



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	2600 MHz $\pm$ 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 $\pm$ 0.2) °C	39.0 $\pm$ 6 %	1.95 mho/m $\pm$ 6 %
Head TSL temperature change during test	<1.0 °C	---	---

SAR result with Head TSL

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	13.9 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	55.8 W/kg $\pm$ 18.8 % (k=2)
SAR averaged over 10 cm ³ (10 g) of Head TSL	Condition	
SAR measured	250 mW input power	6.13 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	24.6 W/kg $\pm$ 18.7 % (k=2)



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Appendix(Additional assessments outside the scope of CNAS L0570)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	51.1 Ω - 5.12j Ω
Return Loss	- 25.7dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.058 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

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DASY5 Validation Report for Head TSL

Date: 09.16.2021

Test Laboratory: CCTL, Beijing, China

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

Communication System: UID 0, CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2600$ MHz; $\sigma = 1.949$ S/m; $\epsilon_r = 39.04$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7517; ConvF(7.1, 7.1, 7.1) @ 2600 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 (7483)

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

Reference Value = 105.3 V/m; Power Drift = 0.01 dB

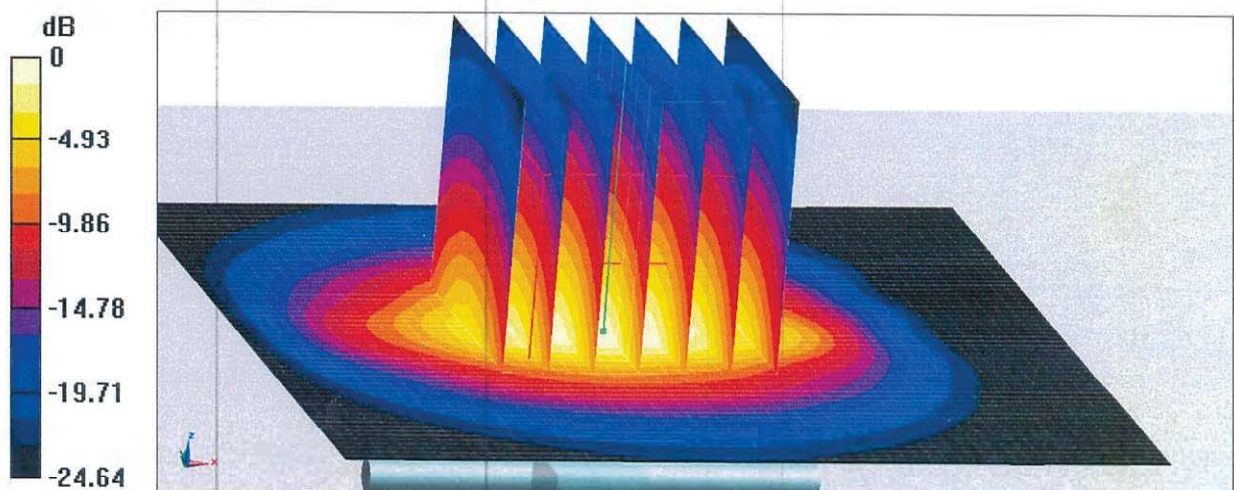
Peak SAR (extrapolated) = 30.6 W/kg

SAR(1 g) = 13.9 W/kg; SAR(10 g) = 6.13 W/kg

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

Ratio of SAR at M2 to SAR at M1 = 45.2%

Maximum value of SAR (measured) = 24.1 W/kg



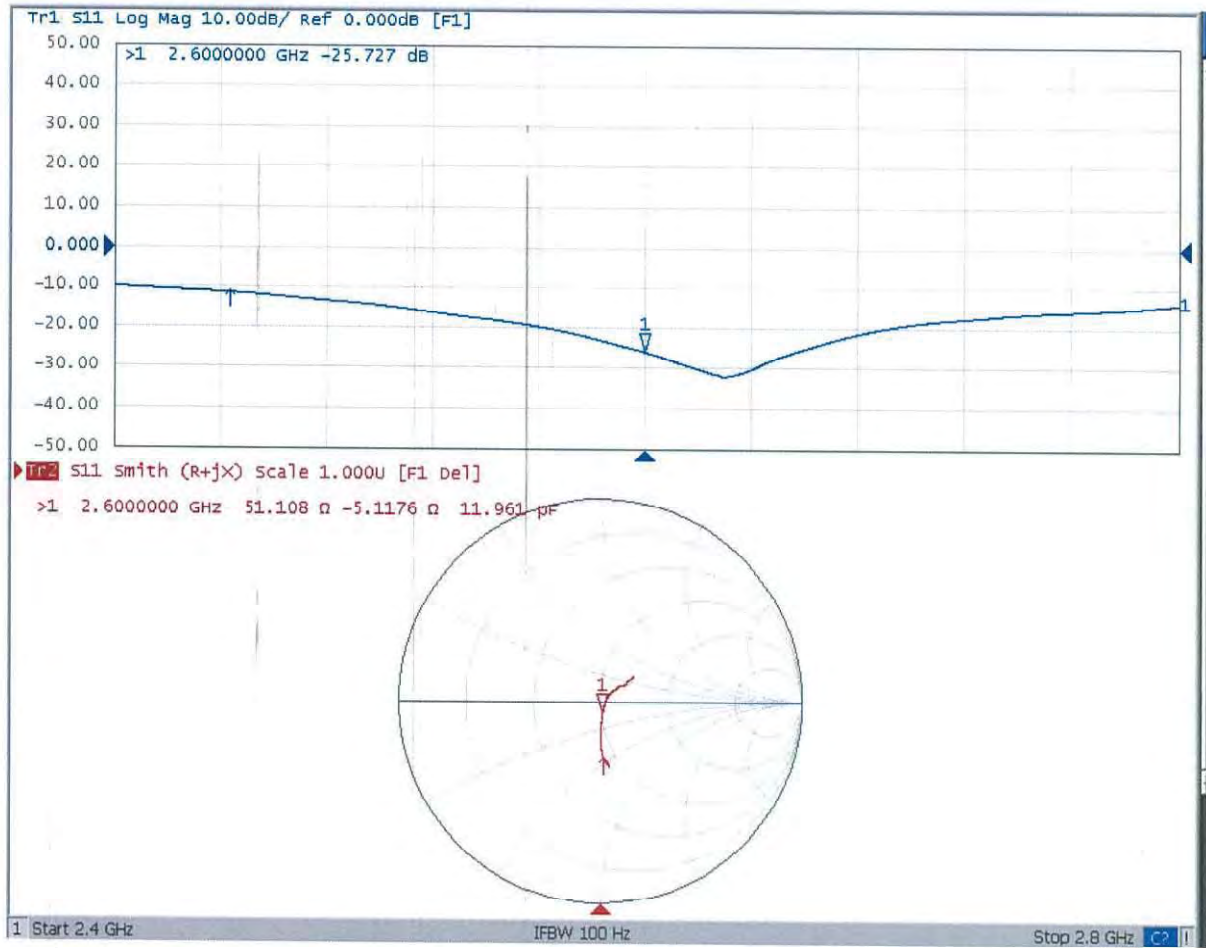
0 dB = 24.1 W/kg = 13.82 dBW/kg



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Impedance Measurement Plot for Head TSL



D2600V2 - SN: 1110 Extended Dipole Calibrations

Referring to KDB 865664 D01, if dipoles are verified in return loss ($< -20\text{dB}$, 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.

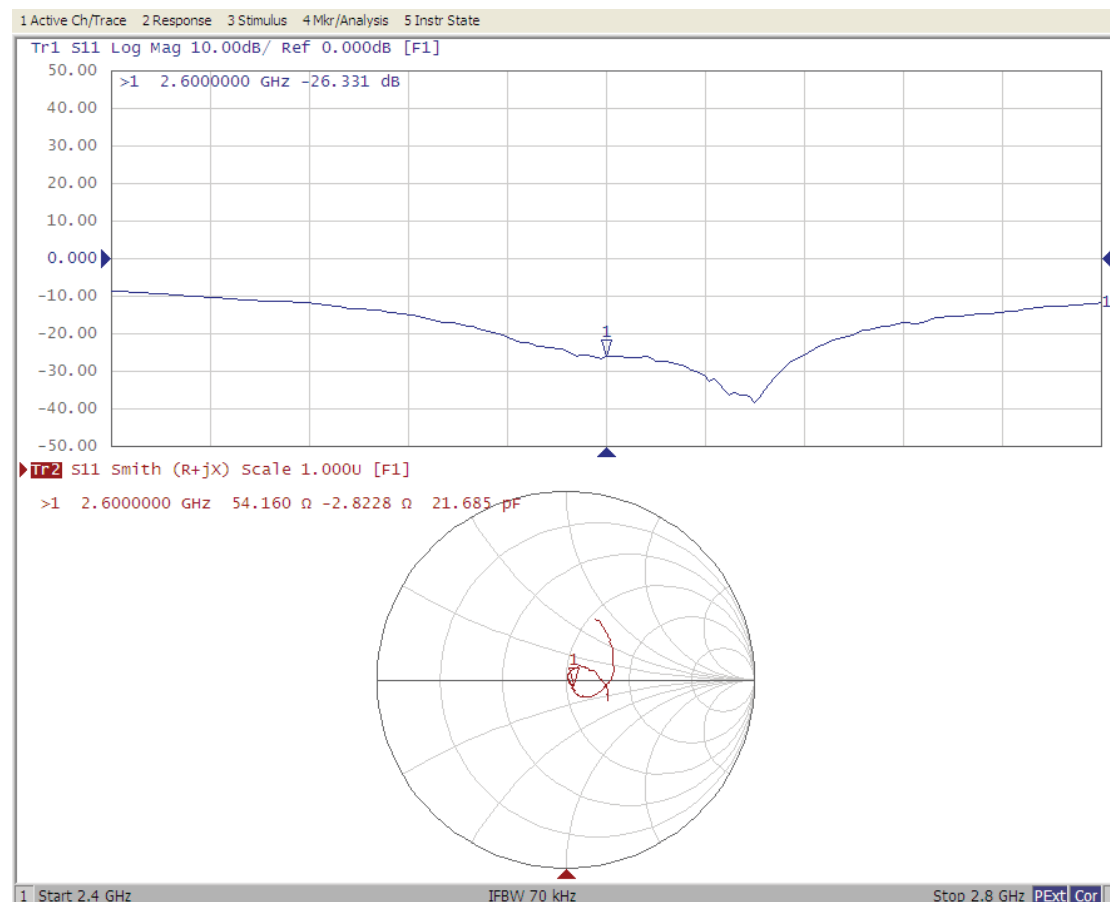
D2600V2 - SN: 1110						
2600 Head						
Date of Measurement	Return-loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)
2021.09.16	-25.7		51.1		-5.1	
2022.09.16	-26.3	2.7	54.2	3.1	-2.8	2.3
2023.09.16	-26.0	-1.2	53.1	2	-4.2	0.9

<Justification of the extended calibration>

The return loss is $< -20\text{dB}$, within 20% of prior calibration, and the impedance is within 5 ohm of prior calibration. Therefore the verification result should support extended calibration.

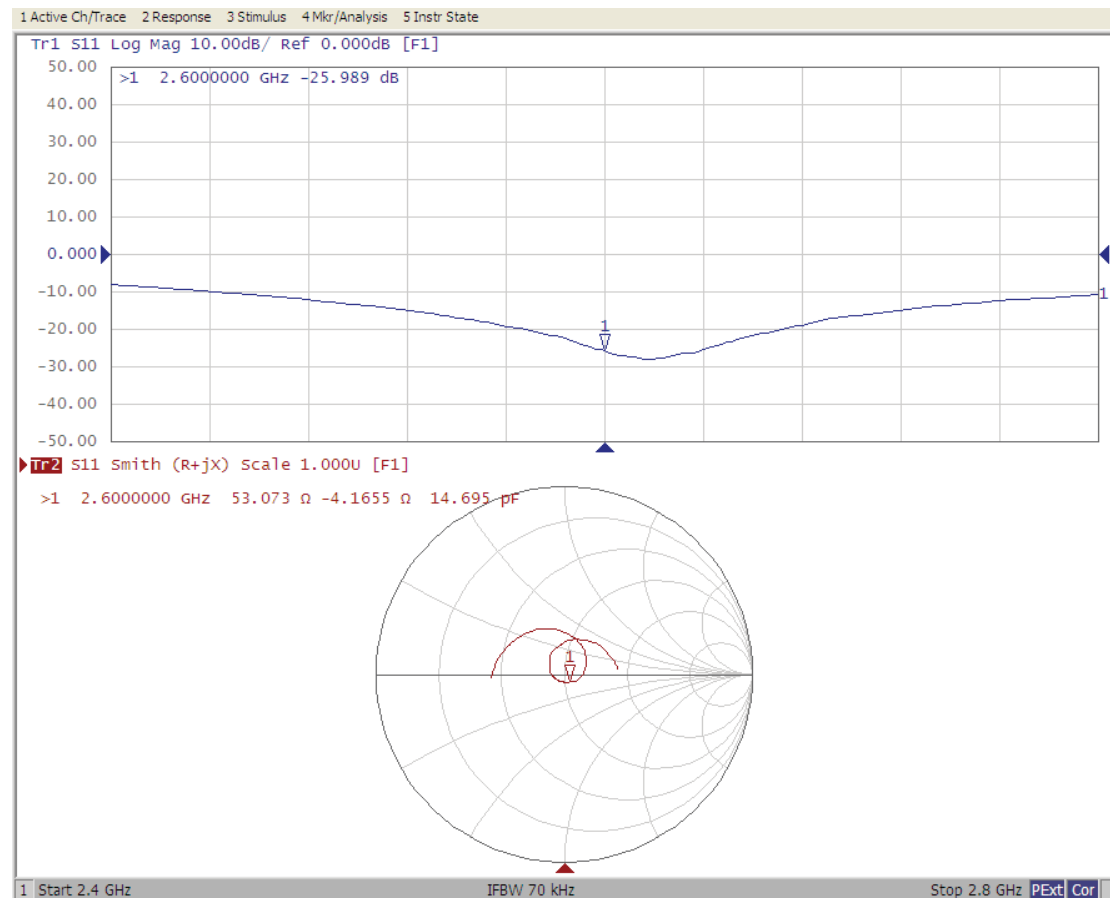
<Dipole Verification Data>

Head 2600MHz _2022.09.16



<Dipole Verification Data>

Head 2600MHz _2023.09.16





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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 $(22\pm3)^{\circ}\text{C}$ 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
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

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



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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:

- 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 = 4 mm, dz = 1.4 mm	Graded Ratio = 1.4 (Z direction)
Frequency	5250 MHz $\pm$ 1 MHz 5600 MHz $\pm$ 1 MHz 5750 MHz $\pm$ 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 $\pm$ 0.2) °C	36.6 $\pm$ 6 %	4.70 mho/m $\pm$ 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 $\pm$ 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 $\pm$ 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	$50.5\Omega - 3.27j\Omega$
Return Loss	- 29.7dB

Antenna Parameters with Head TSL at 5600 MHz

Impedance, transformed to feed point	$54.2\Omega + 0.81j\Omega$
Return Loss	- 27.8dB

Antenna Parameters with Head TSL at 5750 MHz

Impedance, transformed to feed point	$49.4\Omega + 1.99j\Omega$
Return Loss	- 33.6dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.098 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

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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

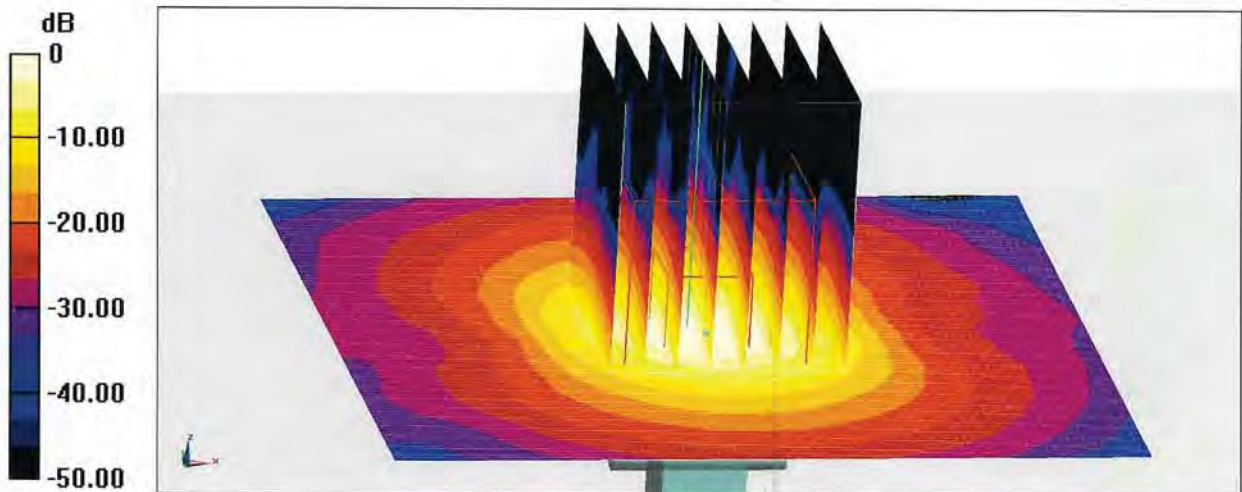


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Dipole Calibration /Pin=100mW, d=10mm, f=5750 MHz/Zoom Scan,
dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 67.72 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 33.5 W/kg
SAR(1 g) = 7.59 W/kg; SAR(10 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

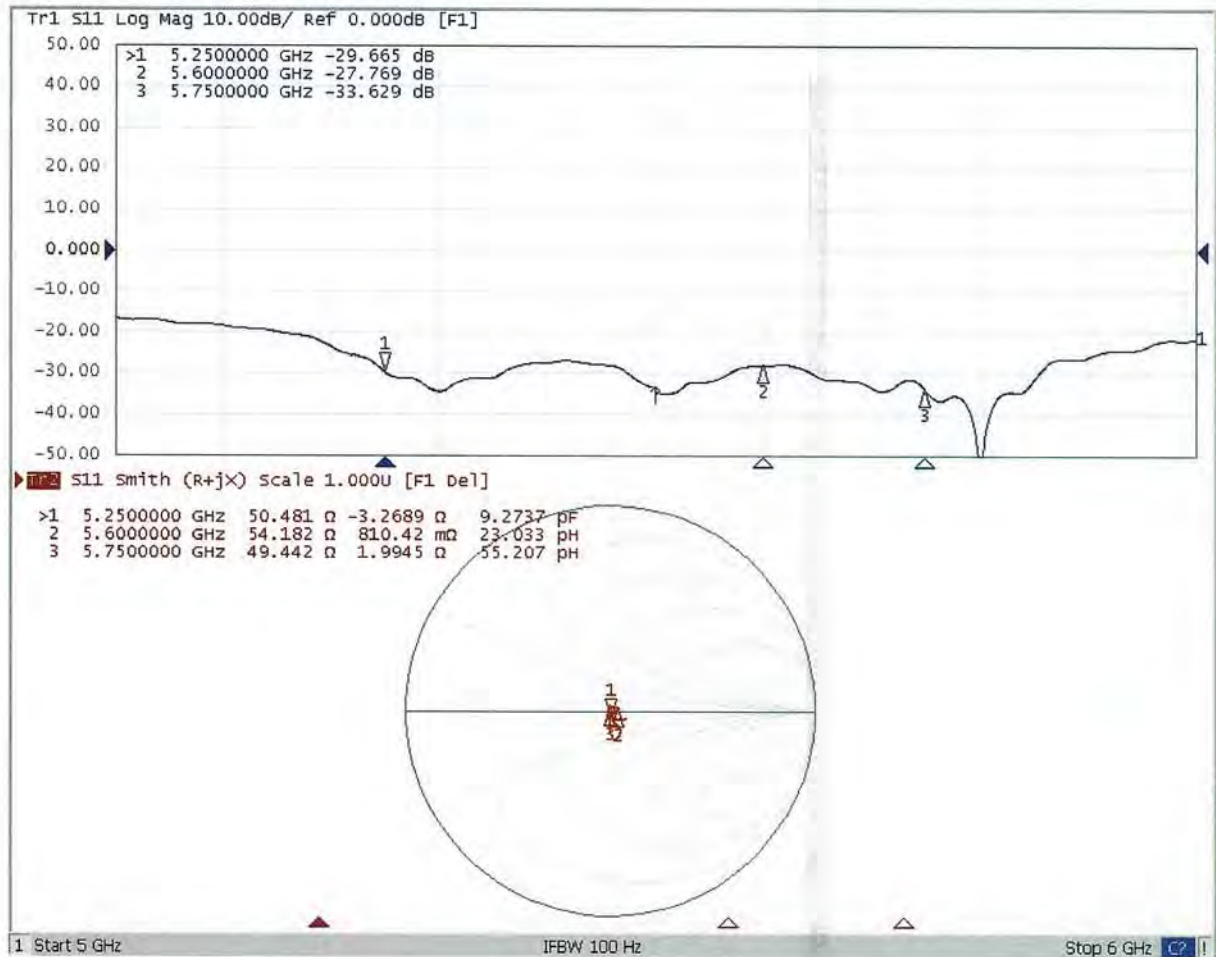




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Impedance Measurement Plot for Head TSL



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

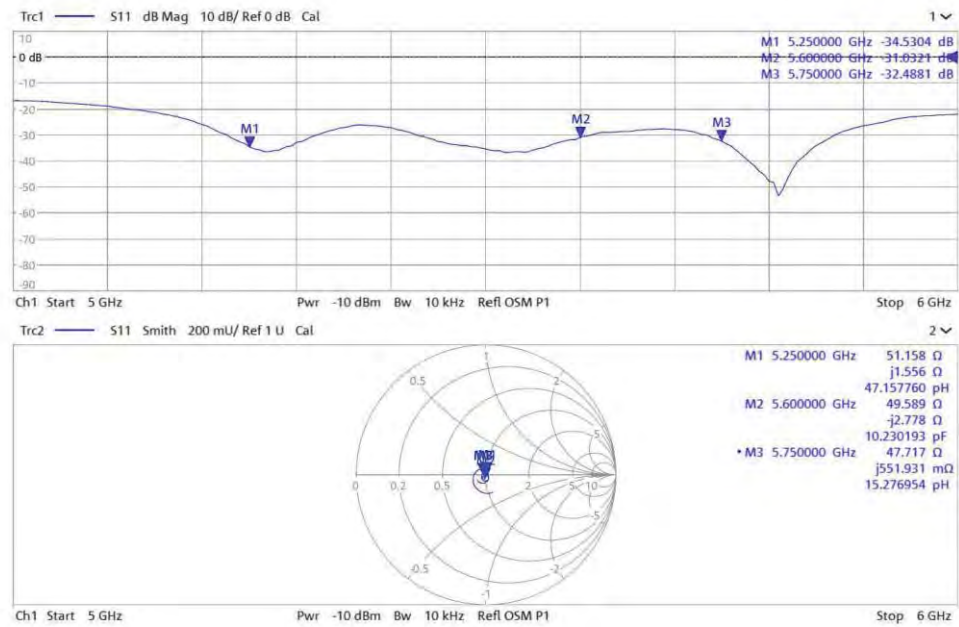
D5GHzV2 - SN: 1315						
5750MHz Head						
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)
10.22.2021	-33.6		49.4		1.99	
10.21.2022	-32.49	-3.31	47.72	-1.68	0.55	-1.44
10.20.2023	-36.43	8.41	50.87	1.47	1.34	-0.65

<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

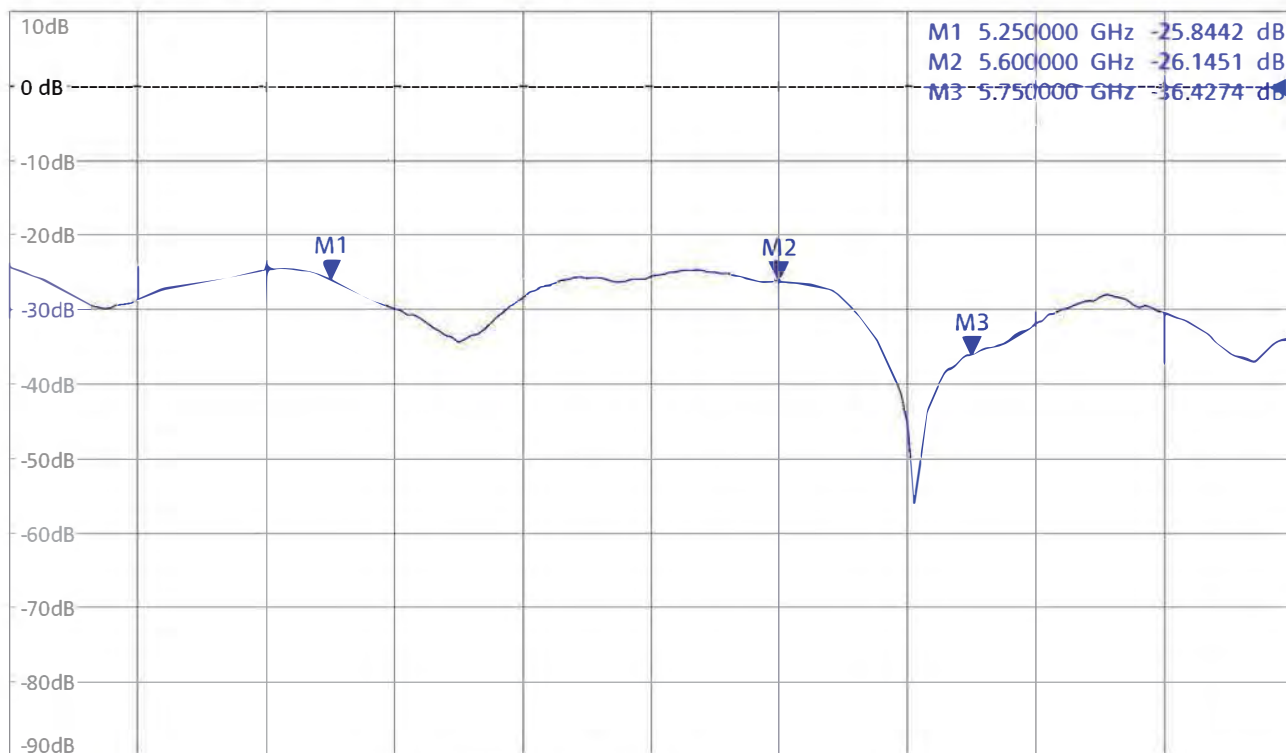


<Dipole Verification Data>

Head 5250-5750MHz _2023.10.20

Trc1 — S11 dB Mag 10 dB/ Ref 0 dB Cal

1

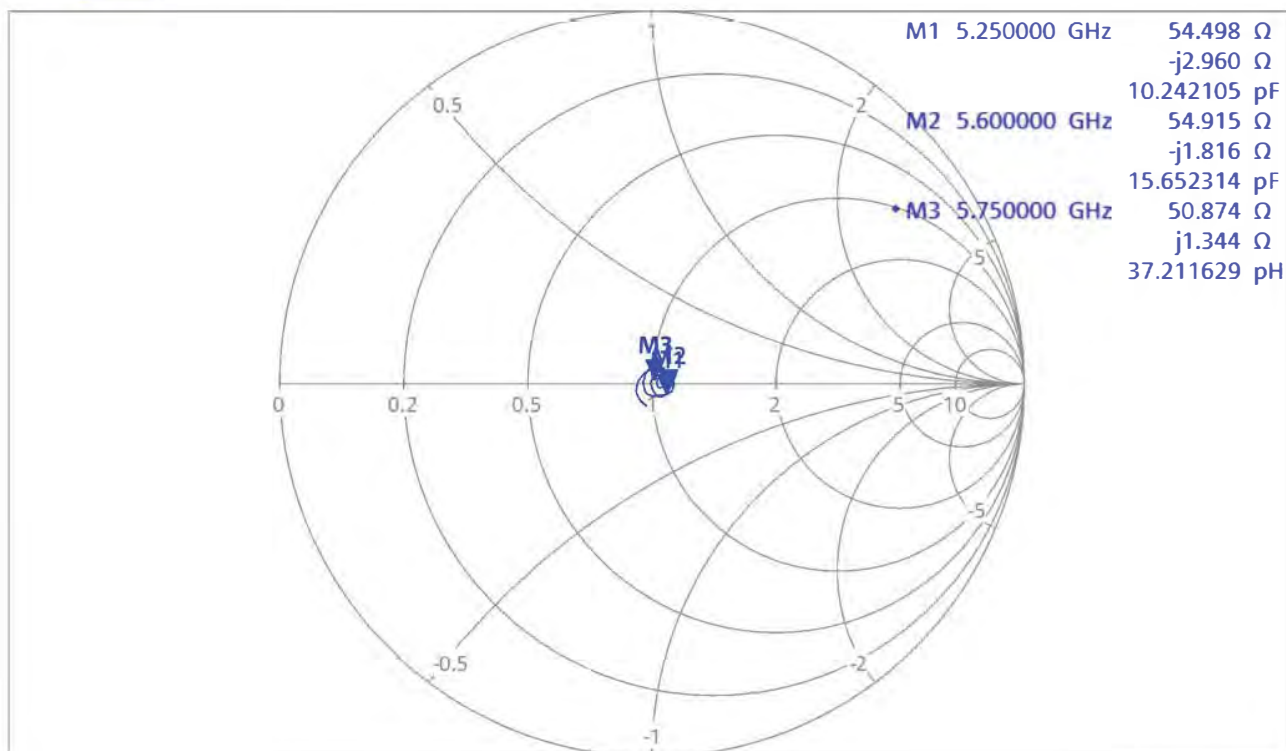


Ch1 Start 5 GHz Pwr -10 dBm Bw 10 kHz Refl OSM P1

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.

WWAN Full Power & DSI-2 Power & DSI-1 Power Ant1(MAIN)

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	32.08	32.11	32.15	33.50	29.36	29.37	29.22	30.50
GPRS 1Tx Slot	32.06	32.09	32.14	33.50	29.34	29.35	29.20	30.50
GPRS 2Tx Slot	28.61	28.64	28.69	30.00	25.61	25.66	25.55	26.70
GPRS 3Tx Slot	27.21	27.23	27.30	28.50	23.82	23.90	23.82	25.00
GPRS 4Tx Slot	26.23	26.26	26.32	27.50	22.98	22.97	22.91	24.00
EDGE 1Tx Slot	26.41	26.39	26.30	28.00	25.06	25.17	25.16	27.00
EDGE 2Tx Slot	23.43	23.49	23.56	25.00	22.06	22.16	22.25	24.00
EDGE 3Tx Slot	21.84	21.71	21.57	23.20	20.23	20.38	20.33	22.20
EDGE 4Tx Slot	20.12	20.14	20.05	22.00	19.07	19.13	19.03	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	810	
GSM	23.08	23.11	23.15	24.50	20.36	20.37	20.22	21.50
GPRS 1Tx Slot	23.06	23.09	23.14	24.50	20.34	20.35	20.20	21.50
GPRS 2Tx Slot	22.61	22.64	22.69	24.00	19.61	19.66	19.55	20.70
GPRS 3Tx Slot	22.95	22.97	23.04	24.24	19.56	19.64	19.56	20.74
GPRS 4Tx Slot	23.23	23.26	23.32	24.50	19.98	19.97	19.91	21.00
EDGE 1Tx Slot	17.41	17.39	17.30	19.00	16.06	16.17	16.16	18.00
EDGE 2Tx Slot	17.43	17.49	17.56	19.00	16.06	16.16	16.25	18.00
EDGE 3Tx Slot	17.58	17.45	17.31	18.94	15.97	16.12	16.07	17.94
EDGE 4Tx Slot	17.12	17.14	17.05	19.00	16.07	16.13	16.03	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	4233	
Rx Channel	9662	9800	9938	Max. Tune-up Power (dBm)	1537	1638	1738	Max. Tune-up Power (dBm)	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	24.37	24.24	24.26	25.50	24.55	24.50	24.49	25.50	24.24	24.20	24.17	25.50
HSDPA Subtest-1	23.53	23.38	23.41	24.00	23.71	23.61	23.60	24.00	23.39	23.37	23.30	24.00
HSDPA Subtest-2	23.51	23.36	23.42	24.00	23.74	23.60	23.68	24.00	23.44	23.33	23.34	24.00
HSDPA Subtest-3	22.96	22.84	22.86	24.00	23.25	23.13	23.18	24.00	22.94	22.89	22.86	24.00
HSDPA Subtest-4	22.98	22.84	22.92	24.00	23.16	23.12	23.15	24.00	22.90	22.88	22.85	24.00
DC-HSDPA Subtest-1	23.52	23.39	23.42	24.00	23.66	23.67	23.58	24.00	23.43	23.33	23.28	24.00
DC-HSDPA Subtest-2	23.51	23.35	23.42	24.00	23.65	23.64	23.63	24.00	23.40	23.37	23.31	24.00
DC-HSDPA Subtest-3	22.98	22.86	22.86	24.00	23.15	23.12	23.17	24.00	22.88	22.82	22.82	24.00
DC-HSDPA Subtest-4	22.99	22.93	22.94	24.00	23.19	23.15	23.09	24.00	22.88	22.89	22.83	24.00
HSUPA Subtest-1	21.76	21.60	21.63	23.00	21.91	21.80	21.86	23.00	21.61	21.50	21.49	23.00
HSUPA Subtest-2	21.40	21.24	21.36	23.00	21.63	21.56	21.52	23.00	21.30	21.21	21.17	23.00
HSUPA Subtest-3	22.37	22.21	22.23	23.00	22.48	22.43	22.45	23.00	22.23	22.15	22.11	23.00
HSUPA Subtest-4	21.23	21.03	21.13	23.00	21.22	21.14	21.16	23.00	21.18	21.11	21.07	23.00
HSUPA Subtest-5	22.32	22.22	22.15	23.00	22.48	22.48	22.39	23.00	22.15	22.17	22.16	23.00
HSPA+ Subtest-1	21.58	21.49	21.48	23.00	21.84	21.71	21.69	23.00	21.49	21.45	21.36	23.00

LTE Band 2										
BW	Modulation	RB Size	RB Offset Channel	Low			High	SCPP MPE (dB)	Max. Time-up (ms)	
				1870 Frequency (MHz)	1880	1890	1910			
GPRS		1	0	23.60	23.78	23.79	0	25.5		
		1	50	23.60	23.78	23.79	0	25.5		
		1	99	23.60	23.78	23.79	0	25.5		
		50	0	22.95	23.01	22.91	1	24.5		
		50	25	22.98	22.81	22.79	1	24.5		
		50	50	22.98	22.86	22.82	1	24.5		
		100	0	22.94	22.99	22.97	1	24.5		
		1	0	22.73	22.65	22.64	1	24.5		
		1	50	22.76	22.84	22.78	1	24.5		
		1	99	22.75	22.61	22.53	1	24.5		
20M	IQAM	50	0	21.86	21.90	21.91	2	23.5		
		50	25	21.91	22.01	21.95	2	23.5		
		50	50	21.98	22.01	22.02	2	23.5		
		100	0	21.99	21.97	21.99	2	23.5		
		1	0	21.62	21.62	21.69	2	23.5		
		1	50	22.01	21.89	21.95	2	23.5		
		1	99	21.55	21.63	21.61	2	23.5		
		50	0	20.91	20.93	20.91	3	22.5		
		50	25	20.93	20.83	20.89	3	22.5		
		50	50	20.96	20.90	20.91	3	22.5		
80AM		100	0	20.92	21.05	20.97	3	22.5		
		GPRS		1	0	23.64	23.65	23.65	0	25.5
				1	37	24.12	23.81	23.96	0	25.5
				1	74	23.50	23.66	23.63	0	25.5
				36	0	22.89	22.92	22.85	1	24.5
				36	19	22.82	22.72	22.73	1	24.5
				36	39	22.88	22.83	22.79	1	24.5
				75	0	22.90	22.93	22.82	1	24.5
				1	0	22.59	22.57	22.49	1	24.5
				1	37	22.69	22.69	22.72	1	24.5
1	74			22.63	22.78	22.90	1	24.5		
10M	IQAM	25	0	21.86	21.78	21.77	2	23.5		
		25	36	21.89	21.93	21.70	2	23.5		
		36	39	21.87	21.89	21.94	2	23.5		
		75	0	21.82	21.87	21.86	2	23.5		
		1	0	21.67	21.74	21.82	2	23.5		
		1	37	21.85	21.78	21.94	2	23.5		
		1	74	21.40	21.52	21.61	2	23.5		
		36	0	20.83	20.88	20.89	3	22.5		
		36	19	20.79	20.79	20.80	3	22.5		
		36	39	20.86	20.86	20.85	3	22.5		
80AM		75	0	20.91	20.99	20.91	3	22.5		
		GPRS		1	0	23.60	23.67	23.77	0	25.5
				1	24	24.01	23.89	23.96	0	25.5
				1	49	23.58	23.61	23.54	0	25.5
				25	0	22.83	22.93	22.86	1	24.5
				25	12	22.79	22.80	22.72	1	24.5
				25	25	22.82	22.83	22.75	1	24.5
				25	25	22.83	22.87	22.87	1	24.5
				1	0	22.72	22.63	22.51	1	24.5
				1	24	22.66	22.69	22.69	1	24.5
1	49			22.40	22.47	22.51	1	24.5		
10M	IQAM	25	0	21.79	21.88	21.82	2	23.5		
		25	12	21.90	21.87	21.77	2	23.5		
		25	25	21.84	21.86	21.96	2	23.5		
		50	0	21.95	21.87	21.87	2	23.5		
		1	0	21.81	21.71	21.69	2	23.5		
		1	24	21.99	21.87	21.94	2	23.5		
		1	49	21.41	21.54	21.63	2	23.5		
		25	0	20.89	20.79	20.86	3	22.5		
		25	12	20.80		20.80	3	22.5		
		25	25	20.83		20.83	3	22.5		
80AM		50	0	20.79	20.98	20.84	3	22.5		
		GPRS		1	0	23.61	23.67	23.67	0	25.5
				1	12	24.01	23.93	23.93	0	25.5
				1	24	23.57	23.51	23.58	0	25.5
				12	0	22.87	22.92	22.89	1	24.5
				12	6	22.80	22.77	22.66	1	24.5
				12	13	22.89	22.80	22.68	1	24.5
				25	0	22.81	22.87	22.87	1	24.5
				1	0	22.71	22.57	22.58	1	24.5
				1	12	22.66	22.62	22.65	1	24.5
1	24			22.53	22.51	22.59	1	24.5		
12M	IQAM	12	6	21.79	21.88	21.76	2	23.5		
		12	6	21.90	22.00	21.76	2	23.5		
		12	13	21.84	21.98	21.90	2	23.5		
		25	0	21.88	21.86	21.82	2	23.5		
		1	0	21.76	21.68	21.62	2	23.5		
		1	12	21.92	21.78	21.94	2	23.5		
		1	24	21.43	21.54	21.51	2	23.5		
		12	0	20.78	20.85	20.81	3	22.5		
		12	6	20.87	21.07	20.82	3	22.5		
		12	13	20.88	20.82	20.85	3	22.5		
80AM		15	0	20.87	21.03	20.83	3	22.5		
		GPRS		1	0	23.58	23.69	23.70	0	25.5
				1	7	24.06	23.97	23.93	0	25.5
				1	14	23.52	23.61	23.62	0	25.5
				8	0	22.94	22.89	22.85	1	24.5
				8	3	22.74	22.69	22.78	1	24.5
				8	7	22.89	22.73	22.73	1	24.5
				15	0	22.85	22.85	22.86	1	24.5
				1	0	22.60	22.62	22.51	1	24.5
				1	7	22.64	22.63	22.70	1	24.5
1	14			22.45	22.53	22.48	1	24.5		
3M	IQAM	8	5	21.73	21.87	21.81	2	23.5		
		8	3	21.84	21.94	21.82	2	23.5		
		8	7	21.86	21.98	21.80	2	23.5		
		15	0	21.97	21.88	21.84	2	23.5		
		1	0	21.71	21.80	21.66	2	23.5		
		1	7	21.98	21.80	21.90	2	23.5		
		1	14	21.54	21.55	21.56	2	23.5		
		8	0	20.77	20.88	20.86	3	22.5		
		8	3	20.85	20.86	20.82	3	22.5		
		8	7	20.75	20.85	20.81	3	22.5		
80AM		15	0	20.77	20.95	20.82	3	22.5		
		GPRS		1	0	23.67	23.76	23.72	0	25.5
				1	7	24.07	23.97	23.94	0	25.5
				1	5	23.61	23.49	23.62	0	25.5
				3	0	23.83	23.95	23.90	0	25.5
				3	1	23.82	23.66	23.76	0	25.5
				3	3	23.88	23.78	23.78	0	25.5
				6	0	22.91	22.89	22.96	1	24.5
				1	0	22.63	22.59	22.54	1	24.5
				1	2	22.70	22.75	22.70	1	24.5
1	5			22.90	22.85	22.40	1	24.5		
1.4M	IQAM	3	5	22.77	22.83	22.78	1	24.5		
		3	1	22.90	22.99	22.92	1	24.5		
		3	3	22.83	22.87	22.80	1	24.5		
		6	0	21.84	21.83	21.81	2	23.5		
		1	0	21.79	21.71	21.62	2	23.5		
		1	2	21.91	21.80	21.92	2	23.5		
		1	5	21.48	21.52	21.59	2	23.5		
		3	0	21.81	21.83	21.78	2	23.5		
		3	1	21.87	21.82	21.85	2	23.5		
		3	3	21.99	21.93	21.87	2	23.5		
80AM		6	0	20.86	20.93	20.82	3	22.5		

L Band 4									
BW	Modulation	RB Size	RB Offset	Low	Mid	High	SOPP MPP (dB)	Max. Time-up (dBm)	
		Channel Frequency (MHz)	20850 1720	20850 1720.5	20850 1721.5	20850 1730			
QPSK		1	0	23.84	23.82	23.70	0	25.5	
		1	50	24.17	24.02	24.00	0	25.5	
		1	99	23.68	23.58	23.70	0	25.5	
		50	0	23.09	23.05	23.07	1	24.5	
		50	25	23.12	23.05	23.09	1	24.5	
		50	50	23.02	23.02	23.10	1	24.5	
		100	0	23.07	22.92	23.10	1	24.5	
		1	0	23.17	23.11	23.11	1	24.5	
		1	50	23.30	23.30	23.37	1	24.5	
		1	99	23.10	23.11	23.07	1	24.5	
16QAM		36	0	21.81	21.84	22.21	2	23.5	
		50	25	22.06	21.99	22.06	2	23.5	
		50	50	22.07	21.93	22.06	2	23.5	
		100	0	22.03	21.92	22.01	2	23.5	
		1	21.91	21.91	22.06	2	23.5		
		1	50	22.32	22.21	22.36	2	23.5	
		1	99	21.97	21.83	21.84	2	23.5	
		50	0	21.02	21.06	21.05	3	22.5	
		50	25	21.00	21.11	20.93	3	22.5	
		50	50	20.99	20.86	20.94	3	22.5	
64QAM		100	0	21.03	20.98	21.08	3	22.5	
		1	0	23.81	23.73	23.64	0	25.5	
		1	37	24.14	24.06	24.06	0	25.5	
		1	74	23.54	23.47	23.71	0	25.5	
		36	0	22.94	22.99	23.05	1	24.5	
		36	19	23.04	22.96	23.05	1	24.5	
		36	39	22.98	22.99	22.96	1	24.5	
		50	0	22.97	22.92	22.96	1	24.5	
		1	0	23.08	23.06	23.06	1	24.5	
		1	37	23.22	23.24	23.22	1	24.5	
15M	16QAM	1	74	23.04	23.09	22.99	1	24.5	
		36	0	21.78	21.86	21.95	2	23.5	
		36	19	21.92	21.88	21.96	2	23.5	
		36	39	21.95	21.90	21.94	2	23.5	
		75	0	21.92	21.80	21.89	2	23.5	
		1	0	21.90	21.81	21.93	2	23.5	
		1	37	22.32	22.05	22.27	2	23.5	
		1	74	21.84	21.78	21.76	2	23.5	
		36	19	20.87	20.99	20.88	3	22.5	
		36	39	20.89	20.85	20.81	3	22.5	
64QAM		75	0	20.89	20.92	21.04	3	22.5	
		1	0	23.82	23.74	23.65	0	25.5	
		1	24	24.11	24.03	24.03	0	25.5	
		1	49	23.63	23.49	23.68	0	25.5	
		25	0	23.03	23.03	22.97	1	24.5	
		25	12	22.97	22.98	22.94	1	24.5	
		25	25	22.90	22.94	23.03	1	24.5	
		50	0	22.99	22.92	22.97	1	24.5	
		1	0	23.08	22.98	23.04	1	24.5	
		1	24	23.28	23.25	23.35	1	24.5	
10M	16QAM	1	49	23.05	23.06	23.00	1	24.5	
		25	0	21.86	21.81	21.93	2	23.5	
		25	12	22.02	21.86	21.95	2	23.5	
		25	25	22.06	21.82	21.92	2	23.5	
		50	0	21.91	21.83	22.00	2	23.5	
		1	0	21.81	21.87	21.94	2	23.5	
		1	24	22.19	22.09	22.29	2	23.5	
		1	49	21.85	21.82	21.82	2	23.5	
		25	0	20.90	20.93	20.97	3	22.5	
		25	12	20.91	20.99	20.94	3	22.5	
64QAM		25	25	20.94	20.84	20.84	3	22.5	
		50	0	20.92	20.87	21.04	3	22.5	
		1	0	23.75	23.79	23.60	0	25.5	
		1	12	24.11	24.03	24.03	0	25.5	
		1	49	23.67	23.53	23.63	0	25.5	
		25	0	22.97	22.98	23.01	1	24.5	
		25	12	22.89	22.97	22.94	1	24.5	
		25	25	22.88	22.85	22.96	1	24.5	
		1	0	23.12	22.96	22.99	1	24.5	
		1	12	23.16	23.15	23.29	1	24.5	
15M	16QAM	1	24	23.05	23.01	22.95	1	24.5	
		25	0	21.90	21.79	21.89	2	23.5	
		12	6	22.05	21.97	22.04	2	23.5	
		12	13	22.01	21.78	21.97	2	23.5	
		25	0	21.99	21.84	21.92	2	23.5	
		1	0	21.78	21.77	21.82	2	23.5	
		1	12	22.25	22.09	22.35	2	23.5	
		1	24	21.90	21.68	21.83	2	23.5	
		12	0	20.98	20.99	20.95	3	22.5	
		12	6	20.94	21.08	20.89	3	22.5	
64QAM		12	13	20.96	20.84	20.83	3	22.5	
		25	0	20.96	20.91	21.04	3	22.5	
		1	0	23.81	23.73	23.64	0	25.5	
		1	12	24.11	24.03	24.03	0	25.5	
		1	24	23.57	23.53	23.60	0	25.5	
		12	0	22.97	22.98	23.01	1	24.5	
		12	6	22.99	22.97	22.94	1	24.5	
		12	13	22.98	22.85	22.96	1	24.5	
		1	0	23.12	22.96	22.99	1	24.5	
		1	12	23.16	23.15	23.29	1	24.5	
10M	16QAM	1	24	23.05	23.01	22.95	1	24.5	
		25	0	21.90	21.79	21.89	2	23.5	
		12	6	22.05	21.97	22.04	2	23.5	
		12	13	22.01	21.78	21.97	2	23.5	
		25	0	21.99	21.84	21.92	2	23.5	
		1	0	21.78	21.77	21.82	2	23.5	
		1	12	22.25	22.09	22.35	2	23.5	
		1	24	21.90	21.68	21.83	2	23.5	
		12	0	20.98	20.99	20.95	3	22.5	
		12	6	20.94	21.08	20.89	3	22.5	
64QAM		12	13	20.96	20.84	20.83	3	22.5	
		25	0	20.96	20.91	21.04	3	22.5	
		1	0	23.75	23.79	23.60	0	25.5	
		1	12	24.11	24.03	24.03	0	25.5	
		1	24	23.57	23.53	23.60	0	25.5	
		12	0	22.97	22.98	23.01	1	24.5	
		12	6	22.99	22.97	22.94	1	24.5	
		12	13	22.98	22.85	22.96	1	24.5	
		1	0	23.09	22.99	23.08	1	24.5	
		1	7	23.20	23.18	23.28	1	24.5	
15M	16QAM	1	14	23.09	23.02	23.01	1	24.5	
		25	0	21.86	21.79	21.89	2	23.5	
		8	3	21.92	21.87	21.93	2	23.5	
		8	7	21.93	21.89	21.95	2	23.5	
		15	0	22.00	21.85	21.98	2	23.5	
		1	0	21.76	21.69	21.88	2	23.5	
		1	7	22.23	22.14	22.30	2	23.5	
		1	14	21.83	21.82	21.74	2	23.5	
		8	0	20.90	21.00	20.94	3	22.5	
		8	3	20.97	21.08	20.89	3	22.5	
64QAM		8	7	20.97	20.83	20.83	3	22.5	
		15	0	21.00	20.85	20.99	3	22.5	
		1	0	23.82	23.74	23.65	0	25.5	
		1	12	24.11	24.03	24.03	0	25.5	
		1	14	23.67	23.53	23.63	0	25.5	
		25	0	22.97	22.98	23.01	1	24.5	
		25	12	22.89	22.97	22.94	1	24.5	
		25	25	22.88	22.85	22.96	1	24.5	
		1	0	23.02	22.97	23.06	1	24.5	
		1	5	23.26	23.19	23.26	1	24.5	
1.4M	16QAM	1	5	23.05	22.97	23.05	1	24.5	
		3	0	22.86	22.81	22.92	1	24.5	
		3	1	22.95	22.87	22.95	1	24.5	
		3	3	22.92	22.84	23.04	1	24.5	
		1	0	21.96	21.81	21.98	2	23.5	
		1	0	21.79	21.84	21.94	2	23.5	
		1	2	22.31	22.19	22.24	2	23.5	
		1	5	21.87	21.71	21.76	2	23.5	
		3	0	21.93	21.93	21.98	2	23.5	
		3	1	21.89	22.00	21.90	2	23.5	
64QAM		3	3	21.78	21.75	21.87	2	23.5	
		6	0	20.98	20.84	20.97	3	22.5	

LTE Band 5										
BW	Modulation	RB Size	RB Offset	Low	Mid	High	3GPP MPR (dB)	Max. Time-up (ms)		
		Channel		2640 Frequency (MHz)	26525 826.5	26600 844				
5GK		1	0	23.91	23.96	23.98	0	25.5		
		1	24	23.95	24.11	24.07	0	25.5		
		1	49	23.93	23.91	23.91	0	25.5		
		25	0	22.88	22.89	22.95	1	24.5		
		25	12	23.04	23.01	23.02	1	24.5		
		25	25	22.92	23.11	23.01	1	24.5		
10M	15QAM	50	0	22.89	23.06	22.90	1	24.5		
		1	0	23.18	23.24	23.12	1	24.5		
		1	24	23.12	23.25	23.31	1	24.5		
		1	49	23.04	23.06	23.05	1	24.5		
		25	0	21.88	22.02	22.06	2	23.5		
		25	12	22.09	22.12	22.02	2	23.5		
15M	15QAM	25	0	21.88	22.01	22.03	2	23.5		
		50	0	21.99	22.14	22.08	2	23.5		
		1	0	22.23	22.36	22.27	2	23.5		
		1	24	22.34	22.39	22.41	2	23.5		
		1	49	22.24	22.28	22.19	2	23.5		
		25	0	21.03	20.95	20.89	3	22.5		
20M	15QAM	25	12	21.11	21.15	20.97	3	22.5		
		25	25	21.02	21.14	21.01	3	22.5		
		50	0	20.94	21.14	21.03	3	22.5		
		30M	15QAM	75	0	20.94	21.14	21.03	3	22.5
				75	0	20.94	21.14	21.03	3	22.5
				75	0	20.94	21.14	21.03	3	22.5
40M	15QAM			100	0	20.94	21.14	21.03	3	22.5
				100	0	20.94	21.14	21.03	3	22.5
				100	0	20.94	21.14	21.03	3	22.5
		50M	15QAM	125	0	20.94	21.14	21.03	3	22.5
				125	0	20.94	21.14	21.03	3	22.5
				125	0	20.94	21.14	21.03	3	22.5
60M	15QAM			150	0	20.94	21.14	21.03	3	22.5
				150	0	20.94	21.14	21.03	3	22.5
				150	0	20.94	21.14	21.03	3	22.5
		70M	15QAM	175	0	20.94	21.14	21.03	3	22.5
				175	0	20.94	21.14	21.03	3	22.5
				175	0	20.94	21.14	21.03	3	22.5
80M	15QAM			200	0	20.94	21.14	21.03	3	22.5
				200	0	20.94	21.14	21.03	3	22.5
				200	0	20.94	21.14	21.03	3	22.5
		90M	15QAM	225	0	20.94	21.14	21.03	3	22.5
				225	0	20.94	21.14	21.03	3	22.5
				225	0	20.94	21.14	21.03	3	22.5
100M	15QAM			250	0	20.94	21.14	21.03	3	22.5
				250	0	20.94	21.14	21.03	3	22.5
				250	0	20.94	21.14	21.03	3	22.5
		120M	15QAM	300	0	20.94	21.14	21.03	3	22.5
				300	0	20.94	21.14	21.03	3	22.5
				300	0	20.94	21.14	21.03	3	22.5
140M	15QAM			350	0	20.94	21.14	21.03	3	22.5
				350	0	20.94	21.14	21.03	3	22.5
				350	0	20.94	21.14	21.03	3	22.5
		160M	15QAM	400	0	20.94	21.14	21.03	3	22.5
				400	0	20.94	21.14	21.03	3	22.5
				400	0	20.94	21.14	21.03	3	22.5
180M	15QAM			450	0	20.94	21.14	21.03	3	22.5
				450	0	20.94	21.14	21.03	3	22.5
				450	0	20.94	21.14	21.03	3	22.5
		200M	15QAM	500	0	20.94	21.14	21.03	3	22.5
				500	0	20.94	21.14	21.03	3	22.5
				500	0	20.94	21.14	21.03	3	22.5

LTE Band 7									
BW	Modulation	RB Size	RB Offset	Low	Mid	High	3GPP	Max.	
		Channel		26850	21100	21350	MPR (dB)	Time-up (dBm)	
Frequency (MHz)									
20M	QPSK	1	0	23.19	23.26	23.41	0	25	
		1	50	23.68	23.60	23.80	0	25	
		1	99	23.53	23.63	23.55	0	25	
		50	0	22.63	22.73	22.83	1	24	
		50	25	22.76	22.86	23.07	1	24	
		50	50	22.84	22.93	22.89	1	24	
		100	0	22.80	22.93	23.01	1	24	
		1	0	22.28	22.31	22.38	1	24	
	16QAM	1	50	22.66	22.90	22.71	1	24	
		1	99	22.43	22.45	22.47	1	24	
		50	0	21.56	21.63	21.65	2	23	
		50	25	21.68	21.86	21.80	2	23	
		50	50	21.77	21.91	21.93	2	23	
		100	0	21.72	21.71	21.80	2	23	
		1	0	21.29	21.41	21.44	2	23	
		1	50	21.81	21.74	21.87	2	23	
64QAM	1	99	21.52	21.58	21.67	2	23		
	50	0	20.58	20.64	20.79	3	22		
	50	25	20.74	20.94	21.08	3	22		
	50	50	20.80	20.93	21.00	3	22		
	100	0	20.84	20.82	20.93	3	22		
	1	0	20.07	20.11	20.26	3	22		
	1	50	20.59	20.57	20.69	3	22		
	1	99	20.52	20.53	20.64	3	22		
10M	QPSK	1	0	23.07	23.11	23.31	0	25	
		1	37	23.64	23.47	23.84	0	25	
		1	74	23.47	23.52	23.53	0	25	
		36	0	22.48	22.64	22.75	1	24	
		36	18	22.67	22.85	22.84	1	24	
		36	39	22.70	22.82	22.97	1	24	
		75	0	22.76	22.82	22.90	1	24	
		1	0	22.15	22.25	22.37	1	24	
	16QAM	1	37	22.55	22.87	22.65	1	24	
		1	74	22.35	22.33	22.44	1	24	
		36	0	21.44	21.58	21.53	2	23	
		36	19	21.61	21.71	21.86	2	23	
		36	39	21.75	21.86	21.86	2	23	
		75	0	21.65	21.67	21.80	2	23	
		1	0	21.21	21.38	21.30	2	23	
		1	37	21.70	21.73	21.73	2	23	
64QAM	1	74	21.46	21.44	21.50	2	23		
	36	0	20.57	20.52	20.65	3	22		
	36	19	20.73	20.90	21.04	3	22		
	36	39	20.78	20.84	20.92	3	22		
	75	0	20.71	20.69	20.72	3	22		
	1	0	20.00	20.00	20.10	3	22		
	1	37	20.52	20.53	20.64	3	22		
	1	74	20.52	20.53	20.64	3	22		
5M	QPSK	1	0	23.04	23.21	23.51	0	25	
		1	24	23.21	23.45	23.39	0	25	
		1	49	23.45	23.55	23.49	0	25	
		25	0	22.52	22.61	22.68	1	24	
		25	12	22.66	22.80	22.83	1	24	
		25	25	22.76	22.78	22.95	1	24	
		50	0	22.75	22.78	22.98	1	24	
		1	0	22.24	22.19	22.28	1	24	
	16QAM	1	24	22.62	22.84	22.68	1	24	
		1	49	22.34	22.37	22.39	1	24	
		25	0	21.43	21.58	21.60	2	23	
		25	12	21.55	21.76	21.58	2	23	
		25	25	21.70	21.87	21.91	2	23	
		50	0	21.64	21.59	21.80	2	23	
		1	0	21.28	21.26	21.42	2	23	
		1	24	21.70	21.62	21.75	2	23	
64QAM	1	49	21.45	21.51	21.54	2	23		
	25	0	20.50	20.51	20.70	3	22		
	25	12	20.63	20.86	20.85	3	22		
	25	25	20.79	20.78	20.86	3	22		
	50	0	20.70	20.75	20.96	3	22		
	1	0	20.00	20.00	20.10	3	22		
	1	24	20.52	20.53	20.64	3	22		
	1	49	20.52	20.53	20.64	3	22		
20M	QPSK	1	0	23.07	23.11	23.31	0	25	
		1	37	23.64	23.47	23.84	0	25	
		1	74	23.47	23.52	23.53	0	25	
		36	0	22.48	22.64	22.75	1	24	
		36	18	22.67	22.85	22.84	1	24	
		36	39	22.70	22.82	22.97	1	24	
		75	0	22.76	22.82	22.90	1	24	
		1	0	22.15	22.25	22.37	1	24	
	16QAM	1	37	22.55	22.87	22.65	1	24	
		1	74	22.36	22.33	22.44	1	24	
		36	0	21.44	21.58	21.53	2	23	
		36	19	21.61	21.71	21.86	2	23	
		36	39	21.75	21.86	21.86	2	23	
		75	0	21.65	21.67	21.80	2	23	
		1	0	21.21	21.38	21.30	2	23	
		1	37	21.70	21.73	21.73	2	23	
64QAM	1	74	21.46	21.44	21.51	2	23		
	36	0	20.56	20.62	20.72	3	22		
	36	19	20.70	20.82	20.83	3	22		
	36	39	20.75	20.80	20.90	3	22		
	75	0	20.71	20.72	20.80	3	22		
	1	0	20.00	20.00	20.10	3	22		
	1	24	20.52	20.53	20.64	3	22		
	1	49	20.52	20.53	20.64	3	22		
10M	QPSK	1	0	23.04	23.21	23.51	0	25	
		1	24	23.21	23.45	23.39	0	25	
		1	49	23.45	23.55	23.49	0	25	
		25	0	22.52	22.62	22.68	1	24	
		25	12	22.67	22.80	22.83	1	24	
		25	25	22.77	22.83	23.01	1	24	
		50	0	22.72	22.81	22.98	1	24	
		1	0	22.25	22.29	22.26	1	24	
	16QAM	1	24	22.64	22.75	22.64	1	24	
		1	49	22.34	22.44	22.37	1	24	
		25	0	21.44	21.48	21.52	2	23	
		25	12	21.67	21.81	21.81	2	23	
		25	25	21.71	21.79	21.78	2	23	
		50	0	21.65	21.61	21.78	2	23	
		1	0	21.21	21.38	21.32	2	23	
		1	24	21.74	21.64	21.76	2	23	
64QAM	1	49	21.50	21.44	21.51	2	23		
	25	0	20.56	20.62	20.72	3	22		
	25	12	20.70	20.82	20.83	3	22		
	25	25	20.75	20.80	20.90	3	22		
	75	0	20.71	20.72	20.80	3	22		
	1	0	20.00	20.00	20.10	3	22		
	1	24	20.52	20.53	20.64	3	22		
	1	49	20.52	20.53	20.64	3	22		
5M	QPSK	1	0	23.07	23.11	23.31	0	25	
		1	37	23.64	23.47	23.84	0	25	
		1	74	23.47	23.52	23.53	0	25	
		36	0	22.48	22.64	22.75	1	24	
		36	18	22.67	22.85	22.84	1	24	
		36	39	22.70	22.82	22.97	1	24	
		75	0	22.76	22.82	22.90	1	24	
		1	0	22.15	22.25	22.37	1	24	
	16QAM	1	37	22.55	22.87	22.65	1	24	
		1	74	22.36	22.33	22.44	1	24	
		36	0	21.44	21.58	21.53	2	23	
		36	19	21.61	21.71	21.86	2	23	
		36	39	21.75	21.86	21.86	2	23	
		75	0	21.65	21.67	21.80	2	23	
		1	0	21.21	21.38	21.30	2	23	
		1	37	21.70	21.73	21.73	2	23	
64QAM	1	74	21.46	21.44	21.51	2	23		
	36	0	20.56	20.62	20.72	3	22		
	36	19	20.70	20.82	20.83	3	22		
	36	39	20.75	20.80	20.90	3	22		
	75	0	20.71	20.72	20.80	3	22		
	1	0	20.00	20.00	20.10	3	22		
	1	24	20.52	20.53	20.64	3	22		
	1	49	20.52	20.53	20.64	3	22		

LTE Band 38									
BW	Modulation	RB Size	RB Offset	Low	Mid	High	SCPP	Max.	Max. Time-up (dBm)
		Channel	Frequency (MHz)	3780	3800	3815	MPR (dB)	Time-up (dBm)	
20M	QPSK	160AM	1	0	24.03	24.11	24.17	0	25.5
			1	50	24.30	24.47	24.32	0	25.5
			1	99	24.04	24.16	24.14	0	25.5
			50	0	23.12	23.16	23.25	1	24.5
			50	25	23.09	23.15	23.25	1	24.5
			50	50	23.14	23.17	23.12	1	24.5
			100	0	23.18	23.39	23.17	1	24.5
			1	0	22.63	22.88	22.78	1	24.5
			1	50	22.06	22.23	22.15	1	24.5
			1	99	22.77	22.95	22.93	1	24.5
20M	160AM	64QAM	50	0	22.15	22.35	22.25	2	23.5
			50	25	22.19	22.39	22.31	2	23.5
			50	50	22.10	22.26	22.14	2	23.5
			100	0	22.36	22.36	22.39	2	23.5
			1	0	21.78	21.91	21.87	2	23.5
			1	50	22.05	22.15	22.10	2	23.5
			1	99	21.79	22.03	21.85	2	23.5
			50	0	21.17	21.37	21.39	3	22.5
			50	25	21.26	21.40	21.36	3	22.5
			50	50	21.08	21.38	21.29	3	22.5
20M	QPSK	160AM	Channel	3780	3800	3815	SCPP	Max.	Max. Time-up (dBm)
			Frequency (MHz)	2377.5	2385	2412.5	MPR (dB)	Time-up (dBm)	
			1	0	23.92	23.96	24.11	0	25.5
			1	37	24.26	24.37	24.29	0	25.5
			1	74	24.00	24.11	24.07	0	25.5
			36	0	23.10	23.06	23.11	1	24.5
			36	19	23.00	23.10	23.14	1	24.5
			36	39	23.11	23.14	22.87	1	24.5
			75	0	22.18	22.39	22.25	1	24.5
			1	0	22.00	22.15	22.04	1	24.5
10M	160AM	64QAM	1	37	22.97	23.14	23.00	1	24.5
			1	74	22.64	22.88	22.78	1	24.5
			36	0	22.13	22.22	22.20	2	23.5
			36	19	22.09	22.24	22.24	2	23.5
			36	39	22.03	22.21	22.02	2	23.5
			75	0	22.34	22.32	22.26	2	23.5
			1	0	21.68	21.78	21.91	2	23.5
			1	37	22.05	22.10	22.15	2	23.5
			1	74	21.66	22.02	21.82	2	23.5
			36	0	21.12	21.25	21.21	3	22.5
10M	QPSK	160AM	36	19	21.14	21.32	21.32	3	22.5
			36	39	21.04	21.33	21.24	3	22.5
			75	0	21.30	21.47	21.23	3	22.5
10M	160AM	64QAM	Channel	3780	3800	3820	SCPP	Max.	Max. Time-up (dBm)
			Frequency (MHz)	2375	2385	2415	MPR (dB)	Time-up (dBm)	
			1	0	23.96	24.05	24.05	0	25.5
			1	24	24.19	24.43	24.23	0	25.5
			1	49	23.90	24.06	24.00	0	25.5
			25	0	23.07	23.10	23.05	1	24.5
			25	12	23.08	23.06	23.21	1	24.5
			25	25	23.09	23.10	23.86	1	24.5
			50	0	23.11	23.24	23.05	1	24.5
			1	0	22.62	22.87	22.75	1	24.5
10M	160AM	64QAM	1	24	23.01	23.17	23.04	1	24.5
			1	49	22.70	22.89	22.89	1	24.5
			25	0	22.14	22.21	22.16	2	23.5
			25	12	22.05	22.37	22.18	2	23.5
			25	25	22.09	22.21	22.08	2	23.5
			50	0	22.27	22.26	22.24	2	23.5
			1	0	21.70	21.89	21.88	2	23.5
			1	24	22.05	22.09	22.14	2	23.5
			1	49	21.68	21.88	21.77	2	23.5
			25	0	21.11	21.23	21.28	3	22.5
10M	QPSK	160AM	25	12	21.15	21.38	21.34	3	22.5
			25	25	20.96	21.23	21.20	3	22.5
			50	0	21.32	21.41	21.19	3	22.5
10M	160AM	64QAM	Channel	3775	3800	3825	SCPP	Max.	Max. Time-up (dBm)
			Frequency (MHz)	2372.5	2385	2417.5	MPR (dB)	Time-up (dBm)	
			1	0	23.94	23.97	24.10	0	25.5
			1	12	24.28	24.46	24.26	0	25.5
			1	24	24.00	24.08	24.03	0	25.5
			12	0	23.02	23.04	23.12	1	24.5
			12	6	23.03	23.09	23.07	1	24.5
			12	13	23.05	23.06	22.97	1	24.5
			25	0	23.16	23.24	23.10	1	24.5
			1	0	22.62	22.86	22.82	1	24.5
10M	160AM	64QAM	1	24	22.62	22.86	22.82	1	24.5
			12	0	22.13	22.34	22.13	2	23.5
			12	6	22.08	22.25	22.19	2	23.5
			12	13	21.99	22.21	22.09	2	23.5
			25	0	22.26	22.29	22.30	2	23.5
			1	0	21.69	21.86	21.88	2	23.5
			1	12	21.99	22.11	22.05	2	23.5
			1	24	21.71	22.01	21.76	2	23.5
			12	0	21.12	21.36	21.24	3	22.5
			12	6	21.16	21.37	21.24	3	22.5
10M	QPSK	160AM	12	13	21.09	21.23	21.28	3	22.5
			25	0	21.33	21.37	21.35	3	22.5

LTE Band 41 (2496 ~ 2690MHz)											
BW	Modulation	RB Size	RB Offset	Low	Low Mid	Mid	High Mid	High	SCPP MPR (dB)	Max. Time-up (dBm)	
		Channel	Frequency (MHz)	2496	2498	2499	2499.5	2500			
20M	QPSK	160AM	1	0	23.85	23.89	23.95	23.95	23.95	0	25
			1	50	24.15	24.08	24.06	23.91	23.79	0	25
			1	99	23.76	23.77	23.64	23.53	23.64	0	25
			50	0	23.00	22.86	22.96	22.77	22.72	1	24
			50	25	23.18	23.11	22.92	22.75	22.90	1	24
			50	50	22.91	23.02	22.75	22.51	22.83	1	24
			100	0	23.01	22.98	22.74	22.68	22.76	1	24
			1	0	22.61	22.56	22.41	22.15	22.32	1	24
			1	50	22.91	22.85	22.71	22.67	22.73	1	24
			1	99	22.91	22.53	22.49	22.27	22.35	1	24
20M	160AM	64QAM	50	0	22.07	21.85	21.81	21.60	21.85	2	23
			50	25	22.09	22.01	21.76	21.70	21.65	2	23
			50	50	21.95	21.95	21.78	21.63	21.77	2	23
			100	0	22.13	22.16	21.91	21.91	21.93	2	23
			1	0	21.70	21.61	21.53	21.31	21.49	2	23
			1	50	21.98	22.03	21.84	21.67	21.82	2	23
			1	99	21.60	21.61	21.38	21.25	21.49	2	23
			50	0	21.07	21.04	20.80	20.71	20.80	3	22
			50	25	21.14	21.02	20.80	20.77	20.77	3	22
			50	50	21.20	20.99	20.79	20.75	20.85	3	22
20M	QPSK	160AM	Channel	2496	2498	2499	2499.5	2500	SCPP MPR (dB)	Max. Time-up (dBm)	
			Frequency (MHz)	2496.5	2498.5	2499.5	2499.5	2500.5	MPR (dB)	Time-up (dBm)	
			1	0	23.83	23.77	23.90	23.81	23.45	0	25
			1	37	24.06	24.06	23.99	23.83	23.88	0	25
			1	74	23.85	23.73	23.57	23.52	23.57	0	25
			36	0	22.92	22.85	22.84	22.75	22.71	1	24
			36	19	23.16	23.00	22.91	22.74	22.77	1	24
			36	39	22.81	23.00	22.68	22.47	22.78	1	24
			75	0	22.89	22.84	22.83	22.55	22.69	1	24
			1	0	22.87	22.41	22.35	22.12	22.25	1	24
10M	160AM	64QAM	1	37	22.82	22.76	22.67	22.54	22.62	1	24
			1	74	22.41	22.43	22.46	22.19	22.23	1	24
			1	99	22.07	21.71	21.77	21.58	21.69	1	23
			36	19	22.05	21.93	21.66	21.63	21.60	2	23
			36	39	21.87	21.92	21.63	21.56	21.66	2	23
			75	0	22.11	22.04	21.88	21.68	21.79	2	23
			1	0	21.68	21.58	21.48	21.17	21.44	2	23
			1	37	21.94	21.89	21.72	21.55	21.73	2	23
			1	74	21.53	21.50	21.29	21.19	21.43	2	23
			36	0	21.01	20.98	20.74	20.66	20.67	3	22
20M	QPSK	160AM	36	19	20.98	20.95	20.74	20.68	20.64	3	22
			36	39	21.09	20.96	20.74	20.67	20.67	3	22
			75	0	21.03	21.03	20.84	20.65	20.81	3	22
			Channel	2496	2498	2499	2499.5	2500	SCPP MPR (dB)	Max. Time-up (dBm)	
			Frequency (MHz)	2496.5	2498.5	2499.5	2499.5	2500.5	MPR (dB)	Time-up (dBm)	
			1	0	23.77	23.87	23.62	23.50	23.47	0	25
			1	24	24.09	24.00	23.94	23.90	23.87	0	25
			1	49	23.72	23.62	23.51	23.46	23.56	0	25
			25	0	22.85	22.74	22.88	22.75	22.64	1	24
			25	12	23.08	22.93	22.91	22.72	22.85	1	24
25	25	22.81	22.94	22.67	22.39	22.77	1	24			
10M	160AM	64QAM	50	0	23.00	22.86	22.70	22.58	22.68	1	24
			1	0	22.60	22.52	22.38	22.11	22.26	1	24
			1	24	22.79	22.66	22.52	22.30	22.59	1	24
			1	49	22.49	22.40	22.40	22.14	22.23	1	24
			25	0	21.96	21.71	21.75	21.48	21.74	2	23
			25	12	21.98	21.93	21.69	21.64	21.59	2	23
			25	25	21.82	21.91	21.51	21.54	21.72	2	23
			50	0	22.08	22.06	21.81	21.78	21.92	2	23
			1	0	21.69	21.58	21.40	21.21	21.42	2	23
			1	24	21.95	21.87	21.73	21.63	21.78	2	23
20M	QPSK	160AM	1	49	21.45	21.47	21.58	21.26	21.42	2	23
			25	0	21.06	20.93	20.73	20.68	20.72	3	22
			25	12	21.04	21.01	20.66	20.76	20.72	3	22
			25	25	21.15	20.91	20.68	20.70	20.77	3	22
			50	0	21.09	21.01	20.66	20.68	20.68	3	22
			Channel	2496	2498	2499	2499.5	2500	SCPP MPR (dB)	Max. Time-up (dBm)	
			Frequency (MHz)	2496.5	2498.5	2499.5	2499.5	2500.5	MPR (dB)	Time-up (dBm)	
			1	0	23.78	23.77	23.56	23.48	23.47	0	25
			1	12	24.06	24.04	23.99	23.87	23.89	0	25
			1	24	23.79	23.69	23.51	23.51	23.56	0	25
12	0	22.91	22.84	22.94	22.72	22.69	1	24			
12	13	23.07	22.99	22.83	22.62	22.75	1	24			
12	13	22.88	22.89	22.71	22.36	22.74	1	24			
25	0	22.05	22.06	22.05	21.78	22.11	1	24			
10M	160AM	64QAM	1	0	22.54	22.49	22.34	22.04	22.17	1	24
			1	12	22.90	22.83	22.67	22.61	22.58	1	24
			1	24	22.41	22.40	22.46	22.20	22.34	1	24
			12	0	21.97	21.71	21.75	21.57	21.76	2	23
			12	6	21.99	21.95	21.75	21.65	21.64	2	23
			12	13	21.87	21.80	21.68	21.59	21.65	2	23
			25	0	22.05	22.09	21.78	21.68	21.83	2	23
			1	0	21.66	21.52	21.51	21.17	21.44	2	23
			1	12	21.89	22.02	21.81	21.63	21.72	2	23
			1	24	21.58	21.46	21.34	21.19	21.35	2	23
64QAM	12	6	0	21.05	21.01	20.85	20.66	20.74	3	22	
			6	21.06	20.94	20.67	20.67	20.72	3	22	
			12	13	21.09	20.86	20.65	20.67	20.73	3	22
			25	0	21.09	21.11	20.83	20.62	20.86	3	22
			25	0	21.09	21.11	20.83	20.62	20.86	3	22

WWAN DSI-3 Power & DSI-4 Power Ant1(MAIN)

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	32.08	32.11	32.15	33.50	27.35	27.36	27.26	28.50
GPRS 1Tx Slot	32.06	32.09	32.14	33.50	27.33	27.35	27.24	28.50
GPRS 2Tx Slot	28.61	28.64	28.69	30.00	22.59	22.66	22.60	23.70
GPRS 3Tx Slot	27.21	27.23	27.30	28.50	20.83	20.93	20.87	22.00
GPRS 4Tx Slot	26.23	26.26	26.32	27.50	19.74	19.89	19.81	21.00
EDGE 1Tx Slot	26.41	26.39	26.30	28.00	25.02	25.16	25.07	27.00
EDGE 2Tx Slot	23.43	23.49	23.56	25.00	21.10	21.29	21.14	23.00
EDGE 3Tx Slot	21.84	21.71	21.57	23.20	19.25	19.24	19.32	21.20
EDGE 4Tx Slot	20.12	20.14	20.05	22.00	18.66	18.71	18.65	20.50

Source-Based Time-Averaged Power								
Band	GSM850			Max. Tune-up Power (dBm)	GSM1900			Max. Tune-up Power (dBm)
Channel	128	189	251		512	661	810	
GSM	23.08	23.11	23.15	24.50	18.35	18.36	18.26	19.50
GPRS 1Tx Slot	23.06	23.09	23.14	24.50	18.33	18.35	18.24	19.50
GPRS 2Tx Slot	22.61	22.64	22.69	24.00	16.59	16.66	16.60	17.70
GPRS 3Tx Slot	22.95	22.97	23.04	24.24	16.57	16.67	16.61	17.74
GPRS 4Tx Slot	23.23	23.26	23.32	24.50	16.74	16.89	16.81	18.00
EDGE 1Tx Slot	17.41	17.39	17.30	19.00	16.02	16.16	16.07	18.00
EDGE 2Tx Slot	17.43	17.49	17.56	19.00	15.10	15.29	15.14	17.00
EDGE 3Tx Slot	17.58	17.45	17.31	18.94	14.99	14.98	15.06	16.94
EDGE 4Tx Slot	17.12	17.14	17.05	19.00	15.66	15.71	15.65	17.50

Band	WCDMA II			Max. Tune-up Power (dBm)	WCDMA IV			Max. Tune-up Power (dBm)	WCDMA V			Max. Tune-up Power (dBm)
TX Channel	9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel	9662	9800	9938	Max. Tune-up Power (dBm)	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	20.37	20.25	20.28	21.50	20.55	20.52	20.49	21.50	24.24	24.20	24.17	25.50
HSDPA Subtest-1	19.54	19.36	19.47	20.00	19.68	19.70	19.59	20.00	23.39	23.37	23.30	24.00
HSDPA Subtest-2	19.49	19.38	19.46	20.00	19.71	19.64	19.63	20.00	23.44	23.33	23.34	24.00
HSDPA Subtest-3	19.01	18.94	18.94	20.00	19.16	19.21	19.14	20.00	22.94	22.89	22.86	24.00
HSDPA Subtest-4	19.07	18.85	18.98	20.00	19.24	19.15	19.15	20.00	22.90	22.88	22.85	24.00
DC-HSDPA Subtest-1	19.55	19.37	19.39	20.00	19.72	19.63	19.62	20.00	23.43	23.33	23.28	24.00
DC-HSDPA Subtest-2	19.50	19.36	19.40	20.00	19.72	19.69	19.62	20.00	23.40	23.37	23.31	24.00
DC-HSDPA Subtest-3	18.98	18.94	18.94	20.00	19.16	19.21	19.15	20.00	22.88	22.82	22.82	24.00
DC-HSDPA Subtest-4	19.02	18.87	18.94	20.00	19.24	19.18	19.15	20.00	22.88	22.89	22.83	24.00
HSUPA Subtest-1	17.72	17.62	17.59	19.00	17.85	17.87	17.80	19.00	21.61	21.50	21.49	23.00
HSUPA Subtest-2	17.43	17.28	17.37	19.00	17.59	17.58	17.49	19.00	21.30	21.21	21.17	23.00
HSUPA Subtest-3	18.35	18.16	18.21	19.00	18.51	18.43	18.47	19.00	22.23	22.15	22.11	23.00
HSUPA Subtest-4	17.19	17.07	17.09	19.00	17.15	17.12	17.12	19.00	21.18	21.11	21.07	23.00
HSUPA Subtest-5	18.35	18.16	18.19	19.00	18.45	18.44	18.43	19.00	22.15	22.17	22.16	23.00
HSPA+ Subtest-1	17.65	17.48	17.48	19.00	17.78	17.71	17.75	19.00	21.49	21.45	21.36	23.00

LTE Band 2									
BW	Modulation	RB Size	RB Offset	Channel			Max. Tune-up (dBm)		
		Low	Mid	High					
20M	QPSK	1	0	20.00	19.90	19.91	21.5		
		1	50	20.26	20.08	20.12	21.5		
		1	99	20.00	19.91	19.82	21.5		
		50	0	20.01	19.96	19.98	21.5		
		50	25	19.97	19.87	19.90	21.5		
	16QAM	50	50	19.96	19.95	19.91	21.5		
		100	0	19.99	19.97	19.93	21.5		
		1	0	20.00	19.94	19.92	21.5		
		1	50	20.10	20.12	20.01	21.5		
		1	99	19.91	19.72	19.77	21.5		
20M	16QAM	50	0	20.07	19.88	19.84	21.5		
		50	25	20.00	19.91	19.91	21.5		
		50	50	20.03	19.96	19.86	21.5		
		100	0	19.99	19.95	19.98	21.5		
		1	0	19.74	19.68	19.59	21.5		
	64QAM	1	50	20.11	20.01	20.03	21.5		
		1	99	19.59	19.61	19.57	21.5		
		50	0	20.04	19.92	19.90	21.5		
		50	25	19.99	19.91	19.92	21.5		
		50	50	20.05	19.92	19.90	21.5		
20M	16QAM	100	0	20.00	19.95	19.94	21.5		
		1	0	19.74	19.68	19.59	21.5		
		1	50	20.11	20.01	20.03	21.5		
		1	99	19.59	19.61	19.57	21.5		
		50	0	20.04	19.92	19.90	21.5		
	64QAM	50	25	19.99	19.91	19.92	21.5		
		50	50	20.05	19.92	19.90	21.5		
		100	0	20.00	19.95	19.94	21.5		
		1	0	19.74	19.68	19.59	21.5		
		1	50	20.11	20.01	20.03	21.5		
20M	QPSK	1	0	19.87	19.88	19.82	21.5		
		1	37	20.14	19.87	19.87	21.5		
		1	74	19.95	19.83	19.80	21.5		
		36	0	19.93	19.84	19.97	21.5		
		36	19	20.01	19.77	19.78	21.5		
	16QAM	36	39	19.98	19.76	19.85	21.5		
		75	0	19.93	19.95	19.92	21.5		
		1	0	19.93	19.82	19.89	21.5		
		1	37	20.00	19.99	19.94	21.5		
		1	74	19.51	19.57	19.43	21.5		
20M	64QAM	36	0	19.91	19.85	19.76	21.5		
		36	19	19.87	19.78	19.84	21.5		
		36	39	20.01	19.91	19.76	21.5		
		75	0	19.93	19.92	19.85	21.5		
		1	0	19.87	19.88	19.82	21.5		
	20M	QPSK	1	0	19.87	19.88	19.82	21.5	
			1	37	20.14	19.87	19.87	21.5	
			1	74	19.95	19.83	19.80	21.5	
			36	0	19.93	19.84	19.97	21.5	
			36	19	20.01	19.77	19.78	21.5	
16QAM		36	39	19.98	19.76	19.85	21.5		
		75	0	19.93	19.95	19.92	21.5		
		1	0	19.93	19.82	19.89	21.5		
		1	37	20.00	19.99	19.94	21.5		
		1	74	19.51	19.57	19.43	21.5		
20M	64QAM	36	0	19.91	19.85	19.76	21.5		
		36	19	19.87	19.78	19.84	21.5		
		36	39	20.01	19.91	19.76	21.5		
		75	0	19.93	19.92	19.85	21.5		
		1	0	19.87	19.88	19.82	21.5		
	20M	QPSK	1	0	19.87	19.88	19.82	21.5	
			1	37	20.14	19.87	19.87	21.5	
			1	74	19.95	19.83	19.80	21.5	
			36	0	19.93	19.84	19.97	21.5	
			36	19	20.01	19.77	19.78	21.5	
16QAM		36	39	19.98	19.76	19.85	21.5		
		75	0	19.93	19.95	19.92	21.5		
		1	0	19.93	19.82	19.89	21.5		
		1	37	20.00	19.99	19.94	21.5		
		1	74	19.51	19.57	19.43	21.5		
20M	64QAM	36	0	19.91	19.85	19.76	21.5		
		36	19	19.87	19.78	19.84	21.5		
		36	39	20.01	19.91	19.76	21.5		
		75	0	19.93	19.92	19.85	21.5		
		1	0	19.87	19.88	19.82	21.5		
	20M	QPSK	1	0	19.87	19.88	19.82	21.5	
			1	37	20.14	19.87	19.87	21.5	
			1	74	19.95	19.83	19.80	21.5	
			36	0	19.93	19.84	19.97	21.5	
			36	19	20.01	19.77	19.78	21.5	
16QAM		36	39	19.98	19.76	19.85	21.5		
		75	0	19.93	19.95	19.92	21.5		
		1	0	19.93	19.82	19.89	21.5		
		1	37	20.00	19.99	19.94	21.5		
		1	74	19.51	19.57	19.43	21.5		
20M	64QAM	36	0	19.91	19.85	19.76	21.5		
		36	19	19.87	19.78	19.84	21.5		
		36	39	20.01	19.91	19.76	21.5		
		75	0	19.93	19.92	19.85	21.5		
		1	0	19.87	19.88	19.82	21.5		
	20M	QPSK	1	0	19.87	19.88	19.82	21.5	
			1	37	20.14	19.87	19.87	21.5	
			1	74	19.95	19.83	19.80	21.5	
			36	0	19.93	19.84	19.97	21.5	
			36	19	20.01	19.77	19.78	21.5	
16QAM		36	39	19.98	19.76	19.85	21.5		
		75	0	19.93	19.95	19.92	21.5		
		1	0	19.93	19.82	19.89	21.5		
		1	37	20.00	19.99	19.94	21.5		
		1	74	19.51	19.57	19.43	21.5		
20M	64QAM	36	0	19.91	19.85	19.76	21.5		
		36	19	19.87	19.78	19.84	21.5		
		36	39	20.01	19.91	19.76	21.5		
		75	0	19.93	19.92	19.85	21.5		
		1	0	19.87	19.88	19.82	21.5		
	20M	QPSK	1	0	19.87	19.88	19.82	21.5	
			1	37	20.14	19.87	19.87	21.5	
			1	74	19.95	19.83	19.80	21.5	
			36	0	19.93	19.84	19.97	21.5	
			36	19	20.01	19.77	19.78	21.5	
16QAM		36	39	19.98	19.76	19.85	21.5		
		75	0	19.93	19.95	19.92	21.5		
		1	0	19.93	19.82	19.89	21.5		
		1	37	20.00	19.99	19.94	21.5		
		1	74	19.51	19.57	19.43	21.5		
20M	64QAM	36	0	19.91	19.85	19.76	21.5		
		36	19	19.87	19.78	19.84	21.5		
		36	39	20.01	19.91	19.76	21.5		
		75	0	19.93	19.92	19.85	21.5		
		1	0	19.87	19.88	19.82	21.5		
	20M	QPSK	1	0	19.87	19.88	19.82	21.5	
			1	37	20.14	19.87	19.87	21.5	
			1	74	19.95	19.83	19.80	21.5	
			36	0	19.93	19.84	19.97	21.5	
			36	19	20.01	19.77	19.78	21.5	
16QAM		36	39	19.98	19.76	19.85	21.5		
		75	0	19.93	19.95	19.92	21.5		
		1	0	19.93	19.82	19.89	21.5		
		1	37	20.00	19.99	19.94	21.5		
		1	74	19.51	19.57	19.43	21.5		
20M	64QAM	36	0	19.91	19.85	19.76	21.5		
		36	19	19.87	19.78	19.84	21.5		
		36	39	20.01	19.91	19.76	21.5		
		75	0	19.93	19.92	19.85	21.5		
		1	0	19.87	19.88	19.82	21.5		
	20M	QPSK	1	0	19.87	19.88	19.82	21.5	
			1	37	20.14	19.87	19.87	21.5	
			1	74	19.95	19.83	19.80	21.5	
			36	0	19.93	19.84	19.97	21.5	
			36	19	20.01	19.77	19.78	21.5	
16QAM		36	39	19.98	19.76	19.85	21.5		
		75	0	19.93	19.95	19.92	21.5		
		1	0	19.93	19.82	19.89	21.5		
		1	37	20.00	19.99	19.94	21.5		
		1	74	19.51	19.57	19.43	21.5		
20M	64QAM	36	0	19.91	19.85	19.76	21.5		
		36	19	19.87	19.78	19.84	21.5		
		36	39	20.01	19.91	19.76	21.5		
		75	0	19.93	19.92	19.85	21.5		
		1	0	19.87	19.88	19.82	21.5		
	20M	QPSK	1	0	19.87	19.88	19.82	21.5	
			1	37	20.14	19.87	19.87	21.5	
			1	74	19.95	19.83	19.80	21.5	
			36	0	19.93	19.84	19.97	21.5	
			36	19	20.01	19.77	19.78	21.5	
16QAM		36	39	19.98	19.76	19.85	21.5		
		75	0	19.93	19.95	19.92	21.5		
		1	0	19.93	19.82	19.89	21.5		
		1	37	20.00	19.99	19.94	21.5		
		1	74	19.51	19.57	19.43	21.5		
20M	64QAM	36	0	19.91	19.85	19.76	21.5		
		36	19	19.87	19.78	19.84	21.5		
		36	39	20.01	19.91	19.76	21.5		
		75	0	19.93	19.92	19.85	21.5		
		1	0	19.87	19.88	19.82	21.5		
	20M	QPSK	1	0	19.87	19.88	19.82	21.5	
			1	37	20.14	19.87	19.87	21.5	
			1	74	19.95	19.83	19.80	21.5	
			36	0	19.93	19.84	19.97	21.5	
			36	19	20.01	19.77	19.78	21.5	
16QAM		36	39	19.98	19.76	19.85	21.5		
		75	0	19.93	19.95	19.92	21.5		
		1	0	19.93	19.82	19.89	21.5		
		1	37	20.00	19.99	19.94	21.5		
		1	74	19.51	19.57	19.43	21.5		
20M	64QAM	36	0	19.91	19.85	19.76	21.5		
		36	19	19.87	19.78	19.84	21.5		
		36	39	20.01	19.91	19.76	21.5		
		75	0	19.93	19.92	19.85	21.5		
		1	0	19.87	19.88	19.82	21.5		
	20M	QPSK	1	0	19.87	19.88	19.82	21.5	
			1	37	20.14	19.87	19.87	21.5	
			1	74	19.95	19.83	19.80	21.5	
			36	0	19.93	19.84	19.97	21.5	
			36	19	20.01	19.77	19.78	21.5	
16QAM		36	39	19.98	19.76	19.85	21.5		
		75	0	19.93	19.95	19.92	21.5		
		1	0	19.93	19.82	19.89	21.5		
		1	37	20.00	19.99	19.94	21.5		
		1	74	19.51	19.57	19.43	21.5		
20M	64QAM	36	0	19.91	19.85	19.76	21.5		
		36	19	19.87	19.78	19.84	21.5		
		36	39	20.01	19.91	19.76	21.5		
		75	0	19.93	19.92	19.85	21.5		
		1	0	19.87	19.88	19.82	21.5		
	20M	QPSK	1	0	19.87	19.88	19.82	21.5	
			1	37	20.14	19.87	19.87	21.5	
			1	74	19.95	19.83	19.80	21.5	
			36	0	19.93	19.84	19.97	21.5	
			36	19	20.01	19.77	19.78	21.5	
16QAM		36	39	19.98	19.76	19.85	21.5		
		75	0	19.93	19.95	19.92	21.5		
		1	0	19.93	19.82	19.89	21.5		
		1	37	20.00	19.99	19.94	21.5		
		1	74	19.51	19.57	19.43	21		

LTE Band 7						
BW	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		29850	21150	21350
		Frequency (MHz)		2510	2635	2660
20M	QPSK	1	0	20.27	20.22	20.28
		1	50	20.42	20.44	20.51
		1	99	20.27	20.37	20.38
		50	0	20.19	20.28	20.33
		50	25	20.35	20.39	20.34
		50	50	20.35	20.28	20.31
	16QAM	100	0	20.44	20.37	20.42
		1	0	20.01	20.05	20.05
		1	50	20.29	20.36	20.38
		1	99	20.13	20.09	20.12
		50	0	20.18	20.26	20.32
		50	25	20.35	20.38	20.48
	64QAM	50	50	20.28	20.38	20.42
		100	0	20.29	20.34	20.33
		1	0	20.02	19.93	19.99
		1	50	20.35	20.36	20.39
		1	99	20.20	20.09	20.19
		50	0	20.23	20.22	20.30
15M	QPSK	50	25	20.33	20.29	20.32
		50	50	20.26	20.37	20.31
		100	0	20.39	20.29	20.40
	16QAM	Channel		29825	21100	21375
		Frequency (MHz)		2567.5	2535	2562.5
		1	0	20.19	20.18	20.27
		1	37	20.27	20.41	20.42
		1	74	20.25	20.25	20.31
		36	0	20.07	20.23	20.20
	64QAM	36	19	20.33	20.27	20.33
		36	39	20.26	20.25	20.23
		75	0	20.37	20.23	20.41
		1	0	19.91	19.95	19.91
		1	37	20.15	20.21	20.25
		1	74	20.12	19.94	20.11
10M	QPSK	36	0	20.16	20.25	20.25
		36	19	20.21	20.26	20.44
		36	39	20.19	20.27	20.36
		75	0	20.21	20.26	20.32
	16QAM	1	0	19.90	19.80	19.93
		1	37	20.33	20.34	20.26
		1	74	20.14	19.95	20.18
	64QAM	36	0	20.18	20.08	20.27
		36	19	20.27	20.16	20.16
		36	39	20.25	20.31	20.22
5M	QPSK	75	0	20.24	20.27	20.34
		Channel		29800	21100	21400
		Frequency (MHz)		2505	2535	2565
		1	0	20.19	20.09	20.26
		1	24	20.40	20.39	20.45
		1	49	20.20	20.26	20.34
	16QAM	25	0	20.05	20.22	20.18
		25	12	20.21	20.36	20.24
		25	25	20.27	20.27	20.27
		50	0	20.34	20.25	20.34
	64QAM	1	0	19.98	19.90	19.96
		1	24	20.28	20.23	20.28
		1	49	19.98	20.01	19.99
		25	0	20.16	20.16	20.20
		25	12	20.30	20.30	20.44
		25	25	20.15	20.36	20.31
BW	QPSK	50	0	20.21	20.21	20.29
		50	0	19.97	19.92	19.94
		1	24	20.27	20.35	20.38
		1	49	20.06	20.05	20.04
		25	0	20.18	20.17	20.21
		25	12	20.30	20.19	20.30
	16QAM	25	25	20.23	20.28	20.26
		50	0	20.31	20.15	20.34
		Channel		29775	21100	21425
		Frequency (MHz)		2502.5	2536	2567.5
		1	0	20.23	20.10	20.14
		1	12	20.29	20.30	20.48
	64QAM	1	24	20.25	20.27	20.36
		12	0	20.08	20.21	20.20
		12	6	20.20	20.25	20.27
		12	13	20.26	20.25	20.31
		25	0	20.38	20.24	20.27
		1	0	19.99	19.96	19.96
BW	QPSK	1	12	20.17	20.24	20.33
		1	24	20.07	20.00	20.06
		12	0	20.14	20.19	20.30
		12	6	20.32	20.33	20.36
		12	13	20.22	20.24	20.40
		25	0	20.14	20.25	20.32
	16QAM	1	0	19.98	19.87	19.92
		1	12	20.29	20.21	20.34
		1	24	20.18	20.04	20.10
		12	0	20.19	20.08	20.25
		12	6	20.20	20.26	20.18
		12	13	20.14	20.31	20.29
	64QAM	25	0	20.33	20.22	20.26
		1	0	19.98	19.87	19.92
		1	12	20.29	20.21	20.34
		1	24	20.18	20.04	20.10
		12	0	20.19	20.08	20.25
		12	6	20.20	20.26	20.18

LTE Band 13						
BW	Modulation	RB Size	RB Offset	Mid		Max. Tune-up (dBm)
		Channel		23230		
		Frequency (MHz)		782		
10M	QPSK	1	0		24.00	25.5
		1	24		24.11	25.5
		1	49		23.85	25.5
		25	0		23.09	24.5
		25	12		22.98	24.5
		25	25		23.04	24.5
	16QAM	50	0		23.15	24.5
		1	0		23.07	24.5
		1	24		23.28	24.5
		1	49		23.05	24.5
		25	0		22.18	23.5
		25	12		22.11	23.5
	64QAM	25	25		22.14	23.5
		50	0		22.20	23.5
		1	0		22.15	23.5
		1	24		22.26	23.5
		1	49		22.13	23.5
		25	0		21.10	22.5
5M	QPSK	25	12		21.04	22.5
		25	25		21.07	22.5
		50	0		21.11	22.5
	16QAM	Channel		23205	23230	23255
		Frequency (MHz)		779.5	782	784.5
		1	0	23.99	23.95	23.99
		1	12	24.03	24.04	23.99
		1	24	23.81	23.71	23.80
		12	0	23.08	22.99	23.02
	64QAM	12	6	22.90	22.84	22.95
		12	13	22.92	22.97	23.03
		25	0	23.05	23.07	23.12
		1	0	22.96	23.01	23.06
		1	12	23.23	23.24	23.26
		1	24	22.90	22.91	22.91
BW	QPSK	12	0	22.13	22.03	22.09
		12	6	21.99	21.99	21.99
		12	13	22.00	22.00	22.13
		25	0	22.13	22.11	22.10
		1	0	22.02	22.00	22.12
		1	12	22.22	22.20	22.15
	16QAM	1	24	21.99	22.12	22.07
		12	0	21.02	21.05	20.97
		12	6	20.96	20.91	21.03
		12	13	20.94	20.92	21.06
		25	0	21.08	20.99	21.04
		25	0	21.08	20.99	21.04
BW	QPSK	Channel		23205	23230	23255
		Frequency (MHz)		779.5	782	784.5
		1	0	23.99	23.95	23.99
		1	12	24.03	24.04	23.99
		1	24	23.81	23.71	23.80
		12	0	23.08	22.99	23.02
	16QAM	12	6	22.90	22.84	22.95
		12	13	22.92	22.97	23.03
		25	0	23.05	23.07	23.12
		1	0	22.96	23.01	23.06
		1	12	23.23	23.24	23.26
		1	24	22.90	22.91	22.91
	64QAM	12	0	22.13	22.03	22.09
		12	6	21.99	21.99	21.99
		12	13	22.00	22.00	22.13
		25	0	22.13	22.11	22.10
		1	0	22.02	22.00	22.12
		1	12	22.22	22.20	22.15

LTE Band 26								
BW	Modulation	RB Size	RB Offset	Low	Mid	High	Max. Time-up (dBm)	
		Channel		26765	26865	26965		
		Frequency (MHz)		821.5	831.5	841.5		
15M	QPSK	1	0	23.69	23.64	23.60	25.5	
		1	37	24.07	23.91	23.96	25.5	
		1	74	23.82	23.65	23.77	25.5	
		36	0	22.73	22.80	22.58	24.5	
		36	19	22.92	22.74	22.70	24.5	
		36	39	22.75	22.78	22.70	24.5	
	16QAM	75	0	22.76	22.78	22.69	24.5	
		1	0	22.58	22.52	22.55	24.5	
		1	37	22.77	22.74	22.75	24.5	
		1	74	22.64	22.49	22.57	24.5	
		36	0	21.70	21.74	21.67	23.5	
		36	19	21.72	21.85	21.77	23.5	
	64QAM	36	39	21.78	21.70	21.64	23.5	
		75	0	21.81	21.83	21.72	23.5	
		1	0	21.84	21.78	21.61	23.5	
		1	37	21.81	21.96	21.79	23.5	
		1	74	21.68	21.58	21.43	23.5	
		36	0	20.78	20.75	20.68	22.5	
	BW	Modulation	36	19	20.83	20.88	20.75	22.5
			36	39	20.86	20.83	20.59	22.5
			75	0	20.90	20.67	20.61	22.5
			Channel		26746	26856	26990	Max. Time-up (dBm)
			Frequency (MHz)		819	831.5	844	
			1	0	23.55	23.62	23.55	25.5
10M		QPSK	1	24	23.96	23.79	23.84	25.5
			1	49	23.79	23.62	23.67	25.5
			25	0	22.87	22.73	22.44	24.5
			25	12	22.90	22.71	22.69	24.5
			25	25	22.70	22.68	22.68	24.5
			50	0	22.73	22.77	22.55	24.5
	16QAM	1	0	22.46	22.40	22.45	24.5	
		1	24	22.64	22.60	22.60	24.5	
		1	49	22.59	22.35	22.45	24.5	
		25	0	21.55	21.69	21.59	23.5	
		25	12	21.65	21.72	21.71	23.5	
		25	25	21.75	21.57	21.53	23.5	
	64QAM	50	0	21.70	21.82	21.59	23.5	
		1	0	21.76	21.76	21.57	23.5	
		1	24	21.74	21.81	21.78	23.5	
		1	49	21.57	21.43	21.35	23.5	
		25	0	20.66	20.67	20.62	22.5	
		25	12	20.81	20.82	20.71	22.5	
	BW	Modulation	25	25	20.74	20.71	20.51	22.5
			50	0	20.54	20.52	20.54	22.5
			Channel		26715	26865	27015	Max. Time-up (dBm)
			Frequency (MHz)		816.5	831.5	846.5	
			1	0	23.67	23.58	23.57	25.5
			1	12	23.92	23.85	23.85	25.5
5M	QPSK	1	24	23.76	23.52	23.78	25.5	
		12	0	22.65	22.77	22.48	24.5	
		12	6	22.78	22.59	22.56	24.5	
		12	13	22.62	22.71	22.58	24.5	
		25	0	22.69	22.70	22.55	24.5	
		1	0	22.46	22.40	22.43	24.5	
	16QAM	12	12	22.68	22.66	22.74	24.5	
		1	24	22.62	22.27	22.43	24.5	
		12	6	21.69	21.65	21.66	23.5	
		12	6	21.65	21.79	21.76	23.5	
		12	13	21.66	21.65	21.54	23.5	
		25	0	21.75	21.76	21.70	23.5	
	64QAM	1	0	21.73	21.78	21.54	23.5	
		1	12	21.66	21.94	21.65	23.5	
		1	24	21.62	21.53	21.41	23.5	
		12	0	20.63	20.73	20.53	22.5	
		12	6	20.73	20.84	20.60	22.5	
		12	13	20.71	20.70	20.48	22.5	
	BW	Modulation	25	0	20.66	20.66	20.53	22.5
			Channel		26765	26865	27025	Max. Time-up (dBm)
			Frequency (MHz)		815.5	831.5	847.5	
			1	0	23.61	23.56	23.54	25.5
			1	7	23.94	23.87	23.89	25.5
			1	14	23.76	23.57	23.74	25.5
3M		QPSK	8	0	22.70	22.65	22.57	24.5
			8	3	22.83	22.66	22.61	24.5
			8	7	22.66	22.63	22.64	24.5
			15	0	22.63	22.69	22.58	24.5
			1	0	22.56	22.39	22.52	24.5
			1	7	22.65	22.68	22.62	24.5
	64QAM	1	14	22.60	22.48	22.62	24.5	
		8	0	21.64	21.68	21.64	23.5	
		8	3	21.61	21.76	21.67	23.5	
		8	7	21.73	21.80	21.58	23.5	
		15	0	21.76	21.78	21.63	23.5	
		1	0	21.70	21.73	21.53	23.5	
1		7	21.80	21.88	21.67	23.5		
1		14	21.64	21.45	21.32	23.5		
8		0	20.72	20.73	20.59	22.5		
8		3	20.78	20.75	20.67	22.5		
8		7	20.74	20.70	20.52	22.5		
15		0	20.61	20.60	20.49	22.5		
BW	Modulation	Channel		26697	26865	27033	Max. Time-up (dBm)	
		Frequency (MHz)		814.7	831.5	848.7		
		1	0	23.59	23.63	23.47	25.5	
		1	2	24.01	23.88	23.85	25.5	
		1	5	23.72	23.54	23.73	25.5	
		3	0	23.63	23.77	23.43	25.5	
	14M	QPSK	3	1	23.86	23.59	23.65	25.5
			3	3	23.68	23.65	23.67	25.5
			6	0	22.74	22.76	22.56	24.5
			1	0	22.52	22.46	22.40	24.5
			1	2	22.68	22.60	22.65	24.5
			1	5	22.81	22.40	22.48	24.5
16QAM		3	0	22.64	22.64	22.58	24.5	
		3	1	22.64	22.73	22.76	24.5	
		3	3	22.65	22.57	22.59	24.5	
		6	0	21.70	21.70	21.61	23.5	
		1	0	21.81	21.67	21.59	23.5	
		1	2	21.69	21.82	21.72	23.5	
64QAM	1	5	21.65	21.52	21.38	23.5		
	3	0	21.69	21.74	21.63	23.5		
	3	1	21.75	21.79	21.72	23.5		
	3	3	21.85	21.70	21.47	23.5		
	6	0	20.57	20.53	20.49	22.5		

LTE Band 38									
BW	Modulation	RB Size	RB Offset	Low	Mid	High	Max. Tune-up (dBm)		
		Channel	Frequency (MHz)	3870	3880	3890	2885	2895	2905
20M	QPSK	1	0	23.15	23.15	23.23	24.5		
		1	50	23.55	23.65	23.49	24.5		
		1	99	23.20	23.28	23.15	24.5		
		50	0	23.33	23.35	23.41	24.5		
		50	25	23.29	23.37	23.33	24.5		
	16QAM	50	50	23.34	23.43	23.23	24.5		
		100	0	23.42	23.41	23.41	24.5		
		1	0	23.17	23.17	23.09	24.5		
		1	50	23.41	23.51	23.41	24.5		
		1	99	23.06	23.16	23.13	23.5		
15M	QPSK	50	0	22.23	22.21	22.18	23.5		
		50	25	22.15	22.30	22.14	23.5		
		50	50	22.22	22.26	22.15	23.5		
		100	0	22.21	22.28	22.20	23.5		
		1	0	21.80	21.85	21.81	23.5		
	16QAM	1	50	22.01	22.13	21.98	23.5		
		1	99	21.87	21.93	21.78	23.5		
		50	0	21.23	21.20	21.23	22.5		
		50	25	21.15	21.20	21.23	22.5		
		50	50	21.14	21.26	21.16	22.5		
10M	QPSK	100	0	21.20	21.30	21.22	22.5		
		1	0	21.80	21.85	21.81	23.5		
		1	50	22.01	22.13	21.98	23.5		
		1	99	21.87	21.93	21.78	23.5		
		50	0	21.23	21.20	21.23	22.5		
	16QAM	50	25	21.15	21.20	21.23	22.5		
		50	50	21.14	21.26	21.16	22.5		
		100	0	21.20	21.30	21.22	22.5		
		1	0	21.80	21.85	21.81	23.5		
		1	50	22.01	22.13	21.98	23.5		
5M	QPSK	50	0	21.23	21.20	21.23	22.5		
		50	25	21.15	21.20	21.23	22.5		
		50	50	21.14	21.26	21.16	22.5		
		100	0	21.20	21.30	21.22	22.5		
		1	0	21.80	21.85	21.81	23.5		
	16QAM	1	50	22.01	22.13	21.98	23.5		
		1	99	21.87	21.93	21.78	23.5		
		50	0	21.23	21.20	21.23	22.5		
		50	25	21.15	21.20	21.23	22.5		
		50	50	21.14	21.26	21.16	22.5		

LTE Band 41 (2496 ~ 2690MHz)									
BW	Modulation	RB Size	RB Offset	Low	Low Mid	Mid	High Mid	High	Max. Tune-up (dBm)
		Channel	Frequency (MHz)	3870	4015	4085	4155	4180	
20M	QPSK	1	0	22.89	22.73	22.75	22.61	22.73	24
		1	50	23.04	22.91	22.95	22.85	22.86	24
		1	99	22.71	22.67	22.71	22.58	22.63	24
		50	0	22.84	22.73	22.74	22.61	22.58	24
		50	25	22.86	22.82	22.75	22.63	22.72	24
	16QAM	50	50	22.85	22.86	22.85	22.75	22.67	24
		100	0	22.93	22.80	22.87	22.75	22.74	24
		1	0	22.63	22.55	22.62	22.50	22.55	24
		1	50	22.90	22.79	22.89	22.83	22.81	24
		1	99	22.67	22.56	22.52	22.41	22.41	24
15M	QPSK	50	0	21.94	21.84	21.80	21.71	21.70	23
		50	25	21.89	21.92	21.88	21.72	21.69	23
		50	50	22.02	21.88	21.91	21.78	21.82	23
		100	0	21.99	21.94	21.80	21.83	21.74	23
		1	0	21.38	21.45	21.43	21.27	21.28	23
	16QAM	1	50	21.83	21.70	21.79	21.63	21.64	23
		1	99	21.42	21.39	21.41	21.32	21.36	23
		50	0	20.81	20.78	20.82	20.64	20.72	22
		50	25	20.80	20.87	20.85	20.73	20.73	22
		50	50	21.02	20.89	20.84	20.87	20.82	22
10M	QPSK	100	0	20.91	20.87	20.92	20.74	20.80	22
		1	0	21.35	21.40	21.30	21.14	21.16	23
		1	37	22.72	22.58	22.74	22.47	22.49	24
		1	74	22.89	22.76	22.95	22.73	22.73	24
		1	74	22.55	22.59	22.52	22.58	24	
	16QAM	36	0	22.78	22.67	22.72	22.56	22.52	24
		36	19	22.79	22.67	22.61	22.52	22.62	24
		36	39	22.72	22.76	22.70	22.72	22.65	24
		75	0	22.85	22.66	22.82	22.67	22.72	24
		1	0	22.53	22.51	22.53	22.47	22.48	24
5M	QPSK	1	37	22.76	22.77	22.84	22.69	22.77	24
		1	74	22.62	22.78	22.79	22.79	22.31	24
		36	0	21.83	21.87	21.79	21.68	21.65	23
		36	19	21.78	21.78	21.73	21.60	21.57	23
		36	39	21.94	21.82	21.83	21.70	21.76	23
	16QAM	75	0	21.90	21.90	21.87	21.81	21.71	23
		1	0	21.35	21.40	21.30	21.14	21.16	23
		1	37	21.78	21.59	21.64	21.55	21.55	23
		1	74	21.37	21.32	21.29	21.24	21.26	23
		36	0	20.73	20.75	20.69	20.59	20.57	22
20M	QPSK	36	19	20.87	20.78	20.72	20.58	20.61	22
		36	39	20.92	20.74	20.82	20.78	20.67	22
		75	0	20.79	20.84	20.77	20.63	20.68	22
		1	0	21.35	21.40	21.30	21.14	21.16	23
		1	37	21.78	21.59	21.64	21.55	21.55	23
	16QAM	1	74	21.37	21.32	21.29	21.24	21.26	23
		36	0	20.73	20.75	20.69	20.59	20.57	22
		36	19	20.87	20.78	20.72	20.58	20.61	22
		36	39	20.92	20.74	20.82	20.78	20.67	22
		75	0	20.79	20.84	20.77	20.63	20.68	22
15M	QPSK	75	0	22.79	22.74	22.84	22.62	22.73	24
		1	0	22.60	22.53	22.57	22.44	22.44	24
		1	24	22.87	22.70	22.86	22.68	22.75	24
		1	49	22.54	22.52	22.49	22.39	22.37	24
		25	0	21.92	21.85	21.78	21.63	21.57	23
	16QAM	25	12	21.82	21.87	21.74	21.57	21.63	23
		25	25	21.90	21.86	21.83	21.64	21.71	23
		50	0	21.90	21.91	21.76	21.75	21.66	23
		1	0	21.27	21.30	21.39	21.24	21.13	23
		1	24	21.75	21.68	21.67	21.53	21.51	23
10M	QPSK	1	49	21.32	21.35	21.40	21.18	21.34	23
		25	0	20.71	20.72	20.77	20.51	20.57	22
		25	12	20.88	20.73	20.79	20.70	20.71	22
		25	25	20.89	20.76	20.71	20.60	20.75	22
		50	0	20.80	20.73	20.77	20.58	20.71	22
	16QAM	50	0	20.80	20.82	20.82	20.60	20.69	22
		1	0	21.31	21.43	21.28	21.15	21.18	23
		1	12	21.71	21.65	21.65	21.49	21.62	23
		1	24	21.27	21.36	21.36	21.21	21.22	23
		12	0	20.80	20.74	20.77	20.62	20.71	22
5M	QPSK	12	6	20.87	20.81	20.76	20.61	20.66	22
		12	13	20.96	20.80	20.72	20.60	20.79	22
		25	0	20.84	20.82	20.82	20.60	20.69	22
		1	0	21.31	21.43	21.28	21.15	21.18	23
		1	12	21.71	21.65	21.65	21.49	21.62	23
	16QAM	1	24	21.27	21.36	21.36	21.21	21.22	23
		12	0	20.80	20.74	20.77	20.62	20.71	22
		12	6	20.87	20.81	20.76	20.61	20.66	22
		12	13	20.96	20.80	20.72	20.60	20.79	22
		25	0	20.84	20.82	20.82	20.60	20.69	22

LTE Band 66										
BW	Modulation	RB Size	RB Offset	Low	Mid	High	Max. Tune-up (dBm)			
		Channel	Frequency (MHz)	13272	13232	13292	12872	12872		
20M	QPSK	1	0	20.52	20.52	20.58	21.5			
		1	50	20.45	20.48	20.40	21.5			
		1	99	20.05	20.07	20.12	21.5			
		50	0	20.22	20.29	20.16	21.5			
		50	25	20.28	20.32	20.25	21.5			
	16QAM	50	50	20.11	20.10	20.11	21.5			
		100	0	20.20	20.23	20.10	21.5			
		1	0	20.07	20.13	20.05	21.5			
		1	50	20.39	20.42	20.34	21.5			
		50	99	20.04	20.06	20.07	21.5			
10M	16QAM	50	0	20.21	20.23	20.27	21.5			
		50	25	20.13	20.18	20.19	21.5			
		50	50	20.12	20.14	20.01	21.5			
		100	0	20.17	20.17	20.21	21.5			
		1	0	19.95	19.90	19.88	21.5			
	64QAM	1	50	20.22	20.34	20.19	21.5			
		1	99	19.85	19.75	19.78	21.5			
		50	0	20.30	20.31	20.20	21.5			
		50	25	20.13	20.17	20.21	21.5			
		50	50	20.09	20.20	20.14	21.5			
5M	QPSK	1	0	20.20	20.23	20.10	21.5			
		1	37	20.34	20.43	20.39	21.5			
		1	74	19.99	19.98	19.98	21.5			
		36	0	20.28	20.19	20.09	21.5			
		36	19	20.10	20.12	20.06	21.5			
	16QAM	36	39	19.98	20.05	20.04	21.5			
		75	0	20.12	20.08	20.00	21.5			
		1	0	19.97	19.99	19.91	21.5			
		1	37	20.11	20.22	20.29	21.5			
		36	74	19.93	19.96	19.95	21.5			
2.5M	16QAM	36	0	20.11	20.22	20.23	21.5			
		36	19	20.11	20.13	20.13	21.5			
		36	39	19.99	20.10	19.94	21.5			
		75	0	20.08	20.08	20.07	21.5			
		1	0	19.91	19.78	19.82	21.5			
	64QAM	1	37	20.18	20.30	20.12	21.5			
		1	74	19.83	19.86	19.72	21.5			
		36	0	20.27	20.28	20.12	21.5			
		36	19	20.10	20.11	20.06	21.5			
		36	39	20.07	20.16	20.10	21.5			
1.4M	QPSK	75	0	20.12	20.02	20.03	21.5			
		Channel	13262	13232	13262	12872	12872			
		1	0	20.12	20.22	20.06	21.5			
		1	24	20.44	20.36	20.27	21.5			
		1	49	19.98	19.90	19.91	21.5			
	16QAM	25	0	20.28	20.21	20.10	21.5			
		25	12	20.03	20.03	20.06	21.5			
		25	25	20.09	20.09	20.04	21.5			
		50	0	20.09	20.17	19.98	21.5			
		1	0	19.92	20.01	19.93	21.5			
0.7M	16QAM	1	24	20.30	20.34	20.20	21.5			
		1	49	20.00	20.03	20.04	21.5			
		25	0	20.13	20.11	20.21	21.5			
		25	12	20.00	20.15	20.17	21.5			
		25	25	20.00	20.08	19.89	21.5			
	64QAM	50	0	20.11	20.02	20.02	21.5			
		1	0	19.86	19.79	19.86	21.5			
		1	24	20.11	20.27	20.12	21.5			
		1	49	19.78	19.60	19.65	21.5			
		25	0	20.22	20.18	20.05	21.5			
0.3M	QPSK	25	12	20.10	20.11	20.06	21.5			
		25	25	20.03	20.13	20.11	21.5			
		50	0	20.09	20.07	20.00	21.5			
		Channel	13197	13232	13267	12877	12877			
		1	0	20.10	20.22	20.06	21.5			
	16QAM	1	12	20.34	20.46	20.33	21.5			
		1	24	19.94	19.98	19.99	21.5			
		12	0	20.19	20.23	20.02	21.5			
		12	6	20.05	20.12	20.14	21.5			
		12	13	20.10	20.18	20.01	21.5			
0.18M	QPSK	25	0	20.10	20.19	20.00	21.5			
		1	0	19.97	20.11	19.94	21.5			
		1	12	20.29	20.37	20.33	21.5			
		1	24	19.97	19.97	19.97	21.5			
		12	0	20.17	20.08	20.15	21.5			
	16QAM	12	6	20.04	20.11	20.15	21.5			
		25	0	20.04	20.02	20.06	21.5			
		1	0	19.84	19.75	19.75	21.5			
		1	12	20.15	20.33	20.04	21.5			
		1	24	19.73	19.73	19.66	21.5			
0.09M	QPSK	12	0	20.20	20.28	20.19	21.5			
		12	6	20.01	20.08	20.12	21.5			
		12	13	20.06	20.07	20.07	21.5			
		25	0	20.15	20.04	20.01	21.5			
		Channel	13187	13232	13266	12867	12867			
	16QAM	1	0	20.20	20.21	20.20	21.5			
		1	7	20.30	20.41	20.35	21.5			
		1	14	19.99	20.06	20.07	21.5			
		8	0	20.25	20.22	20.10	21.5			
		8	3	20.03	20.14	20.17	21.5			
0.045M	QPSK	8	7	19.98	19.97	19.91	21.5			
		15	0	20.18	20.13	20.00	21.5			
		1	0	19.99	20.07	19.94	21.5			
		1	7	20.34	20.36	20.22	21.5			
		1	14	19.98	19.97	19.97	21.5			
	16QAM	8	3	20.11	20.20	20.22	21.5			
		8	7	20.09	20.09	19.88	21.5			
		15	0	20.08	20.11	20.04	21.5			
		1	0	19.86	19.84	19.75	21.5			
		1	7	20.17	20.19	20.04	21.5			
0.0225M	QPSK	1	14	19.75	19.66	19.75	21.5			
		8	0	20.15	20.29	20.16	21.5			
		8	3	20.06	20.15	20.13	21.5			
		8	7	19.98	19.98	19.98	21.5			
		15	0	20.17	20.04	20.03	21.5			
	0.01125M	QPSK	1	0	20.20	20.28	19.97	21.5		
			1	2	20.24	20.36	20.23	21.5		
			1	5	19.96	19.95	19.86	21.5		
			3	0	20.22	20.31	20.09	21.5		
			3	1	20.14	20.16	20.08	21.5		
16QAM		6	0	20.06	19.99	19.91	21.5			
		6	0	20.14	20.08	19.97	21.5			
		1	0	20.00	20.03	20.03	21.5			
		1	2	20.20	20.27	20.05	21.5			
		1	5	19.81	19.74	19.70	21.5			
0.005625M	QPSK	3	0	20.20	20.21	20.17	21.5			
		3	1	20.06	20.12	20.10	21.5			
		3	3	20.02	20.06	20.02	21.5			
		6	0	20.17	20.10	20.06	21.5			
		Channel	13179	13232	13266	12866	12866			
	16QAM	3	0	20.20	20.21	20.17	21.5			
		3	1	20.06	20.12	20.10	21.5			
		3	3	20.02	20.06	20.02	21.5			
		6	0	20.17	20.10	20.06	21.5			
		Channel	13173	13232	13266	12866	12866			
64QAM	3	0	20.20	20.21	20.17	21.5				
	3	1	20.06	20.12	20.10	21.5				
	3	3	20.02	20.06	20.02	21.5				
	6	0	20.17	20.10	20.06	21.5				
	Channel	13167	13232	13266	12866	12866				

WWAN Full Power & DSI-2 Power Ant2(DIV)

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	31.95	31.96	32.04	33.50	29.57	29.68	29.52	30.50
GPRS 1Tx Slot	31.93	31.94	32.02	33.50	29.56	29.66	29.51	30.50
GPRS 2Tx Slot	28.49	28.49	28.57	30.00	25.80	25.96	25.87	26.70
GPRS 3Tx Slot	27.11	27.10	27.08	28.50	24.01	24.19	24.14	25.00
GPRS 4Tx Slot	26.14	26.14	26.22	27.50	23.08	23.27	23.23	24.00
EDGE 1Tx Slot	26.90	26.72	26.77	28.00	25.42	25.39	25.59	27.00
EDGE 2Tx Slot	23.96	23.79	23.93	25.00	22.14	22.09	22.34	24.00
EDGE 3Tx Slot	22.28	22.10	22.16	23.20	20.29	20.25	20.48	22.20
EDGE 4Tx Slot	20.88	20.53	20.64	22.00	19.54	19.37	19.50	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	810	
GSM	22.95	22.96	23.04	24.50	20.57	20.68	20.52	21.50
GPRS 1Tx Slot	22.93	22.94	23.02	24.50	20.56	20.66	20.51	21.50
GPRS 2Tx Slot	22.49	22.49	22.57	24.00	19.80	19.96	19.87	20.70
GPRS 3Tx Slot	22.85	22.84	22.82	24.24	19.75	19.93	19.88	20.74
GPRS 4Tx Slot	23.14	23.14	23.22	24.50	20.08	20.27	20.23	21.00
EDGE 1Tx Slot	17.90	17.72	17.77	19.00	16.42	16.39	16.59	18.00
EDGE 2Tx Slot	17.96	17.79	17.93	19.00	16.14	16.09	16.34	18.00
EDGE 3Tx Slot	18.02	17.84	17.90	18.94	16.03	15.99	16.22	17.94
EDGE 4Tx Slot	17.88	17.53	17.64	19.00	16.54	16.37	16.50	18.00

Band	WCDMA II			Max. Tune-up Power (dBm)	WCDMA IV			Max. Tune-up Power (dBm)	WCDMA V			Max. Tune-up Power (dBm)
TX Channel	9262	9400	9538		1312	1413	1513		4132	4182	4233	
Rx Channel	9662	9800	9938	Max. Tune-up Power (dBm)	1537	1638	1738	Max. Tune-up Power (dBm)	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	24.45	24.39	24.40	25.50	24.56	24.54	24.55	25.50	24.12	24.09	24.10	25.50
HSDPA Subtest-1	23.63	23.59	23.51	24.00	23.73	23.71	23.75	24.00	23.30	23.23	23.20	24.00
HSDPA Subtest-2	23.62	23.51	23.59	24.00	23.69	23.69	23.66	24.00	23.26	23.19	23.22	24.00
HSDPA Subtest-3	23.13	23.00	23.01	24.00	23.19	23.18	23.15	24.00	22.75	22.74	22.77	24.00
HSDPA Subtest-4	23.07	23.06	22.99	24.00	23.24	23.24	23.21	24.00	22.80	22.72	22.70	24.00
DC-HSDPA Subtest-1	23.55	23.56	23.49	24.00	23.75	23.70	23.65	24.00	23.29	23.22	23.26	24.00
DC-HSDPA Subtest-2	23.56	23.50	23.49	24.00	23.65	23.69	23.67	24.00	23.27	23.27	23.22	24.00
DC-HSDPA Subtest-3	23.14	23.02	23.02	24.00	23.18	23.17	23.23	24.00	22.80	22.75	22.72	24.00
DC-HSDPA Subtest-4	23.11	23.07	23.10	24.00	23.22	23.23	23.22	24.00	22.72	22.78	22.76	24.00
HSUPA Subtest-1	21.75	21.76	21.77	23.00	21.91	21.89	21.93	23.00	21.44	21.46	21.42	23.00
HSUPA Subtest-2	21.45	21.45	21.39	23.00	21.57	21.54	21.60	23.00	21.12	21.15	21.18	23.00
HSUPA Subtest-3	22.40	22.35	22.30	23.00	22.46	22.49	22.48	23.00	22.12	22.07	22.01	23.00
HSUPA Subtest-4	21.10	21.01	21.09	23.00	21.18	21.24	21.20	23.00	21.09	21.07	21.10	23.00
HSUPA Subtest-5	22.37	22.29	22.40	23.00	22.50	22.44	22.55	23.00	22.08	22.07	22.02	23.00
HSPA+ Subtest-1	21.73	21.61	21.61	23.00	21.78	21.76	21.84	23.00	21.39	21.33	21.40	23.00

LTE Band 2									
BW	Modulation	RB Size	RB Offset	Low	Mid	High	SCPP	Max.	Max. Time-up (dBm)
		Channel	Frequency (MHz)	1870.5	1880	1910	MPR (dB)	Time-up (dBm)	
20M	QPSK	1	0	24.09	24.03	23.94	0	25.5	
		1	50	24.37	24.29	24.21	0	25.5	
		1	99	23.98	23.80	23.70	0	25.5	
		50	0	23.22	23.24	23.11	1	24.5	
		50	25	23.11	23.11	23.06	1	24.5	
		50	50	23.21	23.16	23.06	1	24.5	
		100	0	23.26	23.12	23.13	1	24.5	
		1	0	23.21	23.24	22.98	1	24.5	
		1	50	23.54	23.40	23.39	1	24.5	
		1	99	23.95	23.86	23.76	1	24.5	
20M	16QAM	50	0	22.16	22.20	22.09	2	23.5	
		50	25	22.15	22.14	22.05	2	23.5	
		50	50	22.33	22.06	22.11	2	23.5	
		100	0	22.28	22.19	22.05	2	23.5	
		1	0	22.22	22.22	22.08	2	23.5	
		1	50	22.47	22.23	22.28	2	23.5	
		1	99	22.14	22.10	21.86	2	23.5	
		50	0	21.10	21.18	20.94	3	22.5	
		50	25	21.10	21.10	20.88	3	22.5	
		50	50	21.13	21.20	21.09	3	22.5	
20M	64QAM	100	0	21.24	21.11	21.02	3	22.5	
10M	QPSK	1	0	24.00	23.99	23.94	0	25.5	
		1	37	24.31	24.16	24.07	0	25.5	
		1	74	23.84	23.65	23.66	0	25.5	
		36	0	23.17	23.14	23.07	1	24.5	
		36	19	23.04	23.05	22.98	1	24.5	
		36	39	23.21	23.13	22.97	1	24.5	
		75	0	23.24	23.10	23.04	1	24.5	
		1	0	23.17	23.16	22.94	1	24.5	
		1	37	23.41	23.36	23.33	1	24.5	
		1	74	22.92	22.87	22.83	1	24.5	
10M	16QAM	36	0	22.12	22.10	22.05	2	23.5	
		36	19	22.07	21.99	22.00	2	23.5	
		36	39	22.32	21.99	21.99	2	23.5	
		75	0	22.24	22.10	21.93	2	23.5	
		1	0	22.18	22.18	22.02	2	23.5	
		1	37	22.37	22.16	22.21	2	23.5	
		1	74	22.07	22.04	21.79	2	23.5	
		36	0	20.99	21.11	20.80	3	22.5	
		36	19	20.99	21.08	20.78	3	22.5	
		36	39	21.11	21.15	21.07	3	22.5	
10M	64QAM	75	0	21.21	21.06	20.94	3	22.5	
5M	QPSK	1	0	23.94	23.93	23.86	0	25.5	
		1	24	24.23	24.16	24.06	0	25.5	
		1	49	23.89	23.71	23.56	0	25.5	
		25	0	23.20	23.16	22.98	1	24.5	
		25	12	23.01	22.99	22.93	1	24.5	
		25	25	23.25	23.08	22.91	1	24.5	
		50	0	23.24	23.10	23.08	1	24.5	
		1	0	23.18	23.09	22.88	1	24.5	
		1	24	23.39	23.37	23.25	1	24.5	
		1	49	22.95	22.98	22.97	1	24.5	
5M	16QAM	25	0	22.04	22.12	22.06	2	23.5	
		25	12	22.03	22.09	22.04	2	23.5	
		25	25	22.28	21.92	22.00	2	23.5	
		50	0	22.18	22.05	21.94	2	23.5	
		1	0	22.11	22.11	21.95	2	23.5	
		1	24	22.34	22.16	22.24	2	23.5	
		1	49	22.03	22.04	21.78	2	23.5	
		25	0	21.07	21.03	20.82	3	22.5	
		25	12	21.04	21.08	20.87	3	22.5	
		25	25	20.98	21.19	21.02	3	22.5	
5M	64QAM	50	0	21.18	21.00	20.98	3	22.5	
3M	QPSK	1	0	24.06	23.99	23.90	0	25.5	
		1	12	24.36	24.23	24.13	0	25.5	
		1	24	23.91	23.67	23.60	0	25.5	
		12	0	23.18	23.21	22.99	1	24.5	
		12	6	23.08	23.04	22.99	1	24.5	
		12	13	23.21	23.08	22.98	1	24.5	
		25	0	23.18	23.07	23.00	1	24.5	
		1	0	23.11	23.23	22.94	1	24.5	
		1	12	23.39	23.35	23.29	1	24.5	
		1	24	23.03	22.91	22.96	1	24.5	
3M	16QAM	12	0	22.04	22.15	21.96	2	23.5	
		12	6	22.03	22.06	21.93	2	23.5	
		12	13	22.19	21.94	21.99	2	23.5	
		25	0	22.25	22.16	22.03	2	23.5	
		1	0	22.10	22.18	21.98	2	23.5	
		1	12	22.43	22.10	22.12	2	23.5	
		1	24	22.03	21.99	21.79	2	23.5	
		12	0	21.08	21.15	20.83	3	22.5	
		12	6	21.09	21.08	20.84	3	22.5	
		12	13	21.03	21.10	21.00	3	22.5	
3M	64QAM	25	0	21.12	21.00	20.93	3	22.5	
1.4M	QPSK	1	0	23.99	23.99	23.90	0	25.5	
		1	7	24.24	24.23	24.16	0	25.5	
		1	14	23.85	23.71	23.62	0	25.5	
		8	0	23.12	23.17	23.00	1	24.5	
		8	3	23.01	23.05	22.99	1	24.5	
		8	7	23.27	23.02	22.97	1	24.5	
		15	0	23.22	23.09	23.06	1	24.5	
		1	0	23.06	23.15	22.95	1	24.5	
		1	7	23.52	23.36	23.35	1	24.5	
		1	14	22.97	22.99	22.88	1	24.5	
1.4M	16QAM	8	0	22.09	22.07	21.96	2	23.5	
		8	3	22.11	22.13	21.90	2	23.5	
		15	0	22.21	22.08	22.18	2	23.5	
		1	0	22.16	22.17	22.03	2	23.5	
		1	7	22.35	22.14	22.21	2	23.5	
		1	14	22.13	22.08	21.89	2	23.5	
		8	0	20.95	21.17	20.79	3	22.5	
		8	3	21.04	21.03	20.76	3	22.5	
		8	7	21.10	21.08	20.86	3	22.5	
		15	0	21.11	20.99	20.92	3	22.5	
1.4M	QPSK	1	0	24.02	23.99	23.91	0	25.5	
		1	2	24.24	24.20	24.18	0	25.5	
		1	5	23.88	23.75	23.65	0	25.5	
		3	1	23.94	23.80	23.91	0	25.5	
		3	3	23.87	23.80	23.78	0	25.5	
		6	0	23.20	23.04	23.12	1	24.5	
		1	0	23.10	23.22	22.96	1	24.5	
		1	2	23.41	23.36	23.25	1	24.5	
		1	5	22.90	22.90	22.95	1	24.5	
		3	0	22.89	22.89	22.87	1	24.5	
1.4M	16QAM	3	1	22.84	22.89	22.83	1	24.5	
		3	3	22.89	22.87	22.87	1	24.5	
		6	0	22.19	22.16	21.98	2	23.5	
		1	0	22.17	22.17	22.03	2	23.5	
		1	2	22.43	22.21	22.28	2	23.5	
		1	5	22.01	21.99	21.73	2	23.5	
		3	0	21.89	21.97	21.71	2	23.5	
		3	1	21.78	21.89	21.66	2	23.5	
		3	3	21.71	21.93	21.78	2	23.5	
		6	0	21.12	21.02	21.01	3	22.5	

LTE Band 7									
BW	Modulation	RB Size	RB Offset	Low	Mid	High	3GPP	Max.	
		Channel		26850	21100	21550	MPR	Time-up	
		Frequency (MHz)		2610	2635	2660	(dB)	(dBm)	
20M	QPSK	1	0	22.47	22.55	22.49	0	24	
		1	50	22.39	22.54	22.61	0	24	
		1	99	22.38	22.49	22.54	0	24	
		50	0	22.42	22.35	22.40	1	24	
		50	25	22.67	22.71	22.78	1	24	
		50	50	22.68	22.70	22.61	1	24	
		100	0	22.52	22.52	22.62	1	24	
		1	0	22.42	22.44	22.39	1	24	
	16QAM	1	50	22.59	22.65	22.71	1	24	
		1	99	22.26	22.25	22.18	1	24	
		50	0	21.81	21.85	21.95	2	23	
		50	25	21.96	22.27	22.15	2	23	
		50	50	22.19	22.10	22.13	2	23	
		100	0	22.14	22.14	22.08	2	23	
		1	0	21.82	21.89	21.92	2	23	
		1	50	22.21	22.23	22.43	2	23	
20M	64QAM	1	99	21.96	21.99	21.88	2	23	
		50	0	21.02	20.96	20.88	3	22	
		50	25	21.16	21.05	21.24	3	22	
		50	50	21.09	21.26	21.13	3	22	
		100	0	20.97	21.10	20.99	3	22	
	Channel	26850	21100	21550	3GPP	Max.			
		Frequency (MHz)		26850	2635	2660			
		1	0	22.38	22.41	22.37	0	24	
		1	37	22.88	22.89	22.97	0	24	
		1	74	22.29	22.38	22.49	0	24	
		36	0	22.27	22.30	22.39	1	24	
		36	19	22.59	22.65	22.66	1	24	
		36	39	22.54	22.64	22.60	1	24	
15M	QPSK	75	0	22.51	22.45	22.48	1	24	
		1	0	22.36	22.42	22.34	1	24	
		1	37	22.44	22.62	22.70	1	24	
		1	74	22.22	22.22	22.13	1	24	
		36	0	21.78	21.81	21.89	2	23	
		36	19	21.84	22.25	22.00	2	23	
		36	39	22.16	21.96	22.01	2	23	
		75	0	22.13	22.02	21.99	2	23	
	16QAM	1	5	21.72	21.71	21.80	2	23	
		1	37	22.16	22.08	22.33	2	23	
		1	74	21.93	21.90	21.82	2	23	
		36	0	20.89	20.92	20.77	3	22	
		36	19	21.02	20.99	21.16	3	22	
		36	39	20.96	21.19	21.01	3	22	
		75	0	20.89	21.05	20.88	3	22	
		75	0	20.89	21.05	20.88	3	22	
15M	64QAM	1	5	21.72	21.71	21.80	2	23	
		1	37	22.16	22.08	22.33	2	23	
		1	74	21.93	21.90	21.82	2	23	
		36	0	20.89	20.92	20.77	3	22	
		36	19	21.02	20.99	21.16	3	22	
		36	39	20.96	21.19	21.01	3	22	
		75	0	20.89	21.05	20.88	3	22	
		75	0	20.89	21.05	20.88	3	22	
10M	QPSK	1	0	22.40	22.54	22.43	0	24	
		1	24	22.85	22.84	22.87	0	24	
		1	49	22.24	22.45	22.40	0	24	
		25	0	22.28	22.34	22.34	1	24	
		25	12	22.57	22.54	22.76	1	24	
		25	25	22.63	22.55	22.57	1	24	
		50	0	22.47	22.39	22.52	1	24	
		1	0	22.38	22.41	22.34	1	24	
	16QAM	1	24	22.45	22.52	22.69	1	24	
		1	49	22.13	22.12	22.10	1	24	
		25	0	21.70	21.78	21.89	2	23	
		25	12	21.95	22.25	22.06	2	23	
		25	25	22.09	22.02	22.04	2	23	
		50	0	22.11	22.05	21.95	2	23	
		1	0	21.69	21.84	21.81	2	23	
		1	24	22.18	22.16	22.41	2	23	
10M	64QAM	1	49	21.94	21.91	21.81	2	23	
		25	0	20.92	20.95	20.82	3	22	
		25	12	21.14	21.00	21.15	3	22	
		25	25	20.95	21.20	21.06	3	22	
		50	0	20.83	21.02	20.91	3	22	
	Channel	26850	21100	21425	3GPP	Max.			
		Frequency (MHz)		26850	2635	2660			
		1	0	22.32	22.54	22.44	0	24	
		1	12	22.86	22.82	22.87	0	24	
		1	24	22.24	22.42	22.53	0	24	
		12	0	22.35	22.21	22.31	1	24	
		12	6	22.60	22.65	22.66	1	24	
		12	13	22.53	22.61	22.50	1	24	
5M	QPSK	25	0	22.50	22.47	22.47	1	24	
		1	0	22.27	22.31	22.31	1	24	
		1	12	22.49	22.55	22.69	1	24	
		1	24	22.11	22.17	22.14	1	24	
		12	0	21.76	21.76	21.94	2	23	
		12	6	21.88	22.16	22.05	2	23	
		12	13	22.14	22.03	22.11	2	23	
		25	0	22.01	22.10	21.93	2	23	
	16QAM	1	0	21.70	21.74	21.87	2	23	
		1	12	22.10	22.22	22.34	2	23	
		1	24	21.95	21.94	21.83	2	23	
		12	0	21.01	20.94	20.75	3	22	
		12	6	21.08	21.04	21.19	3	22	
		12	13	21.08	21.12	21.06	3	22	
		25	0	20.96	20.97	20.90	3	22	
		25	0	20.96	20.97	20.90	3	22	

LTE Band 13									
BW	Modulation	RB Size	RB Offset	Mid			3GPP MPR (dB)	Max. Time-up (dBm)	
		Channel		23230					
10M	QPSK	Frequency (MHz)			762				
		1	0	24	23.93		0	25.5	
		1	24		23.81		0	25.5	
		1	49		23.81		0	25.5	
		25	0		23.44		1	24.5	
		25	12		23.31		1	24.5	
	16QAM	25	25		23.30		1	24.5	
		50	0		23.40		1	24.5	
		1	0		22.94		1	24.5	
		1	24		23.20		1	24.5	
		25	0		22.18		2	23.5	
		25	12		22.17		2	23.5	
	64QAM	25	25		22.13		2	23.5	
		50	0		22.24		2	23.5	
		1	0		22.32		2	23.5	
		1	24		22.56		2	23.5	
1		49		22.35		2	23.5		
25		0		21.29		3	22.5		
5M	QPSK	25	12		21.15		3	22.5	
		25	25		21.09		3	22.5	
		50	0		21.23		3	22.5	
		Channel			23230	23230	3GPP	Max.	
		Frequency (MHz)			762	762	MPR	Time-up	
		1	0		23.87	23.90	23.81	0	25.5
	16QAM	1	12		24.22	24.17	24.13	0	25.5
		1	24		23.80	23.70	23.69	0	25.5
		12	0		23.07	23.06	23.15	1	24.5
		12	6		23.05	22.96	22.91	1	24.5
64QAM	12	13		23.02	23.03	22.93	1	24.5	
	25	0		23.06	23.02	23.10	1	24.5	
	1	0		22.91	22.91	22.91	1	24.5	
	1	12		23.15	23.05	23.17	1	24.5	
	1	24		23.13	23.07	23.11	1	24.5	
	12	0		22.05	22.14	22.09	2	23.5	
	12	6		22.16	22.11	22.07	2	23.5	
	12	13		22.02	22.07	22.09	2	23.5	
10M	QPSK	25	0		22.17	22.18	22.23	2	23.5
		1	0		22.20	22.27	22.19	2	23.5
		1	12		22.41	22.55	22.52	2	23.5
		1	24		22.33	22.26	22.24	2	23.5
	16QAM	12	0		21.19	21.24	21.16	3	22.5
		12	6		21.06	21.11	21.01	3	22.5
		12	13		20.95	21.06	21.01	3	22.5
		25	0		21.19	21.08	21.22	3	22.5

LTE Band 38									
BW	Modulation	RB Size	RB Offset	Low	Mid	High	SCPP	Max.	
		Channel	Frequency (MHz)	3780	3800	3820	MPR (dB)	Time-up (dBm)	
20M	QPSK	1	0	24.25	24.37	24.52	0	25.5	
		1	50	24.74	24.49	24.53	0	25.5	
		1	99	24.32	24.25	24.18	0	25.5	
		50	0	23.39	23.31	23.24	1	24.5	
		50	25	23.54	23.50	23.38	1	24.5	
		50	50	23.33	23.29	23.22	1	24.5	
		100	0	23.40	23.39	23.37	1	24.5	
		1	0	23.22	23.03	22.99	1	24.5	
		1	50	23.30	23.24	23.25	1	24.5	
		1	99	22.87	22.91	22.89	1	24.5	
20M	16QAM	50	0	22.31	22.51	22.48	2	23.5	
		50	25	22.47	22.52	22.45	2	23.5	
		50	50	22.34	22.32	22.29	2	23.5	
		100	0	22.38	22.40	22.48	2	23.5	
		1	0	22.14	22.11	21.90	2	23.5	
		1	50	22.28	22.32	22.29	2	23.5	
		1	99	21.98	22.04	21.88	2	23.5	
		50	0	21.49	21.38	21.34	3	22.5	
		50	25	21.45	21.43	21.45	3	22.5	
		50	50	21.44	21.36	21.42	3	22.5	
20M	64QAM	100	0	21.49	21.36	21.37	3	22.5	
		Channel	Frequency (MHz)	3780	3800	3820	SCPP	Max.	
		Channel	Frequency (MHz)	3780	3800	3820	SCPP	Max.	
		1	0	24.24	24.37	24.52	0	25.5	
		1	37	24.67	24.46	24.41	0	25.5	
		1	74	24.36	24.22	24.12	0	25.5	
		36	0	23.35	23.22	23.13	1	24.5	
		36	19	23.51	23.42	23.37	1	24.5	
		36	39	23.25	23.14	23.17	1	24.5	
		75	0	23.23	23.45	23.24	1	24.5	
10M	16QAM	1	0	23.21	22.88	22.83	1	24.5	
		1	37	23.17	23.21	23.23	1	24.5	
		1	74	22.73	22.89	22.79	1	24.5	
		36	0	22.18	22.42	22.44	2	23.5	
		36	19	22.35	22.42	22.37	2	23.5	
		36	39	22.21	22.26	22.23	2	23.5	
		75	0	22.48	22.25	22.38	2	23.5	
		1	0	22.08	22.07	21.88	2	23.5	
		1	37	22.26	22.20	22.15	2	23.5	
		1	74	21.91	21.91	21.85	2	23.5	
10M	64QAM	36	0	21.42	21.36	21.28	3	22.5	
		36	19	21.39	21.41	21.38	3	22.5	
		36	39	21.34	21.26	21.33	3	22.5	
		75	0	21.26	21.21	21.31	3	22.5	
20M	QPSK	Channel	Frequency (MHz)	3780	3800	3820	SCPP	Max.	
		Channel	Frequency (MHz)	3780	3800	3820	SCPP	Max.	
		1	0	24.20	24.32	24.19	0	25.5	
		1	24	24.62	24.37	24.49	0	25.5	
		1	49	24.25	24.18	24.07	0	25.5	
		25	0	23.27	23.21	23.20	1	24.5	
		25	12	23.41	23.45	23.34	1	24.5	
		25	25	23.30	23.21	23.17	1	24.5	
		50	0	23.38	23.42	23.38	1	24.5	
		1	0	23.20	22.97	22.90	1	24.5	
20M	16QAM	1	24	23.25	23.18	23.15	1	24.5	
		1	49	23.80	23.80	23.79	1	24.5	
		25	0	23.25	22.49	22.36	2	23.5	
		25	12	23.38	22.45	22.39	2	23.5	
		25	25	23.27	22.22	22.23	2	23.5	
		50	0	22.48	22.35	22.45	2	23.5	
		1	0	22.03	21.99	21.87	2	23.5	
		1	24	22.23	22.17	22.23	2	23.5	
		1	49	21.96	22.01	21.85	2	23.5	
		25	0	21.37	21.30	21.31	3	22.5	
20M	64QAM	25	12	21.43	21.32	21.34	3	22.5	
		25	25	21.34	21.22	21.33	3	22.5	
		50	0	21.32	21.31	21.35	3	22.5	
20M	QPSK	Channel	Frequency (MHz)	37775	38080	38225	SCPP	Max.	
		Channel	Frequency (MHz)	37775	38080	38225	SCPP	Max.	
		1	0	24.20	24.24	24.08	0	25.5	
		1	12	24.68	24.34	24.38	0	25.5	
		1	24	24.24	24.20	24.07	0	25.5	
		12	0	23.39	23.41	23.27	1	24.5	
		12	13	23.28	23.15	23.17	1	24.5	
		25	0	23.35	23.47	23.38	1	24.5	
		1	0	23.14	22.88	22.89	1	24.5	
		1	12	23.30	23.19	23.11	1	24.5	
20M	16QAM	1	24	22.83	22.76	22.75	1	24.5	
		12	0	22.25	22.38	22.44	2	23.5	
		12	6	22.40	22.41	22.42	2	23.5	
		12	13	22.31	22.24	22.16	2	23.5	
		25	0	22.48	22.37	22.39	2	23.5	
		1	0	22.07	22.05	21.87	2	23.5	
		1	12	22.29	22.21	22.25	2	23.5	
		1	24	21.93	21.95	21.83	2	23.5	
		12	0	21.34	21.29	21.20	3	22.5	
		12	6	21.43	21.32	21.43	3	22.5	
20M	64QAM	12	13	21.33	21.26	21.37	3	22.5	
		25	0	21.32	21.33	21.33	3	22.5	

LTE Band 41 (2496 ~ 2690MHz)										
BW	Modulation	RB Size	RB Offset	Low	Low Mid	Mid	High Mid	High	SCPP MPE (dB)	Max. Tx- turn-off (dBm)
		Channel	Frequency (MHz)	2496	2540.5	2585	2630	2685		
20M	QPSK	1	0	24.17	24.01	23.98	23.95	23.73	0	25
		1	50	24.38	24.19	24.12	23.93	23.95	0	25
		1	99	24.01	24.03	23.74	23.59	23.65	0	25
		50	0	23.22	23.21	23.08	22.81	22.95	1	24
		50	25	23.10	23.07	22.97	22.84	22.85	1	24
		50	50	23.05	23.07	22.93	22.87	22.73	1	24
		100	0	23.20	22.97	22.93	22.74	22.79	1	24
		1	0	22.80	22.64	22.68	22.29	22.45	1	24
		1	50	22.98	22.94	22.99	22.54	22.69	1	24
		1	99	22.72	22.66	22.56	22.24	22.48	1	24
20M	16QAM	50	0	22.21	22.15	22.07	21.82	21.94	2	23
		50	25	22.17	22.04	21.99	21.72	21.77	2	23
		50	50	22.10	22.02	21.83	21.70	21.83	2	23
		100	0	22.28	22.31	22.20	21.83	22.01	2	23
		1	0	21.74	21.78	21.60	21.34	21.44	2	23
		1	50	22.08	21.98	21.92	21.67	21.82	2	23
		1	99	21.86	21.81	21.49	21.38	21.30	2	23
		50	0	21.39	21.22	21.06	20.88	20.90	3	22
		50	25	21.24	21.12	21.15	20.70	20.97	3	22
		50	50	21.11	21.00	21.02	20.70	21.01	3	22
20M	64QAM	100	0	21.35	21.21	21.10	20.84	20.90	3	22
		Channel	Frequency (MHz)	2496	2540.5	2585	2630	2685	SCPP MPE (dB)	Max. Tx- turn-off (dBm)
		Channel	Frequency (MHz)	2496	2540.5	2585	2630	2685	SCPP MPE (dB)	Max. Tx- turn-off (dBm)
		1	0	24.04	23.96	23.94	23.62	23.66	0	25
		1	37	24.28	24.16	24.07	23.88	23.85	0	25
		1	74	23.96	24.00	23.62	23.50	23.59	0	25
		36	0	23.07	23.20	22.99	22.78	22.94	1	24
		36	19	22.98	22.96	22.82	22.82	22.78	1	24
		36	39	22.97	23.05	22.79	22.56	22.65	1	24
		75	0	23.16	22.91	22.82	22.84	22.69	1	24
10M	16QAM	1	0	22.73	22.53	22.97	22.28	22.41	1	24
		1	37	22.85	22.85	22.97	22.41	22.59	1	24
		1	74	22.61	22.53	22.42	22.19	22.41	1	24
		36	0	22.18	22.12	22.06	21.78	21.89	2	23
		36	19	22.02	21.89	21.82	21.62	21.68	2	23
		36	39	21.96	21.88	21.74	21.57	21.71	2	23
		75	0	22.27	22.30	22.19	21.77	21.97	2	23
		1	0	21.73	21.75	21.57	21.23	21.46	2	23
		1	37	22.00	21.96	21.82	21.55	21.75	2	23
		1	74	21.75	21.50	21.39	21.26	21.26	2	23
10M	64QAM	36	0	21.38	21.17	20.91	20.58	20.80	3	22
		36	19	21.23	20.99	20.92	20.58	20.81	3	22
		36	39	20.97	20.89	20.82	20.52	20.99	3	22
		75	0	21.30	21.06	21.04	20.83	21.04	3	22
		Channel	Frequency (MHz)	2496	2540.5	2585	2630	2685	SCPP MPE (dB)	Max. Tx- turn-off (dBm)
		Channel	Frequency (MHz)	2496	2540.5	2585	2630	2685	SCPP MPE (dB)	Max. Tx- turn-off (dBm)
		1	0	24.03	23.92	23.93	23.59	23.59	0	25
		1	24	24.31	24.08	23.98	23.89	23.85	0	25
		1	49	23.89	23.92	23.63	23.46	23.47	0	25
		25	0	23.12	23.10	23.05	22.72	22.85	1	24
25	12	23.06	23.03	22.91	22.72	22.78	1	24		
25	25	23.03	23.06	22.83	22.53	22.71	1	24		
50	0	23.18	22.92	22.79	22.61	22.78	1	24		
10M	16QAM	1	0	22.69	22.53	22.83	22.21	22.30	1	24
		1	24	23.07	22.81	22.72	22.52	22.65	1	24
		1	49	22.95	22.87	22.51	22.14	22.45	1	24
		25	0	22.09	22.11	21.98	21.76	21.93	2	23
		25	12	22.10	21.98	21.89	21.66	21.73	2	23
		25	25	22.04	21.91	21.81	21.56	21.74	2	23
		50	0	22.24	22.28	22.15	21.79	21.99	2	23
		1	0	21.71	21.73	21.52	21.19	21.37	2	23
		1	24	21.99	21.94	21.79	21.64	21.76	2	23
		1	49	21.75	21.58	21.37	21.12	21.29	2	23
10M	64QAM	25	0	21.37	21.12	20.96	20.57	20.78	3	22
		25	12	21.14	20.99	21.09	20.57	20.84	3	22
		25	25	20.96	20.87	20.97	20.55	20.88	3	22
		50	0	21.22	21.11	21.02	20.75	20.98	3	22
		Channel	Frequency (MHz)	2496	2540.5	2585	2630	2685	SCPP MPE (dB)	Max. Tx- turn-off (dBm)
		Channel	Frequency (MHz)	2496	2540.5	2585	2630	2685	SCPP MPE (dB)	Max. Tx- turn-off (dBm)
		1	0	24.09	24.00	23.87	23.53	23.59	0	25
		1	12	24.36	24.07	24.01	23.68	23.94	0	25
		1	24	23.85	23.88	23.44	23.48	23.51	1	24
		12	0	23.10	23.14	23.01	22.75	22.91	1	24
12	6	23.02	22.94	22.87	22.75	22.75	1	24		
12	13	23.03	22.92	22.81	22.52	22.63	1	24		
25	0	22.28	22.27	22.05	21.73	21.74	1	24		
10M	16QAM	1	0	22.71	22.62	22.64	22.14	22.34	1	24
		1	12	23.02	22.89	22.87	22.44	22.58	1	24
		1	24	22.70	22.63	22.53	22.22	22.39	1	24
		12	0	22.12	22.10	21.83	21.73	21.87	1	24
		12	6	22.11	22.02	21.90	21.64	21.72	1	24
		12	13	21.97	21.90	21.71	21.60	21.69	2	23
		25	0	22.25	22.24	21.94	21.82	21.89	2	23
		25	12	22.18	22.16	21.82	21.76	21.78	2	23
		1	12	21.96	21.94	21.84	21.56	21.81	2	23
		1	24	21.74	21.57	21.40	21.32	21.19	2	23
10M	64QAM	12	0	21.28	21.17	20.96	20.67	20.83	3	22
		12	6	21.26	21.06	21.04	20.67	20.83	3	22
		12	13	21.00	20.92	20.88	20.66	20.80	3	22
		25	0	21.32	21.12	21.03	20.75	20.87	3	22

WWAN DSI-1 Power Ant2(DIV)

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	30.02	30.03	30.11	31.50	25.10	25.28	25.20	26.00
GPRS 1Tx Slot	30.00	30.02	30.10	31.50	25.08	25.26	25.18	26.00
GPRS 2Tx Slot	26.55	26.55	26.63	28.00	21.29	21.51	21.47	22.20
GPRS 3Tx Slot	25.14	25.13	25.22	26.50	19.52	19.78	19.75	20.50
GPRS 4Tx Slot	24.18	24.18	24.26	25.50	18.56	18.81	18.78	19.50
EDGE 1Tx Slot	26.90	26.72	26.77	28.00	24.44	24.35	24.50	26.00
EDGE 2Tx Slot	23.96	23.79	23.93	25.00	19.87	19.56	19.89	21.50
EDGE 3Tx Slot	22.28	22.10	22.16	23.20	18.12	18.04	18.29	19.70
EDGE 4Tx Slot	20.88	20.53	20.64	22.00	17.47	17.40	17.59	19.00

Source-Based Time-Averaged Power								
Band	GSM850			Max. Tune-up Power (dBm)	GSM1900			Max. Tune-up Power (dBm)
Channel	128	189	251		512	661	810	
GSM	21.02	21.03	21.11	22.50	16.10	16.28	16.20	17.00
GPRS 1Tx Slot	21.00	21.02	21.10	22.50	16.08	16.26	16.18	17.00
GPRS 2Tx Slot	20.55	20.55	20.63	22.00	15.29	15.51	15.47	16.20
GPRS 3Tx Slot	20.88	20.87	20.96	22.24	15.26	15.52	15.49	16.24
GPRS 4Tx Slot	21.18	21.18	21.26	22.50	15.56	15.81	15.78	16.50
EDGE 1Tx Slot	17.90	17.72	17.77	19.00	15.44	15.35	15.50	17.00
EDGE 2Tx Slot	17.96	17.79	17.93	19.00	13.87	13.56	13.89	15.50
EDGE 3Tx Slot	18.02	17.84	17.90	18.94	13.86	13.78	14.03	15.44
EDGE 4Tx Slot	17.88	17.53	17.64	19.00	14.47	14.40	14.59	16.00

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	4233	
Rx Channel	9662	9800	9938	Max. Tune-up Power (dBm)	1537	1638	1738	Max. Tune-up Power (dBm)	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	18.11	17.97	18.03	19.00	19.57	19.52	19.49	20.50	21.66	21.60	21.63	23.00
HSDPA Subtest-1	17.10	17.02	17.09	17.50	18.68	18.64	18.61	19.00	20.79	20.75	20.74	21.50
HSDPA Subtest-2	17.08	16.96	17.06	17.50	18.74	18.68	18.61	19.00	20.86	20.73	20.81	21.50
HSDPA Subtest-3	16.63	16.53	16.57	17.50	18.23	18.20	18.12	19.00	20.36	20.28	20.25	21.50
HSDPA Subtest-4	16.62	16.50	16.56	17.50	18.20	18.15	18.11	19.00	20.28	20.25	20.31	21.50
DC-HSDPA Subtest-1	17.07	16.99	17.05	17.50	18.75	18.62	18.67	19.00	20.83	20.80	20.82	21.50
DC-HSDPA Subtest-2	17.13	17.02	17.05	17.50	18.66	18.67	18.63	19.00	20.81	20.73	20.73	21.50
DC-HSDPA Subtest-3	16.57	16.53	16.57	17.50	18.17	18.21	18.10	19.00	20.32	20.20	20.28	21.50
DC-HSDPA Subtest-4	16.67	16.55	16.62	17.50	18.23	18.20	18.13	19.00	20.35	20.26	20.23	21.50
HSUPA Subtest-1	15.34	15.26	15.28	16.50	16.97	16.89	16.84	18.00	18.95	18.99	19.02	20.50
HSUPA Subtest-2	14.97	14.86	14.93	16.50	16.59	16.60	16.57	18.00	18.74	18.62	18.65	20.50
HSUPA Subtest-3	15.89	15.77	15.87	16.50	17.51	17.47	17.44	18.00	19.64	19.59	19.54	20.50
HSUPA Subtest-4	14.64	14.56	14.61	16.50	16.17	16.16	16.09	18.00	18.63	18.59	18.62	20.50
HSUPA Subtest-5	15.88	15.86	15.92	16.50	17.51	17.46	17.41	18.00	19.64	19.56	19.62	20.50
HSPA+ Subtest-1	15.22	15.09	15.17	16.50	16.79	16.75	16.75	18.00	18.87	18.81	18.93	20.50

LTE Band 2									
BW	Modulation	RB Size	RB Offset	Low			Mid	High	Max. Time-upt. (dBm)
		Channel	Frequency (MHz)	1870	1880	1910			
20M	QPSK	1	0	18.29	18.11	18.30	19.5		
		1	50	18.44	18.29	18.25	19.5		
		1	99	17.99	17.90	17.78	19.5		
		50	0	18.22	18.14	18.05	19.5		
		50	25	18.08	18.06	17.90	19.5		
	16QAM	50	50	18.20	18.13	17.90	19.5		
		100	0	18.15	18.13	17.92	19.5		
		1	0	18.11	18.02	17.93	19.5		
		1	50	18.23	18.32	18.11	19.5		
		1	99	18.01	17.78	17.71	19.5		
20M	16QAM	50	0	18.07	18.04	17.94	19.5		
		50	25	18.15	18.01	17.90	19.5		
		50	50	18.13	18.11	18.05	19.5		
		100	0	18.10	18.06	17.97	19.5		
		1	0	17.95	17.84	17.91	19.5		
	64QAM	1	50	18.16	18.19	17.98	19.5		
		1	99	17.77	17.62	17.56	19.5		
		50	0	18.04	18.02	17.87	19.5		
		50	25	18.06	18.05	17.81	19.5		
		50	50	18.02	17.97	17.95	19.5		
20M	64QAM	100	0	18.04	18.05	17.89	19.5		
		QPSK	Channel	1887.5	1890	1912.5	Max. Time-upt. (dBm)		
			Frequency (MHz)						
			1	0	18.15	17.99	18.08	19.5	
			1	37	18.34	18.22	18.22	19.5	
			1	74	17.96	17.84	17.64	19.5	
15M	QPSK	36	0	18.11	18.06	18.07	19.5		
		36	19	17.98	17.96	17.86	19.5		
		36	39	18.07	18.09	17.78	19.5		
		75	0	18.07	18.05	17.84	19.5		
		1	0	17.98	17.87	17.81	19.5		
	16QAM	1	37	18.22	18.27	18.06	19.5		
		1	74	17.87	17.67	17.70	19.5		
		36	0	18.05	17.91	17.82	19.5		
		36	19	18.08	17.99	17.84	19.5		
		36	39	17.98	17.96	17.81	19.5		
15M	16QAM	75	0	18.09	17.99	17.83	19.5		
		1	0	17.83	17.73	17.83	19.5		
		1	37	18.05	18.07	17.88	19.5		
		1	74	17.64	17.51	17.49	19.5		
		36	0	17.99	17.96	17.77	19.5		
	64QAM	36	19	17.93	17.90	17.73	19.5		
		36	39	17.84	17.86	17.84	19.5		
75	0	17.90	17.97	17.88	19.5				
20M	QPSK	Channel	1885	1890	1910	Max. Time-upt. (dBm)			
		Frequency (MHz)							
		1	0	18.14	18.01	17.99	19.5		
		1	24	18.30	18.26	18.14	19.5		
		1	49	17.89	17.77	17.74	19.5		
	16QAM	25	0	18.19	18.05	17.99	19.5		
		25	12	18.01	18.05	17.94	19.5		
		25	25	18.06	18.01	17.76	19.5		
		50	0	18.00	18.07	17.81	19.5		
		1	0	17.98	18.00	17.85	19.5		
10M	QPSK	1	24	18.18	18.18	17.99	19.5		
		1	49	17.86	17.67	17.63	19.5		
		25	0	17.93	17.98	17.83	19.5		
		25	12	18.11	17.87	17.88	19.5		
		25	25	18.01	18.03	17.91	19.5		
	16QAM	50	0	18.03	18.05	17.85	19.5		
		1	0	17.87	17.71	17.81	19.5		
		1	24	18.06	18.05	17.88	19.5		
		1	49	17.76	17.49	17.46	19.5		
		25	0	17.96	17.99	17.84	19.5		
10M	64QAM	25	12	17.98	17.99	17.73	19.5		
		25	25	17.99	17.88	17.83	19.5		
		50	0	17.93	17.93	17.86	19.5		
		20M	QPSK	Channel	1882.5	1890	1917.5	Max. Time-upt. (dBm)	
				Frequency (MHz)					
1	0			18.14	18.01	17.99	19.5		
1	12			18.40	18.26	18.24	19.5		
1	24			17.87	17.86	17.75	19.5		
5M	QPSK	12	0	18.17	18.09	18.03	19.5		
		12	6	18.02	18.06	17.82	19.5		
		12	13	18.13	18.04	17.85	19.5		
		25	0	18.02	18.11	17.89	19.5		
		1	0	18.09	17.89	17.82	19.5		
	16QAM	1	12	18.10	18.26	17.99	19.5		
		1	24	17.99	17.68	17.61	19.5		
		12	0	17.95	17.99	17.84	19.5		
		12	6	18.11	17.95	17.81	19.5		
		12	13	18.07	18.02	17.93	19.5		
5M	64QAM	25	0	17.95	17.98	17.89	19.5		
		1	0	17.94	17.79	17.77	19.5		
		1	12	18.05	18.14	17.88	19.5		
		1	24	17.68	17.60	17.47	19.5		
		12	0	17.95	17.89	17.76	19.5		
20M	QPSK	12	6	18.01	18.06	17.72	19.5		
		12	13	17.99	17.82	17.82	19.5		
		25	0	17.98	17.99	17.79	19.5		
		3M	QPSK	Channel	1881.5	1890	1918.5	Max. Time-upt. (dBm)	
				Frequency (MHz)					
1	0			18.14	18.01	17.99	19.5		
1	7			18.38	18.16	18.19	19.5		
1	14			17.93	17.88	17.69	19.5		
1.4M	QPSK	8	0	18.13	18.05	17.93	19.5		
		8	3	18.06	18.05	17.88	19.5		
		8	7	18.06	18.12	17.88	19.5		
		15	0	17.99	18.12	17.77	19.5		
		1	0	17.99	17.87	17.79	19.5		
	16QAM	1	7	18.17	18.30	18.04	19.5		
		1	14	17.90	17.73	17.64	19.5		
		8	0	17.83	17.99	17.89	19.5		
		8	3	18.07	17.99	17.77	19.5		
		8	7	18.00	18.06	17.97	19.5		
1.4M	64QAM	15	0	18.02	17.95	17.88	19.5		
		1	0	17.84	17.71	17.69	19.5		
		1	7	18.08	18.07	17.97	19.5		
		1	14	17.69	17.51	17.53	19.5		
		8	0	17.94	17.97	17.72	19.5		
20M	QPSK	8	3	17.91	18.04	17.75	19.5		
		8	7	18.01	17.84	17.82	19.5		
		15	0	17.89	17.91	17.79	19.5		
		3M	QPSK	Channel	1880.7	1890	1919.3	Max. Time-upt. (dBm)	
				Frequency (MHz)					
1	0			18.28	18.10	17.85	19.5		
1	2			18.43	18.21	18.14	19.5		
1	5			17.98	17.84	17.72	19.5		
1.4M	QPSK	3	0	18.18	18.10	18.02	19.5		
		3	1	18.00	18.07	17.76	19.5		
		3	3	18.18	18.05	17.92	19.5		
		6	0	18.01	18.11	17.87	19.5		
		1	0	18.07	17.93	17.87	19.5		
	16QAM	1	2	18.19	18.21	18.10	19.5		
		1	5	17.95	17.71	17.56	19.5		
		3	0	18.02	17.93	17.82	19.5		
		3	1	18.09	17.94	17.87	19.5		
		3	3	18.03	18.04	17.96	19.5		
1.4M	64QAM	6	0	18.02	17.92	17.88	19.5		
		1	0	17.87	17.69	17.69	19.5		
		1	2	18.06	18.04	17.94	19.5		
		1	5	17.62	17.53	17.42	19.5		
		3	0	18.01	17.88	17.77	19.5		
20M	QPSK	3	1	18.04	18.03	17.67	19.5		
		3	3	17.95	17.81	17.67	19.5		
		6	0	18.03	17.99	17.76	19.5		
		3M	QPSK	Channel	1887.5	1890	1918.5	Max. Time-upt. (dBm)	
				Frequency (MHz)					
1	0			18.28	18.10	17.85	19.5		
1	2			18.43	18.21	18.14	19.5		
1	5			17.98	17.84	17.72	19.5		
1.4M	QPSK	3	0	18.18	18.10	18.02	19.5		
		3	1	18.00	18.07	17.76	19.5		
		3	3	18.18	18.05	17.92	19.5		
		6	0	18.01	18.11	17.87	19.5		
		1	0	18.07	17.93	17.87	19.5		
1.4M	16QAM	1	2	18.19	18.21	18.10	19.5		
		1	5	17.95	17.71	17.56	19.5		
		3	0	18.02	17.93	17.82	19.5		
		3	1	18.09	17.94	17.87	19.5		
		3	3	18.03	18.04	17.96	19.5		
1.4M	64QAM	6	0	18.02	17.92	17.88	19.5		
		1	0	17.87	17.69	17.69	19.5		
		1	2	18.06	18.04	17.94	19.5		
		1	5	17.62	17.53	17.42	19.5		
		3	0	18.01	17.88	17.77	19.5		
20M	QPSK	3	1	18.04	18.03	17.67	19.5		
		3	3	17.95	17.81	17.67	19.5		
		6	0	18.03	17.99	17.76	19.5		

LTE Band 4									
BW	Modulation	RB Size		RB Offset			Max. Time-up (dBm)		
		Channel Frequency (MHz)	Low	Mid	High				
						2000		2015	2030
20M	QPSK	1	0	1728	1732.5	1745			
		1	50	18.16	18.04	18.12			
		1	99	18.59	18.56	18.51			
		50	0	18.85	18.84	18.91			
		50	25	19.01	18.81	18.87			
	16QAM	50	50	18.93	18.84	18.93			
		100	0	18.98	18.80	18.95			
		1	0	18.63	18.65	18.71			
		1	50	18.97	19.10	18.99			
		1	99	18.56	18.55	18.52			
20M	16QAM	50	0	18.84	18.76	18.95			
		50	25	18.98	18.89	18.96			
		50	50	18.83	18.78	18.90			
		100	0	18.94	18.86	18.91			
		1	0	18.63	18.59	18.56			
	64QAM	1	50	18.73	18.90	18.93			
		1	99	18.56	18.55	18.52			
		50	0	18.84	18.76	18.95			
		50	25	18.98	18.89	18.96			
		50	50	18.93	18.86	18.93			
20M	QPSK	100	0	18.85	18.90	19.01			
		QPSK	Channel Frequency (MHz)	1717.5	1732.5	1747.5			
			1	0	18.40	18.29	18.24		
			1	37	19.13	18.89	18.98		
			1	74	18.50	18.48	18.37		
	36		0	18.81	18.76	18.83			
	16QAM	36	19	18.88	18.66	18.75			
		36	39	18.81	18.80	18.85			
		75	0	18.86	18.77	18.92			
		1	0	18.56	18.63	18.67			
1		37	18.85	18.99	18.91				
15M	16QAM	1	74	18.55	18.51	18.63			
		36	0	18.68	18.84	18.77			
		36	19	18.76	18.90	18.84			
		36	39	18.73	18.76	18.81			
		75	0	18.93	18.77	18.78			
15M	64QAM	75	0	18.49	18.56	18.48			
		1	37	18.65	18.80	18.88			
		1	74	18.50	18.44	18.49			
		36	0	18.81	18.75	18.81			
		36	19	18.92	18.74	18.82			
20M	QPSK	36	39	18.88	18.93	18.78			
		75	0	18.73	18.89	18.97			
		QPSK	Channel Frequency (MHz)	1716	1732.5	1750			
			1	0	18.77	18.67	18.73		
			1	24	19.05	19.03	19.07		
	1		49	18.52	18.55	18.39			
	25		0	18.77	18.78	18.76			
	10M	QPSK	25	12	18.95	18.69	18.75		
			25	25	18.93	18.90	18.86		
			50	0	18.91	18.69	18.90		
1			0	18.60	18.56	18.64			
1			24	18.86	19.02	18.91			
10M	16QAM	1	49	18.46	18.51	18.59			
		25	0	18.75	18.84	18.76			
		25	12	18.77	18.89	18.85			
		25	25	18.74	18.65	18.85			
		50	0	18.91	18.72	18.89			
10M	16QAM	50	0	18.65	18.57	18.64			
		1	24	18.63	18.80	18.91			
		1	49	18.46	18.54	18.49			
		25	0	18.82	18.69	18.86			
		25	12	18.88	18.75	18.82			
20M	QPSK	25	25	18.84	18.94	18.91			
		50	0	18.75	18.81	18.97			
		QPSK	Channel Frequency (MHz)	1715.5	1732.5	1750.5			
			1	0	18.67	18.57	18.62		
			1	12	19.11	18.95	19.04		
	1		24	18.54	18.54	18.42			
	12		0	18.84	18.74	18.81			
	15M	QPSK	12	6	18.87	18.79	18.76		
			12	13	18.89	18.74	18.80		
			25	0	18.91	18.66	18.85		
1			0	18.60	18.64	18.64			
1			12	18.96	19.09	18.94			
15M	16QAM	1	24	18.48	18.54	18.56			
		12	0	18.65	18.67	18.79			
		12	6	18.72	18.86	18.78			
		25	0	18.82	18.77	18.79			
		14	0	18.49	18.49	18.51			
15M	64QAM	1	12	18.58	18.79	18.85			
		1	24	18.55	18.43	18.48			
		12	0	18.74	18.61	18.90			
		1	19	18.66	18.62	18.94			
		12	13	18.91	18.89	18.92			
20M	QPSK	25	0	18.81	18.84	18.91			
		QPSK	Channel Frequency (MHz)	1716.5	1732.5	1750.5			
			1	0	18.68	18.52	18.70		
			1	7	19.11	18.94	18.99		
			1	14	18.57	18.48	18.38		
	15M		QPSK	8	0	18.77	18.74	18.76	
		8		3	18.91	18.66	18.75		
		8		7	18.82	18.76	18.81		
		15		0	18.96	18.69	18.81		
		1		0	18.59	18.54	18.69		
15M	16QAM	1	7	18.82	18.89	18.88			
		1	14	18.54	18.64	18.52			
		8	0	18.68	18.68	18.65			
		8	3	18.76	18.86	18.72			
		8	7	18.82	18.67	18.86			
15M	64QAM	15	0	18.89	18.70	18.80			
		8	7	18.82	18.59	18.50			
		1	7	18.68	18.79	18.81			
		1	14	18.45	18.46	18.38			
		8	0	18.82	18.63	18.91			
20M	QPSK	8	3	18.88	18.73	18.83			
		8	7	18.81	18.66	18.89			
		15	0	18.71	18.81	18.86			
		QPSK	Channel Frequency (MHz)	1716.7	1732.5	1750.3			
			1	0	18.77	18.62	18.71		
	1		5	19.03	18.97	18.97			
	1		5	18.57	18.54	18.45			
	3		0	18.84	18.80	18.82			
	15M	QPSK	3	1	18.98	18.73	18.83		
			3	5	18.85	18.73	18.81		
6			0	18.85	18.71	18.83			
1			0	18.52	18.64	18.70			
1			2	18.85	18.59	18.89			
1.4M	16QAM	1	5	18.67	18.63	18.81			
		3	1	18.89	18.83	18.66			
		3	1	18.73	18.92	18.79			
		3	3	18.81	18.69	18.75			
		6	0	18.79	18.74	18.89			
1.4M	64QAM	6	5	18.55	18.50	18.58			
		1	2	18.68	18.83	18.82			
		1	5	18.47	18.42	18.37			
		3	0	18.83	18.70	18.87			
		3	1	18.96	18.79	18.86			
1.4M	64QAM	3	1	18.89	18.83	18.82			
		6	0	18.81	18.82	18.86			

LTE Band 7						
BW	Modulation	RB Size	RB Offset	Low	Mid	High
		Channel		25950	21150	21350
		Frequency (MHz)		2510	2535	2560
20M	QPSK	1	0	14.27	14.33	14.33
		1	50	14.63	14.59	14.71
		1	99	14.62	14.62	14.63
		50	0	14.19	14.20	14.17
		50	25	14.29	14.30	14.48
		50	50	14.44	14.63	14.60
	16QAM	100	0	14.38	14.44	14.40
		1	0	14.29	14.31	14.32
		1	50	14.56	14.89	14.58
		1	99	14.23	14.41	14.44
		50	0	14.14	14.24	14.16
		50	25	14.31	14.32	14.45
	64QAM	50	50	14.54	14.47	14.47
		100	0	14.35	14.41	14.47
		1	0	14.18	14.12	14.15
		1	50	14.33	14.51	14.49
		1	99	14.08	14.14	14.17
		50	0	14.19	14.23	14.32
15M	QPSK	50	25	14.16	14.33	14.41
		50	50	14.50	14.45	14.46
		100	0	14.32	14.40	14.44
	16QAM	Channel		25925	21100	21375
		Frequency (MHz)		2597.5	2535	2562.5
		1	0	14.16	14.31	14.27
		1	37	14.60	14.55	14.64
		1	74	14.51	14.52	14.53
		36	0	14.05	14.09	14.16
	64QAM	36	19	14.28	14.29	14.42
		36	39	14.31	14.53	14.55
		75	0	14.23	14.34	14.37
		1	0	14.24	14.20	14.22
		1	37	14.55	14.54	14.57
		1	74	14.09	14.31	14.42
10M	QPSK	36	0	14.08	14.23	14.04
		36	19	14.26	14.31	14.38
		36	39	14.48	14.46	14.48
		75	0	14.29	14.40	14.32
		1	0	14.04	14.10	14.03
		1	37	14.21	14.39	14.44
	16QAM	1	74	14.07	14.02	14.02
		36	0	14.16	14.09	14.21
		36	19	14.03	14.18	14.33
		36	39	14.37	14.41	14.31
		75	0	14.17	14.37	14.32
		Channel		20800	21100	21400
5M	QPSK	Frequency (MHz)		2595	2535	2565
		1	0	14.13	14.19	14.18
		1	24	14.56	14.53	14.67
		1	49	14.56	14.49	14.56
		25	0	14.08	14.10	14.03
		25	12	14.21	14.31	14.34
	16QAM	25	25	14.42	14.49	14.53
		50	0	14.36	14.43	14.33
		1	0	14.24	14.20	14.19
		1	24	14.44	14.68	14.55
		1	49	14.14	14.27	14.41
		25	0	14.01	14.17	14.13
	64QAM	25	12	14.19	14.18	14.32
		25	25	14.40	14.45	14.39
		50	0	14.32	14.35	14.39
		1	0	14.09	14.07	14.08
		1	24	14.19	14.38	14.40
		1	49	14.06	14.09	14.03
BW	QPSK	Channel		20775	21100	21425
		Frequency (MHz)		2592.5	2535	2567.5
		1	0	14.19	14.23	14.20
		1	12	14.56	14.55	14.58
		1	24	14.56	14.49	14.62
		12	0	14.12	14.19	14.06
	16QAM	12	6	14.27	14.32	14.36
		12	13	14.31	14.60	14.50
		25	0	14.36	14.37	14.35
		1	0	14.22	14.19	14.27
		1	12	14.45	14.60	14.54
		1	24	14.16	14.28	14.43
	64QAM	12	0	14.01	14.10	14.15
		12	6	14.23	14.25	14.39
		12	13	14.39	14.32	14.39
		25	0	14.33	14.36	14.39
		1	0	14.14	14.01	14.01
		1	12	14.29	14.41	14.42
BW	QPSK	Channel		20775	21100	21425
		Frequency (MHz)		2592.5	2535	2567.5
		1	0	14.19	14.23	14.20
		1	12	14.56	14.55	14.58
		1	24	14.56	14.49	14.62
		12	0	14.12	14.19	14.06
	16QAM	12	6	14.27	14.32	14.36
		12	13	14.31	14.60	14.50
		25	0	14.36	14.37	14.35
		1	0	14.22	14.19	14.27
		1	12	14.45	14.60	14.54
		1	24	14.16	14.28	14.43
	64QAM	12	0	14.01	14.10	14.15
		12	6	14.23	14.25	14.39
		12	13	14.39	14.32	14.39
		25	0	14.33	14.36	14.39
		1	0	14.14	14.01	14.01
		1	12	14.29	14.41	14.42

LTE Band 13							
BW	Modulation	RB Size	RB Offset	Mid	Max. Tune-up (dBm)		
		Channel		23230			
		Frequency (MHz)		782			
10M	QPSK	1	0	23.21	24.5		
		1	24	23.47	24.5		
		1	49	23.30	24.5		
		25	0	23.42	24.5		
		25	12	23.36	24.5		
		25	25	23.32	24.5		
	16QAM	50	0	23.45	24.5		
		1	0	23.09	24.5		
		1	24	23.14	24.5		
		1	49	23.00	24.5		
		25	0	21.98	23.5		
		25	12	21.99	23.5		
	64QAM	25	25	21.89	23.5		
		50	0	21.95	23.5		
		1	0	22.27	23.5		
		1	24	22.36	23.5		
		1	49	22.24	23.5		
		25	0	21.15	22.5		
5M	QPSK	25	12	21.14	22.5		
		25	25	21.12	22.5		
		50	0	21.10	22.5		
	16QAM	Channel		23205	23230	23255	
		Frequency (MHz)		779.5	782	784.5	
		1	0	23.13	23.19	23.10	24.5
		1	12	23.35	23.34	23.42	24.5
		1	24	23.27	23.28	23.19	24.5
		12	0	23.10	22.97	22.97	24.5
	64QAM	12	6	22.95	22.93	22.99	24.5
		12	13	23.02	23.00	23.01	24.5
		25	0	22.95	22.93	22.90	24.5
		1	0	22.98	22.98	23.07	24.5
		1	12	23.05	23.01	23.12	24.5
		1	24	22.89	22.93	22.94	24.5
BW	QPSK	12	0	21.95	21.90	21.91	23.5
		12	6	21.81	21.95	21.86	23.5
		12	13	21.81	21.77	21.79	23.5
		25	0	21.84	21.88	21.86	23.5
		1	0	22.24	22.24	22.21	23.5
		1	12	22.21	22.28	22.33	23.5
	16QAM	1	24	22.19	22.12	22.14	23.5
		12	0	21.14	21.10	21.12	22.5
		12	6	21.08	20.99	21.13	22.5
		12	13	21.07	21.09	20.98	22.5
		25	0	21.00	21.06	20.96	22.5
		Channel		23205	23230	23255	
BW	QPSK	Frequency (MHz)		779.5	782	784.5	
		1	0	23.13	23.19	23.10	24.5
		1	12	23.35	23.34	23.42	24.5
		1	24	23.27	23.28	23.19	24.5
		12	0	23.10	22.97	22.97	24.5
		12	6	22.95	22.93	22.99	24.5
	16QAM	12	13	23.02	23.00	23.01	24.5
		25	0	22.95	22.93	22.90	24.5
		1	0	22.98	22.98	23.07	24.5
		1	12	23.05	23.01	23.12	24.5
		1	24	22.89	22.93	22.94	24.5
		12	0	21.95	21.90	21.91	23.5
	64QAM	12	6	21.81	21.95	21.86	23.5
		12	13	21.81	21.77	21.79	23.5
		25	0	21.84	21.88	21.86	23.5
		1	0	22.24	22.24	22.21	23.5
		1	12	22.21	22.28	22.33	23.5
		1	24	22.19	22.12	22.14	23.5

LTE Band 38									
BW	Modulation	RB Size	RB Offset	Low	Mid	High	Max. Tune-up (dBm)		
		Channel	Frequency (MHz)	3780	3800	3815			
20M	QPSK	2880	2885	2890					
		1	0	16.85	16.75	16.73	18		
		1	50	17.14	17.03	16.86	18		
		1	99	16.59	16.58	16.65	18		
		50	0	17.02	16.89	16.90	18		
		50	25	16.93	16.84	16.83	18		
		50	50	16.95	16.82	16.81	18		
		100	0	16.87	16.81	16.76	18		
	16QAM	1	0	16.40	16.40	16.38	18		
		1	50	16.86	16.68	16.72	18		
		1	99	16.58	16.36	16.27	18		
		50	0	16.84	16.82	16.83	18		
		50	25	16.90	16.80	16.78	18		
10M	16QAM	50	50	16.95	16.75	16.73	18		
		100	0	17.05	17.03	16.80	18		
		1	0	16.47	16.29	16.27	18		
		1	50	16.79	16.67	16.70	18		
		1	99	16.37	16.26	16.25	18		
	64QAM	50	0	17.10	16.98	16.92	18		
		50	25	16.83	17.00	16.91	18		
		50	50	17.06	16.88	16.93	18		
		100	0	17.01	16.93	16.75	18		
		37825	38000	38175					
5M	QPSK	28725	28800	28975					
		1	0	16.84	16.74	16.71	18		
		1	37	17.09	16.94	16.72	18		
		1	74	16.55	16.48	16.58	18		
		36	0	16.80	16.84	16.76	18		
		36	19	17.00	16.71	16.71	18		
		36	39	16.82	16.79	16.73	18		
		75	0	16.86	16.79	16.63	18		
	16QAM	1	0	16.27	16.35	16.28	18		
		1	37	16.81	16.69	16.71	18		
		1	74	16.48	16.23	16.19	18		
		36	0	16.70	16.71	16.80	18		
		36	19	16.87	16.71	16.74	18		
2.5M	16QAM	36	39	16.88	16.74	16.64	18		
		75	0	16.94	17.01	16.79	18		
		1	0	16.43	16.22	16.14	18		
		1	37	16.77	16.65	16.57	18		
		1	74	16.23	16.21	16.20	18		
	64QAM	36	0	17.03	16.84	16.83	18		
		36	19	16.90	16.95	16.77	18		
		36	39	16.93	16.97	16.85	18		
		75	0	17.00	16.91	16.61	18		
		37825	38000	38200					
2.5M	QPSK	28750	28800	28950					
		1	0	16.79	16.66	16.66	18		
		1	24	17.06	16.80	16.75	18		
		1	49	16.51	16.55	16.54	18		
		25	0	16.79	16.86	16.88	18		
		25	12	16.88	16.70	16.68	18		
		25	25	16.88	16.79	16.74	18		
		50	0	16.85	16.74	16.66	18		
	16QAM	1	0	16.33	16.29	16.34	18		
		1	24	16.80	16.58	16.60	18		
		1	49	16.45	16.33	16.12	18		
		25	0	16.70	16.68	16.70	18		
		25	12	16.85	16.68	16.70	18		
1.25M	16QAM	25	25	16.83	16.71	16.68	18		
		50	0	16.98	16.97	16.69	18		
		1	0	16.36	16.19	16.12	18		
		1	24	16.74	16.58	16.56	18		
		1	49	16.22	16.20	16.20	18		
	64QAM	25	0	17.09	16.97	16.77	18		
		25	12	16.88	16.89	16.90	18		
		25	25	17.00	16.87	16.79	18		
		50	0	16.97	16.79	16.68	18		
		37825	38000	38225					
1.25M	QPSK	28775	28800	28975					
		1	0	16.81	16.62	16.63	18		
		1	12	17.01	16.92	16.73	18		
		1	24	16.56	16.47	16.54	18		
		12	0	16.80	16.76	16.79	18		
		12	6	16.93	16.73	16.73	18		
		12	13	16.83	16.76	16.80	18		
		25	0	16.84	16.67	16.68	18		
	16QAM	1	0	16.30	16.35	16.27	18		
		1	12	16.71	16.54	16.64	18		
		1	24	16.48	16.24	16.14	18		
		12	0	16.76	16.68	16.76	18		
		12	6	16.86	16.68	16.69	18		
625K	16QAM	12	13	16.89	16.73	16.65	18		
		25	0	17.03	16.92	16.77	18		
		1	0	16.36	16.27	16.15	18		
		1	12	16.68	16.65	16.56	18		
		1	24	16.24	16.16	16.14	18		
	64QAM	12	0	16.96	16.84	16.85	18		
		12	6	16.81	16.99	16.82	18		
		12	13	17.02	16.83	16.83	18		
		25	0	16.86	16.79	16.61	18		
		37875	38000	38175					
625K	QPSK	28787.5	28800	28812.5					
		1	0	16.87	16.80	16.62	18		
		1	12	17.02	16.85	16.87	18		
		1	24	16.57	16.48	16.55	18		
		12	0	16.81	16.77	16.80	18		
		12	6	16.94	16.74	16.74	18		
		12	13	16.84	16.77	16.81	18		
		25	0	16.85	16.68	16.69	18		
	16QAM	1	0	16.31	16.37	16.29	18		
		1	12	16.73	16.56	16.66	18		
		1	24	16.27	16.19	16.17	18		
		12	0	16.98	16.86	16.87	18		
		12	6	16.83	16.99	16.83	18		
312.5K	QPSK	28793.75	28800	28806.25					
		1	0	16.89	16.81	16.63	18		
		1	12	17.03	16.86	16.88	18		
		1	24	16.58	16.49	16.56	18		
		12	0	16.82	16.78	16.81	18		
	16QAM	12	6	16.95	16.75	16.75	18		
		12	13	16.85	16.78	16.82	18		
		25	0	16.86	16.69	16.70	18		
		1	0	16.32	16.38	16.30	18		
		1	12	16.75	16.58	16.68	18		
156.25K	16QAM	1	24	16.49	16.25	16.15	18		
		12	0	16.78	16.70	16.78	18		
		12	6	16.88	16.69	16.70	18		
		12	13	16.91	16.75	16.87	18		
		25	0	17.03	16.92	16.77	18		
	64QAM	1	0	16.38	16.29	16.17	18		
		1	12	16.70	16.67	16.58	18		
		1	24	16.27	16.19	16.17	18		
		12	0	16.98	16.86	16.87	18		
		12	6	16.83	16.99	16.83	18		
78.125K	QPSK	28796.875	28800	28803.125					
		1	0	16.89	16.81	16.63	18		
		1	12	17.04	16.87	16.89	18		
		1	24	16.59	16.50	16.57	18		
		12	0	16.84	16.80	16.83	18		
	16QAM	12	6	16.96	16.76	16.76	18		
		12	13	16.86	16.79	16.83	18		
		25	0	16.87	16.70	16.71	18		
		1	0	16.34	16.39	16.31	18		
		1	12	16.77	16.60	16.70	18		
39.0625K	16QAM	1	24	16.49	16.25	16.15	18		
		12	0	16.79	16.71	16.79	18		
		12	6	16.89	16.70	16.71	18		
		12	13	16.92	16.76	16.88	18		
		25	0	17.04	16.93	16.78	18		
	64QAM	1	0	16.39	16.30	16.18	18		
		1	12	16.71	16.68	16.59	18		
		1	24	16.28	16.20	16.18	18		
		12	0	16.99	16.87	16.88	18		
		12	6	16.84	17.00	16.84	18		