21.87	22.06	21.78	23				
10M	QPSK	25	0	23.63	23.62	23.68	25			
			1	37	23.99	24.13	23.89	25		
			1	74	23.65	23.68	23.56	25		
			25	0	22.67	22.95	22.71	24		
			25	12	22.88	22.88	22.61	24		
			25	25	22.86	22.89	22.62	24		
	16QAM	50	0	22.88	23.00	22.83	24			
		1	0	22.61	22.84	22.65	24			
		1	24	23.01	23.12	22.89	24			
		1	49	22.66	22.76	22.47	24			
		25	0	21.73	21.96	21.86	23			
		25	25	23.03	23.02	23.01	24			
64QAM	50	0	22.88	23.00	22.83	24				
	1	0	22.61	22.84	22.65	24				
	1	24	23.01	23.12	22.89	24				
	1	49	22.66	22.76	22.47	24				
	25	0	21.73	21.96	21.86	23				
	25	25	23.03	23.02	23.01	24				
5M	QPSK	12	0	23.71	23.97	23.63	25			
			1	24	24.02	24.21	24.00	25		
			1	49	23.62	23.62	23.59	25		
			12	0	22.66	22.98	22.74	24		
			12	6	22.88	22.97	22.71	24		
			12	13	22.88	22.95	22.79	24		
	16QAM	25	0	22.85	23.02	22.77	24			
		1	0	22.60	22.83	22.68	24			
		1	12	23.07	23.21	22.93	24			
		1	24	22.77	22.73	22.42	24			
		12	0	21.84	21.96	21.82	23			
		12	6	21.78	22.07	21.75	23			
64QAM	12	0	21.98	22.03	21.64	23				
	1	0	21.92	22.02	21.77	23				
	1	0	21.54	21.76	21.53	23				
	1	12	21.65	21.76	21.50	23				
	1	24	21.44	21.34	21.53	23				
	12	0	20.58	20.88	20.69	22				
BW	QPSK	Channel	Frequency (MHz)	2486	2546	2606	Max. Turn-up (dBm)			
				1	0	23.71	23.97	23.63	25	
				1	12	23.95	24.17	23.89	25	
				1	24	23.64	23.63	23.55	25	
				12	0	22.70	22.84	22.74	24	
				12	6	22.88	22.97	22.71	24	
	16QAM	25	0	22.85	23.02	22.77	24			
		1	0	22.60	22.83	22.68	24			
		1	12	23.07	23.21	22.93	24			
		1	24	22.77	22.73	22.42	24			
		12	0	21.84	21.96	21.82	23			
		12	6	21.78	22.07	21.75	23			
64QAM	12	0	21.98	22.03	21.64	23				
	1	0	21.92	22.02	21.77	23				
	1	0	21.54	21.76	21.53	23				
	1	12	21.65	21.76	21.50	23				
	1	24	21.44	21.34	21.53	23				
	12	0	20.58	20.88	20.69	22				

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		LTE Band 2						
BW	Modulation	Channel	RB Size	RB Offset	Low	Mid	High	Max. Tune-up (dBm)
		Frequency (MHz)	1800	1880	1960	1960	1960	
20M	QPSK	1	0	21.58	21.56	21.54	23	
		1	50	21.96	21.96	21.96	23	
		1	99	21.60	21.62	21.51	23	
		50	0	21.78	21.78	21.81	23	
		50	25	21.63	21.78	21.86	23	
		50	50	21.74	21.85	21.73	23	
	16QAM	100	0	21.86	21.81	21.84	23	
		1	0	21.83	21.58	21.52	23	
		1	50	21.85	21.81	21.69	23	
		1	99	21.66	21.68	21.56	23	
		50	0	21.41	21.39	21.56	23	
		50	25	21.56	21.52	21.55	23	
64QAM	100	0	21.43	21.42	21.40	23		
	1	0	21.44	21.34	21.30	23		
	1	50	21.66	21.70	21.62	23		
	1	99	21.40	21.28	21.39	23		
	50	0	21.20	21.26	21.36	23		
	50	25	21.34	21.23	21.28	23		
15M	QPSK	1	0	21.19	21.32	21.17	23	
		1	0	21.48	21.44	21.44	23	
		1	37	21.64	21.69	21.84	23	
		1	74	21.69	21.45	21.47	23	
		36	0	21.65	21.63	21.78	23	
		36	19	21.78	21.66	21.78	23	
	16QAM	36	39	21.61	21.81	21.70	23	
		75	0	21.64	21.74	21.71	23	
		1	0	21.55	21.53	21.49	23	
		1	37	21.71	21.74	21.65	23	
		1	74	21.62	21.51	21.42	23	
		36	0	21.31	21.35	21.41	23	
64QAM	36	19	21.41	21.47	21.42	23		
	36	39	21.30	21.56	21.28	23		
	75	0	21.38	21.41	21.34	23		
	1	0	21.42	21.20	21.29	23		
	1	37	21.62	21.65	21.59	23		
	1	74	21.26	21.16	21.25	23		
10M	QPSK	36	0	21.30	21.16	21.32	23	
		36	19	21.32	21.18	21.12	23	
		36	39	20.98	21.27	21.08	23	
		75	0	21.10	21.19	21.16	23	
		1	0	21.52	21.49	21.47	23	
		1	24	21.71	21.70	21.72	23	
	16QAM	1	49	21.49	21.45	21.42	23	
		25	0	21.72	21.75	21.78	23	
		25	12	21.68	21.73	21.80	23	
		25	25	21.71	21.83	21.81	23	
		50	0	21.82	21.77	21.73	23	
		1	0	21.49	21.52	21.37	23	
64QAM	1	24	21.64	21.66	21.55	23		
	1	49	21.62	21.58	21.44	23		
	25	0	21.30	21.15	21.32	23		
	25	12	21.45	21.38	21.53	23		
	25	25	21.24	21.55	21.30	23		
	50	0	21.35	21.28	21.33	23		
5M	QPSK	1	0	21.36	21.31	21.21	23	
		1	24	21.64	21.68	21.51	23	
		1	49	21.27	21.15	21.35	23	
		25	0	21.12	21.16	21.35	23	
		25	12	21.19	21.19	21.18	23	
		25	25	21.09	21.15	21.09	23	
	16QAM	25	0	21.15	21.22	21.10	23	
		1	0	21.53	21.51	21.53	23	
		1	12	21.79	21.78	21.80	23	
		1	24	21.52	21.39	21.47	23	
		12	0	21.83	21.71	21.77	23	
		12	6	21.74	21.69	21.78	23	
64QAM	12	13	21.70	21.81	21.59	23		
	25	0	21.72	21.68	21.75	23		
	1	0	21.53	21.50	21.51	23		
	1	12	21.79	21.69	21.58	23		
	1	24	21.53	21.62	21.48	23		
	12	0	21.36	21.25	21.47	23		
3M	QPSK	12	6	21.52	21.49	21.54	23	
		12	13	21.28	21.43	21.23	23	
		25	0	21.41	21.41	21.28	23	
		1	0	21.35	21.30	21.17	23	
		1	12	21.62	21.56	21.52	23	
		1	24	21.28	21.21	21.32	23	
	16QAM	12	0	21.14	21.11	21.23	23	
		12	6	21.23	21.22	21.26	23	
		12	13	21.10	21.14	21.03	23	
		25	0	21.09	21.17	21.03	23	
		1	0	21.53	21.43	21.49	23	
		1	2	21.73	21.66	21.79	23	
64QAM	1	5	21.51	21.49	21.49	23		
	3	0	22.80	22.55	22.57	23		
	3	1	22.83	22.54	22.59	23		
	3	3	22.53	22.61	22.40	23		
	6	0	21.72	21.78	21.72	23		
	1	0	21.55	21.45	21.38	23		
1.4M	QPSK	1	0	21.74	21.68	21.62	23	
		1	5	21.59	21.55	21.55	23	
		3	0	22.21	22.09	22.32	23	
		3	1	22.24	22.23	22.33	23	
		3	3	22.09	22.32	22.06	23	
		6	0	21.80	21.38	21.38	23	
	16QAM	1	0	21.37	21.29	21.17	23	
		1	2	21.54	21.56	21.48	23	
		1	5	21.34	21.27	21.35	23	
		3	0	21.65	21.68	21.77	23	
		3	1	21.77	21.61	21.63	23	
		3	3	21.42	21.65	21.51	23	
64QAM	6	0	21.07	21.25	21.14	23		

		LTE Band 4						
BW	Modulation	Channel	RB Size	RB Offset	Low	Mid	High	Max. Tune-up (dBm)
		Frequency (MHz)	1700	1780	1860	1915	1915	
20M	QPSK	1	0	20.84	20.88	20.77	22.5	
		1	50	21.14	21.32	21.17	22.5	
		1	99	20.98	21.04	20.91	22.5	
		50	0	20.81	20.77	20.79	22.5	
		50	25	20.87	20.78	20.82	22.5	
		50	50	20.82	20.91	20.98	22.5	
	16QAM	100	0	20.93	20.91	20.85	22.5	
		1	0	20.71	20.87	20.82	22.5	
		1	50	21.03	21.05	21.03	22.5	
		1	99	20.96	20.87	20.79	22.5	
		50	0	20.87	20.79	20.79	22.5	
		50	25	20.91	20.92	20.77	22.5	
64QAM	100	0	20.82	20.67	20.69	22.5		
	1	0	20.84	20.73	20.78	22.5		
	1	50	21.01	21.00	21.13	22.5		
	1	99	20.77	20.74	20.72	22.5		
	50	0	21.08	21.12	21.10	22.5		
	50	25	21.05	21.10	21.20	22.5		
15M	QPSK	1	0	20.84	20.78	20.78	22.5	
		1	37	20.94	21.04	20.89	22.5	
		1	74	20.89	20.74	20.80	22.5	
		36	0	20.80	20.68	20.65	22.5	
		36	19	20.90	20.79	20.68	22.5	
		36	39	20.65	20.69	20.62	22.5	
	16QAM	75	0	20.81	20.87	20.72	22.5	
		1	0	20.76	20.78	20.78	22.5	
		1	37	20.94	21.04	20.89	22.5	
		1	74	20.89	20.74	20.80	22.5	
		36	0	20.80	20.68	20.65	22.5	
		36	19	20.90	20.79	20.68	22.5	
64QAM	36	39	20.65	20.69	20.62	22.5		
	75	0	20.67	20.64	20.61	22.5		
	1	0	20.72	20.71	20.65	22.5		
	1	37	20.87	20.92	20.98	22.5		
	1	74	20.65	20.68	20.67	22.5		
	36	0	21.04	21.06	21.08	22.5		
10M	QPSK	36	19	21.03	21.04	21.07	22.5	
		36	39	20.95	21.09	21.05	22.5	
		75	0	21.04	21.12	20.93	22.5	
		1	0	20.72	20.71	20.65	22.5	
		1	37	20.87	20.92	20.98	22.5	
		1	74	20.65	20.68	20.67	22.5	
	16QAM	36	0	21.04	21.06	21.08	22.5	
		36	19	20.95	21.09	21.05	22.5	
		25	0	20.82	20.72	20.84	22.5	
		1	0	20.58	20.84	20.72	22.5	
		1	24	20.91	20.90	20.89	22.5	
		1	49	20.84	20.73	20.85	22.5	
64QAM	25	0	20.82	20.72	20.84	22.5		
	25	12	20.84	20.79	20.70	22.5		
	25	25	20.95	20.56	20.57	22.5		
	50	0	20.72	20.59	20.54	22.5		
	1	0	20.75	20.60	20.63	22.5		
	1	24	20.97	20.95	21.11	22.5		
5M	QPSK	1	0	20.71	20.83	20.80	22.5	
		1	24	21.09	21.28	21.04	22.5	
		1	49	20.85	21.03	20.89	22.5	
		25	0	20.74	20.68	20.66	22.5	
		25	12	20.77	20.82	20.87	22.5	
		25	25	20.71	20.89	20.86	22.5	
	16QAM	50	0	20.92	20.77	20.84	22.5	
		1	0	20.58	20.84	20.72	22.5	
		1	24	20.91	20.90			

LTE Band 7									
BW	Modulation	RB Size	RB Offset	Low	Mid	High	Max. Tune-up (dBm)		
		Channel	2956	2986	21106	21359			
20M	QPSK	1	0	19.07	18.70	18.93	20		
		1	50	19.41	19.13	19.25	20		
		1	99	19.02	18.71	18.92	20		
		50	0	19.01	18.82	19.00	20		
		50	25	19.04	18.85	19.02	20		
		50	50	19.03	18.70	18.86	20		
		100	0	19.00	18.63	18.90	20		
		1	0	18.78	18.39	19.01	20		
		1	50	19.01	18.75	19.28	20		
		1	99	18.91	18.58	19.12	20		
		50	0	18.96	18.56	18.82	20		
		50	25	19.00	18.65	18.84	20		
	50	50	19.06	18.56	18.85	20			
	100	0	18.90	18.59	18.84	20			
	16QAM	1	0	18.86	18.77	18.69	20		
		1	50	19.15	19.11	18.69	20		
		1	99	19.03	18.89	18.61	20		
		50	0	19.02	18.96	18.89	20		
		50	25	19.02	19.03	18.97	20		
		50	50	19.07	18.92	18.88	20		
		100	0	19.02	18.97	18.91	20		
		64QAM	1	0	18.86	18.77	18.69	20	
			1	50	19.15	19.11	18.69	20	
			1	99	19.03	18.89	18.61	20	
50			0	19.02	18.96	18.89	20		
50			25	19.02	19.03	18.97	20		
50	50		19.07	18.92	18.88	20			
100	0		19.02	18.97	18.91	20			
20M	QPSK		1	0	18.94	18.58	18.86	20	
			1	37	19.29	19.12	19.22	20	
			1	74	18.87	18.64	18.81	20	
			36	0	18.87	18.73	18.87	20	
			36	19	18.91	18.80	19.01	20	
		36	39	18.97	18.64	18.83	20		
		75	0	18.88	18.48	18.83	20		
		1	0	18.70	18.28	19.00	20		
		1	37	18.90	18.73	19.13	20		
		1	74	18.79	18.46	19.02	20		
		36	0	18.81	18.42	18.67	20		
		36	19	18.87	18.64	18.71	20		
36	39	19.04	18.48	18.75	20				
75	0	18.82	18.28	18.80	20				
15M	16QAM	1	0	18.71	18.73	18.67	20		
		1	37	19.00	19.00	18.64	20		
		1	74	18.68	18.81	18.46	20		
		36	0	18.94	18.86	18.77	20		
		36	19	18.92	18.86	18.93	20		
		36	39	18.99	18.90	18.84	20		
	75	0	18.96	18.83	18.80	20			
	64QAM	1	0	18.80	18.80	18.60	20		
		1	37	19.00	19.00	18.64	20		
		1	74	18.68	18.81	18.46	20		
		36	0	18.94	18.86	18.77	20		
		36	19	18.92	18.86	18.93	20		
36		39	18.99	18.90	18.84	20			
10M	QPSK	1	0	19.03	18.57	18.78	20		
		1	24	19.27	19.01	19.13	20		
		1	49	18.95	18.59	18.86	20		
		25	0	19.00	18.75	19.00	20		
		25	12	18.91	18.78	18.93	20		
		25	25	18.91	18.60	18.84	20		
	50	0	18.97	18.61	18.94	20			
	16QAM	1	0	18.66	18.24	18.87	20		
		1	24	18.91	18.69	19.27	20		
		1	49	18.81	18.54	19.03	20		
		25	0	18.84	18.55	18.74	20		
		25	12	18.86	18.64	18.75	20		
25		25	18.98	18.50	18.75	20			
50	0	18.75	18.44	18.74	20				
64QAM	1	0	18.78	18.74	18.62	20			
	1	24	19.05	18.97	18.60	20			
	1	49	18.98	18.87	18.51	20			
	25	0	18.91	18.93	18.87	20			
	25	12	18.94	18.95	18.86	20			
	25	25	18.93	18.88	18.86	20			
5M	QPSK	1	0	18.93	18.55	18.80	20		
		1	12	19.36	19.10	19.18	20		
		1	24	18.93	18.63	18.91	20		
		12	0	18.91	18.79	18.90	20		
		12	6	18.93	18.80	18.96	20		
		12	13	18.89	18.56	18.85	20		
	25	0	18.85	18.56	18.84	20			
	16QAM	1	0	18.68	18.38	18.86	20		
		1	12	18.89	18.67	19.19	20		
		1	24	18.85	18.45	19.06	20		
		12	0	18.81	18.50	18.76	20		
		12	6	18.96	18.82	18.73	20		
12		13	19.05	18.50	18.77	20			
25	0	18.77	18.45	18.73	20				
64QAM	1	0	18.75	18.74	18.62	20			
	1	12	19.12	19.08	18.58	20			
	1	24	18.91	18.77	18.52	20			
	12	0	18.88	18.89	18.77	20			
	12	6	19.00	18.93	18.90	20			
	12	13	19.00	18.84	18.86	20			
25	0	18.93	18.86	18.78	20				
20M	QPSK	1	0	19.03	18.57	18.78	20		
		1	24	19.27	19.01	19.13	20		
		1	49	18.95	18.59	18.86	20		
		25	0	19.00	18.75	19.00	20		
		25	12	18.91	18.78	18.93	20		
		25	25	18.91	18.60	18.84	20		
		50	0	18.97	18.61	18.94	20		
		15M	16QAM	1	0	18.66	18.24	18.87	20
				1	24	18.91	18.69	19.27	20
				1	49	18.81	18.54	19.03	20
				25	0	18.84	18.55	18.74	20
				25	12	18.86	18.64	18.75	20
25	25			18.98	18.50	18.75	20		
50	0		18.75	18.44	18.74	20			
64QAM	1		0	18.78	18.74	18.62	20		
	1		24	19.05	18.97	18.60	20		
	1		49	18.98	18.87	18.51	20		
	25		0	18.91	18.93	18.87	20		
	25		12	18.94	18.95	18.86	20		
	25	25	18.93	18.88	18.86	20			
10M	QPSK	1	0	19.03	18.57	18.78	20		
		1	24	19.27	19.01	19.13	20		
		1	49	18.95	18.59	18.86	20		
		25	0	19.00	18.75	19.00	20		
		25	12	18.91	18.78	18.93	20		
		25	25	18.91	18.60	18.84	20		
	50	0	18.97	18.61	18.94	20			
	16QAM	1	0	18.66	18.24	18.87	20		
		1	24	18.91	18.69	19.27	20		
		1	49	18.81	18.54	19.03	20		
		25	0	18.84	18.55	18.74	20		
		25	12	18.86	18.64	18.75	20		
25		25	18.98	18.50	18.75	20			
50	0	18.75	18.44	18.74	20				
64QAM	1	0	18.78	18.74	18.62	20			
	1	24	19.05	18.97	18.60	20			
	1	49	18.98	18.87	18.51	20			
	25	0	18.91	18.93	18.87	20			
	25	12	18.94	18.95	18.86	20			
	25	25	18.93	18.88	18.86	20			
5M	QPSK	1	0	18.93	18.55	18.80	20		
		1	12	19.36	19.10	19.18	20		
		1	24	18.93	18.63	18.91	20		
		12	0	18.91	18.79	18.90	20		
		12	6	18.93	18.80	18.96	20		
		12	13	18.89	18.56	18.85	20		
	25	0	18.85	18.56	18.84	20			
	16QAM	1	0	18.68	18.38	18.86	20		
		1	12	18.89	18.67	19.19	20		
		1	24	18.85	18.45	19.06	20		
		12	0	18.81	18.50	18.76	20		
		12	6	18.96	18.82	18.73	20		
12		13	19.05	18.50	18.77	20			
25	0	18.77	18.45	18.73	20				
64QAM	1	0	18.75	18.74	18.62	20			
	1	12	19.12	19.08	18.58	20			
	1	24	18.91	18.77	18.52	20			
	12	0	18.88	18.89	18.77	20			
	12	6	19.00	18.93	18.90	20			
	12	13	19.00	18.84	18.86	20			
25	0	18.93	18.86	18.78	20				

LTE Band 13								
BW	Modulation	RB Size	RB Offset	Low	Mid	High	Max. Tune-up (dBm)	
		Channel	2329	782	784.5			
10M	QPSK	1	0	24.45	24.45	25.5	20	
		1	24	24.45	24.45	25.5	20	
		1	49	24.40	24.40	25.5	20	
		25	0	23.51	23.51	24.5	20	
		25	12	23.63	23.63	24.5	20	
		25	25	23.59	23.59	24.5	20	
		50	0	23.53	23.53	24.5	20	
		1	0	23.46	23.46	24.5	20	
		1	24	23.74	23.74	24.5	20	
		1	49	23.56	23.56	24.5	20	
		25	0	22.51	22.51	23.5	20	
		25	12	22.52	22.52	23.5	20	
	25	25	22.49	22.49	23.5	20		
	50	0	22.55	22.55	23.5	20		
	16QAM	1	0	22.58	22.58	23.5	20	
		1	24	22.78	22.78	23.5	20	
		1	49	22.59	22.59	23.5	20	
		25	0	21.49	21.49	22.5	20	
		25	12	21.48	21.48	22.5	20	
		25	25	21.47	21.47	22.5	20	
		50	0	21.51	21.51	22.5	20	
		64QAM	1	0	22.58	22.58	23.5	20
			1	24	22.78	22.78	23.5	20
			1	49	22.59	22.59	23.5	20
25			0	21.49	21.49	22.5	20	
25			12	21.48	21.48	22.5	20	
25	25							

LTE Band 38										
BW	Modulation	RB Size		RB Offset	Low	Mid	High	Max. Tilt-up (dBm)	Max. Tilt-down (dBm)	Max. Tilt-up (dBm)
		Channel	Frequency (MHz)							
QPSK	15M	1	0	19.99	20.14	20.13	21.5			
		1	50	20.59	20.66	20.61	21.5			
		1	99	20.27	20.12	20.21	21.5			
		50	0	20.19	20.28	20.10	21.5			
		50	25	20.20	20.06	19.96	21.5			
	10M	50	50	20.15	20.12	20.14	21.5			
		100	0	20.04	20.14	20.07	21.5			
		1	0	19.82	19.85	19.80	21.5			
		1	50	19.80	19.86	19.81	21.5			
		1	99	19.83	19.58	19.66	21.5			
QPSK	15M	1	0	19.99	19.86	20.07	21.5			
		50	25	20.01	19.88	19.98	21.5			
		50	50	20.07	20.05	19.85	21.5			
		100	0	20.00	19.95	20.10	21.5			
		1	0	19.75	19.68	19.81	21.5			
	10M	1	50	19.86	19.98	19.78	21.5			
		1	99	19.68	19.61	19.72	21.5			
		50	25	19.92	19.75	19.71	21.5			
		50	50	19.64	19.64	19.80	21.5			
		100	0	19.78	19.85	19.79	21.5			
QPSK	15M	1	0	20.06	20.06	20.20	21.5			
		1	37	20.57	20.55	20.55	21.5			
		1	74	20.34	20.15	20.23	21.5			
		36	0	20.11	20.08	19.98	21.5			
		36	19	19.84	19.84	19.86	21.5			
	10M	36	39	20.55	20.17	19.97	21.5			
		75	0	20.16	20.14	20.01	21.5			
		1	0	19.90	19.87	19.89	21.5			
		1	37	20.23	20.26	20.04	21.5			
		1	74	19.84	19.86	19.86	21.5			
QPSK	15M	36	0	19.97	19.94	20.01	21.5			
		36	19	20.11	19.86	20.09	21.5			
		36	39	19.99	20.03	19.86	21.5			
		75	0	19.69	19.68	19.69	21.5			
		1	37	19.63	20.03	19.67	21.5			
	10M	1	74	19.60	19.72	19.70	21.5			
		36	0	19.76	19.76	19.95	21.5			
		36	19	19.86	19.74	19.76	21.5			
		36	39	19.74	19.69	19.83	21.5			
		75	0	19.68	19.91	19.92	21.5			
QPSK	15M	1	0	20.00	20.06	20.15	21.5			
		1	24	20.63	20.61	20.58	21.5			
		1	49	20.37	20.13	20.29	21.5			
		25	0	20.13	20.06	20.01	21.5			
		25	12	20.17	20.11	20.06	21.5			
	10M	25	25	20.06	20.03	19.95	21.5			
		50	0	20.04	20.18	20.06	21.5			
		1	0	19.90	19.90	19.83	21.5			
		1	24	20.22	20.31	20.04	21.5			
		1	49	19.93	19.87	19.86	21.5			
QPSK	15M	25	0	20.03	19.88	19.95	21.5			
		25	12	20.10	19.96	20.09	21.5			
		25	25	20.00	20.00	19.91	21.5			
		50	0	20.06	19.85	20.00	21.5			
		50	0	19.67	19.75	19.78	21.5			
	10M	1	24	19.90	20.00	19.68	21.5			
		1	49	19.68	19.73	19.70	21.5			
		25	0	19.67	19.65	20.00	21.5			
		25	12	19.92	19.74	19.76	21.5			
		25	25	19.76	19.64	19.70	21.5			
QPSK	15M	50	0	19.82	19.92	19.90	21.5			
		1	0	20.01	20.03	20.16	21.5			
		1	12	20.59	20.56	20.52	21.5			
		1	24	20.38	20.14	20.18	21.5			
		12	0	20.00	20.15	20.00	21.5			
	10M	12	6	20.13	20.11	19.98	21.5			
		12	13	20.17	20.08	20.09	21.5			
		25	0	20.13	20.11	19.98	21.5			
		1	0	19.85	19.87	19.83	21.5			
		1	12	20.11	20.26	20.11	21.5			
QPSK	15M	1	24	19.83	19.66	19.74	21.5			
		12	0	20.02	19.88	19.97	21.5			
		12	6	20.11	19.95	20.10	21.5			
		12	13	20.10	20.06	19.86	21.5			
		25	0	19.89	19.82	20.05	21.5			
	10M	1	0	19.71	19.61	19.68	21.5			
		1	12	19.87	20.02	19.67	21.5			
		1	24	19.63	19.60	19.63	21.5			
		12	0	19.80	19.74	19.87	21.5			
		12	6	19.80	19.75	19.73	21.5			
QPSK	15M	12	13	19.64	19.68	19.75	21.5			
		25	0	19.71	19.90	19.85	21.5			
		1	0	19.92	19.97	19.97	21.5			
		1	12	20.57	20.54	20.52	21.5			
		1	24	20.37	20.13	20.29	21.5			
	10M	25	0	20.03	19.88	19.95	21.5			
		25	12	20.09	19.96	20.09	21.5			
		25	25	19.95	19.95	19.95	21.5			
		50	0	19.67	19.75	19.78	21.5			
		50	0	19.68	19.91	19.92	21.5			
QPSK	15M	1	0	19.92	19.97	19.97	21.5			
		1	12	19.81	19.88	19.76	21.5			
		1	24	19.40	19.49	19.45	21.5			
		12	0	19.18	19.42	19.21	21.5			
		12	6	19.40	19.57	19.30	21.5			
	10M	12	13	19.24	19.50	19.26	21.5			
		25	0	19.41	19.55	19.20	21.5			
		1	0	19.28	19.52	19.15	21.5			
		1	12	19.58	19.63	19.49	21.5			
		1	24	19.26	19.18	19.43	21.5			
QPSK	15M	12	0	19.40	19.46	19.35	21.5			
		12	6	19.51	19.47	19.35	21.5			
		12	13	19.38	19.52	19.21	21.5			
		25	0	19.27	19.50	19.28	21.5			
		1	0	19.24	19.38	19.10	21.5			
	10M	1	12	19.44	19.43	19.15	21.5			
		1	24	19.27	19.11	19.18	21.5			
		12	0	19.30	19.48	19.33	21.5			
		12	6	19.38	19.47	19.35	21.5			
		12	13	19.29	19.45	19.21	21.5			
QPSK	15M	25	0	19.39	19.52	19.32	21.5			
		1	0	19.92	19.97	19.97	21.5			
		1	12	20.57	20.54	20.52	21.5			
		1	24	20.37	20.13	20.29	21.5			
		25	0	20.03	19.88	19.95	21.5			
	10M	25	12	20.09	19.96	20.09	21.5			
		25	25	19.95	19.95	19.95	21.5			
		50	0	19.67	19.75	19.78	21.5			
		50	0	19.68	19.91	19.92	21.5			
		1	0	19.92	19.97	19.97	21.5			
QPSK	15M	1	12	19.81	19.88	19.76	21.5			
		1	24	19.40	19.49	19.45	21.5			
		12	0	19.18	19.42	19.21	21.5			
		12	6	19.40	19.57	19.30	21.5			
		12	13	19.24	19.50	19.26	21.5			
	10M	25	0	19.41	19.55	19.20	21.5			
		1	0	19.28	19.52	19.15	21.5			
		1	12	19.58	19.63	19.49	21.5			
		1	24	19.26	19.18	19.43	21.5			
		12	0	19.40	19.46	19.35	21.5			
QPSK	15M	12	6	19.51	19.47	19.35	21.5			
		12	13	19.38	19.52	19.21	21.5			
		25	0	19.27	19.50	19.28	21.5			
		1	0	19.24	19.38	19.10	21.5			
		1	12	19.44	19.43	19.15	21.5			
	10M	1	24	19.27	19.11	19.18	21.5			
		12	0	19.30	19.48	19.33	21.5			
		12	6	19.38	19.47	19.35	21.5			
		12	13	19.29	19.45	19.21	21.5			
		25	0	19.39	19.52	19.32	21.5			
QPSK	15M	1	0	19.92	19.97	19.97	21.5			
		1	12	19.81	19.88	19.76	21.5			
		1	24	19.40	19.49	19.45	21.5			
		12	0	19.18	19.42	19.21	21.5			
		12	6	19.40	19.57	19.30	21.5			

Default Power Ant4

Band	GSM850				GSM1900				
	Channel	128	189	251	Max. Tune-up Power (dBm)	512	661	810	Max. Tune-up Power (dBm)
Frequency (MHz)	824.2	836.4	848.8		1850.2	1880	1909.8		
GSM	32.39	32.52	32.58	33.50	29.26	29.25	29.34	30.50	
GPRS 1Tx Slot	32.41	32.51	32.60	33.50	29.27	29.24	29.33	30.50	
GPRS 2Tx Slot	29.03	29.11	29.29	30.00	25.66	25.71	25.93	26.50	
GPRS 3Tx Slot	27.55	27.65	27.84	28.50	23.83	23.94	24.17	25.00	
GPRS 4Tx Slot	26.52	26.61	26.79	27.50	22.84	22.99	23.23	24.00	
EDGE 1Tx Slot	27.01	27.03	27.07	28.00	26.08	26.06	26.24	27.00	
EDGE 2Tx Slot	23.72	23.73	23.77	25.00	22.91	22.94	23.22	24.00	
EDGE 3Tx Slot	21.67	21.69	21.72	23.20	21.07	21.10	21.30	22.00	
EDGE 4Tx Slot	20.58	20.63	20.67	22.00	19.91	19.96	20.11	21.00	

Source-Based Time-Averaged Power								
Band	GSM850			Max. Tune-up Power (dBm)	GSM1900			Max. Tune-up Power (dBm)
	Channel	128	189		251	512	661	
GSM	23.39	23.52	23.58	24.50	20.26	20.25	20.34	21.50
GPRS 1Tx Slot	23.41	23.51	23.60	24.50	20.27	20.24	20.33	21.50
GPRS 2Tx Slot	23.03	23.11	23.29	24.00	19.66	19.71	19.93	20.50
GPRS 3Tx Slot	23.29	23.39	23.58	24.24	19.57	19.68	19.91	20.74
GPRS 4Tx Slot	23.52	23.61	23.79	24.50	19.84	19.99	20.23	21.00
EDGE 1Tx Slot	18.01	18.03	18.07	19.00	17.08	17.06	17.24	18.00
EDGE 2Tx Slot	17.72	17.73	17.77	19.00	16.91	16.94	17.22	18.00
EDGE 3Tx Slot	17.41	17.43	17.46	18.94	16.81	16.84	17.04	17.74
EDGE 4Tx Slot	17.58	17.63	17.67	19.00	16.91	16.96	17.11	18.00

Band	WCDMA II			WCDMA II	WCDMA IV			WCDMA IV	WCDMA V			WCDMA V
	TX Channel	9262	9400		9538	Max. Tune-up Power (dBm)	1312		1413	1513	Max. Tune-up Power (dBm)	
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	
RMC 12.2K	24.57	24.61	24.60	25.50	24.67	24.76	24.79	25.50	24.67	24.65	24.62	25.50
HSDPA Subtest-1	23.76	23.77	23.71	24.00	23.85	23.86	23.92	24.00	23.77	23.81	23.80	24.00
HSDPA Subtest-2	23.75	23.76	23.72	24.00	23.78	23.90	23.94	24.00	23.86	23.79	23.76	24.00
HSDPA Subtest-3	23.25	23.29	23.23	24.00	23.34	23.35	23.40	24.00	23.29	23.35	23.26	24.00
HSDPA Subtest-4	23.21	23.27	23.30	24.00	23.36	23.43	23.43	24.00	23.33	23.27	23.25	24.00
DC-HSDPA Subtest-1	23.69	23.79	23.76	24.00	23.79	23.94	23.98	24.00	23.78	23.77	23.73	24.00
DC-HSDPA Subtest-2	23.76	23.79	23.72	24.00	23.85	23.88	23.91	24.00	23.82	23.79	23.74	24.00
DC-HSDPA Subtest-3	23.22	23.29	23.28	24.00	23.33	23.38	23.48	24.00	23.28	23.32	23.30	24.00
DC-HSDPA Subtest-4	23.19	23.30	23.19	24.00	23.32	23.40	23.47	24.00	23.30	23.34	23.22	24.00
HSUPA Subtest-1	21.88	21.92	21.94	23.00	22.05	22.07	22.10	23.00	22.03	22.00	21.94	23.00
HSUPA Subtest-2	21.59	21.69	21.67	23.00	21.69	21.76	21.86	23.00	21.68	21.74	21.71	23.00
HSUPA Subtest-3	22.57	22.52	22.54	23.00	22.60	22.68	22.76	23.00	22.58	22.57	22.51	23.00
HSUPA Subtest-4	21.24	21.31	21.27	23.00	21.36	21.39	21.49	23.00	21.33	21.30	21.27	23.00
HSUPA Subtest-5	22.54	22.55	22.59	23.00	22.57	22.65	22.70	23.00	22.66	22.60	22.60	23.00
HSPA+ Subtest-1	21.80	21.87	21.84	23.00	21.88	22.03	22.02	23.00	21.90	21.91	21.82	23.00

Default Power Ant4

		LTE Band 2						
BW	Modulation	RB Size	RB Offset	Low	High	3GPP	Max.	
		Channel	Frequency (MHz)	1880	1888	1900	MPR (dB)	Time-up (dBm)
10M	QPSK	1	0	24.10	23.98	23.86	0	25.5
		1	50	24.97	24.27	24.25	0	25.5
		1	99	25.09	23.83	23.87	0	25.5
		50	0	23.20	23.21	23.24	1	24.5
		50	25	23.27	23.25	23.30	1	24.5
		50	50	23.17	23.26	23.07	1	24.5
	16QAM	100	0	23.22	23.21	23.18	1	24.5
		1	0	23.29	23.30	23.19	1	24.5
		1	50	23.58	23.61	23.44	1	24.5
		1	99	23.21	23.26	23.11	1	24.5
		50	0	22.25	22.36	22.26	2	23.5
		50	25	22.30	22.33	22.28	2	23.5
64QAM	50	50	22.16	22.28	22.09	2	23.5	
	100	0	22.24	22.31	22.25	2	23.5	
	1	0	22.65	22.36	22.22	2	23.5	
	1	50	22.93	22.63	22.47	2	23.5	
	1	99	22.51	22.33	22.16	2	23.5	
	50	0	21.23	21.28	21.24	3	22.5	
10M	QPSK	1	0	21.29	21.27	21.25	3	22.5
		50	50	21.28	21.23	21.04	3	22.5
		100	0	21.19	21.30	21.14	3	22.5
		1	0	21.65	21.68	21.62	3	22.5
		1	37	21.56	21.59	21.57	3	22.5
		1	74	21.46	21.56	21.49	3	22.5
	16QAM	36	0	21.33	21.22	21.19	1	24.5
		36	19	21.35	21.19	21.19	1	24.5
		36	39	21.07	21.14	21.08	1	24.5
		75	0	21.18	21.21	21.11	1	24.5
		1	0	21.16	21.25	21.03	1	24.5
		1	37	21.37	21.32	21.31	1	24.5
64QAM	1	74	21.07	21.17	21.07	1	24.5	
	36	0	22.12	22.21	22.12	2	23.5	
	36	19	22.19	22.24	22.21	2	23.5	
	36	39	22.06	22.23	22.07	2	23.5	
	75	0	22.18	22.17	22.05	2	23.5	
	1	0	22.42	22.34	22.14	2	23.5	
10M	QPSK	1	0	22.85	22.61	22.37	2	23.5
		1	74	22.48	22.19	22.04	2	23.5
		36	0	21.22	21.24	21.10	3	22.5
		36	19	21.26	21.18	21.14	3	22.5
		36	39	21.11	21.21	21.01	3	22.5
		75	0	21.13	21.16	21.03	3	22.5
	16QAM	1	0	21.67	21.67	21.67	3	22.5
		1	24	21.27	21.27	21.27	3	22.5
		1	49	21.33	21.31	21.31	3	22.5
		25	0	21.35	21.35	21.35	3	22.5
		25	12	21.20	21.19	21.28	1	24.5
		25	25	21.25	21.22	21.27	1	24.5
10M	QPSK	50	0	21.10	21.17	21.15	1	24.5
		1	0	21.07	21.07	21.07	1	24.5
		1	24	21.34	21.37	21.34	1	24.5
		1	49	21.35	21.35	21.35	1	24.5
		25	0	21.20	21.19	21.28	1	24.5
		25	12	21.25	21.22	21.27	1	24.5
	16QAM	100	0	21.16	21.16	21.16	1	24.5
		1	0	21.16	21.16	21.16	1	24.5
		1	24	21.34	21.37	21.34	1	24.5
		1	49	21.35	21.35	21.35	1	24.5
		25	0	21.20	21.19	21.28	1	24.5
		25	12	21.25	21.22	21.27	1	24.5
64QAM	12	13	21.16	21.16	21.16	1	24.5	
	12	6	21.16	21.16	21.16	1	24.5	
	12	19	21.16	21.16	21.16	1	24.5	
	12	32	21.16	21.16	21.16	1	24.5	
	12	45	21.16	21.16	21.16	1	24.5	
	12	58	21.16	21.16	21.16	1	24.5	

		LTE Band 4						
BW	Modulation	RB Size	RB Offset	Low	High	3GPP	Max.	
		Channel	Frequency (MHz)	1720	1722.5	1743	MPR (dB)	Time-up (dBm)
10M	QPSK	1	0	24.03	23.98	23.97	0	25.5
		1	50	24.97	24.24	24.20	0	25.5
		1	99	24.05	24.04	24.00	0	25.5
		50	0	23.15	23.30	23.31	1	24.5
		50	25	23.26	23.25	23.34	1	24.5
		50	50	23.19	23.29	23.23	1	24.5
	16QAM	100	0	23.32	23.27	23.30	1	24.5
		1	0	23.13	23.20	23.25	1	24.5
		1	50	23.50	23.58	23.63	1	24.5
		1	99	23.25	23.29	23.27	1	24.5
		50	0	22.20	22.34	22.42	2	23.5
		50	25	22.27	22.42	22.45	2	23.5
64QAM	50	50	22.12	22.28	22.28	2	23.5	
	100	0	22.21	22.28	22.37	2	23.5	
	1	0	22.47	22.26	22.29	2	23.5	
	1	50	22.84	22.62	22.63	2	23.5	
	1	99	22.49	22.34	22.31	2	23.5	
	50	0	21.18	21.30	21.35	3	22.5	
10M	QPSK	1	0	21.22	21.39	21.38	3	22.5
		50	50	21.23	21.33	21.31	3	22.5
		100	0	21.14	21.39	21.30	3	22.5
		1	0	21.61	21.61	21.61	3	22.5
		1	37	21.52	21.52	21.52	3	22.5
		1	74	21.43	21.43	21.43	3	22.5
	16QAM	36	0	21.20	21.10	21.12	1	24.5
		36	19	21.27	21.31	21.32	1	24.5
		36	39	21.28	21.35	21.30	1	24.5
		75	0	21.19	21.25	21.27	1	24.5
		1	0	21.19	21.25	21.27	1	24.5
		1	37	21.37	21.37	21.37	1	24.5
64QAM	1	74	21.10	21.15	21.23	1	24.5	
	36	0	22.06	22.29	22.37	2	23.5	
	36	19	22.13	22.39	22.42	2	23.5	
	36	39	22.18	22.35	22.30	2	23.5	
	75	0	22.19	22.24	22.34	2	23.5	
	1	0	22.44	22.21	22.18	2	23.5	
10M	QPSK	1	0	22.62	22.54	22.50	2	23.5
		1	37	22.62	22.54	22.50	2	23.5
		1	74	22.58	22.29	22.16	2	23.5
		36	0	21.14	21.25	21.25	3	22.5
		36	19	21.20	21.23	21.21	3	22.5
		36	39	21.09	21.16	21.24	3	22.5
	16QAM	1	0	21.67	21.67	21.67	3	22.5
		1	24	21.27	21.27	21.27	3	22.5
		1	49	21.33	21.31	21.31	3	22.5
		25	0	21.35	21.35	21.35	3	22.5
		25	12	21.20	21.19	21.28	1	24.5
		25	25	21.25	21.22	21.27	1	24.5
10M	QPSK	50	0	21.10	21.17	21.15	1	24.5
		1	0	21.07	21.07	21.07	1	24.5
		1	24	21.34	21.37	21.34	1	24.5
		1	49	21.35	21.35	21.35	1	24.5
		25	0	21.20	21.19	21.28	1	24.5
		25	12	21.25	21.22	21.27	1	24.5
	16QAM	100	0	21.16	21.16	21.16	1	24.5
		1	0	21.16	21.16	21.16	1	24.5
		1	24	21.34	21.37	21.34	1	24.5
		1	49	21.35	21.35	21.35	1	24.5
		25	0	21.20	21.19	21.28	1	24.5
		25	12	21.25	21.22	21.27	1	24.5
64QAM	12	13	21.16	21.16	21.16	1	24.5	
	12	6	21.16	21.16	21.16	1	24.5	
	12	19	21.16	21.16	21.16	1	24.5	
	12	32	21.16	21.16	21.16	1	24.5	
	12	45	21.16	21.16	21.16	1	24.5	
	12	58	21.16	21.16	21.16	1	24.5	

		LTE Band 5						
BW	Modulation	RB Size	RB Offset	Low	High	3GPP	Max.	
		Channel	Frequency (MHz)	825	838.5	844	MPR (dB)	Time-up (dBm)
10M	QPSK	1	0	24.11	24.02	24.12	0	25.5
		1	24	24.41	24.26	24.30	0	25.5
		1	49	23.69	23.65	23.69	0	25.5
		25	0	23.29	23.28	23.25	1	24.5
		25	12	23.28	23.24	23.18	1	24.5
		25	25	23.18	23.25	23.07	1	24.5
	16QAM	100	0	23.25	23.19	23.24	1	24.5
		1	0	22.89	23.58	23.02	1	24.5
		1	24	23.15	23.78	23.25	1	24.5
		1	49	22.07	23.16	23.19	1	24.5
		25	0	22.36	22.23	22.42	2	23.5
		25	12	22.31	22.32	22.34	2	23.5
64QAM	25	25	22.31	22.32	22.28	2	23.5	
	1	0	22.13	22.21	21.96	2	23.5	
	1	24	22.38	22.46	22.19	2	23.5	
	1	49	21.85	22.01	21.75	2	23.5	
	25	0	21.39	21.18	21.42	3	22.5	
	25	12	21.34	21.23	21.32	3	22.5	
10M	QPSK	25	25	21.38	21.32	21.39	3	22.5
		100	0	21.33	21.32	21.29	3	22.5
		1	0	21.81	21.81	21.81	3	22.5
		1	12	21.85	21.85	21.85	3	22.5
		1	24	21.85	21.85	21.85	3	22.5
		1	36</					

LTE Band 7										
BW	Modulation	RB Size		Low	Mid	High	SCPP	Max. Twp-up	Max. (dBm)	
		Channel	RB Offset							
20M	QPSK	1	0	23.48	23.21	23.12	0	25		
		1	50	23.72	23.47	23.45	0	25		
		1	99	23.23	23.00	23.09	0	25		
		50	0	22.66	22.51	22.40	1	24		
		50	25	22.73	22.55	22.44	1	24		
		50	50	22.72	22.52	22.44	1	24		
	16QAM	1	0	22.70	22.44	22.32	1	24		
		1	50	22.53	22.64	22.65	1	24		
		1	99	22.51	22.22	22.26	1	24		
		50	0	21.62	21.50	21.35	2	23		
		50	25	21.72	21.45	21.40	2	23		
		50	50	21.71	21.36	21.28	2	23		
60QAM	1	0	21.64	21.41	21.29	2	23			
	1	0	21.56	21.30	21.31	2	23			
	1	50	21.88	21.57	21.58	2	23			
	1	99	21.41	21.32	21.35	2	23			
	50	0	20.57	20.47	20.32	3	22			
	50	25	20.70	20.41	20.36	3	22			
	50	50	20.69	20.31	20.34	3	22			
	100	0	20.62	20.40	20.35	3	22			
	20M	QPSK	1	0	23.42	23.14	23.06	0	25	
			1	37	23.62	23.44	23.40	0	25	
			1	74	23.18	22.87	23.08	0	25	
			38	0	22.56	22.47	22.34	1	24	
38			19	22.67	22.49	22.58	1	24		
38			39	22.58	22.32	22.26	1	24		
16QAM		1	0	22.67	22.31	22.24	1	24		
		1	0	22.59	22.36	22.22	1	24		
		1	37	22.90	22.62	22.61	1	24		
		1	74	22.38	22.18	22.21	1	24		
		38	0	21.47	21.35	21.25	2	23		
		38	19	21.70	21.31	21.26	2	23		
60QAM	38	39	21.56	21.24	21.19	2	23			
	75	0	21.52	21.39	21.25	2	23			
	1	0	21.46	21.26	21.29	2	23			
	1	37	22.00	21.82	21.80	1	24			
	1	74	21.29	21.22	21.27	2	23			
	38	0	20.43	20.34	20.22	3	22			
20M	QPSK	1	0	23.42	23.14	23.06	0	25		
		1	37	23.62	23.44	23.40	0	25		
		1	74	23.18	22.87	23.08	0	25		
		38	0	22.56	22.47	22.34	1	24		
		38	19	22.67	22.49	22.58	1	24		
		38	39	22.58	22.32	22.26	1	24		
	16QAM	1	0	22.67	22.31	22.24	1	24		
		1	0	22.59	22.36	22.22	1	24		
		1	37	22.90	22.62	22.61	1	24		
		1	74	22.38	22.18	22.21	1	24		
		38	0	21.47	21.35	21.25	2	23		
		38	19	21.70	21.31	21.26	2	23		
60QAM	38	39	21.56	21.24	21.19	2	23			
	75	0	21.52	21.39	21.25	2	23			
	1	0	21.46	21.26	21.29	2	23			
	1	37	22.00	21.82	21.80	1	24			
	1	74	21.29	21.22	21.27	2	23			
	38	0	20.43	20.34	20.22	3	22			

LTE Band 13									
BW	Modulation	RB Size		Low	Mid	High	SCPP	Max. Twp-up	Max. (dBm)
		Channel	RB Offset						
20M	QPSK	1	0	24.33			0	25.5	
		1	24	24.46			0	25.5	
		1	49	24.31			0	25.5	
		25	0	23.38			1	24.5	
		25	12	23.42			1	24.5	
		25	25	23.39			1	24.5	
	16QAM	50	0	23.41			1	24.5	
		1	0	23.64			1	24.5	
		1	24	23.86			1	24.5	
		1	49	23.62			1	24.5	
		25	0	22.51			2	23.5	
		25	12	22.48			2	23.5	
60QAM	25	25	22.47			2	23.5		
	50	0	22.50			2	23.5		
	1	0	22.05			2	23.5		
	1	24	22.77			2	23.5		
	1	49	22.65			2	23.5		
	25	0	21.37			3	22.5		
20M	QPSK	1	0	24.32			0	25.5	
		1	12	24.40			0	25.5	
		1	24	24.28			0	25.5	
		12	0	23.35			1	24.5	
		12	6	23.30			1	24.5	
		12	13	23.27			1	24.5	
	16QAM	25	0	23.37			1	24.5	
		1	0	23.52			1	24.5	
		1	12	23.81			1	24.5	
		1	24	23.49			1	24.5	
		12	0	22.48			2	23.5	
		12	6	22.39			2	23.5	
60QAM	12	13	22.34			2	23.5		
	25	0	22.47			2	23.5		
	1	0	22.43			2	23.5		
	1	12	22.69			2	23.5		
	1	24	22.41			2	23.5		
	12	0	21.29			3	22.5		

LTE Band 28										
BW	Modulation	RB Size		Low	Mid	High	SCPP	Max. Twp-up	Max. (dBm)	
		Channel	RB Offset							
20M	QPSK	1	0	24.19	24.08	24.03	0	25.5		
		1	37	24.46	24.34	24.29	0	25.5		
		1	74	24.02	23.86	23.99	0	25.5		
		38	0	23.32	23.30	23.22	1	24.5		
		38	19	23.35	23.31	23.25	1	24.5		
		38	39	23.28	23.29	23.23	1	24.5		
	16QAM	75	0	23.30	23.27	23.22	1	24.5		
		1	0	23.48	23.39	23.33	1	24.5		
		1	37	23.70	23.60	23.58	1	24.5		
		1	74	23.42	23.34	23.31	1	24.5		
		38	0	22.34	22.32	22.21	2	23.5		
		38	19	22.40	22.31	22.24	2	23.5		
60QAM	75	0	22.36	22.33	22.19	2	23.5			
	1	0	22.45	22.46	21.98	2	23.5			
	1	37	22.84	22.49	22.17	2	23.5			
	1	74	22.43	22.51	21.94	2	23.5			
	38	0	21.28	21.33	21.22	3	22.5			
	38	19	21.30	21.34	21.25	3	22.5			
	20M	QPSK	1	0	24.18	24.04	24.04	0	25.5	
			1	24	24.38	24.25	24.18	0	25.5	
			1	49	24.17	23.96	23.85	0	25.5	
			25	0	23.19	23.17	23.08	1	24.5	
			25	12	23.20	23.30	23.16	1	24.5	
			25	25	23.20	23.18	23.15	1	24.5	
16QAM		50	0	23.18	23.22	23.21	1	24.5		
		1	0	23.38	23.36	23.28	1	24.5		
		1	24	23.45	23.56	23.48	1	24.5		
		1	49	23.32	23.33	23.19	1	24.5		
		25	0	22.27	22.18	22.19	2	23.5		
		25	12	22.39	22.25	22.23	2	23.5		
60QAM	25	25	22.29	22.23	22.07	2	23.5			
	50	0	22.35	22.21	22.16	2	23.5			
	1	0	22.35	22.39	21.97	2	23.5			
	1	24	22.51	22.42	21.92	2	23.5			
	1	49	22.37	22.45	21.91	2	23.5			
	25	0	21.25	21.22	21.12	3	22.5			
20M	QPSK	1	0	24.18	24.04	24.04	0	25.5		
		1	24	24.38	24.25	24.18	0	25.5		
		1	49	24.17	23.96	23.85	0	25.5		
		25	0	23.19	23.17	23.08	1	24.5		
		25	12	23.20	23.30	23.16	1	24.5		
		25	25	23.20	23.18	23.15	1	24.5		
	16QAM	50	0	23.18	23.22	23.21	1	24.5		
		1	0	23.38	23.36	23.28	1	24.5		
		1	24	23.45	23.56	23.48	1	24.5		
		1	49	23.32	23.33	23.19	1	24.5		
		25	0	22.27	22.18	22.19	2	23.5		
		25	12	22.39	22.25	22.23	2	23.5		
60QAM	25	25	22.29	22.23	22.07	2	23.5			
	50	0	22.35	22.21	22.16	2	23.5			
	1	0	22.35	22.39	21.97	2	23.5			
	1	24	22.51	22.42	21.92	2	23.5			
	1	49	22.37	22.45	21.91	2	23.5			
	25	0	21.25	21.22	21.12	3	22.5			
20M	QPSK	1	0	24.04	23.95	24.01	0	25.5		
		1	12	24.37	24.30	24.18	0	25.5		
		1	24	24.15	23.91	23.89	0	25.5		
		12	0	23.19	23.18	23.16	1	24.5		
		12	6	23.25	23.22	23.20	1	24.5		
		12	13	23.16	23.16	23.14	1	24.5		
	16QAM	25	0	23.21	23.21	23.07	1	24.5		
		1	0	23.41	23.34	23.31	1	24.5		
		1								

LTE Band 33									
BW	Modulation	RB Size		Low	Mid	High	SPP	Max. Time-up	Max. Time-down
		RB Offset	Channel						
20M	QPSK	1	0	23.59	23.48	23.46	0	25	0
		1	50	23.61	23.24	23.28	0	25	0
		50	0	22.43	22.51	22.45	1	24	0
		50	25	22.44	22.46	22.46	1	24	0
		50	50	22.44	22.44	22.44	1	24	0
		100	0	22.51	22.58	22.47	1	24	0
		1	50	22.60	22.65	22.60	1	24	0
		1	99	22.59	22.28	22.14	1	24	0
		50	0	21.68	21.62	21.64	2	23	0
		50	25	21.58	21.55	21.46	2	23	0
50	50	21.49	21.50	21.41	2	23	0		
100	0	21.51	21.56	21.67	2	23	0		
1	0	21.51	21.18	21.16	2	23	0		
1	50	21.25	21.25	21.21	2	23	0		
1	99	21.19	21.22	21.13	2	23	0		
50	0	20.39	20.38	20.37	3	22	0		
50	25	20.46	20.47	20.41	3	22	0		
50	50	20.38	20.35	20.29	3	22	0		
100	0	20.46	20.43	20.38	3	22	0		
20M	16QAM	1	0	22.08	22.08	22.06	0	25	0
		1	50	22.31	22.24	22.28	0	25	0
		50	0	22.43	22.51	22.45	1	24	0
		50	25	22.44	22.46	22.46	1	24	0
		50	50	22.44	22.44	22.44	1	24	0
		100	0	22.51	22.58	22.47	1	24	0
		1	50	22.60	22.65	22.60	1	24	0
		1	99	22.59	22.28	22.14	1	24	0
		50	0	21.68	21.62	21.64	2	23	0
		50	25	21.58	21.55	21.46	2	23	0
50	50	21.49	21.50	21.41	2	23	0		
100	0	21.51	21.56	21.67	2	23	0		
1	0	21.51	21.18	21.16	2	23	0		
1	50	21.25	21.25	21.21	2	23	0		
1	99	21.19	21.22	21.13	2	23	0		
50	0	20.39	20.38	20.37	3	22	0		
50	25	20.46	20.47	20.41	3	22	0		
50	50	20.38	20.35	20.29	3	22	0		
100	0	20.46	20.43	20.38	3	22	0		
20M	64QAM	1	0	21.68	21.62	21.64	2	23	0
		1	50	21.49	21.50	21.41	2	23	0
		50	0	20.39	20.38	20.37	3	22	0
		50	25	20.46	20.47	20.41	3	22	0
		50	50	20.38	20.35	20.29	3	22	0
		100	0	20.46	20.43	20.38	3	22	0
		1	0	21.68	21.62	21.64	2	23	0
		1	50	21.49	21.50	21.41	2	23	0
		50	0	20.39	20.38	20.37	3	22	0
		50	25	20.46	20.47	20.41	3	22	0
50	50	20.38	20.35	20.29	3	22	0		
100	0	20.46	20.43	20.38	3	22	0		
20M	QPSK	1	0	23.59	23.48	23.46	0	25	0
		1	50	23.61	23.24	23.28	0	25	0
		50	0	22.43	22.51	22.45	1	24	0
		50	25	22.44	22.46	22.46	1	24	0
		50	50	22.44	22.44	22.44	1	24	0
		100	0	22.51	22.58	22.47	1	24	0
		1	50	22.60	22.65	22.60	1	24	0
		1	99	22.59	22.28	22.14	1	24	0
		50	0	21.68	21.62	21.64	2	23	0
		50	25	21.58	21.55	21.46	2	23	0
50	50	21.49	21.50	21.41	2	23	0		
100	0	21.51	21.56	21.67	2	23	0		
1	0	21.51	21.18	21.16	2	23	0		
1	50	21.25	21.25	21.21	2	23	0		
1	99	21.19	21.22	21.13	2	23	0		
50	0	20.39	20.38	20.37	3	22	0		
50	25	20.46	20.47	20.41	3	22	0		
50	50	20.38	20.35	20.29	3	22	0		
100	0	20.46	20.43	20.38	3	22	0		
20M	16QAM	1	0	22.08	22.08	22.06	0	25	0
		1	50	22.31	22.24	22.28	0	25	0
		50	0	22.43	22.51	22.45	1	24	0
		50	25	22.44	22.46	22.46	1	24	0
		50	50	22.44	22.44	22.44	1	24	0
		100	0	22.51	22.58	22.47	1	24	0
		1	50	22.60	22.65	22.60	1	24	0
		1	99	22.59	22.28	22.14	1	24	0
		50	0	21.68	21.62	21.64	2	23	0
		50	25	21.58	21.55	21.46	2	23	0
50	50	21.49	21.50	21.41	2	23	0		
100	0	21.51	21.56	21.67	2	23	0		
1	0	21.51	21.18	21.16	2	23	0		
1	50	21.25	21.25	21.21	2	23	0		
1	99	21.19	21.22	21.13	2	23	0		
50	0	20.39	20.38	20.37	3	22	0		
50	25	20.46	20.47	20.41	3	22	0		
50	50	20.38	20.35	20.29	3	22	0		
100	0	20.46	20.43	20.38	3	22	0		
20M	64QAM	1	0	21.68	21.62	21.64	2	23	0
		1	50	21.49	21.50	21.41	2	23	0
		50	0	20.39	20.38	20.37	3	22	0
		50	25	20.46	20.47	20.41	3	22	0
		50	50	20.38	20.35	20.29	3	22	0
		100	0	20.46	20.43	20.38	3	22	0
		1	0	21.68	21.62	21.64	2	23	0
		1	50	21.49	21.50	21.41	2	23	0
		50	0	20.39	20.38	20.37	3	22	0
		50	25	20.46	20.47	20.41	3	22	0
50	50	20.38	20.35	20.29	3	22	0		
100	0	20.46	20.43	20.38	3	22	0		

LTE Band 41 (2486 - 2600MHz)										
BW	Modulation	RB Size		Low	Low Mid	Mid	High Mid	High	SPP	Max. Time-up
		RB Offset	Channel							
20M	QPSK	1	0	23.54	23.15	23.38	23.11	23.13	0	25
		1	50	23.60	23.83	23.81	23.38	23.43	0	25
		1	99	23.34	23.12	23.17	23.13	23.10	0	25
		50	0	22.49	22.22	22.43	22.17	22.22	1	24
		50	25	22.54	22.28	22.48	22.19	22.24	1	24
		50	50	22.53	22.24	22.41	22.09	22.15	1	24
		100	0	22.65	22.30	22.52	22.20	22.22	1	24
		1	50	22.65	22.38	22.48	22.28	22.32	1	24
		1	99	22.75	22.46	22.68	22.30	22.36	1	24
		1	99	22.13	22.13	22.18	22.11	22.21	1	24
50	0	21.53	21.33	21.48	21.37	21.35	2	23		
50	25	21.60	21.34	21.50	21.25	21.25	2	23		
50	50	21.58	21.29	21.42	21.13	21.23	2	23		
100	0	21.61	21.28	21.49	21.23	21.24	2	23		
1	0	21.13	21.25	21.28	21.14	21.23	2	23		
1	50	21.38	21.18	21.22	21.17	21.18	2	23		
1	99	21.18	21.12	21.13	21.09	21.02	2	23		
50	0	20.47	20.25	20.38	20.18	20.21	3	22		
50	25	20.52	20.30	20.44	20.20	20.23	3	22		
50	50	20.51	20.22	20.34	20.17	20.18	3	22		
100	0	20.58	20.28	20.44	20.21	20.20	3	22		
20M	16QAM	1	0	23.54	23.15	23.38	23.11	23.13	0	25
		1	50	23.60	23.83	23.81	23.38	23.43	0	25
		1	99	23.34	23.12	23.17	23.13	23.10	0	25
		50	0	22.49	22.22	22.43	22.17	22.22	1	24
		50	25	22.54	22.28	22.48	22.19	22.24	1	24
		50	50	22.53	22.24	22.41	22.09	22.15	1	24
		100	0	22.65	22.30	22.52	22.20	22.22	1	24
		1	50	22.65	22.38	22.48	22.28	22.32	1	24
		1	99	22.75	22.46	22.68	22.30	22.36	1	24
		1	99	22.13	22.13	22.18	22.11	22.21	1	24
50	0	21.53	21.33	21.48	21.37	21.35	2	23		
50	25	21.60	21.34	21.50	21.25	21.25	2	23		
50	50	21.58	21.29	21.42	21.13	21.23	2	23		
100	0	21.61	21.28	21.49	21.23	21.24	2	23		
1	0	21.13	21.25	21.28	21.14	21.23	2	23		
1	50	21.38	21.18	21.22	21.17	21.18	2	23		
1	99	21.18	21.12	21.13	21.09	21.02	2	23		
50	0	20.47	20.25	20.38	20.18	20.21	3	22		
50	25	20.52	20.30	20.44	20.20	20.23	3	22		
50	50	20.51	20.22	20.34	20.17	20.18	3	22		
100	0	20.58	20.28	20.44	20.21	20.20	3	22		
20M	QPSK	1	0	23.53	23.13	23.32	23.08	23.11	0	25
		1	50							

GSM&WCDMA_DSI-1

Ant4

Band	GSM850				GSM1900			
	Channel	128	189	251	Max. Tune-up Power (dBm)	512	661	810
Frequency (MHz)	824.2	836.4	848.8		1850.2	1880	1909.8	
GSM	32.39	32.52	32.58	33.50	25.43	25.56	25.76	26.50
GPRS 1Tx Slot	32.41	32.51	32.60	33.50	25.03	25.42	25.31	26.50
GPRS 2Tx Slot	29.03	29.11	29.29	30.00	20.62	20.58	20.81	22.50
GPRS 3Tx Slot	27.55	27.65	27.84	28.50	19.13	19.08	19.34	21.00
GPRS 4Tx Slot	26.52	26.61	26.79	27.50	18.07	18.11	18.33	20.00
EDGE 1Tx Slot	27.01	27.03	27.07	28.00	24.99	24.90	25.11	26.00
EDGE 2Tx Slot	23.72	23.73	23.77	25.00	19.99	19.97	20.06	21.00
EDGE 3Tx Slot	21.67	21.69	21.72	23.20	17.98	17.95	18.04	19.00
EDGE 4Tx Slot	20.58	20.63	20.67	22.00	16.77	16.75	16.94	18.00

Source-Based Time-Averaged Power								
Band	GSM850			Max. Tune-up Power (dBm)	GSM1900			Max. Tune-up Power (dBm)
	Channel	128	189		251	512	661	
GSM	23.39	23.52	23.58	24.50	16.43	16.56	16.76	17.50
GPRS 1Tx Slot	23.41	23.51	23.60	24.50	16.03	16.42	16.31	17.50
GPRS 2Tx Slot	23.03	23.11	23.29	24.00	14.62	14.58	14.81	16.50
GPRS 3Tx Slot	23.29	23.39	23.58	24.24	14.87	14.82	15.08	16.74
GPRS 4Tx Slot	23.52	23.61	23.79	24.50	15.07	15.11	15.33	17.00
EDGE 1Tx Slot	18.01	18.03	18.07	19.00	15.99	15.90	16.11	17.00
EDGE 2Tx Slot	17.72	17.73	17.77	19.00	13.99	13.97	14.06	15.00
EDGE 3Tx Slot	17.41	17.43	17.46	18.94	13.72	13.69	13.78	14.74
EDGE 4Tx Slot	17.58	17.63	17.67	19.00	13.77	13.75	13.94	15.00

Band	WCDMA II			WCDMA II	WCDMA IV			WCDMA IV	WCDMA V			WCDMA V
	TX Channel	9262	9400		9538	1312	1413		1513	4132	4182	
Rx Channel	9662	9800	9938		1537	1638	1738		4357	4407	4458	
Frequency (MHz)	1852.4	1880	1907.6	Max. Tune-up Power (dBm)	1712.4	1732.6	1752.6	Max. Tune-up Power (dBm)	826.4	836.4	846.6	Max. Tune-up Power (dBm)
RMC 12.2K	15.15	15.19	15.08	16.00	15.50	15.57	15.65	16.50	23.55	23.78	23.50	24.50
HSDPA Subtest-1	14.33	14.36	14.33	14.50	14.43	14.61	14.56	15.00	22.74	22.63	22.62	23.00
HSDPA Subtest-2	14.21	14.14	14.27	14.50	14.51	14.45	14.51	15.00	22.73	22.66	22.66	23.00
HSDPA Subtest-3	13.64	13.87	13.83	14.50	14.04	14.15	14.04	15.00	22.21	22.18	22.10	23.00
HSDPA Subtest-4	13.70	13.70	13.88	14.50	14.13	14.17	14.06	15.00	22.08	22.18	22.21	23.00
DC-HSDPA Subtest-1	14.21	14.30	14.21	14.50	14.51	14.60	14.74	15.00	22.59	22.67	22.64	23.00
DC-HSDPA Subtest-2	14.22	14.35	14.11	14.50	14.41	14.62	14.58	15.00	22.59	22.62	22.57	23.00
DC-HSDPA Subtest-3	13.72	13.85	13.76	14.50	13.98	14.06	14.13	15.00	22.01	22.07	22.08	23.00
DC-HSDPA Subtest-4	13.63	13.78	13.66	14.50	14.10	14.04	14.08	15.00	22.20	22.21	22.13	23.00
HSUPA Subtest-1	12.37	12.49	12.36	13.50	12.78	12.79	12.95	14.00	20.78	20.82	20.78	22.00
HSUPA Subtest-2	12.12	12.21	12.10	13.50	12.49	12.67	12.82	14.00	20.48	20.51	20.64	22.00
HSUPA Subtest-3	13.09	13.10	12.93	13.50	13.58	13.49	13.58	14.00	21.39	21.40	21.47	22.00
HSUPA Subtest-4	11.66	11.77	11.69	13.50	12.33	12.19	12.32	14.00	20.41	20.35	20.27	22.00
HSUPA Subtest-5	13.02	13.02	13.10	13.50	13.41	13.50	13.49	14.00	21.55	21.49	21.50	22.00
HSPA+ Subtest-1	12.38	12.37	12.37	13.50	12.68	12.93	12.97	14.00	20.75	20.71	20.60	22.00

GSM&WCDMA_DSI-2

Ant4

Band	GSM850				GSM1900				
	Channel	128	189	251	Max. Tune-up Power (dBm)	512	661	810	Max. Tune-up Power (dBm)
Frequency (MHz)	824.2	836.4	848.8		1850.2	1880	1909.8		
GSM	32.39	32.52	32.58	33.50	29.26	29.25	29.34	30.50	
GPRS 1Tx Slot	32.41	32.51	32.60	33.50	29.27	29.24	29.33	30.50	
GPRS 2Tx Slot	29.03	29.11	29.29	30.00	25.66	25.71	25.93	26.50	
GPRS 3Tx Slot	27.55	27.65	27.84	28.50	23.83	23.94	24.17	25.00	
GPRS 4Tx Slot	26.52	26.61	26.79	27.50	22.84	22.99	23.23	24.00	
EDGE 1Tx Slot	27.01	27.03	27.07	28.00	26.08	26.06	26.24	27.00	
EDGE 2Tx Slot	23.72	23.73	23.77	25.00	22.91	22.94	23.22	24.00	
EDGE 3Tx Slot	21.67	21.69	21.72	23.20	21.07	21.10	21.30	22.00	
EDGE 4Tx Slot	20.58	20.63	20.67	22.00	19.91	19.96	20.11	21.00	

Source-Based Time-Averaged Power								
Band	GSM850			Max. Tune-up Power (dBm)	GSM1900			Max. Tune-up Power (dBm)
	Channel	128	189		251	512	661	
GSM	23.39	23.52	23.58	24.50	20.26	20.25	20.34	21.50
GPRS 1Tx Slot	23.41	23.51	23.60	24.50	20.27	20.24	20.33	21.50
GPRS 2Tx Slot	23.03	23.11	23.29	24.00	19.66	19.71	19.93	20.50
GPRS 3Tx Slot	23.29	23.39	23.58	24.24	19.57	19.68	19.91	20.74
GPRS 4Tx Slot	23.52	23.61	23.79	24.50	19.84	19.99	20.23	21.00
EDGE 1Tx Slot	18.01	18.03	18.07	19.00	17.08	17.06	17.24	18.00
EDGE 2Tx Slot	17.72	17.73	17.77	19.00	16.91	16.94	17.22	18.00
EDGE 3Tx Slot	17.41	17.43	17.46	18.94	16.81	16.84	17.04	17.74
EDGE 4Tx Slot	17.58	17.63	17.67	19.00	16.91	16.96	17.11	18.00

Band	WCDMA II			WCDMA II Max. Tune-up Power (dBm)	WCDMA IV			WCDMA IV Max. Tune-up Power (dBm)	WCDMA V			WCDMA V Max. Tune-up Power (dBm)
	TX Channel	9262	9400		9538	1312	1413		1513	4132	4182	
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	
RMC 12.2K	22.49	22.54	22.52	23.50	22.46	22.63	22.68	23.50	24.67	24.65	24.62	25.50
HSDPA Subtest-1	21.48	21.38	21.39	22.00	21.43	21.49	21.57	22.00	23.77	23.81	23.80	24.00
HSDPA Subtest-2	21.46	21.55	21.46	22.00	21.43	21.55	21.63	22.00	23.86	23.79	23.76	24.00
HSDPA Subtest-3	20.93	20.90	20.81	22.00	21.05	20.94	20.99	22.00	23.29	23.35	23.26	24.00
HSDPA Subtest-4	20.90	21.05	20.93	22.00	20.98	21.12	21.11	22.00	23.33	23.27	23.25	24.00
DC-HSDPA Subtest-1	21.27	21.42	21.43	22.00	21.49	21.54	21.55	22.00	23.78	23.77	23.73	24.00
DC-HSDPA Subtest-2	21.39	21.50	21.31	22.00	21.57	21.54	21.62	22.00	23.82	23.79	23.74	24.00
DC-HSDPA Subtest-3	20.91	21.04	20.98	22.00	20.92	21.00	21.01	22.00	23.28	23.32	23.30	24.00
DC-HSDPA Subtest-4	20.92	20.87	20.93	22.00	20.89	20.90	21.02	22.00	23.30	23.34	23.22	24.00
HSUPA Subtest-1	19.73	19.81	19.95	21.00	19.81	19.99	19.94	21.00	22.03	22.00	21.94	23.00
HSUPA Subtest-2	19.46	19.47	19.51	21.00	19.50	19.64	19.78	21.00	21.68	21.74	21.71	23.00
HSUPA Subtest-3	20.47	20.32	20.35	21.00	20.39	20.60	20.57	21.00	22.58	22.57	22.51	23.00
HSUPA Subtest-4	19.19	19.23	19.18	21.00	19.18	19.24	19.33	21.00	21.33	21.30	21.27	23.00
HSUPA Subtest-5	20.43	20.40	20.46	21.00	20.40	20.57	20.63	21.00	22.66	22.60	22.60	23.00
HSPA+ Subtest-1	19.65	19.87	19.73	21.00	19.62	19.90	19.85	21.00	21.90	21.91	21.82	23.00

GSM&WCDMA_DSI-4

Ant4

Band	GSM850				GSM1900			
	Channel	128	189	251	Max. Tune-up Power (dBm)	512	661	810
Frequency (MHz)	824.2	836.4	848.8		1850.2	1880	1909.8	
GSM	32.39	32.52	32.58	33.50	26.99	27.08	27.21	28.00
GPRS 1Tx Slot	32.41	32.51	32.60	33.50	26.67	26.97	26.86	28.00
GPRS 2Tx Slot	29.03	29.11	29.29	30.00	22.14	22.23	22.37	24.00
GPRS 3Tx Slot	27.55	27.65	27.84	28.50	20.67	20.73	20.91	22.50
GPRS 4Tx Slot	26.52	26.61	26.79	27.50	19.57	19.68	19.73	21.50
EDGE 1Tx Slot	27.01	27.03	27.07	28.00	24.93	25.02	25.07	26.00
EDGE 2Tx Slot	23.72	23.73	23.77	25.00	22.81	22.89	22.87	24.00
EDGE 3Tx Slot	21.67	21.69	21.72	23.20	20.97	21.02	21.40	22.00
EDGE 4Tx Slot	20.58	20.63	20.67	22.00	19.77	19.81	19.90	21.00

Source-Based Time-Averaged Power								
Band	GSM850			Max. Tune-up Power (dBm)	GSM1900			Max. Tune-up Power (dBm)
	Channel	128	189		251	512	661	
GSM	23.39	23.52	23.58	24.50	17.99	18.08	18.21	19.00
GPRS 1Tx Slot	23.41	23.51	23.60	24.50	17.67	17.97	17.86	19.00
GPRS 2Tx Slot	23.03	23.11	23.29	24.00	16.14	16.23	16.37	18.00
GPRS 3Tx Slot	23.29	23.39	23.58	24.24	16.41	16.47	16.65	18.24
GPRS 4Tx Slot	23.52	23.61	23.79	24.50	16.57	16.68	16.73	18.50
EDGE 1Tx Slot	18.01	18.03	18.07	19.00	15.93	16.02	16.07	17.00
EDGE 2Tx Slot	17.72	17.73	17.77	19.00	16.81	16.89	16.87	18.00
EDGE 3Tx Slot	17.41	17.43	17.46	18.94	16.71	16.76	17.14	17.74
EDGE 4Tx Slot	17.58	17.63	17.67	19.00	16.77	16.81	16.90	18.00

Band	WCDMA II			WCDMA II	WCDMA IV			WCDMA IV	WCDMA V			WCDMA V
	TX Channel	9262	9400		9538	Max. Tune-up Power (dBm)	1312		1413	1513	Max. Tune-up Power (dBm)	
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	
RMC 12.2K	17.52	17.56	17.53	18.50	19.12	19.16	19.22	20.00	24.67	24.65	24.62	25.50
HSDPA Subtest-1	16.58	16.51	16.45	17.00	18.08	18.08	18.22	18.50	23.77	23.81	23.80	24.00
HSDPA Subtest-2	16.46	16.48	16.50	17.00	17.98	18.10	18.24	18.50	23.86	23.79	23.76	24.00
HSDPA Subtest-3	16.09	16.11	15.97	17.00	17.64	17.65	17.63	18.50	23.29	23.35	23.26	24.00
HSDPA Subtest-4	15.93	16.06	16.14	17.00	17.63	17.68	17.69	18.50	23.33	23.27	23.25	24.00
DC-HSDPA Subtest-1	16.46	16.54	16.56	17.00	18.12	18.20	18.23	18.50	23.78	23.77	23.73	24.00
DC-HSDPA Subtest-2	16.51	16.50	16.47	17.00	18.13	18.09	18.11	18.50	23.82	23.79	23.74	24.00
DC-HSDPA Subtest-3	16.04	16.06	16.12	17.00	17.63	17.61	17.70	18.50	23.28	23.32	23.30	24.00
DC-HSDPA Subtest-4	15.97	16.00	16.00	17.00	17.62	17.70	17.76	18.50	23.30	23.34	23.22	24.00
HSUPA Subtest-1	14.80	14.81	14.88	16.00	16.47	16.50	16.58	17.50	22.03	22.00	21.94	23.00
HSUPA Subtest-2	14.44	14.65	14.54	16.00	16.04	16.21	16.35	17.50	21.68	21.74	21.71	23.00
HSUPA Subtest-3	15.55	15.46	15.52	16.00	17.09	17.06	17.20	17.50	22.58	22.57	22.51	23.00
HSUPA Subtest-4	14.21	14.18	14.26	16.00	15.82	15.86	15.94	17.50	21.33	21.30	21.27	23.00
HSUPA Subtest-5	15.42	15.41	15.58	16.00	17.03	17.10	17.07	17.50	22.66	22.60	22.60	23.00
HSPA+ Subtest-1	14.65	14.81	14.72	16.00	16.37	16.47	16.47	17.50	21.90	21.91	21.82	23.00

LTE_DSI-1 Ant4

		LTE Band 2						
BW	Modulation	Channel	RB Size	RB Offset	Low	Mid	High	Max. Tune-up (dBm)
		Frequency (MHz)	1800	1880	1960	1910	1910	
20M	QPSK	1	0	14.49	14.43	14.31	16	
		1	50	14.78	14.68	14.72	16	
		1	99	14.34	14.36	14.27	16	
		50	0	14.51	14.55	14.51	16	
		50	25	14.69	14.53	14.61	16	
	16QAM	50	50	14.57	14.51	14.43	16	
		100	0	14.58	14.61	14.51	16	
		1	0	14.68	14.64	14.45	16	
		1	50	14.75	14.51	14.69	16	
		1	99	14.60	14.56	14.46	16	
64QAM	50	0	14.65	14.64	14.57	16		
	50	25	14.58	14.60	14.55	16		
	50	50	14.59	14.68	14.35	16		
	100	0	14.63	14.62	14.49	16		
	1	0	14.70	14.64	14.51	16		
15M	QPSK	1	0	14.27	14.54	14.47	16	
		1	50	14.27	14.54	14.47	16	
		1	99	14.73	14.62	14.47	16	
		50	0	14.53	14.63	14.51	16	
		50	25	14.59	14.54	14.63	16	
	16QAM	50	50	14.64	14.69	14.36	16	
		100	0	14.57	14.69	14.54	16	
		1	0	14.38	14.28	14.29	16	
		1	37	14.76	14.63	14.59	16	
		1	74	14.21	14.22	14.29	16	
10M	QPSK	36	0	14.37	14.48	14.43	16	
		36	19	14.50	14.46	14.48	16	
		36	39	14.45	14.46	14.32	16	
		75	0	14.46	14.50	14.38	16	
		1	0	14.55	14.60	14.60	16	
	16QAM	1	37	14.73	14.38	14.60	16	
		1	74	14.39	14.44	14.44	16	
		36	0	14.53	14.62	14.51	16	
		36	19	14.47	14.49	14.41	16	
		36	39	14.44	14.48	14.36	16	
64QAM	75	0	14.62	14.59	14.47	16		
	1	0	14.63	14.55	14.48	16		
	1	37	14.38	14.42	14.40	16		
	1	74	14.64	14.61	14.40	16		
	36	0	14.60	14.63	14.45	16		
5M	QPSK	36	19	14.50	14.40	14.51	16	
		36	39	14.46	14.55	14.23	16	
		75	0	14.48	14.67	14.50	16	
		1	0	14.63	14.55	14.48	16	
		1	37	14.38	14.42	14.40	16	
	16QAM	1	74	14.39	14.44	14.44	16	
		36	0	14.53	14.62	14.51	16	
		36	19	14.47	14.49	14.41	16	
		36	39	14.44	14.48	14.36	16	
		75	0	14.62	14.59	14.47	16	
64QAM	1	0	14.63	14.55	14.48	16		
	1	37	14.38	14.42	14.40	16		
	1	74	14.64	14.61	14.40	16		
	36	0	14.60	14.63	14.45	16		
	36	19	14.50	14.40	14.51	16		
3M	QPSK	36	19	14.48	14.48	14.38	16	
		75	0	14.48	14.52	14.38	16	
		1	0	14.63	14.54	14.40	16	
		1	37	14.38	14.42	14.40	16	
		1	74	14.64	14.61	14.40	16	
	16QAM	36	0	14.53	14.63	14.45	16	
		36	19	14.47	14.49	14.41	16	
		36	39	14.44	14.48	14.36	16	
		75	0	14.62	14.59	14.47	16	
		1	0	14.56	14.52	14.38	16	
64QAM	1	24	14.18	14.39	14.41	16		
	1	49	14.68	14.51	14.43	16		
	25	0	14.38	14.56	14.38	16		
	25	12	14.45	14.46	14.61	16		
	25	25	14.53	14.65	14.25	16		
1.4M	QPSK	15	0	14.54	14.58	14.40	16	
		1	0	14.34	14.34	14.27	16	
		1	12	14.68	14.56	14.61	16	
		1	24	14.18	14.23	14.15	16	
		12	0	14.38	14.46	14.50	16	
	16QAM	12	6	14.57	14.41	14.57	16	
		12	13	14.46	14.43	14.36	16	
		25	0	14.53	14.54	14.43	16	
		1	0	14.53	14.58	14.43	16	
		1	12	14.71	14.41	14.60	16	
64QAM	1	24	14.42	14.49	14.31	16		
	12	0	14.56	14.54	14.44	16		
	12	6	14.57	14.55	14.43	16		
	12	13	14.47	14.60	14.32	16		
	25	0	14.56	14.52	14.48	16		
3M	QPSK	1	0	14.56	14.60	14.38	16	
		1	12	14.16	14.48	14.44	16	
		1	24	14.67	14.47	14.44	16	
		12	0	14.45	14.59	14.49	16	
		12	6	14.51	14.44	14.49	16	
	16QAM	12	13	14.51	14.66	14.27	16	
		25	0	14.47	14.54	14.47	16	
		1	0	14.34	14.34	14.27	16	
		1	12	14.68	14.56	14.61	16	
		1	24	14.18	14.23	14.15	16	
64QAM	12	0	14.38	14.46	14.50	16		
	12	6	14.57	14.41	14.57	16		
	12	13	14.46	14.43	14.36	16		
	25	0	14.53	14.54	14.43	16		
	1	0	14.53	14.58	14.43	16		
1.4M	QPSK	1	0	14.34	14.34	14.27	16	
		1	12	14.68	14.56	14.61	16	
		1	24	14.18	14.23	14.15	16	
		12	0	14.38	14.46	14.50	16	
		12	6	14.57	14.41	14.57	16	
	16QAM	12	13	14.46	14.43	14.36	16	
		25	0	14.53	14.54	14.43	16	
		1	0	14.53	14.58	14.43	16	
		1	12	14.71	14.41	14.60	16	
		1	24	14.42	14.49	14.31	16	
64QAM	12	0	14.56	14.54	14.44	16		
	12	6	14.57	14.55	14.43	16		
	12	13	14.47	14.60	14.32	16		
	25	0	14.56	14.52	14.48	16		
	1	0	14.56	14.60	14.38	16		
3M	QPSK	1	0	14.34	14.34	14.27	16	
		1	12	14.68	14.56	14.61	16	
		1	24	14.18	14.23	14.15	16	
		12	0	14.38	14.46	14.50	16	
		12	6	14.57	14.41	14.57	16	
	16QAM	12	13	14.46	14.43	14.36	16	
		25	0	14.53	14.54	14.43	16	
		1	0	14.53	14.58	14.43	16	
		1	12	14.71	14.41	14.60	16	
		1	24	14.42	14.49	14.31	16	
64QAM	12	0	14.56	14.54	14.44	16		
	12	6	14.57	14.55	14.43	16		
	12	13	14.47	14.60	14.32	16		
	25	0	14.56	14.52	14.48	16		
	1	0	14.56	14.60	14.38	16		
1.4M	QPSK	1	0	14.34	14.34	14.27	16	
		1	12	14.68	14.56	14.61	16	
		1	24	14.18	14.23	14.15	16	
		12	0	14.38	14.46	14.50	16	
		12	6	14.57	14.41	14.57	16	
	16QAM	12	13	14.46	14.43	14.36	16	
		25	0	14.53	14.54	14.43	16	
		1	0	14.53	14.58	14.43	16	
		1	12	14.71	14.41	14.60	16	
		1	24	14.42	14.49	14.31	16	
64QAM	12	0	14.56	14.54	14.44	16		
	12	6	14.57	14.55	14.43	16		
	12	13	14.47	14.60	14.32	16		
	25	0	14.56	14.52	14.48	16		
	1	0	14.56	14.60	14.38	16		
1.4M	QPSK	1	0	14.34	14.34	14.27	16	
		1	12	14.68	14.56	14.61	16	
		1	24	14.18	14.23	14.15	16	
		12	0	14.38	14.46	14.50	16	
		12	6	14.57	14.41	14.57	16	
	16QAM	12	13	14.46	14.43	14.36	16	
		25	0	14.53	14.54	14.43	16	
		1	0	14.53	14.58	14.43	16	
		1	12	14.71	14.41	14.60	16	
		1	24	14.42	14.49	14.31	16	
64QAM	12	0	14.56	14.54	14.44	16		
	12	6	14.57	14.55	14.43	16		
	12	13	14.47	14.60	14.32	16		
	25	0	14.56	14.52	14.48	16		
	1	0	14.56	14.60	14.38	16		
1.4M	QPSK	1	0	14.34	14.34	14.27	16	
		1	12	14.68	14.56	14.61	16	
		1	24	14.18	14.23	14.15	16	
		12	0	14.38	14.46	14.50	16	
		12	6	14.57	14.41	14.57	16	
	16QAM	12	13	14.46	14.43	14.36	16	
		25	0	14.53	14.54	14.43	16	
		1	0	14.53	14.58	14.43	16	
		1	12	14.71	14.41	14.60	16	
		1	24	14.42				

LTE Band 7								
BW	Modulation	RB Size	RB Offset	Low	Mid	High	Max. Tune-up (dBm)	
		Channel	2916	2935	2960	2985		3010
20M	QPSK	1	0	16.30	16.00	15.90	17.5	
		1	50	16.31	16.06	16.01	17.5	
		1	99	16.04	15.83	15.93	17.5	
		50	0	16.14	16.03	15.93	17.5	
		50	25	16.24	16.15	15.98	17.5	
		50	50	16.17	16.08	15.97	17.5	
		100	0	16.26	16.23	16.07	17.5	
		1	0	16.14	16.23	16.00	17.5	
		1	50	16.11	16.03	16.18	17.5	
		1	99	16.22	16.02	15.92	17.5	
		50	25	16.04	15.85	15.68	17.5	
		50	50	15.96	15.94	15.93	17.5	
	16QAM	1	0	16.01	15.86	15.85	17.5	
		1	0	15.90	15.94	15.90	17.5	
		1	50	16.20	15.83	15.85	17.5	
		1	99	15.89	15.99	15.99	17.5	
		50	0	15.94	15.76	15.68	17.5	
		50	25	16.15	15.97	15.82	17.5	
		50	50	16.16	15.79	15.82	17.5	
		100	0	16.17	15.88	15.89	17.5	
		64QAM	1	0	15.90	15.94	15.90	17.5
			1	50	16.20	15.83	15.85	17.5
			1	99	15.89	15.99	15.99	17.5
			50	0	15.94	15.76	15.68	17.5
50	25		16.15	15.97	15.82	17.5		
50	50		16.16	15.79	15.82	17.5		
100	0		16.17	15.88	15.89	17.5		
15M	QPSK		1	0	16.18	15.94	15.86	17.5
			1	37	16.23	15.95	15.90	17.5
			1	74	15.96	15.80	15.86	17.5
			36	0	16.11	15.98	15.87	17.5
			36	19	16.20	16.08	15.83	17.5
		36	39	16.07	15.99	15.95	17.5	
		75	0	16.18	16.16	15.97	17.5	
		1	0	16.08	16.20	15.92	17.5	
		1	37	16.02	16.00	16.12	17.5	
		1	74	16.11	15.89	15.85	17.5	
		36	0	15.93	15.74	15.75	17.5	
		36	19	15.96	15.71	15.59	17.5	
	36	39	15.96	15.83	15.89	17.5		
	75	0	15.99	15.82	15.92	17.5		
	16QAM	1	0	15.78	15.90	15.78	17.5	
		1	37	16.10	15.68	15.79	17.5	
		1	74	15.88	15.95	15.96	17.5	
		36	0	15.79	15.61	15.75	17.5	
		36	19	16.03	15.85	15.67	17.5	
		36	39	16.14	15.73	15.77	17.5	
		75	0	16.14	15.84	15.77	17.5	
		64QAM	1	0	15.90	15.94	15.90	17.5
			1	50	16.20	15.83	15.85	17.5
			1	99	15.89	15.99	15.99	17.5
50			0	15.94	15.76	15.68	17.5	
50			25	16.15	15.97	15.82	17.5	
50	50		16.16	15.79	15.82	17.5		
100	0		16.17	15.88	15.89	17.5		
10M	QPSK		1	0	16.23	15.85	15.90	17.5
			1	24	16.19	15.93	15.93	17.5
			1	49	15.99	15.76	15.79	17.5
			25	0	16.04	16.01	15.86	17.5
			25	12	16.14	16.09	15.90	17.5
		25	25	16.14	16.06	15.95	17.5	
		50	0	16.18	16.18	15.97	17.5	
		1	0	16.13	16.11	15.95	17.5	
		1	24	16.00	15.97	16.06	17.5	
		1	49	16.17	16.01	15.84	17.5	
		25	0	15.91	15.71	15.71	17.5	
		25	12	16.03	15.76	15.55	17.5	
	25	25	15.95	15.79	15.79	17.5		
	50	0	15.94	15.64	15.74	17.5		
	16QAM	1	0	15.77	15.87	15.79	17.5	
		1	24	16.06	15.81	15.74	17.5	
		1	49	15.80	15.95	15.85	17.5	
		25	0	15.90	15.64	15.84	17.5	
		25	12	16.02	15.93	15.89	17.5	
		25	25	16.14	15.73	15.81	17.5	
		50	0	16.11	15.87	15.77	17.5	
		64QAM	1	0	15.90	15.94	15.90	17.5
			1	50	16.20	15.83	15.85	17.5
			1	99	15.89	15.99	15.99	17.5
50			0	15.94	15.76	15.68	17.5	
50			25	16.15	15.97	15.82	17.5	
50	50		16.16	15.79	15.82	17.5		
100	0		16.17	15.88	15.89	17.5		
5M	QPSK		1	0	16.27	15.86	15.83	17.5
			1	12	16.20	16.00	15.86	17.5
			1	24	15.90	15.68	15.91	17.5
			12	0	15.99	16.01	15.78	17.5
			12	6	16.23	16.01	15.82	17.5
		12	13	16.12	16.03	15.91	17.5	
		25	0	16.11	16.22	16.03	17.5	
		1	0	16.11	16.21	15.99	17.5	
		1	12	16.10	15.94	16.08	17.5	
		1	24	16.14	16.01	15.91	17.5	
		12	0	15.92	15.68	15.74	17.5	
		12	6	15.92	15.75	15.58	17.5	
	12	13	15.89	15.92	15.90	17.5		
	25	0	15.99	15.63	15.80	17.5		
	16QAM	1	0	15.79	15.92	15.82	17.5	
		1	12	16.08	15.81	15.75	17.5	
		1	24	15.80	15.94	15.94	17.5	
		12	0	15.93	15.65	15.77	17.5	
		12	6	16.01	15.82	15.74	17.5	
		12	13	16.11	15.67	15.80	17.5	
		25	0	16.07	15.84	15.80	17.5	
		64QAM	1	0	15.90	15.94	15.90	17.5
			1	50	16.20	15.83	15.85	17.5
			1	99	15.89	15.99	15.99	17.5
50			0	15.94	15.76	15.68	17.5	
50			25	16.15	15.97	15.82	17.5	
50	50		16.16	15.79	15.82	17.5		
100	0		16.17	15.88	15.89	17.5		

LTE Band 13								
BW	Modulation	RB Size	RB Offset	Mid	Max. Tune-up (dBm)			
		Channel	782	23229				
10M	QPSK	1	0	24.33	25.5			
		1	24	24.46	25.5			
		1	49	24.31	25.5			
		25	0	23.38	24.5			
		25	12	23.42	24.5			
		25	25	23.39	24.5			
		50	0	23.41	24.5			
		1	0	23.64	24.5			
		1	24	23.88	24.5			
		1	49	23.62	24.5			
		25	0	22.51	23.5			
		25	12	22.49	23.5			
	25	25	22.47	23.5				
	50	0	22.50	23.5				
	16QAM	1	0	22.55	23.5			
		1	24	22.77	23.5			
		1	49	22.55	23.5			
		25	0	21.37	22.5			
		25	12	21.33	22.5			
		25	25	21.31	22.5			
		50	0	21.35	22.5			
		64QAM	1	0	22.55	23.5		
			1	24	22.77	23.5		
			1	49	22.55	23.5		
25			0	21.37	22.5			
25			12	21.33	22.5			
25	25		21.31	22.5				
50	0		21.35	22.5				
5M	QPSK		1	0	24.32	24.27	25.5	
			1	12	24.40	24.42	24.35	25.5
			1	24	24.28	24.24	24.23	25.5
			12	0	23.35	23.32	23.23	24.5
			12	6	23.30	23.23	23.30	24.5
		12	13	23.27	23.32	23.36	24.5	
		25	0	23.37	23.39	23.29	24.5	
		1	0	23.52	23.59	23.59	24.5	
		1	12	23.81	23.79	23.72	24.5	
		1	24	23.49	23.58	23.60	24.5	
		12	0	22.48	22.44	22.39	23.5	
		12	6	22.39	22.42	22.42	23.5	
	12	13	22.34	22.46	22.42	23.5		
	25	0	22.47	22.35	22.37	23.5		
	16QAM	1	0	22.43	22.42	22.50	23.5	
		1	12	22.69	22.73	22.75	23.5	
		1	24	22.41	22.40	22.46	23.5	
		12	0	21.29	21.22	21.32	22.5	
		12	6	21.23	21.31	21.22	22.5	
		12	13	21.23	21.18	21.16	22.5	
		25	0	21.21	21.25	21.25	22.5	
		64QAM	1	0	22.43	22.42	22.50	23.5
			1	12	22.69	22.73	22.75	23.5
			1	24	22.41	22.40	22.46	23.5
12			0	21.29	21.22	21.32	22.5	
12			6	21.23	21.31	21.22	22.5	
12	13		21.23	21.18	21.16	22.5		
25	0		21.21	21.25	21.25	22.5		

LTE Band 26							
BW	Modulation	RB Size	RB Offset	Low	Mid	High	Max. Tune-up (dBm)
		Channel	815.5	2665	2665	2665	
15M	QPSK	1	0	22.97	22.95	23.06	24.5
		1	37	23.36	23.14	23.17	24.5
		1	74	22.93	22.98	22.95	24.5
		36	0	23.00	22.86	22.93	24.5
		36	19	23.18	23.08	23.11	24.5
		36	39	22.90	22.95	22.93	24.5
		75	0	23.01	22.85	22.86	24.5
		1	0	22.85	22.95	22.77	24.5
		1	37	22.78	22.80	22.91	24.5
		1	74	22.96	22.86	22.76	24.5
		36	0	22.97	22.85	22.92	24.5
		36	19	22.91	22.85	22.90	24.5
	36	39	22.30	22.32	22.38	24.5	
	75	0	22.35	22.33	22.38	24.5	
	16QAM	1	0	22.13	22.20	22.00	23.5
		1	37	22.36	22.52	22.23	23.5
		1	74	22.13	21.98	22.19	23.5
		36	0	21.40	21.15	21.46	22.5

LTE_DSI-2 Ant4

		LTE Band 2					
BW	Modulation	RB Size	RB Offset	Low	Mid	High	Max. Tune-up (dBm)
		Channel Frequency (MHz)	18750	18800	18900	19100	
20M	QPSK	1	0	22.02	21.97	21.84	23.5
		1	50	22.34	22.14	22.25	23.5
		1	99	21.84	21.85	21.87	23.5
		50	0	22.07	22.20	22.21	23.5
		50	25	22.08	22.21	22.29	23.5
		50	50	22.04	22.15	21.98	23.5
	16QAM	100	0	22.16	22.15	22.06	23.5
		1	0	22.24	22.21	22.14	23.5
		1	50	21.84	22.25	22.09	23.5
		1	99	22.19	22.01	22.06	23.5
		50	0	22.12	22.03	22.16	23.5
		50	25	22.15	22.28	22.22	23.5
20M	16QAM	50	50	22.18	22.17	21.95	23.5
		100	0	22.17	22.25	22.09	23.5
		1	0	21.80	22.20	22.16	23.5
		1	50	22.00	22.20	22.12	23.5
		1	99	22.07	21.96	22.01	23.5
		50	0	21.13	21.25	21.17	22.5
	64QAM	50	25	21.26	21.26	21.17	22.5
		50	50	21.26	21.26	21.17	22.5
		100	0	21.10	21.25	21.07	22.5
		1	0	21.10	21.25	21.07	22.5
		1	50	21.10	21.25	21.07	22.5
		100	0	21.10	21.25	21.07	22.5
15M	QPSK	1	0	21.99	21.95	21.72	23.5
		1	37	22.19	22.00	22.14	23.5
		1	74	21.62	21.80	21.80	23.5
		36	0	21.94	22.15	22.07	23.5
		36	19	22.14	22.21	22.21	23.5
		36	39	21.91	22.06	21.93	23.5
	16QAM	75	0	22.13	22.12	21.92	23.5
		1	0	22.17	22.14	22.00	23.5
		1	37	21.84	22.23	22.00	23.5
		1	74	22.08	22.13	21.96	23.5
		36	0	22.10	21.89	22.08	23.5
		36	19	22.05	22.18	22.20	23.5
15M	16QAM	36	39	22.03	22.16	21.91	23.5
		75	0	22.05	22.23	22.02	23.5
		1	0	21.84	22.09	22.00	23.5
		1	37	21.91	22.07	22.06	23.5
		1	74	21.85	21.89	22.00	23.5
		36	0	21.09	21.20	21.16	22.5
	64QAM	36	19	21.20	21.12	21.16	22.5
		36	39	21.04	21.25	20.90	22.5
		75	0	21.00	21.20	20.99	22.5
		1	0	21.84	22.09	22.00	23.5
		1	37	21.91	22.07	22.06	23.5
		1	74	21.85	21.89	22.00	23.5
10M	QPSK	1	0	21.94	21.88	21.81	23.5
		1	24	22.31	22.10	22.10	23.5
		1	49	21.91	21.75	21.79	23.5
		25	0	21.97	22.15	22.12	23.5
		25	12	22.23	22.17	22.21	23.5
		25	25	22.03	22.14	21.90	23.5
	16QAM	50	0	22.14	22.01	22.04	23.5
		1	0	22.23	22.07	22.04	23.5
		1	24	21.86	22.20	21.98	23.5
		1	49	22.13	22.08	21.92	23.5
		25	0	22.11	22.06	22.09	23.5
		25	12	22.10	22.13	22.21	23.5
10M	16QAM	25	25	22.14	22.04	21.93	23.5
		50	0	22.10	22.23	22.06	23.5
		1	0	21.82	22.05	21.99	23.5
		1	24	21.91	22.11	22.00	23.5
		1	49	22.01	21.94	21.88	23.5
		25	0	21.10	21.20	21.15	22.5
	64QAM	25	12	21.21	21.17	21.05	22.5
		25	25	20.97	21.18	20.96	22.5
		50	0	21.05	21.22	21.01	22.5
		1	0	21.84	22.09	22.00	23.5
		1	24	21.94	22.17	22.08	23.5
		1	49	22.01	21.94	21.88	23.5
5M	QPSK	1	0	21.95	21.86	21.72	23.5
		1	12	22.20	22.08	22.18	23.5
		1	24	21.80	21.75	21.79	23.5
		12	0	21.96	22.16	22.13	23.5
		12	6	22.14	22.15	22.15	23.5
		12	13	21.93	22.12	21.87	23.5
	16QAM	25	0	22.01	22.06	22.00	23.5
		1	0	22.20	22.14	21.99	23.5
		1	12	21.85	22.15	22.08	23.5
		1	24	22.13	22.19	22.03	23.5
		12	0	22.09	21.91	22.13	23.5
		12	6	22.06	22.23	22.08	23.5
5M	16QAM	12	13	22.05	22.03	21.91	23.5
		25	0	22.03	22.17	22.01	23.5
		1	0	21.85	22.10	22.00	23.5
		1	12	21.94	22.17	22.08	23.5
		1	24	22.04	21.86	21.88	23.5
		12	0	20.99	21.23	21.13	22.5
	64QAM	12	6	21.22	21.21	21.15	22.5
		12	13	20.94	21.21	20.96	22.5
		25	0	20.97	21.11	20.92	22.5
		1	0	21.84	22.09	22.00	23.5
		1	12	21.94	22.17	22.08	23.5
		1	24	22.04	21.86	21.88	23.5
3M	QPSK	1	0	21.84	21.86	21.71	23.5
		1	7	22.22	22.08	22.15	23.5
		1	14	21.86	21.75	21.75	23.5
		8	0	22.00	22.09	22.12	23.5
		8	3	22.19	22.07	22.28	23.5
		8	7	22.01	22.12	21.86	23.5
	16QAM	15	0	22.11	22.10	22.01	23.5
		1	0	22.10	22.14	22.05	23.5
		1	7	21.86	22.18	22.08	23.5
		1	14	22.15	22.11	21.93	23.5
		8	0	22.08	22.00	22.09	23.5
		8	3	22.04	22.13	22.17	23.5
3M	16QAM	8	7	22.08	22.13	21.93	23.5
		15	0	22.05	22.22	21.97	23.5
		1	0	21.76	22.16	22.03	23.5
		1	7	21.88	22.05	21.98	23.5
		1	14	22.02	21.92	21.87	23.5
		8	0	21.06	21.12	21.07	22.5
	64QAM	8	3	21.23	21.20	21.16	22.5
		8	7	20.94	21.20	20.96	22.5
		15	0	20.97	21.11	20.92	22.5
		1	0	21.84	22.09	22.00	23.5
		1	7	21.88	22.05	21.98	23.5
		1	14	22.02	21.92	21.87	23.5
1.4M	QPSK	1	0	21.89	21.91	21.70	23.5
		1	2	22.20	22.02	22.20	23.5
		1	5	21.80	21.80	21.72	23.5
		3	0	22.88	22.93	22.99	23.5
		3	1	22.02	22.97	23.10	23.5
		3	3	22.76	22.92	22.67	23.5
	16QAM	6	0	22.05	22.02	21.95	23.5
		1	0	22.16	22.06	22.03	23.5
		1	2	21.89	22.04	22.07	23.5
		1	5	22.10	22.13	21.97	23.5
		3	0	22.61	22.74	22.86	23.5
		3	1	22.92	23.08	22.98	23.5
1.4M	16QAM	3	3	22.98	22.89	22.75	23.5
		6	0	22.05	22.21	21.94	23.5
		1	0	21.83	22.12	21.95	23.5
		1	2	21.92	22.12	22.04	23.5
		1	5	21.99	21.81	21.96	23.5
		3	0	21.84	21.96	21.85	23.5
	64QAM	3	1	21.84	21.86	21.83	23.5
		3	3	21.72	22.05	21.86	23.5
		6	0	21.09	21.17	21.03	22.5
		1	0	21.84	22.09	22.00	23.5
		1	2	21.88	22.04	22.07	23.5
		1	5	22.10	22.13	21.97	23.5

		LTE Band 4					
BW	Modulation	RB Size	RB Offset	Low	Mid	High	Max. Tune-up (dBm)
		Channel Frequency (MHz)	20800	20975	20930	20930	
20M	QPSK	1	0	22.02	21.89	21.91	23.5
		1	50	22.36	22.28	22.34	23.5
		1	99	22.00	22.05	21.92	23.5
		50	0	22.03	22.23	22.24	23.5
		50	25	22.04	22.24	22.21	23.5
		50	50	22.05	22.26	22.26	23.5
	16QAM	100	0	22.24	22.17	22.25	23.5
		1	0	22.09	22.11	22.19	23.5
		1	50	22.16	21.96	22.11	23.5
		1	99	22.21	22.01	22.16	23.5
		50	0	22.11	22.19	22.27	23.5
		50	25	22.18	21.98	22.20	23.5
20M	16QAM	50	50	22.16	22.32	22.35	23.5
		100	0	22.15	22.31	22.33	23.5
		1	0	22.13	22.16	22.16	23.5
		1	50	21.93	22.16	22.23	23.5
		1	99	22.01	22.31	22.16	23.5
		50	0	21.07	21.22	21.33	22.5
	64QAM	50	25	21.10	21.28	21.33	22.5
		50	50	21.08	21.31	21.17	22.5
		100	0	21.08	21.28	21.27	22.5
		1	0	21.84	22.09	22.00	23.5
		1	37	21.91	22.07	22.06	23.5
		1	74	22.06	22.11	22.11	23.5
15M	QPSK	1	0	21.91	21.82	21.80	23.5
		1	37	22.22	22.18	22.32	23.5
		1	74	21.61	21.89	21.82	23.5
		36	0	21.96	22.21	22.19	23.5
		36	19	22.09	22.15	22.12	23.5
		36	39	22.00	22.24	22.18	23.5
	16QAM	75	0	22.11	22.02		

LTE Band 7									
BW	Modulation	RB Size	RB Offset	Low	Mid	High	Max. Tune-up (dBm)		
		Channel	Channel	2985	3100	3190			
20M	QPSK	1	0	23.45	23.21	23.12	25		
		1	50	23.72	23.47	23.45	25		
		1	99	23.23	23.00	23.09	25		
		50	0	22.66	22.51	22.40	24		
		50	25	22.73	22.55	22.44	24		
		50	50	22.72	22.38	22.26	24		
		100	0	22.98	22.43	22.33	24		
		1	0	22.70	22.44	22.32	24		
		1	50	22.93	22.64	22.65	24		
		1	99	22.51	22.22	22.26	24		
		50	0	21.62	21.50	21.35	23		
		50	25	21.72	21.45	21.40	23		
	50	50	21.71	21.36	21.29	23			
	100	0	21.64	21.41	21.29	23			
	64QAM	1	0	21.55	21.35	21.31	23		
		1	50	21.88	21.57	21.58	23		
		1	99	21.41	21.32	21.35	23		
		50	0	20.57	20.47	20.36	22		
		50	25	20.70	20.41	20.36	22		
		50	50	20.69	20.31	20.33	22		
		100	0	20.62	20.40	20.35	22		
		15M	QPSK	1	0	23.44	23.14	23.07	25
				1	37	23.62	23.44	23.40	25
				1	74	23.18	22.87	23.08	25
36				0	22.56	22.47	22.34	24	
36				19	22.67	22.40	22.38	24	
36	39			22.58	22.32	22.26	24		
75	0			22.67	22.31	22.24	24		
1	0			22.59	22.36	22.32	24		
1	37			22.90	22.59	22.58	24		
1	74			22.38	22.18	22.21	24		
36	0			21.47	21.35	21.25	23		
36	19			21.70	21.31	21.26	23		
36	39		21.56	21.24	21.19	23			
75	0		21.52	21.30	21.25	23			
64QAM	1		0	21.46	21.26	21.29	23		
	1		37	21.86	21.42	21.46	23		
	1		74	21.29	21.22	21.27	23		
	36		0	20.43	20.34	20.22	22		
	36		19	20.61	20.37	20.30	22		
	36		39	20.63	20.27	20.26	22		
	75		0	20.57	20.35	20.33	22		
	10M		QPSK	1	0	23.42	23.09	22.97	25
				1	24	23.59	23.39	23.38	25
				1	49	23.17	23.21	23.14	25
		25		0	22.64	22.41	22.36	24	
		25		12	22.69	22.42	22.30	24	
25		25		22.68	22.26	22.26	24		
50		0		22.57	22.36	22.31	24		
1		0		22.64	22.30	22.22	24		
1		24		22.88	22.52	22.61	24		
1		49		22.41	22.18	22.14	24		
25		0		21.61	21.47	21.29	23		
25		12		21.57	21.35	21.35	23		
25		25	21.65	21.31	21.13	23			
50		0	21.60	21.28	21.22	23			
64QAM		1	0	21.54	21.25	21.30	23		
		1	24	21.86	21.46	21.44	23		
		1	49	21.33	21.30	21.28	23		
		25	0	20.47	20.43	20.20	22		
		25	12	20.55	20.28	20.28	22		
		25	25	20.62	20.17	20.32	22		
		50	0	20.55	20.31	20.27	22		
		5M	QPSK	1	0	23.38	23.19	23.06	25
				1	12	23.70	23.32	23.42	25
				1	24	23.20	23.08	23.15	25
	12			0	22.63	22.42	22.27	24	
	12			6	22.71	22.40	22.43	24	
12	13			22.60	22.35	22.26	24		
25	0			22.67	22.32	22.22	24		
1	0			22.59	22.43	22.29	24		
1	12			22.90	22.49	22.62	24		
1	24			22.41	22.20	22.25	24		
12	0			21.59	21.39	21.25	23		
12	6			21.70	21.44	21.31	23		
12	13		21.69	21.33	21.15	23			
25	0		21.49	21.35	21.27	23			
64QAM	1		0	21.54	21.22	21.26	23		
	1		12	21.85	21.52	21.43	23		
	1		24	21.34	21.17	21.31	23		
	12		0	20.43	20.46	20.20	22		
	12		6	20.59	20.30	20.21	22		
	12		13	20.57	20.16	20.21	22		
	25		0	20.48	20.25	20.26	22		
	BW		QPSK	1	0	23.38	23.19	23.06	25
				1	12	23.70	23.32	23.42	25
				1	24	23.20	23.08	23.15	25
		12		0	22.63	22.42	22.27	24	
		12		6	22.71	22.40	22.43	24	
12		13		22.60	22.35	22.26	24		
25		0		22.67	22.32	22.22	24		
1		0		22.59	22.43	22.29	24		
1		12		22.90	22.49	22.62	24		
1		24		22.41	22.20	22.25	24		
12		0		21.59	21.39	21.25	23		
12		6		21.70	21.44	21.31	23		
12		13	21.69	21.33	21.15	23			
25		0	21.49	21.35	21.27	23			
64QAM		1	0	21.54	21.22	21.26	23		
		1	12	21.85	21.52	21.43	23		
		1	24	21.34	21.17	21.31	23		
		12	0	20.43	20.46	20.20	22		
		12	6	20.59	20.30	20.21	22		
		12	13	20.57	20.16	20.21	22		
		25	0	20.48	20.25	20.26	22		
		BW	QPSK	1	0	23.38	23.19	23.06	25
				1	12	23.70	23.32	23.42	25
				1	24	23.20	23.08	23.15	25
	12			0	22.63	22.42	22.27	24	
	12			6	22.71	22.40	22.43	24	
12	13			22.60	22.35	22.26	24		
25	0			22.67	22.32	22.22	24		
1	0			22.59	22.43	22.29	24		
1	12			22.90	22.49	22.62	24		
1	24			22.41	22.20	22.25	24		
12	0			21.59	21.39	21.25	23		
12	6			21.70	21.44	21.31	23		
12	13		21.69	21.33	21.15	23			
25	0		21.49	21.35	21.27	23			
64QAM	1		0	21.54	21.22	21.26	23		
	1		12	21.85	21.52	21.43	23		
	1		24	21.34	21.17	21.31	23		
	12		0	20.43	20.46	20.20	22		
	12		6	20.59	20.30	20.21	22		
	12		13	20.57	20.16	20.21	22		
	25		0	20.48	20.25	20.26	22		

LTE Band 13									
BW	Modulation	RB Size	RB Offset	Mid	Max. Tune-up (dBm)				
		Channel	Channel	2329					
10M	QPSK	1	0	24.33	25.5				
		1	24	24.46	25.5				
		1	49	24.31	25.5				
		25	0	23.38	24.5				
		25	12	23.42	24.5				
		25	25	23.39	24.5				
		50	0	23.41	24.5				
		1	0	23.64	24.5				
		1	24	23.88	24.5				
		1	49	23.62	24.5				
		25	0	22.51	23.5				
		25	12	22.48	23.5				
	25	25	22.47	23.5					
	50	0	22.50	23.5					
	64QAM	1	0	22.55	23.5				
		1	24	22.77	23.5				
		1	49	22.55	23.5				
		25	0	21.37	22.5				
		25	12	21.33	22.5				
		25	25	21.31	22.5				
		50	0	21.35	22.5				
		5M	QPSK	1	0	24.32	24.27	25.5	
				1	12	24.40	24.42	24.35	25.5
				1	24	24.28	24.24	24.23	25.5
12				0	23.35	23.32	23.23	24.5	
12				6	23.30	23.23	23.20	24.5	
12	13			23.27	23.32	23.36	24.5		
25	0			23.37	23.39	23.29	24.5		
1	0			23.52	23.59	23.59	24.5		
1	12			23.81	23.79	23.72	24.5		
1	24			23.49	23.58	23.60	24.5		
12	0			22.48	22.44	22.39	23.5		
12	6			22.39	22.42	22.42	23.5		
12	13		22.34	22.46	22.42	23.5			
25	0		22.47	22.35	22.37	23.5			
64QAM	1		0	22.43	22.42	22.50	23.5		
	1		12	22.69	22.73	22.75	23.5		
	1		24	22.41	22.40	22.46	23.5		
	12		0	21.29	21.22	21.32	22.5		
	12		6	21.23	21.31	21.22	22.5		
	12		13	21.23	21.18	21.16	22.5		
	25		0	21.21	21.25	21.25	22.5		

LTE Band 26							
BW	Modulation	RB Size	RB Offset	Low	Mid	High	Max. Tune-up (dBm)
		Channel	Channel	2674	2685	2690	
15M	QPSK	1	0	24.19	24.08	24.03	25.5
		1	37	24.45	24.34	24.29	25.5
		1	74	24.18	24.08	23.99	25.5
		36	0	23.32	23.30	23.22	24.5
		36	19	23.35	23.31	23.25	24.5
		36	39	23.28	23.29	23.20	24.5
		75	0	23.30	23.27	23.22	24.5
		1	0	23.48	23.39	23.33	24.5
		1	37	23.70	23.60	23.58	24.5
		1	74	23.42	23.34	23.23	24.5
		36	0	22.34	22.32	22.21	23.5
		36	19	22.40	22.31	22.24	23.5
	36	39	22.33	22.28	22.14	23.5	
	75	0	22.36	22.33	22.19	23.5	
	64QAM	1	0	22.45	22.48	21.88	23.5
		1	37	22.84	22.49	22.17	23.5
		1	74	22.43	22.51	21.84	23.5
		36	0	21.28	21.33	21.22	22.5
		36	19	21.30	21.34	21.08	22.5
		3					

LTE Band 38									
BW	Modulation	Channel				Max. T _{ch} (dBm)			
		RB Size	RB Offset	Low	High				
QPSK	15M	1	0	23.39	23.48	23.45	25		
		1	50	23.67	23.71	23.62	25		
		1	99	23.31	23.24	23.28	25		
		50	0	22.45	22.47	22.46	24		
		50	50	22.44	22.44	22.36	24		
	20M	1	0	22.41	22.46	22.43	24		
		1	50	22.60	22.66	22.60	24		
		1	99	22.29	22.28	22.14	24		
		50	0	21.48	21.52	21.44	23		
		50	25	21.58	21.55	21.46	23		
16QAM	15M	1	0	21.48	21.50	21.41	23		
		1	50	21.54	21.56	21.47	23		
		1	0	21.21	21.18	21.18	23		
		1	50	21.26	21.25	21.21	23		
		1	99	21.19	21.22	21.13	23		
	20M	1	0	21.21	21.18	21.18	23		
		1	50	21.26	21.25	21.21	23		
		1	99	21.19	21.22	21.13	23		
		50	0	20.38	20.47	20.41	22		
		50	50	20.38	20.35	20.29	22		
QPSK	15M	1	0	20.48	20.43	20.42	22		
		1	37	23.64	23.59	23.57	25		
		1	74	23.18	23.15	23.07	25		
		36	0	22.33	22.49	22.32	24		
		36	19	22.40	22.48	22.36	24		
	20M	1	0	22.29	22.36	22.31	24		
		1	37	22.60	22.56	22.45	24		
		1	74	22.27	22.34	22.26	24		
		36	0	21.43	21.41	21.37	23		
		36	19	21.47	21.54	21.32	23		
16QAM	15M	1	0	21.11	21.14	21.11	23		
		1	37	21.13	21.15	21.13	23		
		1	74	21.13	21.08	21.09	23		
		36	0	20.24	20.28	20.31	22		
		36	19	20.28	20.38	20.37	22		
	20M	1	0	21.11	21.14	21.11	23		
		1	37	21.13	21.15	21.13	23		
		1	74	21.13	21.08	21.09	23		
		36	0	20.24	20.28	20.31	22		
		36	19	20.28	20.38	20.37	22		
QPSK	15M	1	0	20.34	20.40	20.29	22		
		1	24	23.61	23.59	23.57	25		
		1	49	23.26	23.18	23.20	25		
		25	0	22.39	22.50	22.38	24		
		25	12	22.40	22.44	22.31	24		
	20M	1	0	22.39	22.45	22.38	24		
		1	0	22.37	22.39	22.34	24		
		1	24	22.55	22.56	22.48	24		
		1	49	22.18	22.21	22.05	24		
		25	0	21.41	21.43	21.38	23		
16QAM	15M	1	0	21.55	21.48	21.36	23		
		1	24	21.35	21.36	21.33	23		
		1	0	21.45	21.50	21.40	23		
		1	49	21.11	21.53	21.07	23		
		1	24	21.23	21.11	21.14	23		
	20M	1	0	21.06	21.16	21.05	23		
		1	24	20.27	20.38	20.24	22		
		25	12	20.32	20.41	20.31	22		
		25	25	20.25	20.34	20.20	22		
		50	0	20.41	20.29	20.27	22		
QPSK	15M	1	0	23.75	23.86	23.78	25		
		1	12	23.57	23.62	23.51	25		
		1	24	23.25	23.16	23.17	25		
		12	0	22.30	22.40	22.43	24		
		12	6	22.42	22.54	22.31	24		
	20M	1	0	22.50	22.44	22.33	24		
		1	0	22.26	22.38	22.37	24		
		1	12	22.54	22.67	22.53	24		
		1	24	22.16	22.14	22.08	24		
		12	0	21.45	21.45	21.29	23		
16QAM	15M	1	0	21.49	21.40	21.45	23		
		1	12	21.39	21.48	21.27	23		
		1	24	21.45	21.51	21.40	23		
		1	0	21.13	21.09	21.11	23		
		1	12	21.10	21.18	21.11	23		
	20M	1	0	21.17	21.13	21.10	23		
		1	12	20.35	20.30	20.25	22		
		12	6	20.36	20.38	20.35	22		
		12	13	20.31	20.29	20.29	22		
		25	0	20.34	20.35	20.34	22		

LTE Band 41 (2486 ~ 2680MHz)									
BW	Modulation	Channel				Max. T _{ch} (dBm)			
		RB Size	RB Offset	Low	High				
QPSK	15M	1	0	23.54	23.15	23.38	25		
		1	50	23.80	23.43	23.65	25		
		1	99	23.34	23.12	23.17	25		
		50	0	22.40	22.42	22.49	24		
		50	25	22.54	22.56	22.46	24		
	20M	1	0	22.52	22.34	22.41	24		
		1	50	22.65	22.20	22.52	24		
		1	0	22.52	22.16	22.45	24		
		1	50	22.75	22.45	22.39	24		
		1	99	22.13	22.13	22.18	24		
16QAM	15M	1	0	21.53	21.33	21.48	23		
		1	50	21.60	21.34	21.50	23		
		1	99	21.28	21.29	21.42	23		
		50	0	21.61	21.38	21.49	23		
		50	25	21.53	21.22	21.48	23		
	20M	1	0	21.13	21.22	21.28	23		
		1	50	21.38	21.18	21.22	23		
		1	99	21.18	21.12	21.13	23		
		50	0	20.47	20.25	20.37	22		
		50	25	20.52	20.30	20.44	22		
QPSK	15M	1	0	20.51	20.22	20.18	22		
		1	0	20.58	20.26	20.44	22		
		1	37	23.66	23.36	23.51	25		
		1	74	23.33	23.07	23.04	25		
		36	0	22.34	22.17	22.39	24		
	20M	1	0	22.50	22.42	22.45	24		
		1	37	22.60	22.36	22.53	24		
		1	74	22.09	22.06	22.06	24		
		36	0	21.38	21.22	21.38	23		
		36	19	21.53	21.20	21.41	23		
16QAM	15M	1	0	21.21	21.19	21.38	23		
		1	37	21.58	21.29	21.16	23		
		1	74	21.37	21.04	21.07	23		
		36	0	20.37	20.24	20.25	22		
		36	19	20.47	20.26	20.45	22		
	20M	1	0	21.23	21.20	21.16	23		
		1	37	21.37	21.04	21.07	23		
		1	74	21.15	21.01	21.07	23		
		36	0	20.37	20.24	20.25	22		
		36	19	20.47	20.26	20.45	22		
QPSK	15M	1	0	20.48	20.12	20.13	22		
		1	24	23.62	23.32	23.08	25		
		1	49	23.21	23.07	23.11	25		
		25	0	22.34	22.12	22.10	24		
		25	12	22.56	22.17	22.32	24		
	20M	1	0	22.38	22.16	22.26	24		
		1	0	22.45	22.27	22.18	24		
		1	0	22.45	22.10	22.35	24		
		1	24	22.70	22.32	22.60	24		
		1	49	22.08	22.05	22.17	24		
16QAM	15M	1	0	21.40	21.26	21.41	23		
		1	12	21.49	21.21	21.35	23		
		1	24	21.57	21.20	21.29	23		
		1	0	21.58	21.26	21.38	23		
		1	49	21.09	21.07	21.29	23		
	20M	1	0	21.08	21.12	21.14	23		
		1	24	21.36	21.12	21.14	23		
		1	49	21.12	21.10	21.08	23		
		25	0	20.43	20.19	20.35	22		
		25	12	20.47	20.23	20.38	22		
QPSK	15M	1	0	20.50	20.22	20.11	22		
		1	0	20.50	20.21	20.42	22		
		1	12	23.72	23.03	23.28	25		
		1	24	23.20	23.04	23.12	25		
		12	0	22.38	22.17	22.41	24		
	20M	1	0	22.44	22.17	22.34	24		
		1	12	22.48	22.12	22.29	24		
		1	24	22.53	22.28	22.41	24		
		1	0	22.43	22.04	22.35	24		
		1	12	22.73	22.40	22.53	24		
16QAM	15M	1	0	22.24	22.15	22.07	24		
		1	12	22.24	21.83	21.18	23		
		1	24	21.53	21.32	21.41	23		
		12	13	21.48	21.21	21.37	23		
		25	0	21.52	21.31	21.34	23		
	20M	1	0	21.04	21.09	21.18	23		
		1	12	21.37	21.08	21.15	23		
		1	24	21.08	21.04	21.04	23		
		12	0	20.32	20.21	20.29	22		
		12	6	20.41	20.26	20.35	22		
QPSK	15M	1	0	20.48	20.19	20.06	22		
		1	12	23.68	23.29	23.06	25		
		1	24	23.20	23.04	23.12	25		
		12	0	22.44	22.17	22.34	24		
		12	13	22.48	22.12	22.29	24		
	20M	1	0	22.53	22.28	22.41	24		
		1	0	22.43	22.04	22.35	24		
		1	12	22.73	22.40	22.53	24		
		1	24	22.24	22.15	22.07	24		
		12	0	21.50	21.43	21.18	23		
16QAM	15M	1	0	21.53	21.32	21.41	23		
		1	12	21.48	21.21	21.37	23		
		1	24	21.52	21.31	21.34	23		
		1	0	21.04	21.09	21.18	23		
		1	12	21.37	21.08	21.15	23		
	20M	1	0	21.04	21.04	21.04	23		
		1	12	20.32	20.21	20.29	22		
		12	6	20.41	20.26	20.35	22		
		12	13	20.48	20.19	20.29	22		
		25	0	20.57	20.23	20.40	22		

LTE_DSI-4 Ant4

LTE Band 2							
BW	Modulation	RB Size	RB Offset	Low	Mid	High	Max. Tune-up (MHz)
		Channel	Frequency (MHz)	1910	1930	1950	
20M	QPSK	1	0	17.24	17.02	16.98	15.5
		1	50	17.42	17.39	17.37	15.5
		1	99	17.10	16.98	16.98	15.5
		50	0	17.21	17.21	17.21	15.5
		50	25	17.27	17.23	17.29	15.5
		50	50	17.21	17.21	17.21	15.5
	100	0	17.25	17.21	17.20	15.5	
	16QAM	1	0	17.23	17.34	17.17	15.5
		1	50	17.37	17.22	17.28	15.5
		1	99	17.24	17.26	17.07	15.5
		50	0	17.23	17.21	17.21	15.5
		50	25	17.24	17.41	17.25	15.5
		50	50	17.24	17.36	17.11	15.5
	64QAM	1	0	17.18	17.38	17.18	15.5
		1	50	17.41	17.36	17.29	15.5
		1	99	17.00	17.20	17.17	15.5
		50	0	17.23	17.21	17.21	15.5
		50	25	17.27	17.30	17.24	15.5
50		50	17.24	17.23	17.26	15.5	
15M	QPSK	1	0	17.14	16.93	16.87	15.5
		1	37	17.32	17.27	17.28	15.5
		1	74	17.00	16.91	16.93	15.5
		36	0	17.13	17.08	17.11	15.5
		36	19	17.19	17.21	17.17	15.5
		36	39	17.12	17.08	16.89	15.5
	75	0	17.24	17.20	17.15	15.5	
	16QAM	1	0	17.10	17.33	17.07	15.5
		1	37	17.30	17.17	17.18	15.5
		1	74	17.16	17.11	17.05	15.5
		36	0	17.22	17.21	17.28	15.5
		36	19	17.22	17.40	17.21	15.5
		36	39	17.09	17.33	17.01	15.5
	64QAM	1	0	17.17	17.23	17.13	15.5
		1	37	17.32	17.32	17.25	15.5
		1	74	16.95	17.12	17.12	15.5
		1	74	17.33	17.30	17.08	15.5
		36	0	17.20	17.15	17.22	15.5
36		19	17.21	17.08	17.12	15.5	
10M	QPSK	1	0	17.22	16.90	16.86	15.5
		1	24	17.28	17.28	17.25	15.5
		1	49	17.05	16.92	16.85	15.5
		25	0	17.13	17.18	17.10	15.5
		25	12	17.19	17.22	17.27	15.5
		25	25	17.07	17.08	16.89	15.5
	50	0	17.21	17.18	17.08	15.5	
	16QAM	1	0	17.22	17.25	17.02	15.5
		1	24	17.22	17.07	17.23	15.5
		1	49	17.10	17.23	16.92	15.5
		25	0	17.09	17.28	17.22	15.5
		25	25	17.11	17.35	17.07	15.5
		50	0	17.16	17.25	17.03	15.5
	64QAM	1	0	17.34	17.32	17.19	15.5
		1	24	16.88	17.13	17.15	15.5
		1	49	17.24	17.20	17.01	15.5
		25	0	17.24	17.22	17.14	15.5
		25	12	17.18	17.13	17.24	15.5
25		25	17.12	17.26	16.95	15.5	
5M	QPSK	1	0	17.05	16.93	16.90	15.5
		1	12	17.39	17.29	17.26	15.5
		1	24	17.00	16.84	16.97	15.5
		12	0	17.15	17.18	17.08	15.5
		12	6	17.15	17.17	17.19	15.5
		12	13	17.12	17.08	16.89	15.5
	25	0	17.24	17.07	17.12	15.5	
	16QAM	1	0	17.08	17.27	17.02	15.5
		1	12	17.22	17.11	17.23	15.5
		1	24	17.16	17.17	17.03	15.5
		12	0	17.12	17.28	17.28	15.5
		12	6	17.10	17.35	17.11	15.5
		12	13	17.09	17.36	17.02	15.5
	64QAM	1	0	17.15	17.36	17.07	15.5
		1	12	17.26	17.21	17.27	15.5
		1	12	16.88	17.14	17.08	15.5
		1	24	17.28	17.20	17.01	15.5
		12	0	17.16	17.27	17.21	15.5
12		6	17.13	17.16	17.18	15.5	
1.4M	QPSK	1	0	17.17	16.99	16.96	15.5
		1	7	17.35	17.37	17.24	15.5
		1	14	17.01	16.84	16.84	15.5
		8	0	17.07	17.19	17.11	15.5
		8	3	17.13	17.10	17.18	15.5
		8	7	17.11	17.20	16.92	15.5
	15	0	17.18	17.11	17.06	15.5	
	16QAM	1	0	17.20	17.31	17.08	15.5
		1	7	17.36	17.08	17.20	15.5
		1	14	17.19	17.16	16.97	15.5
		8	0	17.12	17.29	17.18	15.5
		8	3	17.18	17.30	17.15	15.5
		8	7	17.12	17.34	17.03	15.5
	64QAM	15	0	17.13	17.26	17.08	15.5
		1	0	17.33	17.21	17.25	15.5
		1	7	16.93	17.05	17.15	15.5
		1	14	17.22	17.26	17.05	15.5
		8	0	17.22	17.27	17.13	15.5
8		3	17.11	17.18	17.22	15.5	
1.4M	QPSK	1	0	17.05	16.93	16.90	15.5
		1	2	17.40	17.31	17.32	15.5
		1	5	16.99	16.86	16.89	15.5
		3	0	17.16	17.20	17.17	15.5
		3	1	17.13	17.16	17.20	15.5
		3	3	17.20	17.15	16.92	15.5
	6	0	17.21	17.18	17.17	15.5	
	16QAM	1	0	17.15	17.32	17.06	15.5
		1	2	17.25	17.20	17.23	15.5
		1	5	17.19	17.22	17.02	15.5
		3	0	17.18	17.18	17.18	15.5
		3	1	17.21	17.32	17.18	15.5
		3	3	17.12	17.40	16.97	15.5
	64QAM	6	0	17.11	17.31	17.03	15.5
		1	0	17.39	17.23	17.28	15.5
		1	2	16.98	17.14	17.10	15.5
		1	5	17.29	17.25	16.98	15.5
		3	0	17.18	17.15	17.14	15.5
3		1	17.22	17.13	17.14	15.5	

LTE Band 4							
BW	Modulation	RB Size	RB Offset	Low	Mid	High	Max. Tune-up (MHz)
		Channel	Frequency (MHz)	2050	2070	2090	
20M	QPSK	1	0	18.04	18.00	17.97	15.5
		1	50	18.32	18.20	18.24	15.5
		1	99	17.95	18.05	17.92	15.5
		50	0	17.96	18.06	18.09	15.5
		50	25	18.16	18.15	18.11	15.5
		50	50	17.94	18.03	18.14	15.5
	100	0	18.10	17.99	18.04	15.5	
	16QAM	1	0	17.89	17.88	18.02	15.5
		1	50	17.98	18.10	18.13	15.5
		1	99	18.05	17.99	18.00	15.5
		50	0	17.97	18.02	18.15	15.5
		50	25	18.01	18.14	18.23	15.5
		50	50	17.88	18.15	18.12	15.5
	64QAM	100	0	17.74	17.89	17.92	15.5
		1	0	17.97	17.79	17.86	15.5
		1	50	18.16	17.99	18.00	15.5
		1	74	18.01	17.88	17.77	15.5
		50	0	18.09	17.89	17.86	15.5
50		25	18.21	18.11	18.07	15.5	
15M	QPSK	1	0	17.97	17.91	17.81	15.5
		1	37	18.29	18.20	18.21	15.5
		1	74	17.94	18.01	17.81	15.5
		36	0	17.78	18.00	17.95	15.5
		36	19	18.10	18.13	18.09	15.5
		36	39	17.81	18.06	18.01	15.5
	75	0	17.98	17.87	17.99	15.5	
	16QAM	1	0	17.74	17.85	17.91	15.5
		1	37	17.93	17.96	18.09	15.5
		1	74	18.03	17.92	17.90	15.5
		36	0	17.89	17.88	18.03	15.5
		36	19	17.91	18.08	18.21	15.5
		36	39	17.86	18.01	18.09	15.5
	64QAM	75	0	17.59	17.87	17.81	15.5
		1	0	17.82	17.72	17.77	15.5
		1	37	18.04	17.93	17.99	15.5
		1	74	18.11	17.84	17.77	15.5
		36	0	17.99	17.84	17.82	15.5
36		19	18.15	18.05	18.03	15.5	
10M	QPSK	1	0	17.97	17.91	17.81	15.5
		1	24	18.24	18.23	18.10	15.5
		1	49	17.81	18.02	17.83	15.5
		25	0	17.78	17.92	18.02	15.5
		25	12	18.04	18.03	17.96	15.5
		25	25	17.81	18.06	18.00	15.5
	50	0	17.99	17.85	17.93	15.5	
	16QAM	1	0	17.82	17.92	17.88	15.5
		1	24	17.92	18.08	18.02	15.5
		1	49	17.98	17.95	17.89	15.5
		25	0	17.89	18.05	18.12	15.5
		25	25	17.81	18.14	18.03	15.5
		50	0	17.80	17.80	17.88	15.5
	64QAM	1	0	17.96	17.76	17.79	15.5
		1	24	18.05	17.90	17.93	15.5
		1	49	18.11	17.84	17.77	15.5
		25	0	18.01	17.82	17.81	15.5
		25	12	18.08	17.98	18.05	15.5
25		25	17.90	17.92	17.94	15.5	
5M	QPSK	1	0	17.97	17.92	17.90	15.5
		1	12	18.30	18.15	18.10	15.5
		1	24	17.82	17.90	17.79	15.5
		12	0	17.72	17.94	18.05	15.5
		12	6	18.05	18.00	17.97	15.5
		12	13	17.81			

LTE Band 7									
BW	Modulation	RB Size	RB Offset	Low	Mid	High	Max. Tune-up (dBm)		
		Channel	20860	21100	21350	21600			
20M	QPSK	1	0	17.32	17.16	17.02	18.5		
		1	50	17.44	17.20	17.07	18.5		
		1	99	17.12	16.93	17.07	18.5		
		50	0	17.21	17.19	16.98	18.5		
		50	25	17.28	17.22	17.16	18.5		
		50	50	17.30	17.23	17.09	18.5		
		100	0	17.26	17.25	17.10	18.5		
		1	0	17.25	17.23	17.13	18.5		
		1	50	17.19	17.18	17.21	18.5		
		1	99	17.29	17.09	17.04	18.5		
		50	0	17.07	16.97	17.02	18.5		
		50	25	17.18	16.88	16.81	18.5		
	50	50	17.16	17.13	17.06	18.5			
	100	0	17.13	16.86	16.80	18.5			
	64QAM	1	0	17.04	17.12	17.01	18.5		
		1	50	16.96	17.08	17.08	18.5		
		1	99	17.00	17.09	17.08	18.5		
		50	0	16.97	16.85	17.02	18.5		
		50	25	17.28	17.04	16.96	18.5		
		50	50	16.92	16.89	16.90	18.5		
		100	0	17.17	16.90	16.83	18.5		
		15M	QPSK	1	0	17.20	17.12	16.89	18.5
				1	37	17.32	17.12	16.97	18.5
				1	74	17.03	16.80	16.97	18.5
36				0	17.07	17.07	16.95	18.5	
36				19	17.19	17.07	17.01	18.5	
36	39			17.21	17.10	16.97	18.5		
75	0			17.26	17.16	17.04	18.5		
1	0			17.15	17.20	17.03	18.5		
1	37			17.12	17.03	17.15	18.5		
1	74			17.14	17.02	16.94	18.5		
36	0			17.04	16.84	16.91	18.5		
36	19			17.12	16.80	16.77	18.5		
36	39		17.05	17.06	16.96	18.5			
75	0		17.02	16.85	16.80	18.5			
64QAM	1		0	16.90	17.09	16.90	18.5		
	1		37	17.23	16.84	16.90	18.5		
	1		74	16.88	17.03	17.04	18.5		
	36		0	16.91	16.72	16.94	18.5		
	36		19	17.19	17.01	16.91	18.5		
	36		39	17.20	16.81	16.84	18.5		
	75		0	17.02	16.84	16.84	18.5		
	10M		QPSK	1	0	17.18	17.03	16.82	18.5
				1	24	17.35	17.13	16.96	18.5
				1	49	16.98	16.80	17.05	18.5
		25		0	17.11	17.04	16.83	18.5	
		25		12	17.14	17.13	17.03	18.5	
25		25		17.16	17.17	17.06	18.5		
50		0		17.31	17.20	17.00	18.5		
1		0		17.16	17.15	17.09	18.5		
1		24		17.06	17.05	17.12	18.5		
1		49		17.15	17.08	16.89	18.5		
25		0		17.00	16.93	16.89	18.5		
25		12		17.11	16.75	16.79	18.5		
64QAM		1	0	17.03	17.07	16.87	18.5		
		1	24	17.27	16.84	17.05	18.5		
		1	49	16.92	17.06	17.02	18.5		
		25	0	16.88	16.79	16.97	18.5		
		25	12	17.15	16.98	16.88	18.5		
		25	25	17.23	16.80	16.85	18.5		
		50	0	17.02	16.86	16.91	18.5		
		5M	QPSK	1	0	17.17	17.15	16.88	18.5
				1	12	17.32	17.13	16.95	18.5
				1	24	17.07	16.90	16.96	18.5
				12	0	17.12	17.16	16.96	18.5
				12	6	17.13	17.20	17.15	18.5
12	13			17.27	17.16	17.07	18.5		
25	0			17.33	17.19	16.99	18.5		
16QAM	1			0	17.19	17.18	17.03	18.5	
	1			12	17.08	17.12	17.12	18.5	
	1			24	17.15	17.05	16.91	18.5	
	12			0	17.01	16.94	16.96	18.5	
	12			6	17.03	16.86	16.66	18.5	
	12		13	17.09	17.10	17.07	18.5		
	25		0	17.06	16.80	16.85	18.5		
	64QAM		1	0	16.97	17.04	16.91	18.5	
			1	12	17.24	16.89	16.96	18.5	
			1	24	16.94	16.95	17.07	18.5	
			12	0	16.90	16.75	16.97	18.5	
			12	6	17.18	16.97	16.88	18.5	
12			13	17.23	16.79	16.85	18.5		
25			0	17.06	16.94	16.81	18.5		

LTE Band 13									
BW	Modulation	RB Size	RB Offset	Mid	Max. Tune-up (dBm)				
		Channel	23230	23230	23230				
10M	QPSK	1	0	792	24.33	25.5			
		1	24	24.46	24.33	25.5			
		1	49	24.31	24.31	25.5			
		25	0	23.38	23.38	24.5			
		25	12	23.42	23.42	24.5			
		25	25	23.39	23.39	24.5			
		50	0	23.41	23.41	24.5			
		1	0	23.64	23.64	24.5			
		1	24	23.66	23.66	24.5			
		1	49	23.62	23.62	24.5			
		25	0	22.51	22.51	23.5			
		25	12	22.48	22.48	23.5			
	25	25	22.47	22.47	23.5				
	50	0	22.50	22.50	23.5				
	64QAM	1	0	22.55	22.55	23.5			
		1	24	22.77	22.77	23.5			
		1	49	22.56	22.56	23.5			
		25	0	21.37	21.37	22.5			
		25	12	21.33	21.33	22.5			
		25	25	21.31	21.31	22.5			
		50	0	21.35	21.35	22.5			
		5M	QPSK	1	0	779.5	24.22	24.27	25.5
				1	12	24.40	24.42	24.35	25.5
				1	24	24.28	24.24	24.23	25.5
12				0	23.35	23.32	23.23	24.5	
12				6	23.30	23.23	23.30	24.5	
12	13			23.27	23.32	23.36	24.5		
25	0			23.37	23.39	23.29	24.5		
16QAM	1			0	23.52	23.59	23.59	24.5	
	1			12	23.81	23.79	23.72	24.5	
	1			24	23.49	23.58	23.60	24.5	
	12			0	22.48	22.44	22.39	23.5	
	12			6	22.39	22.42	22.42	23.5	
	12		13	22.34	22.46	22.42	23.5		
	25		0	22.47	22.35	22.37	23.5		
	64QAM		1	0	22.43	22.42	22.50	23.5	
			1	12	22.69	22.73	22.75	23.5	
			1	24	22.41	22.40	22.46	23.5	
			12	0	21.29	21.22	21.32	22.5	
			12	6	21.23	21.31	21.22	22.5	
12			13	21.23	21.18	21.16	22.5		
25			0	21.21	21.25	21.25	22.5		

LTE Band 26									
BW	Modulation	RB Size	RB Offset	Low	Mid	High	Max. Tune-up (dBm)		
		Channel	26740	26865	26990	27115			
15M	QPSK	1	0	841.5	831.5	841.5	25.5		
		1	37	24.45	24.34	24.29	25.5		
		1	74	24.18	24.06	23.99	25.5		
		36	0	23.32	23.30	23.22	24.5		
		36	19	23.35	23.31	23.25	24.5		
		36	39	23.28	23.29	23.20	24.5		
		75	0	23.30	23.27	23.22	24.5		
		1	0	23.48	23.36	23.33	24.5		
		1	37	23.70	23.60	23.58	24.5		
		1	74	23.42	23.34	23.23	24.5		
		36	0	22.34	22.32	22.21	23.5		
		36	19	22.40	22.31	22.24	23.5		
	36	39	22.33	22.28	22.16	23.5			
	75	0	22.36	22.33	22.19	23.5			
	64QAM	1	0	22.45	22.46	21.98	23.5		
		1	37	22.64	22.49	22.17	23.5		
		1	74	22.43	22.31	21.94	23.5		
		36	0	21.28	21.33	21.22	22.5		
		36	19	21.30	21.34	21.26	22.5		
		36	39	21.22	21.30	21.22	22.5		
		75	0	21.30	21.29	21.21	22.5		
		10M	QPSK	1	0	24.06	24.04	23.92	25.5
				1	24	24.38	24.25	24.18	25.5
				1	49	24.17	23.96	23.85	25.5
25				0	23.19	23.17	23.08	24.5	
25				12	23.20	23.30	23.16	24.5	
25	25			23.20	23.18	23.15	24.5		
50	0			23.18	23.22	23.21	24.5		
16QAM	1			0	23.38	23.35	23.28	24.5	
	1			24	23.64	23.56	23.48	24.5	
	1			49	23.32	23.33	23.19	24.5	
	25			0	22.27	22.18	22.19	23.5	
	25			12	22.39	22.25	22.23	23.5	
	25		25	22.26	22.23	22.07	23.5		
	50		0	22.35	22.21	22.17	23.5		
	64QAM		1	0	22.35	22.39	21.97	23.5	
			1	24	22.51	22.45	22.16	23.5	
			1	49	22.37	22.45	21.91	23.5	
			25	0	21.25	21.22	21.12	22.5	
			25	12	21.25	21.25	21.15	22.5	
25			25	21.18	21.18	21.08	22.5		
50			0	21.28	21.19	21.14	22.5		
5M			QPSK	1	0	846.5	831.5	846.5	25.5
				1	12	24.37	24.30	24.18	25.5
				1	24	24.15	23.91	23.88	25.5
		12		0	23.17	23.19	23.14	24.5	
		12		6	23.25	23.22	23.20	24.5	
	12	13		23.16	23.16	23.14	24.5		
	25	0		23.21	23.21	23.07	24.5		
	16QAM	1		0	23.41	23.34	23.23	24.5	
		1		12	23.55	23.47	23.53	24.5	
		1		24	23.39	23.19	23.11	24.5	
		12		0	22.21	22.27	22.14	23.5	
		12		6	22.38	22.24	22.21	23.5	
		12	13	22.2					

LTE Band 38							
BW	Modulation	RB Size	RB Offset	Low	Mid	High	Max. Time-up (dBm)
		Channel	2975	3000	3025	3050	
20M	QPSK	1	0	19.88	20.08	19.98	21.5
		1	50	20.20	20.26	20.23	21.5
		1	99	19.86	19.82	19.82	21.5
		50	0	19.84	19.97	19.88	21.5
	16QAM	50	25	20.07	19.98	19.89	21.5
		50	50	19.84	19.86	19.79	21.5
		100	0	20.00	20.05	19.88	21.5
		1	0	19.79	19.92	19.90	21.5
	64QAM	1	50	20.12	20.06	20.08	21.5
		1	99	19.88	19.94	20.03	21.5
		50	25	20.15	20.13	20.13	21.5
		50	50	20.06	20.12	20.08	21.5
15M	QPSK	1	0	19.87	19.87	19.87	21.5
		1	37	20.18	20.21	20.16	21.5
		1	74	19.81	19.74	19.68	21.5
		36	0	19.79	19.92	19.81	21.5
	16QAM	36	19	19.95	19.93	19.90	21.5
		36	39	19.84	19.76	19.67	21.5
		75	0	19.97	19.95	19.87	21.5
		1	0	19.68	19.81	19.89	21.5
	64QAM	1	37	19.99	20.04	19.94	21.5
		1	74	19.84	19.88	19.97	21.5
		1	37	20.07	20.03	19.92	21.5
		1	74	19.86	19.87	19.86	21.5
10M	QPSK	1	0	19.83	19.83	19.83	21.5
		1	24	20.06	20.20	20.22	21.5
		1	49	19.85	19.80	19.69	21.5
		25	0	19.76	19.83	19.85	21.5
	16QAM	25	12	19.95	19.97	19.79	21.5
		25	25	19.74	19.76	19.67	21.5
		50	0	19.97	19.92	19.87	21.5
		1	0	19.73	19.90	19.84	21.5
	64QAM	1	24	20.06	20.01	19.97	21.5
		1	49	19.90	19.87	19.91	21.5
		1	49	19.92	20.04	19.97	21.5
		25	12	20.03	19.98	20.05	21.5
5M	QPSK	1	0	19.83	19.83	19.83	21.5
		1	12	20.11	20.20	20.15	21.5
		1	24	19.81	19.67	19.74	21.5
		12	0	19.79	19.86	19.79	21.5
	16QAM	12	6	19.95	19.97	19.76	21.5
		12	13	19.80	19.77	19.73	21.5
		25	0	19.86	20.02	19.80	21.5
		1	0	19.65	19.87	19.83	21.5
	64QAM	1	12	20.08	19.95	20.05	21.5
		1	24	19.90	19.81	20.01	21.5
		1	24	19.91	20.06	20.06	21.5
		12	6	20.08	20.08	20.11	21.5

LTE Band 41 (2486 - 2690MHz)							
BW	Modulation	RB Size	RB Offset	Low	Mid	High	Max. Time-up (dBm)
		Channel	2975	3000	3025	3050	
20M	QPSK	1	0	19.74	19.39	19.51	19.30
		1	50	19.86	19.50	19.74	19.44
		1	99	19.55	19.31	19.33	19.39
		50	0	19.69	19.44	19.69	19.40
	16QAM	50	25	19.76	19.45	19.72	19.40
		50	50	19.53	19.42	19.47	19.33
		100	0	19.67	19.56	19.64	19.43
		1	0	19.74	19.36	19.54	19.43
	64QAM	1	50	19.64	19.63	19.53	19.62
		1	99	19.25	19.25	19.36	19.35
		50	25	19.84	19.48	19.68	19.41
		50	50	19.78	19.53	19.56	19.35
15M	QPSK	1	0	19.68	19.62	19.65	19.51
		1	37	19.31	19.43	19.47	19.41
		1	74	19.61	19.41	19.47	19.42
		36	0	19.62	19.43	19.62	19.41
	16QAM	36	19	19.69	19.30	19.60	19.29
		36	39	19.51	19.37	19.44	19.20
		75	0	19.62	19.43	19.54	19.34
		1	0	19.68	19.25	19.45	19.36
	64QAM	1	37	19.53	19.52	19.44	19.58
		1	74	19.12	19.11	19.25	19.28
		1	37	19.54	19.29	19.44	19.29
		1	74	19.38	19.17	19.26	19.38
10M	QPSK	1	0	19.65	19.48	19.68	19.48
		1	39	19.81	19.40	19.58	19.47
		36	0	19.55	19.48	19.52	19.30
		36	19	19.59	19.54	19.57	19.39
	16QAM	36	39	19.62	19.24	19.38	19.24
		75	0	19.78	19.35	19.54	19.39
		1	0	19.70	19.47	19.56	19.27
		1	0	19.30	19.40	19.41	19.24
	64QAM	1	37	19.54	19.29	19.44	19.29
		1	74	19.38	19.17	19.26	19.38
		1	37	19.55	19.30	19.37	19.29
		1	74	19.32	19.20	19.31	19.28
5M	QPSK	1	0	19.69	19.25	19.43	19.25
		1	24	19.80	19.47	19.68	19.34
		1	49	19.51	19.30	19.21	19.25
		25	0	19.59	19.29	19.63	19.34
	16QAM	25	12	19.61	19.32	19.60	19.29
		25	25	19.51	19.37	19.44	19.20
		50	0	19.52	19.54	19.49	19.32
		1	0	19.70	19.21	19.48	19.33
	64QAM	1	24	19.62	19.51	19.50	19.47
		1	49	19.13	19.13	19.31	19.31
		1	49	19.32	19.20	19.31	19.28
		25	12	19.70	19.43	19.64	19.39
2.5M	QPSK	1	0	19.73	19.50	19.52	19.33
		1	12	19.57	19.42	19.64	19.43
		1	24	19.62	19.51	19.50	19.47
		12	0	19.63	19.42	19.63	19.28
	16QAM	12	6	19.63	19.42	19.63	19.28
		12	13	19.42	19.31	19.49	19.28
		25	0	19.57	19.49	19.60	19.28
		1	0	19.67	19.32	19.49	19.31
	64QAM	1	12	19.57	19.48	19.51	19.52
		1	24	19.10	19.14	19.29	19.24
		1	24	19.56	19.33	19.58	19.28
		12	6	19.76	19.45	19.58	19.45

LTE Band 66							
BW	Modulation	RB Size	RB Offset	Low	Mid	High	Max. Time-up (dBm)
		Channel	19272	19292	19312	19332	
20M	QPSK	1	0	18.16	18.10	18.11	19.5
		1	50	18.47	18.48	18.43	19.5
		1	99	18.20	18.08	18.13	19.5
		50	0	18.10	18.22	18.18	19.5
	16QAM	50	25	18.30	18.39	18.31	19.5
		50	50	18.15	18.12	18.21	19.5
		100	0	18.24	18.32	18.22	19.5
		1	0	18.02	18.08	18.14	19.5
	64QAM	1	50	18.15	18.28	18.30	19.5
		1	99	18.23	18.20	18.17	19.5
		50	25	17.95	18.10	18.22	19.5
		50	50	17.95	18.16	18.13	19.5
15M	QPSK	1	0	18.16	18.08	18.07	19.5
		1	50	18.40	18.17	18.12	19.5
		1	99	18.32	18.03	17.98	19.5
		36	0	18.03	18.15	18.13	19.5
	16QAM	36	19	18.17	18.22	18.22	19.5
		36	39	18.04	18.07	18.16	19.5
		75	0	18.09	18.20	18.12	19.5
		1	0	17.89	17.99	18.08	19.5
	64QAM	1	37	18.07	18.19	18.18	19.5
		1	74	18.21	18.10	18.11	19.5
		1	37	18.25	18.06	18.07	19.5
		1	74	18.28	18.07	17.97	19.5
10M	QPSK	1	0	18.14	18.01	18.01	19.5
		1	39	18.13	17.97	17.97	19.5
		1	78	18.15	18.06	18.05	19.5
		36	0	18.01	18.13	18.13	19.5
	16QAM	36	19	18.13	18.04	18.04	19.5
		75	0	18.01	17.93	17.90	19.5
		1	0	18.13	17.94	17.97	19.5
		1	37	18.25	18.06	18.07	19.5
	64QAM	1	74	18.28	18.07	17.97	19.5
		1	37	18.26	18.06	18.07	19.5
		1	74	18.28	18.07	17.97	19.5
		25	12	18.09	17.98	17.98	19.5
5M	QPSK	1	0	18.07	18.02	18.02	19.5
		1	24	18.34	18.38	18.34	19.5
		1	49	18.09	17.97	18.03	19.5
		25	0	18.00	18.16	18.09	19.5
	16QAM	25	12	18.19	18.35	18.23	19.5
		25	25	18.04	18.02	18.09	19.5
		50	0	18.22	18.20	18.11	19.5
		1	0	17.90	18.02	18.03	19.5
	64QAM	1	24	18.14	18.13	18.29	19.5
		1	49	18.18	18.18	18.10	19.5
		1	49	18.38	17.97	17.97	19.5
		25	12	17.80	17.98	18.08	19.5
2.5M	QPSK	1	0	18.07	18.02	18.02	19.5
		1	12	18.39	18.47	18.33	19.5
		1	24	18.12	17.98	18.06	19.5
		12	0	18.08	18.08	18.13	19.5
	16QAM	12	6	18.16	18.27	18.29	19.5
		12	13	18.13	18.15	18.15	19.5
		25	0	18.11	18.28	18.09	19.5
		1	0	17.87	18.04	18.12	19.5
	64QAM	1	12	18.01	18.19	18.17	19.5
		1	24	18.17	18.11	18.05	19.5
		1	24	18.27	18.00	18.10	19.5
		12	6	17.86	18.02	18.11	19.5

Default Power					
2.4GHz WLAN		Ant2			
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	
2.4GHz WLAN	802.11a 1Mbps	1	2412	15.98	17.50
		6	2437	16.23	17.50
		11	2462	16.24	17.50
	802.11g 6Mbps	1	2412	14.90	16.50
		6	2437	15.13	16.50
		11	2462	15.20	16.50
	802.11n-HT20 MCS0	1	2412	13.96	15.50
		6	2437	14.19	15.50
		11	2462	14.05	15.50

5GHz WLAN					
5GHz WLAN		Ant2			
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	
5.2GHz WLAN	802.11a 6Mbps	36	5180	13.01	14.50
		40	5200	13.19	14.50
		44	5220	13.11	14.50
	802.11n-HT20 MCS0	48	5240	13.24	14.50
		36	5180	13.06	14.50
		40	5200	13.15	14.50
	802.11n-HT40 MCS0	44	5220	13.03	14.50
		48	5240	13.38	14.50
		38	5190	13.13	14.50
	802.11ac-VHT20 MCS0	46	5230	13.14	14.50
		36	5180	13.18	14.50
		40	5200	13.01	14.50
802.11ac-VHT40 MCS0	44	5220	13.09	14.50	
	48	5240	13.11	14.50	
	38	5190	13.08	14.50	
802.11ac-VHT80 MCS0	46	5230	13.16	14.50	
	42	5210	13.73	14.50	

5GHz WLAN					
5GHz WLAN		Ant2			
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	
5.3GHz WLAN	802.11a 6Mbps	52	5260	13.34	14.50
		56	5280	13.15	14.50
		60	5300	13.06	14.50
	802.11n-HT20 MCS0	64	5320	13.21	14.50
		52	5260	13.17	14.50
		56	5280	13.11	14.50
	802.11n-HT40 MCS0	60	5300	13.33	14.50
		64	5320	13.18	14.50
		54	5270	13.10	14.50
	802.11ac-VHT20 MCS0	62	5310	13.08	14.50
		52	5260	13.03	14.50
		56	5280	13.12	14.50
802.11ac-VHT40 MCS0	60	5300	13.07	14.50	
	64	5320	13.34	14.50	
	54	5270	13.23	14.50	
802.11ac-VHT80 MCS0	62	5310	13.46	14.50	
	58	5290	13.29	14.50	

5GHz WLAN					
5GHz WLAN		Ant2			
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	
5.5GHz WLAN	802.11a 6Mbps	100	5500	13.34	14.50
		116	5580	13.04	14.50
		124	5620	13.21	14.50
	802.11n-HT20 MCS0	132	5660	13.17	14.50
		140	5700	13.43	14.50
		144	5720	13.28	14.50
	802.11n-HT40 MCS0	100	5500	13.23	14.50
		116	5580	13.28	14.50
		124	5620	13.22	14.50
	802.11ac-VHT20 MCS0	132	5660	13.18	14.50
		140	5700	13.31	14.50
		144	5720	13.23	14.50
802.11ac-VHT40 MCS0	102	5510	13.20	14.50	
	110	5550	13.33	14.50	
	126	5630	13.14	14.50	
802.11ac-VHT80 MCS0	134	5670	13.28	14.50	
	142	5710	13.27	14.50	
	100	5500	13.35	14.50	
802.11ac-VHT20 MCS0	116	5580	13.32	14.50	
	124	5620	13.21	14.50	
	132	5660	13.13	14.50	
802.11ac-VHT40 MCS0	140	5700	13.15	14.50	
	144	5720	13.27	14.50	
	102	5510	13.24	14.50	
802.11ac-VHT80 MCS0	110	5550	13.37	14.50	
	126	5630	13.21	14.50	
	134	5670	13.34	14.50	
802.11ac-VHT80 MCS0	142	5710	13.18	14.50	
	106	5530	13.84	14.50	
	122	5610	13.38	14.50	
802.11ac-VHT80 MCS0	138	5690	13.42	14.50	

5GHz WLAN					
5GHz WLAN		Ant2			
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	
5.8GHz WLAN	802.11a 6Mbps	149	5745	13.37	14.50
		157	5785	12.99	14.50
		165	5825	13.25	14.50
	802.11n-HT20 MCS0	149	5745	13.13	14.50
		157	5785	13.31	14.50
		165	5825	13.19	14.50
	802.11n-HT40 MCS0	151	5765	13.37	14.50
		159	5795	13.22	14.50
		149	5745	13.02	14.50
	802.11ac-VHT20 MCS0	157	5785	13.06	14.50
		165	5825	13.14	14.50
		151	5765	13.20	14.50
802.11ac-VHT40 MCS0	159	5795	13.34	14.50	
	155	5775	13.87	14.50	

Ant2					
BT	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit
BLE	1M	0	2402	0.46	2.00
		19	2440	0.97	2.00
	2M	39	2480	1.09	3.00
		1	2404	0.86	2.00
BLE	2M	19	2440	1.14	3.00
		38	2478	1.47	3.00
	S2	0	2402	0.49	2.00
		19	2440	0.98	2.00
BLE	S2	39	2480	1.70	3.00
		0	2402	0.61	2.00
	S8	19	2440	1.13	3.00
		39	2480	1.87	3.00
BLE	S8	0	2402	0.65	10.00
		39	2441	6.50	8.00
	GFSK	78	2480	10.67	12.00
		0	2402	0.80	2.00
BLE	DQPSK	39	2441	3.47	5.00
		78	2480	8.18	10.00
	8DPSK	0	2402	0.66	8.00
		39	2441	3.48	5.00
BLE	8DPSK	78	2480	8.14	10.00

< Receiver Power / DSI-1 >					
2.4GHz WLAN		Ant2			
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	
2.4GHz WLAN	802.11a 1Mbps	1	2412	13.09	14.50
		6	2437	13.38	14.50
		11	2462	13.45	14.50
	802.11g 6Mbps	1	2412	13.50	14.50
		6	2437	13.50	14.50
		11	2462	13.50	14.50
	802.11n-HT20 MCS0	1	2412	12.50	14.50
		6	2437	12.50	14.50
		11	2462	12.50	14.50

5GHz WLAN					
5GHz WLAN		Ant2			
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	
5.2GHz WLAN	802.11a 6Mbps	36	5180	9.50	9.50
		40	5200	9.50	9.50
		44	5220	9.50	9.50
	802.11n-HT20 MCS0	48	5240	9.50	9.50
		36	5180	9.50	9.50
		40	5200	9.50	9.50
	802.11n-HT40 MCS0	44	5220	9.50	9.50
		48	5240	9.50	9.50
		38	5190	9.50	9.50
	802.11ac-VHT20 MCS0	46	5230	9.50	9.50
		36	5180	9.50	9.50
		40	5200	9.50	9.50
802.11ac-VHT40 MCS0	44	5220	9.50	9.50	
	48	5240	9.50	9.50	
	38	5190	9.50	9.50	
802.11ac-VHT80 MCS0	46	5230	9.50	9.50	
	42	5210	8.87	9.50	

5GHz WLAN					
5GHz WLAN		Ant2			
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	
5.3GHz WLAN	802.11a 6Mbps	52	5260	9.50	9.50
		56	5280	9.50	9.50
		60	5300	9.50	9.50
	802.11n-HT20 MCS0	64	5320	9.50	9.50
		52	5260	9.50	9.50
		56	5280	9.50	9.50
	802.11n-HT40 MCS0	60	5300	9.50	9.50
		64	5320	9.50	9.50
		54	5270	9.50	9.50
	802.11ac-VHT20 MCS0	62	5310	9.50	9.50
		52	5260	9.50	9.50
		56	5280	9.50	9.50
802.11ac-VHT40 MCS0	60	5300	9.50	9.50	
	64	5320	9.50	9.50	
	54	5270	8.37	9.50	
802.11ac-VHT80 MCS0	62	5310	8.91	9.50	
	58	5290	9.50	9.50	

5GHz WLAN					
5GHz WLAN		Ant2			
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	
5.5GHz WLAN	802.11a 6Mbps	100	5500	9.50	9.50
		116	5580	9.50	9.50
		124	5620	9.50	9.50
	802.11n-HT20 MCS0	132	5660	9.50	9.50
		140	5700	9.50	9.50
		144	5720	9.50	9.50
	802.11n-HT40 MCS0	100	5500	9.50	9.50
		116	5580	9.50	9.50
		124	5620	9.50	9.50
	802.11ac-VHT20 MCS0	132	5660	9.50	9.50
		140	5700	9.50	9.50
		144	5720	9.50	9.50
802.11ac-VHT40 MCS0	102	5510	9.50	9.50	
	110	5550	9.50	9.50	
	126	5630	9.50	9.50	
802.11ac-VHT80 MCS0	134	5670	9.50	9.50	
	142	5710	9.50	9.50	
	100	5500	9.50	9.50	
802.11ac-VHT20 MCS0	116	5580	9.50	9.50	
	124	5620	9.50	9.50	
	132	5660	9.50	9.50	
802.11ac-VHT40 MCS0	140	5700	9.50	9.50	
	144	5720	9.50	9.50	
	102	5510	9.50	9.50	
802.11ac-VHT80 MCS0	110	5550	9.50	9.50	
	126	5630	9.50	9.50	
	134	5670	9.50	9.50	
802.11ac-VHT80 MCS0	142	5710	9.50	9.50	
	106	5530	8.66	9.50	
	122	5610	8.43	9.50	
802.11ac-VHT80 MCS0	138	5690	8.51	9.50	

5GHz WLAN					
5GHz WLAN		Ant2			
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	
5.8GHz WLAN	802.11a 6Mbps	149	5745	9.50	9.50
		157	5785	9.50	9.50
		165	5825	9.50	9.50
	802.11n-HT20 MCS0	149	5745	9.50	9.50
		157	5785	9.50	9.50
		165	5825	9.50	9.50
	802.11n-HT40 MCS0	151	5765	9.50	9.50
		159	5795	9.50	9.50
		149	5745	9.50	9.50
	802.11ac-VHT20 MCS0	157	5785	9.50	9.50
		165	5825	9.50	9.50
		151	5765	9.50	9.50

Appendix E. Photographs of EUT and Setup