



Accredited by the Swiss Accreditation Service (SAS)
 The Swiss Accreditation Service is one of the signatories to the EA
 Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Client **Sporton**

Certificate No: **D3700V2-1037_Apr19**

CALIBRATION CERTIFICATE

Object **D3700V2 - SN:1037**

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

Calibration date: **April 29, 2019**

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	03-Apr-19 (No. 217-02892/02893)	Apr-20
Power sensor NRP-Z91	SN: 103244	03-Apr-19 (No. 217-02892)	Apr-20
Power sensor NRP-Z91	SN: 103245	03-Apr-19 (No. 217-02893)	Apr-20
Reference 20 dB Attenuator	SN: 5058 (20k)	04-Apr-19 (No. 217-02894)	Apr-20
Type-N mismatch combination	SN: 5047.2 / 06327	04-Apr-19 (No. 217-02895)	Apr-20
Reference Probe EX3DV4	SN: 3503	25-Mar-19 (No. EX3-3503_Mar19)	Mar-20
DAE4	SN: 601	04-Oct-18 (No. DAE4-601_Oct18)	Oct-19

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

	Name	Function	Signature
Calibrated by:	Michael Weber	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: April 29, 2019

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



Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Glossary:

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

Calibration is Performed According to the Following Standards:

- 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 the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- KDB 865664, "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%.

Measurement Conditions

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

DASY Version	DASY5	V52.10.2
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
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	3700 MHz $\pm$ 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	37.7	3.12 mho/m
Measured Head TSL parameters	(22.0 $\pm$ 0.2) °C	37.1 $\pm$ 6 %	3.06 mho/m $\pm$ 6 %
Head TSL temperature change during test	< 0.5 °C	----	----

SAR result with Head TSL

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	6.85 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	68.5 W/kg $\pm$ 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.49 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	24.8 W/kg $\pm$ 19.5 % (k=2)

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	46.4 Ω - 0.6 j Ω
Return Loss	- 28.4 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.138 ns
----------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

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

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

Additional EUT Data

Manufactured by	SPEAG
-----------------	-------

DASY5 Validation Report for Head TSL

Date: 29.04.2019

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 3700 MHz; Type: D3700V2; Serial: D3700V2 - SN:1037

Communication System: UID 0 - CW; Frequency: 3700 MHz

Medium parameters used: $f = 3700$ MHz; $\sigma = 3.06$ S/m; $\epsilon_r = 37.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY52 Configuration:

- Probe: EX3DV4 - SN3503; ConvF(7.5, 7.5, 7.5) @ 3700 MHz; Calibrated: 25.03.2019
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 04.10.2018
- Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001
- DASY52 52.10.2(1495); SEMCAD X 14.6.12(7450)

Dipole Calibration for Head Tissue/Pin=100 mW, d=10mm, f=3700MHz/Zoom Scan,

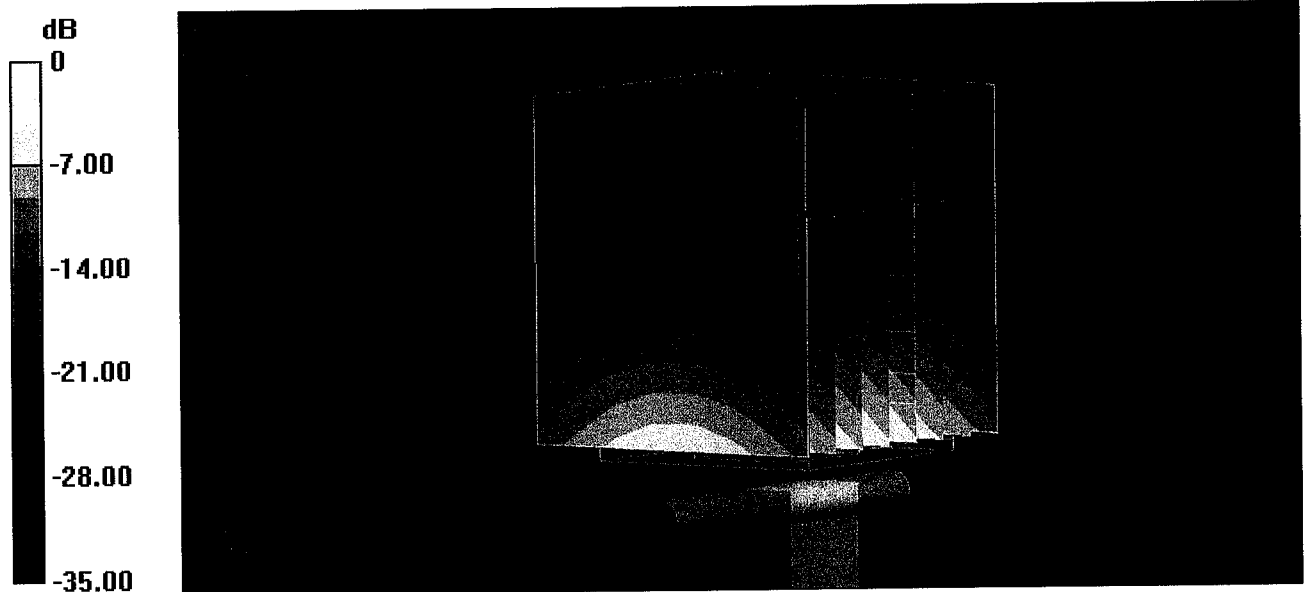
dist=1.4mm (8x8x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 71.88 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 19.5 W/kg

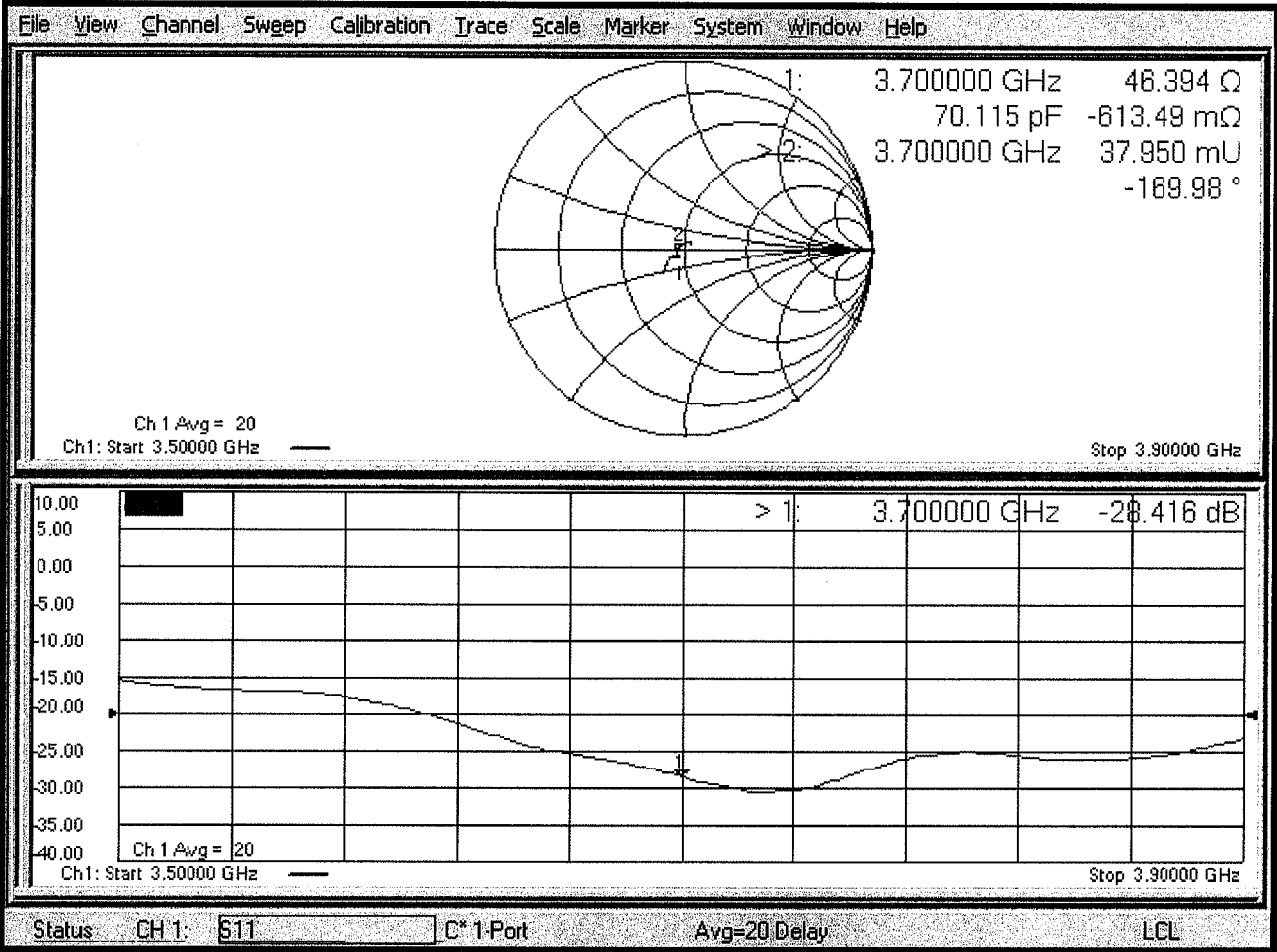
SAR(1 g) = 6.85 W/kg; SAR(10 g) = 2.49 W/kg

Maximum value of SAR (measured) = 13.5 W/kg



0 dB = 13.5 W/kg = 11.30 dBW/kg

Impedance Measurement Plot for Head TSL



D3700V2, Serial No. 1037 Extended Dipole Calibrations

Referring to KDB 865664 D01 v01r02, 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.

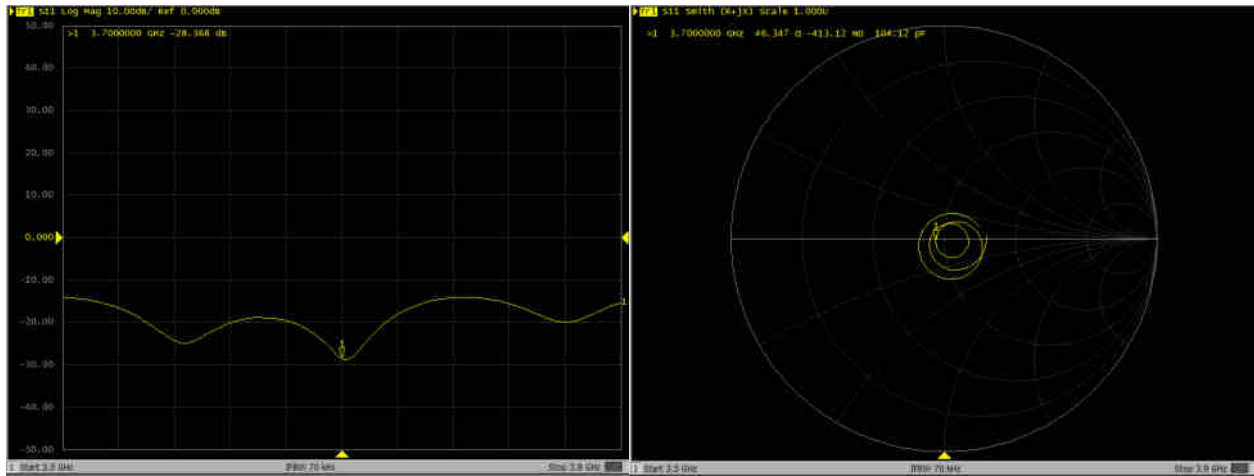
D3700V2 – serial no. 1037						
3700 Head						
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)
2019.4.29	-28.4		46.4		-0.6	
2020.4.15	-28.4	0	46.3	-0.1	-0.4	0.2

<Justification of the extended calibration>

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

Dipole Verification Data> D3700V2, serial no. 1037

3700MHz - Head





Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Client **Sporton**

Certificate No: **D3900V2-1022_Jul19**

CALIBRATION CERTIFICATE

Object **D3900V2 - SN:1022**

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

Calibration date: **July 11, 2019**

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

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

Calibration Equipment used (M&TE critical for calibration)

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

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

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

Issued: July 11, 2019

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



Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Glossary:

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

Calibration is Performed According to the Following Standards:

- 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 the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- KDB 865664, "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%.

Measurement Conditions

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

DASY Version	DASY5	V52.10.2
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
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	3900 MHz $\pm$ 1 MHz 4100 MHz $\pm$ 1 MHz	

Head TSL parameters at 3900 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	37.5	3.32 mho/m
Measured Head TSL parameters	(22.0 $\pm$ 0.2) °C	37.2 $\pm$ 6 %	3.23 mho/m $\pm$ 6 %
Head TSL temperature change during test	< 0.5 °C	----	----

SAR result with Head TSL at 3900 MHz

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	7.03 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	70.5 W/kg $\pm$ 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.46 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	24.6 W/kg $\pm$ 19.5 % (k=2)

Head TSL parameters at 4100 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	37.2	3.53 mho/m
Measured Head TSL parameters	(22.0 $\pm$ 0.2) °C	37.0 $\pm$ 6 %	3.41 mho/m $\pm$ 6 %
Head TSL temperature change during test	< 0.5 °C	----	----

SAR result with Head TSL at 4100 MHz

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	6.64 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	66.6 W/kg $\pm$ 19.9 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	100 mW input power	2.32 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	23.2 W/kg $\pm$ 19.5 % (k=2)

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL at 3900 MHz

Impedance, transformed to feed point	$47.2 \Omega - 4.1 j\Omega$
Return Loss	- 25.9 dB

Antenna Parameters with Head TSL at 4100 MHz

Impedance, transformed to feed point	$57.0 \Omega + 0.7 j\Omega$
Return Loss	- 23.6 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.101 ns
----------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

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

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

Additional EUT Data

Manufactured by	SPEAG
-----------------	-------

Test Laboratory: SPEAG, Zurich, Switzerland

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

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

Medium parameters used: $f = 3900$ MHz; $\sigma = 3.23$ S/m; $\epsilon_r = 37.2$; $\rho = 1000$ kg/m³,Medium parameters used: $f = 4100$ MHz; $\sigma = 3.41$ S/m; $\epsilon_r = 37$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY52 Configuration:

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

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

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

Peak SAR (extrapolated) = 20.0 W/kg

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

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

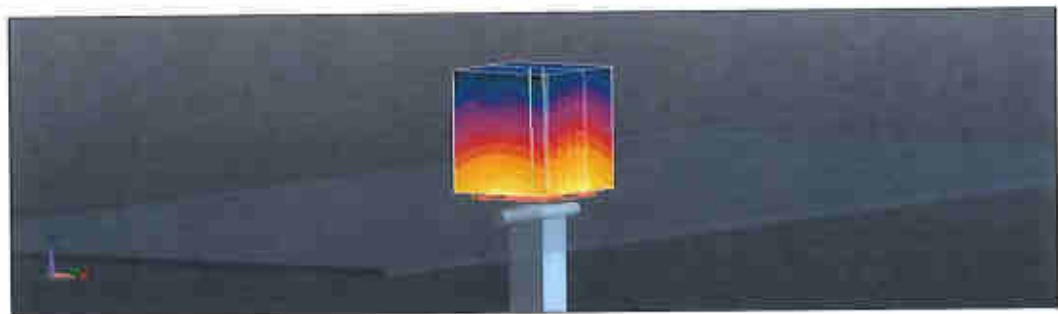
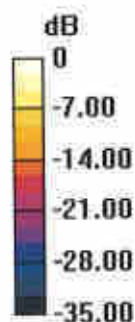
Dipole Calibration for Head Tissue/Pin=100 mW, d=10mm, f=4100MHz/Zoom Scan, dist=1.4mm (8x8x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

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

Peak SAR (extrapolated) = 19.0 W/kg

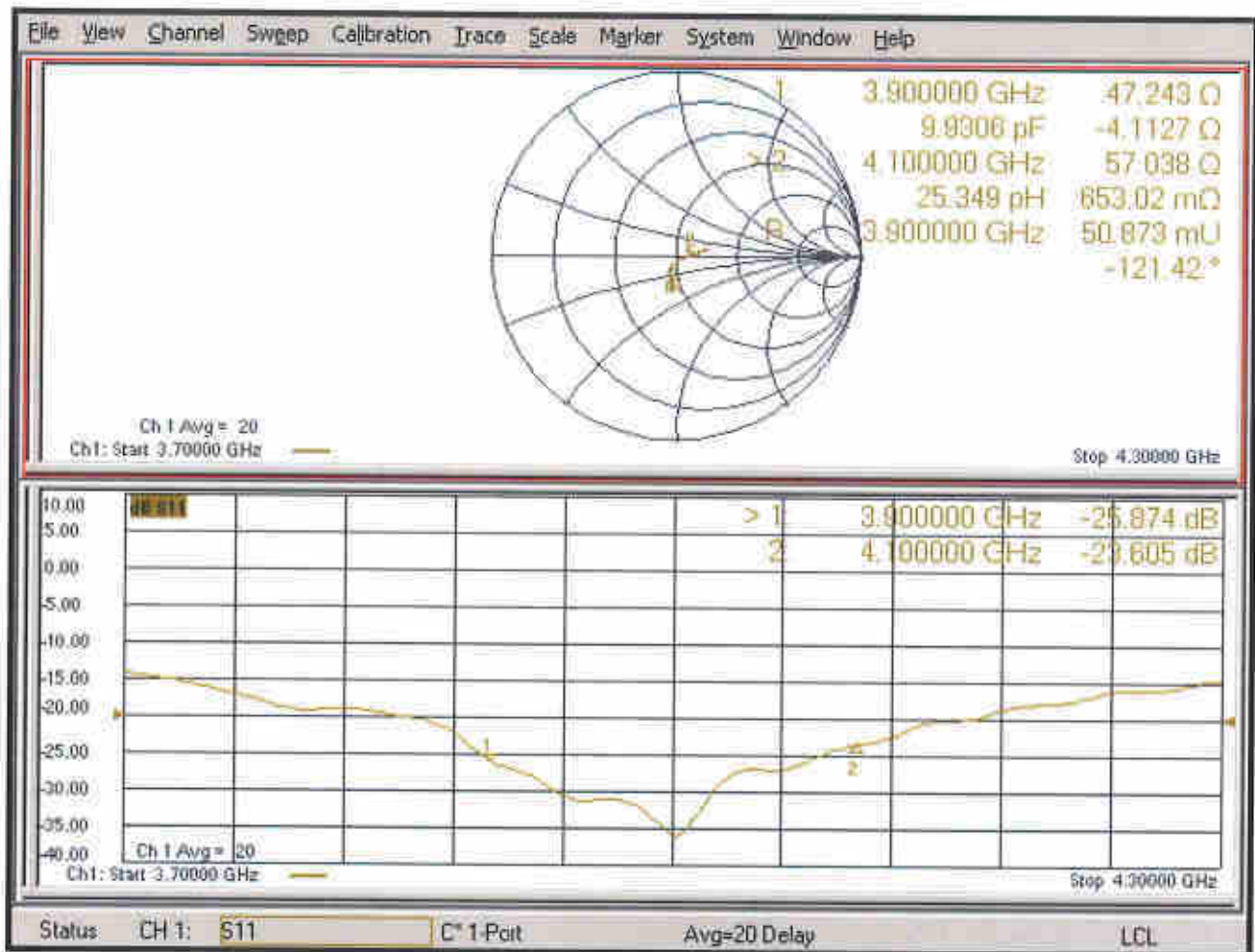
SAR(1 g) = 6.64 W/kg; SAR(10 g) = 2.32 W/kg

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



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

Impedance Measurement Plot for Head TSL



D3900V2, Serial No. 1022 Extended Dipole Calibrations

Referring to KDB 865664 D01 v01r02, if dipoles are verified in return loss ($< -20\text{dB}$, 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.

D3900V2 – serial no. 1022						
3900 Head						
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)
2019.7.11	-25.9		47.2		-4.1	
2020.7.7	-26.3	-1.5	47.9	0.7	-1.7	2.4
D3900V2 – serial no. 1022						
4100 Head						
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)
2019.7.11	-23.6		57.0		0.7	
2020.7.7	-23.3	1.3	58.2	1.2	-1.1	-1.8

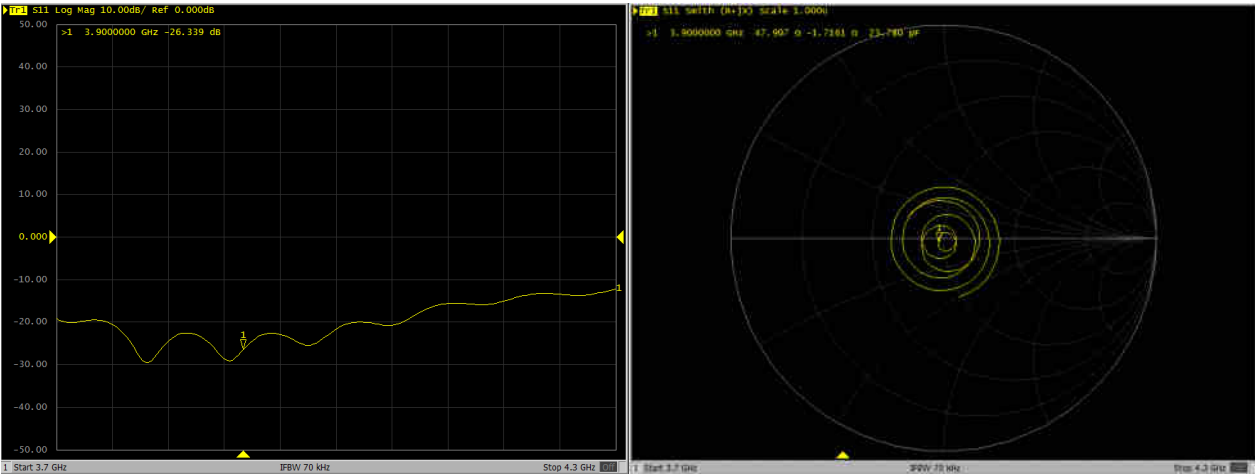
<Justification of the extended calibration>

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

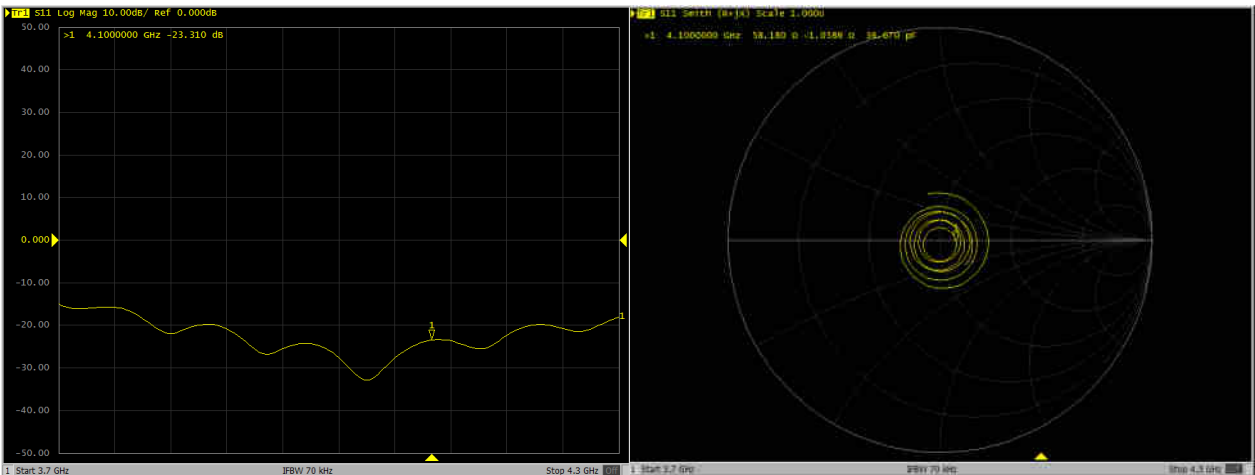


Dipole Verification Data> D3900V2, serial no. 1022

3900MHz - Head



4100MHz - Head





In Collaboration with
s p e a g
CALIBRATION LABORATORY



中国认可
国际互认
校准
CALIBRATION
CNAS L0570

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2512 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

Client

Sporton

Certificate No: Z18-60259

CALIBRATION CERTIFICATE

Object **D5GHzV2 - SN: 1167**

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

Calibration date: **August 03, 2018**

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	102083	01-Nov-17 (CTTL, No.J17X08756)	Oct-18
Power sensor NRP-Z91	100542	01-Nov-17 (CTTL, No.J17X08756)	Oct-18
ReferenceProbe EX3DV4	SN 7464	12-Sep-17(SPEAG,No.EX3-7464_Sep17)	Sep-18
DAE4	SN 1524	13-Sep-17(SPEAG,No.DAE4-1524_Sep17)	Sep-18
Secondary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Signal Generator E4438C	MY49071430	23-Jan-18 (CTTL, No.J18X00560)	Jan-19
NetworkAnalyzerE5071C	MY46110673	24-Jan-18 (CTTL, No.J18X00561)	Jan-19

	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: August 6, 2018

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



In Collaboration with

s p e a g
CALIBRATION LABORATORY

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2512 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

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%.



In Collaboration with

s p e a g
CALIBRATION LABORATORY

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
 Tel: +86-10-62304633-2512 Fax: +86-10-62304633-2504
 E-mail: cttl@chinattl.com http://www.chinattl.cn

Measurement Conditions

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

DASY Version	DASY52	52.10.1.1476
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	35.9 $\pm$ 6 %	4.82 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	7.69 mW / g
SAR for nominal Head TSL parameters	normalized to 1W	77.0 mW /g $\pm$ 24.4 % (k=2)
SAR averaged over 10 cm³ (10 g) of Head TSL	Condition	
SAR measured	100 mW input power	2.20 mW / g
SAR for nominal Head TSL parameters	normalized to 1W	22.0 mW /g $\pm$ 24.2 % (k=2)



In Collaboration with

s p e a g
CALIBRATION LABORATORY

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
 Tel: +86-10-62304633-2512 Fax: +86-10-62304633-2504
 E-mail: cttl@chinattl.com http://www.chinattl.cn

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	35.1 ± 6 %	5.18 mho/m ± 6 %
Head TSL temperature change during test	<1.0 °C	----	----

SAR result with Head TSL at 5600 MHz

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	8.09 mW / g
SAR for nominal Head TSL parameters	normalized to 1W	80.8 mW / g ± 24.4 % (k=2)
SAR averaged over 10 cm ³ (10 g) of Head TSL	Condition	
SAR measured	100 mW input power	2.32 mW / g
SAR for nominal Head TSL parameters	normalized to 1W	23.2 mW / g ± 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	34.9 ± 6 %	5.37 mho/m ± 6 %
Head TSL temperature change during test	<1.0 °C	----	----

SAR result with Head TSL at 5750 MHz

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	100 mW input power	7.70 mW / g
SAR for nominal Head TSL parameters	normalized to 1W	76.9 mW / g ± 24.4 % (k=2)
SAR averaged over 10 cm ³ (10 g) of Head TSL	Condition	
SAR measured	100 mW input power	2.17 mW / g
SAR for nominal Head TSL parameters	normalized to 1W	21.6 mW / g ± 24.2 % (k=2)



In Collaboration with

s p e a g
CALIBRATION LABORATORY

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2512 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

Body TSL parameters at 5250 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	48.9	5.36 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	48.4 ± 6 %	5.32 mho/m ± 6 %
Body TSL temperature change during test	<1.0 °C	----	----

SAR result with Body TSL at 5250 MHz

SAR averaged over 1 cm ³ (1 g) of Body TSL	Condition	
SAR measured	100 mW input power	7.46 mW / g
SAR for nominal Body TSL parameters	normalized to 1W	74.4 mW /g ± 24.4 % (k=2)
SAR averaged over 10 cm ³ (10 g) of Body TSL	Condition	
SAR measured	100 mW input power	2.10 mW / g
SAR for nominal Body TSL parameters	normalized to 1W	20.9 mW /g ± 24.2 % (k=2)

Body TSL parameters at 5600 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	48.5	5.77 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	47.7 ± 6 %	5.79 mho/m ± 6 %
Body TSL temperature change during test	<1.0 °C	----	----

SAR result with Body TSL at 5600 MHz

SAR averaged over 1 cm ³ (1 g) of Body TSL	Condition	
SAR measured	100 mW input power	7.73 mW / g
SAR for nominal Body TSL parameters	normalized to 1W	77.1 mW /g ± 24.4 % (k=2)
SAR averaged over 10 cm ³ (10 g) of Body TSL	Condition	
SAR measured	100 mW input power	2.16 mW / g
SAR for nominal Body TSL parameters	normalized to 1W	21.5 mW /g ± 24.2 % (k=2)



Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2512 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

Body TSL parameters at 5750 MHz

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	48.3	5.94 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	48.5 ± 6 %	5.93 mho/m ± 6 %
Body TSL temperature change during test	<1.0 °C	----	----

SAR result with Body TSL at 5750 MHz

SAR averaged over 1 cm^3 (1 g) of Body TSL	Condition	
SAR measured	100 mW input power	7.43 mW / g
SAR for nominal Body TSL parameters	normalized to 1W	74.3 mW /g ± 24.4 % (k=2)
SAR averaged over 10 cm^3 (10 g) of Body TSL	Condition	
SAR measured	100 mW input power	2.08 mW / g
SAR for nominal Body TSL parameters	normalized to 1W	20.8 mW /g ± 24.2 % (k=2)



In Collaboration with

s p e a g
CALIBRATION LABORATORY

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2512 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

Appendix (Additional assessments outside the scope of CNAS L0570)

Antenna Parameters with Head TSL at 5250 MHz

Impedance, transformed to feed point	50.3 Ω - 9.42j Ω
Return Loss	- 20.6dB

Antenna Parameters with Head TSL at 5600 MHz

Impedance, transformed to feed point	58.1 Ω - 7.15j Ω
Return Loss	- 20.0dB

Antenna Parameters with Head TSL at 5750 MHz

Impedance, transformed to feed point	53.5 Ω - 7.66j Ω
Return Loss	- 21.8dB

Antenna Parameters with Body TSL at 5250 MHz

Impedance, transformed to feed point	49.5 Ω - 7.40j Ω
Return Loss	- 22.6dB

Antenna Parameters with Body TSL at 5600 MHz

Impedance, transformed to feed point	58.0 Ω - 6.37j Ω
Return Loss	- 20.5dB

Antenna Parameters with Body TSL at 5750 MHz

Impedance, transformed to feed point	54.5 Ω - 7.07j Ω
Return Loss	- 21.9dB



In Collaboration with

s p e a g
CALIBRATION LABORATORY

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2512 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com <http://www.chinattl.cn>

General Antenna Parameters and Design

Electrical Delay (one direction)	1.065 ns
----------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard. No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
-----------------	-------



In Collaboration with

s p e a g
CALIBRATION LABORATORY

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2512 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

DASY5 Validation Report for Head TSL

Date: 07.27.2018

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 5GHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1167

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

Medium parameters used: $f = 5250$ MHz; $\sigma = 4.822$ S/m; $\epsilon_r = 35.92$; $\rho = 1000$ kg/m³, Medium parameters used: $f = 5600$ MHz; $\sigma = 5.184$ S/m; $\epsilon_r = 35.14$; $\rho = 1000$ kg/m³, Medium parameters used: $f = 5750$ MHz; $\sigma = 5.365$ S/m; $\epsilon_r = 34.88$; $\rho = 1000$ kg/m³,

Phantom section: Center Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7464; ConvF(5.68, 5.68, 5.68) @ 5250 MHz; Calibrated: 9/12/2017, ConvF(4.98, 4.98, 4.98) @ 5600 MHz; Calibrated: 9/12/2017, ConvF(5.04, 5.04, 5.04) @ 5750 MHz; Calibrated: 9/12/2017,
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1524; Calibrated: 9/13/2017
- Phantom: MFP_V5.1C ; Type: QD 000 P51CA; Serial: 1062
- Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

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 = 65.09 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 32.4 W/kg
SAR(1 g) = 7.69 W/kg; SAR(10 g) = 2.2 W/kg
Maximum value of SAR (measured) = 18.0 W/kg

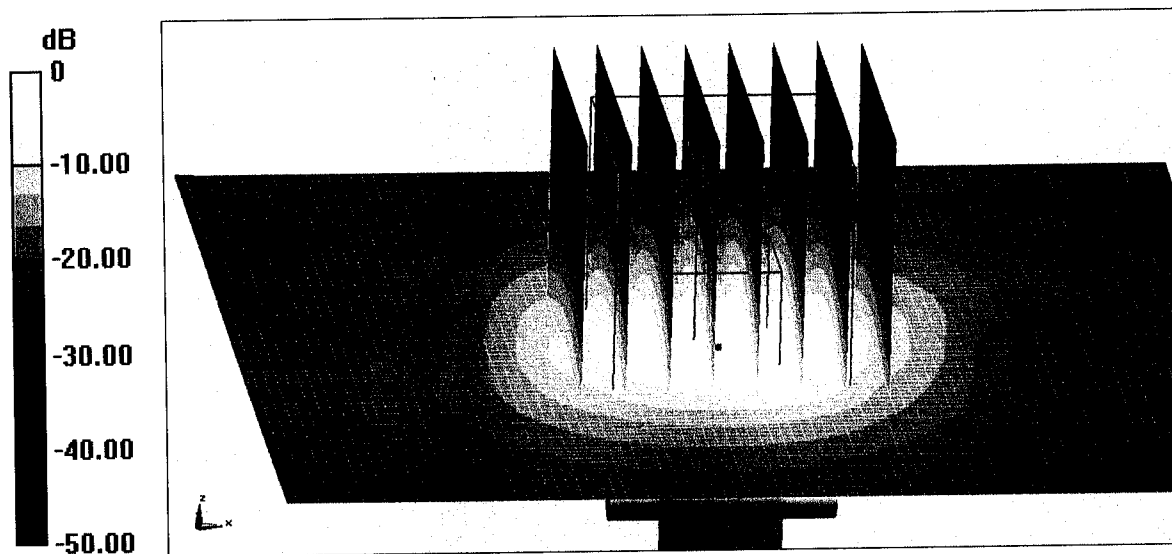
Dipole Calibration /Pin=100mW, d=10mm, f=5600 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 63.53 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 36.2 W/kg
SAR(1 g) = 8.09 W/kg; SAR(10 g) = 2.32 W/kg
Maximum value of SAR (measured) = 19.7 W/kg

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 = 63.79 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 36.2 W/kg
SAR(1 g) = 7.7 W/kg; SAR(10 g) = 2.17 W/kg
Maximum value of SAR (measured) = 19.0 W/kg



In Collaboration with
s p e a g
CALIBRATION LABORATORY

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2512 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com <http://www.chinattl.cn>



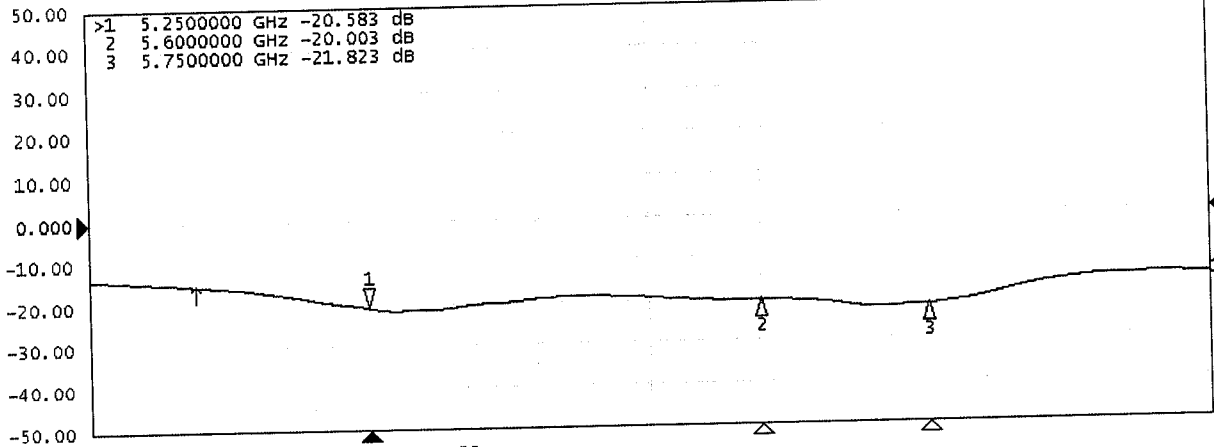
0 dB = 19.0 W/kg = 12.79 dBW/kg



Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2512 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

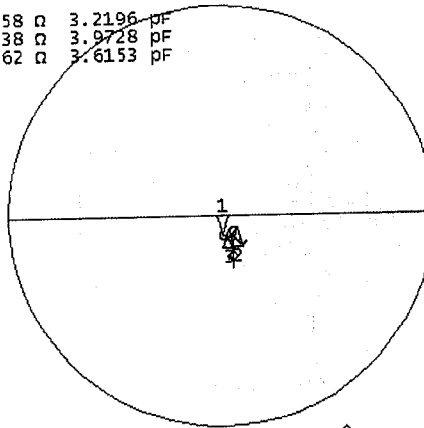
Impedance Measurement Plot for Head TSL

Tr1 S11 Log Mag 10.00dB/ Ref 0.000dB [F1]



Tr2 S11 Smith (R+jX) scale 1.000U [F1 Del]

>1	5.250000 GHz	50.314 Ω	-9.4158 Ω	3.2196 pF
2	5.600000 GHz	58.136 Ω	-7.1538 Ω	3.9728 pF
3	5.750000 GHz	53.485 Ω	-7.6562 Ω	3.6153 pF





In Collaboration with

s p e a g
CALIBRATION LABORATORY

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2512 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com http://www.chinattl.cn

Date: 08.02.2018

DASY5 Validation Report for Body TSL

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 5GHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1167

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

Medium parameters used: $f = 5250$ MHz; $\sigma = 5.316$ S/m; $\epsilon_r = 48.42$; $\rho = 1000$ kg/m³, Medium parameters used: $f = 5600$ MHz; $\sigma = 5.789$ S/m; $\epsilon_r = 47.7$; $\rho = 1000$ kg/m³, Medium parameters used: $f = 5750$ MHz; $\sigma = 5.926$ S/m; $\epsilon_r = 48.45$; $\rho = 1000$ kg/m³,

Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7464; ConvF(5.29, 5.29, 5.29) @ 5250 MHz; Calibrated: 9/12/2017, ConvF(4.5, 4.5, 4.5) @ 5600 MHz; Calibrated: 9/12/2017, ConvF(4.59, 4.59, 4.59) @ 5750 MHz; Calibrated: 9/12/2017,
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1524; Calibrated: 9/13/2017
- Phantom: MFP_V5.1C ; Type: QD 000 P51CA; Serial: 1062
- Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.11 (7439)

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 = 64.14 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 31.9 W/kg
SAR(1 g) = 7.46 W/kg; SAR(10 g) = 2.1 W/kg
Maximum value of SAR (measured) = 17.6 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 = 62.32 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 36.3 W/kg
SAR(1 g) = 7.73 W/kg; SAR(10 g) = 2.16 W/kg
Maximum value of SAR (measured) = 19.1 W/kg

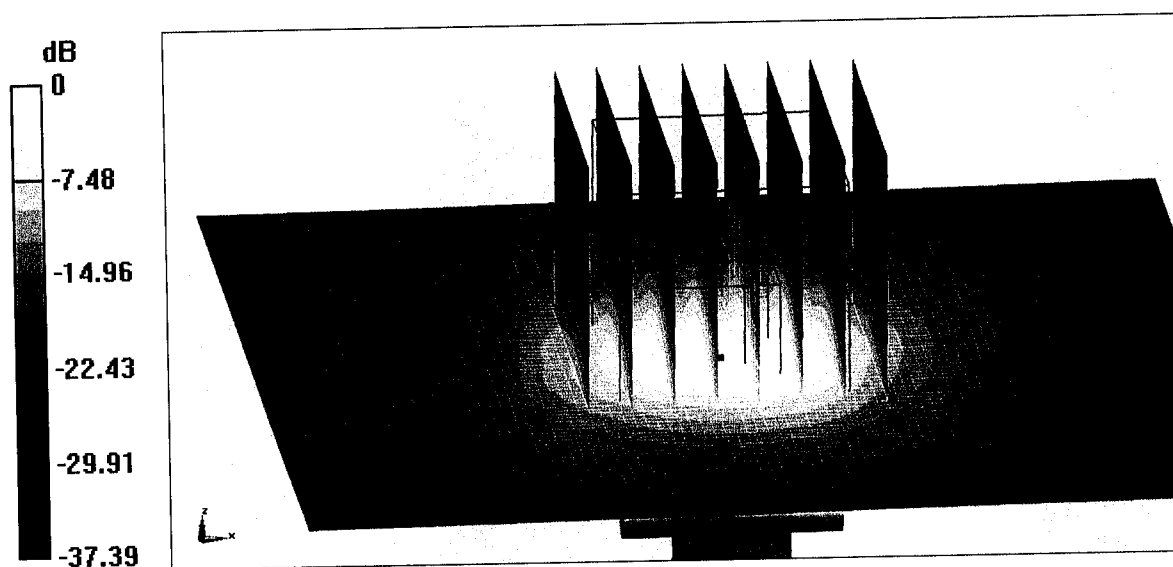
Dipole Calibration /Pin=100mW, d=10mm, f=5750 MHz/Zoom Scan, dist=1.4mm (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 63.99 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 35.2 W/kg
SAR(1 g) = 7.43 W/kg; SAR(10 g) = 2.08 W/kg
Maximum value of SAR (measured) = 18.0 W/kg



In Collaboration with

s p e a k
CALIBRATION LABORATORY

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China
Tel: +86-10-62304633-2512 Fax: +86-10-62304633-2504
E-mail: cttl@chinattl.com <http://www.chinattl.cn>



0 dB = 18.0 W/kg = 12.55 dBW/kg



In Collaboration with

s p e a g
CALIBRATION LABORATORY

Add: No.51 Xueyuan Road, Haidian District, Beijing, 100191, China

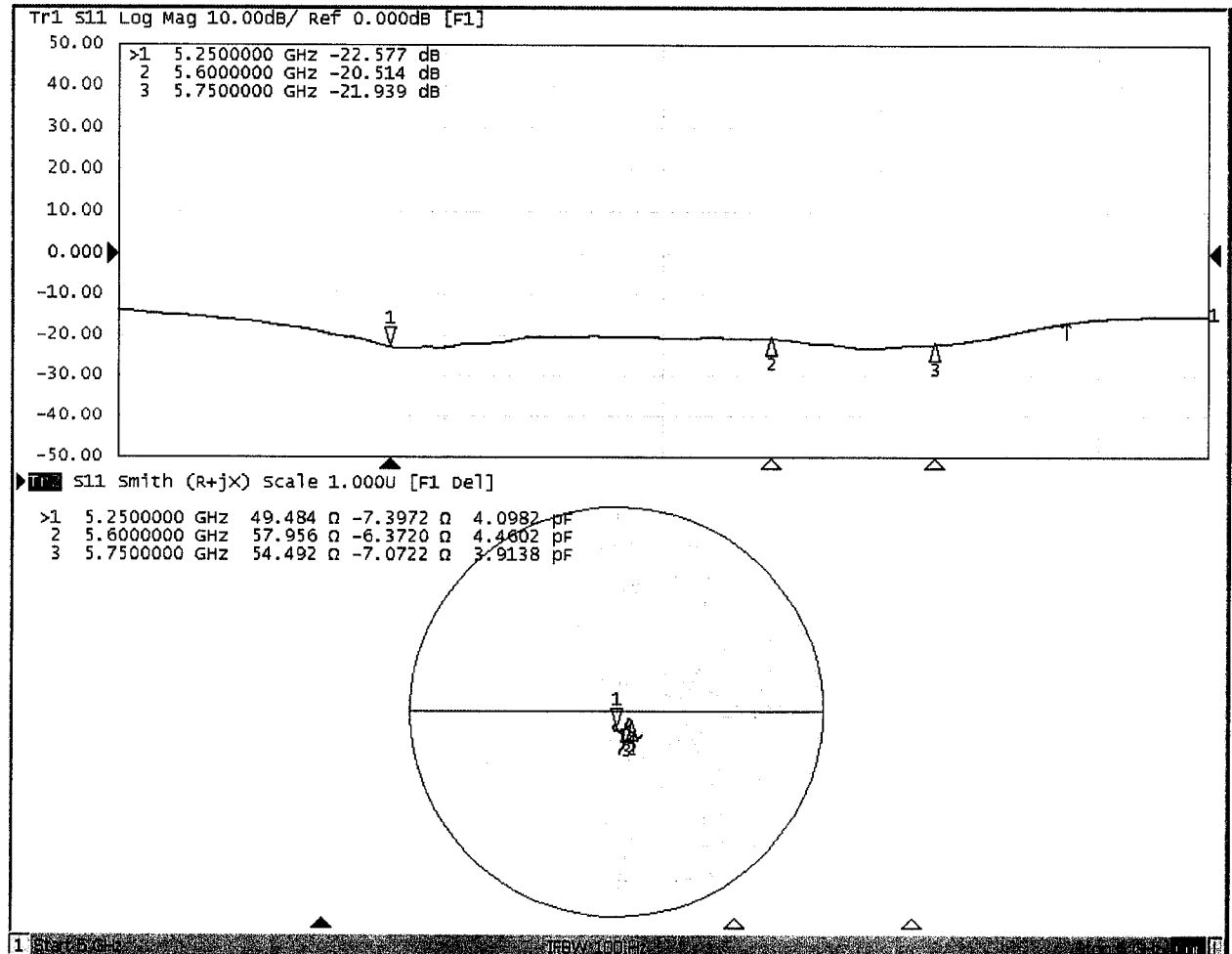
Tel: +86-10-62304633-2512

Fax: +86-10-62304633-2504

E-mail: cttl@chinattl.com

http://www.chinattl.cn

Impedance Measurement Plot for Body TSL





D5GHzV3, Serial No. 1167 Extended Dipole Calibrations

Referring to KDB 865664 D01 v01r02, 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.

5250MHz

D5GHzV3 – serial no. 1167												
	5250 Head						5250 Body					
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)
2018.08.03	-20.6		50.3		-9.42		-22.6		49.5		-7.40	
2019.10.30	-20.3	1.5	50.9	0.6	-9.72	-0.3	-22.4	0.9	48.2	-1.3	-7.25	0.15
2020.10.30	-20.7	-0.05	50.19	-0.11	-9.09	0.33	-23.1	-2.2	50.2	0.7	-7.03	0.37

5600MHz

D5GHzV3 – serial no. 1167												
	5600 Head						5600 Body					
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)
2018.08.03	-20.0		58.1		-7.15		-20.5		58.0		-6.37	
2019.10.30	-20.1	-0.5	57.4	-0.7	-7.63	-0.48	-20.4	0.5	57.7	-0.3	-6.87	-0.5
2020.10.30	-19.99	0.05	58.2	0.1	-7.13	0.02	-20.1	1.95	58.9	0.9	-5.96	0.41

5750MHz

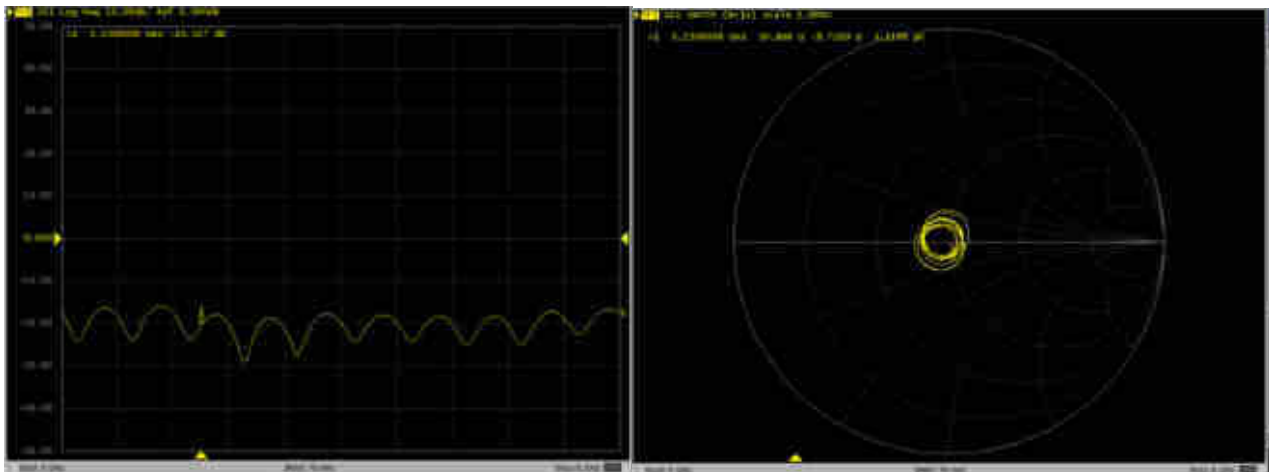
D5GHzV3 – serial no. 1167												
	5750 Head						5750 Body					
Date of Measurement	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)	Return-Loss (dB)	Delta (%)	Real Impedance (ohm)	Delta (ohm)	Imaginary Impedance (ohm)	Delta (ohm)
2018.08.03	-21.8		53.5		-7.66		-21.9		54.5		-7.07	
2019.10.30	-21.1	3.2	53.0	-0.5	-8.58	-0.92	-21.6	1.4	55.2	0.7	-7.04	0.03
2020.10.30	-21.9	0.05	53.2	-0.3	-7.35	0.31	-21.6	1.4	54.2	-0.3	-7.60	-0.53

<Justification of the extended calibration>

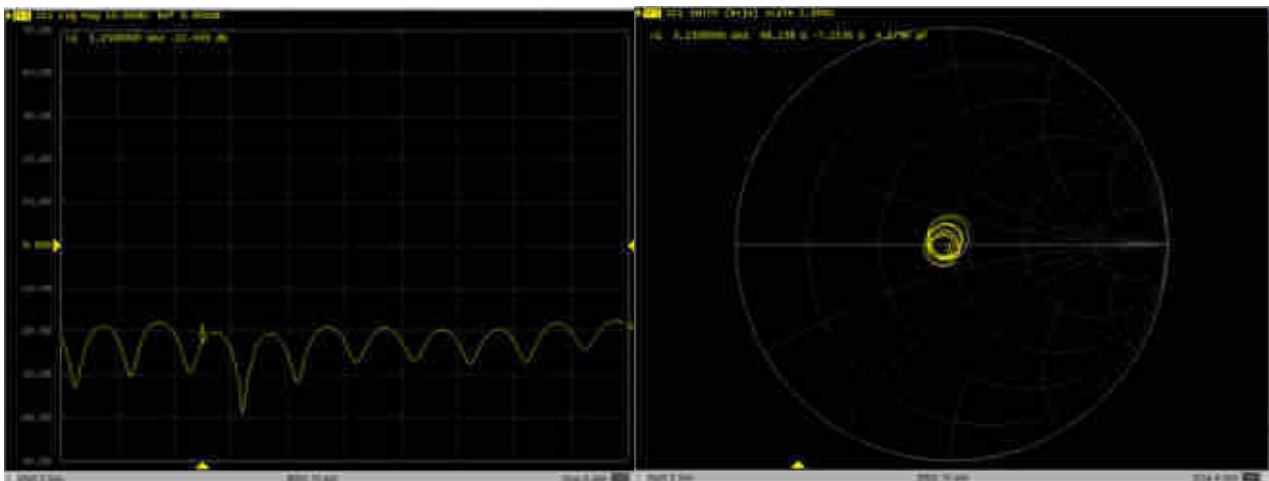
The return loss is $< -20\text{dB}$, within 20% of prior calibration; the impedance is within 5 ohm of prior calibration. Therefore the verification result should support extended calibration.

Dipole Verification Data> D5GHzV3, serial no. 1167

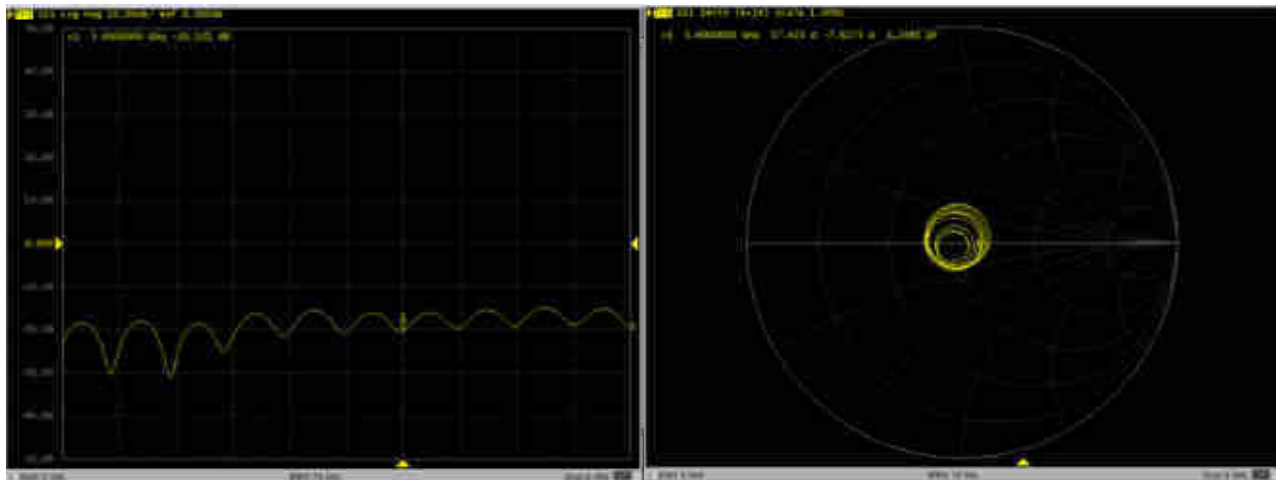
5250MHz – Head----2019.10.30



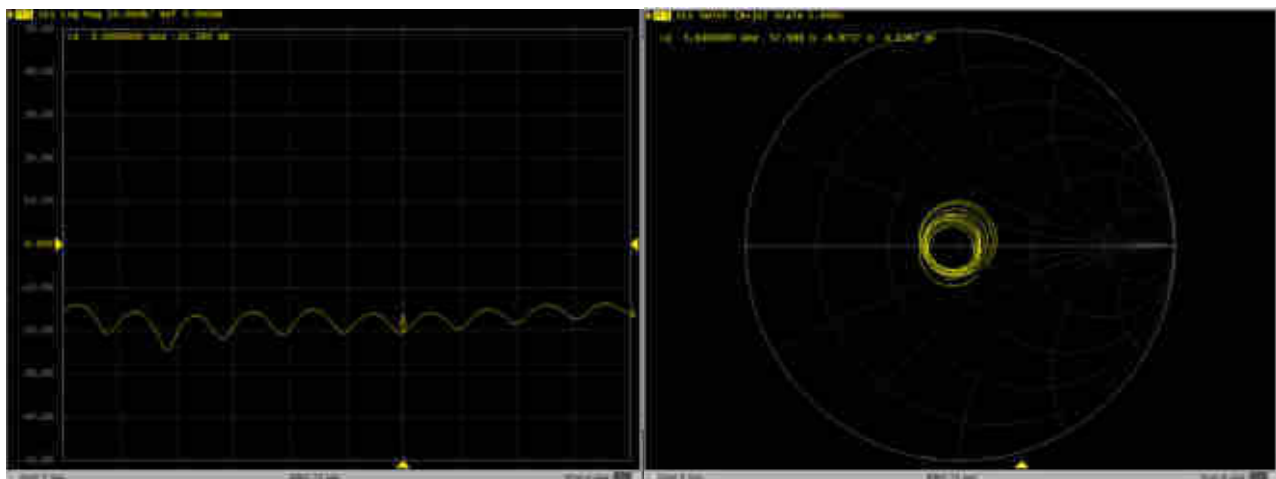
5250MHz – Body----2019.10.30



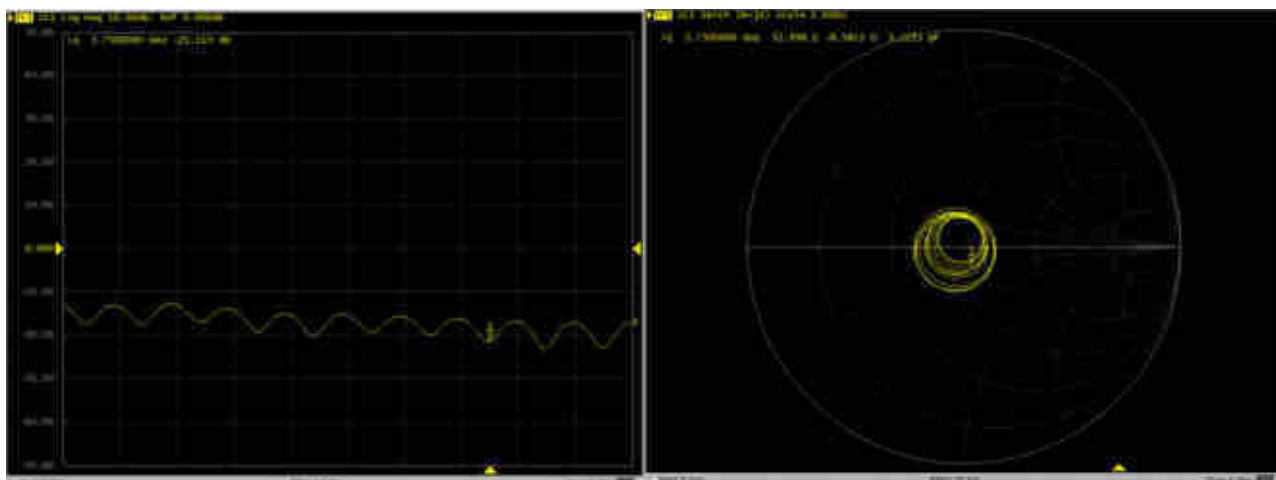
5600MHz – Head----2019.10.30



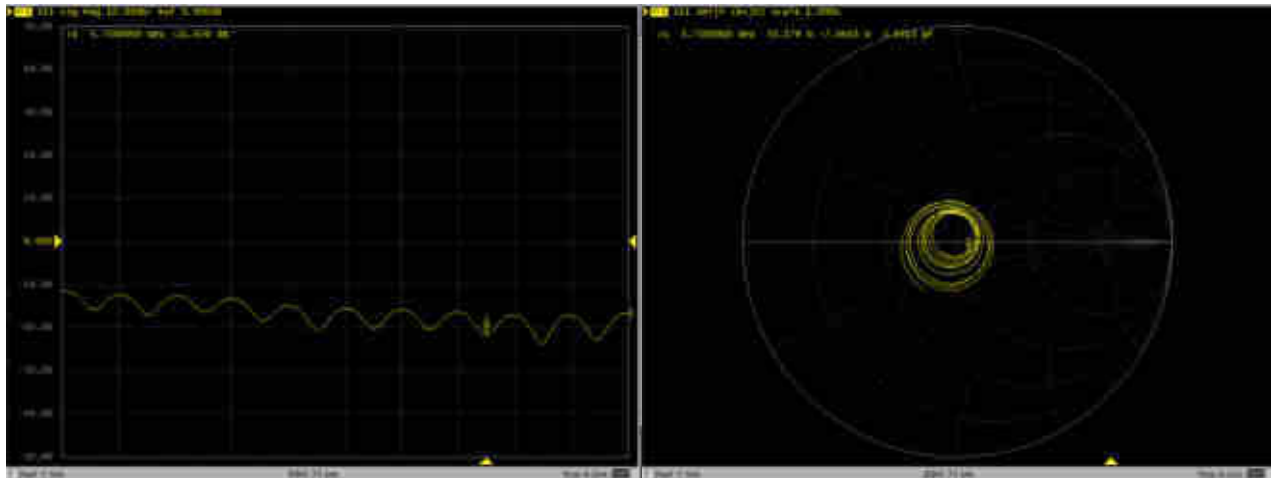
5600MHz – Body----2019.10.30



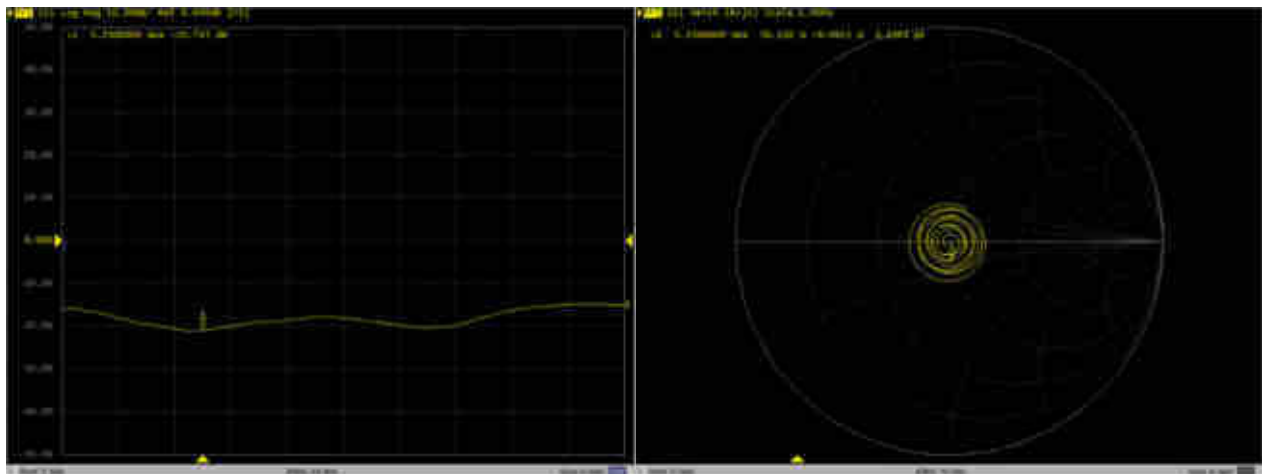
5750MHz – Head----2019.10.30



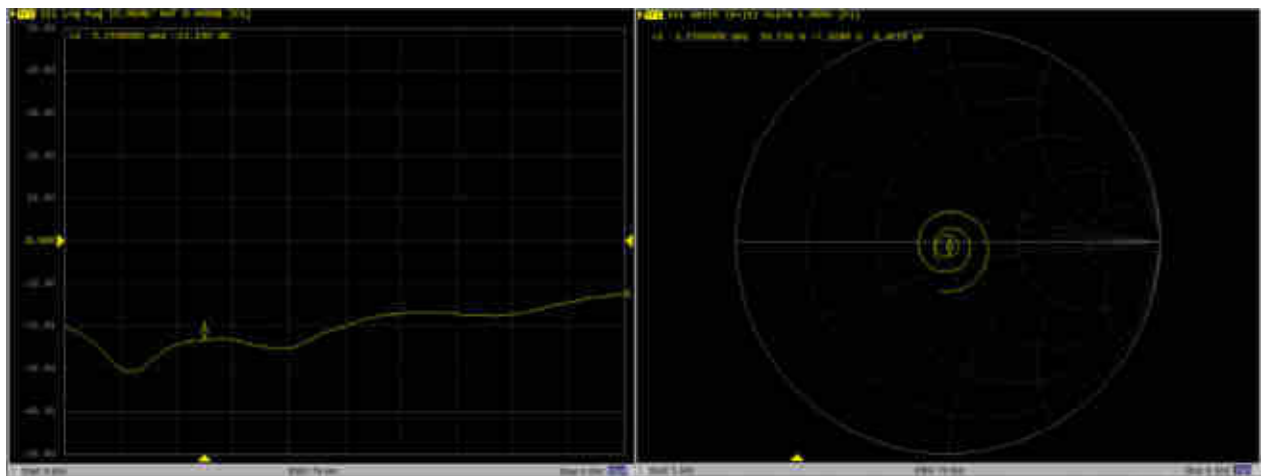
5750MHz – Body----2019.10.30



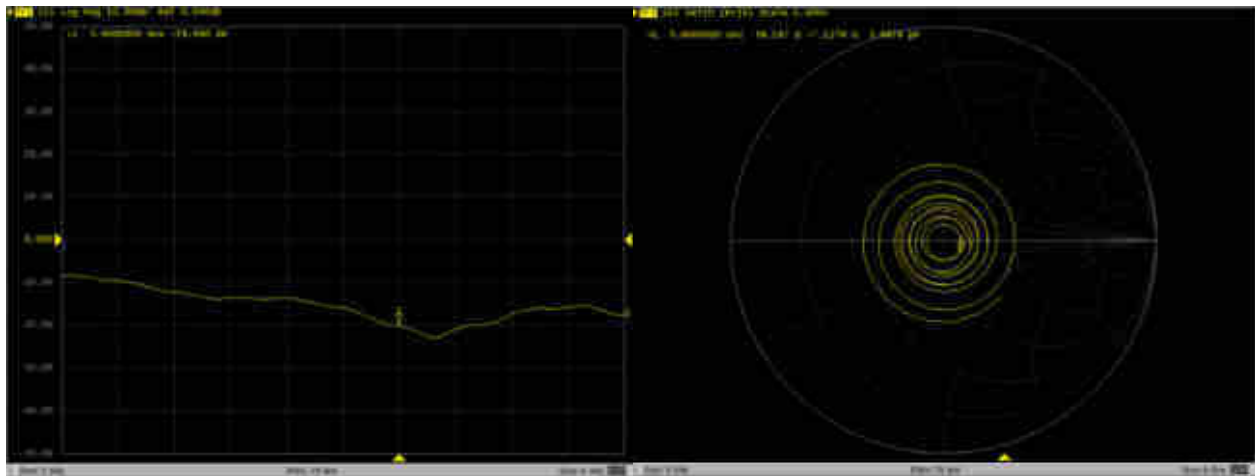
5250MHz – Head----2020.10.30



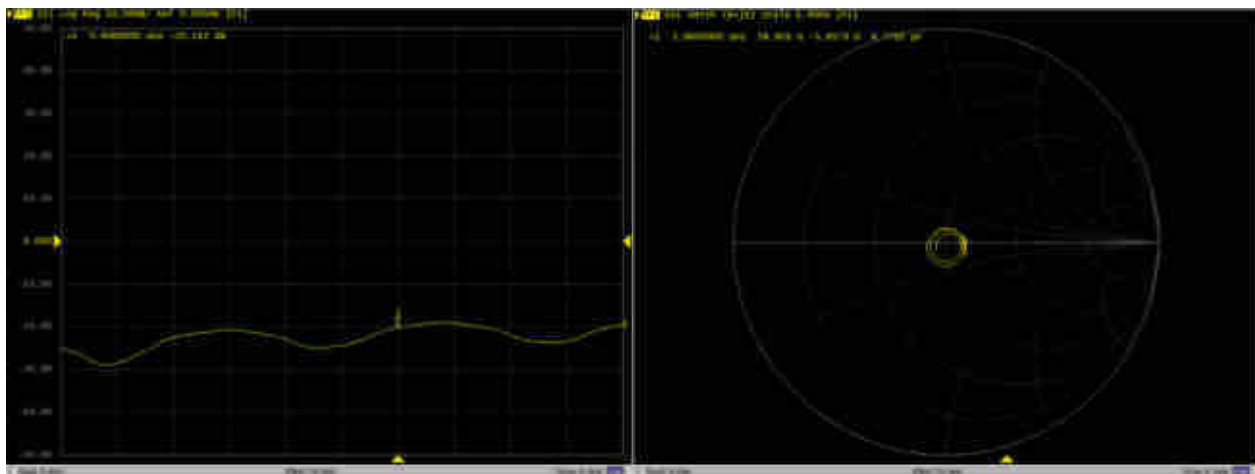
5250MHz – Body----2020.10.30



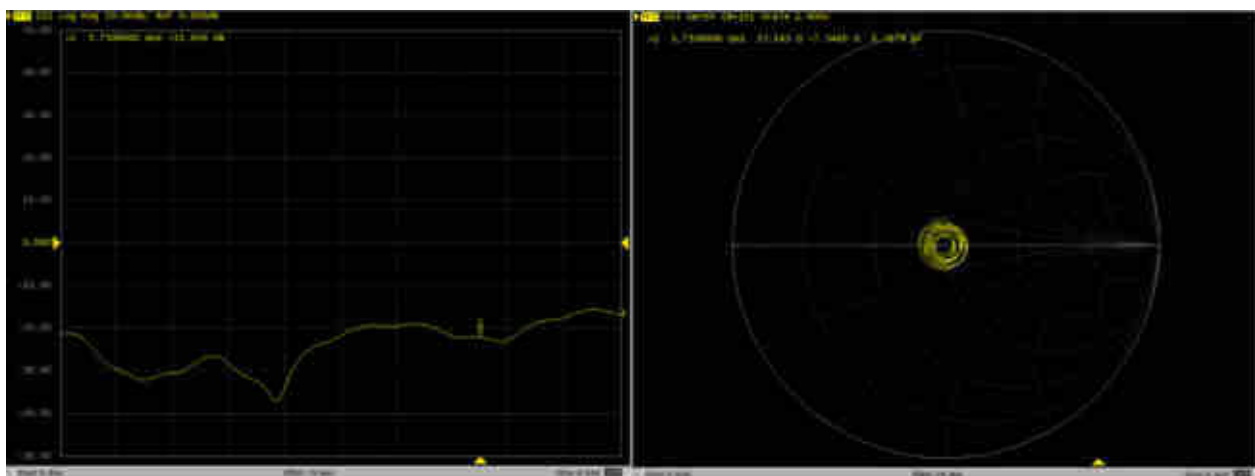
5600MHz – Head----2020.10.30

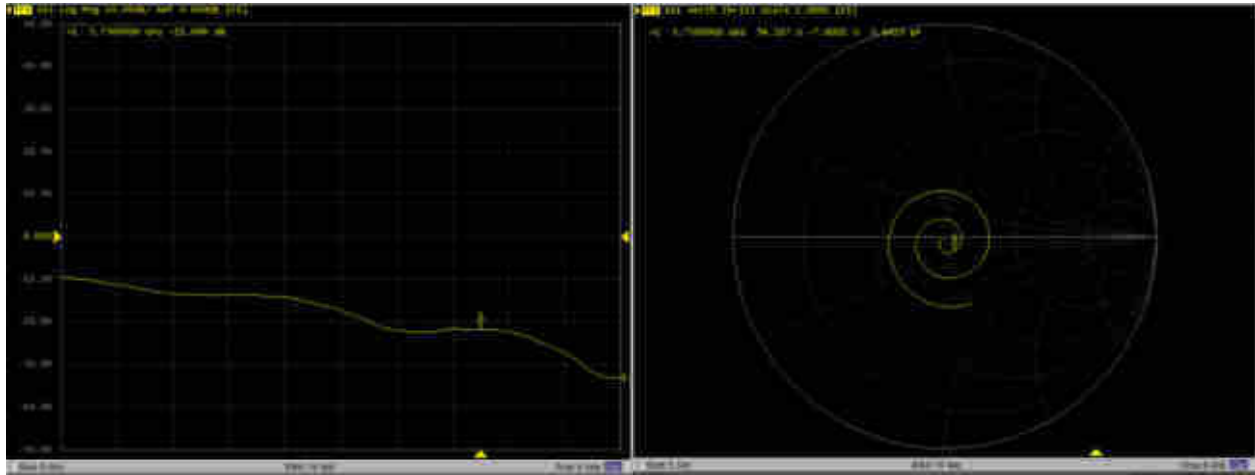


5600MHz – Body----2020.10.30



5750MHz – Head----2020.10.30







Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Client **Auden**

Certificate No: **DAE3-528_Mar20**

CALIBRATION CERTIFICATE

Object **DAE3 - SD 000 D03 AA - SN: 528**

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

Calibration date: **March 16, 2020**

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

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

Calibration Equipment used (M&TE critical for calibration)

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

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

Issued: March 16, 2020

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



Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Glossary

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

Methods Applied and Interpretation of Parameters

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

DC Voltage Measurement

A/D - Converter Resolution nominal

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

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

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

Calibration Factors	X	Y	Z
High Range	404.513 $\pm$ 0.02% (k=2)	404.615 $\pm$ 0.02% (k=2)	404.537 $\pm$ 0.02% (k=2)
Low Range	3.97109 $\pm$ 1.50% (k=2)	3.95930 $\pm$ 1.50% (k=2)	3.96568 $\pm$ 1.50% (k=2)

Connector Angle

Connector Angle to be used in DASY system	50.0 $^{\circ}$ $\pm$ 1 $^{\circ}$
---	------------------------------------

Appendix (Additional assessments outside the scope of SCS0108)

1. DC Voltage Linearity

High Range	Reading (μV)	Difference (μV)	Error (%)
Channel X + Input	200037.58	3.28	0.00
Channel X + Input	20009.65	3.92	0.02
Channel X - Input	-20001.89	3.62	-0.02
Channel Y + Input	200037.90	3.50	0.00
Channel Y + Input	20005.83	0.31	0.00
Channel Y - Input	-20005.73	-0.03	0.00
Channel Z + Input	200033.51	-0.62	-0.00
Channel Z + Input	20006.48	0.89	0.00
Channel Z - Input	-20006.01	-0.27	0.00

Low Range	Reading (μV)	Difference (μV)	Error (%)
Channel X + Input	2001.68	0.24	0.01
Channel X + Input	201.09	-0.22	-0.11
Channel X - Input	-198.93	-0.12	0.06
Channel Y + Input	2001.70	0.49	0.02
Channel Y + Input	200.70	-0.24	-0.12
Channel Y - Input	-199.76	-0.76	0.38
Channel Z + Input	2001.03	-0.04	-0.00
Channel Z + Input	201.25	0.40	0.20
Channel Z - Input	-199.29	-0.32	0.16

2. Common mode sensitivity

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

	Common mode Input Voltage (mV)	High Range Average Reading (μV)	Low Range Average Reading (μV)
Channel X	200	9.59	7.82
	- 200	-7.34	-8.76
Channel Y	200	14.74	14.93
	- 200	-16.81	-17.15
Channel Z	200	-3.39	-3.82
	- 200	3.03	3.16

3. Channel separation

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

	Input Voltage (mV)	Channel X (μV)	Channel Y (μV)	Channel Z (μV)
Channel X	200	-	3.19	-1.66
Channel Y	200	6.79	-	4.73
Channel Z	200	7.16	5.28	-

4. AD-Converter Values with inputs shorted

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

	High Range (LSB)	Low Range (LSB)
Channel X	15972	16183
Channel Y	15900	16376
Channel Z	16167	15841

5. Input Offset Measurement

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

Input 10M Ω

	Average (μ V)	min. Offset (μ V)	max. Offset (μ V)	Std. Deviation (μ V)
Channel X	1.19	0.18	2.38	0.46
Channel Y	0.15	-1.39	1.24	0.47
Channel Z	0.36	-1.22	1.42	0.42

6. Input Offset Current

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

7. Input Resistance (Typical values for information)

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

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

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

9. Power Consumption (Typical values for information)

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



Accredited by the Swiss Accreditation Service (SAS)
 The Swiss Accreditation Service is one of the signatories to the EA
 Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Client **Sporton**

Certificate No: **EX3-7576_Jan20**

CALIBRATION CERTIFICATE

Object **EX3DV4 - SN:7576**

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

Calibration date: **January 22, 2020**

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

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

Calibration Equipment used (M&E critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	03-Apr-19 (No. 217-02892/02893)	Apr-20
Power sensor NRP-Z91	SN: 103244	03-Apr-19 (No. 217-02892)	Apr-20
Power sensor NRP-Z91	SN: 103245	03-Apr-19 (No. 217-02893)	Apr-20
Reference 20 dB Attenuator	SN: S5277 (20x)	04-Apr-19 (No. 217-02894)	Apr-20
DAE4	SN: 660	27-Dec-19 (No. DAE4-660 Dec19)	Dec-20
Reference Probe ES3DV2	SN: 3013	31-Dec-19 (No. ES3-3013 Dec19)	Dec-20
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-16)	In house check: Jun-20
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-16)	In house check: Jun-20
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-16)	In house check: Jun-20
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-16)	In house check: Jun-20
Network Analyzer E8358A	SN: US41080477	31-Mar-14 (in house check Oct-19)	In house check: Oct-20

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

Issued: January 25, 2020

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



Accredited by the Swiss Accreditation Service (SAS)

Accreditation No.: **SCS 0108**

The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates

Glossary:

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

Calibration is Performed According to the Following Standards:

- 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 the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

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

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7576

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm ($\mu\text{V}/(\text{V}/\text{m})^2$) ^A	0.48	0.63	0.63	$\pm 10.1 \%$
DCP (mV) ^B	103.8	99.8	103.6	

Calibration Results for Modulation Response

UID	Communication System Name		A dB	B dB $\sqrt{\mu\text{V}}$	C	D dB	VR mV	Max dev.	Unc (k=2) ^E
0	CW	X	0.0	0.0	1.0	0.00	164.4	$\pm 2.7 \%$	$\pm 4.7 \%$
		Y	0.0	0.0	1.0		161.8		
		Z	0.0	0.0	1.0		164.7		

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

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

^B Numerical linearization parameter: uncertainty not required.

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

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7576**Other Probe Parameters**

Sensor Arrangement	Triangular
Connector Angle (°)	112.2
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	1.4 mm

DASY/EASY - Parameters of Probe: EX3DV4 - SN:7576

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) ^c	Relative Permittivity ^f	Conductivity (S/m) ^f	ConvF X	ConvF Y	ConvF Z	Alpha ^o	Depth (mm) ^o	Unc (k=2)
750	41.9	0.89	10.71	10.71	10.71	0.62	0.80	± 12.0 %
835	41.5	0.90	10.45	10.45	10.45	0.46	0.94	± 12.0 %
900	41.5	0.97	10.16	10.16	10.16	0.33	1.09	± 12.0 %
1750	40.1	1.37	8.88	8.88	8.88	0.42	0.86	± 12.0 %
1900	40.0	1.40	8.58	8.58	8.58	0.38	0.86	± 12.0 %
2000	40.0	1.40	8.48	8.48	8.48	0.39	0.86	± 12.0 %
2300	39.5	1.67	8.03	8.03	8.03	0.41	0.90	± 12.0 %
2450	39.2	1.80	7.76	7.76	7.76	0.44	0.90	± 12.0 %
2600	39.0	1.96	7.47	7.47	7.47	0.41	0.96	± 12.0 %
3300	38.2	2.71	7.08	7.08	7.08	0.30	1.35	± 14.0 %
3500	37.9	2.91	6.77	6.77	6.77	0.30	1.35	± 14.0 %
3700	37.7	3.12	6.74	6.74	6.74	0.30	1.35	± 14.0 %
3900	37.5	3.32	6.56	6.56	6.56	0.40	1.40	± 14.0 %
4100	37.2	3.53	6.26	6.26	6.26	0.40	1.40	± 14.0 %
4400	36.9	3.84	6.19	6.19	6.19	0.40	1.60	± 14.0 %
4600	36.7	4.04	6.06	6.06	6.06	0.40	1.60	± 14.0 %
4800	36.4	4.25	5.89	5.89	5.89	0.40	1.80	± 14.0 %
4950	36.3	4.40	5.59	5.59	5.59	0.40	1.80	± 14.0 %
5250	35.9	4.71	5.20	5.20	5.20	0.40	1.80	± 14.0 %
5600	35.5	5.07	4.62	4.62	4.62	0.40	1.80	± 14.0 %
5750	35.4	5.22	4.83	4.83	4.83	0.40	1.80	± 14.0 %

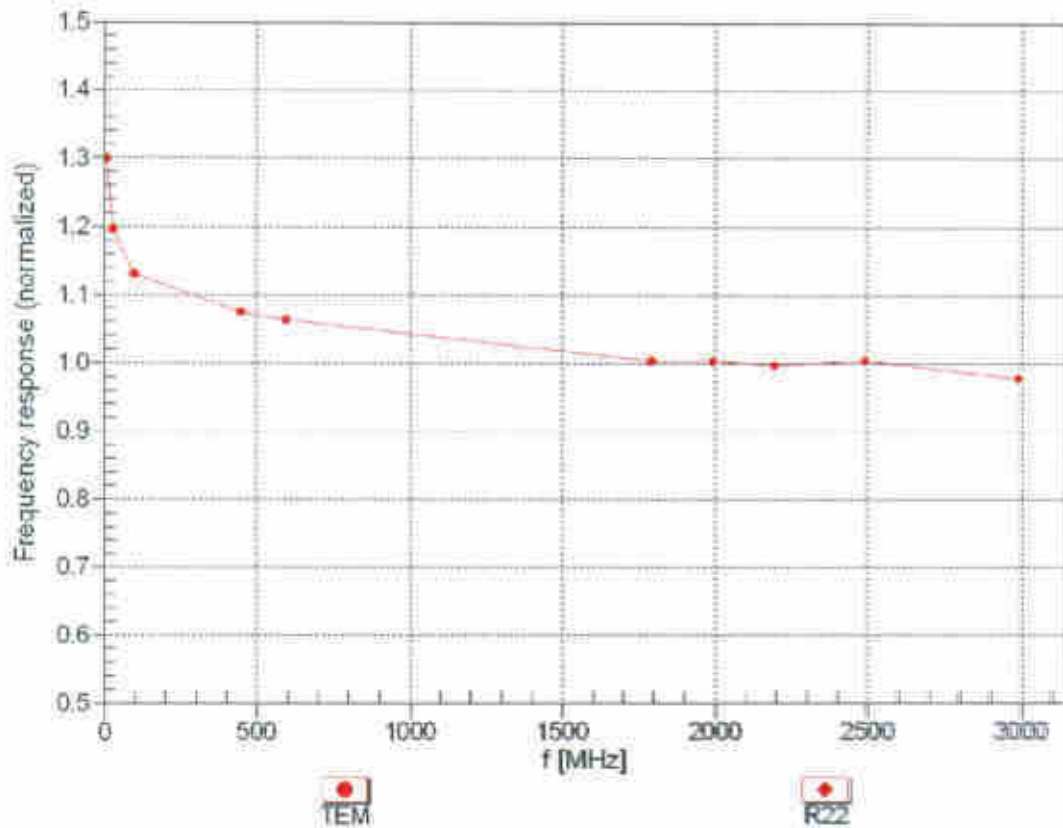
^c Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is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

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

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

Frequency Response of E-Field

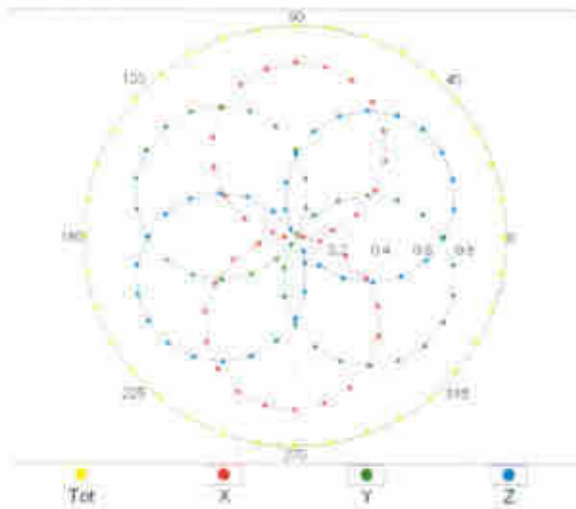
(TEM-Cell:ifi110 EXX, Waveguide: R22)



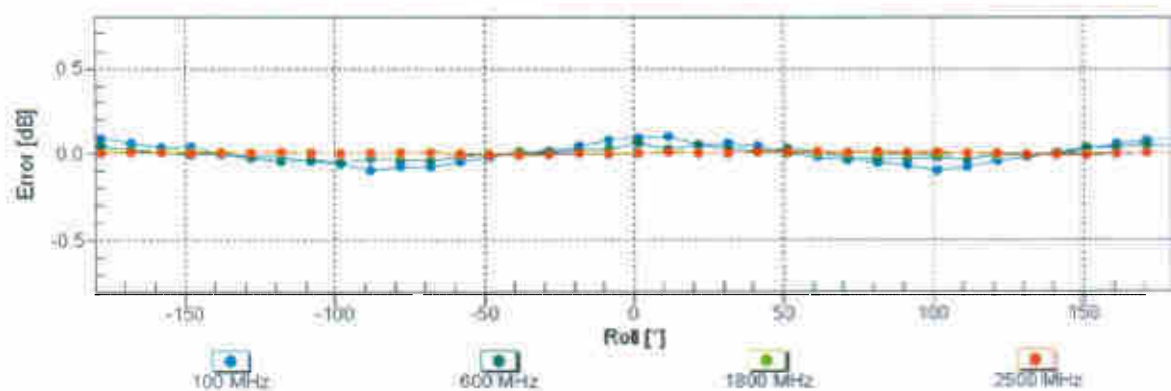
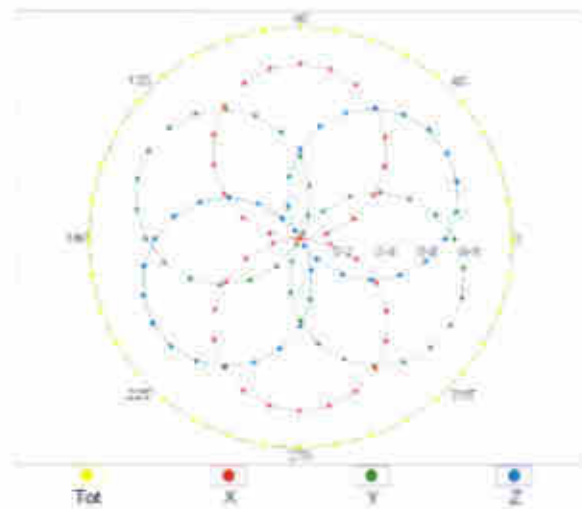
Uncertainty of Frequency Response of E-field: $\pm 6.3\%$ ($k=2$)

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

f=600 MHz,TEM

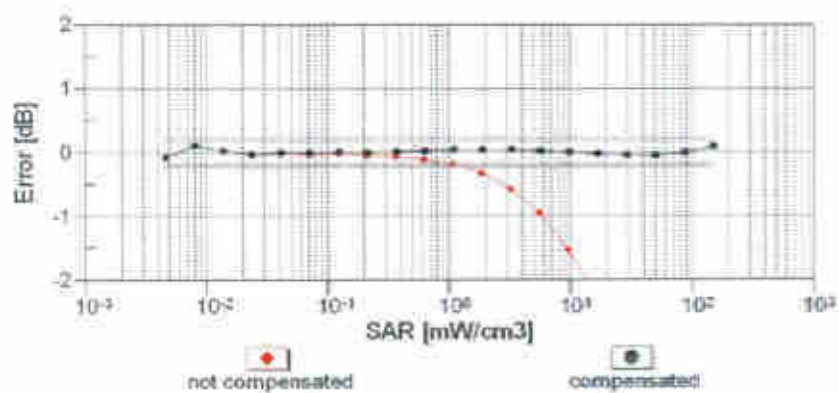
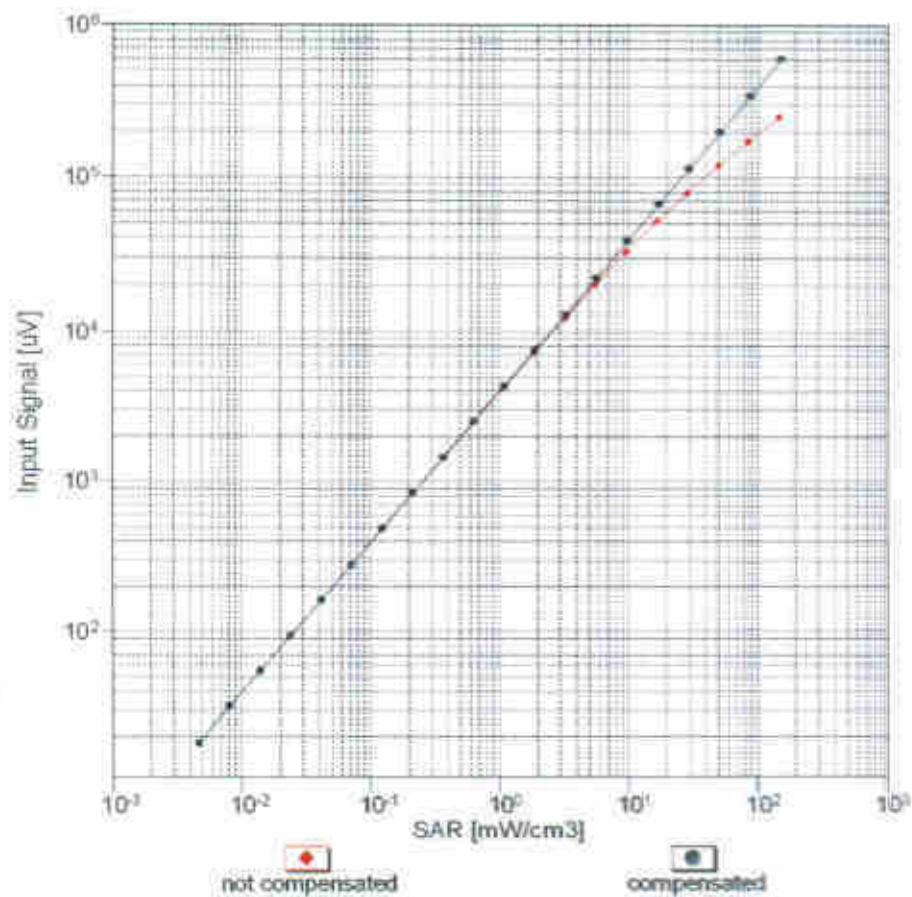


f=1800 MHz,R22



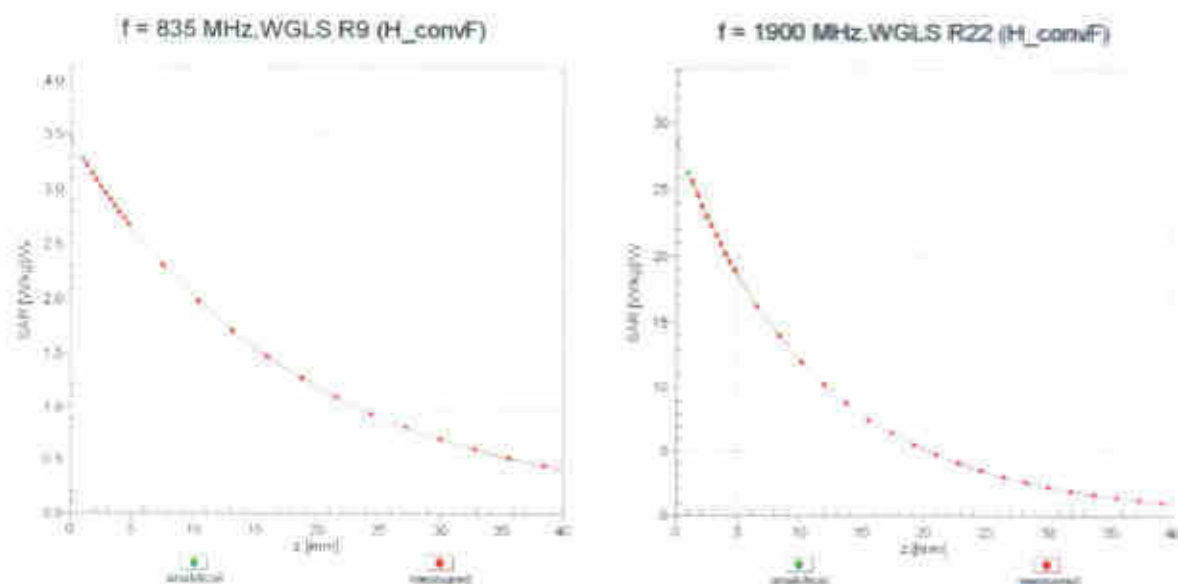
Uncertainty of Axial Isotropy Assessment: $\pm 0.5\%$ ($k=2$)

Dynamic Range $f(\text{SAR}_{\text{head}})$ (TEM cell, $f_{\text{eval}} = 1900 \text{ MHz}$)



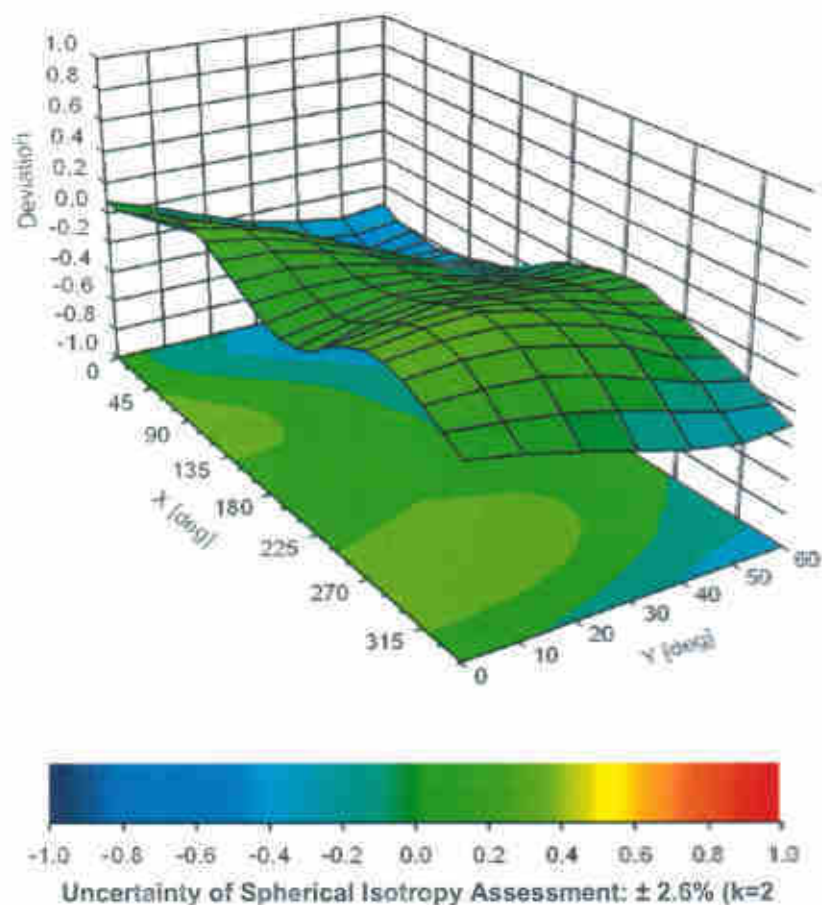
Uncertainty of Linearity Assessment: $\pm 0.6\%$ ($k=2$)

Conversion Factor Assessment



Deviation from Isotropy in Liquid

Error (ϕ , θ), $f = 900 \text{ MHz}$





Appendix E. Conducted RF Output Power Table

The detailed power tables are shown as follows.



Full Power Mode - UAT

GSM900		Power Average Power (dBm)				Power Average Power (dBm)			
Tx Channel		198	198	201	Tune-up	198	198	201	Tune-up
Frequency (MHz)		824.2	836.4	848.6	Frame Average Power (dBm)	824.2	836.4	848.6	Frame Average Power (dBm)
GSM 1 Tx test		20.10	20.08	20.02	20.00	24.10	23.88	24.02	24.00
GPRS 1 Tx test		20.12	20.05	20.00	20.00	24.12	23.95	24.00	24.00
GPRS 3 Tx test		20.44	20.44	20.38	20.00	24.44	24.44	24.38	24.00
GPRS 3 Tx test		20.66	20.66	20.60	20.00	24.66	24.66	24.54	24.00
EDGE 4 Tx test		20.01	20.02	20.05	20.00	24.01	24.02	24.05	20.00
EDGE 1 Tx test		20.08	20.04	20.04	20.00	16.08	16.04	16.04	17.00
EDGE 2 Tx test		20.02	20.02	20.01	20.00	17.02	17.01	17.01	18.00
EDGE 3 Tx test		20.08	20.02	20.10	20.00	18.02	18.00	18.04	19.00
EDGE 4 Tx test		20.14	20.20	20.02	20.00	19.14	19.20	19.02	19.00

GSM1800		Base Band Power (dBm)				Time up Limit (min)		Frame Average Power (dBm)				Time up Limit (min)	
Tx Channel		512	561	610		Time up Limit (min)		512	561	610		Time up Limit (min)	
Frequency (MHz)		1800.2	1800	1800.8		Time up Limit (min)		1800.2	1800	1800.8		Time up Limit (min)	
GSM 1 Tx test		20.00	20.00	20.00		20.00		20.00	19.76	19.80		20.00	
GPRS 1 Tx test		20.00	20.00	20.04		20.00		19.00	19.00	19.04		20.00	
GPRS 2 Tx test		20.00	20.00	20.01		20.00		19.00	20.00	19.01		20.00	
GPRS 3 Tx test		20.40	20.40	20.40		20.00		20.20	20.00	19.80		21.00	
GPRS 4 Tx test		20.00	20.00	20.00		20.00		19.00	20.00	19.00		20.00	
EDGE 1 Tx test		20.00	20.00	20.04		20.00		19.00	19.00	19.04		19.00	
EDGE 2 Tx test		20.00	20.00	20.00		20.00		17.00	17.00	17.00		17.00	
EDGE 3 Tx test		20.00	20.00	20.00		20.00		18.00	18.00	18.00		18.00	
EDGE 4 Tx test		20.00	20.00	20.00		20.00		18.00	18.00	18.00		18.00	

Band		WCDMA S					WCDMA V					WCDMA V				
Tx Channel		9262	9400	9638	Tune-up Limit		9312	1412	1412	Tune-up Limit		4102	4102	4202	Tune-up Limit	
Frequency (MHz)		9262	9400	9638	Frame Average Power (dBm)		9312	1412	1412	Frame Average Power (dBm)		4102	4102	4202	Frame Average Power (dBm)	
SCPP Rel 96		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 97		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 98		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 99		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 100		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 101		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 102		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 103		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 104		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 105		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 106		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 107		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 108		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 109		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 110		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 111		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 112		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 113		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 114		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 115		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 116		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 117		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 118		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 119		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 120		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 121		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 122		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 123		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 124		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 125		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 126		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 127		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 128		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 129		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 130		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 131		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 132		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 133		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 134		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 135		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 136		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 137		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 138		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 139		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 140		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 141		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 142		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 143		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 144		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 145		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 146		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 147		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 148		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 149		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 150		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 151		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 152		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 153		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 154		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 155		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 156		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 157		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 158		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 159		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 160		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 161		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 162		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 163		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 164		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 165		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 166		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 167		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 168		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 169		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 170		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 171		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 172		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 173		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 174		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 175		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 176		20.70	20.70	20.64	20.00		24.12	24.21	24.22	24.00		20.00	20.00	20.00	20.00	
SCPP Rel 177		20.70	20.70	20.64	20.00		24.12	24.21								

Band 2 (190MHz Band)									
Part 24E									
BS (MHz)	Modulation	RB Size	RB Offset	Channel Offset	Channel Width	Channel Mask	Channel High	Turn-up time	APRS (dB)
18000									
Frequency (MHz)									
15	QPSK	1	0	23.96	23.83	23.86			
15	QPSK	1	48	23.94	23.88	23.95		24.8	0
15	QPSK	1	96	23.87	23.72	23.87			
15	QPSK	1	144	23.85	23.74	23.87			
15	QPSK	56	24	22.74	22.88	22.72		23.8	1
15	QPSK	56	56	22.73	22.88	22.78			
15	QPSK	56	80	22.71	22.88	22.83			
15	QPSK	1	0	23.96	23.81	23.94			
15	QPSK	1	48	22.87	22.08	22.94		23.8	1
15	QPSK	1	96	22.85	21.93	22.95			
15	QPSK	56	0	21.86	21.88	21.87			
15	QPSK	56	24	21.74	21.81	21.75		22.8	2
15	QPSK	56	48	21.71	21.80	21.74			
15	QPSK	56	72	21.69	21.80	21.75			
15	QPSK	100	0	21.70	21.87	22.03			
15	QPSK	1	0	21.81	21.80	22.04			
15	QPSK	1	48	21.79	21.80	22.05		22.8	2
15	QPSK	1	96	21.77	21.86	22.11			
15	QPSK	56	0	20.68	20.82	20.82			
15	QPSK	56	24	20.65	20.80	20.75		21.8	3
15	QPSK	56	48	20.64	20.80	20.77			
15	QPSK	100	0	20.74	20.93	21.12			
15	QPSK	100	0	20.72	20.89	21.07			
15	QPSK	100	0	20.70	20.82	20.97			
15	QPSK	1	48	19.89	19.81	19.94		19.8	5
15	QPSK	1	96	19.84	19.68	19.95			
15	QPSK	56	0	19.79	19.73	19.78			
15	QPSK	56	24	19.74	19.84	19.19		19.8	5
15	QPSK	56	48	19.73	19.84	19.19			
15	QPSK	100	0	19.85	19.87	19.18			
Channel									
18000									
Frequency (MHz)									
15	QPSK	1	0	23.51	23.69	23.84			
15	QPSK	1	32	23.49	23.63	23.88		24.8	0
15	QPSK	1	74	23.32	23.20	23.81			
15	QPSK	1	116	23.27	23.17	23.81			
15	QPSK	36	20	22.66	22.84	22.68		23.8	1
15	QPSK	36	36	22.63	22.80	22.67			
15	QPSK	36	52	22.61	22.80	22.67			
15	QPSK	1	0	22.80	22.98	23.18			
15	QPSK	1	32	22.78	22.88	23.24		23.8	1
15	QPSK	1	64	22.76	22.88	23.29			
15	QPSK	36	0	21.59	21.74	21.95			
15	QPSK	36	0	21.58	21.83	21.99		22.8	2
15	QPSK	36	0	21.63	21.83	21.99			
15	QPSK	75	0	21.86	21.83	21.87			
15	QPSK	75	0	21.85	21.83	21.87			
15	QPSK	1	32	21.71	21.89	22.18		22.8	2
15	QPSK	1	74	21.85	21.80	22.08			
15	QPSK	1	116	21.80	21.75	22.08			
15	QPSK	36	20	20.72	20.88	21.05		21.8	3
15	QPSK	36	36	20.68	20.89	21.11			
15	QPSK	36	52	20.62	20.87	21.12			
15	QPSK	1	0	19.77	19.77	19.03			
15	QPSK	1	32	19.76	19.87	19.18		19.8	5
15	QPSK	1	64	19.75	19.87	19.18			
15	QPSK	36	0	19.57	19.72	19.90			
15	QPSK	36	0	19.57	19.72	19.90			
15	QPSK	75	0	19.84	19.82	19.03		19.8	5
15	QPSK	75	0	19.84	19.82	19.03			
Channel									
18000									
Frequency (MHz)									
15	QPSK	1	0	23.53	23.69	23.83			
15	QPSK	1	24	23.46	23.65	23.83		24.8	0
15	QPSK	1	48	23.39	23.58	23.81			
15	QPSK	24	0	22.50	22.65	22.65		23.8	1
15	QPSK	24	12	22.56	22.80	22.81			
15	QPSK	24	24	22.57	22.80	22.81			
15	QPSK	56	0	22.58	22.74	22.85			
15	QPSK	1	0	23.13	23.82	23.84		23.8	1
15	QPSK	1	48	23.06	23.74	23.84			
15	QPSK	1	48	23.05	23.72	23.85			
15	QPSK	25	0	21.58	21.87	21.79		22.8	2
15	QPSK	25	0	21.58	21.87	21.79			
15	QPSK	25	24	21.73	21.88	21.85			
15	QPSK	25	24	21.73	21.88	21.85			
15	QPSK	1	48	22.00	21.82	22.29		22.8	2
15	QPSK	1	48	21.98	22.00	22.24			
15	QPSK	1	48	21.98	22.00	22.24			
15	QPSK	25	12	20.57	20.83	21.01		21.8	3
15	QPSK	25	12	20.56	20.83	21.01			
15	QPSK	25	12	20.56	20.83	21.01			
15	QPSK	1	0	19.86	19.92	19.27			
15	QPSK	1	24	19.86	19.80	19.17		19.8	5
15	QPSK	1	24	19.86	19.80	19.17			
15	QPSK	25	0	19.84	19.84	19.08			
15	QPSK	25	12	19.80	19.84	19.10		19.8	5
15	QPSK	25	12	19.80	19.84	19.10			
15	QPSK	50	0	19.87	19.87	19.12			
15	QPSK	50	0	19.87	19.87	19.12			
Channel									
18000									
Frequency (MHz)									
5	QPSK	1	0	23.53	23.69	23.83			
5	QPSK	1	12	23.50	23.60	23.65		24.8	0
5	QPSK	1	24	23.47	23.55	23.61			
5	QPSK	12	0	22.83	22.86	22.95		23.8	1
5	QPSK	12	7	22.55	22.80	22.83			
5	QPSK	12	14	22.56	22.80	22.83			
5	QPSK	25	0	22.54	22.74	22.80			
5	QPSK	1	0	22.88	23.02	23.08		23.8	1
5	QPSK	1	12	22.87	23.02	23.08			
5	QPSK	1	24	22.91	23.04	23.03			
5	QPSK	12	9	21.62	21.72	21.64		22.8	2
5	QPSK	12	18	21.62	21.74	21.67			
5	QPSK	12	18	21.62	21.81	22.05			
5	QPSK	25	0	21.60	21.80	22.07			
5	QPSK	25	0	21.71	21.80	22.07			
5	QPSK	1	12	21.72	21.78	21.72		21.8	2
5	QPSK	1	24	21.72	21.78	21.72			
5	QPSK	12	9	21.60	21.89	22.08			
5	QPSK	12	18	21.59	21.89	22.08			
5	QPSK	12	7	20.53	20.74	21.07		21.8	3
5	QPSK	12	14	20.53	20.75	21.08			
5	QPSK	1	0	19.72	19.70	19.84			
5	QPSK	1	12	19.70	19.70	19.84		19.8	5
5	QPSK	1	24	19.74	19.81	19.23			
5	QPSK	12	0	19.68	19.63	19.18			
5	QPSK	12	0	19.68	19.63	19.18			
5	QPSK	12	12	19.62	19.73	19.15		19.8	5
5	QPSK	25	0	19.61	19.76	19.11			
Channel									
18000									
Frequency (MHz)									
3	QPSK	1	0	23.45	23.54	23.80			
3	QPSK	1	1	23.60	23.70	23.91		24.8	0
3	QPSK	1	14	23.52	23.62	23.83			
3	QPSK	8	0	22.54	22.60	22.94		23.8	1
3	QPSK	8	7	22.56	22.77	22.91			
3	QPSK	8	14	22.55	22.77	22.91			
3	QPSK	15	0	22.92	22.70	22.94			
3	QPSK	15	7	22.93	22.70	22.94			
3	QPSK	1	8	22.53	22.89	23.05		23.8	1
3	QPSK	1	14	22.56	22.80	23.00			
3	QPSK	1	14	22.56	22.80	23.00			
3	QPSK	8	4	21.73	21.95	22.01		22.8	2
3	QPSK	8	4	21.71	21.75	22.04			
3	QPSK	8	7	21.76	21.75	22.04			
3	QPSK	1	8	21.68	21.71	22.03			
3	QPSK	1	8	21.67	21.89	22.05		22.8	2
3	QPSK	1	8	21.67	21.89	22.05			
3	QPSK	8	0	20.57	20.62	21.05			
3	QPSK	8	4	20.64	20.84	21.05		21.8	3
3	QPSK	8	4	20.64	20.84	21.05			
3	QPSK	15	0	20.67	20.78	21.00			
3	QPSK	1	0	19.70	19.85	19.79		19.8	5
3	QPSK	1	0	19.70	19.85	19.79			
3	QPSK	1	14	19.01	19.01	19.29			
3	QPSK	8	0	19.58	19.60	19.89			
3	QPSK	8	0	19.58	19.60	19.89			
3	QPSK	8	7	19.53	19.58	19.34		19.8	5
3	QPSK	15	0	19.56	19.58	19.26			
Channel									
18000									
Frequency (MHz)									
1.4	QPSK	1	0	23.44	23.42	23.80			
1.4	QPSK	1	0	23.44	23.42	23.80			
1.4	QPSK	1	14	23.38	23.45	23.82		24.8	0
1.4	QPSK	3	0	23.39	23.52	23.75			
1.4	QPSK	3	0	23.39	23.52	23.75			
1.4	QPSK	3	7	23.44	23.58	23.81			
1.4	QPSK	1	0	22.55	22.92	22.88		23.8	1
1.4	QPSK	1	0	22.55	22.92	22.88			
1.4	QPSK	3	0	23.01	23.08	23.44			
1.4	QPSK	3	0	23.01	23.08	23.44			
1.4	QPSK	3	7	23.01	23.08	23.44			
1.4	QPSK	1	0	22.51	22.97	23.32		23.8	1
1.4	QPSK	1	0	22.51	22.97	23.32			
1.4	QPSK	3	0	22.51	22.94	22.88			
1.4	QPSK	3	0	22.51	22.94	22.88			
1.4	QPSK	3	7	21.76	21.78	22.01		22.8	2
1.4	QPSK	1							

Band 4 (AWS Band)										
Part 2ZL (only on channel required)										
RF Freq (MHz)	Modulation	RB Size	RB Offset	Low Power Channel (MHz)	Low Power Channel (MHz)	High Power Channel (MHz)	High Power Channel (MHz)	Turnup time (ms)	MPR (dB)	
Channel										
15	QPSK	1	0	17.25	17.25	17.25	17.25			
15	QPSK	1	49	23.69	23.69	23.69	23.69	24.8	0	
15	QPSK	1	99	23.77	23.88	23.88	23.88			
15	QPSK	1	149	23.85	23.96	23.96	23.96			
15	QPSK	50	24	22.91	23.14	23.14	23.14	23.8	1	
15	QPSK	50	50	22.86	23.04	23.04	23.04			
15	QPSK	50	100	22.82	23.02	23.02	23.02			
15	QPSK	50	150	22.77	22.98	22.98	22.98			
15	QPSK	50	200	22.71	22.93	22.93	22.93	23.8	1	
15	QPSK	50	250	22.66	22.89	22.89	22.89			
15	QPSK	50	300	22.60	22.84	22.84	22.84			
15	QPSK	50	350	22.55	22.79	22.79	22.79			
15	QPSK	50	400	22.50	22.74	22.74	22.74			
15	QPSK	50	450	22.45	22.69	22.69	22.69			
15	QPSK	50	500	22.40	22.64	22.64	22.64			
15	QPSK	50	550	22.35	22.59	22.59	22.59			
15	QPSK	50	600	22.30	22.54	22.54	22.54			
15	QPSK	50	650	22.25	22.49	22.49	22.49			
15	QPSK	50	700	22.20	22.44	22.44	22.44			
15	QPSK	50	750	22.15	22.39	22.39	22.39			
15	QPSK	50	800	22.10	22.34	22.34	22.34			
15	QPSK	50	850	22.05	22.29	22.29	22.29			
15	QPSK	50	900	22.00	22.24	22.24	22.24			
15	QPSK	50	950	21.95	22.19	22.19	22.19			
15	QPSK	50	1000	21.90	22.14	22.14	22.14			
15	QPSK	50	1050	21.85	22.09	22.09	22.09			
15	QPSK	50	1100	21.80	22.04	22.04	22.04			
15	QPSK	50	1150	21.75	21.99	21.99	21.99			
15	QPSK	50	1200	21.70	21.94	21.94	21.94			
15	QPSK	50	1250	21.65	21.89	21.89	21.89			
15	QPSK	50	1300	21.60	21.84	21.84	21.84			
15	QPSK	50	1350	21.55	21.79	21.79	21.79			
15	QPSK	50	1400	21.50	21.74	21.74	21.74			
15	QPSK	50	1450	21.45	21.69	21.69	21.69			
15	QPSK	50	1500	21.40	21.64	21.64	21.64			
15	QPSK	50	1550	21.35	21.59	21.59	21.59			
15	QPSK	50	1600	21.30	21.54	21.54	21.54			
15	QPSK	50	1650	21.25	21.49	21.49	21.49			
15	QPSK	50	1700	21.20	21.44	21.44	21.44			
15	QPSK	50	1750	21.15	21.39	21.39	21.39			
15	QPSK	50	1800	21.10	21.34	21.34	21.34			
15	QPSK	50	1850	21.05	21.29	21.29	21.29			
15	QPSK	50	1900	21.00	21.24	21.24	21.24			
15	QPSK	50	1950	20.95	21.19	21.19	21.19			
15	QPSK	50	2000	20.90	21.14	21.14	21.14			
15	QPSK	50	2050	20.85	21.09	21.09	21.09			
15	QPSK	50	2100	20.80	21.04	21.04	21.04			
15	QPSK	50	2150	20.75	20.99	20.99	20.99			
15	QPSK	50	2200	20.70	20.94	20.94	20.94			
15	QPSK	50	2250	20.65	20.89	20.89	20.89			
15	QPSK	50	2300	20.60	20.84	20.84	20.84			
15	QPSK	50	2350	20.55	20.79	20.79	20.79			
15	QPSK	50	2400	20.50	20.74	20.74	20.74			
15	QPSK	50	2450	20.45	20.69	20.69	20.69			
15	QPSK	50	2500	20.40	20.64	20.64	20.64			
15	QPSK	50	2550	20.35	20.59	20.59	20.59			
15	QPSK	50	2600	20.30	20.54	20.54	20.54			
15	QPSK	50	2650	20.25	20.49	20.49	20.49			
15	QPSK	50	2700	20.20	20.44	20.44	20.44			
15	QPSK	50	2750	20.15	20.39	20.39	20.39			
15	QPSK	50	2800	20.10	20.34	20.34	20.34			
15	QPSK	50	2850	20.05	20.29	20.29	20.29			
15	QPSK	50	2900	20.00	20.24	20.24	20.24			
15	QPSK	50	2950	19.95	20.19	20.19	20.19			
15	QPSK	50	3000	19.90	20.14	20.14	20.14			
15	QPSK	50	3050	19.85	20.09	20.09	20.09			
15	QPSK	50	3100	19.80	20.04	20.04	20.04			
15	QPSK	50	3150	19.75	19.99	19.99	19.99			
15	QPSK	50	3200	19.70	19.94	19.94	19.94			
15	QPSK	50	3250	19.65	19.89	19.89	19.89			
15	QPSK	50	3300	19.60	19.84	19.84	19.84			
15	QPSK	50	3350	19.55	19.79	19.79	19.79			
15	QPSK	50	3400	19.50	19.74	19.74	19.74			
15	QPSK	50	3450	19.45	19.69	19.69	19.69			
15	QPSK	50	3500	19.40	19.64	19.64	19.64			
15	QPSK	50	3550	19.35	19.59	19.59	19.59			
15	QPSK	50	3600	19.30	19.54	19.54	19.54			
15	QPSK	50	3650	19.25	19.49	19.49	19.49			
15	QPSK	50	3700	19.20	19.44	19.44	19.44			
15	QPSK	50	3750	19.15	19.39	19.39	19.39			
15	QPSK	50	3800	19.10	19.34	19.34	19.34			
15	QPSK	50	3850	19.05	19.29	19.29	19.29			
15	QPSK	50	3900	19.00	19.24	19.24	19.24			
15	QPSK	50	3950	18.95	19.19	19.19	19.19			
15	QPSK	50	4000	18.90	19.14	19.14	19.14			
15	QPSK	50	4050	18.85	19.09	19.09	19.09			
15	QPSK	50	4100	18.80	19.04	19.04	19.04			
15	QPSK	50	4150	18.75	18.99	18.99	18.99			
15	QPSK	50	4200	18.70	18.94	18.94	18.94			
15	QPSK	50	4250	18.65	18.89	18.89	18.89			
15	QPSK	50	4300	18.60	18.84	18.84	18.84			
15	QPSK	50	4350	18.55	18.79	18.79	18.79			
15	QPSK	50	4400	18.50	18.74	18.74	18.74			
15	QPSK	50	4450	18.45	18.69	18.69	18.69			
15	QPSK	50	4500	18.40	18.64	18.64	18.64			
15	QPSK	50	4550	18.35	18.59	18.59	18.59			
15	QPSK	50	4600	18.30	18.54	18.54	18.54			
15	QPSK	50	4650	18.25	18.49	18.49	18.49			
15	QPSK	50	4700	18.20	18.44	18.44	18.44			
15	QPSK	50	4750	18.15	18.39	18.39	18.39			
15	QPSK	50	4800	18.10	18.34	18.34	18.34			
15	QPSK	50	4850	18.05	18.29	18.29	18.29			
15	QPSK	50	4900	18.00	18.24	18.24	18.24			
15	QPSK	50	4950	17.95	18.19	18.19	18.19			
15	QPSK	50	5000	17.90	18.14	18.14	18.14			
15	QPSK	50	5050	17.85	18.09	18.09	18.09			
15	QPSK	50	5100	17.80	18.04	18.04	18.04			
15	QPSK	50	5150	17.75	17.99	17.99	17.99			
15	QPSK	50	5200	17.70	17.94	17.94	17.94			
15	QPSK	50	5250	17.65	17.89	17.89	17.89			
15	QPSK	50	5300	17.60	17.84	17.84	17.84			
15	QPSK	50	5350	17.55	17.79	17.79	17.79			
15	QPSK	50	5400	17.50	17.74	17.74	17.74			
15	QPSK	50	5450	17.45	17.69	17.69	17.69			
15	QPSK	50	5500	17.40	17.64	17.64	17.64			
15	QPSK	50	5550	17.35	17.59	17.59	17.59			
15	QPSK	50	5600	17.30	17.54	17.54	17.54			
15	QPSK	50	5650	17.25	17.49	17.49	17.49			
15	QPSK	50	5700	17.20	17.44	17.44	17.44			
15	QPSK	50	5750	17.15	17.39	17.39	17.39			
15	QPSK	50	5800	17.10	17.34	17.34	17.34			
15	QPSK	50	5850	17.05	17.29	17.29	17.29			
15	QPSK	50	5900	17.00	17.24	17.24	17.24			
15	QPSK	50	5950	16.95	17.19	17.19	17.19			
15	QPSK	50	6000	16.90	17.14	17.14	17.14			
15	QPSK	50	6050	16.85	17.09	17.09	17.09			
15	QPSK	50	6100	16.80	17.04	17.04	17.04			
15	QPSK	50	6150	16.75	16.99	16.99	16.99			
15	QPSK	50	6200	16.70	16.94	16.94	16.94			
15	QPSK	50	6250	16.65	16.89	16.89	16.89			
15	QPSK	50	6300	16.60	16.84	16.84	16.84			
15	QPSK	50	6350	16.55	16.79	16.79	16.79			
15	QPSK	50	6400	16.50	16.74	16.74	16.74			
15	QPSK	50	6450	16.45	16.69	16.69	16.69			
15	QPSK	50	6500	16.40	16.64	16.64	16.64			
15	QPSK	50	6550	16.35	16.59	16.59	16.59			
15	QPSK	50	6600	16.30	16.54	16.54	16.54			
15	QPSK	50	6650	16.25	16.49	16.49	16.49			
15	QPSK	50	6700	16.20	16.44	16.44	16.44			
15	QPSK	50	6750	16.15	16.39	16.39	16.39			
15	QPSK	50	6800	16.10	16.34	16.34</				

Band 5 (Cellular Band)												
Part 222(only on channel required)												
RF (MHz)	Modulation	RB Size	RB Offset	Low Power	Low Modu- lation	High Power	High Modu- lation	Time-slot	RBs (kpts)	RBs (kpts)	RBs (kpts)	RBs (kpts)
Channel 1												
Frequency (MHz)												
18	QPSK	1	0	23.53	23.52	23.53	23.53	24	0	0	0	0
18	QPSK	1	26	23.53	23.52	23.51	23.51	24	0	0	0	0
18	QPSK	1	46	23.51	23.56	23.56	23.56	24	0	0	0	0
18	QPSK	1	66	23.51	23.52	23.52	23.52	24	0	0	0	0
18	QPSK	25	12	22.83	22.88	22.93	22.93	24	0	1	0	0
18	QPSK	25	26	22.85	22.92	22.92	22.92	24	0	0	0	0
18	QPSK	25	46	22.85	22.81	22.81	22.81	24	0	0	0	0
18	16QAM	1	0	22.87	22.87	22.87	22.87	24	0	0	0	0
18	16QAM	1	26	22.86	22.84	22.87	22.87	24	0	1	0	0
18	16QAM	1	46	22.86	22.88	22.88	22.88	24	0	0	0	0
18	16QAM	25	0	21.59	21.63	21.61	21.61	24	0	0	0	0
18	16QAM	25	12	21.73	21.63	21.61	21.61	24	0	0	0	0
18	16QAM	25	26	21.67	21.67	21.67	21.67	24	0	0	0	0
18	16QAM	25	46	21.73	21.63	21.61	21.61	24	0	0	0	0
18	64QAM	1	0	21.63	21.66	21.61	21.61	24	0	0	0	0
18	64QAM	1	26	21.63	21.68	21.68	21.68	24	0	0	0	0
18	64QAM	1	46	21.60	21.70	21.72	21.72	24	0	0	0	0
18	64QAM	1	66	21.63	21.68	21.68	21.68	24	0	0	0	0
18	64QAM	25	12	20.32	20.63	20.76	20.76	24	0	0	0	0
18	64QAM	25	26	20.43	20.63	20.71	20.71	24	0	0	0	0
18	64QAM	25	46	20.43	20.63	20.71	20.71	24	0	0	0	0
18	256QAM	1	0	18.92	18.79	18.79	18.79	24	0	0	0	0
18	256QAM	1	26	18.84	18.61	18.59	18.59	24	0	0	0	0
18	256QAM	1	46	18.84	18.62	18.62	18.62	24	0	0	0	0
18	256QAM	25	0	18.72	18.57	18.57	18.57	24	0	0	0	0
18	256QAM	25	12	18.84	18.62	18.59	18.59	24	0	0	0	0
18	256QAM	25	26	18.82	18.53	18.53	18.53	24	0	0	0	0
18	256QAM	25	46	18.75	18.54	18.52	18.52	24	0	0	0	0
Channel 2												
Frequency (MHz)												
5	QPSK	1	0	23.00	23.02	23.05	23.05	24	0	0	0	0
5	QPSK	1	12	23.48	23.48	23.46	23.46	24	0	0	0	0
5	QPSK	1	26	23.48	23.48	23.46	23.46	24	0	0	0	0
5	QPSK	12	0	23.00	23.00	23.04	23.04	24	0	0	0	0
5	QPSK	12	7	23.58	23.58	23.51	23.51	24	0	1	0	0
5	QPSK	12	19	23.58	23.58	23.51	23.51	24	0	0	0	0
5	QPSK	25	0	22.62	22.62	22.62	22.62	24	0	0	0	0
5	16QAM	1	0	22.88	22.77	22.78	22.78	24	0	0	0	0
5	16QAM	1	12	22.77	22.77	22.77	22.77	24	0	0	0	0
5	16QAM	1	26	22.74	22.77	22.69	22.69	24	0	0	0	0
5	16QAM	12	0	21.65	21.69	21.66	21.66	24	0	0	0	0
5	16QAM	12	7	21.69	21.69	21.63	21.63	24	0	0	0	0
5	16QAM	12	19	21.74	21.62	21.61	21.61	24	0	0	0	0
5	16QAM	25	0	21.63	21.69	21.62	21.62	24	0	0	0	0
5	16QAM	25	12	21.69	21.69	21.63	21.63	24	0	0	0	0
5	64QAM	1	0	21.61	21.71	21.62	21.62	24	0	0	0	0
5	64QAM	1	12	21.71	21.62	21.61	21.61	24	0	0	0	0
5	64QAM	1	26	21.69	21.65	21.66	21.66	24	0	0	0	0
5	64QAM	12	0	20.34	20.58	20.53	20.53	24	0	0	0	0
5	64QAM	12	7	20.58	20.58	20.53	20.53	24	0	0	0	0
5	64QAM	12	19	20.22	20.58	20.53	20.53	24	0	0	0	0
5	64QAM	25	0	20.49	20.49	20.49	20.49	24	0	0	0	0
5	256QAM	1	0	18.88	18.76	18.79	18.79	24	0	0	0	0
5	256QAM	1	12	18.76	18.76	18.79	18.79	24	0	0	0	0
5	256QAM	1	26	18.75	18.75	18.76	18.76	24	0	0	0	0
5	256QAM	12	0	18.72	18.63	18.66	18.66	24	0	0	0	0
5	256QAM	12	7	18.66	18.66	18.63	18.63	24	0	0	0	0
5	256QAM	12	19	18.61	18.62	18.63	18.63	24	0	0	0	0
5	256QAM	25	0	18.73	18.58	18.57	18.57	24	0	0	0	0
Channel 3												
Frequency (MHz)												
3	QPSK	1	0	23.55	23.53	23.55	23.55	24	0	0	0	0
3	QPSK	1	0	23.56	23.57	23.56	23.56	24	0	0	0	0
3	QPSK	1	26	23.54	23.43	23.43	23.43	24	0	0	0	0
3	QPSK	1	52	23.54	23.43	23.43	23.43	24	0	0	0	0
3	QPSK	8	0	22.60	22.52	22.52	22.52	24	0	0	0	0
3	QPSK	8	4	22.61	22.57	22.55	22.55	24	0	0	0	0
3	QPSK	8	8	22.61	22.57	22.55	22.55	24	0	0	0	0
3	QPSK	8	12	22.60	22.57	22.55	22.55	24	0	0	0	0
3	QPSK	16	0	22.60	22.48	22.51	22.51	24	0	0	0	0
3	QPSK	16	8	22.60	22.48	22.51	22.51	24	0	0	0	0
3	16QAM	1	0	22.84	22.82	22.82	22.82	24	0	0	0	0
3	16QAM	1	8	22.87	22.73	22.63	22.63	24	0	0	0	0
3	16QAM	1	16	22.87	22.73	22.63	22.63	24	0	0	0	0
3	16QAM	1	24	22.86	22.73	22.63	22.63	24	0	0	0	0
3	16QAM	8	4	21.87	21.81	21.81	21.81	24	0	0	0	0
3	16QAM	8	8	21.87	21.81	21.81	21.81	24	0	0	0	0
3	16QAM	8	12	21.87	21.81	21.81	21.81	24	0	0	0	0
3	16QAM	8	16	21.86	21.80	21.80	21.80	24	0	0	0	0
3	64QAM	1	0	21.76	21.79	21.78	21.78	24	0	0	0	0
3	64QAM	1	8	21.81	21.82	21.82	21.82	24	0	0	0	0
3	64QAM	1	16	21.81	21.82	21.82	21.82	24	0	0	0	0
3	64QAM	1	24	21.80	21.82	21.82	21.82	24	0	0	0	0
3	64QAM	8	4	20.68	20.68	20.68	20.68	24	0	0	0	0
3	64QAM	8	8	20.68	20.68	20.68	20.68	24	0	0	0	0
3	64QAM	8	12	20.68	20.68	20.68	20.68	24	0	0	0	0
3	256QAM	1	0	18.84	18.75	18.80	18.80	24	0	0	0	0
3	256QAM	1	8	18.84	18.75	18.80	18.80	24	0	0	0	0
3	256QAM	1	16	18.84	18.75	18.80	18.80	24	0	0	0	0
3	256QAM	1	24	18.83	18.75	18.80	18.80	24	0	0	0	0
3	256QAM	8	4	18.87	18.71	18.63	18.63	24	0	0	0	0
3	256QAM	8	8	18.88	18.68	18.63	18.63	24	0	0	0	0
3	256QAM	8	16	18.87	18.58	18.53	18.53	24	0	0	0	0
3	256QAM	8	24	18.86	18.58	18.53	18.53	24	0	0	0	0
Channel 4												
Frequency (MHz)												
14	QPSK	1	0	23.20	23.27	23.28	23.28	24	0	0	0	0
14	QPSK	1	0	23.21	23.27	23.28	23.28	24	0	0	0	0
14	QPSK	1	5	23.28	23.34	23.34	23.34	24	0	0	0	0
14	QPSK	1	5	23.48	23.39	23.39	23.39	24	0	0	0	0
14	QPSK	1	10	23.48	23.39	23.39	23.39	24	0	0	0	0
14	QPSK	1	15	23.48	23.39	23.39	23.39	24	0	0	0	0
14	QPSK	8	0	23.44	23.43	23.42	23.42	24	0	0	0	0
14	QPSK	8	4	22.90	22.92	22.92	22.92	24	0	0	0	0
14	QPSK	8	8	22.91	22.92	22.92	22.92	24	0	0	0	0
14	16QAM	1	0	22.76	22.84	22.84	22.84	24	0	0	0	0
14	16QAM	1	4	22.76	22.84	22.84	22.84	24	0	0	0	0
14	16QAM	1	8	22.80	22.81	22.80	22.80	24	0	0	0	0
14	16QAM	1	12	22.80	22.81	22.80	22.80	24	0	0	0	0
14	16QAM	8	0	21.82	21.79	21.81	21.81	24	0	0	0	0
14	16QAM	8	4	21.73	21.80	21.78	21.78	24	0	0	0	0
14	16QAM	8	8	21.73	21.80	21.78	21.78	24	0	0	0	0
14	16QAM	8	12	21.73	21.80	21.78	21.78	24	0	0	0	0
14	64QAM	1	0	21.64	21.67	21.65	21.65	24	0	0	0	0
14	64QAM	1	4	21.70	21.68	21.65	21.65	24	0	0	0	0
14	64QAM	1	8	21.73	21.63	21.63	21.63	24	0	0	0	0
14	64QAM	1	12	21.67	21.63	21.63	21.63	24	0	0	0	0
14	64QAM	8	0	20.85	20.49	20.44	20.44	24	0	0	0	0
14	256QAM	1	0	18.77	18.74	18.68	18.68	24	0	0	0	0
14	256QAM	1	4	18.80	18.62	18.58	18.58	24	0	0	0	0
14	256QAM	1	8	18.80	18.62	18.58	18.58	24	0	0	0	0
14	256QAM	1	12	18.78	18.61	18.58	18.58	24	0	0	0	0
14	256QAM	8	0	18.83	18.50	18.57	18.57	24	0	0	0	0
14	2											

Band 7 (200 MHz)										Turn-on (ms)	Spectrum (MHz)
BW (MHz)	Modulation	RB Size	RB Offset	Power Level			Turn-on (ms)	Spectrum (MHz)			
				Power Level 1	Power Level 2	Power Level 3					
Frequency (MHz)											
20	QPSK	1	0	23.87	24.18	24.13					
20	QPSK	1	49	23.87	24.18	24.13		24.8	0		
20	QPSK	1	99	23.89	24.19	24.18					
20	QPSK	80	0	23.87	24.18	24.13					
20	QPSK	80	24	23.87	24.18	24.13					
20	QPSK	80	34	23.87	24.18	24.13		23.8	1		
20	QPSK	80	50	23.89	24.19	24.18					
20	QPSK	160	0	23.87	24.18	24.13					
20	16QAM	1	0	23.23	23.45	23.40					
20	16QAM	1	49	23.27	23.52	23.47		23.8	1		
20	16QAM	1	99	23.29	23.54	23.53					
20	16QAM	80	0	23.23	23.45	23.40					
20	16QAM	80	24	23.28	23.53	23.53		22.8	2		
20	16QAM	80	34	23.28	23.53	23.53					
20	16QAM	80	50	23.29	23.54	23.53					
20	16QAM	160	0	22.28	22.58	22.53					
20	16QAM	160	1	22.29	22.59	22.58					
20	16QAM	160	2	22.29	22.59	22.58					
20	16QAM	160	3	22.29	22.59	22.58					
20	16QAM	160	4	22.29	22.59	22.58					
20	16QAM	160	5	22.29	22.59	22.58					
20	16QAM	160	6	22.29	22.59	22.58					
20	16QAM	160	7	22.29	22.59	22.58					
20	16QAM	160	8	22.29	22.59	22.58					
20	16QAM	160	9	22.29	22.59	22.58					
20	16QAM	160	10	22.29	22.59	22.58					
20	16QAM	160	11	22.29	22.59	22.58					
20	16QAM	160	12	22.29	22.59	22.58					
20	16QAM	160	13	22.29	22.59	22.58					
20	16QAM	160	14	22.29	22.59	22.58					
20	16QAM	160	15	22.29	22.59	22.58					
20	16QAM	160	16	22.29	22.59	22.58					
20	16QAM	160	17	22.29	22.59	22.58					
20	16QAM	160	18	22.29	22.59	22.58					
20	16QAM	160	19	22.29	22.59	22.58					
20	16QAM	160	20	22.29	22.59	22.58					
20	16QAM	160	21	22.29	22.59	22.58					
20	16QAM	160	22	22.29	22.59	22.58					
20	16QAM	160	23	22.29	22.59	22.58					
20	16QAM	160	24	22.29	22.59	22.58					
20	16QAM	160	25	22.29	22.59	22.58					
20	16QAM	160	26	22.29	22.59	22.58					
20	16QAM	160	27	22.29	22.59	22.58					
20	16QAM	160	28	22.29	22.59	22.58					
20	16QAM	160	29	22.29	22.59	22.58					
20	16QAM	160	30	22.29	22.59	22.58					
20	16QAM	160	31	22.29	22.59	22.58					
20	16QAM	160	32	22.29	22.59	22.58					
20	16QAM	160	33	22.29	22.59	22.58					
20	16QAM	160	34	22.29	22.59	22.58					
20	16QAM	160	35	22.29	22.59	22.58					
20	16QAM	160	36	22.29	22.59	22.58					
20	16QAM	160	37	22.29	22.59	22.58					
20	16QAM	160	38	22.29	22.59	22.58					
20	16QAM	160	39	22.29	22.59	22.58					
20	16QAM	160	40	22.29	22.59	22.58					
20	16QAM	160	41	22.29	22.59	22.58					
20	16QAM	160	42	22.29	22.59	22.58					
20	16QAM	160	43	22.29	22.59	22.58					
20	16QAM	160	44	22.29	22.59	22.58					
20	16QAM	160	45	22.29	22.59	22.58					
20	16QAM	160	46	22.29	22.59	22.58					
20	16QAM	160	47	22.29	22.59	22.58					
20	16QAM	160	48	22.29	22.59	22.58					
20	16QAM	160	49	22.29	22.59	22.58					
20	16QAM	160	50	22.29	22.59	22.58					
20	16QAM	160	51	22.29	22.59	22.58					
20	16QAM	160	52	22.29	22.59	22.58					
20	16QAM	160	53	22.29	22.59	22.58					
20	16QAM	160	54	22.29	22.59	22.58					
20	16QAM	160	55	22.29	22.59	22.58					
20	16QAM	160	56	22.29	22.59	22.58					
20	16QAM	160	57	22.29	22.59	22.58					
20	16QAM	160	58	22.29	22.59	22.58					
20	16QAM	160	59	22.29	22.59	22.58					
20	16QAM	160	60	22.29	22.59	22.58					
20	16QAM	160	61	22.29	22.59	22.58					
20	16QAM	160	62	22.29	22.59	22.58					
20	16QAM	160	63	22.29	22.59	22.58					
20	16QAM	160	64	22.29	22.59	22.58					
20	16QAM	160	65	22.29	22.59	22.58					
20	16QAM	160	66	22.29	22.59	22.58					
20	16QAM	160	67	22.29	22.59	22.58					
20	16QAM	160	68	22.29	22.59	22.58					
20	16QAM	160	69	22.29	22.59	22.58					
20	16QAM	160	70	22.29	22.59	22.58					
20	16QAM	160	71	22.29	22.59	22.58					
20	16QAM	160	72	22.29	22.59	22.58					
20	16QAM	160	73	22.29	22.59	22.58					
20	16QAM	160	74	22.29	22.59	22.58					
20	16QAM	160	75	22.29	22.59	22.58					
20	16QAM	160	76	22.29	22.59	22.58					
20	16QAM	160	77	22.29	22.59	22.58					
20	16QAM	160	78	22.29	22.59	22.58					
20	16QAM	160	79	22.29	22.59	22.58					
20	16QAM	160	80	22.29	22.59	22.58					
20	16QAM	160	81	22.29	22.59	22.58					
20	16QAM	160	82	22.29	22.59	22.58					
20	16QAM	160	83	22.29	22.59	22.58					
20	16QAM	160	84	22.29	22.59	22.58					
20	16QAM	160	85	22.29	22.59	22.58					
20	16QAM	160	86	22.29	22.59	22.58					
20	16QAM	160	87	22.29	22.59	22.58					
20	16QAM	160	88	22.29	22.59	22.58					
20	16QAM	160	89	22.29	22.59	22.58					
20	16QAM	160	90	22.29	22.59	22.58					
20	16QAM	160	91	22.29	22.59	22.58					
20	16QAM	160	92	22.29	22.59	22.58					
20	16QAM	160	93	22.29	22.59	22.58					
20	16QAM	160	94	22.29	22.59	22.58					
20	16QAM	160	95	22.29	22.59	22.58					
20	16QAM	160	96	22.29	22.59	22.58					
20	16QAM	160	97	22.29	22.59	22.58					
20	16QAM	160	98	22.29	22.59	22.58					
20	16QAM	160	99	22.29	22.59	22.58					
20	16QAM	160	100	22.29	22.59	22.58					
20	16QAM	160	101	22.29	22.59	22.58					
20	16QAM	160	102	22.29	22.59	22.58					
20	16QAM	160	103	22.29	22.59	22.58					
20	16QAM	160	104	22.29	22.59	22.58					
20	16QAM	160	105	22.29	22.59	22.58					
20	16QAM	160	106	22.29	22.59	22.58					
20	16QAM	160	107	22.29	22.59	22.58					
20	16QAM	160	108	22.29	22.59	22.58					
20	16QAM	160	109	22.29	22.59	22.58					
20	16QAM	160	110	22.29	22.59	22.58					
20	16QAM	160	111	22.29	22.59	22.58					
20	16QAM	160	112	22.29	22.59	22.58					
20	16QAM	160	113	22.29	22.59	22.58					
20	16QAM	160	114	22.29	22.59	22.58					
20	16QAM	160	115	22.29	22.59	22.58					
20	16QAM	160	116	22.29	22.59	22.58					
20	16QAM	160	117	22.29	22.59	22.58					
20	16QAM	160	118	22.29	22.59	22.58					
20	16QAM	160	119	22.29	22.59	22.58					
20	16QAM	160	120	22.29	22.59	22.58					
20	16QAM	160	121	22.29	22.59	22.58					
20	16QAM	160	122	22.29	22.59	22.58					
20	16QAM	160	123	22.29	22.59	22.58					
20	16QAM	160	124	22.29	22.59	22.58					
20	16QAM	160	125	22.29	22.59	22.58					
20	16QAM	160	126	22.29	22.59	22.58					
20	16QAM	160	127	22.29	22.59	22.58					
20	16QAM	160	128	22.29	22.59	22.58					
20	16QAM	160	129	22.29	22.59	22.58					
20	16QAM	160	130	22.29	22.59	22.58					
20	16QAM	160	131	22.29	22.59	22.58					
20	16QAM	160	132	22.29	22.59	22.58					
20	16QAM	160	133	22.29	22.59	22.58					
20	16QAM	160	134	22.29	22.59	22.58					
20	16QAM	160	135	22.29	22.59	22.58					
20	16QAM	160	136	22.29	22.59	22.58					
20	16QAM	160	137	22.29	22.59	22.58					
20	16QAM	160	138	22.29	22.59	22.58					
20	16QAM	160	139	22.29	22.59	22.58					
20	16QAM	160	140	22.29	22.59	22.58					
20	16QAM	160	141	22.29	22.59	22.58					
20	16QAM	160	142	22.29	22.59	22.58					
20	16										



Band 12 (700MHz Low Band) Part 27F (only on channel required)															
BV (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Mid Ch./Freq.	Power High Ch./Freq.	Time-up (sec)	MPE (dB)							
Channel															
Frequency (MHz)				764	767.5	771									
10	QPSK	1	5	23.62	23.67	23.80	24.8	0							
10	QPSK	1	26	23.68	23.73	23.80									
10	QPSK	1	49	23.67	23.71	23.68									
10	QPSK	25	5	22.74	22.78	22.78									
10	QPSK	25	26	22.79	22.84	22.81									
10	QPSK	25	5	22.74	22.78	22.78	23.8	1							
10	QPSK	25	12	22.75	22.78	22.78									
10	16QAM	1	5	23.68	23.68	23.80									
10	16QAM	1	26	23.68	23.68	23.80									
10	16QAM	1	49	23.71	23.61	23.68									
10	16QAM	25	5	21.84	21.77	21.77	22.8	2							
10	16QAM	25	12	21.85	21.83	21.78									
10	16QAM	25	26	21.86	21.85	21.79									
10	16QAM	50	5	21.82	21.80	21.75									
10	16QAM	1	5	21.82	21.81	21.81									
10	16QAM	1	25	21.82	21.81	21.80	22.8	2							
10	16QAM	1	49	22.01	22.00	21.92									
10	16QAM	25	5	20.79	20.82	20.83									
10	16QAM	25	12	20.86	20.83	20.83									
10	16QAM	25	26	20.86	20.87	20.82									
10	16QAM	50	5	20.84	20.85	20.79	21.8	3							
10	25QAM	1	5	18.96	18.96	18.77									
10	25QAM	1	25	18.76	18.86	18.83									
10	25QAM	1	49	18.80	18.81	18.85									
10	25QAM	25	5	18.71	18.72	18.78									
10	25QAM	25	12	18.76	18.72	18.71	19.8	5							
10	25QAM	25	26	18.71	18.77	18.74									
10	25QAM	50	5	18.74	18.74	18.72									
Channel															
Frequency (MHz)				761.5	767.4	771.5									
5	QPSK	1	5	23.61	23.58	23.59	24.8	0							
5	QPSK	1	14	23.64	23.63	23.64									
5	QPSK	1	24	23.67	23.65	23.62									
5	QPSK	12	5	22.64	22.70	22.69									
5	QPSK	12	7	22.68	22.74	22.67									
5	QPSK	12	13	22.67	22.70	22.68	23.8	1							
5	QPSK	25	5	22.64	22.68	22.63									
5	16QAM	1	5	23.66	23.66	23.80									
5	16QAM	1	12	22.82	22.85	22.87									
5	16QAM	1	24	22.86	22.80	22.84									
5	16QAM	12	5	21.71	21.73	21.72	22.8	2							
5	16QAM	12	7	21.73	21.80	21.68									
5	16QAM	12	13	21.67	21.74	21.65									
5	16QAM	25	5	21.69	21.70	21.69									
5	16QAM	1	5	21.69	21.69	21.65									
5	16QAM	1	5	21.69	21.69	21.65	22.8	2							
5	16QAM	1	12	21.67	21.63	21.69									
5	16QAM	1	24	21.74	21.60	21.71									
5	16QAM	12	5	20.75	20.78	20.75									
5	16QAM	12	7	20.87	20.84	20.84									
5	16QAM	12	13	20.87	20.78	20.78	21.8	3							
5	16QAM	25	5	20.71	20.70	20.68									
5	25QAM	1	5	18.75	18.86	18.80									
5	25QAM	1	12	18.75	18.86	18.80									
5	25QAM	1	24	18.75	18.86	18.83									
5	25QAM	12	5	18.67	18.71	18.74	19.8	5							
5	25QAM	12	7	18.71	18.76	18.75									
5	25QAM	12	13	18.67	18.69	18.71									
5	25QAM	25	5	18.67	18.65	18.66									
5	25QAM	25	5	18.67	18.65	18.66									

Band 12(700MHz Low Band) Part 27F (only on channel required)									
BV (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Mid Ch./Freq.	Power High Ch./Freq.	Time-up (sec)	MPE (dB)	
Channel									
Frequency (MHz)				762					
10	QPSK	1	5	23.44	23.44		24.8	0	
10	QPSK	1	26	23.44					
10	QPSK	1	49	23.43					
10	QPSK	25	5	22.80					
10	QPSK	25	12	22.80					
10	QPSK	25	25	22.84			23.8	1	
10	QPSK	50	5	22.87					
10	16QAM	1	5	23.82					
10	16QAM	1	26	23.73					
10	16QAM	1	49	22.78					
10	16QAM	25	12	21.52			22.8	2	
10	16QAM	25	25	21.57					
10	16QAM	50	5	21.52					
10	16QAM	1	5	21.56					
10	16QAM	1	25	21.74					
10	16QAM	1	49	21.87			22.8	2	
10	16QAM	25	5	20.43					
10	16QAM	25	12	20.48					
10	16QAM	25	25	20.53					
10	25QAM	1	5	18.80					
10	25QAM	1	25	18.76			19.8	5	
10	25QAM	1	49	18.81					
10	25QAM	25	5	18.84					
10	25QAM	25	12	18.81					
10	25QAM	25	25	18.88					
10	25QAM	50	5	18.87					
Channel				765.5	769.5	774.5	Time-up (sec)	MPE (dB)	
Frequency (MHz)				775.5	782	784.5			
5	QPSK	1	5	23.36	23.31	23.33	24.8	0	
5	QPSK	1	12	23.38	23.41	23.41			
5	QPSK	1	24	23.27	23.32	23.32			
5	QPSK	12	5	22.51	22.52	22.49			
5	QPSK	12	7	22.53	22.51	22.50			
5	QPSK	12	13	22.57	22.57	22.56	23.8	1	
5	QPSK	25	5	22.58	22.48	22.51			
5	16QAM	1	5	22.80	22.75	22.74			
5	16QAM	1	12	22.80	22.86	22.86			
5	16QAM	1	24	22.86	22.88	22.78			
5	16QAM	12	5	21.66	21.58	21.58	22.8	2	
5	16QAM	12	7	21.68	21.64	21.61			
5	16QAM	12	13	21.68	21.53	21.52			
5	16QAM	25	5	21.58	21.57	21.57			
5	16QAM	25	12	21.58	21.64	21.64			
5	16QAM	25	25	21.62	21.58	21.57	22.2	2	
5	16QAM	50	5	21.57	21.57	21.57			
5	16QAM	1	24	21.80	21.81	21.72			
5	16QAM	1	49	21.82	21.82	21.64			
5	16QAM	12	7	20.67	20.54	20.44			
5	16QAM	12	13	20.67	20.59	20.44	21.8	3	
5	16QAM	25	5	20.76	20.61	20.57			
5	16QAM	25	12	20.76	20.61	20.57			
5	16QAM	25	25	20.76	20.61	20.57			
5	16QAM	50	5	20.76	20.61	20.57			
5	25QAM	1	12	19.06	18.94	18.94	19.8	5	
5	25QAM	1	25	19.06	18.94	18.94			
5	25QAM	1	49	19.06	18.94	18.94			
5	25QAM	12	5	18.98	18.84	18.80			
5	25QAM	12	7	18.94	18.79	18.71			
5	25QAM	12	13	18.77	18.61	18.60	19.8	5	
5	25QAM	25	5	18.92	18.76	18.76			
5	25QAM	25	12	18.92	18.76	18.76			
5	25QAM	25	25	18.92	18.76	18.76			
5	25QAM	50	5	18.92	18.76	18.76			

Band 26 for FCC (only on a channel required)									
RF Freq (MHz)	Modulation	IF Bins (Hz)	IFB Offset (Hz)	Low Pass Filter (MHz)	High Pass Filter (MHz)	Transmit Power (dBm)	Antenna Gain (dBi)	Antenna Height (m)	Antenna Type
Channel 1									
15	QPSK	1	0	26.765	26.865	26.965	27.065	27.165	27.265
15	QPSK	1	37	23.59	23.69	23.79	23.89	23.99	24.09
15	QPSK	1	74	23.60	23.63	23.67	23.70	23.73	23.76
15	QPSK	1	111	23.61	23.64	23.67	23.70	23.73	23.76
15	QPSK	36	20	22.79	22.71	22.61	22.51	22.41	22.31
15	QPSK	36	39	22.79	22.79	22.68	22.58	22.48	22.38
15	QPSK	36	72	22.79	22.79	22.62	22.52	22.42	22.32
15	QPSK	36	105	22.79	22.79	22.62	22.52	22.42	22.32
15	QPSK	1	0	22.98	22.93	22.83	22.73	22.63	22.53
15	QPSK	1	37	22.93	22.83	22.68	22.58	22.48	22.38
15	QPSK	1	74	22.83	22.73	22.58	22.48	22.38	22.28
15	QPSK	1	111	22.73	22.63	22.48	22.38	22.28	22.18
15	QPSK	36	20	21.73	21.72	21.62	21.52	21.42	21.32
15	QPSK	36	39	21.73	21.72	21.62	21.52	21.42	21.32
15	QPSK	36	72	21.73	21.72	21.62	21.52	21.42	21.32
15	QPSK	36	105	21.73	21.72	21.62	21.52	21.42	21.32
15	QPSK	1	0	21.65	21.64	21.67	21.67	21.67	21.67
15	QPSK	1	37	21.65	21.64	21.67	21.67	21.67	21.67
15	QPSK	1	74	21.61	21.61	21.61	21.61	21.61	21.61
15	QPSK	36	0	20.57	20.48	20.38	20.28	20.18	20.08
15	QPSK	36	33	20.57	20.48	20.38	20.28	20.18	20.08
15	QPSK	36	66	20.57	20.48	20.38	20.28	20.18	20.08
15	QPSK	36	99	20.57	20.48	20.38	20.28	20.18	20.08
15	QPSK	75	0	19.63	19.57	19.51	19.45	19.39	19.33
15	QPSK	75	33	19.63	19.57	19.51	19.45	19.39	19.33
15	QPSK	75	66	19.63	19.57	19.51	19.45	19.39	19.33
15	QPSK	75	99	19.63	19.57	19.51	19.45	19.39	19.33
15	QPSK	1	0	18.56	18.55	18.54	18.53	18.52	18.51
15	QPSK	1	37	18.56	18.55	18.54	18.53	18.52	18.51
15	QPSK	1	74	18.63	18.60	18.54	18.50	18.46	18.42
15	QPSK	1	111	18.63	18.60	18.54	18.50	18.46	18.42
15	QPSK	36	20	18.66	18.75	18.85	18.95	19.05	19.15
15	QPSK	36	39	18.75	18.85	18.95	19.05	19.15	19.25
15	QPSK	36	72	18.85	18.95	19.05	19.15	19.25	19.35
15	QPSK	36	105	18.95	19.05	19.15	19.25	19.35	19.45
Channel 2									
15	QPSK	1	0	26.765	26.865	26.965	27.065	27.165	27.265
15	QPSK	1	37	23.49	23.59	23.69	23.79	23.89	23.99
15	QPSK	1	74	23.49	23.59	23.69	23.79	23.89	23.99
15	QPSK	1	111	23.51	23.63	23.63	23.75	23.87	23.99
15	QPSK	25	0	22.55	22.60	22.62	22.64	22.66	22.68
15	QPSK	25	33	22.55	22.60	22.62	22.64	22.66	22.68
15	QPSK	25	66	22.55	22.60	22.62	22.64	22.66	22.68
15	QPSK	25	99	22.55	22.60	22.62	22.64	22.66	22.68
15	QPSK	1	0	22.98	22.93	22.83	22.73	22.63	22.53
15	QPSK	1	37	22.93	22.83	22.68	22.58	22.48	22.38
15	QPSK	1	74	22.83	22.73	22.58	22.48	22.38	22.28
15	QPSK	1	111	22.73	22.63	22.48	22.38	22.28	22.18
15	QPSK	36	20	21.73	21.72	21.62	21.52	21.42	21.32
15	QPSK	36	39	21.73	21.72	21.62	21.52	21.42	21.32
15	QPSK	36	72	21.73	21.72	21.62	21.52	21.42	21.32
15	QPSK	36	105	21.73	21.72	21.62	21.52	21.42	21.32
15	QPSK	1	0	21.65	21.64	21.67	21.67	21.67	21.67
15	QPSK	1	37	21.65	21.64	21.67	21.67	21.67	21.67
15	QPSK	1	74	21.61	21.61	21.61	21.61	21.61	21.61
15	QPSK	36	0	20.57	20.48	20.38	20.28	20.18	20.08
15	QPSK	36	33	20.57	20.48	20.38	20.28	20.18	20.08
15	QPSK	36	66	20.57	20.48	20.38	20.28	20.18	20.08
15	QPSK	36	99	20.57	20.48	20.38	20.28	20.18	20.08
15	QPSK	75	0	19.63	19.57	19.51	19.45	19.39	19.33
15	QPSK	75	33	19.63	19.57	19.51	19.45	19.39	19.33
15	QPSK	75	66	19.63	19.57	19.51	19.45	19.39	19.33
15	QPSK	75	99	19.63	19.57	19.51	19.45	19.39	19.33
15	QPSK	1	0	18.56	18.55	18.54	18.53	18.52	18.51
15	QPSK	1	37	18.56	18.55	18.54	18.53	18.52	18.51
15	QPSK	1	74	18.63	18.60	18.54	18.50	18.46	18.42
15	QPSK	1	111	18.63	18.60	18.54	18.50	18.46	18.42
15	QPSK	36	20	18.66	18.75	18.85	18.95	19.05	19.15
15	QPSK	36	39	18.75	18.85	18.95	19.05	19.15	19.25
15	QPSK	36	72	18.85	18.95	19.05	19.15	19.25	19.35
15	QPSK	36	105	18.95	19.05	19.15	19.25	19.35	19.45
Channel 3									
15	QPSK	1	0	26.765	26.865	26.965	27.065	27.165	27.265
15	QPSK	1	37	23.49	23.59	23.69	23.79	23.89	23.99
15	QPSK	1	74	23.49	23.59	23.69	23.79	23.89	23.99
15	QPSK	1	111	23.51	23.63	23.63	23.75	23.87	23.99
15	QPSK	25	0	22.55	22.60	22.62	22.64	22.66	22.68
15	QPSK	25	33	22.55	22.60	22.62	22.64	22.66	22.68
15	QPSK	25	66	22.55	22.60	22.62	22.64	22.66	22.68
15	QPSK	25	99	22.55	22.60	22.62	22.64	22.66	22.68
15	QPSK	1	0	22.98	22.93	22.83	22.73	22.63	22.53
15	QPSK	1	37	22.93	22.83	22.68	22.58	22.48	22.38
15	QPSK	1	74	22.83	22.73	22.58	22.48	22.38	22.28
15	QPSK	1	111	22.73	22.63	22.48	22.38	22.28	22.18
15	QPSK	36	20	21.73	21.72	21.62	21.52	21.42	21.32
15	QPSK	36	39	21.73	21.72	21.62	21.52	21.42	21.32
15	QPSK	36	72	21.73	21.72	21.62	21.52	21.42	21.32
15	QPSK	36	105	21.73	21.72	21.62	21.52	21.42	21.32
15	QPSK	1	0	21.65	21.64	21.67	21.67	21.67	21.67
15	QPSK	1	37	21.65	21.64	21.67	21.67	21.67	21.67
15	QPSK	1	74	21.61	21.61	21.61	21.61	21.61	21.61
15	QPSK	36	0	20.57	20.48	20.38	20.28	20.18	20.08
15	QPSK	36	33	20.57	20.48	20.38	20.28	20.18	20.08
15	QPSK	36	66	20.57	20.48	20.38	20.28	20.18	20.08
15	QPSK	36	99	20.57	20.48	20.38	20.28	20.18	20.08
15	QPSK	75	0	19.63	19.57	19.51	19.45	19.39	19.33
15	QPSK	75	33	19.63	19.57	19.51	19.45	19.39	19.33
15	QPSK	75	66	19.63	19.57	19.51	19.45	19.39	19.33
15	QPSK	75	99	19.63	19.57	19.51	19.45	19.39	19.33
15	QPSK	1	0	18.56	18.55	18.54	18.53	18.52	18.51
15	QPSK	1	37	18.56	18.55	18.54	18.53	18.52	18.51
15	QPSK	1	74	18.63	18.60	18.54	18.50	18.46	18.42
15	QPSK	1	111	18.63	18.60	18.54	18.50	18.46	18.42
15	QPSK	36	20	18.66	18.75	18.85	18.95	19.05	19.15
15	QPSK	36	39	18.75	18.85	18.95	19.05	19.15	19.25
15	QPSK	36	72	18.85	18.95	19.05	19.15	19.25	19.35
15	QPSK	36	105	18.95	19.05	19.15	19.25	19.35	19.45
Channel 4									
15	QPSK	1	0	26.765	26.865	26.965	27.065	27.165	27.265
15	QPSK	1	37	23.49	23.59	23.69	23.79	23.89	23.99
15	QPSK	1	74	23.49	23.59	23.69	23.79	23.89	23.99
15	QPSK	1	111	23.51	23.63	23.63	23.75	23.87	23.99
15	QPSK	25	0	22.55	22.60	22.62	22.64	22.66	22.68
15	QPSK	25	33	22.55	22.60	22.62	22.64	22.66	22.68
15	QPSK	25	66	22.55	22.60	22.62	22.64	22.66	22.68
15	QPSK	25	99	22.55	22.60	22.62	22.64	22.66	22.68
15	QPSK	1	0	22.98	22.93	22.83	22.73	22.63	22.53
15	QPSK	1	37	22.93	22.83	22.68	22.58	22.48	22.38
15	QPSK	1	74	22.83	22.73	22.58	22.48	22.38	22.28
15	QPSK	1	111	22.73	22.63	22.48	22.38	22.28	22.18
15	QPSK	36	20	21.73	21.72	21.62	21.52	21.42	21.32
15	QPSK	36	39	21.73	21.72	21.62	21.52	21.42	21.32
15	QPSK	36	72	21.73	21.72	21.62	21.52	21.42	21.32
15	QPSK	36	105	21.73	21.72	21.62	21.52	21.42	21.32
15	QPSK	1	0	21.65	21.64	21.67	21.67	21.67	21.67
15	QPSK	1	37	21.65	21.64	21.67	21.67	21.67	21.67
15	QPSK	1	74	21.61	21.61	21.61	21.61	21.61	21.61
15	QPSK	36	0	20.57	20.48	20.38	20.28	20.18	20.08
15	QPSK	36	33	20.57	20.48	20.38	20.28	20.18	20.08
15	QPSK	36	66	20.57	20.48	20.38	20.28	20.18	20.08
15	QPSK	36	99	20.57	20.48	20.38	20.28	20.18	20.08
15	QPSK	75	0	19.63	19.57	19.51	19.45	19.39	19.33
15	QPSK	75	33	19.63	19.57	19.51	19.45	19.39	19.33
15	QPSK	75	66	19.63	19.57	19.51	19.45	19.39	19.33
15	QPSK	75	99	19.63	19.				

Band 30									
Ref ID	Modulation	RBs	RB Offset	Power Loss Co. Freq.	Power Loss Co. Freq.	Power Loss Co. Freq.	Time-avg. (dB)	MPE (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	0	24.00	24.00				
10	QPSK	1	25	24.03	24.03		24.0	0	
10	QPSK	1	49	24.03	24.03				
10	QPSK	1	73	24.06	24.06				
10	QPSK	20	12	23.19	23.19		23.0	1	
10	QPSK	20	36	23.19	23.19				
10	QPSK	50	0	23.16	23.16				
10	HQAM	1	0	20.39	20.39				
10	HQAM	1	25	20.46	20.46		20.0	1	
10	HQAM	1	49	20.24	20.24				
10	HQAM	20	0	22.08	22.08				
10	HQAM	20	25	22.05	22.05		22.0	2	
10	HQAM	20	49	22.05	22.05				
10	HQAM	50	0	22.14	22.14				
10	HQAM	50	25	22.22	22.22		22.0	2	
10	HQAM	50	49	22.22	22.22				
10	HQAM	1	25	22.32	22.32				
10	HQAM	1	49	22.32	22.32				
10	HQAM	20	12	21.25	21.25		21.0	3	
10	HQAM	20	36	21.48	21.48				
10	HQAM	50	0	19.19	19.19				
10	HQAM	50	25	20.26	20.26		19.0	4	
10	HQAM	1	49	19.24	19.24				
10	PSK256	20	0	19.33	19.33		19.0	5	
10	PSK256	20	25	19.37	19.37				
10	PSK256	50	0	19.40	19.40				
							Time-avg. (dB)	MPE (dB)	
				21.00	21.11	21.12		19.0	
Frequency (MHz)									
5	QPSK	1	0	20.00	20.00	20.00			
5	QPSK	1	25	20.03	20.03	20.03	20.0	0	
5	QPSK	1	49	20.03	20.03	20.03			
5	QPSK	12	0	20.13	20.09	20.11			
5	QPSK	12	25	20.17	20.17	20.17	20.0	1	
5	QPSK	14	19	20.33	20.13	20.27			
5	QPSK	20	0	20.32	20.10	20.21			
5	QPSK	20	25	20.32	20.12	20.43	20.0	1	
5	HQAM	1	12	18.60	18.62	18.39	20.0	1	
5	HQAM	1	24	18.51	18.28	18.20			
5	HQAM	1	36	18.52	18.29	18.15			
5	HQAM	14	7	22.24	22.19	22.22	22.0	2	
5	HQAM	20	0	20.20	20.00	20.23			
5	HQAM	20	12	20.13	20.04	20.20			
5	HQAM	1	0	21.82	21.68	22.08	22.0	2	
5	HQAM	1	12	21.76	21.63	21.99			
5	HQAM	1	24	21.89	21.64	22.22			
5	HQAM	12	0	21.02	21.20	21.36			
5	HQAM	12	12	21.04	21.20	21.36	21.0	3	
5	HQAM	14	19	21.38	21.38	21.21			
5	HQAM	20	0	21.26	21.18	21.15			
5	HQAM	20	12	21.24	21.20	21.35			
5	PSK256	1	12	19.23	19.28	19.30	19.0	5	
5	PSK256	1	24	19.40	19.48	19.48			
5	PSK256	1	36	19.29	19.29	19.49			
5	PSK256	12	7	19.38	19.46	19.50	19.0	5	
							Time-avg. (dB)	MPE (dB)	
5	PSK256	12	15	19.27	19.32	19.41			

Band 6										
PRF (MHz)	Modulation	Channel	RS	RS Offset	PRF Ch. Center 130972	PRF Ch. Edge 130972	PRF Ch. Edge 130972	PRF Ch. Edge 130972	Turn-up (dB)	Spurs (dB)
Channel 1										
20	QPSK	1	0	0	21.84	21.84	21.84			
20	QPSK	1	49	23.71	23.87	23.87	23.87	24.8	0	
20	QPSK	1	99	23.72	23.85	23.78	23.85			
20	QPSK	1	149	23.78	23.86	23.86	23.86			
20	QPSK	1	199	23.81	23.81	23.81	23.81	23.8	1	
20	QPSK	1	249	23.87	23.83	23.83	23.83			
20	QPSK	1	299	23.88	23.82	23.82	23.82			
20	QPSK	1	349	23.90	23.89	23.89	23.89			
20	QPSK	1	399	23.92	23.88	23.88	23.88	23.8	1	
20	QPSK	1	449	23.94	23.93	23.93	23.93			
20	QPSK	1	499	23.94	23.90	23.90	23.90			
20	QPSK	1	549	23.95	23.91	23.91	23.91			
20	QPSK	1	599	23.96	23.92	23.92	23.92	22.8	2	
20	QPSK	1	649	23.97	23.93	23.93	23.93			
20	QPSK	1	699	23.98	23.94	23.94	23.94			
20	QPSK	1	749	23.99	23.95	23.95	23.95	22.8	2	
20	QPSK	1	799	24.00	23.96	23.96	23.96			
20	QPSK	1	849	24.01	23.97	23.97	23.97	21.8	3	
20	QPSK	1	899	24.02	23.98	23.98	23.98			
20	QPSK	1	949	24.03	23.99	23.99	23.99	19.8	5	
20	QPSK	1	999	24.04	24.00	24.00	24.00			
20	QPSK	1	1049	24.05	24.01	24.01	24.01	19.8	5	
20	QPSK	1	1099	24.06	24.02	24.02	24.02			
20	QPSK	1	1149	24.07	24.03	24.03	24.03	22.8	2	
20	QPSK	1	1199	24.08	24.04	24.04	24.04			
20	QPSK	1	1249	24.09	24.05	24.05	24.05	21.8	3	
20	QPSK	1	1299	24.10	24.06	24.06	24.06			
20	QPSK	1	1349	24.11	24.07	24.07	24.07	19.8	5	
20	QPSK	1	1399	24.12	24.08	24.08	24.08			
20	QPSK	1	1449	24.13	24.09	24.09	24.09	22.8	2	
20	QPSK	1	1499	24.14	24.10	24.10	24.10			
20	QPSK	1	1549	24.15	24.11	24.11	24.11	21.8	3	
20	QPSK	1	1599	24.16	24.12	24.12	24.12			
20	QPSK	1	1649	24.17	24.13	24.13	24.13	19.8	5	
20	QPSK	1	1699	24.18	24.14	24.14	24.14			
20	QPSK	1	1749	24.19	24.15	24.15	24.15	22.8	2	
20	QPSK	1	1799	24.20	24.16	24.16	24.16			
20	QPSK	1	1849	24.21	24.17	24.17	24.17	21.8	3	
20	QPSK	1	1899	24.22	24.18	24.18	24.18			
20	QPSK	1	1949	24.23	24.19	24.19	24.19	19.8	5	
20	QPSK	1	1999	24.24	24.20	24.20	24.20			
20	QPSK	1	2049	24.25	24.21	24.21	24.21	22.8	2	
20	QPSK	1	2099	24.26	24.22	24.22	24.22			
20	QPSK	1	2149	24.27	24.23	24.23	24.23	21.8	3	
20	QPSK	1	2199	24.28	24.24	24.24	24.24			
20	QPSK	1	2249	24.29	24.25	24.25	24.25	19.8	5	
20	QPSK	1	2299	24.30	24.26	24.26	24.26			
20	QPSK	1	2349	24.31	24.27	24.27	24.27	22.8	2	
20	QPSK	1	2399	24.32	24.28	24.28	24.28			
20	QPSK	1	2449	24.33	24.29	24.29	24.29	21.8	3	
20	QPSK	1	2499	24.34	24.30	24.30	24.30			
20	QPSK	1	2549	24.35	24.31	24.31	24.31	19.8	5	
20	QPSK	1	2599	24.36	24.32	24.32	24.32			
20	QPSK	1	2649	24.37	24.33	24.33	24.33	22.8	2	
20	QPSK	1	2699	24.38	24.34	24.34	24.34			
20	QPSK	1	2749	24.39	24.35	24.35	24.35	21.8	3	
20	QPSK	1	2799	24.40	24.36	24.36	24.36			
20	QPSK	1	2849	24.41	24.37	24.37	24.37	19.8	5	
20	QPSK	1	2899	24.42	24.38	24.38	24.38			
20	QPSK	1	2949	24.43	24.39	24.39	24.39	22.8	2	
20	QPSK	1	2999	24.44	24.40	24.40	24.40			
20	QPSK	1	3049	24.45	24.41	24.41	24.41	21.8	3	
20	QPSK	1	3099	24.46	24.42	24.42	24.42			
20	QPSK	1	3149	24.47	24.43	24.43	24.43	19.8	5	
20	QPSK	1	3199	24.48	24.44	24.44	24.44			
20	QPSK	1	3249	24.49	24.45	24.45	24.45	22.8	2	
20	QPSK	1	3299	24.50	24.46	24.46	24.46			
20	QPSK	1	3349	24.51	24.47	24.47	24.47	21.8	3	
20	QPSK	1	3399	24.52	24.48	24.48	24.48			
20	QPSK	1	3449	24.53	24.49	24.49	24.49	19.8	5	
20	QPSK	1	3499	24.54	24.50	24.50	24.50			
20	QPSK	1	3549	24.55	24.51	24.51	24.51	22.8	2	
20	QPSK	1	3599	24.56	24.52	24.52	24.52			
20	QPSK	1	3649	24.57	24.53	24.53	24.53	21.8	3	
20	QPSK	1	3699	24.58	24.54	24.54	24.54			
20	QPSK	1	3749	24.59	24.55	24.55	24.55	19.8	5	
20	QPSK	1	3799	24.60	24.56	24.56	24.56			
20	QPSK	1	3849	24.61	24.57	24.57	24.57	22.8	2	
20	QPSK	1	3899	24.62	24.58	24.58	24.58			
20	QPSK	1	3949	24.63	24.59	24.59	24.59	21.8	3	
20	QPSK	1	3999	24.64	24.60	24.60	24.60			
20	QPSK	1	4049	24.65	24.61	24.61	24.61	19.8	5	
20	QPSK	1	4099	24.66	24.62	24.62	24.62			
20	QPSK	1	4149	24.67	24.63	24.63	24.63	22.8	2	
20	QPSK	1	4199	24.68	24.64	24.64	24.64			
20	QPSK	1	4249	24.69	24.65	24.65	24.65	21.8	3	
20	QPSK	1	4299	24.70	24.66	24.66	24.66			
20	QPSK	1	4349	24.71	24.67	24.67	24.67	19.8	5	
20	QPSK	1	4399	24.72	24.68	24.68	24.68			
20	QPSK	1	4449	24.73	24.69	24.69	24.69	22.8	2	
20	QPSK	1	4499	24.74	24.70	24.70	24.70			
20	QPSK	1	4549	24.75	24.71	24.71	24.71	21.8	3	
20	QPSK	1	4599	24.76	24.72	24.72	24.72			
20	QPSK	1	4649	24.77	24.73	24.73	24.73	19.8	5	
20	QPSK	1	4699	24.78	24.74	24.74	24.74			
20	QPSK	1	4749	24.79	24.75	24.75	24.75	22.8	2	
20	QPSK	1	4799	24.80	24.76	24.76	24.76			
20	QPSK	1	4849	24.81	24.77	24.77	24.77	21.8	3	
20	QPSK	1	4899	24.82	24.78	24.78	24.78			
20	QPSK	1	4949	24.83	24.79	24.79	24.79	19.8	5	
20	QPSK	1	4999	24.84	24.80	24.80	24.80			
20	QPSK	1	5049	24.85	24.81	24.81	24.81	22.8	2	
20	QPSK	1	5099	24.86	24.82	24.82	24.82			
20	QPSK	1	5149	24.87	24.83	24.83	24.83	21.8	3	
20	QPSK	1	5199	24.88	24.84	24.84	24.84			
20	QPSK	1	5249	24.89	24.85	24.85	24.85	19.8	5	
20	QPSK	1	5299	24.90	24.86	24.86	24.86			
20	QPSK	1	5349	24.91	24.87	24.87	24.87	22.8	2	
20	QPSK	1	5399	24.92	24.88	24.88	24.88			
20	QPSK	1	5449	24.93	24.89	24.89	24.89	21.8	3	
20	QPSK	1	5499	24.94	24.90	24.90	24.90			
20	QPSK	1	5549	24.95	24.91	24.91	24.91	19.8	5	
20	QPSK	1	5599	24.96	24.92	24.92	24.92			
20	QPSK	1	5649	24.97	24.93	24.93	24.93	22.8	2	
20	QPSK	1	5699	24.98	24.94	24.94	24.94			
20	QPSK	1	5749	24.99	24.95	24.95	24.95	21.8	3	
20	QPSK	1	5799	25.00	24.96	24.96	24.96			
20	QPSK	1	5849	25.01	24.97	24.97	24.97	19.8	5	
20	QPSK	1	5899	25.02	24.98	24.98	24.98			
20	QPSK	1	5949	25.03	24.99	24.99	24.99	22.8	2	
20	QPSK	1	5999	25.04	25.00	25.00	25.00			
20	QPSK	1	6049	25.05	25.01	25.01	25.01	21.8	3	
20	QPSK	1	6099	25.06	25.02	25.02	25.02			
20	QPSK	1	6149	25.07	25.03	25.03	25.03	19.8	5	
20	QPSK	1	6199	25.08	25.04	25.04	25.04			
20	QPSK	1	6249	25.09	25.05	25.05	25.05	22.8	2	
20	QPSK	1	6299	25.10	25.06	25.06	25.06			
20	QPSK	1	6349	25.11	25.07	25.07	25.07	21.8	3	
20	QPSK	1	6399	25.12	25.08	25.08	25.08			
20	QPSK	1	6449	25.13	25.09	25.09	25.09	19.8	5	
20	QPSK	1	6499	25.14	25.10	25.10	25.10			
20	QPSK	1	6549	25.15	25.11	25.11	25.11	22.8	2	
20	QPSK	1	6599	25.16	25.12	25.12	25.12			
20	QPSK	1	6649	25.17	25.13	25.13	25.13	21.8	3	
20	QPSK	1	6699	25.18	25.14	25.14	25.14			
20	QPSK	1	6749	25.19	25.15	25.15	25.15	19.8	5	
20	QPSK	1	6799	25.20	25.16	25.16	25.16			
20	QPS									

Band 71										
SVT (MHz)	Modulation	Channel Size	RF Offset	Power Loss Coeff.	Power Loss (dB)	Power Loss (dB)	Power Loss (dB)	Turn-on (dBm)	MPE (dB)	
Frequency (MHz)										
20	QPSK	1	0	25.71	23.50	23.50				
20	QPSK	1	46	23.67	23.62	23.65		24.8	0	
20	QPSK	1	96	23.38	23.24	23.29				
20	QPSK	36	0	22.49	22.49	22.49				
20	QPSK	36	24	22.67	22.48	22.54		23.8	1	
20	QPSK	36	50	22.58	22.41	22.50				
20	QPSK	36	76	22.54	22.41	22.52				
20	16QAM	1	0	22.76	22.76	22.76				
20	16QAM	1	46	22.36	22.22	22.29		23.8	1	
20	16QAM	1	96	22.32	22.22	22.29				
20	16QAM	36	0	21.85	21.50	21.54				
20	16QAM	36	24	21.91	21.61	21.76		22.8	2	
20	16QAM	36	50	21.88	21.43	21.53				
20	16QAM	36	76	21.85	21.41	21.59				
20	64QAM	1	0	21.85	21.85	21.85				
20	64QAM	1	46	21.81	21.72	21.75		22.8		
20	64QAM	1	96	21.86	21.53	21.66				
20	64QAM	36	0	20.81	20.46	20.54		21.8	3	
20	64QAM	36	24	20.81	20.48	20.48				
20	64QAM	36	50	20.47	20.38	20.45				
20	256QAM	1	0	18.01	18.00	18.07		19.8	5	
20	256QAM	1	46	18.04	18.02	18.15				
20	256QAM	1	96	18.01	18.00	18.13				
20	256QAM	36	0	18.06	18.01	18.07		19.8	5	
20	256QAM	36	24	18.06	18.01	18.07				
20	256QAM	36	50	18.06	18.01	18.07				
20	256QAM	36	76	18.06	18.01	18.07				
Channel										
Frequency (MHz)				0	13.517	13.527	13.537	Turn-on (dBm)	MPE (dB)	
16	QPSK	1	0	23.28	23.02	23.04				
16	QPSK	1	37	23.34	23.08	23.40		24.8	0	
16	QPSK	1	74	23.34	23.08	23.40				
16	QPSK	36	0	22.83	22.81	22.82				
16	QPSK	36	25	22.77	22.64	22.63		23.8	1	
16	QPSK	36	50	22.77	22.64	22.63				
16	QPSK	36	75	22.77	22.74	22.53				
16	16QAM	1	0	22.97	22.75	22.77		23.8	1	
16	16QAM	1	37	22.97	22.75	22.77				
16	16QAM	1	74	22.98	22.76	22.77				
16	16QAM	36	0	21.78	21.71	21.61		22.8	2	
16	16QAM	36	25	21.78	21.67	21.67				
16	16QAM	36	50	21.78	21.67	21.69				
16	16QAM	36	75	21.89	21.86	21.81				
16	64QAM	1	0	21.89	21.89	21.89				
16	64QAM	1	37	21.80	21.87	21.73		22.8	2	
16	64QAM	1	74	21.82	21.81	21.73				
16	64QAM	36	0	20.82	20.51	20.53		21.8	3	
16	64QAM	36	25	20.88	20.73	20.61				
16	64QAM	36	50	20.88	20.73	20.61				
16	64QAM	36	75	20.89	20.80	20.59				
16	256QAM	1	0	18.08	18.02	18.07				
16	256QAM	1	37	18.17	18.07	18.17		19.8	5	
16	256QAM	1	74	18.17	18.07	18.17				
16	256QAM	36	0	18.73	18.76	18.71		19.8	5	
16	256QAM	36	25	18.73	18.76	18.71				
16	256QAM	36	50	18.70	18.73	18.68				
16	256QAM	36	75	18.68	18.67	18.70				
Channel										
Frequency (MHz)				0	13.517	13.527	13.545	Turn-on (dBm)	MPE (dB)	
8	QPSK	1	0	23.86	23.51	23.52				
8	QPSK	1	12	23.87	23.44	23.52		24.8	0	
8	QPSK	1	49	23.57	23.43	23.57				
8	QPSK	36	0	22.81	22.80	22.81				
8	QPSK	36	13	22.77	22.68	22.69		23.8	1	
8	QPSK	36	25	22.77	22.68	22.69				
8	QPSK	36	48	22.81	22.83	22.82				
8	QPSK	36	60	22.81	22.83	22.82				
8	16QAM	1	0	22.98	22.97	22.99		23.8	1	
8	16QAM	1	49	22.83	22.80	22.89				
8	16QAM	36	0	21.85	21.85	21.85				
8	16QAM	36	12	21.82	21.80	21.84		22.8	2	
8	16QAM	36	25	21.82	21.80	21.81				
8	64QAM	1	0	21.82	21.86	21.86				
8	64QAM	1	49	21.73	21.81	21.81		22.8	2	
8	64QAM	1	96	21.85	21.85	21.85				
8	64QAM	36	0	20.82	20.82	20.82		21.8	3	
8	64QAM	36	12	20.84	20.77	20.52				
8	64QAM	36	25	20.84	20.77	20.52				
8	64QAM	36	48	20.62	20.67	20.41				
8	64QAM	36	60	20.62	20.67	20.41				
8	256QAM	1	0	18.00	18.16	18.16		19.8	5	
8	256QAM	1	49	18.00	18.16	18.16				
8	256QAM	36	0	18.70	18.76	18.71		19.8	5	
8	256QAM	36	12	18.68	18.70	18.70				
8	256QAM	36	25	18.71	18.74	18.76				
8	256QAM	36	48	18.70	18.74	18.76				
Channel										
Frequency (MHz)				0	13.517	13.524	13.545	Turn-on (dBm)	MPE (dB)	
4	QPSK	1	0	23.87	23.44	23.52				
4	QPSK	1	12	23.88	23.41	23.52		24.8	0	
4	QPSK	1	24	23.48	23.43	23.51				
4	QPSK	12	0	22.71	22.45	22.49		23.8	1	
4	QPSK	12	13	22.71	22.45	22.49				
4	QPSK	36	0	22.74	22.71	22.69				
4	QPSK	36	12	22.74	22.71	22.69				
4	16QAM	1	0	22.97	22.97	22.96		23.8	1	
4	16QAM	1	12	22.97	22.97	22.96				
4	16QAM	36	0	21.80	21.82	21.78				
4	16QAM	36	12	21.77	21.80	21.81		22.8	2	
4	16QAM	36	24	21.77	21.80	21.81				
4	64QAM	1	0	21.80	21.81	21.83				
4	64QAM	1	24	21.82	21.82	21.83		22.8	2	
4	64QAM	12	0	20.89	20.83	20.49		21.8	3	
4	64QAM	12	13	20.89	20.83	20.49				
4	64QAM	12	24	20.83	20.86	20.51				
4	64QAM	36	0	20.83	20.83	20.51				
4	256QAM	1	0	18.70	18.68	18.70		19.8	5	
4	256QAM	1	12	18.68	18.61	18.66				
4	256QAM	12	24	18.66	18.66	18.45				
4	256QAM	36	0	18.71	18.68	18.70		19.8	5	
4	256QAM	36	12	18.70	18.68	18.72				
4	256QAM	36	24	18.68	18.63	18.71		19.8	5	



Band 38(only on channel required)												
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. (Freq)	Power Middle Ch. (Freq)	Power High Ch. (Freq)	Tune-up limit (dBm)	MPR (dB)				
Channel												
Frequency (MHz)				37860	38000	38150						
20	QPSK	1	0	23.98	23.74	23.77	24.8	0				
20	QPSK	1	40	23.93	23.89	23.81						
20	QPSK	1	80	24.00	23.88	23.87						
20	QPSK	50	24	23.32	23.08	23.14						
20	QPSK	10	24	22.19	21.98	21.94	23.8	1				
20	QPSK	50	50	23.21	23.09	23.12						
20	QPSK	100	0	23.31	23.07	23.22						
20	16QAM	1	0	23.29	23.12	23.23						
20	16QAM	1	40	23.42	23.11	23.26	23.8	1				
20	16QAM	1	80	23.27	23.20	23.22						
20	16QAM	50	24	22.33	22.09	22.22						
20	16QAM	50	50	22.24	22.16	22.21						
20	16QAM	100	0	22.34	22.04	22.14	22.8	2				
20	64QAM	1	0	22.19	21.98	22.04						
20	64QAM	1	40	22.17	22.02	22.22						
20	64QAM	50	24	21.26	21.04	21.15						
20	64QAM	50	50	21.33	21.18	21.18	21.8	3				
20	64QAM	100	0	21.39	21.06	21.11						
20	256QAM	1	0	18.93	18.94	18.96						
20	256QAM	1	40	18.89	18.88	18.77						
20	256QAM	1	80	18.87	18.73	18.85	19.8	5				
20	256QAM	50	0	19.21	19.19	19.14						
20	256QAM	50	24	19.28	19.18	19.07						
20	256QAM	50	50	19.19	19.08	18.92						
20	256QAM	100	0	19.19	19.08	19.00						
20	256QAM	1	0	18.93	18.94	18.96						
Channel												
Frequency (MHz)				37860	38000	38150	Tune-up limit (dBm)	MPR (dB)				
Frequency (MHz)				25775	25905	26125						
15	QPSK	1	0	23.88	23.77	23.84	24.8	0				
15	QPSK	1	37	23.95	23.78	23.89						
15	QPSK	1	74	23.92	23.78	23.86						
15	QPSK	36	0	23.18	22.98	22.98						
15	QPSK	36	20	23.20	22.97	22.94	23.8	1				
15	QPSK	36	39	23.25	22.97	22.96						
15	QPSK	75	0	23.27	22.84	22.90						
15	16QAM	1	0	23.28	23.08	23.19						
15	16QAM	1	37	23.33	23.15	22.96	23.8	1				
15	16QAM	1	74	23.30	23.17	23.15						
15	16QAM	36	0	22.12	21.89	21.94						
15	16QAM	36	20	22.19	21.80	21.95						
15	16QAM	36	39	22.26	21.85	21.87	22.8	2				
15	16QAM	75	0	22.18	21.54	21.95						
15	64QAM	1	0	22.21	21.83	22.21						
15	64QAM	1	37	22.16	21.69	22.04						
15	64QAM	1	74	22.18	21.93	22.08	21.8	3				
15	64QAM	36	0	21.14	20.95	20.94						
15	64QAM	36	20	21.27	20.90	21.04						
15	64QAM	36	39	21.26	20.95	20.99						
15	64QAM	75	0	21.24	21.01	21.02	19.8	5				
15	256QAM	1	0	18.80	18.85	18.88						
15	256QAM	1	37	18.77	18.81	18.78						
15	256QAM	1	74	18.89	18.82	18.81						
15	256QAM	36	0	19.11	19.21	19.08	19.8	5				
15	256QAM	36	20	19.15	19.25	19.05						
15	256QAM	36	39	19.09	19.07	18.95						
15	256QAM	75	0	19.22	18.82	18.86						
Channel												
Frequency (MHz)				37860	38000	38150				Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				25925	26055	26275						
10	QPSK	1	0	23.90	23.78	23.87	24.8	0				
10	QPSK	1	26	23.93	23.77	23.82						
10	QPSK	1	48	23.85	23.76	23.77						
10	QPSK	26	0	23.13	22.94	22.96						
10	QPSK	26	12	23.28	22.92	23.00	23.8	1				
10	QPSK	25	25	23.25	22.96	22.93						
10	QPSK	10	0	23.28	22.88	22.97						
10	16QAM	1	0	23.34	23.11	23.21						
10	16QAM	1	26	23.37	23.16	23.13	23.8	1				
10	16QAM	1	48	23.37	23.28	22.96						
10	16QAM	25	0	22.27	21.88	21.88						
10	16QAM	25	12	22.28	21.87	22.07						
10	16QAM	25	25	22.12	21.80	22.07	22.8	2				
10	16QAM	50	0	22.26	22.02	22.00						
10	64QAM	1	0	22.29	22.05	22.04						
10	64QAM	1	25	22.10	22.07	22.28						
10	64QAM	1	48	22.26	22.11	22.10	21.8	3				
10	64QAM	25	0	21.25	21.05	21.00						
10	64QAM	25	12	21.28	21.03	21.10						
10	64QAM	25	25	21.31	21.06	21.09						
10	64QAM	50	0	21.22	21.07	21.02	19.8	5				
10	256QAM	1	0	18.82	18.88	18.71						
10	256QAM	1	25	18.75	18.83	18.41						
10	256QAM	1	48	18.72	18.80	18.42						
10	256QAM	25	0	19.15	19.19	19.04	19.8	5				
10	256QAM	25	12	19.23	19.05	19.01						
10	256QAM	25	25	19.06	19.05	18.87						
10	256QAM	50	0	19.23	18.96	18.97						
Channel												
Frequency (MHz)				37775	38005	38225				Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				25725	25955	26175						
5	QPSK	1	0	23.95	23.74	23.80	24.8	0				
5	QPSK	1	12	23.94	23.76	23.72						
5	QPSK	1	24	23.98	23.80	23.80						
5	QPSK	12	0	23.24	22.98	22.93						
5	QPSK	12	7	23.21	22.96	22.96	23.8	1				
5	QPSK	12	13	23.25	22.91	22.96						
5	QPSK	26	0	23.27	22.94	22.96						
5	16QAM	1	0	23.42	23.12	23.08						
5	16QAM	1	12	23.34	23.07	23.04	23.8	1				
5	16QAM	1	24	23.36	23.11	23.15						
5	16QAM	12	0	22.32	22.00	22.08						
5	16QAM	12	7	22.25	21.97	21.97						
5	16QAM	12	13	22.28	21.98	21.99	22.8	2				
5	64QAM	1	0	22.26	21.97	22.02						
5	64QAM	1	12	22.25	22.07	21.99						
5	64QAM	1	24	22.38	22.00	22.18						
5	64QAM	12	0	21.27	20.95	21.02	21.8	3				
5	64QAM	12	7	21.31	20.99	20.99						
5	64QAM	12	13	21.24	21.03	21.02						
5	64QAM	25	0	21.31	21.02	21.02						
5	256QAM	1	0	18.87	18.82	18.84	19.8	5				
5	256QAM	1	12	18.86	18.82	18.51						
5	256QAM	1	24	18.83	18.54	18.45						
5	256QAM	12	0	19.17	19.23	19.01						
5	256QAM	12	7	19.16	19.03	19.00	19.8	5				
5	256QAM	12	13	19.09	19.00	18.90						
5	256QAM	25	0	19.22	18.92	18.92						

Band 41 (2.6G Band)										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low (Ch. / Freq.)	Power Low Middle (Ch. / Freq.)	Power Middle (Ch. / Freq.)	Power High Middle (Ch. / Freq.)	Power High (Ch. / Freq.)	Tune-up limit (dBm)	MPR (dB)
Channel										
Frequency (MHz)										
20	QPSK	1	0	23.88	24.07	24.06	24.12	24.20	24.8	0
20	QPSK	1	40	23.94	24.10	24.02	24.15	24.20		
20	QPSK	1	80	23.98	24.23	24.10	24.15	24.17		
20	QPSK	50	0	23.83	23.26	23.01	23.20	23.20		
20	QPSK	10	24	23.81	23.09	23.20	23.30	23.30	23.8	1
20	QPSK	50	50	22.97	23.20	23.14	23.21	23.22		
20	QPSK	100	0	23.80	23.23	23.01	23.27	23.30		
20	16QAM	1	0	23.11	23.02	23.22	23.20	23.40		
20	16QAM	1	40	23.00	23.01	23.09	23.30	23.13	23.8	1
20	16QAM	1	80	23.03	22.90	23.20	23.27	23.30		
20	16QAM	50	24	22.98	22.52	22.27	22.27	22.26		
20	16QAM	50	50	21.95	22.26	22.17	22.26	22.29		
20	64QAM	100	0	23.00	23.01	23.02	23.27	23.27	22.8	2
20	64QAM	1	0	21.87	21.60	21.86	21.50	22.07		
20	64QAM	1	40	21.88	21.91	21.85	21.88	21.98		
20	64QAM	1	80	21.71	21.79	21.66	21.86	21.88		
20	64QAM	50	24	21.60	21.29	21.21	21.18	21.21	21.8	2
20	64QAM	50	50	21.63	21.25	21.21	21.20	21.29		
20	64QAM	50	50	21.04	21.04	21.17	21.27	21.31		
20	64QAM	100	0	21.60	21.31	21.20	21.30	21.30		
20	256QAM	1	0	19.20	19.18	19.37	19.14	19.18	19.8	5
20	256QAM	1	40	19.12	19.17	19.26	19.05	19.02		
20	256QAM	1	80	19.16	19.24	19.18	19.14	19.07		
20	256QAM	50	0	19.40	19.43	19.38	19.43	19.42		
20	256QAM	50	24	19.41	19.42	19.38	19.42	19.41	19.8	5
20	256QAM	50	50	19.42	19.44	19.38	19.41	19.41		
20	256QAM	100	0	19.43	19.47	19.44	19.43	19.43		
Channel										
Frequency (MHz)										
15	QPSK	1	0	23.85	24.04	23.83	24.03	24.02	24.8	0
15	QPSK	1	40	23.91	24.13	24.02	24.08	23.88		
15	QPSK	1	74	23.98	24.22	23.93	24.02	23.93		
15	QPSK	36	0	23.29	23.48	23.30	23.48	23.30		
15	QPSK	36	20	23.22	23.57	23.42	23.30	23.33	23.8	1
15	QPSK	36	50	23.21	23.58	23.43	23.31	23.27		
15	QPSK	76	0	23.29	23.58	23.38	23.39	23.35		
15	16QAM	1	0	23.23	23.52	23.32	23.41	23.48		
15	16QAM	1	40	23.14	23.40	23.30	23.37	23.37	23.8	1
15	16QAM	1	74	23.31	23.50	23.00	23.48	23.32		
15	16QAM	36	0	22.14	22.47	22.21	22.28	22.31		
15	16QAM	36	20	22.25	22.68	22.24	22.29	22.26		
15	16QAM	36	50	22.31	22.63	22.36	22.29	22.26	22.8	2
15	16QAM	76	0	22.31	22.56	22.45	22.41	22.36		
15	64QAM	1	0	21.97	22.21	21.96	22.05	22.08		
15	64QAM	1	40	21.87	22.00	21.83	21.92	21.92		
15	64QAM	1	74	21.94	22.26	22.24	22.30	22.07	21.8	3
15	64QAM	36	0	21.26	21.87	21.36	21.37	21.29		
15	64QAM	36	20	21.29	21.56	21.26	21.27	21.50		
15	64QAM	36	50	21.33	21.64	21.40	21.37	21.35		
15	64QAM	76	0	21.34	21.59	21.40	21.41	21.35	19.8	5
15	256QAM	1	0	19.27	19.11	19.24	19.03	19.08		
15	256QAM	1	40	19.20	19.20	19.10	19.05	18.95		
15	256QAM	1	74	19.17	19.41	19.07	19.17	19.05		
15	256QAM	36	0	19.37	19.40	19.44	19.40	19.41	19.8	5
15	256QAM	36	20	19.28	19.41	19.39	19.35	19.31		
15	256QAM	36	50	19.40	19.51	19.39	19.32	19.32		
15	256QAM	76	0	19.35	19.47	19.46	19.38	19.26		
Channel										
Frequency (MHz)										
10	QPSK	1	0	23.96	24.12	24.01	24.03	23.98	24.8	0
10	QPSK	1	26	23.88	24.20	24.02	23.94	23.95		
10	QPSK	1	48	23.92	24.20	24.01	23.94	23.97		
10	QPSK	25	0	23.28	23.45	23.25	23.35	23.36		
10	QPSK	25	26	23.27	23.63	23.39	23.37	23.32	23.8	1
10	QPSK	25	26	23.19	23.62	23.44	23.36	23.34		
10	QPSK	50	0	23.30	23.63	23.42	23.35	23.27		
10	16QAM	1	0	23.28	23.62	23.38	23.35	23.43		
10	16QAM	1	26	23.28	23.63	23.46	23.38	23.31	23.8	1
10	16QAM	1	48	23.28	23.84	23.37	23.41	23.31		
10	16QAM	25	0	23.24	23.84	23.37	23.38	23.38		
10	16QAM	25	12	23.27	22.68	22.42	22.37	22.32		
10	16QAM	25	26	22.26	22.66	22.47	22.33	22.31	22.8	2
10	16QAM	50	0	22.31	22.66	22.45	22.37	22.44		
10	64QAM	1	0	22.03	22.23	22.11	22.15	22.05		
10	64QAM	1	26	22.03	22.30	22.20	22.07	21.94		
10	64QAM	1	48	21.93	22.27	21.98	21.98	21.84	21.8	3
10	64QAM	25	0	21.90	21.53	21.30	21.32	21.48		
10	64QAM	25	12	21.40	21.87	21.31	21.48	21.34		
10	64QAM	25	26	21.36	21.70	21.47	21.30	21.40		
10	256QAM	1	0	19.14	19.16	19.14	19.11	19.08	19.8	5
10	256QAM	1	0	19.33	19.08	19.26	19.12	19.08		
10	256QAM	1	26	19.17	19.11	19.26	19.08	19.02		
10	256QAM	48	0	19.11	19.43	19.15	19.05	19.09		
10	256QAM	25	0	19.36	19.36	19.36	19.36	19.36	19.8	5
10	256QAM	25	12	19.31	19.47	19.34	19.37	19.30		
10	256QAM	25	26	19.28	19.55	19.34	19.31	19.39		
10	256QAM	50	0	19.26	19.40	19.41	19.36	19.38		
Channel										
Frequency (MHz)										
5	QPSK	1	0	23.98	24.15	23.93	24.02	24.00	24.8	0
5	QPSK	1	12	23.87	24.20	24.02	23.95	23.99		
5	QPSK	1	24	23.90	24.24	24.03	23.96	23.88		
5	QPSK	10	0	23.28	23.56	23.44	23.34	23.30		
5	QPSK	10	7	23.33	23.62	23.42	23.41	23.31	23.8	1
5	QPSK	10	13	23.31	23.61	23.38	23.30	23.23		
5	QPSK	10	24	23.21	23.56	23.38	23.28	23.28		
5	16QAM	1	0	23.28	23.57	23.42	23.33	23.28		
5	16QAM	1	12	23.44	23.64	23.47	23.40	23.20	23.8	1
5	16QAM	1	24	23.33	23.59	23.40	23.32	23.32		
5	16QAM	10	0	22.30	22.53	22.36	22.38	22.27		
5	16QAM	10	7	22.24	22.69	22.49	22.32	22.28		
5	16QAM	12	13	22.20	22.83	22.49	22.38	22.26	22.8	2
5	16QAM	25	0	22.28	22.83	22.49	22.42	22.28		
5	64QAM	1	0	22.07	22.25	22.11	22.07	21.99		
5	64QAM	1	12	21.97	22.30	22.21	22.09	22.02		
5	64QAM	1	24	22.11	22.25	22.12	22.12	21.93	21.8	3
5	64QAM	10	0	21.28	21.62	21.47	21.39	21.35		
5	64QAM	12	7	21.33	21.67	21.48	21.38	21.29		
5	64QAM	12	13	21.18	21.33	21.16	21.12	21.15		
5	64QAM	25	0	21.37	21.68	21.49	21.39	21.37	19.8	5
5	256QAM	1	0	19.35	19.08	19.25	19.03	19.10		
5	256QAM	1	12	19.16	19.17	19.26	19.06	19.06		
5	256QAM	1	24	19.10	19.28	19.27	19.10	19.10		
5	256QAM	10	0	19.36	19.50	19.38	19.30	19.37	19.8	5
5	256QAM	10	7	19.37	19.46	19.37	19.41	19.29		
5	256QAM	10	13	19.40	19.49	19.40	19.44	19.34		
5	256QAM	25	0	19.27	19.44	19.37	19.37	19.37		

Band 41 (2.6G Band) HPUE (Limit 27)												
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Co. Ch / Freq	Power Low Middle Co. Ch / Freq	Power Middle Co. Ch / Freq	Power High Middle Co. Ch / Freq	Power High Co. Ch / Freq	Time-up limit (dBm)	MPR (dB)		
Channel												
Frequency (MHz)												
20	QPSK	1	0	25.86	26.11	26.05	26.09	26.09	26.8	0		
20	QPSK	1	48	25.86	26.01	25.96	26.09	26.11				
20	QPSK	1	96	25.88	26.15	26.06	26.10	26.12				
20	QPSK	50	0	25.03	25.28	25.08	25.24	25.22	26.8	1		
20	QPSK	50	24	25.07	25.30	25.23	25.27	25.27				
20	QPSK	50	50	25.02	25.25	25.15	25.19	25.19				
20	16QAM	1	0	25.20	25.40	25.13	25.38	25.46	26.8	1		
20	16QAM	1	48	25.22	25.46	25.12	25.18	25.29				
20	16QAM	1	96	25.22	25.41	25.37	25.33	25.28				
20	16QAM	50	24	24.17	24.45	24.34	24.32	24.38	24.8	2		
20	16QAM	50	50	24.18	24.37	24.32	24.43	24.42				
20	16QAM	100	0	24.17	24.39	24.30	24.40	24.42				
20	64QAM	1	0	23.95	24.22	24.22	24.31	24.30	24.8	2		
20	64QAM	1	48	23.95	24.32	24.24	24.31	24.37				
20	64QAM	1	96	24.06	24.33	24.41	24.40	24.32				
20	64QAM	50	24	23.16	23.33	23.32	23.32	23.36	23.8	3		
20	64QAM	50	24	23.16	23.43	23.38	23.37	23.38				
20	64QAM	50	50	23.12	23.41	23.37	23.41	23.42				
20	256QAM	1	0	21.00	21.15	21.10	21.12	21.08	21.8	5		
20	256QAM	1	48	20.85	21.02	21.03	21.06	21.12				
20	256QAM	1	96	20.94	21.14	21.05	21.05	20.81				
20	256QAM	50	0	21.13	21.19	21.23	21.22	21.01	21.8	5		
20	256QAM	50	24	21.19	21.23	21.24	21.21	21.12				
20	256QAM	50	50	21.14	21.22	21.23	21.18	21.08				
20	256QAM	100	0	21.08	21.23	21.15	21.14	21.08				
Channel												
Frequency (MHz)												
15	QPSK	1	0	25.86	26.05	26.01	26.08	25.96	26.8	0		
15	QPSK	1	37	25.98	26.09	25.97	26.07	26.01				
15	QPSK	1	74	26.00	26.11	26.12	26.11	26.10				
15	QPSK	36	0	24.96	25.34	25.15	25.11	25.13	25.8	1		
15	QPSK	36	20	25.10	25.35	25.23	26.05	25.05				
15	QPSK	36	36	25.09	25.47	25.28	25.02	25.02				
15	QPSK	75	0	25.14	25.39	25.20	25.06	25.12	25.8	1		
15	16QAM	1	0	25.17	25.47	25.32	25.32	25.26				
15	16QAM	1	37	25.19	25.41	25.38	25.08	25.17				
15	16QAM	1	74	25.16	25.50	25.43	25.02	25.30	24.8	2		
15	16QAM	36	0	24.02	24.28	24.12	24.10	24.14				
15	16QAM	36	20	24.01	24.38	24.19	24.06	24.02				
15	16QAM	36	36	24.04	24.35	24.21	24.07	24.04	24.8	2		
15	16QAM	75	0	24.11	24.44	24.18	24.02	24.10				
15	16QAM	1	0	23.83	24.03	24.01	24.24	24.20				
15	16QAM	1	37	24.06	24.17	24.08	24.05	24.01	24.8	2		
15	16QAM	1	74	24.04	24.28	24.23	23.98	23.90				
15	16QAM	36	0	22.87	22.89	23.18	23.25	23.10				
15	16QAM	36	20	23.14	23.29	23.18	23.22	23.17	23.8	3		
15	16QAM	36	36	23.04	23.26	23.07	23.03	23.00				
15	16QAM	75	0	23.31	23.15	23.12	23.05	23.07				
15	256QAM	1	0	20.92	21.04	21.17	21.10	20.81	21.8	5		
15	256QAM	1	37	20.81	20.99	20.97	21.02	21.14				
15	256QAM	1	74	20.93	21.13	21.08	21.03	20.75				
15	256QAM	36	0	21.03	21.10	21.04	21.13	20.95	21.8	5		
15	256QAM	36	20	21.18	21.23	21.17	21.07	21.07				
15	256QAM	36	36	21.13	21.15	21.09	21.14	20.98				
15	256QAM	75	0	21.03	21.29	21.05	21.05	21.29				
Channel												
Frequency (MHz)												
10	QPSK	1	0	25.76	26.13	25.97	25.98	25.99	26.8	0		
10	QPSK	1	24	25.82	26.12	26.00	25.90	25.86				
10	QPSK	1	48	25.87	26.13	26.14	26.12	25.90				
10	QPSK	36	0	25.02	25.20	25.13	25.15	25.15	25.8	1		
10	QPSK	36	12	25.05	25.41	25.31	25.07	25.21				
10	QPSK	25	25	25.02	25.39	25.26	24.95	25.11				
10	QPSK	160	0	25.07	25.38	25.07	25.07	25.07	25.8	1		
10	16QAM	1	0	25.02	25.41	25.32	25.25	25.43				
10	16QAM	1	24	25.09	25.47	25.39	25.14	25.27				
10	16QAM	1	48	25.36	25.42	25.40	24.99	25.18	24.8	2		
10	16QAM	25	0	23.95	24.18	24.28	24.17	24.25				
10	16QAM	25	12	24.02	24.38	24.27	24.16	24.14				
10	16QAM	25	25	23.95	24.42	24.30	24.05	24.19	24.8	2		
10	16QAM	50	0	24.12	24.42	24.32	24.13	24.14				
10	16QAM	1	0	23.85	24.11	24.04	24.22	24.16				
10	16QAM	1	25	23.90	24.19	24.04	24.31	24.17	24.8	2		
10	16QAM	1	48	23.93	24.25	24.25	23.80	23.80				
10	16QAM	25	0	22.48	23.01	23.22	23.41	23.22				
10	16QAM	25	12	23.22	23.18	23.19	23.29	23.33	23.8	3		
10	16QAM	25	25	23.15	23.46	23.17	23.08	23.10				
10	16QAM	50	0	23.21	23.13	23.18	23.32	23.08				
10	256QAM	1	0	20.98	21.04	21.09	21.10	20.97	21.8	5		
10	256QAM	1	25	20.94	20.83	21.01	21.05	21.02				
10	256QAM	1	48	20.74	21.10	20.96	20.89	20.70				
10	256QAM	25	0	21.03	20.99	21.12	21.22	20.93	21.8	5		
10	256QAM	25	12	21.07	21.24	21.28	21.12	21.07				
10	256QAM	25	25	21.07	21.19	21.10	21.11	21.05				
10	256QAM	50	0	20.92	21.18	20.99	21.14	21.21	21.8	5		
Channel												
Frequency (MHz)												
5	QPSK	1	0	25.76	26.12	25.91	26.81	25.94	26.8	0		
5	QPSK	1	12	25.38	26.14	25.99	25.73	25.87				
5	QPSK	1	24	25.92	26.12	26.05	25.65	25.79				
5	QPSK	12	0	25.00	25.38	25.26	24.96	25.09	25.8	1		
5	QPSK	12	7	25.04	25.39	25.23	24.96	25.15				
5	QPSK	12	13	25.04	25.36	25.24	24.91	25.13				
5	QPSK	26	0	25.05	25.34	25.19	24.85	25.07	25.8	1		
5	16QAM	1	0	24.96	25.40	25.26	25.04	25.23				
5	16QAM	1	12	25.22	25.42	25.41	24.98	25.29				
5	16QAM	1	24	25.27	25.40	25.37	24.92	25.12	25.8	1		
5	16QAM	12	0	24.02	24.41	24.34	24.01	24.11				
5	16QAM	12	7	24.07	24.43	24.35	24.08	24.16				
5	16QAM	12	13	24.15	24.41	24.25	23.97	24.10	24.8	2		
5	16QAM	25	0	24.17	24.38	24.26	23.98	24.17				
5	16QAM	1	0	23.98	23.98	24.04	24.34	24.03				
5	16QAM	1	12	24.01	24.00	24.04	24.23	24.20	24.8	2		
5	16QAM	1	24	23.98	24.20	24.27	24.02	23.98				
5	16QAM	12	0	22.90	23.02	23.14	23.41	23.95				
5	16QAM	12	7	23.09	23.12	23.18	23.23	23.22	23.8	3		
5	16QAM	12	13	23.11	23.42	23.15	23.22	23.96				
5	64QAM	25	0	23.14	23.20	23.20	23.05	23.04				
5	256QAM	1	0	21.00	21.10	21.07	21.05	21.02	21.8	5		
5	256QAM	1	12	20.84	20.86	21.00	20.99	21.12				
5	256QAM	1	24	20.93	20.97	21.08	21.07	21.06				
5	256QAM	12	0	21.10	21.03	21.16	21.06	21.00	21.8	5		
5	256QAM	12	7	20.99	21.23	21.15	21.14	21.06				
5	256QAM	12	13	21.12	21.13	21.16	21.14	21.05				
5	256QAM	25	0	20.85	21.10	21.15	21.04	21.28	21.8	5		



Reduced Power level 1 for Head – UAT

GSM900		Sust-Average Power (dBm)		Tx Channel		Frame-Average Power (dBm)		Tx Channel	
Frequency (MHz)		824.2	834.4	844.8	Frequency (MHz)		824.2	834.4	844.8
GSM 1 Tx slot		31.20	31.35	30.92	GSM 1 Tx slot	31.19	32.20	22.35	21.92
GSM 1 Tx slot		31.18	31.32	30.90	GSM 1 Tx slot	31.19	32.18	22.33	21.90
GPRS 2 Tx slots		27.98	28.28	28.15	GPRS 2 Tx slots	29.08	21.96	22.25	22.25
GPRS 3 Tx slots		28.49	28.74	28.55	GPRS 3 Tx slots	27.80	22.23	22.48	22.29
EDGE 3 Tx slots		25.93	26.46	25.28	EDGE 3 Tx slots	26.79	22.93	22.99	22.99
EDGE 3 Tx slot		25.58	25.54	25.74	EDGE 3 Tx slot	26.60	18.58	18.54	18.74
EDGE 2 Tx slots		25.82	25.67	25.81	EDGE 2 Tx slots	24.46	17.82	17.97	17.81
EDGE 3 Tx slots		25.88	25.62	25.15	EDGE 3 Tx slots	23.35	18.72	18.72	18.76
EDGE 4 Tx slots		22.14	22.25	22.32	EDGE 4 Tx slots	22.89	19.14	19.21	19.22

GSM900		Sust-Average Power (dBm)			GSM900		Sust-Average Power (dBm)		
Tx Channel		862.2	868.0	869.8	Tx Channel		862.2	868.0	869.8
Frequency (MHz)		1800.2	1800.2	1800.2	Frequency (MHz)		1800.2	1800.2	1800.2
GSM 1 Tx slot		24.15	24.02	24.01	24.00	15.15	15.00	15.01	15.00
GPRS 3 Tx slot		24.13	23.86	23.99	24.00	15.13	14.98	14.99	15.00
GPRS 3 Tx slots		21.15	20.94	20.77	24.00	15.15	14.94	14.97	15.00
GPRS 3 Tx slots		18.35	18.12	18.04	24.00	15.09	14.88	14.88	15.04
EDGE 3 Tx slot		16.48	16.46	16.68	24.00	15.28	15.25	15.08	17.00
EDGE 3 Tx slot		24.02	23.88	23.85	25.00	15.02	14.98	14.85	15.00
EDGE 3 Tx slots		21.01	20.94	20.88	25.00	15.01	14.94	14.80	15.00
EDGE 3 Tx slots		19.30	19.12	19.05	25.00	14.84	14.86	15.00	15.00
EDGE 4 Tx slots		18.22	18.25	18.12	16.70	15.22	15.25	15.12	15.30

Band	WCDMA 5					WCDMA 5					WCDMA 5				
	Tx Channel		9052	9050	9038	Tx-Chip Rate (MHz)	9132	9115	9103	Tx-Chip Rate (MHz)	9152	9140	9133	Tx-Chip Rate (MHz)	
	No Channel		9052	9050	9038		9157	9138	9126		9167	9147	9146		
SUPPORT Rel 99	AWR 12.2kbps		17.28	17.40	17.34	18.02	18.23	18.15	18.00	22.02	22.03	22.03	23.50		
SUPPORT Rel 99	HSR 12.2kbps		17.30	17.42	17.36	18.08	18.30	18.26	18.18	22.03	22.05	22.05	23.50		
SUPPORT Rel 99	HS-PA Subclass1		16.37	16.26	16.48	17.08	17.08	17.17	17.15	21.46	21.46	21.46	23.50		
SUPPORT Rel 99	HS-PA Subclass2		16.37	16.12	16.50	17.09	17.18	17.13	16.80	21.46	21.46	21.46	23.50		
SUPPORT Rel 99	HS-PA Subclass3		15.84	15.88	15.65	17.08	18.04	16.86	16.87	21.47	21.17	21.17	22.80		
SUPPORT Rel 99	HS-PA Subclass4		15.85	15.91	15.84	17.08	18.04	16.86	16.84	21.21	21.21	21.21	22.80		
SUPPORT Rel 99	DC-HSPA Subclass1		16.28	16.10	16.47	17.07	16.93	16.92	17.03	21.40	21.42	21.42	23.50		
SUPPORT Rel 99	DC-HSPA Subclass2		15.25	15.29	15.43	17.08	18.00	16.80	16.81	21.41	21.41	21.41	23.50		
SUPPORT Rel 99	DC-HSPA Subclass3		15.74	15.68	15.81	17.08	16.81	16.81	16.81	21.41	21.41	21.41	23.50		
SUPPORT Rel 99	DC-HSPA Subclass4		15.73	15.64	15.93	17.07	16.48	16.41	16.48	21.40	21.39	21.04	20.97		
SUPPORT Rel 99	HS-PA Subclass1		16.22	16.42	16.34	17.08	18.08	16.87	17.02	18.06	21.76	22.02	21.90		
SUPPORT Rel 99	HS-PA Subclass2		14.31	14.58	14.38	16.08	14.83	15.03	15.03	16.08	20.20	20.20	20.20		
SUPPORT Rel 99	HS-PA Subclass3		13.37	13.37	13.43	14.80	13.87	14.04	13.93	16.08	18.42	18.83	18.81		
SUPPORT Rel 99	HS-PA Subclass4		14.08	14.30	14.01	15.80	14.80	14.80	14.80	16.08	19.30	19.83	19.80		
SUPPORT Rel 99	HS-PA Subclass5		16.30	16.50	16.40	17.08	18.08	16.80	17.00	18.08	22.00	22.00	22.00		
SUPPORT Rel 99	HS-PA Subclass6		14.80	14.80	14.72	16.08	15.05	15.18	15.16	16.08	19.34	19.81	19.34		

Band		CDMA BC3			CDMA BC1			
Tx Channel	1813	1804	1797	Time up (min)	26	1800	1798	Time up (min)
Frequency (MHz)	1824.7	1816.52	1808.31		1815.25	1807	1806.75	
NC1 DOSS	23.38	23.44	23.40	24.00	17.50	17.57	17.54	18.50
NC1 DOSS	23.38	23.41	23.39	24.00	17.46	17.56	17.52	18.50
NC1 DOSS (F+DCH)	23.38	23.42	23.37	24.00	17.47	17.54	17.51	18.50
NC1 DOSS (F+DCH)	23.34	23.40	23.35	24.00	17.44	17.52	17.49	18.50
NC1AF 15.3kbps	23.32	23.38	23.34	24.00	17.45	17.51	17.48	18.50
NC1AF 4068kbps	23.30	23.37	23.33	24.00	17.43	17.49	17.47	18.50



MINISTRY OF NATIONAL DEFENSE
CUMHURİYET HALKİ

Band 2 (100MHz Band)														
Part 2E (only on channel required)														
BW (MHz)	Modulation	RB Slot	RB Offset	Power Ch./F/Freq.	Power Ch./F/Freq.	Power Ch./F/Freq.	Turn-on (dBm)	MPR (dB)						
Channel														
Frequency (MHz)														
20	QPSK	1	0	17.33	17.32	17.36								
20	QPSK	1	49	17.35	17.35	17.40	18.5	0						
20	QPSK	1	99	17.36	17.34	17.41								
20	QPSK	1	149	17.37	17.36	17.43								
20	QPSK	50	24	17.34	17.34	17.37	18.5	0						
20	QPSK	50	50	17.31	17.33	17.31								
20	QPSK	50	99	17.34	17.32	17.38								
20	QPSK	50	149	17.35	17.35	17.40	18.5	0						
20	QPSK	1	0	17.30	17.29	17.27								
20	QPSK	1	49	17.21	17.18	17.14	18.5	0						
20	QPSK	1	99	17.07	17.12	17.10								
20	QPSK	1	149	17.10	17.12	17.15								
20	QPSK	50	24	17.23	17.13	17.12	18.5	0						
20	QPSK	50	50	17.18	17.17	17.19								
20	QPSK	50	99	17.19	17.08	17.11								
20	QPSK	50	149	17.26	17.20	17.27								
20	25QAM	1	49	17.25	17.23	17.24	18.5	0						
20	25QAM	1	99	17.26	17.25	17.21								
20	25QAM	1	149	17.28	17.25	17.32								
20	25QAM	50	24	17.30	17.30	17.28	18.5	0						
20	25QAM	50	50	17.26	17.26	17.26								
20	25QAM	50	99	17.31	17.28	17.31								
20	25QAM	50	149	17.33	17.30	17.35								
Channel														
Frequency (MHz)														
16	QPSK	1	0	17.21	17.21	17.21								
16	QPSK	1	37	17.26	17.22	17.26	18.5	0						
16	QPSK	1	74	17.28	17.21	17.23								
16	QPSK	36	0	17.38	17.18	17.12	18.5	0						
16	QPSK	36	20	17.28	17.37	17.27								
16	QPSK	36	36	17.30	17.28	17.33								
16	QPSK	75	0	17.22	17.13	17.16	18.5	0						
16	QPSK	1	0	17.08	17.11	17.04	18.5	0						
16	QPSK	1	37	17.03	17.16	16.98								
16	QPSK	1	74	17.09	17.09	17.00								
16	QPSK	36	0	17.16	17.03	17.11	18.5	0						
16	QPSK	36	20	17.22	16.89	17.17								
16	QPSK	36	36	17.34	17.28	17.33								
16	QPSK	75	0	17.10	17.01	16.91	18.5	0						
16	QPSK	1	0	17.13	17.22	16.98								
16	QPSK	1	37	17.06	17.26	17.04	18.5	0						
16	QPSK	1	74	16.96	17.12	16.98								
16	QPSK	36	0	17.00	17.10	17.02	18.5	0						
16	QPSK	36	20	17.03	17.09	17.04								
16	QPSK	36	36	17.08	17.08	17.17								
16	QPSK	75	0	16.97	16.91	17.05	18.5	0						
16	25QAM	1	0	17.26	17.11	17.01	18.5	0						
16	25QAM	1	37	17.30	17.22	17.12								
16	25QAM	1	74	17.32	17.21	17.13								
16	25QAM	36	0	17.21	17.24	17.17	18.5	0						
16	25QAM	36	20	17.30	17.25	17.21								
16	25QAM	36	36	17.34	17.25	17.22								
16	25QAM	75	0	17.20	17.21	17.35	18.5	0						
Channel														
Frequency (MHz)														
16	QPSK	1	0	17.26	17.13	17.28								
16	QPSK	1	37	17.28	17.28	17.28	18.5	0						
16	QPSK	1	49	17.27	17.26	17.24								
16	QPSK	25	0	17.18	17.33	17.14	18.5	0						
16	QPSK	25	12	17.18	17.17	17.13								
16	QPSK	25	25	17.28	17.13	17.16	18.5	0						
16	QPSK	50	0	17.30	17.10	17.31								
16	QPSK	50	0	17.27	17.09	17.10	18.5	0						
16	QPSK	50	12	16.96	17.17	17.02								
16	QPSK	1	49	16.91	17.17	17.00								
16	QPSK	25	0	16.88	17.05	16.99	18.5	0						
16	QPSK	25	12	17.06	17.06	17.06								
16	QPSK	25	25	17.17	17.06	17.17								
16	QPSK	50	0	17.22	17.12	17.04	18.5	0						
16	QPSK	1	0	17.20	17.01	17.23								
16	QPSK	1	49	17.11	16.96	17.07	18.5	0						
16	QPSK	25	0	17.07	17.00	17.13								
16	QPSK	25	12	17.10	17.08	17.10	18.5	0						
16	QPSK	50	0	17.15	17.15	17.22								
16	QPSK	50	12	17.16	17.05	17.16	18.5	0						
16	QPSK	50	25	17.26	17.07	17.07								
16	QPSK	50	0	17.31	17.16	17.24	18.5	0						
Channel														
Frequency (MHz)														
5	QPSK	1	0	17.17	17.37	17.19	18.5	0						
5	QPSK	1	12	17.15	17.05	17.28								
5	QPSK	1	24	17.30	17.25	17.21								
5	QPSK	12	0	17.20	17.23	17.23	18.5	0						
5	QPSK	12	7	17.34	17.12	17.29								
5	QPSK	12	13	17.28	17.09	17.28	18.5	0						
5	QPSK	25	0	17.24	17.19	17.10								
5	QPSK	25	7	17.14	17.14	17.10	18.5	0						
5	QPSK	1	12	17.08	16.93	17.14								
5	QPSK	1	24	16.94	16.95	17.13	18.5	0						
5	QPSK	12	0	17.03	17.00	17.00								
5	QPSK	12	7	17.22	16.91	16.99	18.5	0						
5	QPSK	12	13	17.08	17.22	17.16								
5	QPSK	25	0	17.24	16.97	17.12	18.5	0						
5	QPSK	25	7	17.23	17.14	17.04								
5	QPSK	1	12	17.19	17.29	17.11	18.5	0						
5	QPSK	1	24	17.07	17.07	17.11								
5	QPSK	12	0	17.08	17.11	17.09	18.5	0						
5	QPSK	12	7	17.27	17.06	17.12								
5	QPSK	12	13	17.18	16.93	17.14	18.5	0						
5	QPSK	25	0	17.14	16.95	16.94								
5	QPSK	25	7	17.26	17.05	17.10	18.5	0						
5	QPSK	1	12	17.14	17.15	17.03								
5	25QAM	1	24	17.06	17.19	17.27	18.5	0						
5	25QAM	12	0	17.01	17.11	17.06								
5	25QAM	12	7	17.25	17.01	17.23	18.5	0						
5	25QAM	12	13	17.06	17.11	17.08								
5	25QAM	25	0	17.19	17.23	17.27	18.5	0						
Channel														
Frequency (MHz)														
1815	QPSK	1	0	17.16	17.25	17.36	18.5	0						
1815	QPSK	1	8	17.18	17.29	17.23								
1815	QPSK	1	16	17.20	17.29	17.29	18.5	0						
1815	QPSK	8	0	17.09	17.27	17.33								
1815	QPSK	8	4	17.26	17.20	17.39	18.5	0						
1815	QPSK	8	7	17.21	17.16	17.10								
1815	QPSK	16	0	17.23	17.19	17.23	18.5	0						
1815	QPSK	1	0	17.31	17.01	17.27								
1815	QPSK	1	8	17.24	17.20	17.16	18.5	0						
1815	QPSK	16	0	17.19	17.22	17.30								
1815	QPSK	8	4	17.14	17.12	17.09	18.5	0						
1815	QPSK	8	7	17.16	17.03	17.09								
1815	QPSK	16	0	16.96	17.15	17.01	18.5	0						
1815	QPSK	1	0	17.18	17.06	17.26								
1815	QPSK	1	8	17.24	17.11	17.05	18.5	0						
1815	QPSK	16	0	17.14	17.18	17.13								
1815	QPSK	8	4	17.18	17.12	17.11	18.5	0						
1815	QPSK	8	7	17.02	17.07	17.08								
1815	QPSK	16	0	17.17	16.95	17.14	18.5	0						
1815	QPSK	3	0	17.14	17.18	17.13								
1815	QPSK	3	4	17.18	17.12	17.11	18.5	0						
1815	QPSK	3	7	17.02	17.07	17.08								
1815	QPSK	16	0	17.17	16.95	17.14	18.5	0						
1815	QPSK	3	0	17.14	17.18	17.13								
1815	QPSK	3	4	17.18	17.12	17.11	18.5	0						
1815	QPSK	3	7	17.02	17.07	17.08								
1815	QPSK	16	0	17.17	16.95	17.14	18.5	0						
1815	QPSK	3	0	17.14	17.18	17.13								
1815	QPSK	3	4	17.18	17.12	17.11	18.5	0						
1815	QPSK	3	7	17.02	17.07	17.08								
1815	QPSK	16	0	17.17	16.95	17.14	18.5	0						
1815	QPSK	3	0	17.14	17.18	17.13								
1815	QPSK	3	4	17.18	17.12	17.11	18.5	0						
1815	QPSK	3	7	17.02	17.07	17.08								
1815	QPSK	16	0	17.17	16.95	17.14	18.5	0						
1815	QPSK	3	0	17.14	17.18	17.13								
1815	QPSK	3	4	17.18	17.12	17.11	18.5	0						
1815	QPSK	3	7	17.02	17.07	17.08								
1815	QPSK	16	0	17.17	16.95	17.14	18.5	0						
1815	QPSK	3	0	17.14	17.18	17.13								
1815	QPSK													



Band 26 (100Watts Band)															
Part 24E															
RF (MHz)	Modulation	RF Size	RF Offset	Power Low Power High	Power Low Power High	Power Low Power High	Time-out (min)	MFR (dB)							
Channel															
Frequency (MHz)															
20	QPSK	1	0	17.40	17.51	17.42	18.5	0							
20	QPSK	1	49	17.42	17.56	17.45									
20	QPSK	1	99	17.52	17.43	17.59									
20	QPSK	50	24	17.46	17.43	17.48	18.5	0							
20	QPSK	50	74	17.40	17.51	17.49									
20	QPSK	50	124	17.52	17.43	17.53									
20	QPSK	100	0	17.38	17.48	17.41	18.5	0							
20	QPSK	100	74	17.47	17.41	17.49									
20	QPSK	100	124	17.48	17.46	17.41									
20	QPSK	1	49	17.41	17.40	17.47	18.5	0							
20	QPSK	1	99	17.50	17.56	17.51									
20	QPSK	50	24	17.40	17.58	17.56									
20	QPSK	50	74	17.43	17.53	17.51	18.5	0							
20	QPSK	50	124	17.46	17.45	17.45									
20	QPSK	100	0	17.45	17.45	17.45									
20	QPSK	1	99	17.43	17.43	17.44	18.5	0							
20	QPSK	50	24	17.38	17.40	17.38									
20	QPSK	50	74	17.39	17.39	17.39									
20	QPSK	50	124	17.37	17.38	17.34	18.5	0							
20	QPSK	100	0	17.35	17.33	17.31									
20	QPSK	100	74	17.47	17.46	17.52									
Channel															
Frequency (MHz)															
16	QPSK	1	0	17.30	17.40	17.30	18.5	0							
16	QPSK	1	37	17.40	17.34	17.38									
16	QPSK	1	74	17.36	17.34	17.31									
16	QPSK	36	0	17.29	17.10	17.12	18.5	0							
16	QPSK	36	20	17.37	17.34	17.37									
16	QPSK	36	24	17.37	17.31	17.25									
16	QPSK	75	0	17.38	17.38	17.08	18.5	0							
16	QPSK	1	0	17.43	17.30	17.33									
16	QPSK	1	37	17.17	17.34	17.39									
16	QPSK	1	74	17.14	17.17	17.14	18.5	0							
16	QPSK	36	0	17.15	17.22	17.34									
16	QPSK	36	20	17.36	17.22	17.37									
16	QPSK	75	0	17.36	17.26	17.36	18.5	0							
16	QPSK	1	37	17.32	17.28	17.31									
16	QPSK	1	74	17.28	17.28	17.28									
16	QPSK	1	37	17.32	17.28	17.31	18.5	0							
16	QPSK	1	74	17.28	17.28	17.28									
16	QPSK	36	0	17.28	17.28	17.14									
16	QPSK	36	20	17.27	17.32	17.38	18.5	0							
16	QPSK	36	24	17.28	17.28	17.31									
16	QPSK	75	0	17.26	17.16	17.26									
16	QPSK	1	0	17.30	17.16	17.29	18.5	0							
16	QPSK	1	37	17.28	17.33	17.37									
16	QPSK	1	74	17.28	17.33	17.33									
16	QPSK	36	0	17.37	17.33	17.32	18.5	0							
16	QPSK	36	20	17.35	17.35	17.33									
16	QPSK	36	24	17.32	17.32	17.34									
16	QPSK	75	0	17.32	17.10	17.34	18.5	0							
16	QPSK	1	0	17.30	17.20	17.30									
16	QPSK	1	37	17.28	17.28	17.28									
Channel															
Frequency (MHz)															
5	QPSK	1	0	17.43	17.43	17.27	18.5	0							
5	QPSK	1	12	17.32	17.35	17.21									
5	QPSK	1	24	17.23	17.28	17.20									
5	QPSK	12	7	17.28	17.28	17.28	18.5	0							
5	QPSK	12	7	17.29	17.18	17.13									
5	QPSK	12	13	17.24	17.30	17.38									
5	QPSK	25	0	17.13	17.25	17.04	18.5	0							
5	QPSK	1	0	17.17	17.28	17.49									
5	QPSK	1	12	17.19	17.40	17.31									
5	QPSK	1	24	17.24	17.28	17.31	18.5	0							
5	QPSK	12	7	17.26	17.18	17.28									
5	QPSK	12	13	17.40	17.23	17.19									
5	QPSK	25	0	17.36	17.23	17.27	18.5	0							
5	QPSK	1	0	17.38	17.23	17.31									
5	QPSK	1	12	17.25	17.28	17.32									
5	QPSK	1	24	17.21	17.21	17.20	18.5	0							
5	QPSK	12	7	17.21	17.30	17.36									
5	QPSK	12	13	17.42	17.29	17.26									
5	QPSK	25	0	17.36	17.36	17.28	18.5	0							
5	QPSK	1	0	17.36	17.36	17.25									
5	QPSK	1	12	17.36	17.36	17.28									
5	QPSK	1	24	17.20	17.35	17.20	18.5	0							
5	QPSK	12	7	17.44	17.44	17.21									
5	QPSK	12	13	17.38	17.45	17.21									
5	QPSK	25	0	17.35	17.36	17.29	18.5	0							
5	QPSK	1	0	17.35	17.36	17.19									
5	QPSK	1	12	17.35	17.36	17.19									
Channel															
Frequency (MHz)															
3	QPSK	1	0	17.51	17.51	17.32	18.5	0							
3	QPSK	1	8	17.25	17.30	17.49									
3	QPSK	1	24	17.23	17.38	17.33									
3	QPSK	8	0	17.22	17.38	17.32	18.5	0							
3	QPSK	8	4	17.39	17.19	17.35									
3	QPSK	8	7	17.13	17.11	17.44									
3	QPSK	15	0	17.30	17.13	17.19	18.5	0							
3	QPSK	1	0	17.30	17.20	17.45									
3	QPSK	1	8	17.48	17.41	17.35									
3	QPSK	1	15	17.19	17.38	17.31	18.5	0							
3	QPSK	8	0	17.44	17.31	17.24									
3	QPSK	8	4	17.35	17.30	17.22									
3	QPSK	1	0	17.27	17.37	17.24	18.5	0							
3	QPSK	1	8	17.29	17.37	17.15									
3	QPSK	1	0	17.48	17.17	17.33									
3	QPSK	1	8	17.48	17.25	17.28	18.5	0							
3	QPSK	1	15	17.39	17.38	17.28									
3	QPSK	8	0	17.23	17.25	17.28									
3	QPSK	8	4	17.20	17.11	17.10	18.5	0							
3	QPSK	8	7	17.28	17.23	17.34									
3	QPSK	15	0	17.10	17.18	17.26									
3	QPSK	1	0	17.41	17.27	17.52	18.5	0							
3	QPSK	1	15	17.30	17.21	17.45									
3	QPSK	8	0	17.23	17.25	17.28									
3	QPSK	8	4	17.42	17.17	17.38	18.5	0							
3	QPSK	8	7	17.26	17.32	17.25									
3	QPSK	15	0	17.33	17.25	17.38									
Channel															
Frequency (MHz)															
1.4	QPSK	1	0	17.44	17.46	17.52	18.5	0							
1.4	QPSK	1	3	17.22	17.36	17.38									
1.4	QPSK	1	6	17.18	17.33	17.29									
1.4	QPSK	3	0	17.17	17.17	17.15	18.5	0							
1.4	QPSK	3	3	17.22	17.34	17.44									
1.4	QPSK	3	6	17.29	17.25	17.20									
1.4	QPSK	1	0	17.38	17.38	17.38	18.5	0							
1.4	QPSK	1	3	17.36	17.31	17.45									
1.4	QPSK	1	6	17.22	17.30	17.42									
1.4	QPSK	3	0	17.22	17.18	17.35	18.5	0							
1.4	QPSK	3	3	17.30	17.17	17.24									
1.4	QPSK	3	6	17.13	17.23	17.21									
1.4	QPSK	1	0	17.38	17.38	17.30	18.5	0							
1.4	QPSK	1	3	17.51	17.38	17.34									
1.4	QPSK	1	6	17.48	17.20	17.44									
1.4	QPSK	3	0	17.28	17.28	17.27	18.5	0							
1.4	QPSK	3	3	17.41	17.38	17.18									
1.4	QPSK	3	6	17.15	17.17	17.38									
1.4	QPSK	1	0	17.36	17.36	17.34	18.5	0							
1.4	QPSK	1	3	17.35	17.42	17.54									
1.4	QPSK	1	6	17.22	17.22	17.22									
1.4	QPSK	3	0	17.15	17.31	17.35	18.5	0							
1.4	QPSK	3	3	17.22	17.22	17.22									
1.4	QPSK	3	6	17.15	17.31	17.35									



Band 3(only on channel required)												
EW (MHz)	Modulation	RS Size	RS Offset	Power Low Ch. (Fmax)	Power Middle Ch. (Fmax)	Power High Ch. (Fmax)	Turn-up test (dBm)	MFR (dB)				
Channel												
Frequency (MHz)												
20	QPSK	1	0	17.24	17.02	17.11	18	0				
20	QPSK	1	40	17.21	17.19	17.06						
20	QPSK	1	80	17.27	17.23	17.26						
20	QPSK	50	0	17.18	17.11	17.01						
20	QPSK	50	24	17.25	17.20	17.23	18	0				
20	QPSK	50	50	17.15	17.01	17.07						
20	QPSK	100	0	17.21	17.17	17.20						
20	16QAM	1	0	17.00	16.82	16.74						
20	16QAM	1	40	16.97	16.85	16.87	18	0				
20	16QAM	1	80	17.04	17.00	16.96						
20	16QAM	50	0	16.98	16.89	17.03						
20	16QAM	50	24	17.12	17.06	17.02						
20	16QAM	50	50	17.17	17.10	17.05	18	0				
20	16QAM	100	0	17.05	16.94	16.91						
20	256QAM	1	0	17.04	17.02	17.00						
20	256QAM	1	40	17.02	17.07	16.99	18	0				
20	256QAM	1	80	17.01	17.00	16.98						
20	256QAM	50	0	17.28	17.26	17.22						
20	256QAM	50	24	17.24	17.23	17.20						
20	256QAM	50	50	17.22	17.21	17.17	18	0				
20	256QAM	100	0	17.22	17.24	17.16						
Channel												
Frequency (MHz)												
20	QPSK	1	0	17.09	16.96	16.97	18	0				
20	QPSK	1	37	17.11	17.17	17.12						
20	QPSK	1	74	17.24	17.21	17.22						
20	QPSK	36	0	17.08	17.18	16.88						
20	QPSK	36	20	16.98	17.12	17.11	18	0				
20	QPSK	36	50	17.03	16.90	16.92						
20	QPSK	75	0	16.91	16.88	17.07						
20	16QAM	1	0	17.12	16.93	16.91	18	0				
20	16QAM	1	37	16.99	17.00	16.98						
20	16QAM	1	74	17.16	17.02	17.02						
20	16QAM	36	0	16.86	17.16	17.06						
20	16QAM	36	20	17.04	17.12	17.01	18	0				
20	16QAM	36	50	17.08	17.20	17.19						
20	16QAM	75	0	17.18	17.02	17.08						
20	16QAM	1	0	17.09	16.90	16.90						
20	16QAM	1	37	17.16	16.88	17.03	18	0				
20	16QAM	1	74	17.11	17.01	17.00						
20	16QAM	36	0	16.97	17.15	17.11						
20	16QAM	36	20	17.14	17.06	17.05						
20	16QAM	36	50	17.03	17.16	17.05	18	0				
20	16QAM	75	0	17.03	17.10	17.13						
20	256QAM	1	0	17.03	17.06	16.90						
20	256QAM	1	37	17.07	16.92	17.00						
20	256QAM	1	74	16.80	16.79	17.01	18	0				
20	256QAM	36	0	17.14	17.14	17.14						
20	256QAM	36	20	17.10	17.18	16.98						
20	256QAM	36	50	17.08	17.06	16.96						
20	256QAM	75	0	16.99	16.97	16.98	18	0				
Channel												
Frequency (MHz)												
10	QPSK	1	0	17.05	16.82	16.97	18	0				
10	QPSK	1	25	16.94	16.95	16.82						
10	QPSK	1	40	17.24	17.23	17.08						
10	QPSK	25	0	16.95	17.12	16.88						
10	QPSK	25	12	16.91	16.88	17.08	18	0				
10	QPSK	25	25	17.04	17.03	16.72						
10	QPSK	50	0	17.16	16.94	17.09						
10	16QAM	1	0	17.15	16.79	16.76						
10	16QAM	1	25	16.87	17.04	16.94	18	0				
10	16QAM	1	40	17.03	16.86	16.93						
10	16QAM	25	0	17.03	16.89	17.13						
10	16QAM	25	12	17.12	16.99	17.04						
10	16QAM	25	25	17.07	17.28	17.03	18	0				
10	16QAM	50	0	16.95	16.77	17.06						
10	16QAM	1	0	17.19	17.01	16.88						
10	16QAM	1	25	17.13	16.88	16.87						
10	16QAM	1	40	16.93	17.04	16.94	18	0				
10	16QAM	25	0	16.94	17.00	17.01						
10	16QAM	25	12	16.95	16.98	17.04						
10	16QAM	25	25	16.96	17.07	17.04						
10	16QAM	50	0	17.17	16.96	16.94	18	0				
10	256QAM	1	0	17.06	16.94	17.04						
10	256QAM	1	25	17.01	16.79	17.03						
10	256QAM	1	40	16.82	16.93	16.72						
10	256QAM	25	0	17.03	17.00	17.16	18	0				
10	256QAM	25	12	17.04	17.10	17.21						
10	256QAM	25	25	17.27	17.14	16.92						
10	256QAM	50	0	17.21	17.02	17.21						
Channel												
Frequency (MHz)												
5	QPSK	1	0	16.99	17.00	16.98	18	0				
5	QPSK	1	12	16.95	16.92	17.00						
5	QPSK	1	24	17.06	17.04	17.24						
5	QPSK	12	0	16.99	17.01	16.85						
5	QPSK	12	7	17.06	17.06	16.94	18	0				
5	QPSK	12	13	16.99	17.03	16.95						
5	QPSK	25	0	17.08	17.10	17.22						
5	16QAM	1	0	16.95	16.71	16.89						
5	16QAM	1	12	17.06	16.97	16.80	18	0				
5	16QAM	1	24	17.16	17.06	17.06						
5	16QAM	12	0	17.06	17.01	17.12						
5	16QAM	12	7	17.16	17.16	16.91						
5	16QAM	12	13	17.21	17.19	17.16	18	0				
5	16QAM	25	0	16.92	16.86	17.07						
5	16QAM	1	0	17.17	17.00	16.77						
5	16QAM	1	12	17.05	16.94	16.96						
5	16QAM	1	24	16.93	16.86	17.11	18	0				
5	16QAM	12	0	17.07	17.00	16.96						
5	16QAM	12	7	17.02	16.91	16.85						
5	16QAM	12	13	16.85	17.21	17.13						
5	16QAM	25	0	17.02	17.02	16.97	18	0				
5	16QAM	1	0	16.86	16.87	17.05						
5	256QAM	1	12	16.99	16.83	17.00						
5	256QAM	1	24	16.76	17.00	16.96						
5	256QAM	12	0	17.12	17.00	17.20	18	0				
5	256QAM	12	7	17.16	17.13	17.21						
5	256QAM	12	13	17.03	16.99	16.94						
5	256QAM	25	0	17.12	17.20	16.99						

Band 41 (240 Bands)										
EW (MHz)	Modulation	RS Size	RS Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power Power Middle Ch. / Freq.	Power Power High Middle Ch. / Freq.	Power Power High Ch. / Freq.	Time-up test (min)	MFR (dB)
Channel										
Frequency (MHz)										
20	QPSK	1	0	17.27	17.33	17.37	17.32	17.36	18	0
20	QPSK	1	40	17.30	17.37	17.38	17.31	17.35		
20	QPSK	1	80	17.32	17.43	17.39	17.30	17.34		
20	QPSK	50	0	17.22	17.29	17.23	17.28	17.24		
20	QPSK	50	40	17.29	17.40	17.37	17.32	17.35	18	0
20	QPSK	100	0	17.28	17.35	17.31	17.26	17.30	18	0
20	16QAM	1	0	17.68	17.71	17.20	17.14	17.15	18	0
20	16QAM	1	40	17.10	17.18	16.51	17.14	17.11		
20	16QAM	1	80	17.12	17.26	17.22	17.28	17.23		
20	16QAM	50	0	17.11	17.16	17.39	17.13	17.38		
20	16QAM	50	40	17.10	17.18	17.25	17.25	17.40	18	0
20	16QAM	50	80	17.08	17.26	17.24	17.23	17.24	18	0
20	16QAM	100	0	17.06	17.16	17.39	17.13	17.24	18	0
20	64QAM	1	0	17.09	16.93	17.02	17.03	17.11	18	0
20	64QAM	1	40	17.11	17.30	17.27	17.07	17.12		
20	64QAM	1	80	17.13	17.30	17.27	17.07	17.12		
20	64QAM	50	0	17.10	17.14	17.14	17.18	17.26		
20	64QAM	50	40	17.11	17.18	17.16	17.35	17.30	18	0
20	64QAM	50	80	17.12	17.17	17.34	17.26	17.30	18	0
20	64QAM	100	0	17.08	17.17	17.34	17.26	17.30	18	0
20	256QAM	1	0	17.31	17.06	17.24	17.29	17.32	18	0
20	256QAM	1	40	17.21	17.02	17.16	17.26	17.30		
20	256QAM	1	80	17.23	17.29	17.19	17.24	17.25		
20	256QAM	50	0	17.30	17.22	17.28	17.25	17.33		
20	256QAM	50	40	17.30	17.20	17.25	17.22	17.30	18	0
20	256QAM	50	80	17.32	17.18	17.27	17.20	17.28	18	0
20	256QAM	100	0	17.31	17.23	17.28	17.24	17.27	18	0
Channel										
Frequency (MHz)										
15	QPSK	1	0	17.17	17.18	17.22	17.12	17.16	18	0
15	QPSK	1	37	17.10	17.31	17.31	17.20	17.40		
15	QPSK	1	74	17.02	17.41	17.23	17.10	17.35		
15	QPSK	36	0	17.08	17.14	17.21	17.09	17.15		
15	QPSK	36	36	17.35	17.30	17.28	17.10	17.34	18	0
15	QPSK	36	72	17.12	17.27	17.25	17.24	17.23	18	0
15	QPSK	36	108	17.16	17.42	17.26	17.14	17.25	18	0
15	16QAM	1	0	17.02	16.93	17.22	16.95	17.07	18	0
15	16QAM	1	37	17.07	17.26	17.14	17.20	17.38		
15	16QAM	1	74	17.09	17.29	17.26	17.26	17.26		
15	16QAM	36	0	17.02	17.13	17.28	17.15	17.21		
15	16QAM	36	36	17.12	17.13	17.21	17.07	17.33	18	0
15	16QAM	36	72	17.22	17.23	17.24	17.17	17.32	18	0
15	16QAM	36	108	17.14	17.33	17.19	17.23	17.23	18	0
15	64QAM	1	0	17.18	17.18	16.98	17.17	16.96	18	0
15	64QAM	1	37	16.83	17.18	17.19	16.88	17.31		
15	64QAM	1	74	16.84	16.94	17.19	16.86	17.00		
15	64QAM	36	0	17.07	17.21	17.30	17.18	17.34		
15	64QAM	36	36	17.23	17.05	17.22	16.94	16.96	18	0
15	64QAM	36	72	17.10	17.12	17.06	16.96	17.03	18	0
15	64QAM	36	108	16.86	17.01	17.09	16.88	17.04	18	0
15	256QAM	1	0	17.19	16.89	17.16	17.06	17.26	18	0
15	256QAM	1	37	17.05	16.88	17.13	17.07	17.33		
15	256QAM	1	74	17.04	17.04	17.13	17.07	17.33		
15	256QAM	36	0	17.17	17.04	17.28	17.13	17.28		
15	256QAM	36	36	17.10	17.13	17.17	17.18	17.14	18	0
15	256QAM	36	72	17.08	17.13	17.17	17.18	17.13	18	0
15	256QAM	36	108	17.09	17.13	17.17	17.13	17.13	18	0
15	256QAM	75	0	17.34	17.07	17.22	17.12	17.14	18	0
Channel										
Frequency (MHz)										
10	QPSK	1	0	17.22	17.17	17.33	17.20	17.50	18	0
10	QPSK	1	26	17.10	17.18	17.14	17.28	17.33		
10	QPSK	1	49	16.94	17.16	17.16	17.06	17.39		
10	QPSK	1	72	16.93	17.27	17.17	17.17	17.35		
10	QPSK	25	12	17.20	17.27	17.17	17.11	17.27	18	0
10	QPSK	25	35	17.19	17.36	17.27	17.11	17.31	18	0
10	QPSK	50	0	17.11	17.11	17.25	17.27	17.33	18	0
10	16QAM	1	0	16.98	17.01	17.15	17.01	17.16	18	0
10	16QAM	1	26	17.29	17.39	17.03	17.12	17.42		
10	16QAM	1	49	16.94	17.16	17.16	17.08	17.12		
10	16QAM	25	12	17.00	17.22	17.22	17.00	17.23		
10	16QAM	25	35	17.02	17.36	17.14	17.07	17.23	18	0
10	16QAM	25	50	17.13	17.22	17.15	17.14	17.36	18	0
10	16QAM	25	75	17.04	17.31	17.15	17.14	17.28	18	0
10	64QAM	1	0	17.10	17.05	17.05	17.05	17.03	18	0
10	64QAM	1	26	16.77	17.22	17.05	16.79	17.08		
10	64QAM	1	49	17.02	17.09	17.15	17.04	17.09		
10	64QAM	25	0	17.14	17.22	17.33	17.11	17.30		
10	64QAM	25	12	17.19	17.01	17.13	17.04	17.12	18	0
10	64QAM	25	35	17.24	17.08	17.21	17.04	16.98	18	0
10	64QAM	25	50	16.81	16.92	17.05	16.79	16.94	18	0
10	256QAM	1	0	17.06	17.06	17.00	17.15	17.05	18	0
10	256QAM	1	26	17.25	17.08	17.11	17.15	17.05		
10	256QAM	1	49	17.04	17.06	17.11	17.04	17.07		
10	256QAM	25	0	17.15	17.20	17.21	17.16	17.20		
10	256QAM	25	12	17.13	17.16	17.07	17.01	17.25	18	0
10	256QAM	25	35	17.20	17.12	17.12	17.07	17.04	18	0
10	256QAM	25	50	17.08	17.22	17.24	17.04	17.15	18	0
10	256QAM	25	75	17.12	17.24	17.24	17.04	17.15	18	0
Channel										
Frequency (MHz)										
5	QPSK	1	12	17.27	17.15	17.08	17.07	17.13	18	0
5	QPSK	1	24	16.98	17.28	17.01	17.03	17.23		
5	QPSK	1	36	16.94	17.21	17.05	17.05	17.26		
5	QPSK	12	7	17.32	17.11	17.17	17.00	17.12		
5	QPSK	12	15	17.33	17.32	17.21	17.12	17.19	18	0
5	QPSK	12	23	17.14	17.33	17.25	17.19	17.25	18	0
5	QPSK	12	31	17.11	17.34	17.26	17.16	17.25	18	0
5	16QAM	1	0	17.11	17.04	17.00	16.95	17.14	18	0
5	16QAM	1	12	17.06	17.42	17.17	17.06	17.38		
5	16QAM	1	24	17.16	17.13	17.22	17.10	17.21		
5	16QAM	12	7	16.88	17.21	17.15	17.17	17.17		
5	16QAM	12	15	17.12	17.35	17.30	17.13	17.25	18	0
5	16QAM	12	23	17.02	17.30	17.19	17.22	17.35	18	0
5	16QAM	12	31	17.04	17.36	17.25	17.11	17.23	18	0
5	64QAM	1	0	16.90	17.03	17.00	17.23	17.06	18	0
5	64QAM	1	12	16.80	17.21	17.22	16.81	17.24		
5	64QAM	1	24	16.81	17.26	17.26	16.80	17.23		
5	64QAM	12	7	16.83	17.22	17.23	17.06	17.21		
5	64QAM	12	15	16.91	17.18	17.10	17.00	17.15	18	0
5	64QAM	12	23	16.96	17.12	17.10	17.25	17.13	18	0
5	64QAM	12	31	16.95	16.95	17.05	16.96	17.06	18	0
5	256QAM	1	0	17.16	16.86	17.23	17.34	17.23	18	0
5	256QAM	1	12	17.03	17.00	17.06	17.04	17.11		
5	256QAM	1	24	17.14	16.86	17.23	17.34	17.21		
5	256QAM	12	0	17.25	17.20	17.10	17.07	17.17		
5	256QAM	12	7	17.15	17.20	17.14	17.05	17.08	18	0
5	256QAM	12	15	17.21	17.10	17.15	17.01	17.20	18	0
5	256QAM	12	23	17.15	17.15	17.15	17.01	17.20	18	0



Band 41 (2.80 Band) HPUE (Link 27)													
BW (MHz)	Modulation	RB Size	RB Offset	Power					Time-up (ms) (dBm)	MPER (dB)			
				Power Low Ch (Fwh)	Power Low Middle Ch (Fwh)	Power Middle Ch (Fwh)	Power High Middle Ch (Fwh)	Power High Ch (Fwh)			Channel	Frequency (MHz)	
Channel													
Frequency (MHz)				36750	40185	40920	41005	41400					
				200k	2540.5	2555	2636.5	3080					
20	QPSK	1	0	18.99	19.02	18.91	18.95	19.11					
20	QPSK	1	40	18.81	19.06	19.01	19.07	19.06	19.0	0			
20	QPSK	1	80	19.11	19.20	19.13	19.10	19.15					
20	QPSK	50	0	19.07	19.05	18.83	18.84	18.98					
20	QPSK	50	24	19.08	19.18	19.11	19.08	19.12					
20	QPSK	50	40	19.01	19.04	18.84	18.80	18.86	19.0	0			
20	QPSK	100	0	19.05	19.18	19.08	19.04	19.10					
20	16QAM	1	0	19.16	19.16	19.06	18.93	19.13					
20	16QAM	1	40	19.06	19.07	18.86	18.84	19.18	19.0	0			
20	16QAM	1	80	19.07	19.06	18.88	18.85	19.04					
20	16QAM	50	0	19.03	19.07	18.79	18.72	19.14					
20	16QAM	50	24	19.10	19.10	18.85	18.87	19.00	19.0	0			
20	16QAM	50	40	19.04	18.89	18.91	18.96	19.18					
20	16QAM	100	0	19.10	18.99	18.88	18.80	19.07					
20	64QAM	1	0	19.18	19.08	19.03	19.07	19.16					
20	64QAM	1	40	19.18	19.03	18.95	19.03	19.06	19.0	0			
20	64QAM	1	80	19.14	18.92	19.06	19.11	19.13					
20	64QAM	50	0	19.09	18.99	18.95	18.92	19.07					
20	64QAM	50	24	19.00	19.14	18.99	19.16	19.08	19.0	0			
20	64QAM	50	40	19.07	19.14	19.02	19.13	19.12					
20	64QAM	100	0	19.09	19.14	18.98	19.10	19.08					
20	256QAM	1	0	19.18	19.08	19.12	19.06	19.15					
20	256QAM	1	40	19.17	19.06	19.10	19.05	19.14	19.0	0			
20	256QAM	1	80	19.14	19.02	19.08	19.02	19.12					
20	256QAM	50	0	19.14	19.09	19.13	19.07	19.11					
20	256QAM	50	24	19.10	19.07	19.11	19.15	19.18	19.0	0			
20	256QAM	50	40	19.10	19.04	19.19	19.14	19.19					
20	256QAM	100	0	19.13	19.17	19.16	19.13	19.13					
Channel													
Frequency (MHz)				36750	40173	40905	41008	41515					
				200k	2548.3	2553	2639.8	3082.5					
15	QPSK	1	0	19.15	19.15	18.99	19.03	19.04					
15	QPSK	1	37	19.83	19.18	18.89	19.00	19.86	19.0	0			
15	QPSK	1	74	19.73	19.80	18.92	19.72	19.84					
15	QPSK	36	0	19.00	18.89	18.99	19.04	18.89					
15	QPSK	36	20	19.00	18.95	19.00	19.00	19.00	19.0	0			
15	QPSK	36	36	19.03	19.78	18.89	19.08	19.81					
15	QPSK	75	0	19.02	19.87	19.09	19.86	19.86					
15	16QAM	1	0	19.14	19.12	19.17	19.07	19.03					
15	16QAM	1	37	19.80	19.86	19.00	19.97	19.92	19.0	0			
15	16QAM	1	74	19.79	19.74	18.94	19.73	19.92					
15	16QAM	36	0	19.00	19.84	19.02	19.96	19.92					
15	16QAM	36	20	19.12	19.89	19.00	19.87	19.92	19.0	0			
15	16QAM	36	36	19.06	19.85	18.82	19.84	19.87					
15	16QAM	75	0	19.09	19.04	19.05	19.98	19.94					
15	64QAM	1	0	19.14	19.07	19.00	19.00	19.00					
15	64QAM	1	37	19.20	19.91	19.02	19.02	19.92	19.0	0			
15	64QAM	1	74	19.02	19.98	19.19	19.01	19.96					
15	64QAM	36	0	19.06	19.12	19.02	19.98	19.96					
15	64QAM	36	20	19.81	19.19	19.06	19.07	19.94	19.0	0			
15	64QAM	36	36	19.16	19.99	19.02	19.84	19.19					
15	64QAM	75	0	19.09	19.19	19.06	19.90	19.96					
15	256QAM	1	0	19.02	19.97	19.02	19.94	19.95					
15	256QAM	1	37	19.19	19.93	19.06	19.94	19.96	19.0	0			
15	256QAM	1	74	19.09	19.95	19.01	19.91	19.91					
15	256QAM	36	0	19.04	19.16	19.00	19.90	19.92					
15	256QAM	36	20	19.08	19.94	19.09	19.00	19.17	19.0	0			
15	256QAM	36	36	19.05	19.87	19.15	19.98	19.90					
15	256QAM	75	0	19.03	19.06	19.00	19.91	19.91					
Channel													
Frequency (MHz)				36750	40160	40906	41008	41500					
				200k	2547	2553	2630	3080					
10	QPSK	1	0	19.02	19.10	19.14	19.96	19.93					
10	QPSK	1	25	19.04	19.09	18.88	19.92	19.84	19.0	0			
10	QPSK	1	49	19.07	19.82	19.91	19.82	19.80					
10	QPSK	25	0	19.05	19.85	19.90	19.82	19.74					
10	QPSK	25	12	19.14	19.04	19.11	19.11	19.81					
10	QPSK	25	25	19.07	19.88	19.99	19.94	19.77	19.0	0			
10	QPSK	50	0	19.07	19.84	18.88	19.91	19.76					
10	16QAM	1	0	19.06	19.12	19.00	19.90	19.86					
10	16QAM	1	25	19.89	19.90	19.93	19.96	19.92	19.0	0			
10	16QAM	1	49	19.73	19.87	18.83	19.80	19.86					
10	16QAM	25	0	19.09	19.89	19.91	19.92	19.83					
10	16QAM	25	12	19.88	19.91	19.86	19.74	19.90	19.0	0			
10	16QAM	25	25	19.83	19.89	18.81	19.86	19.72					
10	16QAM	50	0	19.08	19.88	19.94	19.13	19.87					
10	64QAM	1	0	19.15	19.78	19.90	19.94	19.83					
10	64QAM	1	25	19.15	19.90	19.90	19.12	19.79	19.0	0			
10	64QAM	1	49	19.04	19.82	19.12	19.11	19.78					
10	64QAM	25	0	19.07	19.13	19.99	19.97	19.92					
10	64QAM	25	12	19.03	19.94	19.91	19.97	19.99	19.0	0			
10	64QAM	25	25	19.91	19.98	19.14	19.90	19.19					
10	64QAM	50	0	19.04	19.96	19.96	19.99	19.94					
10	256QAM	1	0	19.10	19.94	19.16	19.92	19.98					
10	256QAM	1	25	19.16	19.81	19.15	19.95	19.19	19.0	0			
10	256QAM	1	49	19.09	19.95	18.89	19.92	19.98					
10	256QAM	25	0	19.04	19.99	19.11	19.98	19.96					
10	256QAM	25	12	19.14	19.93	19.91	19.25	19.12	19.0	0			
10	256QAM	25	25	19.07	19.99	19.96	19.12	19.15					
10	256QAM	50	0	19.03	19.96	19.92	19.96	19.91					
Channel													
Frequency (MHz)				36675	40146	40906	41009	41500					
				249.5	2545.5	2555	2640.5	3087.5					
5	QPSK	1	0	19.73	19.87	19.72	19.98	19.99					
5	QPSK	1	12	19.83	19.74	19.86	19.80	19.77	19.0	0			
5	QPSK	1	24	19.83	19.82	19.63	19.79	19.84					
5	QPSK	12	0	19.58	19.49	19.68	19.79	19.59					
5	QPSK	12	7	19.80	19.57	19.65	19.76	19.74	19.0	0			
5	QPSK	12	13	19.72	19.59	19.61	19.88	19.71					
5	QPSK	25	0	19.88	19.80	19.82	19.68	19.75					
5	16QAM	1	0	19.82	19.82	19.81	19.98	19.98					
5	16QAM	1	12	19.91	19.80	19.68	19.91	19.78	19.0	0			
5	16QAM	1	24	19.59	19.63	19.67	19.69	19.62					
5	16QAM	12	7	19.69	19.62	19.83	19.79	19.47					
5	16QAM	12	13	19.77	19.59	19.75	19.74	19.72					
5	16QAM	12	13	19.88	19.55	19.81	19.86	19.85	19.0	0			
5	16QAM	25	0	19.74	19.59	19.70	19.70	19.64					
5	64QAM	1	0	19.82	19.71	19.82	19.87	19.87					
5	64QAM	1	12	19.76	19.74	19.80	19.76	19.87	19.0	0			
5	64QAM	1	24	19.87	19.69	19.84	19.77	19.82					
5	64QAM	12	0	19.79	19.79	19.86	19.78	19.84					
5	64QAM	12	7	19.84	19.73	19.59	19.74	19.70	19.0	0			
5	64QAM	12	13	19.75	19.79	19.886							



Reduced Power level 2/3 for Head – UAT

GBM60		Band Average Power (dBm)			Time-up Limit			Power Change Power (dBm)			Time-up Limit		
TX Channel		128	198	261	128			128	198	261	128		
Frequency (MHz)		864.2	866.4	868.8	(dBm)			864.2	866.4	868.8	(dBm)		
GBM61 Tx out		21.26	21.53	21.90	21.79			22.22	22.33	21.52	22.73		
GBM61 1 Tx out		21.18	21.30	20.90	21.79			22.18	22.39	21.99	22.79		
GBM61 2 Tx out		27.88	28.26	28.15	28.40			21.80	22.25	22.15	23.00		
GBM61 3 Tx out		28.40	28.14	28.95	27.85			22.22	22.48	22.29	23.84		
GBM61 4 Tx out		26.93	26.48	26.28	26.79			22.53	22.48	22.29	23.79		
EDGE 1 Tx out		25.58	25.54	25.74	26.40			18.60	18.54	18.74	17.90		
EDGE 2 Tx out		23.92	23.87	23.91	24.40			17.62	17.67	17.61	18.40		
EDGE 3 Tx out		22.88	23.82	23.10	23.35			18.72	18.76	18.84	19.04		
EDGE 4 Tx out		22.14	22.23	22.35	22.80			19.14	19.23	19.32	19.89		

GBM60		Band Average Power (dBm)			Time-up Limit			Power Change Power (dBm)			Time-up Limit		
TX Channel		869.2	869	869.8	869.2			869.2	869	869.8	869.2		
Frequency (MHz)		869.2	869	869.8	(dBm)			869.2	869	869.8	(dBm)		
GBM61 Tx out		24.15	24.00	24.01	24.80			15.15	15.00	15.01	16.00		
GBM61 1 Tx out		24.13	23.96	23.99	25.80			15.13	14.96	14.99	16.00		
GBM61 2 Tx out		21.15	20.94	20.97	22.80			15.15	14.94	14.97	16.00		
GBM61 3 Tx out		19.35	19.12	19.94	20.50			15.09	14.86	14.89	16.24		
GBM61 4 Tx out		18.20	18.25	18.08	20.00			15.25	15.25	15.09	17.00		
EDGE 1 Tx out		24.02	23.98	23.85	24.80			15.02	14.98	14.85	16.00		
EDGE 2 Tx out		21.81	20.94	20.88	21.80			15.01	14.94	14.86	15.90		
EDGE 3 Tx out		19.20	19.12	19.05	19.70			14.90	14.80	14.80	15.44		
EDGE 4 Tx out		18.22	18.20	18.10	18.70			15.22	15.22	15.10	16.70		

Band		WCDMA V			Time-up Limit			WCDMA V			Time-up Limit		
TX Channel		3602	3605	3638	Time-up Limit			3602	3605	3638	Time-up Limit		
Frequency (MHz)		3602	3605	3638	(dBm)			3602	3605	3638	(dBm)		
SCPP Rel 5G		17.28	17.40	17.34	18.80			18.02	18.23	18.15	19.80		
SCPP Rel 6		17.30	17.43	17.36	18.80			18.05	18.26	18.18	19.80		
SCPP Rel 6		18.37	18.29	18.46	17.80			17.08	17.14	17.17	18.80		
SCPP Rel 6		18.37	18.12	18.92	17.80			17.09	17.18	17.13	18.80		
SCPP Rel 6		18.84	18.80	18.05	17.80			18.04	18.07	17.89	19.83		
SCPP Rel 6		18.83	18.91	18.84	17.80			18.59	18.84	18.84	17.80		
SCPP Rel 6		18.28	18.10	18.47	17.80			18.85	18.92	17.89	18.80		
SCPP Rel 6		18.25	18.09	18.43	17.80			18.86	18.96	17.81	18.80		
SCPP Rel 6		18.74	18.88	18.91	17.80			18.51	18.43	18.51	17.80		
SCPP Rel 6		18.75	18.84	18.99	17.80			18.49	18.41	18.49	17.80		
SCPP Rel 6		18.22	18.42	18.34	17.80			18.89	18.97	17.82	18.80		
SCPP Rel 6		14.31	14.58	14.38	16.80			14.83	15.03	15.04	16.80		
SCPP Rel 6		13.37	13.37	13.43	14.80			13.87	14.04	13.93	14.80		
SCPP Rel 6		14.08	14.39	14.01	16.80			14.80	14.88	14.89	16.80		
SCPP Rel 6		18.30	18.30	18.42	17.80			18.85	17.80	17.80	18.80		
SCPP Rel 7		14.62	14.88	14.72	16.80			15.09	15.18	15.19	16.80		

Band		GSM-R			Time-up Limit			GSM-R			Time-up Limit		
TX Channel		9013	901	777	25			9013	901	777	478		
Frequency (MHz)		854.7	856.52	848.31	(dBm)			854.7	856.52	848.31	(dBm)		
RCS-RCS		21.87	21.98	21.91	23.80			17.49	17.58	17.52	18.80		
RCS-RCS		21.85	21.95	21.88	23.80			17.47	17.54	17.51	18.80		
RCS-RCS (F-RCS)		21.84	21.93	21.87	23.80			17.46	17.52	17.49	18.80		
WTAU-RCS		21.82	21.92	21.85	23.80			17.45	17.51	17.48	18.80		
TETRA-RCS		21.81	21.91	21.84	23.80			17.43	17.49	17.47	18.80		



MINISTRY OF NATIONAL DEFENSE
T.C. SAKARYA VALİSİ

Band 2 (1900MHz Band) Part 24E									
BW (MHz)	Modulation	RB Slot	RB Offset	Power Ch./F/Freq.	Power Ch./F/Freq.	Power Ch./F/Freq.	Turn-on Time (s)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	17.33	17.32	17.36			
20	QPSK	1	49	17.35	17.35	17.49	18.5	0	
20	QPSK	1	99	17.36	17.34	17.41			
20	QPSK	5	0	17.35	17.35	17.49			
20	QPSK	50	24	17.34	17.34	17.37	18.5	0	
20	QPSK	50	50	17.31	17.33	17.31			
20	QPSK	100	0	17.34	17.32	17.38			
20	QPSK	1	0	17.30	17.29	17.27			
20	QPSK	1	49	17.21	17.18	17.14	18.5	0	
20	QPSK	1	99	17.07	17.12	17.10			
20	QPSK	5	0	17.30	17.30	17.11			
20	QPSK	50	24	17.23	17.13	17.12	18.5	0	
20	QPSK	50	50	17.18	17.17	17.19			
20	QPSK	100	0	17.16	17.08	17.11			
20	QPSK	1	0	17.21	17.20	17.22			
20	QPSK	1	49	17.27	17.29	17.27	18.5	0	
20	QPSK	1	99	17.11	17.15	17.20			
20	QPSK	50	0	17.15	17.13	17.12			
20	QPSK	50	24	17.23	17.15	17.14	18.5	0	
20	QPSK	50	50	17.19	17.16	17.19			
20	QPSK	100	0	17.21	17.20	17.19			
20	QPSK	1	0	17.26	17.26	17.27			
20	QPSK	1	49	17.25	17.23	17.24	18.5	0	
20	QPSK	1	99	17.26	17.25	17.21			
20	QPSK	50	0	17.23	17.23	17.23			
20	QPSK	50	24	17.30	17.30	17.28	18.5	0	
20	QPSK	50	50	17.26	17.26	17.26			
20	QPSK	100	0	17.23	17.26	17.26			
20	QPSK	1	0	17.23	17.23	17.23	Turn-on Time (s)	MPR (dB)	
Channel									
Frequency (MHz)									
15	QPSK	1	0	17.21	17.21	17.21			
15	QPSK	1	37	17.26	17.22	17.26	18.5	0	
15	QPSK	1	74	17.26	17.21	17.23			
15	QPSK	36	0	17.26	17.18	17.12			
15	QPSK	36	20	17.26	17.37	17.27	18.5	0	
15	QPSK	36	36	17.26	17.26	17.17			
15	QPSK	75	0	17.22	17.13	17.16			
15	QPSK	1	0	17.08	17.11	17.04	18.5	0	
15	QPSK	1	37	17.03	17.16	16.98			
15	QPSK	1	74	17.09	16.99	16.90			
15	QPSK	36	0	17.16	17.03	17.11			
15	QPSK	36	20	17.22	16.89	17.17	18.5	0	
15	QPSK	36	36	17.26	17.29	17.19			
15	QPSK	75	0	17.10	17.01	16.91			
15	QPSK	1	0	17.13	17.02	16.96			
15	QPSK	1	37	17.06	17.26	17.04	18.5	0	
15	QPSK	1	74	16.96	17.12	16.98			
15	QPSK	36	0	17.00	17.10	17.02			
15	QPSK	36	20	17.03	17.09	17.04	18.5	0	
15	QPSK	36	36	17.06	17.06	16.97			
15	QPSK	75	0	16.97	16.99	17.05			
15	QPSK	1	0	17.26	17.11	17.14			
15	QPSK	1	37	17.06	17.22	17.12	18.5	0	
15	QPSK	1	74	17.01	17.21	17.01			
15	QPSK	36	0	17.21	17.24	17.17			
15	QPSK	36	20	17.30	17.25	17.31	18.5	0	
15	QPSK	36	36	17.26	17.15	17.22			
15	QPSK	75	0	17.20	17.16	17.24			
15	QPSK	1	0	16.95	16.95	16.95	Turn-on Time (s)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	0	17.17	17.37	17.19			
10	QPSK	1	12	17.15	17.05	17.28	18.5	0	
10	QPSK	1	24	17.30	17.25	17.21			
10	QPSK	1	36	17.22	17.23	17.23			
10	QPSK	12	7	17.34	17.12	17.29	18.5	0	
10	QPSK	12	13	17.23	17.09	17.28			
10	QPSK	25	0	17.24	17.19	17.10			
10	QPSK	25	12	17.12	17.14	17.10			
10	QPSK	1	12	17.00	16.93	17.14	18.5	0	
10	QPSK	1	24	16.94	16.95	17.13			
10	QPSK	1	36	17.03	17.00	17.00			
10	QPSK	12	7	17.22	16.91	16.99	18.5	0	
10	QPSK	12	13	17.00	17.22	17.16			
10	QPSK	25	0	17.24	16.97	17.12			
10	QPSK	1	12	17.13	17.14	17.04			
10	QPSK	1	24	17.07	17.29	17.11	18.5	0	
10	QPSK	1	36	17.08	17.11	17.05			
10	QPSK	12	7	17.27	17.06	17.12			
10	QPSK	12	13	17.19	16.93	17.14	18.5	0	
10	QPSK	25	0	17.14	16.95	16.94			
10	QPSK	25	12	17.26	17.05	17.03			
10	QPSK	1	12	17.14	17.15	17.03	18.5	0	
10	QPSK	1	24	17.06	17.31	17.20			
10	QPSK	1	36	17.23	17.21	17.26			
10	QPSK	12	13	17.26	17.11	17.08	18.5	0	
10	QPSK	25	0	17.19	17.23	17.27			
10	QPSK	1	0	16.91	16.90	16.93	Turn-on Time (s)	MPR (dB)	
Channel									
Frequency (MHz)									
5	QPSK	1	0	17.15	17.25	17.36			
5	QPSK	1	8	17.16	17.29	17.23	18.5	0	
5	QPSK	1	16	17.28	17.28	17.29			
5	QPSK	8	0	17.08	17.27	17.33			
5	QPSK	8	4	17.26	17.20	17.39	18.5	0	
5	QPSK	8	7	17.21	17.16	17.10			
5	QPSK	1	0	17.17	17.19	17.23			
5	QPSK	1	8	17.31	17.01	17.27	18.5	0	
5	QPSK	1	16	17.24	17.20	17.16			
5	QPSK	8	0	17.09	17.22	17.30			
5	QPSK	8	4	17.14	17.12	17.09	18.5	0	
5	QPSK	8	7	17.16	17.03	17.09			
5	QPSK	1	0	16.96	17.15	17.01			
5	QPSK	1	8	17.18	17.06	17.26			
5	QPSK	1	16	17.24	17.11	17.05	18.5	0	
5	QPSK	8	0	17.14	17.18	17.13			
5	QPSK	8	4	17.19	17.12	17.11			
5	QPSK	8	7	17.02	17.07	17.08	18.5	0	
5	QPSK	1	0	17.17	16.95	16.98			
5	QPSK	1	8	17.05	17.27	17.23			
5	QPSK	1	16	17.06	17.29	17.09	18.5	0	
5	QPSK	8	0	17.13	17.03	17.06			
5	QPSK	8	4	17.13	16.96	16.92	18.5	0	
5	QPSK	8	7	17.20	17.09	17.05			
5	QPSK	1	0	17.20	17.08	17.09			
5	QPSK	1	8	17.29	17.14	17.13	18.5	0	
5	QPSK	1	16	17.10	17.15	17.14			
5	QPSK	8	0	17.01	17.15	17.14			
5	QPSK	8	4	17.16	17.07	17.17	18.5	0	
5	QPSK	8	7	17.06	17.06	17.06			
5	QPSK	1	0	17.13	17.00	17.16			
5	QPSK	1	8	17.21	17.26	17.14			
5	QPSK	1	16	17.22	17.28	17.19	18.5	0	
5	QPSK	8	0	16.91	17.15	17.14			
5	QPSK	8	4	17.16	17.07	17.17	18.5	0	
5	QPSK	8	7	17.06	17.06	17.06			
5	QPSK	1	0	17.13	17.00	17.16			
5	QPSK	1	8	17.21	17.26	17.14			
5	QPSK	1	16	17.22	17.28	17.19	18.5	0	
5	QPSK	8	0	16.91	17.15	17.14			
5	QPSK	8	4	17.16	17.07	17.17	18.5	0	
5	QPSK	8	7	17.06	17.06	17.06			
5	QPSK	1	0	17.13	17.00	17.16			
5	QPSK	1	8	17.21	17.26	17.14			
5	QPSK	1	16	17.22	17.28	17.19	18.5	0	
5	QPSK	8	0	16.91	17.15	17.14			
5	QPSK	8	4	17.16	17.07	17.17	18.5	0	
5	QPSK	8	7	17.06	17.06	17.06			
5	QPSK	1	0	17.13	17.00	17.16			
5	QPSK	1	8	17.21	17.26	17.14			
5	QPSK	1	16	17.22	17.28	17.19	18.5	0	
5	QPSK	8	0	16.91	17.15	17.14			
5	QPSK	8	4	17.16	17.07	17.17	18.5	0	
5	QPSK	8	7	17.06	17.06	17.06			
5	QPSK	1	0	17.13	17.00	17.16			
5	QPSK	1	8	17.21	17.26	17.14			
5	QPSK	1	16	17.22	17.28	17.19	18.5	0	
5	QPSK	8	0	16.91	17.15	17.14			
5	QPSK	8	4	17.16	17.07	17.17	18.5	0	
5	QPSK	8	7	17.06	17.06	17.06			
5	QPSK	1	0	17.13	17.00	17.16			
5	QPSK	1	8	17.21	17.26	17.14			
5	QPSK	1	16	17.22	17.28	17.19	18.5	0	
5	QPSK	8	0	16.91	17.15	17.14			
5	QPSK	8	4	17.16	17.07	17.17	18.5	0	
5	QPSK	8	7	17.06	17.06	17.06			
5	QPSK	1	0	17.13	17.00	17.16			
5	QPSK	1	8	17.21	17.26	17.14			
5	QPSK	1	16	17.22	17.28	17.19	18.5	0	
5	QPSK	8	0	16.91	17.15	17.14			
5	QPSK	8	4	17.16	17.07	17.17	18.5	0	
5	QPSK	8	7	17.06	17.06	17.06			
5	QPSK	1	0	17.13	17.00	17.16			
5	QPSK	1	8	17.21	17.26	17.14			
5	QPSK	1	16	17.22	17.28	17.19	18.5	0	
5	QPSK	8	0						



MINISTRY OF NATIONAL DEFENSE
T.C. SAKARYA VALİLİĞİ

Band 12 (700MHz Low Band) Part 27F(only on channel required)									
BW (MHz)	Modulation	RB Size	RB Offset	Power Ch./F (Freq.)	Power Ch./F (Freq.)	Power Ch./F (Freq.)	Turn-on Time (s)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	0	22.58	22.59	22.60			
10	QPSK	1	25	22.55	22.55	22.53	23.7	0	
10	QPSK	1	49	22.40	22.40	22.38			
10	QPSK	25	0	22.62	22.62	22.60			
10	QPSK	25	12	22.65	22.62	22.47	23.7	0	
10	QPSK	25	25	22.58	22.63	22.62			
10	QPSK	50	0	22.57	22.61	22.55			
10	QPSK	1	5	22.48	22.44	22.29			
10	16QAM	1	25	22.63	22.60	22.61	23.7	0	
10	16QAM	1	49	22.55	22.63	22.49			
10	16QAM	25	0	21.95	21.95	21.93			
10	16QAM	25	12	22.00	21.92	21.79	23.7	1	
10	16QAM	25	25	21.97	22.00	21.82			
10	16QAM	50	0	22.00	21.98	21.76			
10	8QAM	1	5	21.95	21.95	21.95			
10	8QAM	1	25	22.55	22.58	22.27	22.7	1	
10	8QAM	1	49	22.25	22.18	22.05			
10	8QAM	25	0	21.93	21.92	21.87			
10	8QAM	25	12	21.93	21.95	21.80	21.7	2	
10	8QAM	25	25	21.95	21.90	21.81			
10	8QAM	50	0	21.93	21.92	21.88			
10	25QAM	1	25	18.77	18.98	18.78	19.7	4	
10	25QAM	1	49	18.90	18.86	18.82			
10	25QAM	25	0	18.92	18.91	18.78			
10	25QAM	25	12	18.90	18.89	18.92			
10	25QAM	25	25	18.95	18.91	18.75	19.7	4	
10	25QAM	50	0	18.74	18.88	18.71			
Channel									
Frequency (MHz)									
5	QPSK	1	0	22.46	22.40	22.29			
5	QPSK	1	12	22.36	22.38	22.29	23.7	0	
5	QPSK	1	24	22.41	22.40	22.35			
5	QPSK	12	0	22.27	22.47	22.44			
5	QPSK	12	7	22.37	22.59	22.24	23.7	0	
5	QPSK	12	14	22.35	22.39	22.35			
5	QPSK	25	0	22.41	22.54	22.43			
5	16QAM	1	0	22.42	22.48	22.17	23.7	0	
5	16QAM	1	12	22.37	22.42	22.52			
5	16QAM	1	24	22.38	22.38	22.53			
5	16QAM	12	0	21.85	21.75	21.94			
5	16QAM	12	7	21.90	21.87	21.70	22.7	1	
5	16QAM	12	14	21.87	21.87	21.76			
5	16QAM	25	0	21.78	21.68	21.81			
5	8QAM	1	0	21.62	21.68	21.83			
5	8QAM	1	12	22.10	22.13	22.28	22.7	1	
5	8QAM	1	24	22.06	22.06	22.10			
5	8QAM	12	0	20.51	20.70	20.83			
5	8QAM	12	7	20.79	20.84	20.57	21.7	2	
5	8QAM	12	14	20.42	20.39	20.37			
5	8QAM	25	0	21.00	20.99	20.77			
5	25QAM	1	0	18.95	18.82	18.75			
5	25QAM	1	12	18.84	18.90	18.82	19.7	4	
5	25QAM	1	24	18.91	18.88	18.78			
5	25QAM	12	0	18.71	18.71	18.78			
5	25QAM	12	7	18.88	18.82	18.85	19.7	4	
5	25QAM	12	14	18.87	18.86	18.78			
5	25QAM	25	0	18.87	18.81	18.71			
Channel									
Frequency (MHz)									
3	QPSK	1	0	22.42	22.34	22.50			
3	QPSK	1	14	22.38	22.44	22.60	23.7	0	
3	QPSK	8	0	22.47	22.56	22.60			
3	QPSK	8	7	22.47	22.48	22.52			
3	QPSK	8	7	22.61	22.63	22.30	23.7	0	
3	QPSK	16	0	22.60	22.68	22.55			
3	QPSK	16	0	22.42	22.19	22.29	23.7	0	
3	16QAM	1	8	22.58	22.65	22.39			
3	16QAM	1	14	22.42	22.49	22.35			
3	16QAM	8	0	21.78	21.96	21.86			
3	16QAM	8	4	22.00	21.89	21.79	22.7	1	
3	16QAM	8	7	22.00	21.94	21.84			
3	16QAM	16	0	21.98	21.88	21.51			
3	8QAM	1	0	21.77	21.72	21.69			
3	8QAM	1	8	22.02	22.08	22.21	22.7	1	
3	8QAM	1	14	22.11	22.20	21.83			
3	8QAM	8	0	20.83	20.83	20.74			
3	8QAM	8	4	20.96	20.76	20.62	21.7	2	
3	8QAM	8	7	20.81	21.08	20.87			
3	8QAM	16	0	20.86	20.69	20.66			
3	25QAM	1	0	18.88	18.61	18.79	19.7	4	
3	25QAM	1	8	18.81	18.91	18.82			
3	25QAM	1	14	18.85	18.70	18.78			
3	25QAM	8	0	18.73	18.59	18.81			
3	25QAM	8	4	18.90	18.82	18.80	19.7	4	
3	25QAM	8	7	18.79	18.80	18.82			
3	25QAM	16	0	18.66	18.91	18.82			
Channel									
Frequency (MHz)									
1.4	QPSK	1	0	22.34	22.27	22.32			
1.4	QPSK	1	3	22.31	22.36	22.29	23.7	0	
1.4	QPSK	1	5	22.65	22.44	22.63			
1.4	QPSK	1	10	22.47	22.38	22.30			
1.4	QPSK	3	1	22.47	22.63	22.36			
1.4	QPSK	3	3	22.53	22.44	22.48			
1.4	QPSK	6	0	22.42	22.54	22.34	23.7	0	
1.4	QPSK	1	24	22.31	22.41	22.17			
1.4	16QAM	1	3	22.43	22.42	22.50			
1.4	16QAM	1	5	22.34	22.49	22.37	23.7	0	
1.4	16QAM	3	0	22.10	22.33	22.18			
1.4	16QAM	3	1	22.48	22.33	22.43			
1.4	16QAM	3	3	22.36	22.52	22.38			
1.4	8QAM	1	0	22.01	21.80	21.60	22.7	1	
1.4	8QAM	1	0	21.87	21.88	21.82			
1.4	8QAM	1	3	22.11	22.03	22.32			
1.4	8QAM	1	5	22.08	22.15	21.81	22.7	1	
1.4	8QAM	3	0	21.78	21.76	21.68			
1.4	8QAM	3	1	22.01	21.79	21.69			
1.4	8QAM	3	3	21.63	22.04	21.67			
1.4	8QAM	6	0	21.03	20.77	20.92	21.7	2	
1.4	25QAM	1	0	18.40	18.56	18.48			
1.4	25QAM	1	3	18.85	18.59	18.58			
1.4	25QAM	1	5	18.70	18.81	18.86	19.7	4	
1.4	25QAM	3	0	18.90	18.82	18.74			
1.4	25QAM	3	1	18.90	18.87	18.80			
1.4	25QAM	3	3	18.77	18.82	18.56			
1.4	25QAM	6	0	18.73	18.67	18.47	19.7	4	

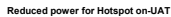
Band 13(700MHz Band) Part 27F									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./F (Freq.)	Power Mid Ch./F (Freq.)	Power High Ch./F (Freq.)	Turn-on Time (sec)	MPR (dB)	
Channel				23.03					
Frequency (MHz)				762					
10	QPSK	1	0		23.04		24.5	0	
10	QPSK	1	25		23.15				
10	QPSK	1	49		23.17				
10	QPSK	25	0		22.32		23.5		
10	QPSK	25	12		22.40				
10	QPSK	25	25		22.43				
10	QPSK	50	0		22.46		23.5	1	
10	16QAM	1	0		22.34				
10	16QAM	1	25		22.68				
10	16QAM	1	49		22.66		22.5	2	
10	16QAM	25	0		21.81				
10	16QAM	25	12		21.87				
10	16QAM	25	25		21.49		22.5	2	
10	16QAM	50	0		21.44				
10	8QAM	1	5		21.29				
10	8QAM	1	25		21.74		21.5	3	
10	8QAM	1	49		21.65				
10	8QAM	25	0		20.50				
10	8QAM	25	12		20.50		19.5	5	
10	8QAM	25	25		20.86				
10	8QAM	50	0		20.45				
10	25QAM	1	5		18.74		19.5	5	
10	25QAM	1	25		18.92				
10	25QAM	1	49		18.85				
10	25QAM	25	0		18.70		19.5	5	
10	25QAM	25	12		18.75				
10	25QAM	25	25		18.82				
10	25QAM	50	0		18.47				
Channel				2036, 2070, 2036			Turn-on Time (sec)	MPR (dB)	
Frequency (MHz)				773.5 762 764.5					
5	QPSK	1	0	22.77	22.72	22.74	24.5	0	
5	QPSK	1	12	22.80	22.82	22.82			
5	QPSK	1	24	22.68	22.70	22.73			
5	QPSK	12	0	22.42	22.43	22.46	23.5	1	
5	QPSK	12	7	22.54	22.42	22.46			
5	QPSK	12	14	22.48	22.48	22.47			
5	QPSK	25	0	22.48	22.39	22.42	23.5	1	
5	16QAM	1	0	22.71	22.61	22.65			
5	16QAM	1	12	22.81	22.71	22.75			
5	16QAM	1	24	22.77	22.77	22.78	22.5	2	
5	16QAM	12	0	21.87	21.47	21.49			
5	16QAM	12	7	21.59	21.47	21.52			
5	16QAM	12	14	21.51	21.50	21.53	22.5	2	
5	16QAM	25	0	21.49	21.48	21.48			
5	16QAM	25	0	21.50	21.60	21.49			
5	16QAM	1	12	21.88	21.74	21.90	21.5	3	
5	16QAM	1	24	21.81	21.72	21.83			
5	16QAM	12	0	20.51	20.46	20.59			
5	16QAM	12	7	20.59	20.49	20.55	19.5	5	
5	16QAM	12	14	20.48	20.50	20.55			
5	16QAM	25	0	20.20	20.48	20.61			
5	16QAM	1	0	18.67	18.67	18.67	19.5	5	
5	25QAM	1	12	18.97	18.81	18.88			
5	25QAM	1	24	18.58	18.67	18.48			
5	25QAM	12	0	18.57	18.75	18.75	19.5	5	
5	25QAM	12	7	18.55	18.70	18.62			
5	25QAM	12	14	18.68	18.72	18.67			
5	25QAM	25	0	18.69	18.78	18.65			

Band 26 for FCC (only on channel required)												
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./F/Freq	Power Main Ch./F/Freq	Power High Ch./F/Freq	Turn-on time (s/min)	MFR (dB)				
Channel												
Frequency (MHz)												
15	QPSK	1	0	21.31	21.29	21.37	22.5	0				
16	QPSK	1	37	21.28	21.27	21.32						
16	QPSK	1	74	21.26	21.24	21.18						
15	QPSK	36	0	21.26	21.24	21.14	22.5	0				
15	QPSK	36	20	21.29	21.27	21.35						
15	QPSK	36	36	21.24	21.22	21.28						
15	QPSK	36	0	21.26	21.25	21.13	22.5	0				
15	16QAM	1	0	21.27	21.24	21.21						
15	16QAM	1	37	21.33	21.30	21.28						
15	16QAM	1	74	21.29	21.25	21.29	22.5	0				
15	16QAM	36	0	21.23	21.27	21.18						
15	16QAM	36	20	21.21	21.27	21.19						
15	16QAM	36	36	21.22	21.29	21.67	22.5	0				
15	16QAM	75	0	21.31	21.13	21.19						
15	16QAM	1	0	21.23	21.22	21.35						
15	16QAM	1	37	21.09	21.30	21.24	22.5	0				
15	16QAM	1	74	21.34	21.34	21.30						
15	16QAM	36	0	20.95	20.79	20.71						
15	16QAM	36	20	20.95	20.77	20.90	21.5	1				
15	16QAM	36	36	20.84	20.77	20.75						
15	16QAM	75	0	20.98	20.94	20.76						
15	25QAM	1	0	18.84	18.86	18.90	19.5	3				
15	25QAM	1	37	18.70	18.86	18.76						
15	25QAM	1	74	18.70	18.85	18.98						
15	25QAM	36	0	18.88	18.87	18.90	19.5	3				
15	25QAM	36	20	18.91	19.04	19.08						
15	25QAM	36	36	18.95	18.98	18.98						
15	25QAM	75	0	18.89	18.85	18.97	19.5	3				
Channel												
Frequency (MHz)												
10	QPSK	1	0	21.16	21.02	21.17	22.5	0				
10	QPSK	1	25	20.93	21.10	21.26						
10	QPSK	1	40	21.05	21.07	21.05						
10	QPSK	25	0	21.19	20.87	21.02	22.5	0				
10	QPSK	25	12	21.01	21.17	21.23						
10	QPSK	25	25	21.12	20.98	20.96						
10	QPSK	50	0	20.90	21.15	21.22	22.5	0				
10	16QAM	1	0	21.05	21.10	20.91						
10	16QAM	1	25	21.19	20.97	21.06						
10	16QAM	1	40	21.07	21.12	21.17	22.5	0				
10	16QAM	25	0	21.19	21.08	21.09						
10	16QAM	25	12	21.10	20.90	21.10						
10	16QAM	25	25	21.03	20.99	20.96	22.5	0				
10	16QAM	50	0	20.97	20.77	21.10						
10	16QAM	50	0	20.97	20.77	21.10						
10	16QAM	1	0	20.86	20.86	21.20	22.5	0				
10	16QAM	1	25	20.83	21.00	20.97						
10	16QAM	1	40	21.15	20.90	21.00						
10	16QAM	25	0	20.83	20.40	20.50	21.5	1				
10	16QAM	25	12	20.84	20.55	20.93						
10	16QAM	25	25	20.84	20.55	20.93						
10	16QAM	50	0	20.94	20.70	20.44	19.5	3				
10	25QAM	1	0	18.84	18.89	18.85						
10	25QAM	1	25	18.95	18.74	18.82						
10	25QAM	1	40	18.84	18.86	18.90	19.5	3				
10	25QAM	25	0	18.80	18.89	18.87						
10	25QAM	25	12	18.86	18.71	18.75						
10	25QAM	25	25	18.81	18.75	18.89	19.5	3				
10	25QAM	50	0	18.87	18.76	18.89						
Channel												
Frequency (MHz)												
5	QPSK	1	0	21.13	21.08	21.13	22.5	0				
5	QPSK	1	12	20.90	21.08	21.14						
5	QPSK	1	24	21.00	21.11	21.04						
5	QPSK	12	0	21.20	20.82	20.92	22.5	0				
5	QPSK	12	7	21.08	21.11	21.17						
5	QPSK	12	13	21.09	20.78	20.92						
5	QPSK	25	0	20.93	21.10	21.18	22.5	0				
5	16QAM	1	0	21.03	21.06	20.94						
5	16QAM	1	12	21.02	20.90	21.05						
5	16QAM	1	24	21.03	21.24	21.21	22.5	0				
5	16QAM	12	0	21.15	21.01	21.04						
5	16QAM	12	13	21.05	20.91	21.07						
5	16QAM	12	13	21.01	20.95	20.98	22.5	0				
5	16QAM	25	0	20.91	20.82	21.15						
5	16QAM	1	0	20.73	20.90	20.97						
5	16QAM	1	24	21.15	20.90	20.95	21.5	1				
5	16QAM	12	0	20.58	20.40	20.53						
5	16QAM	12	13	20.69	20.41	20.42						
5	16QAM	12	13	20.42	20.95	20.36	19.5	3				
5	16QAM	25	0	20.65	20.73	20.42						
5	16QAM	25	0	20.65	20.73	20.42						
5	25QAM	1	0	18.84	18.84	18.89	19.5	3				
5	25QAM	1	12	18.94	18.84	18.92						
5	25QAM	1	24	18.40	18.89	18.84						
5	25QAM	12	0	18.73	18.99	18.89	19.5	3				
5	25QAM	12	7	18.81	18.85	18.71						
5	25QAM	12	13	18.80	18.87	18.82						
5	25QAM	25	0	18.63	18.79	18.73	19.5	3				
Channel												
Frequency (MHz)												
3	QPSK	1	0	21.05	21.16	21.15	22.5	0				
3	QPSK	1	8	21.08	21.07	21.17						
3	QPSK	1	14	21.02	21.09	21.05						
3	QPSK	8	0	21.11	20.98	20.99	22.5	0				
3	QPSK	8	4	21.04	21.13	21.14						
3	QPSK	8	7	21.11	20.98	21.02	22.5	0				
3	QPSK	1	0	21.12	21.08	21.13						
3	QPSK	1	8	21.11	20.98	21.05						
3	16QAM	1	8	21.07	21.03	21.15	22.5	0				
3	16QAM	1	14	21.02	21.18	21.19						
3	16QAM	1	19	21.13	21.09	21.09						
3	16QAM	8	4	21.00	21.08	20.99	22.5	0				
3	16QAM	8	7	20.96	21.18	20.98						
3	16QAM	8	19	20.99	20.98	20.98						
3	16QAM	1	0	20.90	20.90	21.14	22.5	0				
3	16QAM	1	8	20.97	21.18	20.99						
3	16QAM	1	14	21.22	21.11	21.19						
3	16QAM	8	0	20.99	20.98	20.98	21.5	1				
3	16QAM	8	4	20.85	20.54	20.65						
3	16QAM	8	7	20.70	20.68	20.85						
3	16QAM	8	19	20.67	20.67	20.67	19.5	3				
3	25QAM	1	0	18.83	18.72	18.75						
3	25QAM	1	8	18.53	18.72	18.65						
3	25QAM	1	14	18.59	18.79	18.70	19.5	3				
3	25QAM	8	0	18.78	18.85	18.85						
3	25QAM	8	7	18.78	18.79	18.70						
3	25QAM	15	0	18.49	18.72	18.64	19.5	3				
Channel												
Frequency (MHz)												
1.4	QPSK	1	0	21.12	21.07	21.21	22.5	0				
1.4	QPSK	1	9	21.08	21.15	21.19						
1.4	QPSK	1	17	21.14	21.16	21.19						
1.4	QPSK	3	0	21.05	21.08	20.98	22.5	0				
1.4	QPSK	3	9	21.05	21.05	21.13						
1.4	QPSK	3	15	21.05	21.14	21.14						
1.4	QPSK	6	0	21.08	21.01	21.14	22.5	0				
1.4	16QAM	1	0	21.11	21.11	21.03						
1.4	16QAM	1	9	21.11	21.08	21.13						
1.4	16QAM	1	17	21.11	21.08	21.13	22.5	0				
1.4	16QAM	3	0	21.11	21.08	21.13						
1.4	16QAM	3	9	21.16	21.01	21.03						
1.4	16QAM	1	0	21.01	21.10	21.02	22.5	0				
1.4	16QAM	1	17	21.13	21.11	21.17						
1.4	16QAM	1	33	21.09	20.99	20.98						
1.4	16QAM	1	0	21.03	21.05	21.14	22.5	0				
1.4	16QAM	3	0	20.88	21.00	21.07						
1.4	16QAM	3	9	21.13	21.02	21.17						
1.4	16QAM	3	0	20.75	20.84	20.81	22.5	0				
1.4	16QAM	3	9	20.84	20.59	20.74						
1.4	16QAM	3	15	20.85	20.68	20.85						
1.4	16QAM	6	0	20.73	20.80	20.84	21.5	1				
1.4	25QAM	1	0	18.72	18.75	18.76						
1.4	25QAM	1	9	18.55	18.67	18.62						
1.4	25QAM	1	17	18.72	18.74	18.74	19.5	3				
1.4	25QAM	3	0	18.65	18.67	18.65						
1.4	25QAM	3	9	18.76	18.81	18.82						
1.4	25QAM	3	15	18.71	18.80	18.80	19.5	3				
1.4	25QAM	6	0	18.61	18.66	18.66						
1.4	25QAM	6	9	18.70	18.70	18.70						

Band 38(only on channel required)											
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. (Fwh)	Power Middle Ch. (Fwh)	Power High Ch. (Fwh)	Turn-up time (dBm)	MFR (dB)			
Channel				37600	38000	38100					
Frequency (MHz)				2080	2095	2010					
20	QPSK	1	0	17.24	17.02	17.11	18	0			
20	QPSK	1	40	17.21	17.19	17.08					
20	QPSK	1	96	17.27	17.23	17.28					
20	QPSK	50	0	17.18	17.11	17.01					
20	QPSK	50	24	17.25	17.20	17.23	18	0			
20	QPSK	50	0	17.15	17.01	17.07					
20	QPSK	100	0	17.21	17.17	17.20					
20	16QAM	1	0	17.00	16.92	16.74					
20	16QAM	1	40	16.97	16.95	16.97	18	0			
20	16QAM	1	96	17.04	17.00	16.98					
20	16QAM	50	0	16.98	16.99	17.03					
20	16QAM	50	24	17.12	17.06	17.02					
20	16QAM	50	50	17.17	17.10	17.00	18	0			
20	16QAM	100	0	17.08	16.92	17.00					
20	64QAM	1	0	16.91	16.96	16.95					
20	64QAM	1	40	16.97	16.94	16.88					
20	64QAM	50	0	16.98	17.03	16.95	18	0			
20	64QAM	50	24	17.12	17.06	17.02					
20	64QAM	50	50	16.96	17.17	17.07					
20	256QAM	1	0	17.04	17.02	17.00					
20	256QAM	1	40	17.02	17.01	16.90	18	0			
20	256QAM	1	96	17.01	17.00	16.98					
20	256QAM	50	0	17.26	17.20	17.23					
20	256QAM	50	24	17.24	17.23	17.20					
20	256QAM	50	50	17.22	17.21	17.17	18	0			
20	256QAM	100	0	17.23	17.24	17.18					
Channel				37600	38000	38175			Turn-up time (dBm)	MFR (dB)	
Frequency (MHz)				2077.5	2095	2017.5					
15	QPSK	1	0	17.09	16.95	16.97	18	0			
15	QPSK	1	37	17.11	17.11	17.12					
15	QPSK	1	74	17.24	17.21	17.22					
15	QPSK	36	0	17.08	17.18	16.88					
15	QPSK	36	20	17.13	17.13	17.15	18	0			
15	QPSK	36	36	17.03	16.96	16.82					
15	QPSK	75	0	16.91	16.93	17.07					
15	16QAM	1	0	17.12	16.91	16.91					
15	16QAM	1	37	16.90	17.00	16.99	18	0			
15	16QAM	1	74	17.16	17.02	17.02					
15	16QAM	36	0	16.99	17.16	17.06					
15	16QAM	36	20	17.04	17.12	16.91					
15	16QAM	36	36	17.08	17.23	17.19	18	0			
15	16QAM	75	0	17.18	17.02	17.06					
15	64QAM	1	0	17.09	16.93	17.00					
15	64QAM	1	37	17.16	16.98	17.03					
15	64QAM	1	74	17.11	17.01	17.00	18	0			
15	64QAM	36	0	17.15	17.11	17.11					
15	64QAM	36	20	17.14	17.00	17.05					
15	64QAM	36	36	17.03	17.16	17.06					
15	64QAM	75	0	17.03	17.19	17.13	18	0			
15	256QAM	1	0	17.03	17.04	16.90					
15	256QAM	1	37	17.07	16.92	17.06					
15	256QAM	1	74	16.90	16.79	17.01					
15	256QAM	36	0	17.14	17.18	17.14	18	0			
15	256QAM	36	20	17.10	17.18	16.98					
15	256QAM	36	36	17.08	17.05	17.18					
15	256QAM	75	0	17.08	17.07	17.18					
Channel				37600	38000	38200	Turn-up time (dBm)	MFR (dB)			
Frequency (MHz)				2077.5	2095	2015					
10	QPSK	1	0	17.02	16.92	16.97	18	0			
10	QPSK	1	25	16.94	16.95	16.92					
10	QPSK	1	40	17.24	17.23	17.08					
10	QPSK	25	0	16.93	17.12	16.88					
10	QPSK	25	12	16.91	16.98	17.09	18	0			
10	QPSK	25	25	17.04	17.03	16.72					
10	QPSK	50	0	17.16	16.94	17.00					
10	16QAM	1	0	17.15	16.79	17.00					
10	16QAM	1	25	16.97	17.04	16.94	18	0			
10	16QAM	1	40	17.03	16.95	16.93					
10	16QAM	25	0	17.03	16.99	17.13					
10	16QAM	25	12	17.12	16.99	17.04					
10	16QAM	25	25	17.02	16.99	17.09	18	0			
10	16QAM	50	0	16.90	16.77	17.06					
10	64QAM	1	0	17.19	17.01	16.99					
10	64QAM	1	25	17.13	16.99	16.97					
10	64QAM	1	40	16.93	17.04	16.94	18	0			
10	64QAM	25	0	16.94	17.09	17.01					
10	64QAM	25	25	16.95	16.98	17.04					
10	64QAM	50	0	17.17	16.96	16.94					
10	256QAM	1	0	17.00	16.94	17.04	18	0			
10	256QAM	1	25	17.00	16.94	17.04					
10	256QAM	1	50	17.00	16.94	17.04					
10	256QAM	25	25	16.96	17.07	17.04					
10	256QAM	25	0	17.02	17.09	17.10	18	0			
10	256QAM	25	12	17.04	17.19	17.21					
10	256QAM	25	25	17.27	17.14	16.92					
10	256QAM	50	0	17.21	17.25	17.21					
Channel				37775	38000	38225	Turn-up time (dBm)	MFR (dB)			
Frequency (MHz)				20775	2095	2017.5					
5	QPSK	1	0	16.99	17.00	16.97	18	0			
5	QPSK	1	12	16.95	16.92	17.00					
5	QPSK	1	24	17.06	17.04	17.24					
5	QPSK	1	48	17.01	17.01	16.99					
5	QPSK	12	7	17.08	17.06	16.94	18	0			
5	QPSK	12	13	16.90	17.03	16.95					
5	QPSK	24	0	16.98	17.16	17.22					
5	QPSK	24	12	16.95	16.78	16.94					
5	16QAM	1	0	16.95	16.78	16.89	18	0			
5	16QAM	1	12	17.06	16.97	16.80					
5	16QAM	1	24	17.16	17.06	17.06					
5	16QAM	12	7	17.16	17.18	16.91					
5	16QAM	12	13	17.21	17.19	17.18	18	0			
5	16QAM	24	0	16.92	16.96	17.07					
5	64QAM	1	0	17.17	17.00	16.77					
5	64QAM	1	12	17.05	16.94	16.97					
5	64QAM	1	24	16.93	16.98	17.11	18	0			
5	64QAM	12	7	17.07	17.00	16.99					
5	64QAM	12	7	17.02	16.91	16.86					
5	64QAM	12	13	16.86	17.21	17.13					
5	256QAM	1	0	16.98	17.02	16.97	18	0			
5	256QAM	1	12	16.86	16.87	17.05					
5	256QAM	1	12	16.99	16.93	17.00					
5	256QAM	1	24	17.16	17.06	16.96					
5	256QAM	12	0	17.18	17.13	17.21	18	0			
5	256QAM	12	13	17.03	16.99	16.94					
5	256QAM	24	0	17.00	17.00	16.99					



Band 41 (2.6G Band) HPUE (Limit 27)													
BW (MHz)	Modulation	RB Size	RB Offset	Power Low		Power Low Middle		Power High Middle		Power High		Time-up limit (dBm)	MPR (dB)
				Ch. (Fwh)	Ch. (Fwh)	Ch. (Fwh)	Ch. (Fwh)	Ch. (Fwh)	Ch. (Fwh)				
Channel													
Frequency (MHz)				36750	40185	40905	41005	41400					
20	QPSK	1	0	18.99	19.02	18.91	18.99	19.11					
20	QPSK	1	40	18.81	19.06	19.01	19.07	19.06					
20	QPSK	1	80	19.11	19.20	19.13	19.10	19.15					
20	QPSK	50	0	19.07	19.05	18.83	18.84	18.98					
20	QPSK	50	24	19.08	19.18	19.11	19.06	19.12					
20	QPSK	50	40	19.01	19.04	18.84	18.80	18.86					
20	QPSK	100	0	19.05	19.18	19.08	19.04	19.10					
20	16QAM	1	0	19.16	19.16	19.06	19.03	19.13					
20	16QAM	1	40	19.06	19.07	18.86	18.84	19.18					
20	16QAM	1	80	19.07	19.06	18.88	18.85	19.04					
20	16QAM	50	0	19.03	19.07	18.79	18.72	19.14					
20	16QAM	50	24	19.10	19.10	18.86	18.87	19.00					
20	16QAM	50	40	19.04	18.89	18.91	18.96	19.18					
20	16QAM	100	0	19.10	19.09	18.88	18.80	19.10					
20	64QAM	1	0	19.18	19.09	19.03	19.06	19.16					
20	64QAM	1	40	19.18	19.03	18.95	19.07	19.07					
20	64QAM	1	80	19.14	19.06	19.06	19.11	19.13					
20	64QAM	50	0	19.09	19.06	18.95	18.92	19.07					
20	64QAM	50	24	19.06	19.14	18.99	19.16	19.08					
20	64QAM	50	40	19.07	19.14	19.02	19.13	19.12					
20	64QAM	100	0	19.09	19.14	18.98	19.10	19.08					
20	256QAM	1	0	19.18	19.08	19.12	19.04	19.15					
20	256QAM	1	40	19.17	19.06	19.10	19.03	19.14					
20	256QAM	1	80	19.14	19.02	19.08	19.02	19.12					
20	256QAM	50	0	19.14	19.09	19.13	19.07	19.11					
20	256QAM	50	24	19.10	19.07	19.11	19.15	19.18					
20	256QAM	50	40	19.10	19.04	19.19	19.14	19.19					
20	256QAM	100	0	19.13	19.12	19.17	19.13	19.12					
Channel													
Frequency (MHz)				36725	40173	40905	41005	41415					
15	QPSK	1	0	19.15	19.15	18.99	19.03	19.04					
15	QPSK	1	37	19.83	19.18	18.89	18.99	19.06					
15	QPSK	1	74	19.73	19.80	19.92	19.79	19.84					
15	QPSK	36	0	19.09	19.09	18.99	19.04	19.89					
15	QPSK	36	20	19.09	19.16	19.09	19.02	19.83					
15	QPSK	36	36	19.03	19.78	19.89	19.08	19.81					
15	QPSK	75	0	19.02	19.87	19.09	19.86	19.86					
15	16QAM	1	0	19.14	19.12	19.17	19.07	19.03					
15	16QAM	1	37	19.86	19.86	19.09	19.97	19.92					
15	16QAM	1	74	19.79	19.74	19.94	19.73	19.92					
15	16QAM	36	0	19.09	19.84	19.02	19.96	19.92					
15	16QAM	36	20	19.12	19.89	19.89	19.87	19.92					
15	16QAM	36	36	19.06	19.85	19.82	19.84	19.87					
15	16QAM	75	0	19.09	19.04	19.05	19.98	19.94					
15	64QAM	1	0	19.14	19.07	19.09	19.09	19.00					
15	64QAM	1	37	19.20	19.91	19.02	19.02	19.92					
15	64QAM	1	74	19.02	19.96	19.19	19.01	19.96					
15	64QAM	36	0	19.06	19.12	19.12	19.91	19.86					
15	64QAM	36	20	19.81	19.19	19.96	19.97	19.94					
15	64QAM	36	36	19.16	19.99	19.02	19.84	19.19					
15	64QAM	75	0	19.09	19.19	19.98	19.93	19.98					
15	256QAM	1	0	19.02	19.97	19.92	19.94	19.95					
15	256QAM	1	37	19.19	19.93	19.98	19.94	19.96					
15	256QAM	1	74	19.09	19.95	19.91	19.91	19.91					
15	256QAM	36	0	19.04	19.16	19.99	19.92	19.92					
15	256QAM	36	20	19.98	19.94	19.09	19.09	19.17					
15	256QAM	36	36	19.05	19.87	19.15	19.98	19.90					
15	256QAM	75	0	19.03	19.16	19.99	19.91	19.91					
Channel													
Frequency (MHz)				36700	40160	40905	41005	41400					
10	QPSK	1	0	19.02	19.10	19.14	19.96	19.93					
10	QPSK	1	25	19.04	19.08	19.88	19.92	19.84					
10	QPSK	1	40	19.07	19.82	19.91	19.82	19.80					
10	QPSK	25	0	19.05	19.85	19.99	19.82	19.74					
10	QPSK	12	0	19.14	19.04	19.11	19.11	19.81					
10	QPSK	25	25	19.07	19.88	19.99	19.99	19.94					
10	QPSK	50	0	19.87	19.84	19.88	19.91	19.76					
10	16QAM	1	0	19.06	19.12	19.09	19.99	19.95					
10	16QAM	1	25	19.89	19.90	19.93	19.96	19.92					
10	16QAM	1	40	19.73	19.87	19.83	19.89	19.96					
10	16QAM	25	0	19.89	19.88	19.90	19.92	19.83					
10	16QAM	25	12	19.88	19.91	19.89	19.14	19.90					
10	16QAM	25	25	19.83	19.89	19.81	19.86	19.72					
10	16QAM	50	0	19.98	19.88	19.94	19.13	19.87					
10	64QAM	1	0	19.15	19.78	19.99	19.94	19.83					
10	64QAM	1	25	19.15	19.90	19.90	19.12	19.79					
10	64QAM	1	40	19.04	19.82	19.12	19.11	19.78					
10	64QAM	25	0	19.97	19.13	19.99	19.97	19.92					
10	64QAM	25	12	19.03	19.94	19.91	19.97	19.99					
10	64QAM	25	25	19.91	19.98	19.14	19.99	19.19					
10	64QAM	50	0	19.84	19.96	19.96	19.99	19.94					
10	256QAM	1	0	19.10	19.94	19.19	19.92	19.98					
10	256QAM	1	25	19.18	19.81	19.15	19.95	19.19					
10	256QAM	1	40	19.08	19.95	19.89	19.92	19.98					
10	256QAM	25	0	19.94	19.99	19.11	19.98	19.96					
10	256QAM	25	12	19.14	19.93	19.91	19.25	19.12					
10	256QAM	25	25	19.07	19.99	19.98	19.12	19.13					
10	256QAM	50	0	19.93	19.96	19.92	19.96	19.91					
Channel													
Frequency (MHz)				36675	40148	40905	41005	41600					
5	QPSK	1	0	19.73	19.87	19.72	19.98	20.22					
5	QPSK	1	12	19.83	19.74	19.68	19.69	19.77					
5	QPSK	1	24	19.53	19.62	19.63	19.79	19.84					
5	QPSK	12	0	19.74	19.74	19.68	19.69	19.74					
5	QPSK	12	7	19.80	19.57	19.60	19.76	19.74					
5	QPSK	24	15	19.72	19.56	19.61	19.88	19.71					
5	QPSK	19	0	19.69	19.69	19.69	19.88	19.75					
5	16QAM	1	0	19.92	19.92	19.91	19.98	19.98					
5	16QAM	1	12	19.91	19.86	19.86	19.91	19.78					
5	16QAM	1	24	19.99	19.93	19.97	19.98	19.92					
5	16QAM	12	0	19.89	19.12	19.89	19.98	19.87					
5	16QAM	12	7	19.77	19.99	19.78	19.74	19.72					
5	16QAM	19	12	19.88	19.55	19.81	19.88	19.55					
5	64QAM	1	0	19.74	19.76	19.76	19.76	19.54					
5	64QAM	1	0	19.82	19.71	19.82	19.87	19.67					
5	64QAM	1	12	19.78	19.74	19.85	19.75	19.67					
5	64QAM	1	24	19.87	19.79	19.84	19.77	19.52					
5	64QAM	12	0	19.79	19.79	19.89	19.89	19.84					
5	64QAM	12	13	19.76	19.79	19.86	19.91	19.90					
5	64QAM	24	0	19.79	19.81	19.83	19.83	19.84					
5	256QAM	1	0	19.13	19.08	19.88	19.97	19.16					
5	256QAM	1	12	19.99	19.91	19.90	19.93	19.93					
5	256QAM	1	24	19.17	19.06	19.87	19.87	19.87					
5	256QAM	12	0	19.91	19.91	19.95	19.95	19.96					
5	256QAM	12	7	19.86	19.90	19.89	19.12	19.97					
5	256QAM	12	13	19.99	19.94	19.15	19.96	19.96					



Base	CDMA BC1			Turn-up Limit (dBm)
TX Channel	25	600	1175	
Frequency (MHz)	1851.25	1860	1908.75	
RC1 90SS	22.44	22.48	22.41	23.50
RC3 90SS	22.44	22.46	22.40	23.50
RC3 90S2 (F=8CH)	22.41	22.45	22.38	23.50
RC3 90S2 (F=8CH)	22.40	22.44	22.38	23.50
RTAP 153.6Kbps	22.38	22.42	22.35	23.50
REAP 4096bps	22.37	22.40	22.34	23.50

Band 2 (1900MHz Band)													
Part 24E													
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freqs	Power Med Ch / Freqs	Power High Ch / Freqs	Turn-on Time (s)	APR3 (dB)					
Channel													
Frequency (MHz)													
20	QPSK	1	0	22.45	22.42	22.38	23.5	0					
20	QPSK	1	49	22.39	22.33	22.35							
20	QPSK	1	99	22.48	22.45	22.53							
20	QPSK	1	149	22.40	22.38	22.42							
20	QPSK	50	24	22.47	22.43	22.50	23.5	0					
20	QPSK	50	50	22.42	22.40	22.48							
20	QPSK	100	0	22.45	22.40	22.49							
20	16QAM	1	0	22.47	22.48	22.52							
20	16QAM	1	49	22.51	22.48	22.48	23.5	0					
20	16QAM	1	99	22.38	22.40	22.43							
20	16QAM	50	50	22.03	21.97	21.92							
20	16QAM	50	24	22.08	21.97	22.01							
20	16QAM	50	50	22.02	22.01	21.98	23	0.5					
20	16QAM	100	0	22.06	21.96	21.97							
20	84QAM	1	0	22.20	22.16	22.08							
20	84QAM	1	49	22.17	22.11	22.07		0.5					
20	84QAM	1	99	22.06	22.01	22.02	22	1.5					
20	84QAM	50	24	21.09	21.05	21.03							
20	84QAM	50	50	21.06	21.03	21.01							
20	84QAM	100	0	21.08	20.94	21.01							
20	256QAM	1	0	18.70	18.72	18.69	19.5	4					
20	256QAM	1	49	18.67	18.70	18.66							
20	256QAM	1	99	18.65	18.67	18.64							
20	256QAM	50	24	18.65	18.67	18.64							
20	256QAM	50	24	18.67	18.65	18.68	19.5	4					
20	256QAM	50	50	18.64	18.68	18.65							
20	256QAM	100	0	18.63	18.64	18.64							
20	256QAM	100	0	18.63	18.64	18.64							
Channel													
Frequency (MHz)													
16	QPSK	1	0	22.40	22.30	22.30	23.5	0					
16	QPSK	1	37	22.33	22.22	22.16							
16	QPSK	1	74	22.48	22.36	22.36							
16	QPSK	36	0	22.34	22.23	22.31							
16	QPSK	36	20	22.43	22.28	22.41	23.5	0					
16	QPSK	36	20	22.40	22.32	22.34							
16	QPSK	75	0	22.45	22.40	22.41							
16	16QAM	1	0	22.45	22.35	22.43							
16	16QAM	1	37	22.37	22.41	22.47	23.5	0					
16	16QAM	1	74	22.27	22.35	22.38							
16	16QAM	36	0	21.97	21.91	21.87							
16	16QAM	36	20	21.96	21.84	21.88		0.5					
16	16QAM	75	0	21.87	21.88	21.87	23	0.5					
16	16QAM	75	0	21.82	21.81	21.87							
16	84QAM	1	0	22.10	22.08	22.02							
16	84QAM	1	37	22.08	22.01	21.83		0.5					
16	84QAM	1	74	22.15	22.06	21.85	22	1.5					
16	84QAM	36	0	20.99	20.93	20.93							
16	84QAM	36	20	21.00	20.97	20.99							
16	84QAM	75	0	20.97	20.95	20.97							
16	256QAM	1	0	18.64	18.67	18.66	19.5	4					
16	256QAM	1	37	18.57	18.69	18.57							
16	256QAM	1	74	18.54	18.54	18.55							
16	256QAM	36	0	18.54	18.56	18.57							
16	256QAM	36	20	18.63	18.67	18.62	19.5	4					
16	256QAM	36	20	18.63	18.68	18.61							
16	256QAM	75	0	18.55	18.58	18.59							
16	256QAM	75	0	18.55	18.58	18.59							
Channel													
Frequency (MHz)													
10	QPSK	1	0	22.39	22.38	22.28	23.5	0					
10	QPSK	1	49	22.36	22.28	22.28							
10	QPSK	1	99	22.41	22.44	22.36							
10	QPSK	25	0	22.38	22.34	22.38							
10	QPSK	25	25	22.33	22.30	22.32	23.5	0					
10	QPSK	50	0	22.34	22.37	22.43							
10	16QAM	1	0	22.41	22.41	22.47							
10	16QAM	1	49	22.39	22.45	22.42							
10	16QAM	1	49	22.33	22.34	22.40	23.5	0					
10	16QAM	25	0	21.96	21.91	21.86							
10	16QAM	25	12	21.90	21.80	21.88		0.5					
10	16QAM	25	25	21.90	21.89	21.89							
10	84QAM	1	0	21.95	21.82	21.91	23	0.5					
10	84QAM	1	0	22.16	22.15	21.85							
10	84QAM	1	20	22.00	22.00	22.00							
10	84QAM	1	49	22.02	21.91	21.93		0.5					
10	84QAM	25	0	20.97	20.98	20.79	22	1.5					
10	84QAM	25	12	21.00	20.97	20.95							
10	84QAM	25	25	21.02	20.99	20.99							
10	84QAM	50	0	21.04	20.91	20.87							
10	256QAM	1	0	18.60	18.70	18.58	19.5	4					
10	256QAM	1	20	18.63	18.65	18.56							
10	256QAM	1	49	18.52	18.63	18.51							
10	256QAM	25	0	18.67	18.59	18.55							
10	256QAM	25	12	18.57	18.68	18.52	19.5	4					
10	256QAM	25	25	18.54	18.53	18.53							
10	256QAM	50	0	18.63	18.66	18.63							
10	256QAM	50	0	18.63	18.66	18.63							
Channel													
Frequency (MHz)													
5	QPSK	1	0	22.42	22.40	22.36	23.5	0					
5	QPSK	1	12	22.32	22.27	22.26							
5	QPSK	1	24	22.45	22.30	22.52							
5	QPSK	1	37	22.33	22.28	22.33							
5	QPSK	12	7	22.38	22.33	22.48	23.5	0					
5	QPSK	12	13	22.38	22.27	22.43							
5	QPSK	25	0	22.37	22.27	22.36							
5	16QAM	1	0	22.37	22.40	22.41							
5	16QAM	1	12	22.39	22.34	22.43	23.5	0					
5	16QAM	1	24	22.34	22.35	22.29							
5	16QAM	12	7	22.00	21.98	21.78		0.5					
5	16QAM	12	7	21.99	21.90	21.94							
5	16QAM	12	13	21.90	21.99	21.88	23	0.5					
5	16QAM	25	0	22.02	21.88	21.87							
5	84QAM	1	0	22.20	22.14	22.14							
5	84QAM	1	12	22.02	22.09	22.01		0.5					
5	84QAM	1	24	22.01	21.91	22.00	22	1.5					
5	84QAM	12	0	21.90	20.98	20.99							
5	84QAM	12	7	21.06	20.99	20.99							
5	84QAM	12	13	21.04	20.94	20.98							
5	84QAM	25	0	21.00	20.91	20.90	19.5	4					
5	256QAM	1	0	18.56	18.61	18.54							
5	256QAM	1	12	18.57	18.63	18.57							
5	256QAM	1	24	18.54	18.57	18.55							
5	256QAM	12	0	18.52	18.68	18.60	19.5	4					
5	256QAM	12	7	18.58	18.56	18.64							
5	256QAM	12	13	18.55	18.54	18.52							
Channel													
Frequency (MHz)													
3	QPSK	1	0	22.45	22.40	22.33	23.5	0					
3	QPSK	1	11	22.40	22.20	22.25							
3	QPSK	1	24	22.44	22.24	22.24							
3	QPSK	8	0	22.40	22.32	22.38							
3	QPSK	8	4	22.41	22.34	22.43	23.5	0					
3	QPSK	16	0	22.38	22.28	22.35							
3	16QAM	1	0	22.42	22.39	22.48							
3	16QAM	1	0	22.41	22.38	22.40							
3	16QAM	1	14	22.36	22.32	22.44	23.5	0					
3	16QAM	8	0	21.97	21.83	21.91							
3	16QAM	8	4	21.94	21.90	22.00							
3	16QAM	16	0	22.06	21.93	21.93		0.5					
3	16QAM	1	0	22.11	22.07	21.94	23	0.5					
3	16QAM	1	14	22.05	21.98	21.90							
3	16QAM	1	14	21.98	21.96	22.00							
3	16QAM	8	0	20.91	20.84	20.80							
3	84QAM	8	4	21.07	20.94	20.92	22	1.5					
3	84QAM	1	0	21.00	20.93	20.93							
3	84QAM	1	14	21.03	20.94	20.94							
3	84QAM	16	0	21.07	20.94	20.91							
3	256QAM	1	0	18.67	18.69	18.62	19.5	4					
3	256QAM	1	14	18.62	18.65	18.61							
3	256QAM	1	14	18.52	18.57	18.51							
3	256QAM	1	0	18.56	18.54	18.63							
Channel													
Frequency (MHz)													
1.4	QPSK	1	0	22.33	22.28	22.30	23.5	0					
1.4	QPSK	1	3	22.33	22.22	22.20							
1.4	QPSK	1	3	22.37	22.41	22.38							
1.4	QPSK	1	30	22.35	22.26	22.42							
1.4	QPSK	1	3	22.46	22.34	22.48	23.5	0					
1.4	QPSK	3	0	22.33	22.29	22.45							
1.4	QPSK	6	0	22.31	22.30	22.40							
1.4	16QAM	1	3	22.46	22.48	22.37							
1.4	16QAM	1	6	22.37	22.29	22.34	23.5	0					
1.4	16QAM	1	30	22.32	22.18	22.30							
1.4	16QAM	3	0	21.94	21.97	21.98							
1.4	16QAM	3	3	21.88	21.95	21.95							
1.4	16QAM	6	0	21.92	21.81	21.94	23	0.5					
1.4	16QAM	6	3	22.05	21.98	22.00							
1.4	16QAM	6	3	22.26	22.11	22.18							
1.4	16QAM	1	6	22.21	22.03	22.10							
1.4	84QAM	1	3	21.92	21.84	21.95	22	1.5					
1.4	84QAM	3	0	21.13	21.04	21.05							
1.4	84QAM	3	3	21.13	21.11	21.00							
1.4	84QAM	6	0	21.01	20.90	20.92		0.5					
1.4	84QAM	6	3	21.02	20.95								

Band 25 (1000MHz Band) Part 24E																
RF (MHz)	Modulation	RB Size	RB Offset	Power Class Ch / Freq	Power Class Ch / Freq	Power Class Ch / Freq	Time-use (min)	MFR (dB)								
Channel																
Frequency (MHz)																
20	QPSK	1	0	22.27	22.38	22.38	23.5	0								
20	QPSK	1	49	22.37	22.38	22.33										
20	QPSK	1	99	22.29	22.31	22.20										
20	QPSK	50	0	22.27	22.38	22.18	23.5	0								
20	QPSK	50	24	22.34	22.38	22.30										
20	QPSK	50	50	22.25	22.25	22.21										
20	QPSK	100	0	22.27	22.38	22.18	23.5	0								
20	QPSK	100	24	22.30	22.38	22.33										
20	QPSK	100	49	22.35	22.37	22.32										
20	QPSK	1	99	22.19	22.33	22.17	23	0.5								
20	QPSK	50	0	21.78	21.81	21.73										
20	QPSK	50	24	21.83	21.81	21.73										
20	QPSK	50	50	21.72	21.78	21.76	23	0.5								
20	QPSK	100	0	21.81	21.80	21.74										
20	QPSK	100	24	22.04	21.98	21.87										
20	QPSK	1	49	21.93	21.91	21.87	23	0.5								
20	QPSK	1	99	21.85	21.79	21.76										
20	QPSK	50	0	20.78	20.80	20.76										
20	QPSK	50	24	20.83	20.83	20.73	22	1.5								
20	QPSK	50	50	20.74	20.80	20.75										
20	QPSK	100	0	20.84	20.86	20.74										
20	QPSK	1	49	18.70	18.76	18.75	19.5	4								
20	QPSK	1	99	18.69	18.73	18.73										
20	QPSK	50	0	18.73	18.75	18.72										
20	QPSK	50	24	18.73	18.75	18.72	19.5	4								
20	QPSK	50	50	18.68	18.71	18.69										
20	QPSK	100	0	18.72	18.71	18.67										
Channel																
Frequency (MHz)																
16	QPSK	1	0	22.12	22.29	22.37	23.5	0								
16	QPSK	1	37	22.26	22.38	22.24										
16	QPSK	1	74	22.28	22.38	22.18										
16	QPSK	36	0	22.14	22.29	22.12	23.5	0								
16	QPSK	36	20	22.24	22.28	22.20										
16	QPSK	36	40	22.18	22.28	22.18										
16	QPSK	75	0	22.21	22.33	22.19	23.5	0								
16	QPSK	75	1	22.17	22.32	22.28										
16	QPSK	75	1	22.27	22.28	22.26										
16	QPSK	1	37	22.09	22.29	22.09	23.5	0								
16	QPSK	36	0	21.78	21.77	21.85										
16	QPSK	36	20	21.72	21.70	21.73										
16	QPSK	75	0	21.78	21.78	21.88	23	0.5								
16	QPSK	75	0	21.73	21.67	21.68										
16	QPSK	1	0	21.97	21.90	21.83										
16	QPSK	1	37	21.92	21.89	21.85	23	0.5								
16	QPSK	1	74	21.80	21.86	21.86										
16	QPSK	36	0	20.73	20.75	20.76										
16	QPSK	36	20	20.78	20.71	20.72	22	1.5								
16	QPSK	36	40	20.72	20.84	20.85										
16	QPSK	75	0	20.78	20.86	20.88										
16	QPSK	75	0	20.78	20.86	20.88	19.5	4								
16	QPSK	1	0	18.73	18.77	18.86										
16	QPSK	1	37	18.62	18.67	18.69										
16	QPSK	1	74	18.62	18.69	18.69	19.5	4								
16	QPSK	36	0	18.69	18.63	18.65										
16	QPSK	36	20	18.64	18.61	18.70										
16	QPSK	36	40	18.60	18.66	18.66	19.5	4								
16	QPSK	75	0	18.68	18.68	18.80										
16	QPSK	75	0	18.68	18.68	18.80										
Channel																
Frequency (MHz)																
16	QPSK	1	0	22.13	22.28	22.25	23.5	0								
16	QPSK	1	49	22.31	22.19	22.07										
16	QPSK	25	0	22.27	22.25	22.11										
16	QPSK	25	0	22.27	22.25	22.11	23.5	0								
16	QPSK	25	25	22.12	22.17	22.16										
16	QPSK	50	0	22.19	22.31	22.16										
16	QPSK	50	0	22.29	22.31	22.16	23.5	0								
16	QPSK	50	0	22.29	22.31	22.16										
16	QPSK	50	0	22.29	22.31	22.16										
16	QPSK	1	0	22.29	22.32	22.25	23.5	0								
16	QPSK	1	49	22.13	22.23	22.07										
16	QPSK	25	0	21.77	21.73	21.68										
16	QPSK	25	0	21.62	21.67	21.58	23	0.5								
16	QPSK	25	25	21.68	21.78	21.67										
16	QPSK	25	25	21.68	21.78	21.67										
16	QPSK	50	0	21.74	21.75	21.74	23	0.5								
16	QPSK	1	0	21.99	21.84	21.81										
16	QPSK	1	25	21.81	21.79	21.86										
16	QPSK	1	49	21.82	21.68	21.83	22	1.5								
16	QPSK	25	0	20.73	20.84	20.76										
16	QPSK	25	12	20.72	20.84	20.85										
16	QPSK	25	25	20.72	20.76	20.71	22	1.5								
16	QPSK	50	0	20.76	20.86	20.87										
16	QPSK	50	0	20.76	20.86	20.87										
16	QPSK	1	0	18.62	18.65	18.65	19.5	4								
16	QPSK	1	25	18.62	18.69	18.69										
16	QPSK	1	49	18.61	18.63	18.73										
16	QPSK	25	0	18.69	18.58	18.71	19.5	4								
16	QPSK	25	12	18.61	18.65	18.64										
16	QPSK	25	25	18.61	18.58	18.54										
16	QPSK	50	0	18.70	18.73	18.82	19.5	4								
16	QPSK	50	0	18.70	18.73	18.82										
16	QPSK	50	0	18.70	18.73	18.82										
Channel																
Frequency (MHz)																
5	QPSK	1	0	22.19	22.27	22.35	23.5	0								
5	QPSK	1	12	22.27	22.28	22.25										
5	QPSK	1	24	22.18	22.20	22.16										
5	QPSK	12	0	22.18	22.27	22.18	23.5	0								
5	QPSK	12	7	22.24	22.28	22.28										
5	QPSK	12	13	22.22	22.21	22.16	23.5	0								
5	QPSK	12	19	22.20	22.20	22.15										
5	QPSK	12	25	22.23	22.28	22.25										
5	QPSK	1	0	22.25	22.33	22.24	23.5	0								
5	QPSK	1	12	22.26	22.33	22.29										
5	QPSK	1	24	22.16	22.20	22.16										
5	QPSK	12	0	22.18	22.27	22.18	23.5	0								
5	QPSK	12	7	22.24	22.28	22.28										
5	QPSK	12	13	22.22	22.21	22.16	23.5	0								
5	QPSK	12	19	22.20	22.20	22.15										
5	QPSK	12	25	22.23	22.28	22.25										
5	QPSK	1	0	21.77	21.66	21.71	23	0.5								
5	QPSK	12	0	21.71	21.66	21.75										
5	QPSK	12	13	21.81	21.68	21.73										
5	QPSK	1	0	21.97	21.84	21.75	23	0.5								
5	QPSK	1	12	21.84	21.77	21.74										
5	QPSK	1	24	21.72	21.62	21.63										
5	QPSK	12	0	20.78	20.74	20.75	23	0.5								
5	QPSK	12	7	20.76	20.80	20.73										
5	QPSK	12	13	20.86	20.80	20.81										
5	QPSK	12	19	20.75	20.79	20.72	22	1.5								
5	QPSK	1	0	18.65	18.68	18.68										
5	QPSK	1	12	18.69	18.64	18.69										
5	QPSK	1	24	18.62	18.66	18.71	19.5	4								
5	QPSK	12	0	18.65	18.73	18.80										
5	QPSK	12	7	18.68	18.62	18.70										
5	QPSK	12	13	18.63	18.68	18.67	19.5	4								
5	QPSK	12	19	18.63	18.68	18.67										
5	QPSK	12	25	18.63	18.68	18.67										
Channel																
Frequency (MHz)																
3	QPSK	1	0	22.24	22.23	22.20	23.5	0								
3	QPSK	1	14	22.27	22.30	22.27										
3	QPSK	1	28	22.22	22.31	22.27										
3	QPSK	8	0	22.12	22.22	22.27	23.5	0								
3	QPSK	8	7	22.13	22.17	22.07										
3	QPSK	16	0	22.19	22.34	22.17										
3	QPSK	1	0	22.26	22.29	22.26	23.5	0								
3	QPSK	1	14	22.29	22.30	22.21										
3	QPSK	1	28	22.26	22.28	22.10										
3	QPSK	8	0	21.70	21.70	21.62	23	0.5								
3	QPSK	8	7	21.63	21.63	21.54										
3	QPSK	16	0	21.70	21.71	21.68										
3	QPSK	15	0	21.74	21.75	21.69	23	0.5								
3	QPSK	1	0	21.79	21.78	21.75										
3	QPSK	1	14	21.79	21.84	21.84										
3	QPSK	1	28	21.73	21.72	21.68	22	1.5								
3	QPSK	8	0	20.71	20.72	20.71										
3	QPSK	8	7	20.71	20.72	20.72										
3	QPSK	8	14	20.71	20.72	20.72	22	1.5								
3	QPSK	15	0	20.79	20.74	20.72										
3	QPSK	15	7	20.76	20.73	20.72										
3	QPSK	1	0	18.59	18.72	18.67	19.5	4								
3	QPSK	1	14	18.57	18.70	18.64										
3	QPSK	8	0	18.66	18.66	18.65										
3	QPSK	8	7	18.64	18.66	18.65	19.5	4								
3	QPSK	15	0	18.67	18.75	18.67										
3	QPSK	15	7	18.67	18.75	18.67										
Channel																
Frequency (MHz)																
1.4	QPSK	1	0	22.10	22.33	22.25	23.5	0								
1.4	QPSK	1	3	22.30	22.24	22.24										
1.4	QPSK	1	6	22.29	22.20	22.19										
1.4	QPSK	3	0	22.20	22.14	22.11	23.5	0								
1.4	QPSK	3	1	22.24	22.31	22.22										
1.4	QPSK	3	3	22.13	22.13	22.13										
1.4	QPSK	15	0	22.33	22.28	22.28	23.5	0								
1.4	QPSK	15	1	22.23	22.23	22.25										

Band 38(only on channel required)																
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. 1 (Fwh)	Power Middle Ch. 1 (Fwh)	Power High Ch. 1 (Fwh)	Turn-up limit (dBm)	MPE (dB)								
Channel																
Frequency (MHz)																
20	QPSK	1	0	19.91	19.91	19.92	20.8	0								
20	QPSK	1	49	20.04	20.02	20.03										
20	QPSK	1	99	20.10	20.05	20.08										
20	QPSK	50	0	19.88	19.92	19.98										
20	QPSK	50	24	20.07	20.03	20.04	20.8	0								
20	QPSK	50	50	19.94	20.07	20.01										
20	16QAM	1	0	20.03	19.99	19.90										
20	16QAM	1	49	19.94	19.86	19.94										
20	16QAM	1	99	20.06	20.02	20.07	20.8	0								
20	16QAM	50	0	20.00	19.98	20.02										
20	16QAM	50	24	20.09	20.00	20.05										
20	16QAM	50	50	20.02	20.06	20.08										
20	16QAM	100	0	20.05	19.92	19.95	20.8	0								
20	16QAM	1	0	19.87	19.81	19.63										
20	16QAM	1	49	19.74	19.73	19.55										
20	16QAM	1	99	19.97	19.83	19.87										
20	16QAM	50	0	19.94	19.92	19.93	20.8	0								
20	16QAM	50	24	20.09	20.04	20.03										
20	16QAM	50	50	20.02	20.06	20.08										
20	16QAM	100	0	20.07	19.97	19.97										
20	256QAM	1	0	19.90	19.90	19.15	19.8	1								
20	256QAM	1	49	19.95	19.98	19.99										
20	256QAM	1	99	19.84	19.85	19.83										
20	256QAM	50	24	19.13	19.20	19.20										
20	256QAM	50	24	19.06	19.18	19.03	19.8	1								
20	256QAM	50	50	19.12	19.17	19.25										
20	256QAM	100	0	19.06	19.11	19.02										
Channel																
Frequency (MHz)																
15	QPSK	1	0	19.79	19.85	19.78	20.8	0								
15	QPSK	1	49	19.89	19.80	20.02										
15	QPSK	1	74	19.87	20.03	19.95										
15	QPSK	36	0	19.75	19.77	19.85										
15	QPSK	36	20	19.86	20.00	19.95	20.8	0								
15	QPSK	36	59	19.85	20.06	19.94										
15	QPSK	75	0	19.82	19.99	20.01										
15	16QAM	1	0	19.97	19.89	19.80										
15	16QAM	1	37	19.88	19.78	19.80	20.8	0								
15	16QAM	1	74	19.92	19.87	19.94										
15	16QAM	36	0	20.00	19.94	20.02										
15	16QAM	36	20	19.92	19.92	20.02										
15	16QAM	36	59	19.96	19.99	20.02	20.8	0								
15	16QAM	75	0	19.89	19.89	19.97										
15	16QAM	1	0	19.87	19.48	19.53										
15	16QAM	1	37	19.70	19.63	19.43										
15	16QAM	1	74	19.72	19.78	19.88	20.8	0								
15	16QAM	36	0	19.96	19.96	19.96										
15	16QAM	36	20	20.00	19.91	19.97										
15	16QAM	36	59	19.96	19.95	20.01										
15	16QAM	75	0	20.02	19.92	19.91	19.8	1								
15	256QAM	1	0	19.87	19.84	19.08										
15	256QAM	1	37	19.89	19.96	19.96										
15	256QAM	1	74	19.88	19.85	19.73										
15	256QAM	36	0	19.92	19.96	19.98	19.8	1								
15	256QAM	36	20	19.08	19.13	19.04										
15	256QAM	36	59	19.02	19.13	19.24										
15	256QAM	75	0	19.07	19.03	19.02										
Channel																
Frequency (MHz)																
10	QPSK	1	0	19.66	19.68	19.62	20.8	0								
10	QPSK	1	20	19.82	19.83	19.81										
10	QPSK	1	49	20.01	19.98	20.05										
10	QPSK	25	0	19.88	19.91	19.78										
10	QPSK	25	12	19.96	19.97	19.92	20.8	0								
10	QPSK	25	25	19.94	19.97	19.92										
10	QPSK	50	0	19.85	19.98	19.92										
10	16QAM	1	0	19.89	19.89	19.77										
10	16QAM	1	20	19.79	19.73	19.79	20.8	0								
10	16QAM	1	49	19.94	20.01	19.97										
10	16QAM	25	0	19.96	19.97	20.02										
10	16QAM	25	12	20.04	19.92	20.05										
10	16QAM	25	25	20.02	20.03	19.91	20.8	0								
10	16QAM	50	0	19.88	19.91	19.99										
10	16QAM	1	0	19.92	19.54	19.55										
10	16QAM	1	25	19.92	19.92	19.49										
10	16QAM	1	49	19.81	19.81	19.79	20.8	0								
10	16QAM	25	0	19.94	19.90	19.85										
10	16QAM	25	12	20.00	20.00	19.94										
10	16QAM	25	25	20.02	19.91	20.06										
10	16QAM	50	0	20.01	19.98	19.96	20.8	0								
10	256QAM	1	0	19.92	19.94	19.08										
10	256QAM	1	25	19.88	19.96	19.96										
10	256QAM	1	49	19.84	19.88	19.76										
10	256QAM	25	0	19.96	19.16	19.13	19.8	1								
10	256QAM	25	12	19.97	19.04	19.04										
10	256QAM	25	25	19.85	19.15	19.21										
10	256QAM	50	0	19.92	19.99	19.16										
Channel																
Frequency (MHz)																
5	QPSK	1	0	19.14	19.81	19.72	20.8	0								
5	QPSK	1	12	19.89	19.72	19.98										
5	QPSK	1	24	20.08	20.00	20.00										
5	QPSK	12	0	19.81	19.90	19.85										
5	QPSK	12	7	20.00	20.01	19.97	20.8	0								
5	QPSK	12	13	19.87	20.04	19.95										
5	QPSK	25	0	20.00	19.89	19.97										
5	16QAM	1	0	19.89	19.83	19.90										
5	16QAM	1	12	19.84	19.81	19.91	20.8	0								
5	16QAM	1	24	20.00	19.89	20.06										
5	16QAM	12	0	19.94	19.88	19.89										
5	16QAM	12	7	20.06	19.93	19.97										
5	16QAM	12	13	19.98	20.05	20.05	20.8	0								
5	16QAM	25	0	19.94	19.89	19.87										
5	16QAM	25	12	20.03	19.70	19.65										
5	16QAM	25	25	19.98	20.00	19.95										
5	16QAM	50	0	19.96	19.94	19.88	20.8	0								
5	256QAM	1	0	19.84	19.84	19.08										
5	256QAM	1	12	19.81	19.86	19.94										
5	256QAM	1	24	19.82	19.88	19.78										
5	256QAM	12	0	19.80	19.05	19.05	19.8	1								
5	256QAM	12	6	19.00	19.00	19.00										
5	256QAM	12	17	18.99	19.02	19.00										
5	256QAM	50	0	19.03	19.03	19.04										
5	256QAM	50	0	19.06	19.07	19.11	19.8	1								

Band 41 (2.6G Band) HPUE (Limit 27)										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. [Fem]	Power Low Middle Ch. [Fem]	Power Middle Ch. [Fem]	Power High Middle Ch. [Fem]	Power High Ch. [Fem]	Time-up-link [dBm]	MFR [dB]
Channel										
Frequency [MHz]				36750	40185	40620	41055	41490		
20	QPSK	1	0	2158	2168	2168	2168	2168		
20	QPSK	1	48	2178	2168	2169	2169	2180	22.4	0
20	QPSK	1	96	2178	2168	2178	2181	2183		
20	QPSK	50	0	2172	2181	2182	2188	2177		
20	QPSK	50	48	2172	2168	2175	2178	2187		
20	QPSK	50	96	2178	2179	2173	2175	2177	22.4	0
20	QPSK	100	0	2178	2183	2172	2176	2178		
20	16QAM	1	0	2185	2177	2171	2172	2178		
20	16QAM	1	48	2182	2179	2174	2179	2185	22.4	0
20	16QAM	1	96	2187	2175	2180	2185	2176		
20	16QAM	50	0	2172	2173	2158	2160	2171		
20	16QAM	50	48	2181	2174	2166	2167	2173	22.4	0
20	16QAM	50	96	2180	2174	2167	2174	2182		
20	16QAM	100	0	2183	2178	2164	2162	2172		
20	16QAM	1	96	2186	2168	2165	2165	2167		
20	16QAM	1	48	2187	2184	2158	2160	2175	22.4	0
20	16QAM	1	96	2186	2161	2169	2171	2179		
20	16QAM	50	0	2188	2172	2153	2158	2171		
20	16QAM	50	24	2179	2174	2153	2164	2174		
20	16QAM	50	50	2178	2172	2183	2173	2181	22.4	0
20	16QAM	100	0	2188	2170	2162	2161	2171		
20	256QAM	1	0	2188	2183	2168	2053	2034		
20	256QAM	1	48	2055	2091	2087	2082	2082	21.8	0.6
20	256QAM	1	96	2185	2090	2093	2079	2080		
20	256QAM	50	0	2088	2111	2086	2108	2108		
20	256QAM	50	24	2114	2103	2092	2108	2101	21.8	0.6
20	256QAM	50	50	2091	2115	2116	2092	2100		
20	256QAM	100	0	2092	2116	2113	2100	2080		
Channel										
Frequency [MHz]				36915	40172	40510	41006	41510	Time-up-link [dBm]	MFR [dB]
15	QPSK	1	0	2162	2156	2160	2161	2176	22.4	0
15	QPSK	1	96	2175	2172	2154	2172	2184		
15	QPSK	1	74	2176	2173	2178	2173	2183		
15	QPSK	36	0	2180	2178	2154	2161	2172		
15	QPSK	36	48	2174	2179	2166	2172	2186	22.4	0
15	QPSK	36	96	2175	2167	2165	2166	2171		
15	QPSK	75	0	2162	2183	2168	2161	2165		
15	16QAM	1	0	2171	2168	2152	2156	2177	22.4	0
15	16QAM	1	96	2189	2165	2170	2167	2177		
15	16QAM	1	74	2178	2175	2171	2174	2167		
15	16QAM	36	0	2157	2170	2145	2167	2163	22.4	0
15	16QAM	36	48	2189	2172	2153	2163	2160		
15	16QAM	36	96	2188	2167	2166	2174	2182		
15	16QAM	75	0	2168	2178	2157	2151	2170		
15	16QAM	1	0	2188	2144	2141	2143	2162	22.4	0
15	16QAM	1	96	2157	2152	2152	2153	2162		
15	16QAM	1	74	2157	2154	2154	2150	2178		
15	16QAM	36	0	2188	2156	2161	2168	2168	22.4	0
15	16QAM	36	20	2187	2159	2183	2153	2171		
15	16QAM	36	36	2176	2167	2151	2159	2168		
15	16QAM	75	0	2185	2168	2148	2158	2170		
15	256QAM	1	0	2092	2090	2101	2089	2080	21.8	0.6
15	256QAM	1	96	2094	2077	2077	2067	2081		
15	256QAM	1	74	2096	2080	2082	2065	2081		
15	256QAM	36	0	2081	2106	2086	2104	2102		
15	256QAM	36	20	2108	2094	2083	2107	2093	21.8	0.6
15	256QAM	36	36	2082	2107	2108	2085	2100		
15	256QAM	75	0	2078	2101	2115	2082	2081		
Channel										
Frequency [MHz]				36975	40160	40500	41000	41500	Time-up-link [dBm]	MFR [dB]
10	QPSK	1	0	2166	2164	2155	2160	2166	22.4	0
10	QPSK	1	96	2172	2167	2158	2168	2176		
10	QPSK	1	48	2168	2187	2189	2178	2180		
10	QPSK	25	0	2187	2187	2162	2168	2171	22.4	0
10	QPSK	25	48	2171	2184	2141	2163	2177		
10	QPSK	25	96	2184	2170	2167	2175	2177		
10	QPSK	50	0	2167	2183	2169	2168	2177		
10	16QAM	1	0	2186	2169	2169	2169	2178	22.4	0
10	16QAM	1	20	2182	2174	2166	2167	2185		
10	16QAM	1	48	2186	2184	2177	2185	2188		
10	16QAM	25	0	2186	2158	2154	2150	2165	22.4	0
10	16QAM	25	48	2179	2168	2152	2150	2168		
10	16QAM	25	96	2165	2165	2158	2165	2168		
10	16QAM	50	0	2173	2163	2153	2167	2184		
10	16QAM	1	0	2188	2148	2136	2148	2150	22.4	0
10	16QAM	1	20	2153	2163	2144	2149	2168		
10	16QAM	1	48	2182	2158	2164	2158	2174		
10	16QAM	25	0	2159	2162	2150	2159	2168	22.4	0
10	16QAM	25	12	2175	2180	2158	2159	2171		
10	16QAM	25	20	2160	2171	2157	2159	2167		
10	16QAM	50	0	2186	2181	2158	2146	2158		
10	256QAM	1	0	2101	2080	2095	2081	2080	21.8	0.6
10	256QAM	1	20	2082	2091	2087	2074	2082		
10	256QAM	1	48	2090	2075	2091	2064	2085		
10	256QAM	25	0	2079	2105	2096	2102	2090		
10	256QAM	25	12	2101	2092	2092	2092	2090	21.8	0.6
10	256QAM	25	20	2080	2108	2106	2081	2082		
10	256QAM	50	0	2090	2091	2117	2072	2080		
Channel										
Frequency [MHz]				36935	40144	40500	41000	41500	Time-up-link [dBm]	MFR [dB]
5	QPSK	1	0	2162	2164	2154	2158	2177	22.4	0
5	QPSK	1	24	2185	2172	2140	2171	2188		
5	QPSK	1	48	2184	2177	2186	2179	2183		
5	QPSK	12	0	2171	2173	2148	2153	2177		
5	QPSK	12	7	2171	2172	2161	2169	2169	22.4	0
5	QPSK	12	13	2167	2174	2170	2173	2176		
5	QPSK	25	0	2181	2182	2159	2174	2171		
5	16QAM	1	0	2175	2168	2170	2188	2178	22.4	0
5	16QAM	1	12	2174	2179	2160	2170	2181		
5	16QAM	1	24	2172	2172	2167	2180	2159		
5	16QAM	12	0	2187	2181	2149	2188	2188	22.4	0
5	16QAM	12	7	2171	2169	2157	2169	2168		
5	16QAM	12	13	2165	2159	2159	2174	2180		
5	16QAM	25	0	2177	2170	2160	2162	2181		
5	16QAM	1	0	2182	2148	2147	2153	2165	22.4	0
5	16QAM	1	12	2187	2163	2144	2158	2171		
5	16QAM	1	24	2187	2147	2160	2163	2174		
5	16QAM	12	0	2188	2163	2140	2168	2158	22.4	0
5	16QAM	12	7	2171	2163	2163	2152	2165		
5	16QAM	12	13	2168	2164	2152	2162	2168		
5	16QAM	25	0	2176	2179	2147	2187	2166		
5	256QAM	1	0	2096	2087	2098	2088	2090	21.8	0.6
5	256QAM	1	12	2080	2091	2079	2075	2083		
5	256QAM	1	24	2090	2075	2085	2075	2088		
5	256QAM	12	0	2073	2111	2108	2099	2090		
5	256QAM	12	7	2111	2102	2081	2089	2091	21.8	0.6
5	256QAM	12	13	2091	2107	2106	2090	2100		
5	256QAM	25	0	2070	2105	2106	2096	2097		

Band 48 (3.9G Band)										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. [Fem]	Power Low Middle Ch. [Fem]	Power High Middle Ch. [Fem]	Power High Ch. [Fem]	Time-up-link [dBm]	MFR [dB]	
Channel										
Frequency [MHz]				55340	56830	56150	56640			
20	QPSK	1	0	2308	2307	2294	2312		24	0
20	QPSK	1	48	2314	2302	2280	2303			
20	QPSK	1	96	2301	2295	2287	2290			
20	QPSK	50	0	2304	2305	2291	2308		24	0
20	QPSK	50	48	2309	2304	2285	2298			
20	QPSK	50	96	2304	2295	2285	2294			
20	QPSK	100	0	2302	2303	2289	2305			
20	16QAM	1	0	2310	2304	2291	2305			
20	16QAM	1	48	2301	2293	2289	2291		23	1
20	16QAM	1	96	2302	2305	2294	2301			
20	16QAM	50	0	2305	2300	2291	2308			
20	16QAM	50	48	2309	2307	2288	2308		22	2
20	16QAM	50	96	2304	2305	2289	2301			
20	16QAM	100	0	2306	2308	2298	2308			
20	256QAM	1	0	1858	1875	1881	1876			
20	256QAM	1	48	1876	1882	1878	1876		19.8	4.2
20	256QAM	1	96	1878	1880	1881	1880			
20	256QAM	50	0	1925	1928	1934	1927			
20	256QAM	50	48	1927	1928	1935	1934			
20	256QAM	50	96	1934	1935	1921	1934		19.8	4.2
20	256QAM	100	0	1925	1927	1932	1934			
Channel										
Frequency [MHz]				55335	56820	56160	56695			
15	QPSK	1	0	2334	2330	2287	2333			
15	QPSK	1	37	2330	2298	2285	2306		24	0
15	QPSK	1	74	2292	2283	2283	2296			
15	QPSK	38	0	2288	2301	2301	2296			
15	QPSK	38	20	2287	2299	2274	2283		24	0
15	QPSK	38	39	2284	2283	2290	2287			
15	QPSK	1	0	2301	2298	2282	2309			
15	16QAM	1	0	2301	2311	2290	2302		23	1
15	16QAM	1	37	2302	2302	2300	2308			
15	16QAM	1	74	2291	2308	2307	2302			
15	16QAM	38	20	2291	2300	2290	2308		23	1
15	16QAM	38	39	2290	2301	2291	2308			
15	16QAM	1	0	2170	2172	2188	2166		23	1
15	16QAM	1	37	2202	2210	2216	2208			
15	16QAM	1	74	2212	2218	2218	2208			
15	16QAM	38	20	2059	2060	2084	2096			
15	16QAM	38	20	2057	2101	2083	2094		22	2
15	16QAM	38	39	2100	2108	2086	2097			
15	64QAM	75	0	2100	2101	2118	2104			
15	256QAM	1	0	1848	1848	1878	1868		19.8	4.2
15	256QAM	1	37	1875	1880	1883	1872			
15	256QAM	1	74	1879	1888	1879	1878			
15	256QAM	38	0	1813	1821	1899	1895			
15	256QAM	38	20	1923	1926	1930	1904		19.8	4.2
15	256QAM	38	39	1926	1934	1904	1907			
15	256QAM	75	0	1913	1920	1937	1933			
Channel										
Frequency [MHz]				55290	56815	56166	56690			
10	QPSK	1	0	2338	2327	2288	2335			
10	QPSK	1	28	2328	2290	2285	2285		24	0
10	QPSK	1	48	2298	2280	2283	2288			
10	QPSK	25	0	2298	2308	2308	2298			
10	QPSK	25	12	2299	2295	2281	2286			
10	QPSK	25	25	2288	2284	2277	2288			
10	QPSK	50	0	2302	2303	2289	2304			
10	16QAM	1	0	2302	2302	2304	2301		23	1
10	16QAM	1	25	2319	2311	2304	2319			
10	16QAM	1	50	2308	2308	2308	2308			
10	16QAM	25	0	2198	2191	2193	2204			
10	16QAM	25	12	2195	2191	2198	2204		23	1
10	16QAM	25	25	2198	2198	2195	2202			
10	16QAM	50	0	2178	2178	2189	2184		23	1
10	16QAM	1	25	2211	2212	2213	2210			
10	16QAM	25	48	2208	2208	2208	2211		23	1
10	64QAM	26	0	2052	2068	2088	2103			
10	64QAM	25	12	2068	2094	2089	2101			
10	64QAM	25	25	2116	2125	2133	2129		22	2
10	64QAM	50	0	2102	2097	2116	2108			
10	256QAM	1	0	1855	1858	1878	1865			
10	256QAM	1	25	1867	1869	1873	1871		19.8	4.2
10	256QAM	1	50	1873	1877	1877	1870			
10	256QAM	25	0	1910	1921	1925	1915			
10	256QAM	25	12	1920	1926	1935	1902			
10	256QAM	25	25	1925	1925	1934	1902		19.8	4.2
10	256QAM	50	0	1920	1904	1937	1934			
Channel										
Frequency [MHz]				55295	56810	56170	56715			
5	QPSK	1	0	2331	2320	2294	2332			
5	QPSK	1	12	2325	2290	2279	2302		24	0
5	QPSK	1	24	2330	2283	2285	2285			
5	QPSK	12	0	2298	2297	2287	2298			
5	QPSK	12	7	2285	2304	2275	2282		24	0
5	QPSK	12	19	2299	2293	2275	2283			
5	QPSK	25	0	2303	2303	2287	2303			
5	16QAM	1	0	2209	2195	2189	2202			
5	16QAM	1	12	2194	2199	2202	2200		23	1
5	16QAM	1	24	2191	2191	2191	2199			
5	16QAM	12	0	2194	2194	2197	2196			
5	16QAM	12	7	2198	2201	2198	2197		23	1
5	16QAM	12	19	2209	2185	2189	2197			
5	16QAM	25	0	2195	2192	2192	2195			
5	64QAM	1	0	2177	2179	2189	2187		23	1
5	64QAM	1	12	2202	2230	2213	2210			
5	64QAM	12	24	2227	2227	2227	2219			
5	64QAM	12	7	2087	2087	2084	2094			
5	64QAM	12	19	2087	2097	2081	2091		23	2
5	64QAM	25	0	2111	2111	2111	2112			
5	64QAM	25	0	2109	2104	2106	2108			
5	256QAM	1	0	1849	1842	1877	1865		19.8	4.2
5	256QAM	1	12	1856	1872	1877	1870			
5	256QAM	1	24	1863	1877	1878	1877			
5	256QAM	12	0	1924	1926	1934	1925			
5	256QAM	12	7	1926	1932	1931	1936		19.8	4.2
5	256QAM	12	19	1926	1932	1936	1936			
5	256QAM	25	0	1924	1928	1936	1935			



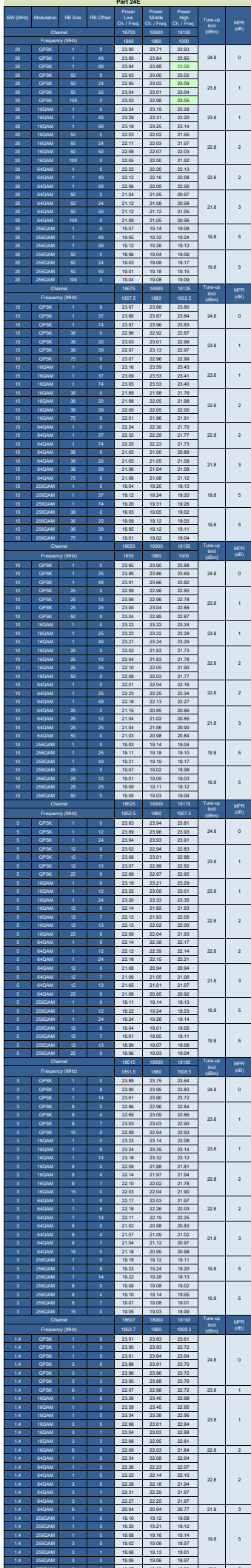
Full Power Mode - LAT

GSM900		Base-Average Power (dBm)			Frame-Average Power (dBm)		
Tx Channel		198	198	201	198		201
Frequency (MHz)		824.2	834.4	844.8	824.2		844.8
Tx Channel		20.02	22.08	22.08	20.02		22.08
OPH5 1 Tx side		23.00	23.00	23.00	23.00		23.00
OPH5 3 Tx side		30.38	30.40	30.38	31.10		24.38
OPH5 4 Tx side		25.80	25.81	25.80	25.80		25.80
EDGE 1 Tx side		25.10	27.60	27.60	25.10		24.00
EDGE 2 Tx side		25.00	25.00	25.01	25.00		25.00
EDGE 3 Tx side		22.80	23.00	24.10	25.20		18.30
EDGE 4 Tx side		22.81	23.00	22.80	24.30		18.30
EDGE 4 Tx side		22.08	22.00	22.13	23.70		19.08

GSM1800		Base-Average Power (dBm)			Frame-Average Power (dBm)		
Tx Channel		1812	1812	1810	1812		1810
Frequency (MHz)		1800.2	1800	1800.8	1800.2		1800.8
Tx Channel		20.72	20.60	20.68	20.72		20.68
OPH5 1 Tx side		25.70	25.66	25.65	25.70		25.65
OPH5 2 Tx side		25.84	25.85	25.85	25.84		25.85
OPH5 3 Tx side		38.12	25.98	38.63	27.60		21.88
OPH5 4 Tx side		25.17	25.18	25.03	25.10		22.78
EDGE 1 Tx side		25.08	24.85	25.12	25.00		18.08
EDGE 2 Tx side		24.05	23.75	24.10	24.00		18.05
EDGE 3 Tx side		22.13	22.00	23.00	22.00		18.07
EDGE 4 Tx side		22.02	21.80	22.07	22.38		18.07

Band		WCDMA S			WCDMA T			WCDMA V		
Tx Channel		9262	9400	9538	9312		1412	1412	4150	
Frequency (MHz)		902.4	900	897.8	912.4		1392.8	1392.8	402.4	
SCPP Rel 99		24.31	24.38	24.23	24.31		24.30	24.27	24.88	
SCPP Rel 99		24.36	24.38	24.35	24.41		24.38	24.36	24.45	
SCPP Rel 99		23.33	23.41	23.27	23.30		23.40	23.34	23.88	
SCPP Rel 99		23.34	23.40	23.27	23.30		23.40	23.32	23.88	
SCPP Rel 99		22.81	22.81	22.73	22.82		22.83	22.88	22.88	
SCPP Rel 99		22.82	22.88	22.78	22.79		22.81	22.82	23.38	
SCPP Rel 99		23.25	23.38	23.17	23.07		23.20	23.17	23.88	
SCPP Rel 99		23.23	23.32	23.11	23.09		23.27	23.10	23.88	
SCPP Rel 99		22.81	22.84	22.62	22.69		22.81	22.74	23.38	
SCPP Rel 99		22.80	22.72	22.68	22.67		22.70	22.72	23.38	
SCPP Rel 99		23.22	23.27	23.08	23.18		23.28	23.24	23.88	
SCPP Rel 99		21.34	21.42	21.30	21.48		21.37	21.31	21.88	
SCPP Rel 99		21.32	21.40	21.28	21.31		21.40	21.38	21.88	
SCPP Rel 99		21.08	21.22	21.08	21.08		21.40	21.32	21.88	
SCPP Rel 99		23.30	23.30	23.20	23.30		23.32	23.32	23.88	
SCPP Rel 99		21.32	21.30	21.30	21.30		21.42	21.31	21.88	

Band		CDMA BC3			CDMA BC1			CDMA BC1B		
Tx Channel		1013	384	777	25		800	1170		476
Frequency (MHz)		813.6	413.4	241.1	113.2		114	1170.2		476
SC1 BC3S		23.68	23.71	23.50	23.68		23.70	23.40		24.88
SC1 BC3S		23.67	23.70	23.38	23.67		23.68	23.40		24.88
SC2 BC3S2 r1009		23.68	23.68	23.38	23.68		23.68	23.68		23.88
SC2 BC3S2 r1009		23.64	23.65	23.38	23.65		23.38	23.37		24.88
RTAP 153.6000g		23.62	23.65	23.27	24.00		23.64	23.35		24.88
RTAP 153.6000g		23.61	23.64	23.25	24.00		23.61	23.62		24.88



Band 5 (Cellular Band)										
Part 22(h)(1) on channel required)										
RF Ch	Modulation	RB Size	RF Offset	Channel	Frequency (MHz)	825	836.5	848	Turn-on and after	APR (dB)
10	QPSK	1	0	23.01	23.01	23.03	23.04		24.0	0
10	QPSK	1	31	23.01	23.01	23.03	23.04			
10	QPSK	1	-49	23.01	23.02	23.04	23.04			
10	QPSK	25	0	22.98	22.98	22.98	22.93			
10	QPSK	25	12	22.98	22.97	22.97	22.93		23.0	1
10	QPSK	25	-25	22.98	22.98	22.98	22.98			
10	QPSK	90	0	22.94	22.99	22.99	22.80			
10	16QAM	1	0	22.90	22.90	22.90	22.80		23.0	1
10	16QAM	1	25	22.92	22.92	22.92	22.88			
10	16QAM	1	-49	22.91	22.91	22.91	22.82			
10	16QAM	25	0	21.61	21.61	21.61	21.48			
10	16QAM	25	12	21.61	21.61	21.61	21.48		22.0	2
10	16QAM	25	-25	21.60	21.60	21.60	21.49			
10	16QAM	90	0	21.64	21.59	21.59	21.52			
10	64QAM	1	0	21.58	22.04	21.61			22.0	2
10	64QAM	1	25	21.62	21.59	21.59				
10	64QAM	1	-49	21.51	21.50	21.50				
10	64QAM	25	0	21.58	21.58	21.58				
10	64QAM	25	12	21.58	21.58	21.58			21.0	3
10	64QAM	25	-25	21.60	21.60	21.60				
10	64QAM	90	0	21.65	21.58	21.58				
10	256QAM	1	0	19.08	19.48	19.44				
10	256QAM	1	25	19.07	19.45	19.45			19.0	5
10	256QAM	1	-49	19.09	19.54	19.52				
10	256QAM	12	0	19.44	19.43	19.39				
10	256QAM	12	25	19.43	19.43	19.43			19.0	
10	256QAM	12	-25	19.43	19.43	19.43				
10	256QAM	25	0	16.44	19.41	19.41				
10	256QAM	25	12	16.44	19.48	19.48				
10	256QAM	25	-25	16.44	19.48	19.48				
10	256QAM	90	0	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	256QAM	90	90	16.44	19.48	19.48				
10	256QAM	90	25	16.44	19.48	19.48				
10	256QAM	90	-25	16.44	19.48	19.48				
10	25									

Band 7 (2600MHz Band)										
Part 27										
BSI (MHz)	Modulation	RB Size	BSF Offset	Power Class (W)	Power Class (dBm)	Power Class (dBm)	Power Class (dBm)	Power Class (dBm)	Power Class (dBm)	Power Class (dBm)
Channel										
Frequency (MHz)				20.10	20.10	20.10	20.10	20.10	20.10	20.10
OPR1	1	5	24.13	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR2	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR3	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR4	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR5	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR6	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR7	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR8	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR9	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR10	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR11	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR12	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR13	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR14	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR15	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR16	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR17	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR18	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR19	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR20	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR21	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR22	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR23	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR24	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR25	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR26	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR27	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR28	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR29	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR30	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR31	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR32	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR33	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR34	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR35	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR36	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR37	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR38	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR39	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR40	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR41	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR42	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR43	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR44	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR45	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR46	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR47	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR48	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR49	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR50	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR51	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR52	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR53	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR54	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR55	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR56	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR57	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR58	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR59	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR60	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR61	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR62	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR63	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR64	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR65	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR66	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR67	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR68	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR69	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR70	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR71	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR72	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR73	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR74	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR75	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR76	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR77	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR78	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR79	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR80	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR81	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR82	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR83	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR84	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR85	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR86	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR87	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR88	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR89	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR90	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR91	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR92	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR93	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR94	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR95	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR96	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR97	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR98	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR99	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
OPR100	1	5	24.15	24.15	24.15	24.15	24.15	24.15	24.15	24.15
Channel										
Frequency (MHz)				20.60	20.60	20.60	20.60	20.60	20.60	20.60
OPR1	1	5	24.08	24.14	24.08	24.08	24.08	24.08	24.08	24.08
OPR2	1	5	24.10	24.14	24.08	24.08	24.08	24.08	24.08	24.08
OPR3	1	74	24.06	24.15	23.95	23.95	23.95	23.95	23.95	23.95
OPR4	1	5	24.08	24.14	24.08	24.08	24.08	24.08	24.08	24.08
OPR5	1	5	24.10	24.14	24.08	24.08	24.08	24.08	24.08	24.08
OPR6	1	5	24.12	24.14	24.08	24.08	24.08	24.08	24.08	24.08
OPR7	1	5	24.14	24.14	24.08	24.08	24.08	24.08	24.08	24.08
OPR8	1	5	24.16	24.14	24.08	24.08	24.08	24.08	24.08	24.08
OPR9	1	5	24.18	24.14	24.08	24.08	24.08	24.08	24.08	24.08
OPR10	1	5	24.20	24.14	24.08	24.08	24.08	24.08	24.08	24.08
OPR11	1	5	24.22	24.14	24.08	24.08	24.08	24.08	24.08	24.08
OPR12	1	5	24.24	24.14	24.08	24.08	24.08	24.08	24.08	24.08
OPR13	1	5	24.26	24.14	24.08	24.08	24.08	24.08	24.08	24.08
OPR14	1	5	24.28	24.14	24.08	24.08	24.08	24.08	24.08	24.08
OPR15	1	5	24.30	24.14						



Band 12 (700MHz Low Band) Part 27f only (on channel required)												
BW (MHz)	Modulation	RB Size	RB Offset	Power Ch./F/Freq.	Power Ch./F/Freq.	Power Ch./F/Freq.	Turn-up level (dBm)	MPR (dB)				
Frequency (MHz)												
Channel												
700.0 700.5 701.0												
10	QPSK	1	0	23.59	23.68	23.83			24.8	0		
10	QPSK	1	26	23.58	23.62	23.52						
10	QPSK	1	49	23.68	23.75	23.67						
10	QPSK	25	0	22.87	22.85	22.78						
10	QPSK	25	12	22.88	22.83	22.79			23.8	1		
10	QPSK	25	25	22.81	22.87	22.86						
10	16QAM	1	0	22.82	23.04	22.91						
10	16QAM	1	26	23.09	23.00	22.87						
10	16QAM	1	49	23.16	23.09	23.00			23.8	1		
10	16QAM	25	0	21.81	21.78	21.79						
10	16QAM	1	0	21.72	22.00	21.50						
10	16QAM	1	26	21.88	21.30	21.45						
10	16QAM	1	49	21.88	21.50	21.55			22.8	2		
10	16QAM	25	0	21.01	20.94	20.91						
10	16QAM	25	12	21.11	20.90	20.78						
10	16QAM	25	25	20.85	20.76	20.80						
10	16QAM	50	0	20.91	20.85	20.89			21.8	3		
10	256QAM	1	0	19.64	19.88	19.83						
10	256QAM	1	26	19.68	19.36	19.64						
10	256QAM	1	49	19.43	19.54	19.56						
10	256QAM	25	0	19.56	19.55	19.42			19.8	5		
10	256QAM	25	12	19.51	19.42	19.36						
10	256QAM	25	25	19.54	19.57	19.59						
10	256QAM	50	0	19.54	19.57	19.57						
Channel												
Frequency (MHz)												
701.5 707.5 713.5												
5	QPSK	1	0	23.57	23.61	23.64			24.8	0		
5	QPSK	1	12	23.63	23.72	23.70						
5	QPSK	1	24	23.64	23.65	23.64						
5	QPSK	12	0	22.72	22.79	22.75						
5	QPSK	12	7	22.77	22.83	22.77			23.8	1		
5	QPSK	12	13	22.71	22.82	22.78						
5	QPSK	25	0	22.75	22.79	22.74						
5	16QAM	1	0	22.96	23.00	22.98						
5	16QAM	1	12	22.99	23.18	23.04			23.8	1		
5	16QAM	1	24	22.99	23.07	23.03						
5	16QAM	12	0	21.78	21.80	21.80						
5	16QAM	12	7	21.79	21.83	21.81						
5	16QAM	12	13	21.78	21.83	21.84			22.8	2		
5	16QAM	25	0	21.78	21.84	21.75						
5	16QAM	1	0	21.45	21.41	21.47						
5	16QAM	1	12	21.83	21.50	21.74						
5	16QAM	1	24	21.78	21.56	21.72			22.8	2		
5	16QAM	12	0	20.88	20.55	21.01						
5	16QAM	12	7	20.97	20.53	20.88						
5	16QAM	12	13	20.79	20.62	20.76						
5	256QAM	1	0	20.89	20.51	20.89			21.8	3		
5	256QAM	1	0	19.59	19.83	19.58						
5	256QAM	1	12	19.63	19.51	19.59						
5	256QAM	1	24	19.61	19.48	19.49						
5	256QAM	12	0	19.51	19.50	19.51			19.8	5		
5	256QAM	12	7	19.48	19.33	19.35						
5	256QAM	12	13	19.44	19.34	19.54						
5	256QAM	25	0	19.50	19.48	19.52						
Channel												
Frequency (MHz)												
702.5 707.5 713.5												
3	QPSK	1	0	23.61	23.71	23.73			24.8	0		
3	QPSK	1	8	23.68	23.73	23.74						
3	QPSK	8	0	22.75	22.74	22.79						
3	QPSK	8	7	22.85	22.74	22.87						
3	QPSK	16	0	22.78	22.78	22.68			23.8	1		
3	16QAM	1	0	23.00	23.02	22.95						
3	16QAM	1	8	22.98	23.04	22.92						
3	16QAM	8	0	21.83	21.88	21.83						
3	16QAM	8	7	21.81	21.87	21.94			22.8	2		
3	16QAM	8	14	21.77	21.89	21.81						
3	16QAM	16	0	21.79	21.85	21.79						
3	16QAM	1	0	21.80	21.48	21.97						
3	16QAM	1	8	21.78	21.52	21.80			22.8	2		
3	16QAM	1	14	21.87	21.48	21.67						
3	16QAM	8	0	20.85	20.54	21.03						
3	16QAM	8	7	21.01	20.59	20.94						
3	16QAM	16	0	21.60	20.52	21.61			21.8	3		
3	256QAM	1	0	19.55	19.51	19.56						
3	256QAM	1	8	19.51	19.48	19.57						
3	256QAM	1	14	19.53	19.47	19.47						
3	256QAM	8	0	19.45	19.46	19.49			19.8	5		
3	256QAM	8	7	19.44	19.38	19.45						
3	256QAM	8	14	19.47	19.50	19.48						
3	256QAM	16	0	19.43	19.46	19.50						
Channel												
Frequency (MHz)												
2307.0 2309.5 2312.0												
1.4	QPSK	1	0	23.57	23.55	23.45			24.8	0		
1.4	QPSK	1	3	23.57	23.75	23.62						
1.4	QPSK	1	5	23.51	23.59	23.48						
1.4	QPSK	3	1	23.66	23.63	23.63						
1.4	QPSK	3	3	23.55	23.71	23.67			23.8	1		
1.4	QPSK	3	5	23.53	23.67	23.56						
1.4	QPSK	6	0	22.68	22.68	22.64						
1.4	16QAM	1	0	22.84	22.96	22.81						
1.4	16QAM	1	3	22.82	23.06	22.99			23.8	1		
1.4	16QAM	1	5	22.87	22.91	22.82						
1.4	16QAM	3	1	22.73	22.72	22.79						
1.4	16QAM	3	1	22.73	22.78	22.77						
1.4	16QAM	3	3	22.72	22.73	22.74			22.8	2		
1.4	16QAM	6	0	21.69	21.71	21.66						
1.4	16QAM	1	0	21.84	21.51	21.68						
1.4	16QAM	1	3	21.81	21.45	21.94						
1.4	16QAM	1	5	21.89	21.44	21.75			22.8	2		
1.4	16QAM	3	1	21.79	21.53	21.98						
1.4	16QAM	3	1	21.79	21.49	21.93						
1.4	16QAM	3	3	21.47	21.51	21.78						
1.4	16QAM	6	0	20.54	20.55	20.78			21.8	3		
1.4	256QAM	1	0	19.51	19.57	19.52						
1.4	256QAM	1	3	19.47	19.44	19.45						
1.4	256QAM	1	5	19.29	19.43	19.43						
1.4	256QAM	3	0	19.41	19.47	19.43			19.8	5		
1.4	256QAM	3	1	19.41	19.24	19.35						
1.4	256QAM	3	3	19.43	19.42	19.42						
1.4	256QAM	6	0	19.39	19.42	19.46						

Band 13(700MHz Band) Part 27f										
BW (MHz)	Modulation	RB Size	RB Offset	Power Ch./F/Freq.	Power Ch./F/Freq.	Power Ch./F/Freq.	Power Ch./F/Freq.	Turn-up level (dBm)	MPR (dB)	
Frequency (MHz)										
Channel										
10	QPSK	1	0		23.47				24.8	0
10	QPSK	1	26		23.53					
10	QPSK	1	49		23.26					
10	QPSK	25	0		22.89					
10	QPSK	25	12		22.84				23.8	1
10	QPSK	25	25		22.84					
10	QPSK	50	0		22.89					
10	QPSK	50	25		22.89					
10	QPSK	1	0		22.87				23.8	1
10	QPSK	1	25		22.86					
10	QPSK	1	49		22.79					
10	QPSK	25	0		21.83					
10	QPSK	25	12		21.69				22.8	2
10	QPSK	25	25		21.66					
10	QPSK	50	0		21.62					
10	QPSK	50	25		21.22					
10	QPSK	1	25		21.72				22.8	2
10	QPSK	1	49		21.55					
10	QPSK	1	73		21.43					
10	QPSK	25	0		20.81					
10	QPSK	25	12		20.81				21.8	3
10	QPSK	25	25		20.47					
10	QPSK	50	0		20.19					
10	QPSK	50	25		20.19					
10	QPSK	1	25		19.38				19.8	5
10	QPSK	1	49		19.85					
10	QPSK	25	0		19.43					
10	QPSK	25	12		19.48					
10	QPSK	25	25		19.43				19.8	5
10	QPSK	50	0		19.48					
10	QPSK	50	25		19.48					
10	QPSK	50	0		19.43					
Frequency (MHz)				782.0	782.5	783.0	783.5	784.0	Turn-up level (dBm)	MPR (dB)
5	QPSK	1	0	23.47	23.43	23.43	23.43	23.43	24.8	0
5	QPSK	1	12	23.54	23.54	23.54	23.43			
5	QPSK	1	24	23.54	23.43	23.43	23.43			
5	QPSK	1	36	23.43	23.43	23.43	23.43			
5	QPSK	12	7	22.72	22.60	22.60	22.58		23.8	1
5	QPSK	12	13	22.68	22.59	22.58				
5	QPSK	25	0	22.87	22.59	22.59	22.58			
5	QPSK	25	12	22.83	22.84	22.83				
5	QPSK	1	12	22.86	22.93	22.93	22.78		23.8	1
5	QPSK	1	24	22.84	22.77	22.77	22.71			
5	QPSK	1	36	21.78	21.69	21.69	21.64			
5	QPSK	12	7	21.80	21.62	21.62	21.61			
5	QPSK	12	13	21.72	21.64	21.64	21.58		22.8	2
5	QPSK	25	0	21.73	21.66	21.67	21.61			
5	QPSK	25	12	21.65	21.76	21.76	21.67			
5	QPSK	1	12	21.84	21.86	21.73	21.73			
5	QPSK	1	24	21.96	21.77	21.77	21.67		22.8	2
5	QPSK	12	0	20.31	20.72	20.69				
5	QPSK	12	13	20.86	20.86	20.86				
5	QPSK	12	13	20.73	20.62	20.63				
5	QPSK	25	0	20.57	20.67	20.66			21.8	3
5	QPSK	25	12	19.54	19.45	19.55				
5	QPSK	1	12	19.46	19.33	19.47				
5	QPSK	1	24	19.28	19.22	19.30				
5	QPSK	12	0	19.38	19.41	19.43			19.8	5
5	QPSK	12	7	19.44	19.47	19.48				
5	QPSK	12	13	19.48	19.42	19.43				
5	QPSK	25	0	19.45	19.43	19.38				



Band 26 for FCC (only on channel required)														
BW (MHz)	Modulation	RF Size	RF Offset	Power Ch./F/Freq.	Power Ch./F/Freq.	Power Ch./F/Freq.	Turn-on Time (min)	MFR (dB)						
Channel														
Frequency (MHz)														
15	QPSK	1	0	23.65	23.58	23.50								
15	QPSK	1	37	23.58	23.46	23.37	24.8	0						
15	QPSK	1	74	23.40	23.34	23.31								
15	QPSK	36	0	22.65	22.60	22.56								
15	QPSK	36	20	23.74	23.70	23.77	23.8	1						
15	QPSK	36	39	22.65	22.68	22.73								
15	QPSK	75	0	22.70	22.61	22.73								
15	QPSK	1	0	22.95	22.97	23.00								
15	QPSK	1	37	22.90	22.81	22.81	23.8	1						
15	QPSK	1	74	22.92	22.58	22.62								
15	QPSK	36	0	21.74	21.71	21.74								
15	QPSK	36	20	21.74	21.67	21.75	22.8	2						
15	QPSK	36	39	21.71	21.73	21.73								
15	QPSK	75	0	21.77	21.66	21.76								
15	QPSK	1	0	21.83	21.84	21.87								
15	QPSK	1	37	21.85	21.33	21.87	22.8	2						
15	QPSK	1	74	21.81	21.81	21.70								
15	QPSK	36	0	20.75	20.76	20.74								
15	QPSK	36	20	20.50	20.40	20.52	21.8	3						
15	QPSK	36	39	20.78	20.74	20.84								
15	QPSK	75	0	20.86	20.72	20.72								
15	QPSK	1	0	18.95	18.90	18.95								
15	QPSK	1	37	18.91	18.94	18.94	19.8	5						
15	QPSK	1	74	18.96	18.92	18.79								
15	QPSK	36	0	18.97	18.96	18.96								
15	QPSK	36	20	18.98	18.96	18.91	19.8	5						
15	QPSK	36	39	18.95	18.91	18.83								
15	QPSK	75	0	18.97	18.96	18.96								
15	QPSK	50	0	18.90	18.95	18.95								
Channel														
Frequency (MHz)														
15	QPSK	1	0	23.63	23.53	23.50	Turn-on Time (min)	MFR (dB)						
15	QPSK	1	0	23.63	23.53	23.50								
15	QPSK	1	25	23.65	23.60	23.60	24.8	0						
15	QPSK	1	49	23.64	23.57	23.58								
15	QPSK	25	0	22.79	22.74	22.73								
15	QPSK	25	12	22.78	22.73	22.77	23.8	1						
15	QPSK	25	12	22.79	22.73	22.77								
15	QPSK	50	0	22.78	22.68	22.68								
15	QPSK	1	0	23.12	23.05	23.08								
15	QPSK	1	25	23.02	23.03	23.03	23.8	1						
15	QPSK	1	49	23.00	23.01	23.01								
15	QPSK	25	0	21.88	21.87	21.72								
15	QPSK	25	12	21.79	21.71	21.72	22.8	2						
15	QPSK	1	0	21.90	21.91	21.91								
15	QPSK	1	25	21.88	21.53	21.56	22.8	2						
15	QPSK	1	49	21.93	21.92	21.92								
15	QPSK	25	0	20.82	20.85	20.78								
15	QPSK	25	12	20.85	20.81	20.79	21.8	3						
15	QPSK	25	12	20.86	20.86	20.76								
15	QPSK	1	0	18.92	18.97	18.92								
15	QPSK	1	25	18.86	18.91	18.86	19.8	5						
15	QPSK	1	49	18.90	18.92	18.91								
15	QPSK	25	0	18.94	18.95	18.95								
15	QPSK	25	12	18.92	18.93	18.88	19.8	5						
15	QPSK	25	12	18.90	18.95	18.95								
15	QPSK	50	0	18.90	18.95	18.95								
Channel														
Frequency (MHz)														
5	QPSK	1	0	23.64	23.41	23.81								
5	QPSK	1	24	23.69	23.57	23.50	24.8	0						
5	QPSK	12	0	22.88	22.71	22.78								
5	QPSK	12	7	22.86	22.76	22.74	23.8	1						
5	QPSK	12	13	22.81	22.69	22.69								
5	QPSK	25	0	22.80	22.67	22.72								
5	QPSK	1	0	21.13	21.02	21.02	23.8	1						
5	QPSK	1	12	21.06	21.06	21.03								
5	QPSK	1	24	21.01	21.01	21.01	23.8	1						
5	QPSK	12	0	21.91	21.76	21.79								
5	QPSK	12	7	21.89	21.82	21.75	22.8	2						
5	QPSK	12	13	21.82	21.73	21.69								
5	QPSK	25	0	21.82	21.74	21.73								
5	QPSK	1	0	21.94	21.61	21.65	22.8	2						
5	QPSK	1	12	21.97	21.58	21.67								
5	QPSK	1	24	21.93	21.84	21.87								
5	QPSK	12	0	20.83	20.47	20.84								
5	QPSK	12	7	20.84	20.46	20.99	21.8	3						
5	QPSK	12	13	20.85	20.53	20.74								
5	QPSK	25	0	20.83	20.36	20.77								
5	QPSK	1	0	18.90	18.95	18.90	19.8	5						
5	QPSK	12	0	18.92	18.96	18.94								
5	QPSK	12	7	18.90	18.97	18.74								
5	QPSK	12	13	18.94	18.98	18.79	19.8	5						
5	QPSK	25	0	18.98	18.93	18.91								
Channel														
Frequency (MHz)														
3	QPSK	1	0	23.59	23.13	23.58								
3	QPSK	1	8	23.55	23.18	23.58	24.8	0						
3	QPSK	1	14	23.54	23.31	23.50								
3	QPSK	3	0	23.48	23.43	23.39								
3	QPSK	8	4	22.84	22.79	22.74	23.8	1						
3	QPSK	15	0	22.82	22.71	22.69								
3	QPSK	1	0	21.90	21.75	21.90	23.8	1						
3	QPSK	1	8	21.87	21.82	22.99								
3	QPSK	1	14	21.82	21.81	22.91								
3	QPSK	1	24	21.79	21.80	21.80	22.8	2						
3	QPSK	8	4	21.83	21.88	21.80								
3	QPSK	8	7	21.85	21.81	21.73								
3	QPSK	15	0	21.83	21.73	21.73								
3	QPSK	1	0	21.85	21.48	21.87	22.8	2						
3	QPSK	1	8	21.83	21.48	21.84	22.8	2						
3	QPSK	1	14	21.89	21.58	21.90	22.8	2						
3	QPSK	1	24	21.88	21.42	20.79								
3	QPSK	8	4	20.87	20.41	20.79	21.8	3						
3	QPSK	8	7	20.88	20.44	20.71								
3	QPSK	15	0	20.78	20.40	20.74								
3	QPSK	1	0	18.91	18.93	18.90	19.8	5						
3	QPSK	1	8	18.93	18.90	18.92								
3	QPSK	1	14	18.90	18.97	18.75								
3	QPSK	8	0	18.94	18.92	18.96	19.8	5						
3	QPSK	8	4	18.98	18.98	18.95								
3	QPSK	8	7	18.92	18.98	18.77								
3	QPSK	15	0	18.96	18.96	18.89	19.8	5						
Channel														
Frequency (MHz)														
1.4	QPSK	1	0	814.7	831.5	846.3	Turn-on Time (min)	MFR (dB)						
1.4	QPSK	1	0	23.55	23.40	23.35								
1.4	QPSK	1	3	23.55	23.44	23.37	24.8	0						
1.4	QPSK	1	5	23.48	23.43	23.39								
1.4	QPSK	3	0	23.59	23.44	23.38								
1.4	QPSK	3	1	23.47	23.51	23.43								
1.4	QPSK	3	3	23.52	23.46	23.36	23.8	1						
1.4	QPSK	1	0	23.08	22.82	22.80								
1.4	QPSK	1	3	23.07	22.88	22.83	23.8	1						
1.4	QPSK	1	5	23.03	22.86	22.79								
1.4	QPSK	3	0	22.83	22.67	22.61								
1.4	QPSK	3	1	22.84	22.79	22.63								
1.4	QPSK	3	3	22.81	22.71	22.67	22.8	2						
1.4	QPSK	1	0	21.82	21.68	21.71	22.8	2						
1.4	QPSK	1	0	21.95	21.55	21.69								
1.4	QPSK	1	3	21.99	21.53	21.81	22.8	2						
1.4	QPSK	1	5	21.94	21.54	21.68								
1.4	QPSK	3	0	21.83	21.50	21.75								
1.4	QPSK	3	1	21.97	21.59	21.63								
1.4	QPSK	3	3	21.93	21.61	21.70	21.8	3						
1.4	QPSK	1	0	18.93	18.91	18.97								
1.4	QPSK	1	3	18.94	18.92	18.80	19.8	5						
1.4	QPSK	1	5	18.90	18.91	18.94								
1.4	QPSK	3	0	18.92	18.91	18.94	19.8	5						
1.4	QPSK	3	1	18.96	18.96	18.93								
1.4	QPSK	3	3	18.90	18.96	18.76	19.8	5						



MINISTRY OF NATIONAL DEFENSE
T.C. SAKARYA VALİSİ

Band 38(only on channel required)

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. [Fwh]	Power Middle Ch. [Fwh]	Power High Ch. [Fwh]	Turn-up level (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	23.91	23.77	23.67	24.8	0		
20	QPSK	1	48	24.04	23.94	23.83				
20	QPSK	1	96	23.91	23.77	23.67				
20	QPSK	56	0	23.13	23.04	23.12	23.8	1		
20	QPSK	56	24	23.30	23.26	23.32				
20	QPSK	56	56	23.17	23.01	23.11				
20	QPSK	100	0	23.18	23.03	23.17	23.8	1		
20	16QAM	1	0	23.21	23.01	23.06				
20	16QAM	1	48	23.25	23.04	23.01				
20	16QAM	1	96	23.12	23.05	23.08	22.8	2		
20	16QAM	56	0	22.16	22.08	22.10				
20	16QAM	24	0	22.24	22.09	22.14				
20	16QAM	56	56	22.23	22.07	22.13	22.8	2		
20	16QAM	100	0	22.22	22.01	22.11				
20	64QAM	1	0	21.93	21.79	21.89				
20	64QAM	1	48	21.90	21.74	21.87	21.8	2		
20	64QAM	1	96	21.85	21.67	21.82				
20	64QAM	56	0	21.92	21.84	21.92				
20	64QAM	56	24	21.92	21.87	21.91	21.8	3		
20	64QAM	56	56	21.92	21.74	21.94				
20	256QAM	100	0	21.27	21.08	21.14				
20	256QAM	1	0	21.32	21.15	21.25	19.8	5		
20	256QAM	1	18	21.32	21.15	21.25				
20	256QAM	1	48	21.28	21.11	21.16				
20	256QAM	56	0	19.27	19.22	19.22	Turn-up level (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
15	QPSK	1	0	23.75	23.65	23.55	24.8	0		
15	QPSK	1	0	23.90	23.83	23.87				
15	QPSK	1	37	21.93	21.87	21.89				
15	QPSK	1	74	23.91	23.80	23.89	23.8	1		
15	QPSK	36	0	23.08	22.95	23.06				
15	QPSK	1	0	23.24	23.14	23.24				
15	QPSK	36	24	23.17	22.99	23.10	23.8	1		
15	QPSK	76	0	23.23	22.98	23.06				
15	QPSK	1	0	23.22	22.98	23.06	23.8	1		
15	QPSK	1	37	23.22	23.15	23.19				
15	16QAM	1	74	23.28	23.13	23.23	22.8	2		
15	16QAM	36	0	22.99	22.88	23.01				
15	16QAM	20	24	23.22	23.14	23.20				
15	16QAM	36	56	22.15	22.01	22.07	22.8	2		
15	16QAM	76	0	22.24	22.02	22.06				
15	16QAM	1	0	22.12	21.99	22.10				
15	16QAM	1	37	22.17	21.99	22.09	22.8	2		
15	16QAM	1	74	22.09	21.98	22.14				
15	16QAM	1	0	21.94	21.80	21.92	21.8	3		
15	16QAM	36	20	21.20	20.91	21.15				
15	16QAM	36	36	21.26	21.00	21.13				
15	256QAM	76	0	21.24	20.97	21.02	19.8	5		
15	256QAM	1	0	21.37	21.07	21.09				
15	256QAM	1	37	19.36	19.31	19.17				
15	256QAM	1	74	19.38	19.30	19.28	19.8	5		
15	256QAM	1	74	19.34	19.30	19.28				
15	256QAM	36	20	19.44	19.38	19.32				
15	256QAM	36	36	19.47	19.42	19.41	Turn-up level (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
15	QPSK	1	0	24.03	23.93	23.83	24.8	0		
15	QPSK	1	12	23.98	23.88	23.88				
15	QPSK	1	24	24.02	23.81	23.98				
15	QPSK	12	0	23.17	22.97	23.17	23.8	1		
15	QPSK	12	12	23.34	23.27	23.19				
15	QPSK	12	24	23.23	22.98	23.11				
15	QPSK	24	0	23.22	22.98	23.11	23.8	1		
15	QPSK	24	12	23.07	22.92	23.07				
15	16QAM	1	12	23.27	23.08	23.30				
15	16QAM	1	24	23.31	23.20	23.38	22.8	2		
15	16QAM	1	12	23.17	23.01	23.16				
15	16QAM	12	7	22.23	22.02	22.20				
15	16QAM	12	13	22.20	22.00	22.20	22.8	2		
15	16QAM	12	25	22.24	22.04	22.16				
15	64QAM	1	0	22.17	21.99	22.23				
15	64QAM	1	12	22.18	21.99	22.21	21.8	3		
15	64QAM	1	24	22.28	22.04	22.24				
15	64QAM	12	7	21.21	21.02	21.23				
15	64QAM	12	7	21.23	21.01	21.22	19.8	5		
15	64QAM	12	13	21.30	21.08	21.21				
15	64QAM	25	25	21.25	21.07	21.21				
15	256QAM	1	0	19.40	19.38	19.31	19.8	5		
15	256QAM	1	12	19.43	19.45	19.36				
15	256QAM	1	24	19.44	19.46	19.38				
15	256QAM	12	0	19.51	19.42	19.41	19.8	5		
15	256QAM	12	7	19.49	19.44	19.43				
15	256QAM	12	13	19.46	19.44	19.35				



Reduced power for Hotspot on-LAT

Band		COMB 1			MCOMB TV		
Tx Channel		9462	9460	9458	Turn-up		
Rx Channel		9962	9960	9958	Level		
Frequency (MHz)		1852.4	1850	1847.6	(dBm)		
		18.62	18.68	18.65	20.30	20.29	20.36
SCPP Rel 20		AMC 12.2000s					21.00
SCPP Rel 16		AMC 12.2000s	18.68	18.74	20.36	20.32	20.40
SCPP Rel 6		HSUPA Subnet 1	18.75	18.81	18.87	19.30	19.30
SCPP Rel 8		HSUPA Subnet 2	18.74	18.80	18.87	19.30	19.30
SCPP Rel 2		HSUPA Subnet 3	18.71	18.77	18.83	19.30	19.30
SCPP Rel 4		HSUPA Subnet 4	18.72	18.78	18.84	19.30	19.30
SCPP Rel 5		DC-HSUPA Subnet 1	18.65	18.70	18.77	19.30	19.30
SCPP Rel 9		DC-HSUPA Subnet 6	18.63	18.72	18.81	19.30	19.30
SCPP Rel 8		DC-HSUPA Subnet 5	18.21	18.24	18.22	18.68	18.79
SCPP Rel 6		HSUPA Subnet 1	18.62	18.67	18.40	19.30	19.30
SCPP Rel 4		HSUPA Subnet 2	18.74	18.82	18.70	17.30	17.67
SCPP Rel 6		HSUPA Subnet 3	18.72	18.82	18.68	16.36	16.46
SCPP Rel 8		HSUPA Subnet 4	18.48	18.62	18.43	17.30	17.42
SCPP Rel 5		HSUPA Subnet 5	18.70	18.80	18.60	19.30	19.30
SCPP Rel 7		HSUPA Subnet 7	20.72	20.80	20.75	21.40	21.41

Band		COMB BC1			Turn-up	
Tx Channel		26	260	3170	Level	
Frequency (MHz)		1851.25	1850	1848.75	(dBm)	
RCT SDDS		20.88	20.62	20.88	22.00	
RCT SDDS		20.88	20.71	20.85	22.00	
RCT SDDS (F+DCH)		20.85	20.60	20.83	22.00	
RCT SDDS (F+DCH)		20.84	20.68	20.82	22.00	
RETAP 15.5000s		20.82	20.85	20.80	22.00	
RETAP 40.000s		20.80	20.80	20.78	22.00	



Band 2 (1900MHz Band)										
Part 24E										
BW (MHz)	Modulation	RB Size	RB Offset	Power Ch / Freqs	Power Ch / Freqs	Power Ch / Freqs	Turn-on time (dBm)	Turn-off time (dBm)	APR (dB)	APR (dB)
Channel										
Frequency (MHz)										
20	QPSK	1	0	19.38	19.60	19.50				
20	QPSK	1	49	19.37	19.53	19.65	20.8	0		
20	QPSK	1	99	19.44	19.64	19.75				
20	QPSK	1	149	19.37	19.58	19.68				
20	QPSK	50	0	19.41	19.62	19.68	20.8	0		
20	QPSK	50	24	19.34	19.60	19.68				
20	QPSK	100	0	19.40	19.60	19.68				
20	16QAM	1	0	19.62	19.57	19.57				
20	16QAM	1	49	19.57	19.53	19.58	20.8	0		
20	16QAM	1	99	19.53	19.51	19.62				
20	16QAM	50	50	19.45	19.60	19.45				
20	16QAM	50	24	19.59	19.57	19.59	20.8	0		
20	16QAM	50	50	19.67	19.59	19.54				
20	16QAM	100	0	19.59	19.57	19.58				
20	8QAM	1	0	19.62	19.63	19.68				
20	8QAM	1	49	19.53	19.58	19.67	20.8	0		
20	8QAM	1	99	19.45	19.55	19.51				
20	8QAM	50	0	19.57	19.52	19.61				
20	8QAM	50	24	19.51	19.52	19.52	20.8	0		
20	8QAM	50	50	19.62	19.58	19.65				
20	8QAM	100	0	19.58	19.67	19.62				
20	25QAM	1	0	19.06	19.06	19.04				
20	25QAM	1	49	19.03	19.07	19.06	19.8	1		
20	25QAM	1	99	19.00	19.04	19.09				
20	25QAM	50	0	19.02	19.07	19.02				
20	25QAM	50	24	19.06	19.06	19.02	19.8	1		
20	25QAM	50	50	19.02	19.03	19.06				
20	25QAM	100	0	19.07	19.06	19.05				
Channel										
Frequency (MHz)										
16	QPSK	1	0	19.28	19.52	19.42				
16	QPSK	1	37	19.30	19.40	19.52	20.8	0		
16	QPSK	1	74	19.34	19.50	19.58				
16	QPSK	36	0	19.28	19.43	19.52				
16	QPSK	36	20	19.41	19.57	19.61	20.8	0		
16	QPSK	36	20	19.33	19.50	19.58				
16	QPSK	75	0	19.36	19.50	19.58				
16	16QAM	1	0	19.51	19.57	19.48	20.8	0		
16	16QAM	1	37	19.42	19.45	19.51				
16	16QAM	1	74	19.40	19.42	19.51				
16	16QAM	36	0	19.38	19.49	19.36				
16	16QAM	36	20	19.54	19.55	19.59	20.8	0		
16	16QAM	36	20	19.39	19.49	19.58				
16	16QAM	75	0	19.50	19.51	19.51				
16	8QAM	1	0	19.57	19.49	19.40				
16	8QAM	1	37	19.48	19.47	19.53	20.8	0		
16	8QAM	1	74	19.40	19.42	19.49				
16	8QAM	36	0	19.45	19.50	19.37				
16	8QAM	36	20	19.46	19.57	19.57	20.8	0		
16	8QAM	36	20	19.37	19.50	19.58				
16	8QAM	75	0	19.57	19.53	19.52				
16	25QAM	1	0	19.03	19.05	19.05				
16	25QAM	1	37	19.00	19.07	19.06	19.8	1		
16	25QAM	1	74	19.06	19.02	19.05				
16	25QAM	36	0	19.05	19.02	19.09				
16	25QAM	36	20	19.02	19.02	19.03	19.8	1		
16	25QAM	36	20	19.03	19.04	19.05				
16	25QAM	75	0	19.07	19.06	19.05				
Channel										
Frequency (MHz)										
10	QPSK	1	0	19.34	19.52	19.50				
10	QPSK	1	25	19.29	19.43	19.47	20.8	0		
10	QPSK	1	49	19.31	19.55	19.56				
10	QPSK	25	0	19.33	19.54	19.58				
10	QPSK	25	12	19.39	19.58	19.58	20.8	0		
10	QPSK	25	25	19.27	19.55	19.53				
10	QPSK	50	0	19.33	19.45	19.53				
10	16QAM	1	0	19.57	19.44	19.48	20.8	0		
10	16QAM	1	25	19.43	19.53	19.55				
10	16QAM	1	49	19.48	19.50	19.55				
10	16QAM	25	0	19.44	19.58	19.31	20.8	0		
10	16QAM	25	12	19.54	19.58	19.45				
10	16QAM	25	25	19.61	19.48	19.42				
10	16QAM	50	0	19.50	19.45	19.45				
10	8QAM	1	0	19.51	19.48	19.39				
10	8QAM	1	25	19.43	19.58	19.57	20.8	0		
10	8QAM	1	49	19.36	19.44	19.19				
10	8QAM	25	0	19.42	19.57	19.52				
10	8QAM	25	12	19.55	19.47	19.48	20.8	0		
10	8QAM	25	25	19.48	19.53	19.53				
10	8QAM	50	0	19.53	19.52	19.51				
10	25QAM	1	0	19.02	19.09	19.01	19.8	1		
10	25QAM	1	25	19.07	19.17	19.07				
10	25QAM	1	49	19.06	19.06	19.09				
10	25QAM	25	0	19.08	19.06	19.02	19.8	1		
10	25QAM	25	12	19.05	19.06	19.02				
10	25QAM	25	25	19.00	19.02	19.05				
10	25QAM	50	0	19.00	19.00	19.01				
Channel										
Frequency (MHz)										
5	QPSK	1	0	19.30	19.48	19.45				
5	QPSK	1	12	19.35	19.39	19.36	20.8	0		
5	QPSK	1	24	19.38	19.53	19.63				
5	QPSK	1	25	19.36	19.54	19.62				
5	QPSK	12	7	19.29	19.53	19.54	20.8	0		
5	QPSK	12	13	19.34	19.55	19.59				
5	QPSK	25	0	19.31	19.51	19.65				
5	16QAM	1	0	19.60	19.58	19.54	20.8	0		
5	16QAM	1	12	19.55	19.49	19.53				
5	16QAM	1	24	19.44	19.43	19.54				
5	16QAM	12	0	19.39	19.57	19.62	20.8	0		
5	16QAM	12	7	19.52	19.45	19.58				
5	16QAM	12	13	19.67	19.48	19.42				
5	16QAM	25	0	19.47	19.43	19.54				
5	8QAM	1	0	19.62	19.55	19.52				
5	8QAM	1	12	19.48	19.45	19.63	20.8	0		
5	8QAM	1	24	19.37	19.42	19.57				
5	8QAM	12	0	19.45	19.48	19.68				
5	8QAM	12	7	19.56	19.58	19.54	20.8	0		
5	8QAM	12	13	19.54	19.46	19.58				
5	8QAM	25	0	19.58	19.54	19.62				
5	25QAM	1	0	19.02	19.10	19.02	19.8	1		
5	25QAM	1	12	19.08	19.01	19.05				
5	25QAM	1	24	19.09	19.09	19.09				
5	25QAM	12	0	19.07	19.03	19.01	20.8	0		
5	25QAM	12	7	19.06	19.03	19.07				
5	25QAM	12	13	19.03	19.02	19.06				
5	25QAM	25	0	19.01	19.03	19.02	19.8	1		
Channel										
Frequency (MHz)										
3	QPSK	1	0	19.29	19.54	19.47				
3	QPSK	1	8	19.24	19.50	19.58	20.8	0		
3	QPSK	1	14	19.40	19.58	19.65				
3	QPSK	8	0	19.34	19.44	19.59				
3	QPSK	8	4	19.37	19.56	19.57	20.8	0		
3	QPSK	8	7	19.19	19.56	19.51				
3	16QAM	1	0	19.58	19.56	19.59				
3	16QAM	1	8	19.49	19.52	19.47	20.8	0		
3	16QAM	1	14	19.47	19.56	19.42				
3	16QAM	8	0	19.40	19.53	19.51				
3	16QAM	8	4	19.49	19.53	19.47	20.8	0		
3	16QAM	8	7	19.58	19.50	19.45				
3	16QAM	14	0	19.44	19.49	19.51				
3	8QAM	1	0	19.60	19.53	19.43				
3	8QAM	1	8	19.39	19.58	19.66	20.8	0		
3	8QAM	1	14	19.44	19.47	19.51				
3	8QAM	8	0	19.51	19.43	19.49				
3	8QAM	8	4	19.53	19.61	19.62	20.8	0		
3	8QAM	8	7	19.55	19.53	19.64				
3	8QAM	14	0	19.44	19.51	19.62				
3	25QAM	1	0	19.09	19.02	19.06	19.8	1		
3	25QAM	1	8	19.03	19.00	19.07				
3	25QAM	1	14	19.07	19.01	19.07				
3	25QAM	8	0	19.06	19.05	19.09				
3	25QAM	8	4	19.02	19.06	19.05	20.8	0		
3	25QAM	8	7	19.05	19.05	19.09				
3	25QAM	14	0	19.07	19.05	19.05				
Channel										
Frequency (MHz)										
1.4	QPSK	1	0	19.33	19.53	19.44				
1.4	QPSK	1	3	19.36	19.50	19.54				
1.4	QPSK	1	6	19.43	19.53	19.58	20.8	0		
1.4	QPSK	3	0	19.34	19.55	19.59				
1.4	QPSK	3	1	19.29	19.58	19.65				
1.4	QPSK	3	3	19.32	19.47	19.61				
1.4	QPSK	3	6	19.35	19.49	19.67	20.8	0		
1.4	16QAM	1	0	19.51	19.50	19.43				
1.4	16QAM	1	3	19.54	19.61	19.45				
1.4	16QAM	1	6	19.40	19.54	19.64	20.8	0		
1.4	16QAM	3	0	19.33	19.50	19.45				
1.4	16QAM	3	1							

Band 27 (700MHz Low Band) Part 27H(only on channel required)												
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freqs	Power Main Ch / Freqs	Power High Ch / Freqs	Turn-up rate (dBm)	MPE (dB)				
Channel												
Frequency (MHz)												
10	QPSK	1	0	22.82	22.77	22.79	24	0				
10	QPSK	1	28	22.83	22.86	22.85						
10	QPSK	49		22.88	22.92	22.82						
10	QPSK	25	0	22.83	22.86	22.77						
10	QPSK	25	12	22.88	22.90	22.80	24	0				
10	QPSK	50	0	22.83	22.89	22.80						
10	16QAM	1	0	22.85	22.80	22.90						
10	16QAM	1	28	22.88	22.90	22.82						
10	16QAM	1	49	22.85	22.75	22.85	24	0				
10	16QAM	25	0	21.93	21.90	21.92						
10	16QAM	25	12	21.93	21.84	21.79						
10	16QAM	25	20	21.73	21.78	21.88						
10	16QAM	50	0	21.85	21.84	21.86	23	1				
10	84QAM	1	0	21.97	21.79	22.01						
10	84QAM	1	28	22.24	22.28	22.17						
10	84QAM	1	49	21.97	22.13	21.91	23	1				
10	84QAM	25	0	20.90	20.92	20.92						
10	84QAM	25	12	20.98	20.97	20.90						
10	84QAM	25	20	20.91	20.93	20.90	22	2				
10	84QAM	50	0	20.90	20.87	20.94						
10	256QAM	1	0	19.08	19.11	19.06						
10	256QAM	1	28	19.05	19.07	19.04	19.8	4.2				
10	256QAM	1	49	19.01	19.05	19.02						
10	256QAM	12	0	19.03	19.06	19.02						
10	256QAM	25	12	18.99	19.02	18.99						
10	256QAM	25	20	18.97	19.00	18.96	19.8	4.2				
10	256QAM	50	0	19.00	19.02	19.00						
10	256QAM	50	0	20.95	20.96	20.95						
Channel												
Frequency (MHz)												
5	QPSK	1	0	22.67	22.72	22.70				24	0	
5	QPSK	1	12	22.77	22.71	22.76						
5	QPSK	1	24	22.68	22.74	22.73						
5	QPSK	12	0	22.67	22.83	22.84						
5	QPSK	12	7	22.70	22.86	22.86	24	0				
5	QPSK	12	14	22.78	22.91	22.74						
5	QPSK	25	0	22.83	22.77	22.88						
5	16QAM	1	0	22.83	22.69	22.87						
5	16QAM	1	12	22.68	22.76	22.73	24	0				
5	16QAM	1	24	22.78	22.74	22.83						
5	16QAM	12	0	21.91	21.76	21.75						
5	16QAM	12	7	21.93	21.73	21.78	23	1				
5	16QAM	12	14	21.96	21.98	21.90						
5	16QAM	25	0	21.86	21.71	21.80						
5	84QAM	1	0	21.85	21.68	21.92	23	1				
5	84QAM	1	12	22.21	22.23	22.14						
5	84QAM	1	24	21.85	21.80	21.90						
5	84QAM	12	0	20.76	20.79	20.82						
5	84QAM	12	7	20.95	20.78	20.85	22	2				
5	84QAM	12	14	20.78	20.96	20.71						
5	84QAM	25	0	20.89	20.77	20.88						
5	256QAM	1	0	18.97	18.98	18.94	19.8	4.2				
5	256QAM	1	12	18.91	18.95	18.92						
5	256QAM	12	14	18.96	18.96	18.90						
5	256QAM	12	0	18.98	18.94	18.86						
5	256QAM	12	7	18.93	18.93	18.87	19.8	4.2				
5	256QAM	12	13	18.94	18.95	18.87						
5	256QAM	12	0	18.89	18.92	18.85						
5	256QAM	25	0	20.95	20.98	20.95						
Channel												
Frequency (MHz)												
3	QPSK	1	0	22.74	22.77	22.74	24	0				
3	QPSK	1	8	22.72	22.83	22.72						
3	QPSK	1	14	22.84	22.86	22.82						
3	QPSK	8	0	22.69	22.79	22.78						
3	QPSK	8	4	22.83	22.84	22.88	24	0				
3	QPSK	8	7	22.86	22.89	22.86						
3	QPSK	16	0	22.73	22.80	22.72						
3	16QAM	1	0	22.76	22.75	22.82						
3	16QAM	1	8	22.81	22.80	22.88	24	0				
3	16QAM	1	14	22.73	22.83	22.48						
3	16QAM	8	0	21.90	21.83	21.78						
3	16QAM	8	4	21.85	21.82	21.73	23	1				
3	16QAM	8	7	21.71	21.78	21.79						
3	84QAM	1	0	21.97	21.65	21.69						
3	84QAM	1	8	22.11	22.18	22.14	23	1				
3	84QAM	1	14	21.97	22.12	21.76						
3	84QAM	8	0	20.77	20.91	20.71						
3	84QAM	8	4	20.94	20.91	20.78	22	2				
3	84QAM	8	7	20.72	20.92	20.83						
3	84QAM	16	0	20.87	20.83	20.91						
3	256QAM	1	0	18.96	19.00	19.04	19.8	4.2				
3	256QAM	1	8	19.04	18.98	18.96						
3	256QAM	1	14	18.97	18.96	18.90						
3	256QAM	8	0	18.96	18.93	18.91						
3	256QAM	8	4	18.94	18.95	18.87	19.8	4.2				
3	256QAM	8	7	18.93	18.91	18.89						
3	256QAM	15	0	18.93	18.95	18.90						
3	256QAM	15	0	20.97	20.99	20.93						
Channel												
Frequency (MHz)												
1.4	QPSK	1	0	22.69	22.64	22.68	24	0				
1.4	QPSK	1	3	22.76	22.73	22.75						
1.4	QPSK	1	5	22.75	22.80	22.70						
1.4	QPSK	3	0	22.70	22.78	22.74						
1.4	QPSK	3	1	22.76	22.71	22.85	24	0				
1.4	QPSK	3	3	22.79	22.75	22.74						
1.4	QPSK	6	0	22.78	22.87	22.69						
1.4	16QAM	1	0	22.80	22.70	22.83						
1.4	16QAM	1	3	22.66	22.89	22.89	24	0				
1.4	16QAM	1	5	22.73	22.84	22.52						
1.4	16QAM	3	0	22.37	22.37	22.39						
1.4	16QAM	3	1	22.33	22.28	22.29	24	0				
1.4	16QAM	3	3	22.13	22.28	22.27						
1.4	16QAM	6	0	21.87	21.73	21.79						
1.4	84QAM	1	0	21.85	21.71	21.83	23	1				
1.4	84QAM	1	3	22.24	22.16	22.09						
1.4	84QAM	1	5	21.89	22.00	21.89						
1.4	84QAM	3	0	21.52	21.67	21.62						
1.4	84QAM	3	1	21.57	21.45	21.47	23	1				
1.4	84QAM	3	3	21.45	21.51	21.46						
1.4	84QAM	6	0	20.83	20.87	20.83						
1.4	256QAM	1	0	19.04	19.11	19.05	19.8	4.2				
1.4	256QAM	1	3	19.01	19.05	19.02						
1.4	256QAM	1	5	18.96	19.05	19.02						
1.4	256QAM	3	0	18.96	19.03	18.96						
1.4	256QAM	3	1	19.00	18.96	18.95	19.8	1				
1.4	256QAM	3	3	18.84	18.96	18.87						
1.4	256QAM	6	0	18.90	19.01	18.95						
1.4	256QAM	6	0	18.90	19.01	18.95						

Band 17 (700MHz Band) Part 27H(only on channel required)									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freqs	Power Main Ch / Freqs	Power High Ch / Freqs	Turn-up rate (dBm)	MPE (dB)	
Channel				20.70	20.90	20.90			
Frequency (MHz)				710	710	711			
5	QPSK	1	0	22.74	22.69	22.71		24	0
5	QPSK	1	26	22.65	22.77	22.71			
5	QPSK	1	49	22.68	22.87	22.84			
5	QPSK	25	0	22.69	22.73	22.70			
5	QPSK	25	12	22.79	22.76	22.71		24	0
5	QPSK	25	20	22.65	22.84	22.82			
5	QPSK	50	0	22.82	22.81	22.80			
5	16QAM	1	0	22.75	22.84	22.74			
5	16QAM	1	26	22.77	22.83	22.78		24	0
5	16QAM	1	49	22.77	22.87	22.81			
5	16QAM	25	0	21.59	21.80	21.73			
5	16QAM	25	12	21.81	21.78	21.78		23	1
5	16QAM	25	20	21.50	21.83	21.83			
5	16QAM	50	0	21.75	21.82	21.82			
5	16QAM	1	0	21.80	21.71	21.74			
5	16QAM	1	25	21.87	21.67	21.84		23	1
5	16QAM	1	49	21.84	21.68	21.87			
5	16QAM	25	0	20.71	20.80	20.87			
5	16QAM	25	12	20.59	20.80	20.83		22	2
5	16QAM	25	20	20.79	20.83	20.78			
5	16QAM	50	0	20.76	20.89	20.76			
5	25QAM	1	0	19.09	19.10	19.07		19.8	4.2
5	25QAM	1	26	19.06	19.08	19.02			
5	25QAM	1	49	19.03	19.07	19.03			
5	25QAM	25	0	19.08	19.11	19.08			
5	25QAM	25	12	19.04	19.05	19.02		19.8	4.2
5	25QAM	25	20	19.02	19.01	18.99			
5	25QAM	50	0	19.06	19.03	19.01			
Channel				706.5	710	713.5	Turn-up rate (dBm)	MPE (dB)	
Frequency (MHz)				706.5	710	713.5			
5	QPSK	1	0	22.67	22.60	22.57		24	0
5	QPSK	1	12	22.49	22.60	22.52			
5	QPSK	1	24	22.68	22.78	22.68			
5	QPSK	12	0	22.60	22.54	22.59			
5	QPSK	12	7	22.81	22.69	22.65		24	0
5	QPSK	12	14	22.84	22.68	22.70			
5	16QAM	1	0	22.68	22.78	22.63			
5	16QAM	1	12	22.80	22.62	22.62		24	0
5	16QAM	1	24	22.62	22.70	22.60			
5	16QAM	12	0	21.43	21.62	21.58			
5	16QAM	12	7	21.82	21.50	21.68		23	1
5	16QAM	12	14	21.70	21.78	21.62			
5	16QAM	25	0	21.54	21.68	21.59			
5	16QAM	1	0	21.72	21.67	21.67		23	1
5	16QAM	1	12	21.79	21.50	21.78			
5	16QAM	1	24	21.50	21.55	21.87			
5	16QAM	12	0	20.65	20.79	20.69		22	2
5	16QAM	12	7	20.87	20.72	20.70			
5	16QAM	12	14	20.72	20.62	20.58			
5	16QAM	25	0	20.79	20.55	20.59			
5	25QAM	1	0	18.88	18.90	18.92		19.8	4.2
5	25QAM	1	12	18.87	18.90	18.84			
5	25QAM	1	24	18.95	18.91	18.84			
5	25QAM	12	0	18.87	18.91	18.86			
5	25QAM	12	7	18.90	18.92	18.92			
5	25QAM	12	14	18.93	18.81	18.78		19.8	4.2
5	25QAM	25	0	18.90	18.85	18.86			

Band 30										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Main Ch / Freq	Power High Ch / Freq	Turn-on time (s)	MFR (dB)		
Channel										
Frequency (MHz)										
27715										
10	QPSK	1	0	20.83			21.7	0		
10	QPSK	1	25	20.83						
10	QPSK	1	49	20.76						
20	QPSK	25	0	20.79			21.7	0		
10	QPSK	25	12	20.83						
10	QPSK	25	25	20.70						
10	QPSK	50	0	20.80			21.7	0		
10	16QAM	1	0	20.76						
10	16QAM	1	25	20.80						
10	16QAM	1	49	20.58			21.7	0		
10	16QAM	25	0	20.53						
10	16QAM	25	12	20.55						
10	16QAM	25	25	20.64			21.7	0		
10	16QAM	12	0	20.62						
10	16QAM	1	0	20.65						
10	16QAM	1	25	20.76			21.7	0		
10	16QAM	1	49	20.57						
10	16QAM	25	25	20.79						
10	16QAM	50	0	20.76			19.7	2		
10	25QAM	1	0	19.15						
10	25QAM	1	25	19.19						
10	25QAM	1	49	19.08			19.7	2		
20	25QAM	25	0	19.20						
10	25QAM	25	12	18.97						
10	25QAM	25	25	18.99			19.7	2		
10	25QAM	50	0	18.98						
20	25QAM	50	0	18.98						
20	25QAM	50	0	18.98						
20	25QAM	50	0	18.98						
Channel										
Frequency (MHz)										
27825										
5	QPSK	1	0	20.74	20.69	20.72	21.7	0		
5	QPSK	1	12	20.74	20.70	20.73				
5	QPSK	1	24	20.65	20.61	20.69				
5	QPSK	12	0	20.68	20.63	20.44	21.7	0		
5	QPSK	12	7	20.68	20.64	20.64				
5	QPSK	12	13	20.58	20.52	20.43				
5	QPSK	25	0	20.67	20.76	20.69	21.7	0		
5	16QAM	1	0	20.58	20.51	20.64				
5	16QAM	1	12	20.73	20.74	20.73				
5	16QAM	1	24	20.47	20.41	20.48	21.7	0		
5	16QAM	12	0	20.33	20.32	20.32				
5	16QAM	12	7	20.43	20.38	20.38				
5	16QAM	12	13	20.45	20.40	20.40	21.7	0		
5	16QAM	25	0	20.41	20.48	20.48				
5	16QAM	25	0	20.65	20.70	20.70				
5	16QAM	1	12	20.58	20.59	20.51	21.7	0		
5	16QAM	1	24	20.67	20.65	20.64				
5	16QAM	12	0	20.23	20.30	20.30				
5	16QAM	12	7	20.73	20.71	20.71	21.7	0		
5	16QAM	12	13	20.68	20.72	20.76				
5	16QAM	25	0	20.63	20.72	20.70				
5	25QAM	1	0	18.99	18.95	18.93	19.7	2		
5	25QAM	1	12	18.94	18.95	18.99				
5	25QAM	1	24	18.98	18.92	18.95				
5	25QAM	12	0	18.79	18.85	18.82	19.7	2		
5	25QAM	12	7	18.69	18.71	18.70				
5	25QAM	12	13	18.78	18.70	18.81				
5	25QAM	25	0	18.88	18.85	18.83	19.7	2		
5	25QAM	25	0	18.88	18.85	18.83				
5	25QAM	25	0	18.88	18.85	18.83				

Band 66												
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Main Ch / Freq	Power High Ch / Freq	Turn-on time (s)	MFR (dB)				
Channel												
Frequency (MHz)												
130072												
20	QPSK	1	0	20.14	20.37	20.37	21.2	0				
20	QPSK	1	49	20.10	20.28	20.28						
20	QPSK	1	99	20.03	20.16	20.15						
20	QPSK	50	0	20.05	20.27	20.19	21.2	0				
20	QPSK	50	24	20.12	20.35	20.28						
20	QPSK	50	50	19.97	20.22	20.15						
20	QPSK	100	0	20.10	20.33	20.33	21.2	0				
20	16QAM	1	0	20.32	20.19	20.24						
20	16QAM	1	49	19.94	20.29	20.27						
20	16QAM	1	99	20.28	20.28	20.22	21.2	0				
20	16QAM	50	0	20.03	20.03	20.15						
20	16QAM	50	24	20.10	20.03	20.28						
20	16QAM	50	50	20.13	20.18	20.10	21.2	0				
20	16QAM	100	0	20.10	20.04	20.04						
20	16QAM	1	0	20.12	20.25	20.25						
20	16QAM	1	49	20.11	20.25	20.20	21.2	0				
20	16QAM	1	99	20.12	20.25	20.20						
20	16QAM	50	0	20.20	20.15	20.09						
20	16QAM	50	24	20.21	20.21	20.10	21.2	0				
20	16QAM	50	50	20.20	20.13	20.15						
20	16QAM	100	0	20.03	20.09	20.12						
20	25QAM	1	0	19.06	19.04	19.05	19.7	1.5				
20	25QAM	1	49	19.04	19.02	19.02						
20	25QAM	1	99	19.04	19.02	19.02						
20	25QAM	50	0	18.98	19.03	19.02	19.7	1.5				
20	25QAM	50	24	18.88	19.00	18.99						
20	25QAM	50	50	18.85	18.88	18.87						
20	25QAM	100	0	18.87	18.88	18.84	19.7	1.5				
20	25QAM	100	0	18.87	18.88	18.84						
20	25QAM	100	0	18.87	18.88	18.84						
Channel												
Frequency (MHz)												
17175												
15	QPSK	1	0	20.09	20.24	20.27	21.2	0				
15	QPSK	1	37	20.05	20.14	20.12						
15	QPSK	1	74	19.94	20.10	20.10						
15	QPSK	36	0	20.03	20.19	20.09	21.2	0				
15	QPSK	36	20	20.01	20.32	20.18						
15	QPSK	36	36	19.89	20.13	20.06						
15	QPSK	75	0	20.02	20.23	20.10	21.2	0				
15	QPSK	1	0	20.19	20.12	20.10						
15	16QAM	1	37	19.91	20.21	20.23						
15	16QAM	1	74	20.25	20.18	20.12	21.2	0				
15	16QAM	36	0	19.99	20.02	20.09						
15	16QAM	36	20	19.97	19.97	20.15						
15	16QAM	75	0	19.98	20.03	20.05	21.2	0				
15	16QAM	1	0	20.11	20.14	20.20						
15	16QAM	1	37	20.05	20.11	20.20						
15	16QAM	36	0	20.02	20.18	20.10	21.2	0				
15	16QAM	36	20	20.00	20.20	20.15						
15	16QAM	36	36	19.97	20.17	20.10						
15	16QAM	75	0	20.13	20.15	20.10	21.2	0				
15	16QAM	1	0	19.97	19.97	20.15						
15	16QAM	1	37	19.99	20.02	20.09						
15	25QAM	1	0	18.97	18.98	18.96	19.7	1.5				
15	25QAM	1	49	18.96	18.96	18.96						
15	25QAM	1	99	18.97	18.93	18.94						
15	25QAM	50	0	18.88	18.90	18.90	19.7	1.5				
15	25QAM	50	24	18.78	18.97	18.87						
15	25QAM	50	50	18.85	18.89	18.84						
15	25QAM	100	0	18.87	18.88	18.84	19.7	1.5				
15	25QAM	100	0	18.87	18.88	18.84						
15	25QAM	100	0	18.87	18.88	18.84						
Channel												
Frequency (MHz)												
130072												
15	QPSK	1	0	20.09	20.24	20.27	21.2	0				
15	QPSK	1	37	20.05	20.14	20.12						
15	QPSK	1	74	19.94	20.10	20.10						
15	QPSK	36	0	20.03	20.19	20.09	21.2	0				
15	QPSK	36	20	20.01	20.32	20.18						
15	QPSK	36	36	19.89	20.13	20.06						
15	QPSK	75	0	20.02	20.23	20.10	21.2	0				
15	QPSK	1	0	20.19	20.12	20.10						
15	16QAM	1	37	19.91	20.21	20.23						
15	16QAM	1	74	20.25	20.18	20.12	21.2	0				
15	16QAM	36	0	19.99	20.02	20.09						
15	16QAM	36	20	19.97	19.97	20.15						
15	16QAM	75	0	19.98	20.03	20.05	21.2	0				
15	16QAM	1	0	20.11	20.14	20.20						
15	16QAM	1	37	20.05	20.11	20.20						
15	16QAM	36	0	20.02	20.18	20.10	21.2	0				
15	16QAM	36	20	20.00	20.20	20.15						
15	16QAM	36	36	19.97	20.17	20.10						
15	16QAM	75	0	20.13	20.15	20.10	21.2	0				
15	16QAM	1	0	19.97	19.97	20.15						
15	16QAM	1	37	19.99	20.02	20.09						
15	25QAM	1	0	18.97	18.98	18.96	19.7	1.5				
15	25QAM	1	49	18.96	18.96	18.96						
15	25QAM	1	99	18.97	18.93	18.94						
15	25QAM	50	0	18.88	18.90	18.90	19.7	1.5				
15	25QAM	50	24	18.78	18.97	18.87						
15	25QAM	50	50	18.84	18.79	18.87						
15	25QAM	100	0	18.84	18.79	18.87	19.7	1.5				
15	25QAM	100	0	18.84	18.79	18.87						
15	25QAM	100	0	18.84	18.79	18.87						
Channel												
Frequency (MHz)												
17175												
6	QPSK	1	0	19.99	20.32	20.25	21.2	0				
6	QPSK	1	12	20.02	20.15	20.13						
6	QPSK	1	24	20.13	20.12	20.14						
6	QPSK	12	0	20.02	20.14	20.13	21.2	0				
6	QPSK	12	7	20.00	20.25	20.15						
6	QPSK	12	14	19.95	20.08	20.08						
6	QPSK	25	0	20.01	20.22	20.20	21.2	0				
6	QPSK	25	7	20.01	20.22	20.20						
6	QPSK	25	14	20.17	20.15	20.23						
6	16QAM	1	0	20.12	20.25	20.25	21.2	0				
6	16QAM	1	12	20.02	20.20	20.20						
6	16QAM	1	24	20.06	20.20	20.20						
6	16QAM	12	0	19.96	20.10	20.10	21.2	0				
6	16QAM	12	7	20.00	20.20	20.20						
6	16QAM	12	14	20.04	20.18	20.18						
6	16QAM	25	0	20.03	20.12	20.12	21.2	0				
6	16QAM	25	7	20.00	20.12	20.22						
6	16QAM	25	14	20.09	20.12	20.20						
6	16QAM	1	0	19.99	20.07	20.15	21.2	0				
6	16QAM	1	12	20.00	20.12	20.12						
6	16QAM	1	24	20.04	20.18	20.18						
6	16QAM	12	0	19.96	20.10	20.10	21.2	0				
6	16QAM	12	7	20.00	20.20	20.20						
6	16QAM	12	14	20.02	20.18	20.18						
6	16QAM	25	0	20.03	20.12	20.12	21.2	0				
6	16QAM	25	7	20.00	20.12	20.22						
6	16QAM	25	14	20.09	20.12	20.20						
6	16QAM	1	0	19.99	20.07	20.15	21.2	0				
6	16QAM	1	12	20.00	20.12	20.12						
6	16QAM	1	24	20.04	20.18	20.18						
6	16QAM	12	0	19.96	20.10	20.10	21.2	0				
6	16QAM	12	7	20.00	20.20	20.20						
6	16QAM	12	14	20.02	20.18	20.18						
6	16QAM	25	0	20.03	20.12	20.12	21.2	0				
6	16QAM	25	7	20.00	20.12	20.22						
6	16QAM	25	14	20.09	20.12	20.20						
6	16QAM	1	0	19.99	20.07	20.15	21.2	0				
6	16QAM	1	12	20.00	20.12	20.12						
6	16QAM	1	24	20.04	20.18	20.18						
6	16QAM	12	0	19.96	20.10	20.10	21.2	0				
6	16QAM	12	7	20.00	20.20	20.20						
6	16QAM	12	14	20.02	20.18	20.18						
6	16QAM	25	0	20.03	20.12	20.12	21.2	0				
6	16QAM	25	7	20.00	20.12	20.22						
6	16QAM	25	14	20.09	20.12	20.20						
6	16QAM	1	0	19.99	20.07	20.15	21.2	0				
6	16QAM	1	12	20.00	20.12	20.12						
6	16QAM	1	24	20.04	20.18	20.18						
6	16QAM	12	0	19.96	20.10	20.10	21.2	0				
6	16QAM	12	7	20.00	20.20	20.20						
6	16QAM	12	14	20.02	20.18	20.18						
6	16QAM	25	0	20.03	20.12	20.12	21.2	0				
6	16QAM	25	7	20.00	20.12	20.22						
6	16QAM	25	14	20.09	20.12	20.20						
6	16QAM	1	0	19.99	20.07	20.15	21.2	0				
6	16QAM	1	12	20.00	20.12	20.12						
6	16QAM	1	24	20.04	20.18	20.18						
6	16QAM	12	0	19.96	20.10	20.10	21.2	0				
6	16QAM	12	7	20.00	20.20	20.20						
6	16QAM	12	14	20.02	20.18	20.18						
6	16QAM	25	0	20.03	20.12	20.12	21.2	0				
6	16QAM	25	7	20.00	20.12	20.22						
6	16QAM	25	14	20.09	20.12	20.20						
6	16QAM	1	0	19.99	20.07	20.15	21.2	0				
6	16QAM	1	12	20.00	20.12	20.12						
6	16QAM	1	24	20.04	20.18	20.18						
6	16QAM	12	0	19.96	20.10	20.10	21.2	0				
6	16QAM	1										



Band 38(only on channel required)												
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch [Fwh]	Power Middle Ch [Fwh]	Power High Ch [Fwh]	Turn-up level (dBm)	MPR (dB)				
Channel												
Frequency (MHz)												
20	QPSK	1	0	22.18	22.13	22.10	23.1	0				
20	QPSK	4	0	22.21	22.23	22.20						
20	QPSK	1	96	22.34	22.29	22.25						
20	QPSK	56	0	22.22	22.22	22.15						
20	QPSK	56	24	22.32	22.27	22.19	23.1	0				
20	QPSK	56	56	22.30	22.21	22.16						
20	QPSK	100	0	22.31	22.26	22.18						
20	16QAM	1	0	22.31	22.30	22.19						
20	16QAM	1	48	22.33	22.30	22.19	23.1	0				
20	16QAM	1	96	22.31	22.32	22.26						
20	16QAM	56	0	22.11	22.07	22.03						
20	16QAM	56	24	22.15	22.12	22.13						
20	16QAM	56	56	22.32	22.21	22.15	23.1	0				
20	16QAM	100	0	22.10	22.13	21.98						
20	16QAM	100	0	21.88	21.72	21.69						
20	16QAM	1	48	21.81	21.70	21.73						
20	16QAM	1	96	21.73	21.84	21.84	22.1	1				
20	16QAM	56	0	21.69	21.76	21.64						
20	16QAM	56	24	21.18	21.16	21.09						
20	16QAM	56	56	21.14	21.17	21.17						
20	16QAM	100	0	21.12	21.09	21.01	19.8	3.3				
20	25QAM	1	0	18.92	18.90	18.94						
20	25QAM	1	37	18.91	18.91	18.94						
20	25QAM	1	96	18.91	18.91	18.94						
20	25QAM	56	0	18.90	18.91	18.90	19.8	3.3				
20	25QAM	56	24	18.95	18.92	18.91						
20	25QAM	56	56	18.90	18.90	18.90						
20	25QAM	100	0	18.94	18.92	18.91						
Channel												
Frequency (MHz)												
15	QPSK	1	0	22.15	22.21	21.95	23.1	0				
15	QPSK	1	37	22.21	22.22	22.13						
15	QPSK	1	74	22.24	22.19	22.12						
15	QPSK	56	0	22.14	22.15	22.12						
15	QPSK	56	24	22.19	22.18	22.08	23.1	0				
15	QPSK	56	56	22.17	22.12	22.02						
15	QPSK	75	0	22.21	22.14	22.11						
15	16QAM	1	0	22.31	22.26	22.18						
15	16QAM	1	37	22.26	22.17	22.10	23.1	0				
15	16QAM	1	74	22.23	22.13	22.07						
15	16QAM	56	0	22.08	22.01	21.98						
15	16QAM	56	24	22.02	21.87	21.90						
15	16QAM	56	56	22.04	22.01	22.02	22.1	1				
15	16QAM	100	0	21.85	21.81	21.84						
15	16QAM	1	37	21.75	21.81	21.84						
15	16QAM	1	74	21.73	21.74	21.83						
15	16QAM	56	0	21.69	21.76	21.66	22.1	1				
15	16QAM	56	24	21.12	21.13	21.06						
15	16QAM	56	56	21.14	21.14	21.14						
15	16QAM	75	0	21.01	20.99	20.92						
15	25QAM	1	0	18.91	18.90	18.92	19.8	3.3				
15	25QAM	1	37	18.92	18.90	18.92						
15	25QAM	1	74	18.90	18.91	18.93						
15	25QAM	56	0	18.96	18.91	18.91						
15	25QAM	56	24	18.95	18.91	18.90	19.8	3.3				
15	25QAM	56	56	18.96	18.93	18.93						
15	25QAM	100	0	18.94	18.91	18.94						
15	25QAM	100	0	18.94	18.91	18.94						
Channel												
Frequency (MHz)												
15	QPSK	1	0	22.15	22.21	21.95	23.1	0				
15	QPSK	1	37	22.21	22.22	22.13						
15	QPSK	1	74	22.24	22.19	22.12						
15	QPSK	56	0	22.14	22.15	22.12						
15	QPSK	56	24	22.19	22.18	22.08	23.1	0				
15	QPSK	56	56	22.17	22.12	22.02						
15	QPSK	75	0	22.21	22.14	22.11						
15	16QAM	1	0	22.29	22.21	22.10						
15	16QAM	1	37	22.26	22.17	22.10	23.1	0				
15	16QAM	1	74	22.23	22.13	22.07						
15	16QAM	56	0	22.08	22.01	21.98						
15	16QAM	56	24	22.02	21.87	21.90						
15	16QAM	56	56	22.04	22.01	22.02	22.1	1				
15	16QAM	100	0	21.85	21.81	21.84						
15	16QAM	1	37	21.75	21.81	21.84						
15	16QAM	1	74	21.73	21.74	21.83						
15	16QAM	56	0	21.69	21.76	21.66	22.1	1				
15	16QAM	56	24	21.12	21.13	21.06						
15	16QAM	56	56	21.14	21.14	21.14						
15	16QAM	100	0	21.01	20.99	20.92						
15	25QAM	1	0	18.91	18.90	18.91	19.8	3.3				
15	25QAM	1	37	18.92	18.91	18.91						
15	25QAM	1	74	18.93	18.91	18.92						
15	25QAM	56	0	18.96	18.91	18.91						
15	25QAM	56	24	18.95	18.91	18.90	19.8	3.3				
15	25QAM	56	56	18.96	18.93	18.93						
15	25QAM	100	0	18.94	18.91	18.94						
15	25QAM	100	0	18.94	18.91	18.94						
Channel												
Frequency (MHz)												
15	QPSK	1	0	22.15	22.21	21.95	23.1	0				
15	QPSK	1	37	22.21	22.22	22.13						
15	QPSK	1	74	22.24	22.22	22.14						
15	QPSK	56	0	22.14	22.15	22.12						
15	QPSK	56	24	22.25	22.21	22.15	23.1	0				
15	QPSK	56	56	22.23	22.23	22.07						
15	QPSK	12	0	22.16	22.22	22.07						
15	QPSK	12	37	22.17	22.19	22.04						
15	QPSK	12	74	22.29	22.27	22.07	23.1	0				
15	QPSK	12	113	22.18	22.22	22.07						
15	16QAM	1	0	22.29	22.23	22.07						
15	16QAM	1	12	22.21	22.10	22.07						
15	16QAM	1	24	22.17	21.96	22.15	23.1	0				
15	16QAM	1	37	22.23	22.19	22.07						
15	16QAM	12	0	22.04	22.01	22.03						
15	16QAM	12	37	22.08	22.11	22.08						
15	16QAM	12	74	22.09	22.09	22.08	22.1	1				
15	16QAM	12	113	21.89	21.89	21.89						
15	16QAM	25	0	21.82	21.68	21.64						
15	16QAM	25	37	21.67	21.67	21.73						
15	16QAM	25	74	21.70	21.70	21.76	22.1	1				
15	16QAM	25	113	21.03	21.05	20.99						
15	16QAM	25	150	21.11	21.05	21.01						
15	16QAM	25	187	21.06	21.06	21.03						
15	16QAM	25	225	21.04	21.14	21.10	22.1	1				
15	16QAM	25	263	21.05	21.05	21.07						
15	16QAM	25	300	21.05	21.05	21.07						
15	16QAM	25	338	21.05	21.05	21.07						
15	25QAM	1	0	18.86	18.93	18.99	19.8	3.3				
15	25QAM	1	12	18.89	18.91	18.96						
15	25QAM	1	24	18.92	18.92	18.98						
15	25QAM	12	0	18.87	19.02	19.10						
15	25QAM	12	7	18.88	19.01	18.98	19.8	3.3				
15	25QAM	12	19	18.91	18.94	18.94						
15	25QAM	12	31	18.91	18.93	18.93						
15	25QAM	12	43	18.91	18.93	18.93						



Reduced power for Sensor on-LAT

Band	WCDMA II			Time-up Limit (min)	WCDMA IV			Time-up Limit (min)
	882.2	945.0	959.8		1172	1419	1515	
TX Channel	8862	9490	9598		1187	1438	1778	
Frequency (MHz)	932.4	1165	1207.6		1712.4	1722.6	1732.8	
SCPP Rel 8	18.63	18.68	18.66	20.30	17.36	17.36	17.36	21.00
SCPP Rel 8G	RNC 12.30ms	18.66	18.75	19.74	20.30	20.44	20.40	21.00
SCPP Rel 8	WCDMA Subnet 1	18.73	18.81	18.87	19.30	19.30	19.44	20.00
SCPP Rel 8	WCDMA Subnet 2	18.74	18.80	18.87	19.30	19.40	19.40	20.00
SCPP Rel 8	WCDMA Subnet 3	18.21	18.31	18.13	18.80	18.80	18.93	19.80
SCPP Rel 8	WCDMA Subnet 4	18.22	18.26	18.16	18.80	18.91	18.92	19.80
SCPP Rel 8	DC-WCDMA Subnet 1	18.65	18.78	18.57	19.30	19.37	19.36	20.00
SCPP Rel 8	DC-WCDMA Subnet 2	18.63	18.72	18.51	19.30	19.37	19.36	20.00
SCPP Rel 8	DC-WCDMA Subnet 3	18.21	18.24	18.02	18.80	18.79	18.91	19.80
SCPP Rel 8	DC-WCDMA Subnet 4	18.00	18.12	18.08	18.80	18.77	18.89	19.80
SCPP Rel 8	WCDMA Subnet 1	18.62	18.67	18.49	19.30	19.38	19.34	20.00
SCPP Rel 8	WCDMA Subnet 2	18.74	18.80	18.70	17.30	17.40	17.41	18.00
SCPP Rel 8	WCDMA Subnet 3	18.72	18.80	18.66	16.30	16.41	16.38	17.00
SCPP Rel 8	WCDMA Subnet 4	18.49	18.62	18.49	17.30	17.38	17.38	18.00
SCPP Rel 8	WCDMA Subnet 5	18.70	18.80	18.60	18.30	18.32	18.30	20.00
SCPP Rel 7	WCDMA Subnet 1	18.72	18.66	18.75	17.40	17.32	17.41	18.00

Band	GSM 850			Time-up Limit (min)
	26	800	1175	
TX Channel				
Frequency (MHz)	18.82	18.74	18.84	
SC1 SCSS	20.11	20.10	20.10	21.00
SC1 SCSS	20.10	20.14	20.11	21.00
SC2 SCSS (FDD)	20.08	20.10	20.09	21.00
SC3 SCSS (FDD)	20.08	20.11	20.08	21.00
RTAP 113.60ms	20.05	20.10	20.08	21.00
RTAP 100.0ms	20.04	20.10	20.06	21.00



Band 2 (1900MHz Band)									
Part 24E									
BW [MHz]	Modulation	RB Size	RB Offset	Power Ch / Freq.	Power Ch / Freq.	Power Ch / Freq.	Turn-on time (s)	APR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	19.84	19.84	19.88			
20	QPSK	1	40	19.85	19.85	19.91	21	0	
20	QPSK	1	96	19.90	19.90	19.95			
20	QPSK	1	144	19.94	19.94	19.99			
20	QPSK	50	0	19.84	19.84	19.78			
20	QPSK	50	24	19.88	19.88	19.93	21	0	
20	QPSK	50	50	19.86	19.82	19.87			
20	QPSK	100	0	19.86	19.82	19.86			
20	16QAM	1	0	19.88	19.84	19.90			
20	16QAM	1	40	19.90	19.90	19.92	21	0	
20	16QAM	1	96	19.78	19.82	19.76			
20	16QAM	1	144	19.83	19.83	19.85			
20	16QAM	50	0	19.83	19.83	19.80			
20	16QAM	50	24	19.94	19.92	19.94	21	0	
20	16QAM	50	50	19.88	19.88	19.88			
20	16QAM	100	0	19.88	19.77	19.86			
20	16QAM	1	0	19.92	19.88	19.94			
20	16QAM	1	40	19.89	19.83	19.90	21	0	
20	16QAM	1	96	19.91	19.87	19.92			
20	16QAM	50	0	19.88	19.87	19.85			
20	16QAM	50	24	19.94	19.92	19.93	21	0	
20	16QAM	50	50	19.90	19.91	19.91			
20	16QAM	100	0	19.94	19.92	19.92			
20	256QAM	1	0	19.92	19.90	19.92			
20	256QAM	1	40	19.19	19.14	19.11	19.8	1.2	
20	256QAM	1	96	19.98	19.96	19.99			
20	256QAM	1	144	19.85	19.85	19.85			
20	256QAM	50	24	19.88	19.19	19.11	19.8	1.2	
20	256QAM	50	50	19.07	19.14	19.04			
20	256QAM	100	0	19.17	19.14	19.04			
Channel									
Frequency (MHz)									
15	QPSK	1	0	19.95	19.99	19.92			
15	QPSK	1	37	19.89	19.83	19.84	21	0	
15	QPSK	1	74	19.84	19.77	19.82			
15	QPSK	1	111	19.79	19.72	19.77			
15	QPSK	36	20	19.65	19.67	19.62	21	0	
15	QPSK	36	36	19.69	19.64	19.68			
15	QPSK	75	0	19.67	19.70	19.63			
15	16QAM	1	0	19.85	19.74	19.73			
15	16QAM	1	37	19.67	19.68	19.65	21	0	
15	16QAM	1	74	19.78	19.80	19.71			
15	16QAM	36	20	19.61	19.70	19.64	21	0	
15	16QAM	36	36	19.70	19.69	19.67			
15	16QAM	75	0	19.75	19.63	19.68			
15	16QAM	1	0	19.66	19.77	19.81			
15	16QAM	1	37	19.62	19.62	19.60	21	0	
15	16QAM	1	74	19.82	19.81	19.87			
15	16QAM	36	0	19.74	19.80	19.88			
15	16QAM	36	20	19.88	19.65	19.84	21	0	
15	16QAM	36	36	19.79	19.71	19.67			
15	16QAM	75	0	19.84	19.63	19.68			
15	256QAM	1	0	19.20	19.08	19.12	19.8	1.2	
15	256QAM	1	37	19.97	19.27	19.87			
15	256QAM	1	74	19.81	19.84	19.76			
15	256QAM	36	0	19.84	19.98	19.99			
15	256QAM	36	20	19.89	19.14	19.09	19.8	1.2	
15	256QAM	36	36	19.83	19.80	19.71			
15	256QAM	75	0	19.11	19.16	19.06			
Channel									
Frequency (MHz)									
10	QPSK	1	0	19.87	19.94	19.85			
10	QPSK	1	40	19.62	19.60	19.57	21	0	
10	QPSK	25	0	19.69	19.72	19.71			
10	QPSK	25	25	19.69	19.68	19.68	21	0	
10	QPSK	50	0	19.80	19.87	19.84			
10	16QAM	1	0	19.83	19.82	19.84			
10	16QAM	1	40	19.84	19.81	19.82	21	0	
10	16QAM	25	0	19.77	19.74	19.70			
10	16QAM	25	25	19.79	19.70	19.67	21	0	
10	16QAM	50	0	19.84	19.80	19.79			
10	16QAM	1	0	19.74	19.84	19.89	21	0	
10	16QAM	1	40	19.68	19.65	19.64			
10	16QAM	1	40	19.74	19.69	19.64			
10	16QAM	25	0	19.75	19.83	19.76			
10	16QAM	25	12	19.78	19.80	19.84	21	0	
10	16QAM	25	25	19.89	19.88	19.74			
10	16QAM	50	0	19.85	19.73	19.76			
10	256QAM	1	0	19.09	19.05	19.26			
10	256QAM	1	40	19.83	19.07	19.08	19.8	1.2	
10	256QAM	1	40	19.86	19.11	19.25			
10	256QAM	25	0	19.80	19.06	19.88			
10	256QAM	25	12	19.81	19.09	19.12	19.8	1.2	
10	256QAM	25	25	19.03	19.07	19.84			
10	256QAM	50	0	19.10	19.07	19.86			
Channel									
Frequency (MHz)									
5	QPSK	1	0	19.85	19.89	19.86			
5	QPSK	1	12	19.68	19.86	19.86	21	0	
5	QPSK	1	24	19.68	19.81	19.83			
5	QPSK	12	0	19.69	19.73	19.69			
5	QPSK	12	7	19.90	19.76	19.69			
5	QPSK	12	13	19.72	19.72	19.81	21	0	
5	QPSK	25	0	19.90	19.70	19.87			
5	16QAM	1	12	19.76	19.81	19.81	21	0	
5	16QAM	1	24	19.71	19.71	19.69			
5	16QAM	12	7	19.86	19.70	19.65			
5	16QAM	12	7	19.89	19.67	19.69	21	0	
5	16QAM	12	13	19.93	19.80	19.84	21	0	
5	16QAM	25	0	19.77	19.81	19.72			
5	16QAM	1	12	19.76	19.87	19.86			
5	16QAM	1	12	19.87	19.87	19.87	21	0	
5	16QAM	1	24	19.80	19.90	19.86			
5	16QAM	12	0	19.89	19.89	19.81			
5	16QAM	12	7	19.89	19.87	19.80	21	0	
5	16QAM	12	13	19.97	19.85	19.72			
5	16QAM	25	0	19.72	19.70	19.81			
5	256QAM	1	12	19.82	19.70	19.77			
5	256QAM	1	24	19.79	19.32	19.09			
5	256QAM	12	0	19.83	19.86	19.80			
5	256QAM	12	7	19.03	19.86	19.89			
5	256QAM	12	13	19.90	19.04	19.89	19.8	1.2	
5	256QAM	25	0	19.17	19.06	19.09			
Channel									
Frequency (MHz)									
3	QPSK	1	0	19.80	19.67	19.76			
3	QPSK	1	6	19.77	19.62	19.63	21	0	
3	QPSK	1	14	19.60	19.62	19.63			
3	QPSK	8	0	19.77	19.84	19.66			
3	QPSK	8	4	19.75	19.70	19.67	21	0	
3	QPSK	8	7	19.65	19.69	19.81			
3	16QAM	1	0	19.80	19.84	19.86			
3	16QAM	1	0	19.73	19.91	19.93	21	0	
3	16QAM	1	6	19.83	19.67	19.68			
3	16QAM	1	14	19.76	19.86	19.86			
3	16QAM	8	0	19.62	19.86	19.88	21	0	
3	16QAM	8	4	19.78	19.79	19.86			
3	16QAM	8	7	19.90	19.73	19.85			
3	16QAM	1	0	19.71	19.82	19.85			
3	16QAM	1	0	19.67	19.69	19.86			
3	16QAM	1	6	19.79	19.58	19.56	21	0	
3	16QAM	1	14	19.69	19.76	19.84			
3	16QAM	8	0	19.65	19.79	19.82			
3	16QAM	8	4	19.86	19.67	19.85	21	0	
3	16QAM	8	7	19.65	19.69	19.81			
3	16QAM	15	0	19.73	19.70	19.77			
3	256QAM	1	0	19.19	19.56	19.57			
3	256QAM	1	6	19.85	19.19	19.82	19.8	1.2	
3	256QAM	1	14	19.67	19.70	19.85			
3	256QAM	1	14	19.87	19.35	19.85			
3	256QAM	8	0	19.68	19.77	19.85			
3	256QAM	8	4	19.78	19.03	19.86	19.8	1.2	
3	256QAM	8	7	19.11	19.11	19.87			
3	256QAM	15	0	19.11	19.02	19.85			
Channel									
Frequency (MHz)									
1.4	QPSK	1	0	19.78	19.68	19.81			
1.4	QPSK	1	0	19.83	19.86	19.86	21	0	
1.4	QPSK	1	5	19.81	19.85	19.86			
1.4	QPSK	1	10	19.77	19.72	19.82			
1.4	QPSK	1	15	19.63	19.63	19.63			
1.4	QPSK	1	20	19.62	19.75	19.80	21	0	
1.4	QPSK	5	0	19.76	19.76	19.81			
1.4	16QAM	1	0	19.81	19.81	19.86			
1.4	16QAM	1	5	19.80	19.82	19.78	21	0	
1.4	16QAM	1	10	19.71	19.67	19.80			
1.4	16QAM	1	15	19.79	19.79	19.83			
1.4	16QAM	1	20	19.69	19.68	19.84			
1.4	16QAM	5	0	19.67	19.62	19.67	21	0	
1.4	16QAM	5	5	19.67	19.79	19.87			
1.4	16QAM	1	0	19.87	19.80	19.78			
1.4	16QAM	1	5	19.86	19.78	19.77			
1.4	16QAM	1	10	19.79	19.63	19.81	21	0	
1.4	16QAM	1	15	19.82	19.82	19.82			
1.4	16QAM	1	20	19.69	19.71	19.77			
1.4	16QAM	5	0	19.67	19.67	19.67	21	0	
1.4	256QAM	1	0	19.03	19.02	19.13			
1.4	256QAM	1	5	19.94	19.43	19.86			

Band 25 (900MHz Band)											
Part 24E											
BW (MHz)	Modulation	RB Size	RB Offset	Power Level Ch / Freq	Power Level Ch / Freq	Power Level Ch / Freq	Turn-on Time (s)	MFR (dB)			
Channel											
Frequency (MHz)											
20	QPSK	1	0	19.93	20.03	19.98					
20	QPSK	1	49	19.95	20.05	19.97	21	0			
20	QPSK	1	99	19.94	19.97	19.97					
20	QPSK	50	0	19.95	19.97	19.98					
20	QPSK	50	24	19.93	20.02	19.94					
20	QPSK	50	50	19.88	19.93	19.93	21	0			
20	QPSK	100	0	19.95	19.97	19.98					
20	16QAM	1	0	19.94	19.94	19.90					
20	16QAM	1	49	19.89	19.97	19.95	21	0			
20	16QAM	1	99	19.90	19.92	19.93					
20	16QAM	50	0	19.78	19.88	19.88					
20	16QAM	50	24	19.85	19.81	19.78	21	0			
20	16QAM	50	50	19.73	19.83	19.82					
20	16QAM	100	0	19.89	19.86	19.78					
20	16QAM	1	0	19.95	19.94	19.78					
20	16QAM	1	49	19.93	19.98	19.94	21	0			
20	16QAM	1	99	19.84	19.95	19.93					
20	16QAM	50	0	19.80	19.82	19.82					
20	16QAM	50	24	19.70	19.85	19.82	21	0			
20	16QAM	50	50	19.79	19.85	19.82					
20	16QAM	100	0	19.93	19.92	19.89					
20	25QAM	1	0	19.84	19.79	19.84					
20	25QAM	1	49	19.12	19.08	19.20	19.8	1.2			
20	25QAM	1	99	19.09	19.07	19.09					
20	25QAM	50	0	19.84	19.82	19.83					
20	25QAM	50	24	19.08	19.13	19.08	19.8	1.2			
20	25QAM	50	50	19.12	19.02	19.15					
20	25QAM	100	0	19.87	19.88	19.89					
Channel											
Frequency (MHz)											
15	QPSK	1	0	19.72	19.88	19.82					
15	QPSK	1	97	19.85	19.81	19.81	21	0			
15	QPSK	1	14	19.62	19.72	19.72					
15	QPSK	36	0	19.77	19.82	19.82					
15	QPSK	36	20	19.77	19.79	19.89	21	0			
15	QPSK	36	36	19.80	19.82	19.72					
15	QPSK	75	0	19.77	19.87	19.87					
15	16QAM	1	0	20.00	19.80	19.84					
15	16QAM	1	97	19.84	19.79	19.82	21	0			
15	16QAM	1	14	19.67	19.78	19.83					
15	16QAM	36	0	19.82	19.79	19.84					
15	16QAM	36	20	19.87	19.84	19.87	21	0			
15	16QAM	36	36	19.84	19.82	19.84					
15	16QAM	75	0	19.89	19.70	19.80					
15	16QAM	1	0	19.70	19.70	19.86					
15	16QAM	1	97	19.76	19.68	19.78	21	0			
15	16QAM	1	14	19.64	19.74	19.79					
15	16QAM	36	0	19.73	19.84	19.72					
15	16QAM	36	20	19.89	19.72	19.88	21	0			
15	16QAM	36	36	19.87	19.82	19.86					
15	16QAM	75	0	19.89	19.80	19.89					
15	16QAM	1	0	19.28	19.88	19.87					
15	25QAM	1	97	19.81	19.85	19.82	19.8	1.2			
15	25QAM	1	14	19.64	19.74	19.79					
15	25QAM	36	0	19.78	19.85	19.72					
15	25QAM	36	20	19.12	19.01	19.36	19.8	1.2			
15	25QAM	36	36	19.12	19.02	19.36					
15	25QAM	75	0	19.87	19.85	19.13					
Channel											
Frequency (MHz)											
10	QPSK	1	0	19.84	19.89	19.87					
10	QPSK	1	25	19.93	19.80	19.78	21	0			
10	QPSK	1	49	19.83	19.82	19.88					
10	QPSK	25	0	19.89	19.83	19.80					
10	QPSK	25	25	19.74	19.84	19.78	21	0			
10	QPSK	25	49	19.85	19.84	19.78					
10	QPSK	50	0	19.80	19.80	19.77					
10	16QAM	1	0	20.03	19.79	19.79					
10	16QAM	1	25	19.80	19.80	19.71	21	0			
10	16QAM	1	49	19.85	19.72	19.80					
10	16QAM	25	0	19.83	19.79	19.78					
10	16QAM	25	25	19.09	19.81	19.71	21	0			
10	16QAM	25	49	19.82	19.84	19.86					
10	16QAM	50	0	19.86	19.82	19.86					
10	25QAM	1	0	19.29	19.82	19.88					
10	25QAM	1	25	19.12	19.11	19.86	19.8	1.2			
10	25QAM	1	49	19.84	19.80	19.82					
10	25QAM	25	0	19.82	19.80	19.84					
10	25QAM	25	25	19.07	19.12	19.80	19.8	1.2			
10	25QAM	25	49	19.89	19.82	19.82					
10	25QAM	50	0	19.77	19.87	19.81					
Channel											
Frequency (MHz)											
5	QPSK	1	0	19.81	19.83	19.87					
5	QPSK	1	12	19.81	20.05	19.72	21	0			
5	QPSK	1	24	19.82	19.85	19.75					
5	QPSK	12	0	19.87	19.77	19.85					
5	QPSK	12	7	19.85	20.03	19.80	21	0			
5	QPSK	12	13	19.72	19.71	19.88					
5	QPSK	25	0	19.83	19.83	19.84					
5	16QAM	1	0	19.80	19.82	19.77					
5	16QAM	1	12	19.79	19.84	19.87	21	0			
5	16QAM	1	24	19.85	19.80	19.88					
5	16QAM	12	0	19.82	19.88	19.85					
5	16QAM	12	7	19.75	19.81	19.75	21	0			
5	16QAM	12	13	19.71	19.82	19.73					
5	16QAM	25	0	19.82	19.84	19.87					
5	16QAM	1	0	19.80	19.74	19.78					
5	16QAM	1	12	19.81	19.89	19.89	21	0			
5	16QAM	1	24	19.79	19.75	19.88					
5	16QAM	12	0	19.89	19.83	19.85					
5	16QAM	12	7	19.82	19.89	19.87	21	0			
5	16QAM	12	13	19.69	19.75	19.89					
5	16QAM	25	0	19.71	19.84	19.79					
5	25QAM	1	0	19.19	19.02	19.85					
5	25QAM	1	12	19.84	19.09	19.09	19.8	1.2			
5	25QAM	1	24	19.85	19.02	19.82					
5	25QAM	12	0	19.80	19.86	19.84					
5	25QAM	12	7	19.02	19.88	19.84					
5	25QAM	12	13	19.86	19.88	19.81	19.8	1.2			
5	25QAM	25	0	19.82	19.89	19.14					
Channel											
Frequency (MHz)											
3	QPSK	1	0	19.90	19.85	19.78					
3	QPSK	1	8	19.72	20.00	19.79	21	0			
3	QPSK	1	14	19.76	19.72	19.85					
3	QPSK	8	0	19.88	19.86	19.82					
3	QPSK	8	4	19.72	19.84	19.89	21	0			
3	QPSK	8	7	19.67	19.74	19.78					
3	QPSK	18	0	19.71	19.79	19.75					
3	16QAM	1	0	19.84	19.83	19.85					
3	16QAM	1	8	19.88	19.86	19.83	21	0			
3	16QAM	1	14	19.91	19.84	19.86					
3	16QAM	8	0	19.78	19.82	19.78					
3	16QAM	8	4	19.74	19.84	19.85	21	0			
3	16QAM	8	7	19.67	19.75	19.82					
3	16QAM	18	0	19.60	19.88	19.83					
3	16QAM	1	0	19.78	1						



Intra Band UL CA Power for UAT

CA_41C											
Combination 20MHz+20MHz (100RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Power Reduction	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB Offset	RB Size	RB Offset					
39730	39686	QPSK	96	0	96	0	1	0	Full	23.38	23.80
39730	39686	QPSK	1	96	0	0	1	0	Full	23.22	23.80
40180	40080	QPSK	1	96	0	0	1	0	Full	23.38	23.80
40630	40430	QPSK	1	96	0	0	1	0	Full	23.20	23.80
41030	40807	QPSK	1	96	0	0	1	0	Full	23.10	23.80
41430	41030	QPSK	1	96	0	0	1	0	Full	23.14	23.80
39730	39686	QPSK	96	0	0	0	1	0	Reduced Power Level 1/2/3	13.10	14.00
39730	39686	QPSK	96	0	0	0	1	0	Reduced Power Level 1/2/3	13.10	14.00
40180	40080	QPSK	96	0	0	0	1	0	Reduced Power Level 1/2/3	13.20	14.00
40630	40430	QPSK	96	0	0	0	1	0	Reduced Power Level 1/2/3	13.10	14.00
41030	40807	QPSK	96	0	0	0	1	0	Reduced Power Level 1/2/3	13.10	14.00
41430	41030	QPSK	96	0	0	0	1	0	Reduced Power Level 1/2/3	13.20	14.00
39730	39686	QPSK	96	0	0	0	1	0	Holdup	16.10	16.80
40180	40080	QPSK	96	0	0	0	1	0	Holdup	16.34	16.80
40630	40430	QPSK	96	0	0	0	1	0	Holdup	16.20	16.80
41030	40807	QPSK	96	0	0	0	1	0	Holdup	16.10	16.80
41430	41030	QPSK	96	0	0	0	1	0	Holdup	16.30	16.80

CA_41C(HRUE)											
Combination 20MHz+20MHz (100RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Power Reduction	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB Offset	RB Size	RB Offset					
39730	39686	QPSK	1	96	0	0	1	0	Full	23.06	23.80
39730	39686	QPSK	1	96	0	0	1	0	Full	23.08	23.80
40180	40080	QPSK	1	96	0	0	1	0	Full	23.20	23.80
40630	40430	QPSK	1	96	0	0	1	0	Full	23.20	23.80
41030	40807	QPSK	1	96	0	0	1	0	Full	23.22	23.80
41430	41030	QPSK	1	96	0	0	1	0	Full	23.19	23.80
39730	39686	QPSK	96	0	0	0	1	0	Reduced Power Level 1/2/3	13.00	14.00
39730	39686	QPSK	96	0	0	0	1	0	Reduced Power Level 1/2/3	13.01	14.00
40180	40080	QPSK	96	0	0	0	1	0	Reduced Power Level 1/2/3	13.09	14.00
40630	40430	QPSK	96	0	0	0	1	0	Reduced Power Level 1/2/3	13.07	14.00
41030	40807	QPSK	96	0	0	0	1	0	Reduced Power Level 1/2/3	13.09	14.00
41430	41030	QPSK	96	0	0	0	1	0	Reduced Power Level 1/2/3	13.06	14.00
39730	39686	QPSK	96	0	0	0	1	0	Holdup	17.70	18.40
40180	40080	QPSK	96	0	0	0	1	0	Holdup	17.86	18.40
40630	40430	QPSK	96	0	0	0	1	0	Holdup	17.66	18.40
41030	40807	QPSK	96	0	0	0	1	0	Holdup	17.80	18.40
41430	41030	QPSK	96	0	0	0	1	0	Holdup	17.70	18.40

CA_41C											
Combination 20MHz+20MHz (100RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Power Reduction	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB Offset	RB Size	RB Offset					
39730	39686	QPSK	1	0	0	0	1	0	Full	23.50	24.80
39730	39686	QPSK	1	0	0	0	1	0	Full	23.49	24.80
40180	40080	QPSK	1	0	0	0	1	0	Full	23.30	24.80
40630	40430	QPSK	1	0	0	0	1	0	Full	23.20	24.80
41030	40807	QPSK	96	0	0	0	1	0	Reduced Power Level 1/2/3	13.34	16.50
41430	41030	QPSK	96	0	0	0	1	0	Reduced Power Level 1/2/3	13.30	16.50
39730	39686	QPSK	96	0	0	0	1	0	Reduced Power Level 1/2/3	13.31	16.50
40180	40080	QPSK	96	0	0	0	1	0	Reduced Power Level 1/2/3	13.41	16.50
40630	40430	QPSK	96	0	0	0	1	0	Holdup	16.50	20.50
41030	40807	QPSK	96	0	0	0	1	0	Holdup	16.20	20.50
41430	41030	QPSK	96	0	0	0	1	0	Holdup	16.50	20.50
41430	41030	QPSK	96	0	0	0	1	0	Holdup	16.00	20.50



Intra Band UL CA Power for LAT

CA_41C											
Combination 20MHz+20MHz (100RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Power Reduction	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset					
39790	39988	QPSK	1	99	0	0	1	0	Full	24.07	24.80
39750	39948	QPSK	1	99	0	0	1	0	Full	23.99	24.80
40185	40383	QPSK	1	99	0	0	1	0	Full	24.11	24.80
40620	40422	QPSK	1	99	0	0	1	0	Full	24.10	24.80
41055	40857	QPSK	1	99	0	0	1	0	Full	24.05	24.80
41490	41292	QPSK	1	99	0	0	1	0	Full	24.08	24.80
39790	39988	QPSK	50	24	0	0	1	0	Hotspot on	19.31	20.10
39750	39948	QPSK	50	24	0	0	1	0	Hotspot on	19.27	20.10
40185	40383	QPSK	50	24	0	0	1	0	Hotspot on	19.33	20.10
40620	40422	QPSK	50	24	0	0	1	0	Hotspot on	19.30	20.10
41055	40857	QPSK	50	24	0	0	1	0	Hotspot on	19.25	20.10
41490	41292	QPSK	50	24	0	0	1	0	Hotspot on	19.30	20.10

CA_41C(HPUE)											
Combination 20MHz+20MHz (100RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Target MPR Level (dB)	Power Reduction	Measured Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset					
39790	39988	QPSK	1	99	0	0	1	0	Full	26.08	26.80
39750	39948	QPSK	1	99	0	0	1	0	Full	26.02	26.80
40185	40383	QPSK	1	99	0	0	1	0	Full	26.15	26.80
40620	40422	QPSK	1	99	0	0	1	0	Full	26.08	26.80
41055	40857	QPSK	1	99	0	0	1	0	Full	25.96	26.80
41490	41292	QPSK	1	99	0	0	1	0	Full	26.11	26.80
39790	39988	QPSK	50	24	0	0	1	0	Hotspot on	21.25	21.90
39750	39948	QPSK	50	24	0	0	1	0	Hotspot on	21.20	21.90
40185	40383	QPSK	50	24	0	0	1	0	Hotspot on	21.30	21.90
40620	40422	QPSK	50	24	0	0	1	0	Hotspot on	21.29	21.90
41055	40857	QPSK	50	24	0	0	1	0	Hotspot on	21.19	21.90
41490	41292	QPSK	50	24	0	0	1	0	Hotspot on	21.28	21.90



Inter Band UL CA Power

PCC:Ant2		SCC:Ant1		Tune up Power (dBm)									
CA_2A-4A													
Combination 20MHz+20MHz (100RB+100RB)													
PCC Channel	SCC Channel	Modulation	PCC		SCC		PCC1 Power (dBm)	SCC2 Power (dBm)	Measured Power (dBm)	PCC1 Tune up Power (dBm)	SCC2 Tune up Power (dBm)	Tune Power (dBm)	
			RB Size	RB offset	RB Size	RB offset							
18700	20050	QPSK	1	0	1	0	21.98	14.88	22.85	24	16.8	24.8	
			1	49	1	49	22.00	15.99	22.86	24	16.8	24.8	
			1	99	1	99	21.88	16.01	22.83	24	16.8	24.8	
			50	0	50	0	21.16	17.98	22.81	23.1	19.8	24.8	
			50	24	50	24	21.33	18.01	22.82	23.1	19.8	24.8	
			50	50	50	50	21.87	17.85	22.85	23.1	19.8	24.8	
18900	20175	QPSK	100	0	100	0	21.53	18.02	22.89	23.1	19.8	24.8	
			1	0	1	0	22.02	14.86	22.86	24	16.8	24.8	
			1	49	1	49	22.04	16.01	22.91	24	16.8	24.8	
			1	99	1	99	22.03	16.09	22.83	24	16.8	24.8	
			50	0	50	0	21.21	18.05	22.88	23.1	19.8	24.8	
			50	24	50	24	21.46	18.09	22.87	23.1	19.8	24.8	
19100	20300	QPSK	50	50	50	50	22.01	17.89	22.90	23.1	19.8	24.8	
			100	0	100	0	21.37	17.82	22.87	23.1	19.8	24.8	
			1	0	1	0	21.94	14.82	22.88	24	16.8	24.8	
			1	49	1	49	22.03	15.86	22.86	24	16.8	24.8	
			1	99	1	99	21.91	15.98	22.81	24	16.8	24.8	
			50	0	50	0	21.19	17.92	22.86	23.1	19.8	24.8	
19100	20300	QPSK	50	24	50	24	21.31	18.06	22.84	23.1	19.8	24.8	
			50	50	50	50	22.00	17.74	22.83	23.1	19.8	24.8	
			100	0	100	0	21.29	17.67	22.81	23.1	19.8	24.8	

PCC:Ant1		SCC:Ant2		Tune up Power (dBm)									
CA_4A-2A													
Combination 20MHz+20MHz (100RB+100RB)													
PCC Channel	SCC Channel	Modulation	PCC		SCC		PCC1 Power (dBm)	SCC2 Power (dBm)	Measured Power (dBm)	PCC1 Tune up Power (dBm)	SCC2 Tune up Power (dBm)	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset							
20050	18700	QPSK	1	0	1	0	21.74	16.75	22.77	23.70	18.20	24.8	
			1	49	1	49	21.80	16.45	22.81	23.70	18.20	24.8	
			1	99	1	99	21.88	16.44	22.90	23.70	18.20	24.8	
			50	0	50	0	21.11	19.03	22.96	23.10	21.00	25.2	
			50	24	50	24	20.50	19.06	22.88	22.50	20.90	24.8	
			50	50	50	50	20.53	19.02	22.81	22.50	20.90	24.8	
20175	18900	QPSK	100	0	100	0	20.47	18.95	22.89	22.50	20.90	24.8	
			1	0	1	0	21.71	16.82	22.90	23.70	18.20	24.8	
			1	49	1	49	21.83	16.38	22.88	23.70	18.20	24.8	
			1	99	1	99	21.95	16.55	23.01	23.70	18.20	24.8	
			50	0	50	0	21.14	19.05	23.08	23.10	21.00	25.2	
			50	24	50	24	20.61	19.18	22.91	22.50	20.90	24.8	
20300	19100	QPSK	50	50	50	50	20.58	19.11	22.92	22.50	20.90	24.8	
			100	0	100	0	20.55	19.10	22.90	22.50	20.90	24.8	
			1	0	1	0	21.78	16.73	22.83	23.70	18.20	24.8	
			1	49	1	49	21.76	16.48	22.84	23.70	18.20	24.8	
			1	99	1	99	21.88	16.53	22.97	23.70	18.20	24.8	
			50	0	50	0	21.13	19.01	23.05	23.10	21.00	25.2	
50	24	50	24	20.61	19.09	22.90	22.50	20.90	24.8				
50	50	50	50	20.43	19.09	22.88	22.50	20.90	24.8				
100	0	100	0	20.53	19.04	22.89	22.50	20.90	24.8				

PCC:Ant3		SCC:Ant0		Tune up Power (dBm)									
CA_2A-4A													
Combination 20MHz+20MHz (100RB+100RB)													
PCC Channel	SCC Channel	Modulation	PCC		SCC		PCC1 Power (dBm)	SCC2 Power (dBm)	Measured Power (dBm)	PCC1 Tune up Power (dBm)	SCC2 Tune up Power (dBm)	Tune Power (dBm)	
			RB Size	RB offset	RB Size	RB offset							
18700	20050	QPSK	1	0	1	0	22.87	17.60	23.77	23.60	18.60	24.8	
			1	49	1	49	22.87	17.35	23.76	23.60	18.60	24.8	
			1	99	1	99	22.68	17.03	23.55	23.60	18.60	24.8	
			50	0	50	0	22.17	19.50	23.95	22.80	20.50	24.8	
			50	24	50	24	22.27	19.40	23.90	22.80	20.50	24.8	
			50	50	50	50	22.17	19.36	23.89	22.80	20.50	24.8	
18900	20175	QPSK	100	0	100	0	21.98	19.35	23.94	22.80	20.50	24.8	
			1	0	1	0	22.95	17.61	23.88	23.60	18.60	24.8	
			1	49	1	49	22.88	17.43	23.78	23.60	18.60	24.8	
			1	99	1	99	22.78	17.11	23.67	23.60	18.60	24.8	
			50	0	50	0	22.27	19.59	24.01	22.80	20.50	24.8	
			50	24	50	24	22.32	19.47	23.97	22.80	20.50	24.8	
19100	20300	QPSK	50	50	50	50	22.28	19.44	23.99	22.80	20.50	24.8	
			100	0	100	0	22.09	19.38	24.08	22.80	20.50	24.8	
			1	0	1	0	22.85	17.47	23.83	23.60	18.60	24.8	
			1	49	1	49	22.81	17.31	23.70	23.60	18.60	24.8	
			1	99	1	99	22.73	17.01	23.58	23.60	18.60	24.8	
			50	0	50	0	22.22	19.50	23.90	22.80	20.50	24.8	
			50	24	50	24	22.32	19.45	23.98	22.80	20.50	24.8	
			50	50	50	50	22.14	19.38	23.99	22.80	20.50	24.8	
			100	0	100	0	21.96	19.27	23.93	22.80	20.50	24.8	

PCC:Ant0		SCC:Ant3		Tune up Power (dBm)									
CA_4A-2A													
Combination 20MHz+20MHz (100RB+100RB)													
PCC Channel	SCC Channel	Modulation	PCC		SCC		PCC1 Power (dBm)	SCC2 Power (dBm)	Measured Power (dBm)	PCC1 Tune up Power (dBm)	SCC2 Tune up Power (dBm)	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset							
20050	18700	QPSK	1	0	1	0	22.79	17.63	23.84	23.50	19.00	24.8	
			1	49	1	49	22.73	17.33	23.85	23.50	19.00	24.8	
			1	99	1	99	22.85	17.46	23.81	23.50	19.00	24.8	
			50	0	50	0	21.92	19.64	23.94	22.70	20.70	24.8	
			50	24	50	24	21.86	19.50	23.83	22.70	20.70	24.8	
			50	50	50	50	21.87	19.67	23.88	22.70	20.70	24.8	
20175	18900	QPSK	100	0	100	0	22.05	19.58	23.91	22.70	20.70	24.8	
			1	0	1	0	22.94	17.68	23.92	23.50	19.00	24.8	
			1	49	1	49	22.87	17.44	23.94	23.50	19.00	24.8	
			1	99	1	99	22.91	17.58	23.87	23.50	19.00	24.8	
			50	0	50	0	21.92	19.70	24.03	22.70	20.70	24.8	
			50	24	50	24	21.88	19.56	23.97	22.70	20.70	24.8	
20300	19100	QPSK	50	50	50	50	21.91	19.67	23.94	22.70	20.70	24.8	
			100	0	100	0	22.09	19.59	23.97	22.70	20.70	24.8	
			1	0	1	0	22.88	17.59	23.92	23.50	19.00	24.8	
			1	49	1	49	22.82	17.40	23.93	23.50	19.00	24.8	
			1	99	1	99	22.90	17.58	23.81	23.50	19.00	24.8	
			50	0	50	0	21.79	19.58	23.98	22.70	20.70	24.8	
			50	24	50	24	21.86	19.54	23.89	22.70	20.70	24.8	
			50	50	50	50	21.78	19.54	23.90	22.70	20.70	24.8	
			100	0	100	0	21.99	19.55	23.84	22.70	20.70	24.8	

Tune up Power (dflw)

PCC:Ant2 SCC:Ant1

CA 2A-66A												
Combination 20MHz+20MHz (100RB+100RB)												
PCC Channel	SCC Channel	Modulation	PCC		SCC		PCC1 Power (dBm)	SCC2 Power (dBm)	Measured Power (dBm)	PCC1 Tune up Power (dBm)	SCC2 Tune up Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset						
18700	132072	QPSK	1	0	1	0	22.26	16.18	22.88	23.80	17.80	24.8
			1	49	1	49	22.65	15.00	23.00	24.00	17.00	24.8
			1	99	1	99	22.01	16.00	22.94	23.80	17.80	24.8
			50	0	50	0	21.28	18.20	22.95	23.10	19.90	24.8
			50	24	50	24	21.09	18.27	22.87	23.10	19.90	24.8
			50	50	50	50	21.11	18.30	22.92	23.10	19.90	24.8
18900	132322	QPSK	100	0	100	0	21.23	18.04	22.97	23.10	19.90	24.8
			1	0	1	0	22.32	16.28	23.02	23.80	17.80	24.8
			1	49	1	49	22.86	15.11	23.05	24.00	17.00	24.8
			1	99	1	99	22.13	15.89	22.94	23.80	17.80	24.8
			50	0	50	0	21.29	18.22	22.98	23.10	19.90	24.8
			50	24	50	24	21.13	18.42	22.97	23.10	19.90	24.8
19100	132572	QPSK	50	50	50	50	21.21	18.38	22.99	23.10	19.90	24.8
			100	0	100	0	21.37	18.07	23.02	23.10	19.90	24.8
			1	0	1	0	22.29	16.28	22.98	23.80	17.80	24.8
			1	49	1	49	22.64	15.10	22.99	24.00	17.00	24.8
			1	99	1	99	22.06	15.94	22.92	23.80	17.80	24.8
			50	0	50	0	21.27	18.14	22.94	23.10	19.90	24.8
			50	24	50	24	21.03	18.35	22.82	23.10	19.90	24.8
			50	50	50	50	21.13	18.32	22.88	23.10	19.90	24.8
			100	0	100	0	21.25	17.97	23.02	23.10	19.90	24.8

Tune up Power (dflw)

PCC:Ant3 SCC:Ant0

CA 2A-66A												
Combination 20MHz+20MHz (100RB+100RB)												
PCC Channel	SCC Channel	Modulation	PCC		SCC		PCC1 Power (dBm)	SCC2 Power (dBm)	Measured Power (dBm)	PCC1 Tune up Power (dBm)	SCC2 Tune up Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset						
18700	132072	QPSK	1	0	1	0	23.00	16.43	24.00	23.90	17.40	24.8
			1	49	1	49	22.87	16.60	23.93	23.90	17.40	24.8
			1	99	1	99	22.90	16.55	23.80	23.90	17.40	24.8
			50	0	50	0	22.21	19.83	24.12	22.80	20.50	24.8
			50	24	50	24	22.19	19.88	24.01	22.80	20.50	24.8
			50	50	50	50	22.18	19.68	24.01	22.80	20.50	24.8
18900	132322	QPSK	100	0	100	0	22.24	19.63	24.04	22.80	20.50	24.8
			1	0	1	0	23.05	16.58	24.06	23.90	17.40	24.8
			1	49	1	49	22.98	16.70	23.98	23.90	17.40	24.8
			1	99	1	99	23.04	16.59	23.91	23.90	17.40	24.8
			50	0	50	0	22.32	19.87	24.19	22.80	20.50	24.8
			50	24	50	24	22.22	19.88	24.11	22.80	20.50	24.8
19100	132572	QPSK	50	50	50	50	22.19	19.81	24.09	22.80	20.50	24.8
			100	0	100	0	22.31	19.70	24.18	22.80	20.50	24.8
			1	0	1	0	22.92	16.53	24.03	23.90	17.40	24.8
			1	49	1	49	22.85	16.55	23.83	23.90	17.40	24.8
			1	99	1	99	23.02	16.44	23.87	23.90	17.40	24.8
			50	0	50	0	22.17	19.83	24.14	22.80	20.50	24.8
			50	24	50	24	22.19	19.74	24.08	22.80	20.50	24.8
			50	50	50	50	22.10	19.72	24.01	22.80	20.50	24.8
			100	0	100	0	22.18	19.6	24.08	22.80	20.50	24.8

Tune up Power (dflw)

PCC:Ant1 SCC:Ant2

CA 66A-2A												
Combination 20MHz+20MHz (100RB+100RB)												
PCC Channel	SCC Channel	Modulation	PCC		SCC		PCC1 Power (dBm)	SCC2 Power (dBm)	Measured Power (dBm)	PCC1 Tune up Power (dBm)	SCC2 Tune up Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset						
132072	18700	QPSK	1	0	1	0	21.82	15.98	22.83	23.80	17.80	24.8
			1	49	1	49	21.84	16.13	22.92	23.80	17.80	24.8
			1	99	1	99	21.85	16.01	22.90	23.80	17.80	24.8
			50	0	50	0	21.09	19.19	23.06	22.60	20.80	24.8
			50	24	50	24	21.12	19.03	23.02	22.60	20.80	24.8
			50	50	50	50	21.10	18.93	23.05	22.60	20.80	24.8
			100	0	100	0	21.04	18.88	22.92	22.60	20.80	24.8
			1	0	1	0	21.84	15.95	22.98	23.80	17.80	24.8
			1	49	1	49	21.87	16.14	22.95	23.80	17.80	24.8
			1	99	1	99	21.94	16.09	22.90	23.80	17.80	24.8
132322	18900	QPSK	50	0	50	0	21.09	19.24	23.11	22.60	20.80	24.8
			50	24	50	24	21.21	19.05	23.08	22.60	20.80	24.8
			50	50	50	50	21.16	19.07	23.08	22.60	20.80	24.8
			100	0	100	0	21.15	18.95	22.96	22.60	20.80	24.8
			1	0	1	0	21.89	15.97	22.92	23.80	17.80	24.8
			1	49	1	49	21.76	16.07	22.95	23.80	17.80	24.8
			1	99	1	99	21.91	16.00	22.88	23.80	17.80	24.8
			50	0	50	0	21.08	19.24	22.97	22.60	20.80	24.8
			50	24	50	24	21.15	19.02	22.99	22.60	20.80	24.8
			50	50	50	50	21.07	18.96	23.04	22.60	20.80	24.8
132572	19100	QPSK	100	0	100	0	21.06	18.93	22.96	22.60	20.80	24.8

Tune up Power (dflw)

PCC:Ant0 SCC:Ant3

CA 66A-2A												
Combination 20MHz+20MHz (100RB+100RB)												
PCC Channel	SCC Channel	Modulation	PCC		SCC		PCC1 Power (dBm)	SCC2 Power (dBm)	Measured Power (dBm)	PCC1 Tune up Power (dBm)	SCC2 Tune up Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset						
132072	18700	QPSK	1	0	1	0	23.24	17.26	24.10	23.80	18.00	24.8
			1	49	1	49	23.25	16.78	23.98	23.80	18.00	24.8
			1	99	1	99	23.19	16.81	24.02	23.80	18.00	24.8
			50	0	50	0	22.18	19.32	24.03	23.00	20.10	24.8
			50	24	50	24	22.12	19.48	24.08	23.00	20.10	24.8
			50	50	50	50	22.19	19.47	24.01	23.00	20.10	24.8
			100	0	100	0	22.19	19.46	24.07	23.00	20.10	24.8
			1	0	1	0	23.34	17.32	24.15	23.80	18.00	24.8
			1	49	1	49	23.33	16.89	24.13	23.80	18.00	24.8
			1	99	1	99	23.19	16.94	24.09	23.80	18.00	24.8
132322	18900	QPSK	50	0	50	0	22.32	19.46	24.12	23.00	20.10	24.8
			50	24	50	24	22.19	19.51	24.09	23.00	20.10	24.8
			50	50	50	50	22.27	19.48	24.05	23.00	20.10	24.8
			100	0	100	0	22.28	19.54	24.11	23.00	20.10	24.8
			1	0	1	0	23.31	17.32	24.14	23.80	18.00	24.8
			1	49	1	49	23.29	16.85	24.09	23.80	18.00	24.8
			1	99	1	99	23.07	16.87	23.99	23.80	18.00	24.8
			50	0	50	0	22.30	19.40	23.99	23.00	20.10	24.8
			50	24	50	24	22.11	19.36	24.05	23.00	20.10	24.8
			50	50	50	50	22.16	19.34	23.90	23.00	20.10	24.8
132572	19100	QPSK	100	0	100	0	22.19	19.49	24.05	23.00	20.10	24.8

PCC:Ant2 SCC:Ant0			CA_2A-12A										Tune up Power (dBm)	
Combination 20MHz+10MHz (100RB+50RB)														
PCC Channel	SCC Channel	Modulation	PCC		SCC		PCC1 Power (dBm)	SCC2 Power (dBm)	Measured Power (dBm)	PCC1 Tune up Power (dBm)	SCC2 Tune up Power (dBm)	Tune up Power (dBm)		
			RB Size	RB offset	RB Size	RB offset								
18700	23060	QPSK	1	0	1	0	22.38	17.26	23.58	23.60	18.60	24.8		
			1	49	1	25	22.34	17.15	23.52	23.60	18.60	24.8		
			1	99	1	49	22.28	17.14	23.48	23.60	18.60	24.8		
			50	0	25	0	21.20	18.57	23.26	22.60	20.80	24.8		
			50	24	25	12	21.22	18.75	23.43	22.60	20.80	24.8		
			50	50	25	25	21.31	18.68	23.37	22.60	20.80	24.8		
			100	0	50	0	21.28	18.18	23.16	22.60	20.80	24.8		
18900	23095	QPSK	1	0	1	0	22.44	17.32	23.63	23.60	18.60	24.8		
			1	49	1	25	22.38	17.23	23.54	23.60	18.60	24.8		
			1	99	1	49	22.31	17.17	23.49	23.60	18.60	24.8		
			50	0	25	0	21.29	18.72	23.41	22.60	20.80	24.8		
			50	24	25	12	21.31	18.88	23.44	22.60	20.80	24.8		
			50	50	25	25	21.35	18.78	23.37	22.60	20.80	24.8		
			100	0	50	0	21.41	18.22	23.29	22.60	20.80	24.8		
19100	23130	QPSK	1	0	1	0	22.40	17.18	23.52	23.60	18.60	24.8		
			1	49	1	25	22.35	17.23	23.48	23.60	18.60	24.8		
			1	99	1	49	22.20	17.02	23.36	23.60	18.60	24.8		
			50	0	25	0	21.20	18.61	23.40	22.60	20.80	24.8		
			50	24	25	12	21.25	18.82	23.34	22.60	20.80	24.8		
			50	50	25	25	21.34	18.73	23.22	22.60	20.80	24.8		
			100	0	50	0	21.38	18.08	23.14	22.60	20.80	24.8		

PCC:Ant3 SCC:Ant1			CA_2A-12A										Tune up Power (dBm)	
Combination 20MHz+10MHz (100RB+50RB)														
PCC Channel	SCC Channel	Modulation	PCC		SCC		PCC1 Power (dBm)	SCC2 Power (dBm)	Measured Power (dBm)	PCC1 Tune up Power (dBm)	SCC2 Tune up Power (dBm)	Tune up Power (dBm)		
			RB Size	RB offset	RB Size	RB offset								
18700	23060	QPSK	1	0	1	0	23.02	16.43	23.87	23.90	17.60	24.8		
			1	49	1	25	22.98	16.80	24.07	23.90	17.60	24.8		
			1	99	1	49	23.06	16.92	24.01	23.90	17.60	24.8		
			50	0	25	0	22.06	19.53	24.10	22.80	20.50	24.8		
			50	24	25	12	22.00	19.59	24.06	22.80	20.50	24.8		
			50	50	25	25	21.96	19.30	24.00	22.80	20.50	24.8		
			100	0	50	0	22.04	19.56	24.11	22.80	20.50	24.8		
18900	23095	QPSK	1	0	1	0	23.11	16.58	23.93	23.90	17.60	24.8		
			1	49	1	25	22.98	16.88	24.17	23.90	17.60	24.8		
			1	99	1	49	23.21	16.92	24.09	23.90	17.60	24.8		
			50	0	25	0	22.10	19.58	24.12	22.80	20.50	24.8		
			50	24	25	12	22.15	19.62	24.06	22.80	20.50	24.8		
			50	50	25	25	22.01	19.44	24.04	22.80	20.50	24.8		
			100	0	50	0	22.11	19.64	24.11	22.80	20.50	24.8		
19100	23130	QPSK	1	0	1	0	23.05	16.46	23.89	23.90	17.60	24.8		
			1	49	1	25	22.90	16.81	24.02	23.90	17.60	24.8		
			1	99	1	49	23.17	16.92	24.06	23.90	17.60	24.8		
			50	0	25	0	21.98	19.49	24.00	22.80	20.50	24.8		
			50	24	25	12	22.14	19.55	23.98	22.80	20.50	24.8		
			50	50	25	25	21.86	19.38	23.93	22.80	20.50	24.8		
			100	0	50	0	22.07	19.61	24.05	22.80	20.50	24.8		

PCC:Ant0		SCC:Ant2				Tune up Power (dBm)						
CA_12A-2A												
Combination 10MHz+20MHz (50RB+100RB)												
PCC Channel	SCC Channel	Modulation	PCC		SCC		PCC1 Power (dBm)	SCC2 Power (dBm)	Measured Power (dBm)	PCC1 Tune up Power (dBm)	SCC2 Tune up Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset						
23060	18700	QPSK	1	0	1	0	22.74	15.52	23.34	24.00	17.00	24.8
			1	25	1	49	22.63	15.55	23.11	24.00	17.00	24.8
			1	49	1	99	22.64	15.51	23.30	24.00	17.00	24.8
			25	0	50	0	21.30	18.77	23.37	22.90	20.30	24.8
			25	12	50	24	21.06	18.56	23.26	22.90	20.30	24.8
			25	25	50	50	21.08	18.81	23.08	22.90	20.30	24.8
			50	0	100	0	21.25	18.77	23.15	22.90	20.30	24.8
23095	18900	QPSK	1	0	1	0	22.76	15.65	23.45	24.00	17.00	24.8
			1	25	1	49	22.73	15.61	23.23	24.00	17.00	24.8
			1	49	1	99	22.69	15.56	23.31	24.00	17.00	24.8
			25	0	50	0	21.43	18.81	23.39	22.90	20.30	24.8
			25	12	50	24	21.13	18.66	23.31	22.90	20.30	24.8
			25	25	50	50	21.05	18.90	23.15	22.90	20.30	24.8
			50	0	100	0	21.26	18.91	23.22	22.90	20.30	24.8
23130	19100	QPSK	1	0	1	0	22.72	15.53	23.38	24.00	17.00	24.8
			1	25	1	49	22.71	15.56	23.09	24.00	17.00	24.8
			1	49	1	99	22.63	15.45	23.23	24.00	17.00	24.8
			25	0	50	0	21.28	18.77	23.29	22.90	20.30	24.8
			25	12	50	24	21.10	18.61	23.23	22.90	20.30	24.8
			25	25	50	50	21.05	18.84	23.12	22.90	20.30	24.8
			50	0	100	0	21.12	18.83	23.10	22.90	20.30	24.8

PCC:Ant1 SCC:Ant3			CA_12A-2A									
Combination 10MHz+20MHz (50RB+100RB)												
PCC Channel	SCC Channel	Modulation	PCC		SCC		PCC1 Power (dBm)	SCC2 Power (dBm)	Measured Power (dBm)	PCC1 Tune up Power (dBm)	SCC2 Tune up Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset						
23060	18700	QPSK	1	0	1	0	22.83	17.74	23.71	23.50	19.00	24.8
			1	25	1	49	22.81	17.34	23.73	23.50	19.00	24.8
			1	49	1	99	22.82	17.59	23.67	23.50	19.00	24.8
			25	0	50	0	22.32	19.32	23.99	23.00	20.20	24.8
			25	12	50	24	22.28	19.35	24.15	23.00	20.20	24.8
			25	25	50	50	22.18	19.24	24.09	23.00	20.20	24.8
			50	0	100	0	22.27	19.57	24.14	23.00	20.20	24.8
23095	18900	QPSK	1	0	1	0	22.93	17.76	23.81	23.50	19.00	24.8
			1	25	1	49	22.82	17.34	23.79	23.50	19.00	24.8
			1	49	1	99	22.88	17.66	23.71	23.50	19.00	24.8
			25	0	50	0	22.36	19.45	24.11	23.00	20.20	24.8
			25	12	50	24	22.28	19.41	24.18	23.00	20.20	24.8
			25	25	50	50	22.21	19.38	24.12	23.00	20.20	24.8
			50	0	100	0	22.32	19.70	24.15	23.00	20.20	24.8
23130	19100	QPSK	1	0	1	0	22.80	17.74	23.68	23.50	19.00	24.8
			1	25	1	49	22.77	17.24	23.71	23.50	19.00	24.8
			1	49	1	99	22.80	17.61	23.62	23.50	19.00	24.8
			25	0	50	0	22.29	19.33	23.98	23.00	20.20	24.8
			25	12	50	24	22.18	19.31	24.08	23.00	20.20	24.8
			25	25	50	50	22.19	19.23	24.05	23.00	20.20	24.8
			50	0	100	0	22.29	19.68	24.02	23.00	20.20	24.8

Tune up Power (dBm)

PCC:Ant2		SCC:Ant0		CA 4A-12A							
Combination 20MHz+10MHz (100RB+50RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		PCC1 Power (dBm)	SCC2 Power (dBm)	Measured Power (dBm)	PCC1 Tune up Power (dBm)	SCC2 Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset					
20050	23060	QPSK	1	0	1	0	22.39	15.76	23.12	23.80	18.00
			1	49	1	25	22.37	16.13	23.13	23.80	18.00
			1	99	1	49	22.37	16.57	23.08	23.80	18.00
			50	0	25	0	21.33	18.92	23.19	22.80	20.50
			50	24	25	12	21.33	18.71	23.30	22.80	20.50
			50	50	25	25	21.20	18.83	23.16	22.80	20.50
20175	23095	QPSK	100	0	50	0	21.17	18.72	23.10	22.80	20.50
			1	0	1	0	22.50	15.83	23.12	23.80	18.00
			1	49	1	25	22.52	16.23	23.22	23.80	18.00
			1	99	1	49	22.44	16.66	23.18	23.80	18.00
			50	0	25	0	21.37	19.01	23.23	22.80	20.50
			50	24	25	12	21.43	18.86	23.33	22.80	20.50
20300	23130	QPSK	50	50	25	25	21.35	18.98	23.31	22.80	20.50
			100	0	50	0	21.25	18.79	23.17	22.80	20.50
			1	0	1	0	22.46	15.83	23.04	23.80	18.00
			1	49	1	25	22.47	16.21	23.22	23.80	18.00
			1	99	1	49	22.41	16.59	23.09	23.80	18.00
			50	0	25	0	21.34	18.97	23.13	22.80	20.50
			50	24	25	12	21.36	18.77	23.19	22.80	20.50
			50	50	25	25	21.28	18.91	23.24	22.80	20.50
			100	0	50	0	21.13	18.66	23.13	22.80	20.50

Tune up Power (dBm)

PCC:Ant3		SCC:Ant1		CA_4A-12A							
Combination 20MHz+10MHz (100RB+50RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		PCC1 Power (dBm)	SCC2 Power (dBm)	Measured Power (dBm)	PCC1 Tune up Power (dBm)	SCC2 Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset					
20050	23060	QPSK	1	0	1	0	23.05	16.72	24.05	23.90	17.70
			1	49	1	25	23.00	16.70	23.92	23.90	17.70
			1	99	1	49	22.90	16.74	23.92	23.90	17.70
			50	0	25	0	22.28	19.54	24.19	22.90	20.30
			50	24	25	12	22.49	19.57	24.02	22.90	20.30
			50	50	25	25	22.47	19.21	24.09	22.90	20.30
20175	23095	QPSK	100	0	50	0	22.26	19.68	24.10	22.90	20.30
			1	0	1	0	23.14	16.81	24.13	23.90	17.70
			1	49	1	25	23.01	16.77	24.02	23.90	17.70
			1	99	1	49	22.99	16.89	24.01	23.90	17.70
			50	0	25	0	22.40	19.63	24.20	22.90	20.30
			50	24	25	12	22.54	19.62	24.16	22.90	20.30
20300	23130	QPSK	50	50	25	25	22.53	19.31	24.18	22.90	20.30
			100	0	50	0	22.30	19.81	24.19	22.90	20.30
			1	0	1	0	23.12	16.68	24.08	23.90	17.70
			1	49	1	25	22.98	16.76	23.87	23.90	17.70
			1	99	1	49	22.90	16.79	23.87	23.90	17.70
			50	0	25	0	22.34	19.49	24.12	22.90	20.30

Tune up Power (dBm)

PCC:Ant0 SCC:Ant2		CA 12A-4A										
Combination 10MHz+20MHz (50RB+100RB)												
PCC Channel	SCC Channel	Modulation	PCC		SCC		PCC1 Power (dBm)	SCC2 Power (dBm)	Measured Power (dBm)	PCC1 Tune up Power (dBm)	SCC2 Tune up Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset						
23060	20050	QPSK	1	0	1	0	22.55	16.28	23.44	23.90	17.50	24.8
			1	25	1	49	22.62	16.29	23.48	23.90	17.50	24.8
			1	49	1	99	22.59	16.19	23.40	23.90	17.50	24.8
			25	0	50	0	21.43	18.65	23.20	23.00	20.10	24.8
			25	12	50	24	21.21	18.66	23.13	23.00	20.10	24.8
			25	25	50	50	21.08	18.62	23.07	23.00	20.10	24.8
23095	20175	QPSK	50	0	100	0	21.16	18.57	23.15	23.00	20.10	24.8
			1	0	1	0	22.64	16.34	23.56	23.90	17.50	24.8
			1	25	1	49	22.68	16.33	23.48	23.90	17.50	24.8
			1	49	1	99	22.59	16.23	23.40	23.90	17.50	24.8
			25	0	50	0	21.55	18.78	23.35	23.00	20.10	24.8
			25	12	50	24	21.23	18.69	23.22	23.00	20.10	24.8
23130	20300	QPSK	25	25	50	50	21.10	18.67	23.13	23.00	20.10	24.8
			50	0	100	0	21.25	18.68	23.17	23.00	20.10	24.8
			1	0	1	0	22.64	16.31	23.55	23.90	17.50	24.8
			1	25	1	49	22.53	16.27	23.41	23.90	17.50	24.8
			1	49	1	99	22.55	16.19	23.25	23.90	17.50	24.8
			25	0	50	0	21.46	18.70	23.21	23.00	20.10	24.8
			25	12	50	24	21.09	18.62	23.22	23.00	20.10	24.8
			25	25	50	50	20.88	18.52	22.99	23.00	20.10	24.8
			50	0	100	0	21.22	18.57	23.17	23.00	20.10	24.8

Tune up Power (dBm)

PCC:Ant1		SCC:Ant3		CA 12A-4A								
Combination 10MHz+20MHz (50RB+100RB)												
PCC Channel	SCC Channel	Modulation	PCC				PCC1 Power (dBm)	SCC2 Power (dBm)	Measured Power (dBm)	PCC1 Tune up Power (dBm)	SCC2 Tune up Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset						
23060	20050	QPSK	1	0	1	0	22.66	17.41	23.74	23.70	18.40	24.8
			1	25	1	49	22.64	17.30	23.76	23.70	18.40	24.8
			1	49	1	99	22.66	17.35	23.81	23.70	18.40	24.8
			25	0	50	0	22.07	19.78	24.16	22.80	20.50	24.8
			25	12	50	24	22.03	19.67	23.98	22.80	20.50	24.8
			25	25	50	50	22.47	19.65	24.07	22.80	20.50	24.8
23095	20175	QPSK	50	0	100	0	22.33	19.78	24.16	22.80	20.50	24.8
			1	0	1	0	22.78	17.46	23.86	23.70	18.40	24.8
			1	25	1	49	22.71	17.33	23.77	23.70	18.40	24.8
			1	49	1	99	22.69	17.41	23.81	23.70	18.40	24.8
			25	0	50	0	22.21	19.91	24.24	22.80	20.50	24.8
			25	12	50	24	22.11	19.79	24.11	22.80	20.50	24.8
23130	20300	QPSK	25	25	50	50	22.49	19.77	24.13	22.80	20.50	24.8
			50	0	100	0	22.40	19.81	24.18	22.80	20.50	24.8
			1	0	1	0	22.76	17.41	23.73	23.70	18.40	24.8
			1	25	1	49	22.59	17.29	23.74	23.70	18.40	24.8
			1	49	1	99	22.67	17.41	23.81	23.70	18.40	24.8
			25	0	50	0	22.15	19.87	24.21	22.80	20.50	24.8
			25	12	50	24	22.10	19.76	23.98	22.80	20.50	24.8
			25	25	50	50	22.39	19.65	23.98	22.80	20.50	24.8
			50	0	100	0	22.33	19.66	24.18	22.80	20.50	24.8

Tune up Power (dBm)

PCC:Ant0 SCC:Ant2

CA_12A-66A												
Combination 10MHz+20MHz (50RB+100RB)												
PCC Channel	SCC Channel	Modulation	PCC		SCC		PCC1 Power (dBm)	SCC2 Power (dBm)	Measured Power (dBm)	PCC1 Tune up Power (dBm)	SCC2 Tune up Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset						
23060	132072	QPSK	1	0	1	0	22.39	16.43	23.34	23.80	18.00	24.8
			1	25	1	49	22.37	16.33	23.26	23.80	18.00	24.8
			1	49	1	99	22.31	16.41	23.31	23.80	18.00	24.8
			25	0	50	0	21.58	18.51	23.25	23.00	20.10	24.8
			25	12	50	24	21.47	18.59	23.21	23.00	20.10	24.8
			25	25	50	50	21.45	18.45	23.26	23.00	20.10	24.8
23095	132322	QPSK	50	0	100	0	21.24	18.37	23.17	23.00	20.10	24.8
			1	0	1	0	22.54	16.58	23.48	23.80	18.00	24.8
			1	25	1	49	22.48	16.40	23.33	23.80	18.00	24.8
			1	49	1	99	22.39	16.44	23.34	23.80	18.00	24.8
			25	0	50	0	21.58	18.57	23.26	23.00	20.10	24.8
			25	12	50	24	21.51	18.67	23.22	23.00	20.10	24.8
23130	132572	QPSK	25	25	50	50	21.48	18.54	23.26	23.00	20.10	24.8
			50	0	100	0	21.24	18.48	23.22	23.00	20.10	24.8
			1	0	1	0	22.49	16.55	23.33	23.80	18.00	24.8
			1	25	1	49	22.38	15.99	23.25	23.80	18.00	24.8
			1	49	1	99	22.27	16.38	23.22	23.80	18.00	24.8
			25	0	50	0	21.47	18.53	23.12	23.00	20.10	24.8
23130	132572	QPSK	25	12	50	24	21.39	18.65	23.09	23.00	20.10	24.8
			25	25	50	50	21.44	18.41	23.23	23.00	20.10	24.8
			50	0	100	0	21.14	18.38	23.17	23.00	20.10	24.8
			50	0	100	0	21.14	18.38	23.17	23.00	20.10	24.8

Tune up Power (dBm)

PCC:Ant1 SCC:Ant3

CA_12A-66A												
Combination 10MHz+20MHz (50RB+100RB)												
PCC Channel	SCC Channel	Modulation	PCC		SCC		PCC1 Power (dBm)	SCC2 Power (dBm)	Measured Power (dBm)	PCC1 Tune up Power (dBm)	SCC2 Tune up Power (dBm)	Turn up Power (dBm)
			RB Size	RB offset	RB Size	RB offset						
23060	132072	QPSK	1	0	1	0	22.67	17.72	23.82	23.60	18.70	24.8
			1	25	1	49	22.61	17.71	23.66	23.60	18.70	24.8
			1	49	1	99	22.68	17.40	23.61	23.60	18.70	24.8
			25	0	50	0	22.08	19.60	24.01	22.80	20.50	24.8
			25	12	50	24	22.07	19.38	23.98	22.80	20.50	24.8
			25	25	50	50	21.92	19.29	24.01	22.80	20.50	24.8
23095	132322	QPSK	50	0	100	0	22.32	19.55	24.14	22.80	20.50	24.8
			1	0	1	0	22.82	17.84	23.88	23.60	18.70	24.8
			1	25	1	49	22.64	17.76	23.77	23.60	18.70	24.8
			1	49	1	99	22.71	17.45	23.74	23.60	18.70	24.8
			25	0	50	0	22.20	19.88	24.10	22.80	20.50	24.8
			25	12	50	24	22.17	19.40	24.06	22.80	20.50	24.8
23130	132572	QPSK	25	25	50	50	22.05	19.32	24.03	22.80	20.50	24.8
			50	0	100	0	22.43	19.64	24.18	22.80	20.50	24.8
			1	0	1	0	22.77	17.74	23.77	23.60	18.70	24.8
			1	25	1	49	22.60	17.68	23.66	23.60	18.70	24.8
			1	49	1	99	22.67	17.45	23.71	23.60	18.70	24.8
			25	0	50	0	22.19	19.74	24.04	22.80	20.50	24.8
			25	12	50	24	22.16	19.34	23.95	22.80	20.50	24.8
			25	25	50	50	21.94	19.27	23.93	22.80	20.50	24.8
			50	0	100	0	22.32	19.53	24.17	22.80	20.50	24.8
			50	0	100	0	22.32	19.53	24.17	22.80	20.50	24.8

Tune up Power (dBm)

PCC:Ant2 SCC:Ant0

CA_66A-12A												
Combination 20MHz+10MHz (100RB+50RB)												
PCC Channel	SCC Channel	Modulation	PCC		SCC		PCC1 Power (dBm)	SCC2 Power (dBm)	Measured Power (dBm)	PCC1 Tune up Power (dBm)	SCC2 Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset						
132072	23060	QPSK	1	0	1	0	22.18	16.87	22.99	23.80	18.00	24.8
			1	49	1	25	22.20	16.94	23.04	23.80	18.00	24.8
			1	99	1	49	22.12	16.97	23.10	23.80	18.00	24.8
			50	0	25	0	21.17	18.93	23.23	23.00	20.10	24.8
			50	24	25	12	21.22	18.91	23.16	23.00	20.10	24.8
			50	50	25	25	21.04	18.85	23.23	23.00	20.10	24.8
132322	23095	QPSK	100	0	50	0	21.12	18.83	23.10	23.00	20.10	24.8
			1	0	1	0	22.21	17.00	23.14	23.80	18.00	24.8
			1	49	1	25	22.23	16.99	23.09	23.80	18.00	24.8
			1	99	1	49	22.15	16.98	23.03	23.80	18.00	24.8
			50	0	25	0	21.26	19.04	23.30	23.00	20.10	24.8
			50	24	25	12	21.23	19.02	23.29	23.00	20.10	24.8
132572	23130	QPSK	50	50	25	25	21.19	18.99	23.26	23.00	20.10	24.8
			100	0	50	0	21.24	18.92	23.21	23.00	20.10	24.8
			1	0	1	0	22.19	16.92	22.99	23.80	18.00	24.8
			1	49	1	25	22.10	16.95	22.94	23.80	18.00	24.8
			1	99	1	49	22.06	16.93	22.94	23.80	18.00	24.8
			50	0	25	0	21.12	18.89	23.23	23.00	20.10	24.8
			50	24	25	12	21.19	18.92	23.19	23.00	20.10	24.8
			50	50	25	25	21.11	18.91	23.20	23.00	20.10	24.8
			100	0	50	0	21.22	18.83	23.07	23.00	20.10	24.8
			100	0	50	0	21.22	18.83	23.07	23.00	20.10	24.8

Tune up Power (dBm)

PCC:Ant3 SCC:Ant1

CA_66A-12A												
Combination 20MHz+10MHz (100RB+50RB)												
PCC Channel	SCC Channel	Modulation	PCC		SCC		PCC1 Power (dBm)	SCC2 Power (dBm)	Measured Power (dBm)	PCC1 Tune up Power (dBm)	SCC2 Tune up Power (dBm)	Turn up Power (dBm)
			RB Size	RB offset	RB Size	RB offset						
132072	23060	QPSK	1	0	1	0	23.03	16.52	23.93	23.90	17.50	24.8
			1	49	1	25	23.12	16.46	23.87	23.90	17.50	24.8
			1	99	1	49	23.01	16.30	23.80	23.90	17.50	24.8
			50	0	25	0	22.22	19.58	23.95	22.80	20.50	24.8
			50	24	25	12	22.14	19.53	23.99	22.80	20.50	24.8
			50	50	25	25	21.99	19.22	24.02	22.80	20.50	24.8
132322	23095	QPSK	100	0	50	0	22.04	19.79	24.07	22.80	20.50	24.8
			1	0	1	0	23.03	16.57	24.04	23.90	17.50	24.8
			1	49	1	25	23.12	16.48	23.98	23.90	17.50	24.8
			1	99	1	49	23.05	16.33	23.91	23.90	17.50	24.8
			50	0	25	0	22.27	19.70	24.10	22.80	20.50	24.8
			50	24	25	12	22.21	19.68	24.02	22.80	20.50	24.8
132572	23130	QPSK	50	50	25	25	22.11	19.36	24.08	22.80	20.50	24.8
			100	0	50	0	22.18	19.93	24.17	22.80	20.50	24.8
			1	0	1	0	23.00	16.54	24.01	23.90	17.50	24.8
			1	49	1	25	23.07	16.39	23.87	23.90	17.50	24.8
			1	99	1	49	23.01	16.33	23.87	23.90	17.50	24.8
			50	0	25	0	22.14	19.68	23.96	22.80	20.50	24.8
			50	24	25	12	22.14	19.68	24.01	22.80	20.50	24.8
			50	50	25	25	22.09	19.34	23.99	22.80	20.50	24.8
			100	0	50	0	22.09	19.78	24.09	22.80	20.50	24.8

Tune up Power (dBm)

PCC:Ant0 SCC:Ant2

CA_13A-66A											
Combination 10MHz+20MHz (50RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		PCC1 Power (dBm)	SCC2 Power (dBm)	Measured Power (dBm)	PCC1 Tune up Power (dBm)	SCC2 Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset					
23230	132072	QPSK	1	0	1	0	23.71	15.71	24.33	24.10	16.50
			1	25	1	49	23.74	14.92	24.19	24.10	16.50
			1	49	1	99	23.73	15.31	24.35	24.10	16.50
			25	0	50	0	23.22	17.79	24.33	23.60	18.70
			25	12	50	24	23.14	17.67	24.18	23.60	18.70
			25	25	50	50	23.04	17.64	24.16	23.60	18.70
23230	132322	QPSK	50	0	100	0	22.97	17.72	24.17	23.60	18.70
			1	0	1	0	23.81	15.78	24.44	24.10	16.50
			1	25	1	49	23.78	15.01	24.32	24.10	16.50
			1	49	1	99	23.76	15.42	24.35	24.10	16.50
			25	0	50	0	23.28	17.83	24.37	23.60	18.70
			25	12	50	24	23.19	17.75	24.30	23.60	18.70
23230	132572	QPSK	25	25	50	50	23.11	17.65	24.20	23.60	18.70
			50	0	100	0	23.08	17.79	24.21	23.60	18.70
			1	0	1	0	23.66	15.63	24.36	24.10	16.50
			1	25	1	49	23.69	14.86	24.32	24.10	16.50
			1	49	1	99	23.65	15.33	24.28	24.10	16.50
			25	0	50	0	23.16	17.69	24.27	23.60	18.70

Tune up Power (dBm)

PCC:Ant1 SCC:Ant3

CA_13A-66A											
Combination 10MHz+20MHz (50RB+100RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		PCC1 Power (dBm)	SCC2 Power (dBm)	Measured Power (dBm)	PCC1 Tune up Power (dBm)	SCC2 Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset					
23230	132072	QPSK	1	0	1	0	22.00	16.33	23.31	23.80	18.00
			1	25	1	49	22.12	16.63	23.18	23.80	18.00
			1	49	1	99	21.05	16.57	22.98	23.80	18.00
			25	0	50	0	20.88	19.48	23.25	22.50	21.00
			25	12	50	24	20.85	19.39	23.27	22.50	21.00
			25	25	50	50	20.90	19.40	23.37	22.50	21.00
23230	132322	QPSK	50	0	100	0	20.70	19.60	23.11	22.50	21.00
			1	0	1	0	22.14	16.44	23.35	23.80	18.00
			1	25	1	49	22.23	16.63	23.21	23.80	18.00
			1	49	1	99	22.04	16.72	23.11	23.80	18.00
			25	0	50	0	21.01	19.61	23.33	22.50	21.00
			25	12	50	24	20.96	19.50	23.41	22.50	21.00
23230	132572	QPSK	25	25	50	50	21.03	19.54	23.39	22.50	21.00
			50	0	100	0	20.84	19.71	23.24	22.50	21.00
			1	0	1	0	22.04	16.31	23.27	23.80	18.00
			1	25	1	49	22.11	16.54	23.16	23.80	18.00
			1	49	1	99	22.02	16.70	23.03	23.80	18.00
			25	0	50	0	20.97	19.58	23.21	22.50	21.00

Tune up Power (dBm)

PCC:Ant3 SCC:Ant1

CA_66A-13A											
Combination 20MHz+10MHz (100RB+50RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		PCC1 Power (dBm)	SCC2 Power (dBm)	Measured Power (dBm)	PCC1 Tune up Power (dBm)	SCC2 Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset					
132072	23230	QPSK	1	0	1	0	23.12	16.79	23.92	23.80	18.00
			1	49	1	25	22.99	16.61	23.76	23.80	18.00
			1	99	1	49	23.09	16.50	23.73	23.80	18.00
			50	0	25	0	22.18	18.50	23.69	23.30	19.50
			50	24	25	12	22.09	18.54	23.67	23.30	19.50
			50	50	25	25	22.11	18.39	23.70	23.30	19.50
132322	23230	QPSK	100	0	50	0	22.22	18.00	23.57	23.30	19.50
			1	0	1	0	23.23	16.83	23.93	23.80	18.00
			1	49	1	25	23.11	16.70	23.78	23.80	18.00
			1	99	1	49	23.18	16.58	23.81	23.80	18.00
			50	0	25	0	22.24	18.64	23.74	23.30	19.50
			50	24	25	12	22.15	18.55	23.75	23.30	19.50
132572	23230	QPSK	50	50	25	25	22.22	18.41	23.71	23.30	19.50
			100	0	50	0	22.25	18.11	23.70	23.30	19.50
			1	0	1	0	23.20	16.68	23.82	23.80	18.00
			1	49	1	25	23.06	16.69	23.65	23.80	18.00
			1	99	1	49	23.09	16.49	23.73	23.80	18.00
			50	0	25	0	22.11	18.56	23.66	23.30	19.50

Tune up Power (dBm)

PCC:Ant2 SCC:Ant0

CA_66A-13A											
Combination 20MHz+10MHz (100RB+50RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		PCC1 Power (dBm)	SCC2 Power (dBm)	Measured Power (dBm)	PCC1 Tune up Power (dBm)	SCC2 Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset					
132072	23230	QPSK	1	0	1	0	22.13	18.80	23.72	23.10	20.00
			1	49	1	25	21.97	18.05	23.71	23.10	20.00
			1	99	1	49	22.03	18.47	23.64	23.10	20.00
			50	0	25	0	21.02	20.96	24.17	21.80	21.80
			50	24	25	12	20.91	20.97	24.14	21.80	21.80
			50	50	25	25	21.15	21.36	23.92	21.80	21.80
132322	23230	QPSK	100	0	50	0	21.09	21.06	24.07	21.80	21.80
			1	0	1	0	22.26	18.81	23.85	23.10	20.00
			1	49	1	25	22.04	18.10	23.75	23.10	20.00
			1	99	1	49	22.11	18.56	23.70	23.10	20.00
			50	0	25	0	21.05	21.10	24.20	21.80	21.80
			50	24	25	12	21.01	21.11	24.18	21.80	21.80
132572	23230	QPSK	50	50	25	25	21.22	21.40	24.05	21.80	21.80
			100	0	50	0	21.23	21.20	24.12	21.80	21.80
			1	0	1	0	22.25	18.71	23.81	23.10	20.00
			1	49	1	25	22.02	18.04	23.64	23.10	20.00
			1	99	1	49	21.99	18.42	23.66	23.10	20.00
			50	0	25	0	20.98	21.03	24.19	21.80	21.80

Tune up Power (dBm)

PCC:Ant1 SCC:Ant3

CA_66A-13A											
Combination 20MHz+10MHz (100RB+50RB)											
PCC Channel	SCC Channel	Modulation	PCC		SCC		PCC1 Power (dBm)	SCC2 Power (dBm)	Measured Power (dBm)	PCC1 Tune up Power (dBm)	SCC2 Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset					
132072	23230	QPSK	1	0	1	0	23.12	16.79	23.92	23.80	18.00
			1	49	1	25	22.99	16.61	23.76	23.80	18.00
			1	99	1	49	23.09	16.50	23.73	23.80	18.00
			50	0	25	0	22.18	18.50	23.69	23.30	19.50
			50	24	25	12	22.09	18.54	23.67	23.30	19.50
			50	50	25	25	22.11	18.39	23.70	23.30	19.50
132322	23230	QPSK	100	0	50	0	22.22	18.00	23.57	23.30	19.50
			1	0	1	0	23.23	16.83	23.93	23.80	18.00
			1	49	1	25	23.11	16.70	23.78	23.80	18.00
			1	99	1	49	23.18	16.58	23.81	23.80	18.



DL CA Power

XCC		POC																BOC				Power	
Configures	CA Configuration (SCS)	LTE Band								UL RB Offset								LTE Band				WRC CA Tx Power (dBm)	WRC CA Tx Power (dBm)
		LTE Band	BW (MHz)	UL Freq (MHz)	UL Channel	Mod.	UL-FB	UL-RB Offset	LTE Band	BW (MHz)	DL Freq (MHz)	DL Channel	UL-FB	UL-RB Offset	LTE Band	BW (MHz)	DL Freq (MHz)	DL Channel					
Intra-Band	CA_7A-6A	7	20	2635	21100	QPSK	1	59	48	20	2640	20800	23.30	24.10	23.30	24.10	23.30	24.10					
	CA_25A-41A	25	20	1905	26500	QPSK	1	49	48	20	2593	26200	23.30	24.10	23.30	24.10	23.30	24.10					
	CA_25A-6A	25	20	1905	26500	QPSK	1	49	48	20	2593	26200	23.30	24.10	23.30	24.10	23.30	24.10					
	CA_25A-41A	25	15	1841.5	26665	QPSK	1	0	41	20	2593	26200	23.70	24.71	23.70	24.71	23.70	24.71					
	CA_41A-6A	41	20	2540.5	40185	QPSK	1	59	41	5	2467.5	41665	23.78	24.23	23.78	24.23	23.78	24.23					
Inter-Band	CA_7C	7	20	2635	21100	QPSK	1	59	7	20	2674.80	2268	23.75	24.19	23.75	24.19	23.75	24.19					
	CA_38C	38	20	2580	37650	QPSK	1	59	38	20	2590.80	36945	23.85	24.00	23.85	24.00	23.85	24.00					

SCC	Config	CA Configuration (SCS)	POC					SCC1				SCC2				Power			
			LTE Band	BW (MHz)	UL Freq (MHz)	UL Channel	Mod.	UL-FB	UL-RB Offset	LTE Band	BW (MHz)	DL Freq (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq (MHz)	DL Channel	WRC CA TxPower (dBm)	WRC CA TxPower (dBm)
Intra-Band	CA_2A-2A-5A	2	20	1900	19100	QPSK	1	59	2	5	1932.5	625	5	10	1889	2600	20	72	23.30
	CA_2A-2A-13A	2	20	1900	19100	QPSK	1	59	2	5	1932.5	625	13	10	1751	5230	20	72	23.30
	CA_2A-2A-71A	2	20	1900	19100	QPSK	1	59	2	5	1932.5	625	71	20	1834.5	6870	20	70	23.30
	CA_2A-5A-5A	2	20	1900	19100	QPSK	1	59	4	20	2132.5	2175	5	10	1811.5	2525	20	70	23.30
	CA_2A-5A-7A	2	20	1900	19100	QPSK	1	59	4	20	2132.5	2175	7	20	1909	2600	20	72	23.30
	CA_2A-5A-13A	2	20	1900	19100	QPSK	1	59	4	20	2132.5	2175	13	10	1751	5230	20	70	23.30
	CA_2A-5A-6A	2	20	1900	19100	QPSK	1	59	5	10	1811.5	2325	48	20	1505	5430	20	74	23.30
	CA_2A-5A-8A	2	20	1900	19100	QPSK	1	59	5	10	1811.5	2325	48	20	1507.2	5442	20	75	23.30
	CA_2A-5A-9A	2	20	1900	19100	QPSK	1	59	5	10	1811.5	2325	48	20	1515	5460	20	76	23.30
	CA_2A-7A-7A	2	20	1900	19100	QPSK	1	59	7	20	2055	2100	7	5	1588.5	3925	20	75	23.30
	CA_2A-13A-6A	2	20	1900	19100	QPSK	1	59	13	10	1751	5230	48	20	1510	5480	20	74	23.30
	CA_2A-13A-8A	2	20	1900	19100	QPSK	1	59	13	10	1751	5230	48	20	1510.2	5482	20	74	23.30
	CA_2A-13A-9A	2	20	1900	19100	QPSK	1	59	13	10	1751	5230	48	20	1518	5500	20	75	23.30
	CA_2A-13A-10A	2	20	1900	19100	QPSK	1	59	13	10	1751	5230	48	20	1526	5518	20	76	23.30
	CA_2A-13A-11A	2	20	1900	19100	QPSK	1	59	13	10	1751	5230	48	20	1534	5536	20	77	23.30
	CA_2A-13A-12A	2	20	1900	19100	QPSK	1	59	13	10	1751	5230	48	20	1542	5554	20	78	23.30
	CA_2A-13A-14A	2	20	1900	19100	QPSK	1	59	13	10	1751	5230	48	20	1550	5572	20	79	23.30
	CA_2A-13A-15A	2	20	1900	19100	QPSK	1	59	13	10	1751	5230	48	20	1558	5590	20	80	23.30
	CA_2A-13A-16A	2	20	1900	19100	QPSK	1	59	13	10	1751	5230	48	20	1566	5608	20	81	23.30
	Inter-Band	CA_4A-4A-5A	2	20	1900	19100	QPSK	1	59	48	20	1932.5	625	48	20	1544.5	5618	20	73
CA_4A-4A-7A		2	1732	20175	QPSK	1	0	4	5	2132.5	2375	7	10	1811.5	2525	20	74	23.30	
CA_4A-4A-7A		4	1732.5	20175	QPSK	1	0	4	5	2132.5	2375	7	10	1811.5	2525	20	74	23.30	
CA_4A-4A-13A		4	1732.5	20175	QPSK	1	0	4	5	2132.5	2375	13	10	1751	5230	20	76	23.30	
CA_4A-4A-71A		4	1732.5	20175	QPSK	1	0	4	5	2132.5	2375	71	20	1834.5	6870	20	74	23.30	
CA_4A-7A-7A		4	1732.5	20175	QPSK	1	0	7	20	2055	2100	7	5	1588.5	3925	20	76	23.30	
CA_4A-7A-12A		4	1732.5	20175	QPSK	1	0	7	20	2055	2100	12	10	1737.5	5095	20	76	23.30	
CA_4A-8A-8A		4	1732.5	20175	QPSK	1	0	48	20	1500	5480	48	20	1505	5430	20	74	23.30	
CA_4A-8A		4	1732.5	20175	QPSK	1	0	48	20	1500	5480	48	20	1505	5430	20	74	23.30	
CA_4A-8A		4	1732.5	20175	QPSK	1	0	48	20	1500	5480	48	20	1505	5430	20	74	23.30	
CA_4A-8A		4	1732.5	20175	QPSK	1	0	48	20	1500	5480	48	20	1505	5430	20	74	23.30	
CA_4A-8A		4	1732.5	20175	QPSK	1	0	48	20	1500	5480	48	20	1505	5430	20	74	23.30	
CA_4A-8A		4	1732.5	20175	QPSK	1	0	48	20	1500	5480	48	20	1505	5430	20	74	23.30	
CA_4A-8A		4	1732.5	20175	QPSK	1	0	48	20	1500	5480	48	20	1505	5430	20	74	23.30	
CA_4A-8A		4	1732.5	20175	QPSK	1	0	48	20	1500	5480	48	20	1505	5430	20	74	23.30	
CA_4A-8A		4	1732.5	20175	QPSK	1	0	48	20	1500	5480	48	20	1505	5430	20	74	23.30	
CA_4A-8A		4	1732.5	20175	QPSK	1	0	48	20	1500	5480	48	20	1505	5430	20	74	23.30	
CA_4A-8A		4	1732.5	20175	QPSK	1	0	48	20	1500	5480	48	20	1505	5430	20	74	23.30	
CA_4A-8A		4	1732.5	20175	QPSK	1	0	48	20	1500	5480	48	20	1505	5430	20	74	23.30	
CA_4A-8A		4	1732.5	20175	QPSK	1	0	48	20	1500	5480	48	20	1505	5430	20	74	23.30	
Intra-Band	CA_5A-5A-5A	5	10	820	20450	QPSK	1	49	5	10	820	20450	66	20	1567.7	5587	20	73	23.30
	CA_5A-5A-7A	5	10	820	20450	QPSK	1	49	7	20	2030	2050	7	20	1568	5590	20	73	23.30
	CA_5A-5A-6A	5	10	820	20450	QPSK	1	49	48	20	1930	5660	66	20	1515	5686	20	76	23.30
	CA_5A-5A-8A	5	10	820	20450	QPSK	1	49	48	20	1930	5660	66	20	1507.2	5642	20	75	23.30
	CA_5A-5A-9A	5	10	820	20450	QPSK	1	49	48	20	1930	5660	66	20	1515.2	5642	20	75	23.30
	CA_5A-5A-10A	5	10	820	20450	QPSK	1	49	48	20	1930	5660	66	20	1523	5642	20	75	23.30
	CA_5A-5A-11A	5	10	820	20450	QPSK	1	49	48	20	1930	5660	66	20	1530	5642	20	75	23.30
	CA_5A-5A-12A	5	10	820	20450	QPSK	1	49	48	20	1930	5660	66	20	1538	5642	20	75	23.30
	CA_5A-5A-13A	5	10	820	20450	QPSK	1	49	48	20	1930	5660	66	20	1546	5642	20	75	23.30
	CA_5A-5A-14A	5	10	820	20450	QPSK	1	49	48	20	1930	5660	66	20	1554	5642	20	75	23.30
	CA_5A-5A-15A	5	10	820	20450	QPSK	1	49	48	20	1930	5660	66	20	1562	5642	20	75	23.30
	CA_5A-5A-16A	5	10	820	20450	QPSK	1	49	48	20	1930	5660	66	20	1570	5642	20	75	23.30
	CA_5A-5A-17A	5	10	820	20450	QPSK	1	49	48	20	1930	5660	66	20	1578	5642	20	75	23.30
	CA_5A-5A-18A	5	10	820	20450	QPSK	1	49	48	20	1930	5660	66	20	1586	5642	20	75	23.30
	CA_5A-5A-19A	5	10	820	20450	QPSK	1	49	48	20	1930	5660	66	20	1594	5642	20	75	23.30
	CA_5A-5A-20A	5	10	820	20450	QPSK	1	49	48	20	1930	5660	66	20	1602	5642	20	75	23.30
	CA_5A-5A-21A	5	10	820	20450	QPSK	1	49	48	20	1930	5660	66	20	1610	5642	20	75	23.30
	CA_5A-5A-22A	5	10	820	20450	QPSK	1	49	48	20	1930	5660	66	20	1618	5642	20	75	23.30
	CA_5A-5A-23A	5	10	820	20450	QPSK	1	49	48	20	1930	5660	66	20	1626	5642	20	75	23.30
	CA_5A-5A-24A	5	10	820	20450	QPSK	1	49	48	20	1930	5660	66	20	1634	5642	20	75	23.30
Inter-Band	CA_13A-13A-6A	13	10	762	23230	QPSK	1	25	48	20	1930	5660	66	20	1510	5626	20	73	23.30
	CA_13A-13A-8A	13	10	762	23230	QPSK	1	25	48	20	1930	5660	66	20	1510.2	5626	20	73	23.30
	CA_13A-13A-10A	13	10	762	23230	QPSK	1	25	48	20	1930	5660	66	20	1510.4	5626	20	73	23.30
	CA_13A-13A-12A	13	10	762	23230	QPSK	1	25	48	20	1930	5660	66	20	1510.6	5626	20	73	23.30
	CA_13A-13A-14A	13	10	762	23230	QPSK	1	25	48	20	1930	5660	66	20	1510.8	5626	20	73	23.30
	CA_13A-13A-16A	13	10	762	23230	QPSK	1	25	48	20	1930	5660	66	20	1511	5626	20	73	23.30
	CA_13A-13A-18A	13	10	762	23230	QPSK	1	25	48	20	1930	5660	66	20	1511.2	5626	20	73	23.30
	CA_13A-13A-20A	13	10	762	23230	QPSK	1	25	48	20	1930	5660	66	20	1511.4	5626	20	73	23.30
	CA_13A-13A-22A	13	10	762	23230	QPSK	1	25	48	20	1930	5660	66	20	1511.6	5626	20	73	23.30
	CA_13A-13A-24A	13	10	762	23230	QPSK	1	25	48	20	1930	5660	66	20	1511.8	5626	20	73	23.30
	CA_13A-13A-26A	13	10	762	23230	QPSK	1	25	48	20	1930	5660	66	20	1512	5626	20	73	23.30
	CA_13A-13A-28A	13	10	762	23230	QPSK	1	25	48	20	1930	5660	66	20	1512.2	5626	20	73	23.30
	CA_13A-13A-30A	13	10	762	23230	QPSK	1	25	48	20	1930	5660	66	20	1512.4	5626	20	73	23.30
	CA_13A-13A-32A	13	10	762	23230	QPSK	1	25	48	20	1930	5660	66	20	1512.6	5626	20	73	23.30
	CA_13A-13A-34A	13	10	762	23230	QPSK	1	25	48	20	1930	5660	66	20	1512.8	5626	20	73	23.30
	CA_13A-13A-36A	13	10	762	23230	QPSK	1	25	48	20	1930	5660	66	20	1513	5626	20	73	23.30
	CA_13A-13A-38A	13	10	762	23230	QPSK	1	25	48	20	1930	5660	66	20	1513.2	5626	20	73	



Full Power Mode - UAT

n2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				372000	376000	380000	24.8	0.0
Frequency (MHz)				1860	1880	1900		
20	PI2 BPSK	1	1	23.87	23.95	23.93		
20	PI2 BPSK	1	53	23.71	23.83	23.82	24.3	0.5
20	PI2 BPSK	1	104	23.85	23.86	23.73		
20	PI2 BPSK	50	0	23.33	23.38	23.31		
20	PI2 BPSK	50	28	23.82	23.90	23.88	24.8	0.0
20	PI2 BPSK	50	56	23.41	23.39	23.33	24.3	0.5
20	PI2 BPSK	100	0	23.25	23.35	23.33		
20	QPSK	1	1	23.88	23.91	23.78		
20	QPSK	1	53	23.84	23.88	23.82	24.8	0.0
20	QPSK	1	104	23.78	23.84	23.78	23.8	1.0
20	QPSK	50	0	22.83	22.89	22.85		
20	QPSK	50	28	23.90	23.88	23.79		
20	QPSK	50	86	22.88	22.87	22.78	23.8	1.0
20	QPSK	100	0	22.98	22.86	22.84	23.8	1.0
20	16QAM	1	1	22.88	22.67	22.62		
20	64QAM	1	1	21.23	21.27	21.18		
20	256QAM	1	1	19.35	19.44	19.21	20.3	4.5
Channel				371000	376000	380000	24.8	0.0
Frequency (MHz)				1867.5	1880	1902.5		
15	PI2 BPSK	1	1	23.78	23.80	23.85		
Channel				371000	376000	381000	24.8	0.0
Frequency (MHz)				1865	1880	1905		
10	PI2 BPSK	1	1	23.83	23.79	23.76		
Channel				370500	376000	381500	24.8	0.0
Frequency (MHz)				1862.5	1880	1907.5		
5	PI2 BPSK	1	1	23.83	23.85	23.58		

n5								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				167800	167300	167300	24.3	0.0
Frequency (MHz)				834	836.5	839		
20	PI2 BPSK	1	1	23.83	23.66	23.60		
20	PI2 BPSK	1	53	23.66	23.62	23.48	23.8	0.5
20	PI2 BPSK	1	104	23.48	23.57	23.36		
20	PI2 BPSK	50	0	23.06	23.09	23.05		
20	PI2 BPSK	50	28	23.58	23.61	23.54	24.3	0.0
20	PI2 BPSK	50	56	22.97	23.02	22.88	23.8	0.5
20	PI2 BPSK	100	0	23.07	23.08	23.05		
20	QPSK	1	1	23.56	23.65	23.54		
20	QPSK	1	53	23.55	23.61	23.48	24.3	0.0
20	QPSK	1	104	23.45	23.62	23.42	23.3	1.0
20	QPSK	50	0	22.57	22.66	22.53		
20	QPSK	50	28	23.55	23.65	23.38		
20	QPSK	50	56	22.36	22.57	22.32	23.3	1.0
20	QPSK	100	0	22.51	22.65	22.44	23.3	1.0
20	16QAM	1	1	22.74	22.86	22.68		
20	64QAM	1	1	20.58	20.99	20.51		
20	256QAM	1	1	18.70	18.98	18.68	19.3	4.5
Channel				167300	167300	167300	24.3	0.0
Frequency (MHz)				831.5	836.5	841.5		
15	PI2 BPSK	1	1	23.44	23.61	23.16		
Channel				167800	167300	167300	24.3	0.0
Frequency (MHz)				839	836.5	844		
10	PI2 BPSK	1	1	23.22	23.43	23.11		
Channel				167300	167300	168300	24.3	0.0
Frequency (MHz)				826.5	836.5	846.5		
5	PI2 BPSK	1	1	23.36	23.52	23.44		

n7								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				502000	507000	512000	24.8	0.0
Frequency (MHz)				2510	2535	2560		
20	PI2 BPSK	1	1	24.01	24.14	24.04		
20	PI2 BPSK	1	53	23.87	23.93	23.92	24.8	0.0
20	PI2 BPSK	1	104	23.95	23.98	23.94		
20	PI2 BPSK	50	0	23.53	23.92	23.95		
20	PI2 BPSK	50	28	23.96	24.08	24.00	24.8	0.0
20	PI2 BPSK	50	56	23.87	23.99	23.96	24.8	0.0
20	PI2 BPSK	100	0	23.93	24.04	23.96		
20	QPSK	1	1	23.98	24.00	23.99		
20	QPSK	1	53	23.98	23.99	23.97	24.8	0.0
20	QPSK	1	104	23.95	23.97	23.92	24.3	0.5
20	QPSK	50	0	23.44	23.45	23.47		
20	QPSK	50	28	23.86	23.96	23.87		
20	QPSK	50	56	23.34	23.31	23.35	24.3	0.5
20	QPSK	100	0	23.20	23.37	23.36	24.3	0.5
20	16QAM	1	1	23.41	23.43	23.48		
20	64QAM	1	1	21.95	21.87	21.88		
20	256QAM	1	1	19.83	19.85	19.84	20.8	4.0
Channel				501000	507000	512000	24.8	0.0
Frequency (MHz)				2507.5	2535	2562.5		
15	PI2 BPSK	1	1	23.66	23.78	23.63		
Channel				501000	507000	513000	24.8	0.0
Frequency (MHz)				2508	2535	2565		
10	PI2 BPSK	1	1	23.69	23.79	23.76		
Channel				500500	507000	513500	24.8	0.0
Frequency (MHz)				2502.5	2535	2567.5		
5	PI2 BPSK	1	1	23.72	23.82	23.79		



n25											
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)			
Channel				372000 1865	376500 1882.5	381000 1905					
Frequency (MHz)											
20	PI2 BPSK	1	1	24.09	24.16	24.13		24.8	0.0		
20	PI2 BPSK	1	53	24.02	24.06	24.04					
20	PI2 BPSK	1	104	24.05	24.07	23.96		24.8	0.0		
20	PI2 BPSK	50	0	24.05	24.08	24.05					
20	PI2 BPSK	50	28	24.08	24.12	24.10		24.8	0.0		
20	PI2 BPSK	50	56	23.98	23.61	24.01					
20	PI2 BPSK	100	0	23.95	24.00	23.98		24.8	0.0		
20	QPSK	1	1	23.94	24.10	24.12					
20	QPSK	1	53	24.08	24.09	24.08		24.8	0.0		
20	QPSK	1	104	24.04	24.10	23.94					
20	QPSK	50	0	23.99	23.69	23.63	24.3	0.5			
20	QPSK	50	28	23.88	24.09	24.06	24.8				
20	QPSK	50	56	23.46	23.42	23.50	24.3	0.5			
20	QPSK	100	0	23.48	23.62	23.42					
20	16QAM	1	1	23.41	23.42	23.38	24.3	0.5			
20	64QAM	1	1	22.08	22.12	22.16	22.8				
20	256QAM	1	1	20.07	20.17	20.10	20.8	4.0			
Channel				371500	376500	381500	Tune-up limit (dBm)			MPR (dB)	
Frequency (MHz)				1867.5	1882.5	1907.5					
15	PI2 BPSK	1	1	24.12	24.05	24.14		24.8	0.0		
Channel				371000	376500	382000	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)				1865	1882.5	1910					
10	PI2 BPSK	1	1	24.12	24.02	24.01		24.8	0.0		
Channel				370500	376500	382500	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)				1862.5	1882.5	1912.5					
5	PI2 BPSK	1	1	24.00	24.08	23.93		24.8	0.0		

n66										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dbm)	MPR (db)		
Channel				344000	349000	354000				
Frequency (MHz)				1720	1745	1770				
20	PI2 BPSK	1	1	24.18	24.21	24.14		24.8	0.0	
20	PI2 BPSK	1	53	24.04	24.07	24.10				
20	PI2 BPSK	1	104	24.09	24.12	24.04		24.8	0.0	
20	PI2 BPSK	50	0	24.12	24.07	24.03				
20	PI2 BPSK	50	28	24.13	24.15	24.10		24.8	0.0	
20	PI2 BPSK	50	56	24.09	24.04	24.08				
20	PI2 BPSK	100	0	24.05	24.08	24.03		24.8	0.0	
20	QPSK	1	1	24.09	24.08	23.92				
20	QPSK	1	53	24.00	24.01	24.03		24.8	0.0	
20	QPSK	1	104	23.92	23.71	24.00				
20	QPSK	50	0	23.83	23.30	23.47		24.3	0.5	
20	QPSK	50	28	24.07	24.03	24.00				
20	QPSK	50	56	23.47	23.25	23.40		24.3	0.5	
20	QPSK	100	0	23.36	23.40	23.48				
20	16QAM	1	1	23.24	23.08	23.12		24.3	0.5	
20	64QAM	1	1	21.83	21.87	21.69				
20	256QAM	1	1	20.09	20.15	19.77		20.8	4.0	
Channel				343500	349500	355500	Tune-up limit (dbm)	MPR (db)		
Frequency (MHz)				1717.5	1745	1772.5				
15	PI2 BPSK	1	1	24.08	24.17	24.08		24.8	0.0	
Channel				343000	349000	355000	Tune-up limit (dbm)	MPR (db)		
Frequency (MHz)				1715	1745	1775				
10	PI2 BPSK	1	1	24.18	24.05	24.11		24.8	0.0	
Channel				342500	348500	354500	Tune-up limit (dbm)	MPR (db)		
Frequency (MHz)				1712.5	1745	1777.5				
5	PI2 BPSK	1	1	23.98	24.08	24.11		24.8	0.0	

n71										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)		
Channel				134000	136100	137600				
Frequency (MHz)				670	680.5	688				
20	PI2 BPSK	1	1	23.92	23.96	23.85		24.8	0.0	
20	PI2 BPSK	1	53	23.79	23.85	23.76				
20	PI2 BPSK	1	104	23.76	23.68	23.47		24.8	0.0	
20	PI2 BPSK	50	0	23.77	23.70	23.75				
20	PI2 BPSK	50	28	23.85	23.90	23.79		24.8	0.0	
20	PI2 BPSK	50	56	23.68	23.67	23.53				
20	PI2 BPSK	100	0	23.62	23.67	23.76		24.8	0.0	
20	QPSK	1	1	23.85	23.92	23.86				
20	QPSK	1	53	23.76	23.84	23.75		24.8	0.0	
20	QPSK	1	104	23.60	23.74	23.46				
20	QPSK	50	0	23.43	23.31	23.30		24.3	0.5	
20	QPSK	50	28	23.85	23.78	23.67				
20	QPSK	50	56	23.28	23.13	23.02		24.3	0.5	
20	QPSK	100	0	23.38	23.30	23.13				
20	16QAM	1	1	23.44	23.32	23.36		24.3	0.5	
20	64QAM	1	1	21.58	21.62	21.61				
20	256QAM	1	1	19.92	19.72	19.75		20.8	4.0	
Channel				134100	136100	138100	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				670.5	680.5	689.5				
15	PI2 BPSK	1	1	23.91	23.65	23.65		24.8	0.0	
Channel				133500	136100	138600	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				668	680.5	693				
10	PI2 BPSK	1	1	23.92	23.75	23.73		24.8	0.0	
Channel				133100	136100	139100	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				665.5	680.5	695.5				
5	PI2 BPSK	1	1	23.71	23.88	23.77		24.8	0.0	



n41_FCC									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				500202	518598	528000	24.1	0.0	
Frequency (MHz)				2546.01	2592.99	2640			
100	P12 BPSK	1	1	23.00	23.08	22.96	24.1	0.0	
100	P12 BPSK	1	137	22.99	23.01	22.91			
100	P12 BPSK	1	271	22.95	22.98	22.95	24.1	0.0	
100	P12 BPSK	135	0	22.37	22.34	22.48			
100	P12 BPSK	135	69	22.97	23.02	22.94	24.1	0.0	
100	P12 BPSK	135	138	22.96	22.48	22.95			
100	P12 BPSK	270	0	22.45	22.52	22.43	23.6	0.5	
100	QPSK	1	1	22.90	22.98	23.00	24.1	0.0	
100	QPSK	1	137	22.98	23.00	22.95			
100	QPSK	1	271	20.94	23.01	22.99	24.1	0.0	
100	QPSK	135	0	22.36	21.97	21.94			
100	QPSK	135	69	22.96	22.93	23.03	24.1	0.0	
100	QPSK	135	138	22.43	21.97	22.99			
100	QPSK	270	0	22.43	21.95	22.94	23.1	1.0	
100	64QAM	1	1	21.93	21.95	21.95	23.1	1.0	
100	64QAM	1	1	20.34	20.46	20.42	21.6	2.5	
100	256QAM	1	1	18.24	18.36	18.31	19.6	4.5	
Channel				508200	518598	528996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2644	2692.99	2644.98			
90	P12 BPSK	1	1	22.85	23.02	22.98	24.1	0.0	
Channel				507204	518598	529998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2636.02	2692.99	2649.99			
80	P12 BPSK	1	1	22.88	22.91	22.97	24.1	0.0	
Channel				503204	518598	529598	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2521.02	2692.99	2664.99			
50	P12 BPSK	1	1	22.93	22.88	22.96	24.1	0.0	
Channel				505202	518598	534000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2514.01	2692.99	2674.98			
40	P12 BPSK	1	1	23.03	22.90	23.01	24.1	0.0	
Channel				502200	518598	534996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2511	2692.99	2674.98			
30	P12 BPSK	1	1	22.98	22.94	22.98	24.1	0.0	
Channel				501204	518598	535998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2506.02	2692.99	2679.99			
20	P12 BPSK	1	1	22.89	22.96	22.90	24.1	0.0	

n41(HPUE)_FCC									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				500202	518598	528000	24.1	0.0	
Frequency (MHz)				2546.01	2592.99	2640			
100	P12 BPSK	1	1	26.12	26.18	26.11	26.8	0.0	
100	P12 BPSK	1	137	26.11	26.15	26.14			
100	P12 BPSK	1	271	26.05	26.14	26.05	26.8	0.0	
100	P12 BPSK	135	0	25.41	25.56	25.54			
100	P12 BPSK	135	69	26.02	26.03	26.00	26.8	0.0	
100	P12 BPSK	135	138	25.06	25.66	25.61			
100	P12 BPSK	270	0	25.79	25.88	25.81	26.3	0.5	
100	QPSK	1	1	26.04	26.10	26.05	26.8	0.0	
100	QPSK	1	137	26.11	26.13	26.04			
100	QPSK	1	271	26.04	26.14	26.09	26.8	0.0	
100	QPSK	135	0	25.04	25.08	25.11			
100	QPSK	135	69	26.01	26.05	26.13	26.8	0.0	
100	QPSK	135	138	26.07	25.06	25.12			
100	QPSK	270	0	25.05	25.01	25.09	25.8	1.0	
100	64QAM	1	1	25.36	25.31	25.34	25.9	1.0	
100	64QAM	1	1	23.18	23.26	23.31	24.3	2.5	
100	256QAM	1	1	21.49	21.52	21.44	22.3	4.5	
Channel				508200	518598	528996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2644	2692.99	2644.98			
90	P12 BPSK	1	1	26.00	26.05	26.05	26.8	0.0	
Channel				507204	518598	529998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2636.02	2692.99	2649.99			
80	P12 BPSK	1	1	25.97	26.06	26.01	26.8	0.0	
Channel				503204	518598	529598	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2521.02	2692.99	2664.99			
50	P12 BPSK	1	1	25.98	26.04	26.02	26.8	0.0	
Channel				505202	518598	534000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2514.01	2692.99	2674.98			
40	P12 BPSK	1	1	25.96	26.02	25.98	26.8	0.0	
Channel				502200	518598	534996	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2511	2692.99	2674.98			
30	P12 BPSK	1	1	26.00	26.06	26.04	26.8	0.0	
Channel				501204	518598	535998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2506.02	2692.99	2679.99			
20	P12 BPSK	1	1	25.95	26.07	26.03	26.8	0.0	

n77									
BW [kHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				650000	656000	662000	24.8	0.0	
Frequency (MHz)				3790	3840	3930			
100	P12 BPSK	1	1	23.97	24.22	24.16	24.8	0.0	
100	P12 BPSK	1	137	23.96	24.20	23.94			
100	P12 BPSK	1	271	23.81	24.08	23.96	24.8	0.0	
100	P12 BPSK	135	0	23.75	24.08	24.01			
100	P12 BPSK	135	69	23.92	24.13	24.12	24.8	0.0	
100	P12 BPSK	135	138	23.95	23.96	23.92			
100	P12 BPSK	270	0	23.82	24.12	23.88	24.8	0.0	
100	QPSK	1	1	23.94	24.06	23.95	24.8	0.0	
100	QPSK	1	137	23.75	23.82	23.89			
100	QPSK	1	271	23.71	23.94	23.83	24.8	0.0	
100	QPSK	135	0	23.82	23.85	23.73			
100	QPSK	135	69	23.86	23.77	23.79	24.8	0.0	
100	QPSK	135	138	23.69	23.86	23.81			
100	QPSK	270	0	23.86	23.79	23.78	24.8	0.0	
100	16QAM	1	1	23.42	23.70	23.68	24.6	0.0	
100	64QAM	1	1	22.18	22.53	22.34	23.3	1.5	
100	256QAM	1	1	19.99	20.12	20.19	22.8	2.0	
Channel				648668	650000	662334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3745.02	3840	3935.01			
90	P12 BPSK	1	1	23.98	24.21	24.18	24.8	0.0	
Channel				648334	650000	662668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3742.01	3840	3940.02			
80	P12 BPSK	1	1	23.94	24.20	24.18	24.8	0.0	
Channel				646868	650000	663334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3730.02	3840	3950.01			
60	P12 BPSK	1	1	23.92	24.18	24.20	24.8	0.0	
Channel				648334	650000	663668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3724.01	3840	3955.02			
50	P12 BPSK	1	1	23.99	24.21	24.19	24.8	0.0	
Channel				648000	650000	664000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3720	3840	3960			
40	P12 BPSK	1	1	23.92	24.19	24.18	24.8	0.0	
Channel				645000	650000	663334	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3715.02	3840	3955.01			
30	P12 BPSK	1	1	23.99	24.20	24.17	24.8	0.0	
Channel				643334	650000	661668	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				3710.01	3840	3970.02			
20	P12 BPSK	1	1	23.95	24.21	24.21	24.8	0.0	



Reduced Power level 1 for Head -- UAT

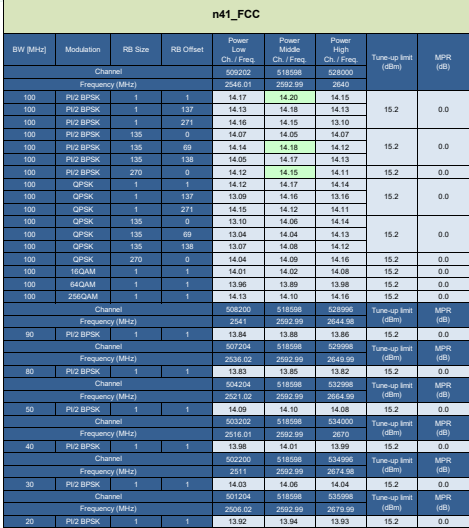
n2								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				372000	376000	380000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1860	1880	1900		
20	PI2 BPSK	1	1	17.14	17.15	17.03	18.2	0.0
20	PI2 BPSK	1	53	16.99	16.98	17.01		
20	PI2 BPSK	1	104	17.03	16.92	16.93	18.2	0.0
20	PI2 BPSK	50	0	17.05	16.97	16.99		
20	PI2 BPSK	50	28	17.09	17.11	17.00	18.2	0.0
20	PI2 BPSK	50	56	16.94	17.00	16.96		
20	PI2 BPSK	100	0	17.05	17.06	16.97	18.2	0.0
20	QPSK	1	1	17.06	17.04	17.01		
20	QPSK	1	53	17.05	17.06	16.98	18.2	0.0
20	QPSK	1	104	16.98	16.94	16.94		
20	QPSK	50	0	16.97	17.07	16.98	18.2	0.0
20	QPSK	50	28	16.95	17.06	17.02		
20	QPSK	50	56	17.02	17.05	16.99	18.2	0.0
20	QPSK	100	0	16.97	16.99	16.94		
20	16QAM	1	1	17.00	17.01	17.01	18.2	0.0
20	64QAM	1	1	17.01	17.06	16.96		
20	256QAM	1	1	16.94	16.98	16.98	18.2	0.0
Channel				371800	376000	380500		
Frequency (MHz)				1857.5	1880	1902.5	Tune-up limit (dBm)	MPR (dB)
15	PI2 BPSK	1	1	16.97	17.06	17.00	18.2	0.0
Channel				371500	376000	381000		
Frequency (MHz)				1865	1880	1905	Tune-up limit (dBm)	MPR (dB)
10	PI2 BPSK	1	1	17.00	17.09	17.04	18.2	0.0
Channel				370500	376000	381500		
Frequency (MHz)				1853.5	1880	1907.5	Tune-up limit (dBm)	MPR (dB)
5	PI2 BPSK	1	1	16.96	17.01	17.03	18.2	0.0

n7								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2510	2535	2560		
20	PI2 BPSK	1	1	15.58	15.62	15.54	16.2	0.0
20	PI2 BPSK	1	53	15.53	15.52	15.52		
20	PI2 BPSK	1	104	15.57	15.49	15.48	16.2	0.0
20	PI2 BPSK	50	0	15.52	15.51	15.46		
20	PI2 BPSK	50	28	15.56	15.58	15.51	16.2	0.0
20	PI2 BPSK	50	56	15.46	15.55	15.48		
20	PI2 BPSK	100	0	15.52	15.58	15.49	16.2	0.0
20	QPSK	1	1	15.60	15.55	15.57		
20	QPSK	1	53	15.58	15.54	15.53	16.2	0.0
20	QPSK	1	104	15.57	15.55	15.47		
20	QPSK	50	0	15.58	15.55	15.54	16.2	0.0
20	QPSK	50	28	15.59	15.60	15.55		
20	QPSK	50	56	15.57	15.55	15.48	16.2	0.0
20	QPSK	100	0	15.56	15.57	15.54		
20	16QAM	1	1	15.59	15.61	15.53	16.2	0.0
20	64QAM	1	1	15.47	15.50	15.57		
20	256QAM	1	1	15.61	15.59	15.57	16.2	0.0
Channel				501500	507000	512000		
Frequency (MHz)				2507.5	2535	2562.5	Tune-up limit (dBm)	MPR (dB)
15	PI2 BPSK	1	1	15.50	15.62	15.49	16.2	0.0
Channel				501000	507000	513500		
Frequency (MHz)				2505	2535	2565	Tune-up limit (dBm)	MPR (dB)
10	PI2 BPSK	1	1	15.46	15.48	15.38	16.2	0.0
Channel				500500	507000	513500		
Frequency (MHz)				2502.5	2535	2567.5	Tune-up limit (dBm)	MPR (dB)
5	PI2 BPSK	1	1	15.45	15.46	15.35	16.2	0.0



n25									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Mode Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				372000	376500	381000			
Frequency (MHz)				1860	1882.5	1905			
20	PI2 BPSK	1	1	17.35	17.41	17.36	18.2	0.0	
20	PI2 BPSK	1	53	17.26	17.40	17.30			
20	PI2 BPSK	1	104	17.27	17.30	17.29			
20	PI2 BPSK	50	0	17.24	17.38	17.32	18.2	0.0	
20	PI2 BPSK	50	26	17.33	17.40	17.34	18.2	0.0	
20	PI2 BPSK	50	56	17.29	17.38	17.33	18.2	0.0	
20	PI2 BPSK	100	0	17.31	17.39	17.32			
20	QPSK	1	1	17.25	17.32	17.24			
20	QPSK	1	53	17.24	17.30	17.27	18.2	0.0	
20	QPSK	1	104	17.23	17.29	17.26			
20	QPSK	50	0	17.18	17.31	17.25	18.2	0.0	
20	QPSK	50	26	17.19	17.24	17.25	18.2	0.0	
20	QPSK	50	56	17.26	17.29	17.17	18.2	0.0	
20	QPSK	100	0	17.20	17.25	17.22			
20	16QAM	1	1	17.27	17.25	17.32	18.2	0.0	
20	64QAM	1	1	16.80	16.99	16.90	18.2	0.0	
20	256QAM	1	1	17.15	17.30	17.25	18.2	0.0	
Channel				371500	376500	381000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1857.5	1882.5	1907.5			
15	PI2 BPSK	1	1	17.20	17.40	17.27	18.2	0.0	
Channel				371000	376500	382000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1855	1882.5	1910			
10	PI2 BPSK	1	1	17.18	17.38	17.36	18.2	0.0	
Channel				370500	376500	382500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1852.2	1882.5	1912.5			
5	PI2 BPSK	1	1	17.13	17.32	17.30	18.2	0.0	

n66									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Mode Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				344500	349000	354000			
Frequency (MHz)				1720	1745	1770			
20	PI2 BPSK	1	1	17.21	17.28	17.20	18.2	0.0	
20	PI2 BPSK	1	53	17.09	17.14	17.16			
20	PI2 BPSK	1	104	17.20	17.24	17.16			
20	PI2 BPSK	50	0	17.13	17.19	17.13	18.2	0.0	
20	PI2 BPSK	50	26	17.18	17.25	17.17	18.2	0.0	
20	PI2 BPSK	50	56	17.11	17.18	17.15	18.2	0.0	
20	PI2 BPSK	100	0	17.15	17.23	17.13			
20	QPSK	1	1	17.21	17.19	17.21			
20	QPSK	1	53	17.10	17.22	17.15	18.2	0.0	
20	QPSK	1	104	17.22	17.27	17.17			
20	QPSK	50	0	17.14	17.26	17.13	18.2	0.0	
20	QPSK	50	26	17.13	17.22	17.16	18.2	0.0	
20	QPSK	50	56	17.20	17.21	17.13	18.2	0.0	
20	QPSK	100	0	17.15	17.27	17.14			
20	16QAM	1	1	17.21	17.13	17.16	18.2	0.0	
20	64QAM	1	1	16.83	16.85	16.77	18.2	0.0	
20	256QAM	1	1	17.20	17.25	17.14	18.2	0.0	
Channel				343500	349000	354500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1717.5	1745	1772.5			
15	PI2 BPSK	1	1	17.16	17.24	17.23	18.2	0.0	
Channel				343000	349000	355000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1715	1745	1775			
10	PI2 BPSK	1	1	17.15	17.20	17.17	18.2	0.0	
Channel				342500	349000	355500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1712.2	1745	1777.2			
5	PI2 BPSK	1	1	17.14	17.19	17.16	18.2	0.0	



n41(HPUe)_FCC									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Time-up limit (dBm)	MPR (dB)	
Channel									
	Frequency (MHz)			2560.01	5168.00	5360.00			
100	P2/BPSK	1	1	14.32	14.37	14.36			
100	P2/BPSK	1	137	14.24	14.28	14.33	15.2	0.0	
100	P2/BPSK	1	273	14.28	14.31	14.34			
100	P2/BPSK	135	1	14.21	14.25	14.30			
100	P2/BPSK	135	69	14.29	14.35	14.33	15.2	0.0	
100	P2/BPSK	135	136	14.17	14.30	14.32			
100	P2/BPSK	270	0	14.27	14.32	14.31	15.2	0.0	
100	QPSK	1	1	14.30	14.25	14.31			
100	QPSK	1	137	14.26	14.28	14.27	15.2	0.0	
100	QPSK	1	273	14.30	14.33	14.34			
100	QPSK	135	0	14.27	14.23	14.28			
100	QPSK	135	69	14.21	14.26	14.27	15.2	0.0	
100	QPSK	135	136	14.26	14.32	14.32			
100	QPSK	270	0	14.26	14.28	14.28	15.2	0.0	
100	16QAM	1	1	14.09	14.11	14.12	15.2	0.0	
100	64QAM	1	1	13.71	13.97	13.73	15.2	0.0	
100	256QAM	1	1	14.02	14.04	14.03	15.2	0.0	
Channel									
	Frequency (MHz)			5052.00	5168.00	5200.00			
90	P2/BPSK	1	1	14.14	14.16	14.19	15.2	0.0	
Channel									
	Frequency (MHz)			6070.04	5168.00	5209.96	Time-up limit (dBm)	MPR (dB)	
80	P2/BPSK	1	1	14.31	14.26	14.28	15.2	0.0	
Channel									
	Frequency (MHz)			5424.04	5168.00	5320.00	Time-up limit (dBm)	MPR (dB)	
50	P2/BPSK	1	1	14.18	14.24	14.14	15.2	0.0	
Channel									
	Frequency (MHz)			5052.02	5168.00	5340.00	Time-up limit (dBm)	MPR (dB)	
30	P2/BPSK	1	1	14.16	14.17	14.19	15.2	0.0	
Channel									
	Frequency (MHz)			14.16	14.21	14.19	15.2	0.0	
40	P2/BPSK	1	1	14.16	14.21	14.19	15.2	0.0	
Channel									
	Frequency (MHz)			5022.00	5168.00	5349.96	Time-up limit (dBm)	MPR (dB)	
30	P2/BPSK	1	1	14.14	14.24	14.08	15.2	0.0	
Channel									
	Frequency (MHz)			5052.02	5168.00	5349.96	Time-up limit (dBm)	MPR (dB)	
20	P2/BPSK	1	1	14.31	14.18	14.15	15.2	0.0	

n77									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Time-up limit (dls)	MPR (dls)	
Channel									
	Frequency (MHz)			3760	3840	3920			
100	P2- BPSK	1	1	17.28	17.44	17.41			
100	P2- BPSK	1	137	17.28	17.12	17.15	18.2		0.0
100	P2- BPSK	1	271	17.28	17.36	17.32			
100	P2- BPSK	135	0	17.24	17.24	17.28			
100	P2- BPSK	135	69	17.26	17.41	17.38	18.2	0.0	
100	P2- BPSK	135	138	17.17	17.34	17.15			
100	P2- BPSK	270	0	17.24	17.38	17.36	18.2	0.0	
100	QPSK	1	1	17.15	17.15	17.13			
100	QPSK	1	137	17.37	17.31	17.22	18.2	0.0	
100	QPSK	1	271	17.27	17.23	17.21			
100	QPSK	135	0	17.27	17.22	17.18			
100	QPSK	135	69	17.28	17.24	17.28	18.2	0.0	
100	QPSK	135	138	17.18	17.17	17.05			
100	QPSK	270	0	17.21	17.19	17.21	18.2	0.0	
100	16QAM	1	1	17.22	17.32	17.32	18.2	0.0	
100	64QAM	1	1	17.33	17.35	17.36	18.2	0.0	
100	256QAM	1	1	17.42	17.43	17.42	18.2	0.0	
Channel									
	Frequency (MHz)			384688	385000	385334	Time-up limit (dls)	MPR (dls)	
90	P2- BPSK	1	1	17.22	17.30	17.27	18.2	0.0	
Channel									
	Frequency (MHz)			384534	385000	385068	Time-up limit (dls)	MPR (dls)	
80	P2- BPSK	1	1	17.33	17.34	17.27	18.2	0.0	
Channel									
	Frequency (MHz)			384688	386000	386334	Time-up limit (dls)	MPR (dls)	
60	P2- BPSK	1	1	17.35	17.42	17.41	18.2	0.0	
Channel									
	Frequency (MHz)			384534	385000	385068	Time-up limit (dls)	MPR (dls)	
50	P2- BPSK	1	1	17.31	17.28	17.21	18.2	0.0	
Channel									
	Frequency (MHz)			384000	385000	384000	Time-up limit (dls)	MPR (dls)	
40	P2- BPSK	1	1	17.26	17.31	17.38	18.2	0.0	
Channel									
	Frequency (MHz)			384768	386000	386334	Time-up limit (dls)	MPR (dls)	
30	P2- BPSK	1	1	17.38	17.24	17.22	18.2	0.0	
Channel									
	Frequency (MHz)			373151	3840	3870.02	Time-up limit (dls)	MPR (dls)	
20	P2- BPSK	1	1	17.40	17.30	17.30	18.2	0.0	



Reduced Power level 2/3 for Head -- UAT

n77							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./ Freq.	Power Middle Ch./ Freq.	Power High Ch./ Freq.	
Channel				650000	656000	662000	Tune-up limit (dBm)
Frequency (MHz)				3750	3840	3930	
100	PI2 BPSK	1	1	15.64	15.74	15.71	16.7
100	PI2 BPSK	1	137	15.61	15.67	15.51	
100	PI2 BPSK	1	271	15.59	15.54	15.66	
100	PI2 BPSK	135	0	15.58	15.66	15.65	16.7
100	PI2 BPSK	135	69	15.62	15.71	15.66	
100	PI2 BPSK	135	138	15.55	15.55	15.45	
100	PI2 BPSK	270	0	15.60	15.68	15.64	16.7
100	QPSK	1	1	15.65	15.55	15.57	
100	QPSK	1	137	15.61	15.59	15.57	
100	QPSK	1	271	15.72	15.64	15.72	16.7
100	QPSK	135	0	15.63	15.71	15.70	
100	QPSK	135	69	15.64	15.59	15.66	
100	QPSK	135	138	15.59	15.52	15.52	16.7
100	QPSK	270	0	15.58	15.64	15.61	
100	ISDAM	1	1	15.59	15.61	15.56	
100	ISDAM	1	1	15.61	15.54	15.56	15.2
100	ISDAM	1	1	15.43	15.44	15.56	14.7
Channel				648668	656000	662334	Tune-up limit (dBm)
Frequency (MHz)				3745.02	3840	3935.01	
50	PI2 BPSK	1	1	15.62	15.56	15.69	16.7
Channel				649204	656000	662669	Tune-up limit (dBm)
Frequency (MHz)				3740.01	3840	3940.02	
80	PI2 BPSK	1	1	15.68	15.51	15.57	16.7
Channel				648668	656000	662334	Tune-up limit (dBm)
Frequency (MHz)				3720.02	3840	3940.01	
60	PI2 BPSK	1	1	15.71	15.57	15.56	16.7
Channel				648334	656000	663668	Tune-up limit (dBm)
Frequency (MHz)				3725.01	3840	3955.02	
50	PI2 BPSK	1	1	15.71	15.54	15.64	16.7
Channel				649204	656000	663000	Tune-up limit (dBm)
Frequency (MHz)				3720	3840	3960	
40	PI2 BPSK	1	1	15.57	15.58	15.67	16.7
Channel				647668	656000	664334	Tune-up limit (dBm)
Frequency (MHz)				3715.02	3840	3965.01	
30	PI2 BPSK	1	1	15.70	15.51	15.53	16.7
Channel				647334	656000	664668	Tune-up limit (dBm)
Frequency (MHz)				3710.01	3840	3970.02	
20	PI2 BPSK	1	1	15.64	15.54	15.70	16.7



Reduced power for Hotspot on-UAT

n2							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	
Channel				372000	376000	380000	
Frequency (MHz)				1865	1880	1900	
20	P12 BPSK	1	1	23.09	23.15	23.10	
20	P12 BPSK	1	53	23.08	23.12	23.04	24.0
20	P12 BPSK	1	104	23.05	23.07	23.00	
20	P12 BPSK	50	0	23.02	23.08	23.02	24.0
20	P12 BPSK	50	28	23.08	23.11	23.05	24.0
20	P12 BPSK	50	56	23.04	23.08	23.08	24.0
20	P12 BPSK	100	0	23.05	23.08	23.03	
20	QPSK	1	1	23.01	23.03	23.05	
20	QPSK	1	53	23.05	23.08	23.02	24.0
20	QPSK	1	104	23.00	23.01	23.01	
20	QPSK	50	0	23.10	23.13	23.04	24.0
20	QPSK	50	28	23.08	23.11	23.02	24.0
20	QPSK	50	56	23.07	23.09	23.00	24.0
20	QPSK	100	0	23.05	23.10	22.98	
20	16QAM	1	1	22.95	22.99	22.97	24.0
20	64QAM	1	1	21.85	21.44	21.42	22.5
20	256QAM	1	1	20.00	19.84	19.95	21.0
Channel				371500	376000	380500	
Frequency (MHz)				1837.5	1860	1822.5	
15	P12 BPSK	1	1	23.02	23.05	22.97	24.0
Channel				371000	376000	381000	
Frequency (MHz)				1865	1880	1905	
10	P12 BPSK	1	1	23.00	23.03	23.01	24.0
Channel				370500	376000	381500	
Frequency (MHz)				1862.5	1880	1907.5	
5	P12 BPSK	1	1	23.01	23.02	22.91	24.0

n7							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	
Channel				502000	507000	512000	
Frequency (MHz)				2510	2535	2560	
20	P12 BPSK	1	1	18.17	18.18	18.14	
20	P12 BPSK	1	53	18.16	18.15	18.12	19.0
20	P12 BPSK	1	104	18.12	18.14	18.13	
20	P12 BPSK	50	0	18.11	18.12	18.10	19.0
20	P12 BPSK	50	28	18.12	18.15	18.11	19.0
20	P12 BPSK	50	56	18.09	18.10	18.08	19.0
20	P12 BPSK	100	0	18.10	18.13	18.11	
20	QPSK	1	1	18.14	18.17	18.14	
20	QPSK	1	53	18.13	18.15	18.11	19.0
20	QPSK	1	104	18.10	18.13	18.08	
20	QPSK	50	0	18.15	18.12	18.13	19.0
20	QPSK	50	28	18.09	18.16	18.08	19.0
20	QPSK	50	56	18.10	18.13	18.07	19.0
20	QPSK	100	0	18.11	18.14	18.09	
20	16QAM	1	1	18.12	18.16	18.10	19.0
20	64QAM	1	1	18.08	18.11	18.07	19.0
20	256QAM	1	1	18.02	18.05	18.00	19.0
Channel				501500	507000	512500	
Frequency (MHz)				2507.5	2535	2562.5	
15	P12 BPSK	1	1	18.10	18.13	18.12	19.0
Channel				501000	507000	513000	
Frequency (MHz)				2505	2535	2565	
10	P12 BPSK	1	1	18.11	18.14	18.10	19.0
Channel				500500	507000	513500	
Frequency (MHz)				2502.5	2535	2567.5	
5	P12 BPSK	1	1	18.09	18.13	18.11	19.0



n25											
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)			
Channel				372000	376500	381000	24.0	0.0			
Frequency (MHz)				1860	1862.5	1905					
20	PI2 BPSK	1	1	23.17	23.25	23.16					
20	PI2 BPSK	1	53	23.08	23.21	23.13					
20	PI2 BPSK	1	104	23.05	23.10	23.12	24.0	0.0			
20	PI2 BPSK	50	0	23.04	23.18	23.09					
20	PI2 BPSK	50	28	23.12	23.22	23.13					
20	PI2 BPSK	50	56	23.07	23.15	23.08					
20	PI2 BPSK	100	0	23.06	23.18	23.05	24.0	0.0			
20	QPSK	1	1	23.05	23.19	23.12					
20	QPSK	1	53	23.02	23.18	23.10					
20	QPSK	1	104	23.00	23.06	23.04					
20	QPSK	50	0	23.00	23.23	23.09	24.0	0.0			
20	QPSK	50	28	23.04	23.21	23.06					
20	QPSK	50	56	23.06	23.17	23.03					
20	QPSK	100	0	23.05	23.20	23.01					
20	16QAM	1	1	23.96	23.97	23.94	24.0	0.0			
20	64QAM	1	1	21.75	21.97	21.96					
20	256QAM	1	1	20.05	20.05	20.11					
20	256QAM	1	1	20.05	20.05	20.11					
Channel				371500	376500	381500	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)				1837.5	1862.5	1907.5	24.0	0.0			
15	PI2 BPSK	1	1	23.08	23.12	23.11					
Channel				371000	376500	382000	Tune-up limit (dBm)			MPR (dB)	
Frequency (MHz)				1865	1862.5	1910	24.0			0.0	
10	PI2 BPSK	1	1	23.04	23.15	23.13					
Channel				370500	376500	382500	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)				1862.5	1862.5	1912.5	24.0	0.0			
5	PI2 BPSK	1	1	22.89	23.03	22.91					

n66											
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)			
Channel				344000	349000	354000	24.4	0.0			
Frequency (MHz)				1720	1745	1770					
20	PI2 BPSK	1	1	23.65	23.71	23.68					
20	PI2 BPSK	1	53	23.63	23.66	23.66					
20	PI2 BPSK	1	104	23.58	23.70	23.66	24.4	0.0			
20	PI2 BPSK	50	0	23.60	23.62	23.63					
20	PI2 BPSK	50	28	23.67	23.69	23.60					
20	PI2 BPSK	50	56	23.35	23.67	23.61					
20	PI2 BPSK	100	0	23.34	23.68	23.39	24.4	0.0			
20	QPSK	1	1	23.81	23.65	23.60					
20	QPSK	1	53	23.59	23.62	23.56					
20	QPSK	1	104	23.56	23.32	23.35					
20	QPSK	50	0	22.98	22.95	23.04	24.4	0.0			
20	QPSK	50	28	23.63	23.66	23.65					
20	QPSK	50	56	23.10	23.14	23.09					
20	QPSK	100	0	23.04	23.07	23.05					
20	16QAM	1	1	22.36	22.97	23.02	24.4	1.0			
20	64QAM	1	1	21.49	21.53	21.50					
20	256QAM	1	1	20.19	20.25	20.10					
20	256QAM	1	1	20.19	20.25	20.10					
Channel				343500	349000	354500	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)				1717.5	1745	1772.5	24.4	0.0			
15	PI2 BPSK	1	1	23.35	23.60	23.56					
Channel				343000	349000	355000	Tune-up limit (dBm)			MPR (dB)	
Frequency (MHz)				1715	1745	1775	24.4			0.0	
10	PI2 BPSK	1	1	23.53	23.61	23.57					
Channel				342500	349000	355500	Tune-up limit (dBm)	MPR (dB)			
Frequency (MHz)				1712.5	1745	1777.5	24.4	0.0			
5	PI2 BPSK	1	1	23.40	23.48	23.47					



TEKEK-2023-01

n41_FCC								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				500202	518598	528000		
Frequency (MHz)				2548.01	2592.99	2640		
100	PI2 BPSK	1	1	17.17	17.19	17.15		
100	PI2 BPSK	1	137	17.14	17.11	17.13	18.1	0.0
100	PI2 BPSK	1	271	17.09	17.15	17.10		
100	PI2 BPSK	135	0	17.13	17.12	17.12		
100	PI2 BPSK	135	69	17.15	17.16	17.14	18.1	0.0
100	PI2 BPSK	135	138	17.14	17.13	17.12		
100	PI2 BPSK	270	0	17.12	17.15	17.11	18.1	0.0
100	QPSK	1	1	17.17	17.13	17.10		
100	QPSK	1	137	17.14	17.11	17.09	18.1	0.0
100	QPSK	1	271	17.15	17.14	17.04		
100	QPSK	135	0	17.16	17.07	17.15		
100	QPSK	135	69	17.12	17.09	17.14	18.1	0.0
100	QPSK	135	138	17.13	17.13	17.11		
100	QPSK	270	0	17.16	17.10	17.10	18.1	0.0
100	16QAM	1	1	17.16	17.16	17.15	18.1	0.0
100	64QAM	1	1	17.10	17.12	17.09	18.1	0.0
100	256QAM	1	1	17.09	17.13	17.04	18.1	0.0
Channel				508200	518598	528996	Tune-up limit (dBm)	MPR
Frequency (MHz)				2641	2692.99	2644.99		
90	PI2 BPSK	1	1	17.12	17.16	17.15	18.1	0.0
Channel				507204	518598	529998	Tune-up limit (dBm)	MPR
Frequency (MHz)				2536.02	2592.99	2649.99		
80	PI2 BPSK	1	1	17.10	17.13	17.12	18.1	0.0
Channel				506204	518598	530998	Tune-up limit (dBm)	MPR
Frequency (MHz)				2521.02	2592.99	2664.99		
50	PI2 BPSK	1	1	17.09	17.11	17.10	18.1	0.0
Channel				503202	518598	534000	Tune-up limit (dBm)	MPR
Frequency (MHz)				2514.01	2592.99	2691		
40	PI2 BPSK	1	1	17.09	17.10	17.09	18.1	0.0
Channel				502200	518598	534998	Tune-up limit (dBm)	MPR
Frequency (MHz)				2511	2592.99	2674.98		
30	PI2 BPSK	1	1	17.10	17.13	17.11	18.1	0.0
Channel				501204	518598	535998	Tune-up limit (dBm)	MPR
Frequency (MHz)				2506.02	2592.99	2679.99		
20	PI2 BPSK	1	1	17.06	17.11	17.08	18.1	0.0

n41(HPUE)_FCC								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				509202	518598	528000		
Frequency (MHz)				2548.01	2592.99	2640		
100	PI2 BPSK	1	1	17.13	17.18	17.10		
100	PI2 BPSK	1	137	17.10	17.09	17.08	18.1	0.0
100	PI2 BPSK	1	271	17.11	17.10	17.11		
100	PI2 BPSK	135	0	17.02	17.04	17.07		
100	PI2 BPSK	135	69	17.06	17.08	17.05	18.1	0.0
100	PI2 BPSK	135	138	17.07	17.07	17.02		
100	PI2 BPSK	270	0	17.03	17.05	17.00	18.1	0.0
100	QPSK	1	1	17.13	17.11	17.06		
100	QPSK	1	137	17.12	17.10	17.02	18.1	0.0
100	QPSK	1	271	17.08	17.09	17.03		
100	QPSK	135	0	17.09	17.04	17.03		
100	QPSK	135	69	17.05	17.09	17.00	18.1	0.0
100	QPSK	135	138	17.00	17.03	16.99		
100	QPSK	270	0	17.09	17.10	17.02	18.1	0.0
100	16QAM	1	1	17.12	17.15	17.11	18.1	0.0
100	64QAM	1	1	17.07	17.11	17.08	18.1	0.0
100	256QAM	1	1	17.06	17.08	17.05	18.1	0.0
Channel				508200	518598	528996	Tune-up limit (dBm)	MPR
Frequency (MHz)				2641	2592.99	2644.98		
90	PI2 BPSK	1	1	17.13	17.15	17.12	18.1	0.0
Channel				507204	518598	529998	Tune-up limit (dBm)	MPR
Frequency (MHz)				2536.02	2592.99	2649.99		
80	PI2 BPSK	1	1	17.14	17.13	17.08	18.1	0.0
Channel				506204	518598	532998	Tune-up limit (dBm)	MPR
Frequency (MHz)				2521.02	2592.99	2664.99		
50	PI2 BPSK	1	1	17.11	17.12	17.09	18.1	0.0
Channel				503202	518598	534000	Tune-up limit (dBm)	MPR
Frequency (MHz)				2516.01	2592.99	2691		
40	PI2 BPSK	1	1	17.14	17.16	17.13	18.1	0.0
Channel				502200	518598	534998	Tune-up limit (dBm)	MPR
Frequency (MHz)				2511	2592.99	2674.98		
30	PI2 BPSK	1	1	17.09	17.13	17.14	18.1	0.0
Channel				501204	518598	535998	Tune-up limit (dBm)	MPR
Frequency (MHz)				2506.02	2592.99	2679.99		
20	PI2 BPSK	1	1	17.15	17.14	17.16	18.1	0.0

n77								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq	Power Middle Ch. / Freq	Power High Ch. / Freq	Tune-up limit (dBm)	MPR (dB)
Channel				650000	666000	682000		
Frequency (MHz)				3750	3840	3930		
100	PI2 BPSK	1	1	19.28	19.55	19.48		
100	PI2 BPSK	1	137	19.18	19.52	19.26	20.6	0.0
100	PI2 BPSK	1	271	19.10	19.37	19.25		
100	PI2 BPSK	135	0	19.02	19.35	19.28		
100	PI2 BPSK	135	69	19.25	19.52	19.45	20.6	0.0
100	PI2 BPSK	135	138	19.12	19.13	19.10		
100	PI2 BPSK	270	0	19.23	19.50	19.44	20.6	0.0
100	QPSK	1	1	19.26	19.40	19.27		
100	QPSK	1	137	19.07	19.14	19.21	20.6	0.0
100	QPSK	1	271	19.03	19.16	19.15		
100	QPSK	135	0	19.07	19.10	18.98		
100	QPSK	135	69	19.11	19.02	19.04	20.6	0.0
100	QPSK	135	138	19.04	19.11	19.06		
100	QPSK	270	0	19.13	19.04	19.03	20.6	0.0
100	16QAM	1	1	19.71	19.50	19.57	20.6	0.0
100	64QAM	1	1	19.67	19.32	19.13	20.6	0.0
100	256QAM	1	1	19.06	19.21	19.08	21.6	0.0
Channel				649698	666000	682334	Tune-up limit (dBm)	MPR
Frequency (MHz)				3745.02	3840	3935.01		
90	PI2 BPSK	1	1	19.25	19.50	19.49	20.6	0.0
Channel				648334	666000	682698	Tune-up limit (dBm)	MPR
Frequency (MHz)				3740.01	3840	3940.02		
80	PI2 BPSK	1	1	19.23	19.49	19.47	20.6	0.0
Channel				647698	666000	683334	Tune-up limit (dBm)	MPR
Frequency (MHz)				3730.02	3840	3950.01		
60	PI2 BPSK	1	1	19.24	19.46	19.45	20.6	0.0
Channel				646334	666000	683998	Tune-up limit (dBm)	MPR
Frequency (MHz)				3725.01	3840	3955.02		
50	PI2 BPSK	1	1	19.26	19.51	19.48	20.6	0.0
Channel				646000	666000	684000	Tune-up limit (dBm)	MPR
Frequency (MHz)				3720	3840	3960		
40	PI2 BPSK	1	1	19.25	19.47	19.45	20.6	0.0
Channel				645698	666000	684334	Tune-up limit (dBm)	MPR
Frequency (MHz)				3715.02	3840	3965.01		
30	PI2 BPSK	1	1	19.20	19.48	19.44	20.6	0.0
Channel				647334	666000	684698	Tune-up limit (dBm)	MPR
Frequency (MHz)				3710.01	3840	3970.02		
20	PI2 BPSK	1	1	19.21	19.44	19.43	20.6	0.0



Full Power Mode - LAT

n2									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. [Freq.]	Power Middle Ch. [Freq.]	Power High Ch. [Freq.]	Tune-up limit (dBm)	MPR (dB)	
Channel				372000	376000	380000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1860	1860	1900			
20	PI2 BPSK	1	1	24.02	24.06	24.00			
20	PI2 BPSK	1	53	23.97	24.03	23.99			
20	PI2 BPSK	1	104	24.00	24.01	23.96	24.8	0.0	
20	PI2 BPSK	50	0	23.43	23.54	23.32	24.3	0.5	
20	PI2 BPSK	50	26	23.97	24.02	23.95	24.8	0.0	
20	PI2 BPSK	50	56	23.50	23.54	23.50	24.3	0.5	
20	PI2 BPSK	100	0	23.48	23.51	23.43	24.3	0.5	
20	QPSK	1	1	24.01	23.99	23.97	24.8	0.0	
20	QPSK	1	53	24.03	24.00	24.05			
20	QPSK	1	104	24.05	24.05	24.02			
20	QPSK	50	0	23.97	23.91	22.90			
20	QPSK	50	26	23.97	24.05	24.01	24.8	0.0	
20	QPSK	50	56	22.93	23.04	23.01	23.8	1.0	
20	QPSK	100	0	22.97	23.05	23.00	23.8	1.0	
20	16QAM	1	1	23.31	23.02	23.20	23.8	1.0	
20	16QAM	1	1	21.48	21.34	21.40	22.3	2.5	
20	256QAM	1	1	19.27	19.47	19.23	20.3	4.5	
Channel				371500	376000	380500	Tune-up limit (dBm)	MPR	
15	PI2 BPSK	1	1	193.75	1940	1927.5	24.8	0.0	
Channel				371000	376000	381000	Tune-up limit (dBm)	MPR (dB)	
10	PI2 BPSK	1	1	23.83	23.89	23.85	24.8	0.0	
Channel				370500	376000	381500	Tune-up limit (dBm)	MPR (dB)	
5	PI2 BPSK	1	1	23.84	23.93	23.85	24.8	0.0	

n5									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. [Freq.]	Power Middle Ch. [Freq.]	Power High Ch. [Freq.]	Tune-up limit (dBm)	MPR (dB)	
Channel				166800	167300	167800	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				834	836.5	839			
20	PI2 BPSK	1	1	23.73	23.79	23.73			
20	PI2 BPSK	1	53	23.67	23.64	23.69			
20	PI2 BPSK	1	104	23.60	23.54	23.58	24.3	0.0	
20	PI2 BPSK	50	0	23.17	23.10	23.15	23.8	0.5	
20	PI2 BPSK	50	26	23.68	23.70	23.65	24.3	0.0	
20	PI2 BPSK	50	56	23.15	23.07	23.06	23.8	0.5	
20	PI2 BPSK	100	0	23.12	23.15	23.10	23.8	0.5	
20	QPSK	1	1	23.73	23.67	23.60	24.3	0.0	
20	QPSK	1	53	23.70	23.74	23.59			
20	QPSK	1	104	23.66	23.61	23.46			
20	QPSK	50	0	23.63	23.56	23.73			
20	QPSK	50	26	23.60	23.55	23.61	24.3	0.0	
20	QPSK	50	56	22.84	22.67	22.99	23.3	1.0	
20	QPSK	100	0	23.70	22.70	22.67	23.3	1.0	
20	16QAM	1	1	22.81	22.46	22.49	23.3	1.0	
20	16QAM	1	1	21.05	21.04	20.71	21.8	2.5	
20	256QAM	1	1	18.97	18.82	18.86	19.8	4.5	
Channel				166300	167300	168300	Tune-up limit (dBm)	MPR (dB)	
15	PI2 BPSK	1	1	831.5	839.5	841.5	24.3	0.0	
Channel				165800	167300	168800	Tune-up limit (dBm)	MPR (dB)	
10	PI2 BPSK	1	1	23.65	23.62	23.58	24.3	0.0	
Channel				165300	167300	168300	Tune-up limit (dBm)	MPR (dB)	
5	PI2 BPSK	1	1	23.65	23.67	23.64	24.3	0.0	

n7									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. [Freq.]	Power Middle Ch. [Freq.]	Power High Ch. [Freq.]	Tune-up limit (dBm)	MPR (dB)	
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2510	2535	2560			
20	PI2 BPSK	1	1	24.08	24.15	24.05			
20	PI2 BPSK	1	53	23.99	24.08	24.03			
20	PI2 BPSK	1	104	24.08	24.08	24.01	24.8	0.0	
20	PI2 BPSK	50	0	23.46	23.58	23.49	24.3	0.5	
20	PI2 BPSK	50	26	24.02	24.10	24.00	24.8	0.0	
20	PI2 BPSK	50	56	23.45	23.58	23.47	24.3	0.5	
20	PI2 BPSK	100	0	23.45	23.60	23.47	24.3	0.5	
20	QPSK	1	1	24.11	24.07	24.11	24.8	0.0	
20	QPSK	1	53	24.10	24.02	24.13			
20	QPSK	1	104	24.12	24.05	24.06			
20	QPSK	50	0	23.05	23.12	23.03			
20	QPSK	50	26	24.03	24.05	24.05	24.8	0.0	
20	QPSK	50	56	22.88	23.10	23.04	23.8	1.0	
20	QPSK	100	0	22.99	23.05	23.05	23.8	1.0	
20	16QAM	1	1	22.34	22.12	22.46	23.8	1.0	
20	16QAM	1	1	21.07	21.31	21.53	22.3	2.5	
20	256QAM	1	1	19.33	19.23	19.37	20.3	4.5	
Channel				501500	507000	512500	Tune-up limit (dBm)	MPR (dB)	
15	PI2 BPSK	1	1	2507.5	2535	2562.5	24.8	0.0	
Channel				501000	507000	513000	Tune-up limit (dBm)	MPR (dB)	
10	PI2 BPSK	1	1	24.04	24.08	24.03	24.8	0.0	
Channel				500500	507000	513500	Tune-up limit (dBm)	MPR (dB)	
5	PI2 BPSK	1	1	24.05	24.09	24.01	24.8	0.0	



n25							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	
Channel				372000	376000	381000	
Frequency (MHz)				1860	1862.5	1905	
20	PI2 BPSK	1	1	23.02	24.06	24.01	
20	PI2 BPSK	1	53	23.86	24.05	23.99	24.8
20	PI2 BPSK	1	104	23.83	23.95	23.89	
20	PI2 BPSK	50	0	23.21	23.43	23.41	24.3
20	PI2 BPSK	50	28	23.89	24.03	23.95	24.8
20	PI2 BPSK	50	56	23.26	23.47	23.37	
20	PI2 BPSK	100	0	23.38	23.52	23.44	24.3
20	QPSK	1	1	23.78	23.99	23.98	
20	QPSK	1	53	23.93	23.96	24.00	24.8
20	QPSK	1	104	23.92	23.98	23.42	
20	QPSK	50	0	22.79	22.97	22.86	23.8
20	QPSK	50	28	23.80	24.01	24.00	24.8
20	QPSK	50	56	22.74	22.96	22.91	
20	QPSK	100	0	22.76	23.00	23.00	23.8
20	16QAM	1	1	21.07	22.89	21.86	23.8
20	16QAM	1	1	21.25	21.21	21.44	22.3
20	256QAM	1	1	19.21	19.51	19.35	20.3
Channel				371500	376500	381500	
Frequency (MHz)				1857.5	1862.5	1907.5	
15	PI2 BPSK	1	1	23.83	23.07	23.93	24.8
Channel				371000	376000	382000	
Frequency (MHz)				1865	1862.5	1910	
10	PI2 BPSK	1	1	23.84	24.00	23.95	24.8
Channel				370500	376000	382000	
Frequency (MHz)				1862.5	1862.5	1912.5	
5	PI2 BPSK	1	1	23.80	23.93	23.91	24.8

n66							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	
Channel				344000	349000	354000	
Frequency (MHz)				1720	1745	1770	
20	PI2 BPSK	1	1	24.07	24.09	24.00	
20	PI2 BPSK	1	53	23.95	23.94	23.94	24.8
20	PI2 BPSK	1	104	24.03	23.97	23.91	
20	PI2 BPSK	50	0	23.50	23.47	23.43	24.3
20	PI2 BPSK	50	28	24.00	24.03	23.97	24.8
20	PI2 BPSK	50	56	23.43	23.43	23.40	
20	PI2 BPSK	100	0	23.41	23.44	23.37	24.3
20	QPSK	1	1	24.03	24.02	23.21	
20	QPSK	1	53	23.93	23.94	23.78	24.8
20	QPSK	1	104	23.37	23.38	23.95	
20	QPSK	50	0	23.04	23.01	23.37	23.8
20	QPSK	50	28	23.90	23.95	23.65	24.8
20	QPSK	50	56	22.73	22.92	22.88	
20	QPSK	100	0	22.94	22.97	22.57	23.8
20	16QAM	1	1	22.97	23.01	22.21	23.8
20	16QAM	1	1	21.44	21.22	20.38	22.3
20	256QAM	1	1	19.47	19.53	18.63	20.3
Channel				343500	349000	354000	
Frequency (MHz)				1717.5	1745	1772.5	
15	PI2 BPSK	1	1	23.94	24.06	23.94	24.8
Channel				343000	349000	353000	
Frequency (MHz)				1715	1745	1775	
10	PI2 BPSK	1	1	23.95	24.03	23.94	24.8
Channel				342500	349000	353000	
Frequency (MHz)				1712.5	1745	1777.5	
5	PI2 BPSK	1	1	23.90	24.00	23.93	24.8

n71							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	
Channel				134600	136100	137600	
Frequency (MHz)				673	680.5	688	
20	PI2 BPSK	1	1	24.06	24.08	23.93	
20	PI2 BPSK	1	53	23.98	23.84	23.83	24.8
20	PI2 BPSK	1	104	23.84	23.73	23.55	
20	PI2 BPSK	50	0	23.44	23.40	23.34	24.3
20	PI2 BPSK	50	28	23.99	24.02	23.88	24.8
20	PI2 BPSK	50	56	23.46	23.24	23.19	
20	PI2 BPSK	100	0	23.42	23.47	23.36	24.3
20	QPSK	1	1	24.04	24.05	24.02	
20	QPSK	1	53	23.93	23.94	23.77	24.8
20	QPSK	1	104	23.88	23.80	23.71	
20	QPSK	50	0	23.17	22.91	22.87	23.8
20	QPSK	50	28	23.96	23.84	23.75	24.8
20	QPSK	50	56	22.98	22.88	22.74	
20	QPSK	100	0	23.01	22.88	22.76	23.8
20	16QAM	1	1	23.31	22.86	20.83	23.8
20	16QAM	1	1	21.41	21.28	21.07	22.3
20	256QAM	1	1	19.44	19.27	18.19	20.3
Channel				134100	136100	138100	
Frequency (MHz)				670.5	680.5	690.5	
15	PI2 BPSK	1	1	23.91	23.94	23.87	24.8
Channel				133600	136100	138600	
Frequency (MHz)				668	680.5	693	
10	PI2 BPSK	1	1	23.82	23.83	23.78	24.8
Channel				133100	136100	139100	
Frequency (MHz)				665.5	680.5	695.5	
5	PI2 BPSK	1	1	23.85	23.88	23.82	24.8



n41_FCC								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				509202	518598	528000		
Frequency (MHz)				2546.01	2592.99	2640		
100	PI2 BPSK	1	1	23.98	24.00	23.94		
100	PI2 BPSK	1	137	23.89	23.96	23.84	24.8	0.0
100	PI2 BPSK	1	271	23.82	23.97	23.83		
100	PI2 BPSK	135	0	23.77	23.91	23.89		
100	PI2 BPSK	135	69	23.91	23.95	23.93	24.8	0.0
100	PI2 BPSK	135	135	23.90	23.93	23.89		
100	PI2 BPSK	270	0	23.88	23.92	23.90	24.8	0.0
100	QPSK	1	1	23.85	23.93	23.92		
100	QPSK	1	137	23.97	23.98	23.98	24.8	0.0
100	QPSK	1	271	23.98	23.93	23.97		
100	QPSK	135	0	23.25	23.40	23.48		
100	QPSK	135	69	23.91	23.96	23.95	24.8	0.0
100	QPSK	135	135	23.41	23.40	23.62		
100	QPSK	270	0	23.36	23.40	23.60	24.8	0.0
100	16QAM	1	1	23.15	23.10	23.14	24.3	0.5
100	64QAM	1	1	21.72	21.89	21.75	22.8	2.0
100	256QAM	1	1	19.77	19.74	19.76	20.9	4.0
Channel				508200	518598	528996	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2541	2592.99	2644.98		
90	PI2 BPSK	1	1	23.92	23.95	23.90	24.8	0.0
Channel				507204	518598	529998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2536.02	2592.99	2649.99		
80	PI2 BPSK	1	1	23.83	23.88	23.82	24.8	0.0
Channel				506204	518598	530998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2521.02	2592.99	2664.99		
50	PI2 BPSK	1	1	23.87	23.93	23.85	24.8	0.0
Channel				503202	518598	534000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2516.01	2592.99	2670		
40	PI2 BPSK	1	1	23.91	23.98	23.90	24.8	0.0
Channel				502200	518598	534996	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2511	2592.99	2674.98		
30	PI2 BPSK	1	1	23.94	23.97	23.95	24.8	0.0
Channel				501204	518598	535000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2506.02	2592.99	2679.99		
20	PI2 BPSK	1	1	23.93	23.96	23.92	24.8	0.0

n41(HPUE)_FCC								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				509202	518598	528000		
Frequency (MHz)				2546.01	2592.99	2640		
100	PI2 BPSK	1	1	25.84	26.00	25.94		
100	PI2 BPSK	1	137	25.78	25.90	25.91	26.8	0.0
100	PI2 BPSK	1	271	25.75	25.99	25.84		
100	PI2 BPSK	135	0	25.63	25.85	25.82		
100	PI2 BPSK	135	69	25.81	25.94	25.90	26.8	0.0
100	PI2 BPSK	135	135	25.77	25.94	25.89		
100	PI2 BPSK	270	0	25.80	25.90	25.88	26.8	0.0
100	QPSK	1	1	25.66	25.89	25.77		
100	QPSK	1	137	25.83	25.97	25.95	26.8	0.0
100	QPSK	1	271	25.71	25.99	25.98		
100	QPSK	135	0	25.18	25.44	25.21		
100	QPSK	135	69	25.77	25.98	25.99	26.8	0.0
100	QPSK	135	135	25.40	25.00	25.45		
100	QPSK	270	0	25.38	25.33	25.32	26.8	0.0
100	16QAM	1	1	25.18	25.20	24.45	26.3	0.5
100	64QAM	1	1	23.50	23.90	22.89	24.3	2.5
100	256QAM	1	1	21.41	21.76	21.47	22.3	4.5
Channel				508200	518598	528996	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2541	2592.99	2644.98		
90	PI2 BPSK	1	1	25.81	25.95	25.85	26.8	0.0
Channel				507204	518598	529998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2536.02	2592.99	2649.99		
80	PI2 BPSK	1	1	25.77	25.87	25.80	26.8	0.0
Channel				506204	518598	530998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2521.02	2592.99	2664.99		
50	PI2 BPSK	1	1	25.84	25.98	25.90	26.8	0.0
Channel				503202	518598	534000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2516.01	2592.99	2670		
40	PI2 BPSK	1	1	25.80	25.92	25.84	26.8	0.0
Channel				502200	518598	534996	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2511	2592.99	2674.98		
30	PI2 BPSK	1	1	25.83	25.93	25.88	26.8	0.0
Channel				501204	518598	535000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2506.02	2592.99	2679.99		
20	PI2 BPSK	1	1	25.81	25.95	25.87	26.8	0.0



Reduced power for Hotspot on-LAT

n2								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Mid-H Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				372000	376000	380000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1860	1880	1900		
20	PI2 BPSK	1	1	20.54	20.56	20.43	21.5	0.0
20	PI2 BPSK	1	53	20.51	20.50	20.42		
20	PI2 BPSK	1	104	20.49	20.48	20.40	21.5	0.0
20	PI2 BPSK	50	0	20.40	20.42	20.33		
20	PI2 BPSK	50	28	20.42	20.48	20.40	21.5	0.0
20	PI2 BPSK	50	56	20.45	20.46	20.39		
20	PI2 BPSK	100	0	20.40	20.45	20.37	21.5	0.0
20	QPSK	1	1	20.49	20.52	20.53		
20	QPSK	1	53	20.47	20.50	20.48	21.5	0.0
20	QPSK	1	104	20.45	20.48	20.49		
20	QPSK	50	0	20.50	20.52	20.48	21.5	0.0
20	QPSK	50	28	20.48	20.51	20.50		
20	QPSK	50	56	20.46	20.48	20.47	21.5	0.0
20	QPSK	100	0	20.47	20.52	20.46		
20	16QAM	1	1	20.48	20.45	20.50	21.5	0.0
20	64QAM	1	1	20.50	20.53	20.54		
20	256QAM	1	1	20.05	20.12	20.08	21.5	0.0
Channel				371500	376000	380500		
Frequency (MHz)				1857.5	1880	1902.5	Tune-up limit (dBm)	MPR (dB)
15	PI2 BPSK	1	1	20.44	20.50	20.48	21.5	0.0
Channel				371000	376000	381000		
Frequency (MHz)				1865	1880	1905	Tune-up limit (dBm)	MPR (dB)
10	PI2 BPSK	1	1	20.45	20.49	20.46	21.5	0.0
Channel				370500	375000	380000		
Frequency (MHz)				1862.5	1880	1907.5	Tune-up limit (dBm)	MPR (dB)
5	PI2 BPSK	1	1	20.41	20.42	20.40	21.5	0.0

n7								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Mid-H Ch./Freq.	Power High Ch./Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				502000	507000	512000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2510	2535	2560		
20	PI2 BPSK	1	1	20.18	20.20	20.14	21.0	0.0
20	PI2 BPSK	1	53	20.15	20.16	20.13		
20	PI2 BPSK	1	104	20.14	20.15	20.12	21.0	0.0
20	PI2 BPSK	50	0	20.11	20.14	20.06		
20	PI2 BPSK	50	28	20.15	20.18	20.11	21.0	0.0
20	PI2 BPSK	50	56	20.13	20.07	20.01		
20	PI2 BPSK	100	0	20.13	20.16	20.09	21.0	0.0
20	QPSK	1	1	20.12	20.18	20.15		
20	QPSK	1	53	20.10	20.14	20.13	21.0	0.0
20	QPSK	1	104	20.13	20.12	20.10		
20	QPSK	50	0	20.12	20.15	20.16	21.0	0.0
20	QPSK	50	28	20.14	20.14	20.12		
20	QPSK	50	56	19.85	20.02	20.01	21.0	0.0
20	QPSK	100	0	19.89	20.11	20.10		
20	16QAM	1	1	20.10	20.10	20.11	21.0	0.0
20	64QAM	1	1	20.05	20.08	20.04		
20	256QAM	1	1	20.12	20.17	20.13	21.0	0.0
Channel				501500	507000	512500		
Frequency (MHz)				2507.5	2535	2562.5	Tune-up limit (dBm)	MPR (dB)
15	PI2 BPSK	1	1	20.14	20.15	20.13	21.0	0.0
Channel				501000	507000	513000		
Frequency (MHz)				2505	2535	2565	Tune-up limit (dBm)	MPR (dB)
10	PI2 BPSK	1	1	20.11	20.12	20.09	21.0	0.0
Channel				500500	507000	513500		
Frequency (MHz)				2502.5	2535	2567.5	Tune-up limit (dBm)	MPR (dB)
5	PI2 BPSK	1	1	20.09	20.11	20.09	21.0	0.0



n25									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				372000	376500	381500			
Frequency (MHz)				1600	1682.5	1765			
20	PI2 BPSK	1	1	20.41	20.56	20.49	21.5	0.0	
20	PI2 BPSK	1	53	20.35	20.50	20.43			
20	PI2 BPSK	1	104	20.36	20.42	20.42			
20	PI2 BPSK	50	0	20.33	20.51	20.45	21.5	0.0	
20	PI2 BPSK	50	28	20.40	20.54	20.47	21.5	0.0	
20	PI2 BPSK	50	56	20.32	20.47	20.39	21.5	0.0	
20	PI2 BPSK	100	0	20.38	20.52	20.45			
20	QPSK	1	1	20.40	20.47	20.43			
20	QPSK	1	53	20.43	20.50	20.46	21.5	0.0	
20	QPSK	1	104	20.52	20.59	20.44	21.5	0.0	
20	QPSK	50	0	20.41	20.51	20.50			
20	QPSK	50	28	20.40	20.49	20.48			
20	QPSK	50	56	20.41	20.48	20.45	21.5	0.0	
20	QPSK	100	0	20.44	20.50	20.44	21.5	0.0	
20	16QAM	1	1	20.36	20.41	20.38			
20	64QAM	1	1	20.40	20.49	20.50			
20	256QAM	1	1	20.05	20.10	20.08	21.5	0.0	
Channel				371500	376500	381500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1637.5	1692.5	1677.5			
15	PI2 BPSK	1	1	20.46	20.49	20.44	21.5	0.0	
Channel				371000	376500	382000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1605	1682.5	1710			
10	PI2 BPSK	1	1	20.37	20.42	20.39	21.5	0.0	
Channel				370500	376500	382500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1612.5	1692.5	1712.5			
5	PI2 BPSK	1	1	20.40	20.41	20.38	21.5	0.0	

n66									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				344000	348000	354000			
Frequency (MHz)				1720	1745	1770			
20	PI2 BPSK	1	1	20.07	20.14	20.03	21.0	0.0	
20	PI2 BPSK	1	53	20.03	20.04	19.97			
20	PI2 BPSK	1	104	20.01	20.06	19.96			
20	PI2 BPSK	50	0	19.99	19.97	19.98	21.0	0.0	
20	PI2 BPSK	50	28	20.05	20.11	20.00	21.0	0.0	
20	PI2 BPSK	50	56	19.97	20.01	19.91	21.0	0.0	
20	PI2 BPSK	100	0	20.02	20.09	19.97			
20	QPSK	1	1	20.01	20.09	20.00			
20	QPSK	1	53	20.06	20.11	19.97	21.0	0.0	
20	QPSK	1	104	20.00	20.03	19.99	21.0	0.0	
20	QPSK	50	0	20.03	20.10	20.02			
20	QPSK	50	28	19.92	20.02	19.96			
20	QPSK	50	56	19.91	20.00	19.95	21.0	0.0	
20	QPSK	100	0	20.01	20.07	19.98	21.0	0.0	
20	16QAM	1	1	19.96	20.01	19.96			
20	64QAM	1	1	20.01	20.09	19.96			
20	256QAM	1	1	20.08	20.10	19.84	21.0	0.0	
Channel				343500	349000	354500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1717.5	1745	1722.5	21.0	0.0	
15	PI2 BPSK	1	1	19.94	19.90	19.95	21.0	0.0	
Channel				343000	348000	353000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1715	1745	1775	21.0	0.0	
10	PI2 BPSK	1	1	19.85	19.84	19.82	21.0	0.0	
Channel				342500	349000	356500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1712.5	1745	1777.5	21.0	0.0	
5	PI2 BPSK	1	1	19.86	19.88	19.85	21.0	0.0	



n41_FCC								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				509202	518598	528000		
Frequency (MHz)				2546.01	2592.99	2640		
100	PI2 BPSK	1	1	20.20	20.25	20.19		
100	PI2 BPSK	1	137	20.19	20.20	20.16	21.2	0.0
100	PI2 BPSK	1	271	20.17	20.21	20.14		
100	PI2 BPSK	135	0	20.15	20.17	20.13		
100	PI2 BPSK	135	69	20.18	20.22	20.16	21.2	0.0
100	PI2 BPSK	135	138	20.14	20.16	20.13		
100	PI2 BPSK	270	0	20.15	20.20	20.13	21.2	0.0
100	QPSK	1	1	20.13	20.16	20.12		
100	QPSK	1	137	20.12	20.14	20.11	21.2	0.0
100	QPSK	1	271	20.10	20.13	20.10		
100	QPSK	135	0	20.11	20.15	20.13		
100	QPSK	135	69	20.13	20.16	20.12	21.2	0.0
100	QPSK	135	138	20.11	20.14	20.09		
100	QPSK	270	0	20.09	20.17	20.13	21.2	0.0
100	16QAM	1	1	20.14	20.15	20.09	21.2	0.0
100	64QAM	1	1	20.12	20.14	20.10	21.2	0.0
100	256QAM	1	1	19.89	20.00	19.96	21.2	0.0
Channel				508200	518598	528996	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2541	2592.99	2644.98		
80	PI2 BPSK	1	1	19.99	19.98	20.11	21.2	0.0
Channel				507204	518598	529998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2536.02	2592.99	2649.99		
80	PI2 BPSK	1	1	19.98	19.99	20.04	21.2	0.0
Channel				506204	518598	530998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2521.02	2592.99	2664.99		
50	PI2 BPSK	1	1	19.99	19.98	19.96	21.2	0.0
Channel				503202	518598	534000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2516.01	2592.99	2670		
40	PI2 BPSK	1	1	20.05	20.06	20.02	21.2	0.0
Channel				502200	518598	534996	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2511	2592.99	2674.98		
30	PI2 BPSK	1	1	20.00	20.08	20.03	21.2	0.0
Channel				501204	518598	535000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2506.02	2592.99	2679.99		
20	PI2 BPSK	1	1	20.01	19.97	19.93	21.2	0.0

n41(HPUE)_FCC								
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				509202	518598	528000		
Frequency (MHz)				2546.01	2592.99	2640		
100	PI2 BPSK	1	1	20.13	20.16	20.11		
100	PI2 BPSK	1	137	20.11	20.13	20.06	21.2	0.0
100	PI2 BPSK	1	271	20.09	20.14	20.08		
100	PI2 BPSK	135	0	20.07	20.10	20.06		
100	PI2 BPSK	135	69	20.10	20.12	20.09	21.2	0.0
100	PI2 BPSK	135	138	20.08	20.07	20.07		
100	PI2 BPSK	270	0	20.08	20.10	20.07	21.2	0.0
100	QPSK	1	1	20.06	20.11	20.04		
100	QPSK	1	137	20.03	20.05	20.11	21.2	0.0
100	QPSK	1	271	20.04	20.07	20.10		
100	QPSK	135	0	20.08	20.10	20.08		
100	QPSK	135	69	20.06	20.09	20.06	21.2	0.0
100	QPSK	135	138	20.05	20.07	20.05		
100	QPSK	270	0	20.02	20.06	20.04	21.2	0.0
100	16QAM	1	1	20.06	20.10	20.03	21.2	0.0
100	64QAM	1	1	20.06	20.09	20.07	21.2	0.0
100	256QAM	1	1	20.05	20.06	20.03	21.2	0.0
Channel				508200	518598	528996	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2541	2592.99	2644.98		
80	PI2 BPSK	1	1	20.06	20.11	20.07	21.2	0.0
Channel				507204	518598	529998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2536.02	2592.99	2649.99		
80	PI2 BPSK	1	1	20.04	20.07	20.05	21.2	0.0
Channel				506204	518598	530998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2521.02	2592.99	2664.99		
50	PI2 BPSK	1	1	20.02	20.09	20.05	21.2	0.0
Channel				503202	518598	534000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2516.01	2592.99	2670		
40	PI2 BPSK	1	1	20.04	20.05	20.02	21.2	0.0
Channel				502200	518598	534996	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2511	2592.99	2674.98		
30	PI2 BPSK	1	1	20.04	20.06	20.03	21.2	0.0
Channel				501204	518598	535000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2506.02	2592.99	2679.99		
20	PI2 BPSK	1	1	20.00	20.04	20.01	21.2	0.0



Reduced power for Sensor on-LAT

n2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Mid Ch. / Freq.	Power High Ch. / Freq.	
Channel				372000	376000	380000	
Frequency (MHz)				1865	1880	1905	
20	PI2 BPSK	1	1	20.03	20.04	19.92	
20	PI2 BPSK	1	53	20.00	20.01	19.90	21.3
20	PI2 BPSK	1	104	19.96	19.97	19.89	
20	PI2 BPSK	50	0	19.97	19.98	19.87	0.0
20	PI2 BPSK	50	28	20.00	20.01	19.90	21.3
20	PI2 BPSK	50	56	19.94	19.97	19.86	
20	PI2 BPSK	100	0	19.98	19.99	19.88	21.3
20	QPSK	1	1	19.95	20.02	19.90	
20	QPSK	1	53	19.94	19.97	19.88	21.3
20	QPSK	1	104	19.90	19.92	19.86	
20	QPSK	50	0	19.93	19.97	19.80	21.3
20	QPSK	50	28	19.92	19.95	19.87	21.3
20	QPSK	50	56	19.90	19.96	19.86	
20	QPSK	100	0	19.97	19.99	19.88	21.3
20	16QAM	1	1	19.98	19.99	19.89	21.3
20	64QAM	1	1	19.99	20.01	19.90	21.3
20	256QAM	1	1	19.98	20.00	19.93	21.3
Channel				371500	376000	380500	
Frequency (MHz)				1857.5	1880	1902.5	
15	PI2 BPSK	1	1	19.99	20.00	19.93	21.3
Channel				371000	376000	381000	
Frequency (MHz)				1865	1880	1905	
10	PI2 BPSK	1	1	19.96	19.98	19.90	21.3
Channel				370500	376000	381500	
Frequency (MHz)				1862.5	1880	1907.5	
5	PI2 BPSK	1	1	19.92	19.95	19.88	21.3

n7							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Mid Ch. / Freq.	Power High Ch. / Freq.	
Channel				502000	507000	512000	
Frequency (MHz)				2515	2535	2560	
20	PI2 BPSK	1	1	18.83	18.87	18.80	
20	PI2 BPSK	1	53	18.82	18.85	18.78	19.8
20	PI2 BPSK	1	104	18.80	18.80	18.75	
20	PI2 BPSK	50	0	18.77	18.82	18.73	19.8
20	PI2 BPSK	50	28	18.81	18.85	18.78	19.8
20	PI2 BPSK	50	56	18.76	18.80	18.73	
20	PI2 BPSK	100	0	18.79	18.82	18.75	19.8
20	QPSK	1	1	18.75	18.83	18.79	
20	QPSK	1	53	18.73	18.79	18.77	19.8
20	QPSK	1	104	18.69	18.70	18.67	
20	QPSK	50	0	18.76	18.81	18.81	19.8
20	QPSK	50	28	18.80	18.82	18.79	19.8
20	QPSK	50	56	18.81	18.80	18.78	
20	QPSK	100	0	18.87	18.81	18.79	19.8
20	16QAM	1	1	18.73	18.80	18.78	19.8
20	64QAM	1	1	18.72	18.77	18.72	19.8
20	256QAM	1	1	18.80	18.81	18.76	19.8
Channel				501500	507000	512500	
Frequency (MHz)				2507.5	2535	2562.5	
15	PI2 BPSK	1	1	18.80	18.82	18.79	19.8
Channel				501000	507000	513000	
Frequency (MHz)				2505	2535	2565	
10	PI2 BPSK	1	1	18.75	18.78	18.75	19.8
Channel				500500	507000	513500	
Frequency (MHz)				2502.5	2535	2567.5	
5	PI2 BPSK	1	1	18.73	18.76	18.71	19.8



n25									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				372000	376500	381000	21.3	0.0	
Frequency (MHz)				1860	1862.5	1905			
20	PI2 BPSK	1	1	19.93	20.09	20.02	21.3	0.0	
20	PI2 BPSK	1	53	19.90	20.07	19.99			
20	PI2 BPSK	1	104	19.91	20.04	20.00	21.3	0.0	
20	PI2 BPSK	50	0	19.83	20.03	19.98			
20	PI2 BPSK	50	28	19.90	20.07	19.99	21.3	0.0	
20	PI2 BPSK	50	56	19.82	19.99	19.90			
20	PI2 BPSK	100	0	19.88	20.05	19.97	21.3	0.0	
20	QPSK	1	1	19.93	20.02	19.97			
20	QPSK	1	53	19.92	20.01	19.96	21.3	0.0	
20	QPSK	1	104	19.91	19.99	19.94			
20	QPSK	50	0	19.86	19.95	19.96	21.3	0.0	
20	QPSK	50	28	19.86	19.97	19.95			
20	QPSK	50	56	19.87	19.96	19.92	21.3	0.0	
20	QPSK	100	0	19.86	20.03	19.96			
20	16QAM	1	1	19.96	20.05	20.01	21.3	0.0	
20	64QAM	1	1	19.91	20.02	19.92			
20	256QAM	1	1	19.98	19.65	19.82	21.3	0.0	
Channel				371500	376500	381500			
Frequency (MHz)				1872.5	1892.5	1927.5	21.3	0.0	
15	PI2 BPSK	1	1	20.00	20.07	20.03			
Channel				371000	376500	382000	21.3	0.0	
Frequency (MHz)				1865	1862.5	1910			
10	PI2 BPSK	1	1	19.97	20.03	19.96	21.3	0.0	
Channel				370500	376500	382000			
Frequency (MHz)				1892.5	1892.5	1912.5	21.3	0.0	
5	PI2 BPSK	1	1	19.95	19.98	19.94			

n66									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq.	Power Middle Ch. Freq.	Power High Ch. Freq.	Tune-up limit (dBm)	MPR (db)	
Channel				344000	349000	354000	22.0	0.0	
Frequency (MHz)				17250	17450	17710			
20	PI2 BPSK	1	1	21.03	21.06	21.01	22.0	0.0	
20	PI2 BPSK	1	53	21.01	21.04	20.96			
20	PI2 BPSK	1	104	20.96	21.03	20.92	22.0	0.0	
20	PI2 BPSK	50	0	20.91	21.01	20.91			
20	PI2 BPSK	50	28	21.00	21.03	20.97	22.0	0.0	
20	PI2 BPSK	50	56	20.93	20.99	20.88			
20	PI2 BPSK	100	0	20.97	21.02	20.95	22.0	0.0	
20	QPSK	1	1	20.95	21.05	20.95			
20	QPSK	1	53	20.97	21.04	20.89	22.0	0.0	
20	QPSK	1	104	20.98	21.03	20.86			
20	QPSK	50	0	20.92	21.01	20.92	22.0	0.0	
20	QPSK	50	28	20.88	21.00	20.93			
20	QPSK	50	56	20.87	20.96	20.92	22.0	0.0	
20	QPSK	100	0	20.94	21.02	20.92			
20	16QAM	1	1	20.97	21.04	20.97	22.0	0.0	
20	64QAM	1	1	20.91	21.01	20.87			
20	256QAM	1	1	20.96	21.00	20.73	22.0	0.0	
Channel				343500	349000	354500			
Frequency (MHz)				1717.5	1745	1772.5	22.0	0.0	
15	PI2 BPSK	1	1	20.98	21.00	20.98			
Channel				343000	349000	350000	22.0	0.0	
Frequency (MHz)				1715	1745	1775			
10	PI2 BPSK	1	1	20.96	20.98	20.97	22.0	0.0	
Channel				342500	349000	350500			
Frequency (MHz)				1712.5	1745	1777.5	22.0	0.0	
5	PI2 BPSK	1	1	20.98	21.01	21.00			



n41_FCC									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Main Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				509202	518598	528000			
Frequency (MHz)				2544.01	2552.99	2644.98			
100	PV2 BPSK	1	1	19.09	19.10	19.07			
100	PV2 BPSK	1	137	19.05	19.08	19.03	20.2	0.0	
100	PV2 BPSK	1	271	19.01	19.07	18.99			
100	PV2 BPSK	135	0	18.98	19.02	18.97	20.2	0.0	
100	PV2 BPSK	135	69	19.06	19.07	19.04			
100	PV2 BPSK	135	138	18.95	18.99	18.95			
100	PV2 BPSK	270	0	19.02	19.04	19.00			
100	QPSK	1	1	19.04	19.09	19.04	20.2	0.0	
100	QPSK	1	137	19.03	19.07	19.03			
100	QPSK	1	271	19.00	19.05	19.01			
100	QPSK	135	0	19.00	19.06	19.03			
100	QPSK	135	69	18.99	19.04	18.99	20.2	0.0	
100	QPSK	135	138	18.97	19.02	18.96			
100	QPSK	270	0	18.90	19.00	18.95	20.2		0.0
100	16QAM	1	1	19.02	19.05	18.98	20.2		0.0
100	16QAM	1	1	18.98	19.02	18.97	20.2		0.0
100	256QAM	1	1	19.02	19.03	19.00	20.2		0.0
Channel				508200	518598	528000	Tune-up limit	MPR	
Frequency (MHz)				2541	2552.99	2644.98	(dBm)	(dB)	
90	PV2 BPSK	1	1	19.05	19.08	19.06	20.2		0.0
Channel				507204	518598	528000	Tune-up limit	MPR	
Frequency (MHz)				2538.02	2552.99	2643.99	(dBm)	(dB)	
80	PV2 BPSK	1	1	19.06	19.07	19.04	20.2		0.0
Channel				504204	518598	532998	Tune-up limit	MPR	
Frequency (MHz)				2522.02	2552.99	2643.99	(dBm)	(dB)	
90	PV2 BPSK	1	1	19.09	19.03	19.00	20.2		0.0
Channel				503202	518598	530000	Tune-up limit	MPR	
Frequency (MHz)				2516.01	2552.99	2670	(dBm)	(dB)	
40	PV2 BPSK	1	1	18.90	19.00	18.98	20.2		0.0
Channel				502200	518598	530000	Tune-up limit	MPR	
Frequency (MHz)				2511	2552.99	2674.98	(dBm)	(dB)	
30	PV2 BPSK	1	1	18.94	18.98	18.95	20.2		0.0
Channel				501204	518598	530998	Tune-up limit	MPR	
Frequency (MHz)				2506.02	2552.99	2678.98	(dBm)	(dB)	
20	PV2 BPSK	1	1	18.98	19.00	18.99	20.2		0.0

n41(HPUE)_FCC									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Main Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel				509202	518598	528000			
Frequency (MHz)				2544.01	2552.99	2644.98			
100	PV2 BPSK	1	1	19.04	19.10	19.05			
100	PV2 BPSK	1	137	19.05	19.09	19.01	20.2	0.0	
100	PV2 BPSK	1	271	18.99	19.06	18.99			
100	PV2 BPSK	135	0	19.02	19.06	19.02	20.2	0.0	
100	PV2 BPSK	135	69	19.03	19.07	19.01			
100	PV2 BPSK	135	138	19.02	19.03	19.00			
100	PV2 BPSK	270	0	19.01	19.06	19.00			
100	QPSK	1	1	19.00	19.05	18.97	20.2	0.0	
100	QPSK	1	137	19.00	19.04	19.00			
100	QPSK	1	271	18.98	19.03	19.05			
100	QPSK	135	0	18.96	19.00	18.97			
100	QPSK	135	69	18.95	18.99	18.95	20.2	0.0	
100	QPSK	138	138	18.93	18.96	18.94			
100	QPSK	270	0	18.96	19.02	18.99	20.2		0.0
100	16QAM	1	1	19.02	19.06	18.98	20.2		0.0
100	16QAM	1	1	18.97	19.02	18.99	20.2		0.0
100	256QAM	1	1	19.02	19.07	19.01	20.2		0.0
Channel				508200	518598	528000	Tune-up limit	MPR	
Frequency (MHz)				2541	2552.99	2644.98	(dBm)	(dB)	
90	PV2 BPSK	1	1	18.97	19.04	18.98	20.2		0.0
Channel				507204	518598	528000	Tune-up limit	MPR	
Frequency (MHz)				2538.02	2552.99	2643.99	(dBm)	(dB)	
80	PV2 BPSK	1	1	18.94	18.97	18.95	20.2		0.0
Channel				504204	518598	532998	Tune-up limit	MPR	
Frequency (MHz)				2522.02	2552.99	2643.99	(dBm)	(dB)	
90	PV2 BPSK	1	1	18.99	19.03	19.05	20.2		0.0
Channel				503202	518598	530000	Tune-up limit	MPR	
Frequency (MHz)				2516.01	2552.99	2670	(dBm)	(dB)	
40	PV2 BPSK	1	1	18.99	19.03	18.90	20.2		0.0
Channel				502200	518598	530000	Tune-up limit	MPR	
Frequency (MHz)				2511	2552.99	2674.98	(dBm)	(dB)	
30	PV2 BPSK	1	1	18.98	19.01	18.93	20.2		0.0
Channel				501204	518598	530998	Tune-up limit	MPR	
Frequency (MHz)				2506.02	2552.99	2678.98	(dBm)	(dB)	
20	PV2 BPSK	1	1	18.97	19.00	18.93	20.2		0.0



LTE&5G NR EN-DC Power

Full Power Mode - Ant0

n66									
BW (MHz)	Multicast	RB Size	RB Offset	Power Low Ch. Power	Power Middle Ch. Power	Power High Ch. Power	Power-up level (dBm)	MPN (dB)	
Channel				344000	346000	348000			
Frequency (MHz)				172.8	174	176.2			
20	PUSC BPSK	1	1	23.88	23.95	23.93		24.8	0.0
20	PUSC BPSK	1	53	23.74	23.87	23.82			
20	PUSC BPSK	1	104	23.85	23.90	23.80			
20	PUSC BPSK	36	0	23.23	23.29	23.20	24.8	0.0	
20	PUSC BPSK	36	36	23.87	23.93	23.80	24.8		
20	PUSC BPSK	36	56	23.29	23.41	23.33	24.8		
20	PUSC BPSK	100	0	23.44	23.50	23.78			
20	QPSK	1	1	23.81	23.93	23.77		24.8	0.0
20	QPSK	1	53	23.70	23.77	23.65			
20	QPSK	1	104	23.80	23.81	23.70			
20	QPSK	36	0	23.79	23.75	23.71	24.8	0.0	
20	QPSK	36	25	23.78	23.74	23.68	24.8		
20	QPSK	36	86	23.76	23.73	23.66			
20	16QAM	1	1	23.79	23.69	23.68	24.8	0.0	3.5
20	16QAM	1	1	20.34	20.23	20.20	23.5		
20	256QAM	1	1	20.27	20.25	20.11	21.3		
Channel				343500	348000	354000			
Frequency (MHz)				173.8	174	175.2			
15	PUSC BPSK	1	1	23.85	23.87	23.77	24.8	0.0	
Channel				343000	348000	354000			
Frequency (MHz)				173.0	174	175.0			
10	PUSC BPSK	1	1	23.82	23.86	23.80	24.8	0.0	
Channel				342500	348000	354000			
Frequency (MHz)				172.2	174	175.2			
5	PUSC BPSK	1	1	23.79	23.86	23.78	24.8	0.0	



n41_FCC								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Turn-up limit (dBm)	MPR (dB)
Channel				555202	518598	528000		
Frequency (MHz)				2548.01	2552.80	2560		
100	PL2 BPSK	1	1	25.94	25.38	25.30	24.1	0.0
100	PL2 BPSK	1	197	25.25	25.35	25.28		
100	PL2 BPSK	1	271	25.31	25.37	25.25		
100	PL2 BPSK	155	0	25.28	25.28	25.25	24.1	0.0
100	PL2 BPSK	155	88	25.52	25.32	25.27		
100	PL2 BPSK	155	158	25.22	25.34	25.22		
100	PL2 BPSK	270	0	25.30	25.33	25.28	24.1	0.0
100	QPSK	1	1	25.30	25.38	25.25	24.1	0.0
100	QPSK	1	93	25.25	25.34	25.22		
100	QPSK	1	271	25.32	25.35	25.28		
100	QPSK	155	0	25.28	25.27	25.18	24.1	0.0
100	QPSK	155	88	25.28	25.34	25.17		
100	QPSK	155	158	25.24	25.35	25.18		
100	QPSK	270	0	25.37	25.34	25.20	24.1	0.0
100	8QAM	1	1	25.28	25.38	25.22	24.1	0.0
100	8QAM	1	1	25.82	25.28	25.20	24.1	0.0
100	25QAM	1	1	22.20	22.58	22.43	23.1	1.0
Channel				555202	518598	528000		
Frequency (MHz)				2548	2552.80	2564.58		
50	PL2 BPSK	1	1	25.28	25.35	25.28	24.1	0.0
Channel				557204	518598	528000		
Frequency (MHz)				2558.02	2552.80	2566.58		
80	PL2 BPSK	1	1	25.25	25.30	25.20	24.1	0.0
Channel				558204	518598	528000		
Frequency (MHz)				2574.02	2552.80	2565.58		
50	PL2 BPSK	1	1	25.30	25.25	25.18	24.1	0.0
Channel				559202	518598	524000		
Frequency (MHz)				2574.01	2525.80	2521.25		
40	PL2 BPSK	1	1	25.31	25.25	25.21	24.1	0.0
Channel				559205	518598	524000		
Frequency (MHz)				2574.01	2552.80	2574.58		
30	PL2 BPSK	1	1	25.24	25.30	25.27	24.1	0.0
Channel				561204	518598	528000		
Frequency (MHz)				2584.02	2552.80	2575.58		
20	PL2 BPSK	1	1	25.28	25.33	25.22	24.1	0.0

n41(RPUE)_FCC								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Turn-up limit (dBm)	MPR (dB)
Channel				555202	518598	528000		
Frequency (MHz)				2548.01	2552.80	2560		
100	PL2 BPSK	1	1	26.10	26.15	26.08	26.8	0.0
100	PL2 BPSK	1	197	26.05	26.11	26.05		
100	PL2 BPSK	1	271	26.09	26.15	26.02		
100	PL2 BPSK	155	0	25.84	25.88	25.82	26.8	0.0
100	PL2 BPSK	155	88	26.08	26.15	26.05		
100	PL2 BPSK	155	158	25.88	25.81	25.81		
100	PL2 BPSK	270	0	26.05	26.11	26.04	26.8	0.0
100	QPSK	1	1	26.00	26.14	26.05	26.8	0.0
100	QPSK	1	197	26.02	26.08	26.02		
100	QPSK	1	271	25.98	25.99	25.92		
100	QPSK	155	0	26.00	26.08	26.02	26.8	0.0
100	QPSK	155	88	25.84	26.00	25.84		
100	QPSK	155	158	25.98	26.04	25.97		
100	QPSK	270	0	25.77	25.97	25.68	26.8	0.0
100	16QAM	1	1	24.82	26.37	25.84	26.8	0.0
100	84QAM	1	1	24.95	24.38	24.67	25.8	1.0
100	256QAM	1	1	22.33	22.35	22.45	23.8	3.0
Channel				564202	518598	528000		
Frequency (MHz)				2548	2552.80	2644.58		
50	PL2 BPSK	1	1	26.08	26.14	26.02	26.8	0.0
Channel				567204	518598	528000		
Frequency (MHz)				2558.02	2552.80	2646.58		
80	PL2 BPSK	1	1	26.02	26.04	25.97	26.8	0.0
Channel				568204	518598	528000		
Frequency (MHz)				2574.02	2552.80	2646.58		
50	PL2 BPSK	1	1	26.02	26.11	26.05	26.8	0.0
Channel				569202	518598	524000		
Frequency (MHz)				2574.01	2552.80	2625		
40	PL2 BPSK	1	1	26.00	26.10	26.03	26.8	0.0
Channel				569205	518598	524000		
Frequency (MHz)				2574.01	2552.80	2614.58		
30	PL2 BPSK	1	1	26.08	26.08	25.99	26.8	0.0
Channel				561204	518598	528000		
Frequency (MHz)				2648.02	2646.58	2675.58		
20	PL2 BPSK	1	1	26.08	26.14	26.05	26.8	0.0



Reduced Power level 1/2/3 for Head – Ant0

n66								
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Middle Ch./Freq.	Power High Ch./Freq.	Power-up limit (dBm)	MPE1 (dB)
Channel				344000	345000	346000		
Frequency (MHz)				1730	1745	1775		
20	PIG BPSK	1	1	16.97	17.15	17.09		
20	PIG BPSK	1	0	16.91	17.01	16.96	18.0	0.0
20	PIG BPSK	1	104	17.01	17.06	16.96		
20	PIG BPSK	50	0	16.84	16.90	16.83	18.0	0.0
20	PIG BPSK	50	26	16.86	17.06	16.87	18.0	0.0
20	PIG BPSK	50	55	16.82	16.84	16.86		
20	PIG BPSK	100	0	16.81	16.87	16.85	18.0	0.0
20	QPSK	1	1	16.91	17.03	16.87		
20	QPSK	1	55	16.89	16.89	16.84	18.0	0.0
20	QPSK	1	104	16.87	16.89	16.77		
20	QPSK	50	0	16.96	16.91	16.87	18.0	0.0
20	QPSK	50	26	16.90	16.95	16.87	18.0	0.0
20	QPSK	50	56	16.88	16.92	16.87	18.0	0.0
20	QPSK	100	0	16.92	16.88	16.83		
20	16QAM	1	1	16.91	17.01	16.90	18.0	0.0
20	16QAM	1	1	16.84	16.83	16.90	18.0	0.0
20	256QAM	1	1	16.77	16.75	16.71	18.0	0.0
Channel				345000	345000	345000		
Frequency (MHz)				1717.5	1745	1772.5		
15	PIG BPSK	1	1	16.93	17.05	16.86	18.0	0.0
Channel				345000	345000	345000		
Frequency (MHz)				1715	1745	1775		
10	PIG BPSK	1	1	16.90	17.03	16.88	18.0	0.0
Channel				345000	345000	345000		
Frequency (MHz)				1732.5	1745	1777.5		
5	PIG BPSK	1	1	16.87	17.04	16.86	18.0	0.0



n41_FCC									
SW (MHz)	Modulation	RB Size	RB Offset	Power Lmt Ch. / Freq.	Power Mtrls. Ch. / Freq.	Power Tgt. Ch. / Freq.	Power Tgt. Ch. / Freq.	Tune-up Intvl (min)	MPQ (dB)
Channel				500000	518000	520000			
Frequency (MHz)				2643.50	2643.50	2643.50			
100	PQ2 BPSK	1	1	17.12	17.27	17.21			
100	PQ2 BPSK	1	137	17.11	17.26	17.18	18.0	0.0	
100	PQ2 BPSK	1	271	17.02	17.18	17.10			
100	PQ2 BPSK	135	0	17.06	17.12	17.09			
100	PQ2 BPSK	135	86	17.12	17.26	17.19	18.0	0.0	
100	PQ2 BPSK	135	138	16.99	17.11	16.99			
100	PQ2 BPSK	270	0	17.10	17.23	17.15	18.0	0.0	
100	QPSK	1	1	17.13	17.19	17.08			
100	QPSK	1	137	17.15	17.17	17.05	18.0	0.0	
100	QPSK	1	271	16.98	17.02	17.07			
100	QPSK	135	0	17.10	17.18	17.07			
100	QPSK	135	86	17.06	17.14	16.97	18.0	0.0	
100	QPSK	135	138	16.98	17.09	17.12			
100	QPSK	270	0	17.08	17.13	16.99	18.0	0.0	
100	16QAM	1	1	17.09	17.10	16.97	18.0	0.0	
100	64QAM	1	1	16.91	16.97	17.09	18.0	0.0	
100	256QAM	1	1	16.81	16.99	17.09	18.0	0.0	
Channel				500000	518000	520000			
Frequency (MHz)				2541.50	2552.50	2644.50			
90	PQ2 BPSK	1	1	16.96	17.00	16.91	18.0	0.0	
Channel				500000	518000	520000			
Frequency (MHz)				2541.50	2552.50	2644.50			
80	PQ2 BPSK	1	1	16.89	16.96	16.84	18.0	0.0	
Channel				500000	518000	520000			
Frequency (MHz)				2541.50	2552.50	2644.50			
50	PQ2 BPSK	1	1	16.85	16.92	16.80	18.0	0.0	
Channel				500000	518000	520000			
Frequency (MHz)				2541.50	2552.50	2644.50			
40	PQ2 BPSK	1	1	16.84	16.97	16.89	18.0	0.0	
Channel				500000	518000	520000			
Frequency (MHz)				2541.50	2552.50	2644.50			
30	PQ2 BPSK	1	1	16.83	16.99	16.95	18.0	0.0	
Channel				500000	518000	520000			
Frequency (MHz)				2541.50	2552.50	2644.50			
20	PQ2 BPSK	1	1	16.82	16.98	16.93	18.0	0.0	

n41(NPUE)_FCC								
SW (MHz)	Modulation	RB Size	RB Offset	Power Lmt Ch. / Freq.	Power Mtrls. Ch. / Freq.	Power Tgt. Ch. / Freq.	Tune-up Intvl (min)	MPQ (dB)
Channel				500000	518000	520000		
Frequency (MHz)				2143.01	2143.50	2143.50		
100	PQ2 BPSK	1	1	17.12	17.27	17.21		
100	PQ2 BPSK	1	137	17.11	17.26	17.18	18.0	0.0
100	PQ2 BPSK	1	271	17.02	17.08	17.10		
100	PQ2 BPSK	135	0	17.06	17.12	17.09		
100	PQ2 BPSK	135	86	17.12	17.26	17.19	18.0	0.0
100	PQ2 BPSK	135	138	16.99	17.11	16.99		
100	PQ2 BPSK	270	0	17.10	17.23	17.15	18.0	0.0
100	QPSK	1	1	17.13	17.19	17.08		
100	QPSK	1	137	17.15	17.17	17.05	18.0	0.0
100	QPSK	1	271	16.99	17.02	17.07		
100	QPSK	135	0	17.10	17.18	17.07		
100	QPSK	135	86	17.06	17.14	16.97	18.0	0.0
100	QPSK	135	138	16.98	17.09	17.12		
100	QPSK	270	0	17.08	17.13	16.99	18.0	0.0
100	16QAM	1	1	17.09	17.10	16.97	18.0	0.0
100	64QAM	1	1	16.91	16.97	17.09	18.0	0.0
100	256QAM	1	1	16.81	16.89	17.09	18.0	0.0
Channel				500000	518000	520000	Tune-up Intvl (min)	MPQ (dB)
Frequency (MHz)				2541.50	2552.50	2644.50		
90	PQ2 BPSK	1	1	16.90	17.00	16.91	18.0	0.0
Channel				507024	518000	520000	Tune-up Intvl (min)	MPQ (dB)
Frequency (MHz)				2541.50	2552.50	2644.50		
80	PQ2 BPSK	1	1	16.89	16.96	16.84	18.0	0.0
Channel				504024	518000	520000	Tune-up Intvl (min)	MPQ (dB)
Frequency (MHz)				2541.50	2552.50	2644.50		
50	PQ2 BPSK	1	1	16.85	16.92	16.80	18.0	0.0
Channel				501000	518000	520000	Tune-up Intvl (min)	MPQ (dB)
Frequency (MHz)				2541.50	2552.50	2644.50		
40	PQ2 BPSK	1	1	16.84	16.97	16.89	18.0	0.0
Channel				502000	518000	520000	Tune-up Intvl (min)	MPQ (dB)
Frequency (MHz)				2541.50	2552.50	2644.50		
30	PQ2 BPSK	1	1	16.83	16.99	16.95	18.0	0.0
Channel				501004	518000	520000	Tune-up Intvl (min)	MPQ (dB)
Frequency (MHz)				2541.50	2552.50	2644.50		
20	PQ2 BPSK	1	1	16.82	16.98	16.93	18.0	0.0



Reduced power for Hotspot on-Air3

n66								
RF (MHz)	Modulation	RF Size	RF Offset	Power Low Ch. / Freq.	Power Main Ch. / Freq.	Power High Ch. / Freq.	Turnup time (Sec)	MFR (dB)
Channel				345000	345000	345000		
Frequency (MHz)				1730	1745	1775		
20	PIG BPSK	1	1	19.18	19.21	19.10		
20	PIG BPSK	1	81	19.15	19.18	19.05	20.2	0.0
20	PIG BPSK	1	104	19.08	19.13	19.03		
20	PIG BPSK	50	0	19.02	19.08	19.08	20.2	0.0
20	PIG BPSK	50	26	19.15	19.18	19.09	20.2	0.0
20	PIG BPSK	50	56	19.05	19.07	19.07	20.2	0.0
20	PIG BPSK	100	0	19.14	19.15	19.07		
20	QPSK	1	1	19.39	19.38	19.05		
20	QPSK	1	53	19.15	19.08	19.08	20.2	0.0
20	QPSK	1	104	19.14	19.05	19.04		
20	QPSK	50	0	19.15	19.09	19.05	20.2	0.0
20	QPSK	50	26	19.18	19.14	19.10	20.2	0.0
20	QPSK	50	56	19.11	19.05	19.10	20.2	0.0
20	QPSK	100	0	19.15	19.11	19.08		
20	16QAM	1	1	19.03	19.13	19.12	20.2	0.0
20	64QAM	1	1	19.06	19.07	19.04	20.2	0.0
20	256QAM	1	1	19.00	19.00	19.98	20.2	0.0
Channel				345100	345100	345100		
Frequency (MHz)				1737.5	1745	1772.5		
15	PIG BPSK	1	1	19.14	19.17	19.04	20.2	0.0
Channel				345100	345100	345100		
Frequency (MHz)				1735	1745	1775		
10	PIG BPSK	1	1	19.11	19.15	19.07	20.2	0.0
Channel				345100	345100	345100		
Frequency (MHz)				1732.5	1745	1777.5		
5	PIG BPSK	1	1	19.08	19.12	19.05	20.2	0.0



n41_FCC								
SV (MHz)	Modulation	RB Size	RB Offset	Power Linc Ch. / Freq.	Power Multis. Ch. / Freq.	Power Txs Ch. / Freq.	Tune-up limit (dB)	MFR (dB)
Channel				500000	518000	528000		
Frequency (MHz)				2643.50	2643.50	2643.50		
100	P2-D BPSK	1	1	17.12	17.27	17.21	18.1	0.0
100	P2-D BPSK	1	137	17.11	17.26	17.18		
100	P2-D BPSK	1	271	17.02	17.08	17.19	18.1	0.0
100	P2-D BPSK	135	0	17.06	17.12	17.09		
100	P2-D BPSK	135	86	17.12	17.26	17.19	18.1	0.0
100	P2-D BPSK	135	138	16.99	17.11	16.99		
100	P2-D BPSK	270	0	17.10	17.23	17.15	18.1	0.0
100	QPSK	1	1	17.13	17.19	17.08		
100	QPSK	1	134	17.15	17.17	17.05	18.1	0.0
100	QPSK	1	271	16.98	17.02	17.07		
100	QPSK	135	0	17.10	17.18	17.07	18.1	0.0
100	QPSK	135	86	17.06	17.14	16.97		
100	QPSK	135	138	16.98	17.09	17.12	18.1	0.0
100	QPSK	270	0	17.08	17.13	16.99		
100	16QAM	1	1	17.09	17.10	16.97	18.1	0.0
100	64QAM	1	1	16.91	16.97	17.09		
100	256QAM	1	1	16.81	16.99	17.09	18.1	0.0
Channel				340000	518000	528000		
Frequency (MHz)				2541	2552.50	2644.50	18.1	0.0
90	P2-D BPSK	1	1	16.96	17.00	16.91		
Channel				301200	518000	528000	18.1	0.0
Frequency (MHz)				2536.50	2552.50	2644.50		
80	P2-D BPSK	1	1	16.89	16.96	16.84	18.1	0.0
Channel				304200	518000	528000		
Frequency (MHz)				2611.50	2552.50	2644.50	18.1	0.0
50	P2-D BPSK	1	1	16.85	16.92	16.80		
Channel				303200	518000	528000	18.1	0.0
Frequency (MHz)				2618.50	2552.50	2670		
40	P2-D BPSK	1	1	16.84	16.97	16.89	18.1	0.0
Channel				302200	518000	528000		
Frequency (MHz)				2611	2552.50	2674.50	18.1	0.0
30	P2-D BPSK	1	1	16.83	16.99	16.95		
Channel				301200	518000	528000	18.1	0.0
Frequency (MHz)				2612.50	2552.50	2679.50		
20	P2-D BPSK	1	1	16.82	16.98	16.93	18.1	0.0
Channel								

n41(NPUE)_FCC								
SV (MHz)	Modulation	RB Size	RB Offset	Power Linc Ch. / Freq.	Power Multis. Ch. / Freq.	Power Txs Ch. / Freq.	Tune-up limit (dB)	MFR (dB)
Channel				500000	518000	528000		
Frequency (MHz)				2143.51	2143.50	2143.50		
100	P2-D BPSK	1	1	17.12	17.27	17.21	18.1	0.0
100	P2-D BPSK	1	137	17.11	17.26	17.18		
100	P2-D BPSK	1	271	17.02	17.08	17.19	18.1	0.0
100	P2-D BPSK	135	0	17.06	17.12	17.09		
100	P2-D BPSK	135	86	17.12	17.26	17.19	18.1	0.0
100	P2-D BPSK	135	138	16.99	17.11	16.99		
100	P2-D BPSK	270	0	17.10	17.23	17.15	18.1	0.0
100	QPSK	1	1	17.13	17.19	17.08		
100	QPSK	1	137	17.15	17.17	17.05	18.1	0.0
100	QPSK	1	271	16.99	17.02	17.07		
100	QPSK	135	0	17.10	17.18	17.07	18.1	0.0
100	QPSK	135	86	17.06	17.14	16.97		
100	QPSK	135	138	16.98	17.09	17.12	18.1	0.0
100	QPSK	270	0	17.08	17.13	16.99		
100	16QAM	1	1	17.09	17.10	16.97	18.1	0.0
100	64QAM	1	1	16.91	16.97	17.09		
100	256QAM	1	1	16.81	16.99	17.09	18.1	0.0
Channel				300000	518000	528000		
Frequency (MHz)				2541	2552.50	2644.50	18.1	0.0
90	P2-D BPSK	1	1	16.90	17.00	16.91		
Channel				301200	518000	528000	18.1	0.0
Frequency (MHz)				2536.50	2552.50	2644.50		
80	P2-D BPSK	1	1	16.89	16.96	16.84	18.1	0.0
Channel				304200	518000	528000		
Frequency (MHz)				2611.50	2552.50	2644.50	18.1	0.0
50	P2-D BPSK	1	1	16.85	16.92	16.80		
Channel				303200	518000	528000	18.1	0.0
Frequency (MHz)				2618.50	2552.50	2670		
40	P2-D BPSK	1	1	16.84	16.90	16.88	18.1	0.0
Channel				302200	518000	528000		
Frequency (MHz)				2611	2552.50	2674.50	18.1	0.0
30	P2-D BPSK	1	1	16.83	16.89	16.95		
Channel				301200	518000	528000	18.1	0.0
Frequency (MHz)				2612.50	2552.50	2679.50		
20	P2-D BPSK	1	1	16.82	16.88	16.93	18.1	0.0
Channel								



Reduced power for Sensor on-AirB

n66							
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Power Spectral Density (dBm)
Channel				344000	345000	346000	
Frequency (MHz)				1720	1745	1770	
20	PSSB-SSB	1	1	18.78	18.81	18.79	
20	PSSB-SSB	1	53	18.76	18.78	18.80	19.8
20	PSSB-SSB	1	104	18.68	18.73	18.83	
20	PSSB-SSB	55	0	18.82	18.88	18.88	19.8
20	PSSB-SSB	56	28	18.79	18.78	18.80	19.8
20	PSSB-SSB	56	56	18.65	18.67	18.67	
20	PSSB-SSB	100	0	18.74	18.75	18.67	19.8
20	QPSK	1	1	18.58	18.68	18.59	
20	QPSK	1	53	18.73	18.68	18.65	19.8
20	QPSK	1	104	18.74	18.65	18.64	
20	QPSK	55	0	18.73	18.68	18.65	19.8
20	QPSK	55	28	18.78	18.74	18.78	19.8
20	QPSK	56	56	18.71	18.65	18.70	
20	QPSK	100	0	18.75	18.71	18.68	19.8
20	16QAM	1	1	18.63	18.73	18.72	19.8
20	16QAM	1	1	18.88	18.67	18.64	19.8
20	256QAM	1	1	18.60	18.60	18.56	19.8
Channel				345000	345000	345000	
Frequency (MHz)				1737.5	1745	1752.5	
15	PSSB-SSB	1	1	18.74	18.77	18.84	19.8
Channel				345000	345000	345000	
Frequency (MHz)				1715	1745	1775	
10	PSSB-SSB	1	1	18.71	18.75	18.67	19.8
Channel				345000	345000	345000	
Frequency (MHz)				1732.5	1745	1757.5	
5	PSSB-SSB	1	1	18.68	18.72	18.65	19.8



n41_FCC									
GW (MHz)	Modulation	RB Size	RB Offset	Power Lmt Ch. / Freq.	Power Mtrls. Ch. / Freq.	Power Tgt. Ch. / Freq.	Tune-up Intvl (min)	MPQ (dB)	
Channel Frequency (MHz)				300000	518000	528000			
				2645.00	2500.00	2640			
100	PQ2 BPSK	1	1	18.13	18.24	18.17			
100	PQ2 BPSK	1	137	18.07	18.21	18.14	20.0	0.0	
100	PQ2 BPSK	1	271	18.00	18.16	18.13			
100	PQ2 BPSK	135	0	18.00	18.18	18.13			
100	PQ2 BPSK	135	88	18.10	18.22	18.15	20.0	0.0	
100	PQ2 BPSK	135	138	18.04	18.08	18.04			
100	PQ2 BPSK	270	0	18.08	18.20	18.12	20.0	0.0	
100	QPSK	1	1	18.18	18.11	18.05			
100	QPSK	1	134	18.11	18.16	18.01	20.0	0.0	
100	QPSK	1	271	18.06	18.08	18.04			
100	QPSK	135	0	18.17	18.11	18.14			
100	QPSK	135	88	18.04	18.16	18.05	20.0	0.0	
100	QPSK	135	138	18.03	18.04	18.07			
100	QPSK	270	0	18.03	18.12	18.06	20.0	0.0	
100	16QAM	1	1	18.10	18.11	18.09	20.0	0.0	
100	64QAM	1	1	18.03	18.06	18.15	20.0	0.0	
100	256QAM	1	1	18.02	18.08	18.01	20.0	0.0	
Channel Frequency (MHz)				300000	518000	527000	Tune-up Intvl (min)	MPQ (dB)	
				2541	2500.00	2644.98			
90	PQ2 BPSK	1	1	18.83	18.00	18.94	20.0	0.0	
Channel Frequency (MHz)				300000	518000	527000	Tune-up Intvl (min)	MPQ (dB)	
				2500.00	2500.00	2640.98			
80	PQ2 BPSK	1	1	18.82	18.98	18.80	20.0	0.0	
Channel Frequency (MHz)				300000	518000	526000	Tune-up Intvl (min)	MPQ (dB)	
				2611.00	2500.00	2644.98			
50	PQ2 BPSK	1	1	18.78	18.94	18.91	20.0	0.0	
Channel Frequency (MHz)				300000	518000	524000	Tune-up Intvl (min)	MPQ (dB)	
				2611.00	2500.00	2610.98			
40	PQ2 BPSK	1	1	18.77	18.99	18.89	20.0	0.0	
Channel Frequency (MHz)				300000	518000	524000	Tune-up Intvl (min)	MPQ (dB)	
				2611	2500.00	2614.98			
30	PQ2 BPSK	1	1	18.76	18.91	18.96	20.0	0.0	
Channel Frequency (MHz)				300000	518000	523000	Tune-up Intvl (min)	MPQ (dB)	
				2600.00	2500.00	2610.98			
20	PQ2 BPSK	1	1	18.75	18.98	18.94	20.0	0.0	

n41(MPUE)_FCC									
GW (MHz)	Modulation	RB Size	RB Offset	Power Lmt Ch. / Freq.	Power Mtrls. Ch. / Freq.	Power Tgt. Ch. / Freq.	Tune-up Intvl (min)	MPQ (dB)	
Channel Frequency (MHz)				300000	518000	528000			
				2540.00	2500.00	2640			
100	PQ2 BPSK	1	1	18.13	18.24	18.17			
100	PQ2 BPSK	1	137	18.07	18.21	18.14	20.0	0.0	
100	PQ2 BPSK	1	271	18.00	18.16	18.13			
100	PQ2 BPSK	135	0	18.00	18.18	18.13			
100	PQ2 BPSK	135	88	18.10	18.22	18.15	20.0	0.0	
100	PQ2 BPSK	135	138	18.04	18.08	18.04			
100	PQ2 BPSK	270	0	18.08	18.20	18.12	20.0	0.0	
100	QPSK	1	1	18.18	18.11	18.05			
100	QPSK	1	137	18.11	18.16	18.01	20.0	0.0	
100	QPSK	1	271	18.06	18.08	18.04			
100	QPSK	135	0	18.17	18.11	18.14			
100	QPSK	135	88	18.04	18.16	18.05	20.0	0.0	
100	QPSK	135	138	18.03	18.04	18.07			
100	QPSK	270	0	18.03	18.12	18.06	20.0	0.0	
100	16QAM	1	1	18.10	18.11	18.09	20.0	0.0	
100	64QAM	1	1	18.03	18.06	18.18	20.0	0.0	
100	256QAM	1	1	18.02	18.08	18.01	20.0	0.0	
Channel Frequency (MHz)				300000	518000	527000	Tune-up Intvl (min)	MPQ (dB)	
				2541	2500.00	2644.98			
90	PQ2 BPSK	1	1	18.83	18.00	18.94	20.0	0.0	
Channel Frequency (MHz)				300000	518000	527000	Tune-up Intvl (min)	MPQ (dB)	
				2500.00	2500.00	2640.98			
80	PQ2 BPSK	1	1	18.82	18.98	18.80	20.0	0.0	
Channel Frequency (MHz)				300000	518000	526000	Tune-up Intvl (min)	MPQ (dB)	
				2611.00	2500.00	2644.98			
50	PQ2 BPSK	1	1	18.78	18.94	18.91	20.0	0.0	
Channel Frequency (MHz)				300000	518000	524000	Tune-up Intvl (min)	MPQ (dB)	
				2611.00	2500.00	2610.98			
40	PQ2 BPSK	1	1	18.77	18.99	18.89	20.0	0.0	
Channel Frequency (MHz)				300000	518000	524000	Tune-up Intvl (min)	MPQ (dB)	
				2611	2500.00	2614.98			
30	PQ2 BPSK	1	1	18.76	18.91	18.96	20.0	0.0	
Channel Frequency (MHz)				300000	518000	523000	Tune-up Intvl (min)	MPQ (dB)	
				2600.00	2500.00	2610.98			
20	PQ2 BPSK	1	1	18.75	18.98	18.94	20.0	0.0	



Full Power Mode - Ant1

n06								
EP (dB)	Modulation	RB Size	RB Offset	Power Line Ch. / Freq.	Power Margin Ch. / Freq.	Power Margin Ch. / Freq.	Totalling limit (dBm)	ERP (dB)
Channel				344500	360000	360000	24.8	0.0
Frequency (MHz)				1745	1745	1770		
20	P12 BPSK	1	1	24.14	24.18	23.87		
20	P12 BPSK	1	104	24.11	24.02	23.79	24.8	0.0
20	P12 BPSK	1	104	24.15	24.06	23.84		
20	P12 BPSK	90	0	24.12	24.01	23.72		
20	P12 BPSK	90	90	24.15	24.10	23.84	24.8	0.0
20	P12 BPSK	90	90	24.09	23.94	23.63		
20	P12 BPSK	100	0	24.10	24.12	23.81		
20	QPSK	1	1	24.10	24.03	23.84	24.8	0.0
20	QPSK	1	50	23.92	23.84	23.38		
20	QPSK	1	104	23.97	23.90	23.47		
20	QPSK	90	0	24.15	24.01	23.70	24.8	0.0
20	QPSK	90	90	24.09	23.90	23.68		
20	QPSK	90	90	24.10	24.03	23.37		
20	QPSK	100	0	24.08	24.03	23.70	24.8	0.0
20	MSK-M	1	1	24.09	24.14	23.68		
20	MSK-M	1	1	23.20	23.30	23.00		
20	25GQAM	1	1	21.01	20.91	20.78	21.8	3.0
Channel				115550	120000	124500	24.8	0.0
Frequency (MHz)				1772.5	1745	1772.5		
Channel				23500	24000	24500		
15	P12 BPSK	1	1	23.98	24.01	23.80	24.8	0.0
Channel				23500	24000	24500	24.8	0.0
Frequency (MHz)				1715	1745	1770		
Channel				24000	24000	24000		
10	P12 BPSK	1	1	24.00	24.00	23.80	24.8	0.0
Channel				1712.5	1745	1772.5	24.8	0.0
Frequency (MHz)				1712.5	1745	1772.5		
5	P12 BPSK	1	1	24.00	24.04	23.78	24.8	0.0



n41_FCC									
GW (MHz)	Modulation	RB Size	RB Offset	Power L1st Ch. / Freq.	Power Main Ch. / Freq.	Power 12th Ch. / Freq.	Tune-up limit (MHz)	MPQ (dB)	
Channel Frequency (MHz)				500000	518000	528000			
				264.50	2560.00	2640			
100	P12 BPSK	1	1	24.18	24.22	24.14	24.8	0.0	
100	P12 BPSK	1	137	24.13	24.19	24.11			
100	P12 BPSK	1	271	24.11	24.13	24.09			
100	P12 BPSK	135	0	23.81	23.84	23.55	24.8	0.0	
100	P12 BPSK	135	88	24.15	24.19	24.11			
100	P12 BPSK	135	138	23.51	23.48	23.37			
100	P12 BPSK	270	0	24.13	24.16	24.09	24.8	0.0	
100	QPSK	1	1	23.92	24.12	24.07	24.8	0.0	
100	QPSK	1	134	24.11	24.01	23.98			
100	QPSK	1	271	24.05	23.93	24.04			
100	QPSK	135	0	23.99	24.05	23.95	24.8	0.0	
100	QPSK	135	88	24.03	23.98	23.91			
100	QPSK	135	138	24.05	23.97	23.93			
100	QPSK	270	0	24.03	24.03	23.95	24.8	0.0	
100	16QAM	1	1	23.54	24.10	23.91	24.8	0.0	
100	64QAM	1	1	22.45	22.88	22.42	23.8	1.0	
100	256QAM	1	1	20.45	20.97	20.53	21.8	3.0	
Channel Frequency (MHz)				540000	518000	520000	Tune-up limit (MHz)	MPQ (dB)	
				2541	2502.00	2644.00			
90	P12 BPSK	1	1	24.15	24.00	24.09	24.8	0.0	
Channel Frequency (MHz)				541200	518000	520000	Tune-up limit (MHz)	MPQ (dB)	
				2500.00	2502.00	2640.00			
80	P12 BPSK	1	1	24.06	24.15	24.03	24.8	0.0	
Channel Frequency (MHz)				542400	518000	520000	Tune-up limit (MHz)	MPQ (dB)	
				2611.00	2502.00	2644.00			
50	P12 BPSK	1	1	24.03	24.20	24.12	24.8	0.0	
Channel Frequency (MHz)				543000	518000	524000	Tune-up limit (MHz)	MPQ (dB)	
				2618.00	2502.00	2670			
40	P12 BPSK	1	1	24.11	24.18	24.08	24.8	0.0	
Channel Frequency (MHz)				542000	518000	524000	Tune-up limit (MHz)	MPQ (dB)	
				2611	2502.00	2674.00			
30	P12 BPSK	1	1	24.08	24.19	24.02	24.8	0.0	
Channel Frequency (MHz)				541204	518000	520000	Tune-up limit (MHz)	MPQ (dB)	
				2600.00	2502.00	2670.00			
20	P12 BPSK	1	1	24.10	24.11	24.07	24.8	0.0	

n41(MPUE)_FCC									
GW (MHz)	Modulation	RB Size	RB Offset	Power L1st Ch. / Freq.	Power Main Ch. / Freq.	Power 12th Ch. / Freq.	Tune-up limit (MHz)	MPQ (dB)	
Channel Frequency (MHz)				500000	518000	528000			
				2540.00	2502.00	2640			
100	P12 BPSK	1	1	25.36	25.48	25.20	26.8	0.0	
100	P12 BPSK	1	137	25.21	25.15	24.85			
100	P12 BPSK	1	271	25.14	24.88	24.45			
100	P12 BPSK	135	0	24.60	24.67	24.44	26.8	0.0	
100	P12 BPSK	135	88	25.32	25.30	25.09			
100	P12 BPSK	135	138	24.60	24.40	24.15			
100	P12 BPSK	270	0	24.60	24.60	24.53	26.8	1.0	
100	QPSK	1	1	25.25	25.38	25.18	26.8	0.0	
100	QPSK	1	137	25.28	25.13	25.02			
100	QPSK	1	271	24.77	24.80	24.68			
100	QPSK	135	0	24.59	24.65	24.48	26.8	0.0	
100	QPSK	135	88	24.59	24.59	24.83			
100	QPSK	135	138	24.13	24.20	23.95			
100	QPSK	270	0	24.20	24.40	24.13	26.8	1.0	
100	16QAM	1	1	24.23	24.37	24.16	26.8	1.0	
100	64QAM	1	1	22.77	22.82	22.68	23.8	3.0	
100	256QAM	1	1	20.32	20.83	20.70	21.8	3.0	
Channel Frequency (MHz)				540000	518000	524000	Tune-up limit (MHz)	MPQ (dB)	
				2541	2502.00	2644.00			
90	P12 BPSK	1	1	25.39	25.36	25.16	26.8	0.0	
Channel Frequency (MHz)				541200	518000	524000	Tune-up limit (MHz)	MPQ (dB)	
				2538.00	2502.00	2640.00			
80	P12 BPSK	1	1	25.28	25.40	25.09	26.8	0.0	
Channel Frequency (MHz)				542400	518000	520000	Tune-up limit (MHz)	MPQ (dB)	
				2611.00	2502.00	2640.00			
50	P12 BPSK	1	1	25.11	25.30	25.11	26.8	0.0	
Channel Frequency (MHz)				543000	518000	524000	Tune-up limit (MHz)	MPQ (dB)	
				2618.00	2502.00	2670			
40	P12 BPSK	1	1	25.08	25.42	25.03	26.8	0.0	
Channel Frequency (MHz)				542000	518000	524000	Tune-up limit (MHz)	MPQ (dB)	
				2611	2502.00	2674.00			
30	P12 BPSK	1	1	25.16	25.93	25.10	26.8	0.0	
Channel Frequency (MHz)				541204	518000	520000	Tune-up limit (MHz)	MPQ (dB)	
				2600.00	2502.00	2670.00			
20	P12 BPSK	1	1	25.27	25.40	25.11	26.8	0.0	



Full Power Mode - Ant0

Band 7 (2400MHz Band) Part 27										Band 66									
BW (MHz)	Modulation	RB Slot	RB Offset	Power Level Ch. (Freq.)	Power Level Ch. (Freq.)	Power Level Ch. (Freq.)	Time-up time (min)	MFR (dB)		BW (MHz)	Modulation	RB Slot	RB Offset	Power Level Ch. (Freq.)	Power Level Ch. (Freq.)	Power Level Ch. (Freq.)	Time-up time (min)	MFR (dB)	
Channel										Channel									
Frequency (MHz)										Frequency (MHz)									
20	QPSK	1	0	24.07	24.16	24.16				20	QPSK	1	0	17.76	17.85	17.75			
20	QPSK	1	48	23.87	24.16	24.18	24.8	0		20	QPSK	1	52	23.37	23.52	23.61	24.8	0	
20	QPSK	50	0	23.89	24.10	24.18				20	QPSK	1	96	23.34	23.43	23.61			
20	QPSK	99	0	22.86	23.22	23.19				20	QPSK	99	0	22.87	22.87	22.82			
20	QPSK	124	0	23.23	23.35	23.25				20	QPSK	124	0	22.78	22.80	22.75			
20	QPSK	50	50	23.05	23.25	23.23	23.8	1		20	QPSK	50	50	22.72	22.84	22.71	23.8	1	
20	HQAM	1	0	23.23	23.45	23.25				20	QPSK	100	0	22.73	22.80	22.73			
20	HQAM	1	48	23.27	23.52	23.47	23.8	1		20	HQAM	1	48	22.82	23.11	23.02	23.8	1	
20	HQAM	1	96	23.32	23.48	23.32				20	HQAM	1	99	22.89	22.95	22.83			
20	HQAM	50	0	21.96	22.23	22.20				20	HQAM	50	0	21.91	21.88	21.76			
20	HQAM	50	24	22.01	22.23	22.33	22.8	2		20	HQAM	50	24	21.78	21.62	21.78	22.8	2	
20	HQAM	50	48	22.09	22.35	22.33				20	HQAM	50	50	21.77	21.62	21.71			
20	HQAM	100	0	22.05	22.26	22.28				20	HQAM	100	0	21.59	21.54	21.91			
20	HQAM	1	0	19.31	19.38	19.35				20	HQAM	1	48	21.85	21.86	21.86	22.8	2	
20	HQAM	1	48	22.10	22.29	22.33				20	HQAM	1	96	21.80	21.77	21.78	21.8	3	
20	HQAM	50	0	21.13	21.37	21.33				20	HQAM	50	0	20.51	20.66	20.88			
20	HQAM	100	0	21.06	21.26	21.28				20	HQAM	100	0	20.49	20.58	20.78			
20	ZSSBAM	1	0	19.32	19.37	19.34				20	ZSSBAM	1	0	19.29	19.14	19.18			
20	ZSSBAM	1	48	19.10	19.34	19.26	19.8	5		20	ZSSBAM	1	48	19.04	19.11	19.17	19.8	5	
20	ZSSBAM	1	99	19.05	19.08	19.22				20	ZSSBAM	1	99	18.97	19.13	19.19			
20	ZSSBAM	50	0	18.35	18.88	18.70				20	ZSSBAM	50	0	18.89	19.21	19.41			
20	ZSSBAM	50	24	18.86	18.80	18.71	19.8	5		20	ZSSBAM	50	24	19.08	19.13	19.52			
20	ZSSBAM	50	50	18.88	18.80	19.21				20	ZSSBAM	50	50	19.05	19.29	19.52			
20	ZSSBAM	100	0	18.05	18.00	18.18				20	ZSSBAM	100	0	18.99	19.18	19.37			
Channel										Channel									
Frequency (MHz)										Frequency (MHz)									
15	QPSK	1	0	24.15	24.08	24.05				15	QPSK	1	0	17.75	17.84	17.73			
15	QPSK	1	37	24.16	24.12	24.13	24.8	0		15	QPSK	1	37	23.34	23.57	23.54	24.8	0	
15	QPSK	1	74	24.16	24.13	24.17				15	QPSK	1	74	23.22	23.44	23.49			
15	QPSK	36	0	23.32	23.32	23.31				15	QPSK	36	0	22.61	22.69	22.38			
15	QPSK	36	20	23.37	23.34	23.34				15	QPSK	36	20	22.67	22.68	22.67	23.8	1	
15	QPSK	36	56	23.32	23.32	23.31				15	QPSK	36	56	22.51	22.57	22.62	23.8	1	
15	QPSK	72	36	23.33	23.30	23.22				15	QPSK	72	36	22.55	22.77	22.78			
15	HQAM	1	0	22.46	23.47	23.48				15	HQAM	1	0	22.34	23.31	23.29			
15	HQAM	1	37	22.51	23.53	23.53	23.8	1		15	HQAM	1	37	22.17	23.17	23.17	23.8	1	
15	HQAM	1	74	23.54	23.53	23.49				15	HQAM	1	74	22.78	22.97	22.71			
15	HQAM	36	0	22.29	22.23	22.19				15	HQAM	36	0	21.27	21.54	21.73			
15	HQAM	36	20	22.34	22.32	22.32	22.8	2		15	HQAM	36	20	21.31	21.42	21.48			
15	HQAM	36	56	22.34	22.32	22.32				15	HQAM	36	56	21.42	21.49	21.61			
15	HQAM	72	36	22.35	22.30	22.23				15	HQAM	72	36	21.34	21.34	21.73	22.8	2	
15	HQAM	1	0	22.37	22.37	22.31				15	HQAM	1	37	21.88	21.78	21.84	22.8	2	
15	HQAM	1	37	22.50	22.41	22.43				15	HQAM	1	74	21.43	21.82	21.64			
15	HQAM	1	74	22.45	22.41	22.41				15	HQAM	36	0	20.57	20.58	20.43			
15	HQAM	36	0	21.34	21.32	21.25				15	HQAM	36	20	20.59	20.64	20.88	21.8	3	
15	HQAM	36	20	21.41	21.41	21.36				15	HQAM	36	56	20.57	20.68	20.90			
15	HQAM	36	56	21.36	21.36	21.36				15	HQAM	72	36	20.51	20.64	20.61			
15	HQAM	72	36	21.34	21.33	21.32				15	ZSSBAM	1	0	19.31	19.38	19.96			
15	ZSSBAM	1	0	19.31	19.38	19.96				15	ZSSBAM	1	37	19.38	19.37	19.70	19.8	5	
15	ZSSBAM	1	37	19.38	19.37	19.70				15	ZSSBAM	1	74	19.33	19.37	19.36			
15	ZSSBAM	1	74	19.33	19.37	19.36				15	ZSSBAM	36	0	19.29	19.24	19.36			
15	ZSSBAM	36	0	19.29	19.24	19.36				15	ZSSBAM	36	20	19.20	19.26	19.45	19.8	5	
15	ZSSBAM	36	20	19.20	19.26	19.45				15	ZSSBAM	36	56	19.15	19.16	19.45			
15	ZSSBAM	36	56	19.15	19.16	19.45				15	ZSSBAM	72	36	19.27	19.32	19.40			
15	ZSSBAM	72	36	19.27	19.32	19.40				15	ZSSBAM	72	72	19.03	19.06	19.41	19.8	5	
Channel										Channel									
Frequency (MHz)										Frequency (MHz)									
10	QPSK	1	0	24.03	24.03	24.02				10	QPSK	1	0	23.72	23.73	23.75			
10	QPSK	1	25	23.93	24.05	24.06	24.8	0		10	QPSK	1	25	23.22	23.35	23.30	24.8	0	
10	QPSK	1	49	24.09	24.04	24.16				10	QPSK	1	49	23.33	23.25	23.30			
10	QPSK	25	10	23.30	23.30	23.30				10	QPSK	25	10	22.58	22.43	22.56			
10	QPSK	25	12	23.32	23.33	23.27	23.8	1		10	QPSK	25	12	22.66	22.64	22.68	23.8	1	
10	QPSK	25	25	23.19	23.36	23.22				10	QPSK	25	25	22.64	22.66	22.64			
10	QPSK	50	9	23.24	23.31	23.24				10	HQAM	1	0	22.97	23.03	22.84			
10	HQAM	1	0	23.35	23.35	23.43	23.8	1		10	HQAM	1	49	22.89	22.89	22.77	23.8	1	
10	HQAM	1	23	23.39	23.39	23.48				10	HQAM	1	99	22.87	22.93	22.81			
10	HQAM	1	49	23.26	23.29	23.38				10	HQAM	1	123	22.86	23.07	22.91	23.8	1	
10	HQAM	25	10	22.37	22.38	22.19				10	HQAM	1	24	21.88	21.83	21.88	22.8	2	
10	HQAM	25	12	22.35	22.35	22.35				10	HQAM	1	49	21.48	21.63	21.48			
10	HQAM	25	25	22.09	22.25	22.30				10	HQAM	1	99	21.43	21.43	21.63	21.8	3	
10	HQAM	1	0	22.15	22.40	22.19				10	HQAM	25	0	21.80	21.93	21.69			
10	HQAM	1	0	22.38	22.37	22.40				10	HQAM	25	12	21.61	21.63	21.63	22.8	2	
10	HQAM	1	25	22.33	22.48	22.48	22.8	2		10	HQAM	25	25	20.50	20.87	20.85	21.8	3	
10	HQAM	1	49	22.48	22.38	22.24				10	HQAM	50	0	20.50	20.58	20.67			
10	HQAM	25	0	21.04	21.24	21.15				10	ZSSBAM	1	0	19.20	19.08	19.17			
10	HQAM	25	12	21.29	21.37	21.41				10	ZSSBAM	1	25	19.09	19.15	19.40	19.8	5	
10	HQAM	25	25	21.24	21.33	21.16				10	ZSSBAM	1	49	19.04	19.27	19.55			
10	HQAM	50	0	21.38	21.44	21.15				10	ZSSBAM	1	99	19.16	19.14	19.33	19.8	5	
10	ZSSBAM	1	0	19.14	19.15	19.36				10	ZSSBAM	25	0	19.26	19.16	19.32			
10	ZSSBAM	1	25	19.08	19.15	19.44	19.8	5		10	ZSSBAM	25	12	19.15	19.25	19.43	19.8	5	
10	ZSSBAM	1	49	19.17	19.07	19.26				10	ZSSBAM	25	25	19.05	19.26	19.27			
10	ZSSBAM	25	0	19.27	19.21	19.42				10	ZSSBAM	50	0	18.86	19.26	19.45	19.8	5	
10	ZSSBAM	25	12	19.15	19.25	19.36				10	ZSSBAM	50	25	18.88	19.26				



Reduced Power level 1 for Head – Ant1

Band 7 (2600MHz Band)											Band 66																
Part 27											Part 66																
BW (MHz)	Modulation	RIS Size	RIS Offset	Power Low Ch. (Freq)	Power Main Ch. (Freq)	Power High Ch. (Freq)	Time-up limit (min)	MPR (dB)			BW (MHz)	Modulation	RIS Size	RIS Offset	Power Low Ch. (Freq)	Power Main Ch. (Freq)	Power High Ch. (Freq)	Time-up limit (min)	MPR (dB)								
Channel											Channel																
Frequency (MHz)											Frequency (MHz)																
20	QPSK	1	0	18.59	18.72	18.82	17.5	0			20	QPSK	1	0	17.90	17.60	17.70	17	0								
20	QPSK	1	49	18.60	18.71	18.80																					
20	QPSK	1	98	18.67	18.74	18.88																					
20	QPSK	50	0	18.65	18.64	18.81																					
20	QPSK	50	24	18.65	18.71	18.85	17.5	0			20	QPSK	1	49	18.97	18.88	18.94	17	0								
20	QPSK	50	49	18.65	18.64	18.84																					
20	QPSK	100	0	18.62	18.68	18.83																					
20	16QAM	1	0	18.68	18.63	18.78																					
20	16QAM	1	49	18.71	18.62	18.78	17.5	0			20	16QAM	1	49	18.97	18.13	18.87	17	0								
20	16QAM	1	98	18.44	18.34	18.80																					
20	16QAM	50	0	18.80	18.48	18.50																					
20	16QAM	50	24	18.50	18.43	18.80	17.5	0			20	16QAM	50	0	18.93	18.96	18.93	17	0								
20	16QAM	50	49	18.68	18.61	18.89																					
20	16QAM	100	0	18.58	18.58	18.81																					
20	64QAM	1	0	18.67	18.63	18.89	17.5	0			20	64QAM	1	0	18.91	18.87	18.90	17	0								
20	64QAM	1	49	18.65	18.69	18.78																					
20	64QAM	1	99	18.70	18.61	18.86																					
20	64QAM	50	0	18.50	18.46	18.49																					
20	64QAM	50	24	18.65	18.58	18.78	17.5	0			20	64QAM	50	24	18.91	18.84	18.84	17	0								
20	64QAM	50	49	18.49	18.54	18.49																					
20	64QAM	100	0	18.54	18.53	18.83																					
20	256QAM	1	0	18.57	18.55	18.80	17.5	0			20	256QAM	1	0	18.94	18.90	18.91	17	0								
20	256QAM	1	49	18.63	18.45	18.81																					
20	256QAM	1	99	18.50	18.54	18.78																					
20	256QAM	50	0	18.54	18.49	18.44																					
20	256QAM	50	24	18.53	18.48	18.47	17.5	0			20	256QAM	50	24	18.95	18.84	18.84	17	0								
20	256QAM	50	49	18.51	18.43	18.45																					
20	256QAM	100	0	18.50	18.45	18.51																					
Channel				20175	21108	21645					Channel				20175	21108	21645										
Frequency (MHz)				20185	21108	21645					Frequency (MHz)				20185	21108	21645										
15	QPSK	1	0	18.47	18.68	18.81	17.5	0			15	QPSK	1	0	18.00	18.08	18.03	17	0								
15	QPSK	1	37	18.54	18.68	18.83																					
15	QPSK	1	74	18.55	18.68	18.88																					
15	QPSK	36	0	18.44	18.55	18.49																					
15	QPSK	36	20	18.65	18.71	18.81	17.5	0			15	QPSK	36	20	18.88	18.00	18.88	17	0								
15	QPSK	36	49	18.48	18.45	18.78																					
15	QPSK	75	0	18.51	18.64	18.51																					
15	16QAM	1	0	18.81	18.51	18.28																					
15	16QAM	1	37	18.63	18.58	18.50	17.5	0			15	16QAM	1	0	18.05	18.00	18.02	17	0								
15	16QAM	1	74	18.31	18.21	18.54																					
15	16QAM	36	0	18.58	18.35	18.36																					
15	16QAM	36	20	18.59	18.28	18.48																					
15	16QAM	36	49	18.45	18.45	18.54	17.5	0			15	16QAM	36	20	18.90	18.00	18.93	17	0								
15	16QAM	75	0	18.56	18.54	18.50																					
15	64QAM	1	0	18.60	18.58	18.56																					
15	64QAM	1	37	18.53	18.50	18.50	17.5	0			15	64QAM	1	0	18.62	18.62	18.62	17	0								
15	64QAM	1	74	18.63	18.60	18.53																					
15	64QAM	36	0	18.42	18.40	18.49																					
15	64QAM	36	20	18.53	18.38	18.50	17.5	0			15	64QAM	36	20	18.75	18.32	18.59	17	0								
15	64QAM	36	49	18.41	18.45	18.43																					
15	64QAM	75	0	18.54	18.43	18.47																					
15	256QAM	1	0	18.43	18.52	18.58	17.5	0			15	256QAM	1	0	18.83	18.07	18.81	17	0								
15	256QAM	1	37	18.56	18.48	18.54																					
15	256QAM	1	74	18.58	18.44	18.44																					
15	256QAM	36	0	18.49	18.41	18.40																					
15	256QAM	36	20	18.53	18.45	18.46	17.5	0			15	256QAM	36	20	18.90	18.00	18.93	17	0								
15	256QAM	36	49	18.50	18.35	18.38																					
15	256QAM	75	0	18.49	18.42	18.39																					
Channel				20190	21108	21690					Channel				20190	21108	21690										
Frequency (MHz)				20200	21108	21690					Frequency (MHz)				20200	21108	21690										
10	QPSK	1	0	18.57	18.71	18.41	17.5	0			10	QPSK	1	0	18.01	18.00	18.00	17	0								
10	QPSK	1	25	18.58	18.68	18.80																					
10	QPSK	1	49	18.61	18.67	18.88																					
10	QPSK	25	0	18.48	18.53	18.55																					
10	QPSK	25	12	18.58	18.65	18.54	17.5	0			10	QPSK	25	12	18.64	18.03	18.88	17	0								
10	QPSK	25	25	18.48	18.51	18.58																					
10	QPSK	50	0	18.47	18.48	18.88																					
10	16QAM	1	0	18.67	18.63	18.24																					
10	16QAM	1	25	18.58	18.47	18.54	17.5	0			10	16QAM	1	0	18.00	18.00	18.02	17	0								
10	16QAM	1	49	18.25	18.21	18.47																					
10	16QAM	25	0	18.54	18.46	18.37																					
10	16QAM	25	12	18.50	18.42	18.39	17.5	0			10	16QAM	25	12	18.64	18.03	18.76	17	0								
10	16QAM	25	25	18.57	18.45	18.38																					
10	16QAM	50	0	18.50	18.45	18.58																					
10	64QAM	1	0	18.54	18.60	18.81	17.5	0			10	64QAM	1	0	18.03	18.05	18.05	17	0								
10	64QAM	1	25	18.51	18.53	18.44																					
10	64QAM	1	49	18.61	18.59	18.54																					
10	64QAM	25	0	18.46	18.34	18.45																					
10	64QAM	25	12	18.47	18.38	18.38	17.5	0			10	64QAM	25	12	18.84	18.04	18.78	17	0								
10	64QAM	25	25	18.41	18.31	18.47																					
10	64QAM	50	0	18.42	18.42	18.50																					
10	256QAM	1	0	18.44	18.37	18.47	17.5	0			10	256QAM	1	0	18.79	18.06	18.87	17	0								
10	256QAM	1	25	18.52	18.38	18.38																					
10	256QAM	1	49	18.58	18.54	18.42																					
10	256QAM	25	0	18.44	18.44	18.39																					
10	256QAM	25	12	18.44	18.46	18.39	17.5	0			10	256QAM	25	12	18.97	18.03	18.87	17	0								
10	256QAM	25	25	18.50	18.39	18.37																					
10	256QAM	50	0	18.44	18.38	18.38																					
Channel				20175	21108	21690					Channel				20175	21108	21690										
Frequency (MHz)				20185	21108	21690					Frequency (MHz)				20185	21108	21690										
5	QPSK	1	0	18.55	18.68	18.42	17.5	0			5	QPSK	1	0	18.05	18.03	18.03	17	0								
5	QPSK	1	12	18.45	18.59	18.60																					
5	QPSK	1	24	18.68	18.64	18.59																					
5	QPSK	12	0	18.54	18.61	18.26																					
5	QPSK	12	7	18.58	18.71	18.81	17.5	0			5	QPSK	12	7	18.94	18.02	18.03	17	0								
5	QPSK	12	13	18.55	18.62	18.49																					
5	16QAM	1	0	18.81	18.68	18.24																					
5	16QAM	1	12	18.63	18.68	18.24	17.5	0			5	16QAM	1	0	18.01	18.00	18.73	17	0								
5	16QAM	1	24	18.36	18.28	18.08																					
5	16QAM	12	0	18.58	18.33	18.37																					
5	16QAM	12	7	18.44	18.41	18.46																					
5	16QAM	12	13	18.53	18.51	18.56	17.5	0			5	16QAM	12	7	18.84	18.03	18.78	17	0								
5	16QAM	25	0	18.55	18.48	18.88																					
5	64QAM	1	0	18.66	18.63	18.57																					
5	64QAM	1	12	18.59	18.57	18.51	17.5	0			5	64QAM	1	12	18.93	18.00	18.89	17	0								
5	64QAM	1	24	18.44	18.57	18.24																					
5	64QAM	12	0	18.49	18.38	18.40																					
5	64QAM	12	7	18.43	18.38	18.31																					
5	64QAM	12	13	18.55	18.48	18.48	17.5	0			5	64QAM	12	13	18.87	18.05	18.81	17	0								
5	64QAM	25	0	18.39	18.39	18.39																					
5	64QAM	25	0	18.39	18.47	18.41																					
5	256QAM	1	0	18.54	18.59	18.37	17.5	0			5	256QAM	1	0	18.80	18.10	18.99	17	0								
5	256QAM	1	12																								
5	256QAM	1	24	18.38	18.08	18.39																					
5	256QAM	12	0	18.44	18.40	18.38																					
5	256QAM	12	7	18.42	18.42	18.44	17.5	0			5	256QAM	12	7	18.88	18.00	18.87	17	0								
5	256QAM	12	13	18.40	18.41	18.81																					
5	256QAM	25	0	18.39	18.37	18.46																					
Channel				17187	17222	17265					Channel				17187	17222	17265										
Frequency (MHz)				17193	17222	17265					Frequency (MHz)				17193	17222	17265										
3	QPSK	1	0	18.00	18.05	18.09	17	0			3	QPSK	1	0	18.00	18.05	18.09	17	0								
3	QPSK	1	8	18.01	18.02</																						



Reduced Power level 2/3 for Head – Ant0

Band 7 (2400MHz Band)										Band 66													
Part 27										Part 27													
BW (MHz)	Modulation	RIS Size	RIS Offset	Power Low Ch (Freq)	Power Main Ch (Freq)	Power High Ch (Freq)	Time-up limit (min)	MFR (dB)		BW (MHz)	Modulation	RIS Size	RIS Offset	Power Low Ch (Freq)	Power Main Ch (Freq)	Power High Ch (Freq)	Time-up limit (min)	MFR (dB)					
Channel										Channel													
Frequency (MHz)										Frequency (MHz)													
20	QPSK	1	0	18.59	18.72	18.82	17.5	0		20	QPSK	1	0	17.92	17.61	17.70	17	0					
20	QPSK	1	49	18.82	18.71	18.88				20	QPSK	1	49	18.88	18.70	18.83							
20	QPSK	1	99	18.87	18.74	18.88				20	QPSK	1	99	18.91	18.88	18.91							
20	QPSK	50	0	18.55	18.84	18.81	17.5	0		20	QPSK	50	0	18.84	18.88	18.94	17	0					
20	QPSK	50	24	18.85	18.71	18.85				20	QPSK	50	24	18.88	18.88	18.90							
20	QPSK	50	49	18.82	18.85	18.82				20	QPSK	50	49	18.96	18.94	18.99							
20	QPSK	100	0	18.62	18.88	18.83	17.5	0		20	QPSK	100	0	18.95	18.94	18.98	17	0					
20	16QAM	1	0	18.83	18.83	18.78				20	16QAM	1	0	19.02	18.92	18.98							
20	16QAM	1	49	18.71	18.83	18.78				20	16QAM	1	49	18.97	18.92	18.97							
20	16QAM	1	99	18.44	18.34	18.80	17.5	0		20	16QAM	1	99	18.96	18.90	18.96	17	0					
20	16QAM	50	0	18.82	18.48	18.92				20	16QAM	50	0	18.93	18.96	18.93							
20	16QAM	50	24	18.58	18.43	18.88				20	16QAM	50	24	18.98	18.96	18.98							
20	16QAM	50	49	18.88	18.87	18.88	17.5	0		20	16QAM	50	49	19.01	18.97	18.98	17	0					
20	16QAM	100	0	18.58	18.58	18.81				20	16QAM	100	0	18.99	18.93	18.96							
20	16QAM	1	0	18.87	18.83	18.69				20	16QAM	1	0	19.04	18.94	19.04							
20	16QAM	1	49	18.82	18.88	18.78	17.5	0		20	16QAM	1	49	19.01	18.94	19.04	17	0					
20	16QAM	1	99	18.72	18.87	18.88				20	16QAM	1	99	19.06	18.94	19.06							
20	16QAM	50	0	18.82	18.48	18.49				20	16QAM	50	0	18.99	18.93	18.96							
20	16QAM	50	24	18.52	18.87	18.88	17.5	0		20	16QAM	50	24	18.98	18.96	18.97	17	0					
20	16QAM	50	49	18.49	18.54	18.49				20	16QAM	50	49	18.96	18.93	18.96							
20	16QAM	100	0	18.54	18.58	18.83				20	16QAM	100	0	18.90	18.83	18.99							
20	256QAM	1	0	18.57	18.87	18.82	17.5	0		20	256QAM	1	0	18.94	18.84	18.92	17	0					
20	256QAM	1	49	18.83	18.48	18.47				20	256QAM	1	49	18.92	18.85	18.90							
20	256QAM	1	99	18.55	18.54	18.56				20	256QAM	1	99	18.98	18.88	18.99							
20	256QAM	50	0	18.54	18.48	18.44	17.5	0		20	256QAM	50	0	18.99	18.96	18.97	17	0					
20	256QAM	50	24	18.53	18.48	18.47				20	256QAM	50	24	18.97	18.94	18.94							
20	256QAM	50	49	18.53	18.43	18.48				20	256QAM	50	49	18.94	18.90	18.99							
20	256QAM	100	0	18.58	18.48	18.81	17.5	0		20	256QAM	100	0	18.92	18.86	18.91	17	0					
Channel										Channel													
Frequency (MHz)										Frequency (MHz)													
15	QPSK	1	0	18.47	18.88	18.81	17.5	0		15	QPSK	1	0	18.08	18.88	18.83	17.5	0					
15	QPSK	1	37	18.54	18.88	18.83				15	QPSK	1	37	18.10	18.88	18.83							
15	QPSK	1	74	18.55	18.88	18.88				15	QPSK	1	74	18.08	18.78	18.88							
15	QPSK	36	0	18.44	18.85	18.49	17.5	0		15	QPSK	36	0	18.88	18.80	18.88	17.5	0					
15	QPSK	36	20	18.83	18.71	18.81				15	QPSK	36	20	18.80	18.80	18.83							
15	QPSK	36	49	18.48	18.87	18.88				15	QPSK	36	49	18.81	18.86	18.89							
15	QPSK	75	0	18.81	18.84	18.81	17.5	0		15	QPSK	75	0	18.04	18.85	18.93	17.5	0					
15	16QAM	1	0	18.81	18.81	18.78				15	16QAM	1	0	18.05	18.86	18.92							
15	16QAM	1	37	18.83	18.88	18.88				15	16QAM	1	37	18.04	18.87	18.92							
15	16QAM	1	74	18.31	18.87	18.84	17.5	0		15	16QAM	1	74	18.04	18.80	18.91	17.5	0					
15	16QAM	36	0	18.58	18.38	18.58				15	16QAM	36	0	18.89	18.84	18.98							
15	16QAM	36	20	18.39	18.28	18.48				15	16QAM	36	20	18.88	18.84	18.91							
15	16QAM	36	49	18.48	18.48	18.47	17.5	0		15	16QAM	36	49	18.90	18.87	18.94	17	0					
15	16QAM	75	0	18.58	18.54	18.50				15	16QAM	75	0	18.77	18.79	18.82							
15	16QAM	1	0	18.82	18.58	18.58	17.5	0		15	16QAM	1	0	18.82	18.82	18.81	17.5	0					
15	16QAM	1	37	18.53	18.88	18.88				15	16QAM	1	37	18.80	18.82	18.83							
15	16QAM	1	74	18.83	18.88	18.83				15	16QAM	1	74	18.81	18.80	18.83							
15	16QAM	36	0	18.42	18.48	18.49	17.5	0		15	16QAM	36	0	18.78	18.82	18.87	17.5	0					
15	16QAM	36	20	18.82	18.87	18.88				15	16QAM	36	20	18.83	18.87	18.88							
15	16QAM	36	49	18.43	18.45	18.45				15	16QAM	36	49	18.79	18.82	18.87							
15	16QAM	75	0	18.54	18.45	18.47	17.5	0		15	16QAM	75	0	18.77	18.78	18.79	17.5	0					
15	256QAM	1	0	18.43	18.82	18.58				15	256QAM	1	0	18.83	18.86	18.92							
15	256QAM	1	37	18.53	18.78	18.87				15	256QAM	1	37	18.81	18.86	18.92							
15	256QAM	1	74	18.38	18.44	18.44	17.5	0		15	256QAM	1	74	18.75	18.85	18.92	17.5	0					
15	256QAM	36	0	18.49	18.41	18.40				15	256QAM	36	0	18.83	18.82	18.82							
15	256QAM	36	20	18.83	18.48	18.48				15	256QAM	36	20	18.80	18.87	18.92							
15	256QAM	36	49	18.58	18.38	18.38	17.5	0		15	256QAM	36	49	18.79	18.91	18.98	17.5	0					
15	256QAM	75	0	18.49	18.42	18.39				15	256QAM	75	0	18.83	18.84	18.91							
Channel										Channel													
Frequency (MHz)										Frequency (MHz)													
10	QPSK	1	0	18.57	18.71	18.41	17.5	0		10	QPSK	1	0	17.91	17.60	17.70	17	0					
10	QPSK	1	20	18.58	18.58	18.88				10	QPSK	1	20	18.84	18.84	18.97							
10	QPSK	1	49	18.81	18.87	18.82				10	QPSK	1	49	18.86	18.86	18.89							
10	QPSK	25	0	18.48	18.83	18.83	17.5	0		10	QPSK	25	0	18.80	18.80	18.91	17	0					
10	QPSK	25	12	18.58	18.88	18.84				10	QPSK	25	12	18.84	18.83	18.88							
10	QPSK	25	25	18.48	18.81	18.88				10	QPSK	25	25	18.83	18.87	18.91							
10	QPSK	50	0	18.47	18.88	18.88	17.5	0		10	QPSK	50	0	18.99	18.95	18.99	17	0					
10	16QAM	1	0	18.87	18.83	18.84				10	16QAM	1	0	19.00	18.90	18.92							
10	16QAM	1	25	18.58	18.47	18.54				10	16QAM	1	25	18.97	18.87	18.92							
10	16QAM	1	49	18.78	18.82	18.87	17.5	0		10	16QAM	1	49	18.94	18.88	18.93	17	0					
10	16QAM	25	0	18.54	18.48	18.37				10	16QAM	25	0	18.90	18.87	18.92							
10	16QAM	25	12	18.52	18.42	18.39				10	16QAM	25	12	18.84	18.89	18.78							
10	16QAM	25	25	18.57	18.48	18.48	17.5	0		10	16QAM	25	25	18.83	18.87	18.82	17	0					
10	16QAM	50	0	18.44	18.57	18.47				10	16QAM	50	0	18.77	18.78	18.79							
10	256QAM	1	0	18.56	18.54	18.82		17.5	0		10	256QAM	1	0	18.83	18.86		18.92	17	0			
10	256QAM	1	49	18.81	18.83	18.84					10	256QAM	1	49	18.81	18.87		18.89					
10	256QAM	1	25	18.51	18.83	18.44					10	256QAM	1	25	18.83	18.83		18.70					
10	256QAM	1	49	18.81	18.83	18.84	17.5	0		10	256QAM	1	49	18.84	18.84	18.86	17	0					
10	256QAM	25	0	18.48	18.34	18.48				10	256QAM	25	0	18.87	18.74	18.80							
10	256QAM	25	12	18.47	18.38	18.38				10	256QAM	25	12	18.79	18.89	18.87							
10	256QAM	25	25	18.41	18.33	18.47	17.5	0		10	256QAM	25	25	18.80	18.87	18.91	17	0					
10	256QAM	50	0	18.42	18.42	18.30				10	256QAM	50	0	18.76	18.76	18.80							
10	256QAM	50	0	18.44	18.38	18.36				10	256QAM	50	0	18.79	18.80	18.87							
Channel										Channel													
Frequency (MHz)										Frequency (MHz)													
5	QPSK	1	0	18.55	18.88	18.42	17.5	0		5	QPSK	1	0	18.05	18.88	18.83	17	0					
5	QPSK	1	12	18.45	18.88	18.88				5	QPSK	1	12	18.83	18.88	18.93							
5	QPSK	1	24	18.88	18.84	18.88				5	QPSK	1	24	18.87	18.86	18.91							
5	QPSK	12	0	18.54	18.87	18.88	17.5	0		5	QPSK</												



Reduced power for Hotspot-on-Arnt0

Band 7 (2400MHz Band)									
Part 27									
BW (MHz)	Modulation	RIS Size	RIS Offset	Power Low Ch. (Freq.)	Power Main Ch. (Freq.)	Power High Ch. (Freq.)	Time-up limit (min)	MFR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	17.66	17.66	17.66			
20	QPSK	1	49	17.65	17.65	17.65	18.5	0	
20	QPSK	1	99	17.67	17.66	17.70			
20	QPSK	50	0	17.67	17.72	17.83			
20	QPSK	50	24	17.83	17.74	17.67	18.5	0	
20	QPSK	50	49	17.82	17.73	17.77			
20	QPSK	100	0	17.66	17.71	17.84			
20	16QAM	1	0	17.55	17.57	17.46			
20	16QAM	1	49	17.55	17.57	17.48	18.5	0	
20	16QAM	1	99	17.55	17.45	17.59			
20	16QAM	50	0	17.54	17.60	17.49			
20	16QAM	50	24	17.70	17.65	17.54	18.5	0	
20	16QAM	50	49	17.67	17.70	17.87			
20	16QAM	100	0	17.64	17.67	17.54			
20	16QAM	1	0	17.58	17.53	17.60	18.5	0	
20	16QAM	1	49	17.62	17.56	17.56			
20	16QAM	1	99	17.58	17.55	17.51			
20	16QAM	50	0	17.54	17.55	17.56			
20	16QAM	50	24	17.58	17.56	17.57	18.5	0	
20	16QAM	50	49	17.70	17.67	17.80			
20	16QAM	100	0	17.54	17.55	17.54			
20	256QAM	1	0	17.57	17.57	17.46	18.5	0	
20	256QAM	1	49	17.51	17.50	17.61			
20	256QAM	1	99	17.54	17.60	17.59			
20	256QAM	50	0	17.42	17.58	17.48			
20	256QAM	50	24	17.67	17.46	17.45	18.5	0	
20	256QAM	50	49	17.62	17.60	17.43			
20	256QAM	100	0	17.52	17.58	17.41			
Channel									
Frequency (MHz)									
15	QPSK	1	0	17.66	17.66	17.61			
15	QPSK	1	37	17.68	17.66	17.63	18.5	0	
15	QPSK	1	74	17.61	17.70	17.61			
15	QPSK	36	0	17.45	17.50	17.52			
15	QPSK	36	20	17.57	17.73	17.57	18.5	0	
15	QPSK	36	39	17.55	17.66	17.56			
15	QPSK	75	0	17.55	17.59	17.61			
15	16QAM	1	0	17.47	17.49	17.41			
15	16QAM	1	37	17.50	17.46	17.54	18.5	0	
15	16QAM	1	74	17.45	17.45	17.45			
15	16QAM	36	0	17.51	17.55	17.45			
15	16QAM	36	20	17.63	17.66	17.55	18.5	0	
15	16QAM	36	39	17.62	17.46	17.45			
15	16QAM	75	0	17.53	17.55	17.46			
15	16QAM	1	0	17.50	17.50	17.57	18.5	0	
15	16QAM	1	37	17.59	17.56	17.48			
15	16QAM	1	74	17.63	17.66	17.46			
15	16QAM	36	0	17.53	17.49	17.50			
15	16QAM	36	20	17.59	17.60	17.59	18.5	0	
15	16QAM	36	39	17.51	17.50	17.51			
15	16QAM	75	0	17.53	17.53	17.45			
15	256QAM	1	0	17.53	17.54	17.59	18.5	0	
15	256QAM	1	37	17.45	17.45	17.45			
15	256QAM	1	74	17.52	17.47	17.44			
15	256QAM	36	0	17.22	17.57	17.44	18.5	0	
15	256QAM	36	20	17.66	17.54	17.46			
15	256QAM	36	39	17.52	17.58	17.55			
15	256QAM	75	0	17.49	17.57	17.39			
Channel									
Frequency (MHz)									
10	QPSK	1	0	17.61	17.47	17.59			
10	QPSK	1	26	17.54	17.66	17.85	18.5	0	
10	QPSK	1	49	17.58	17.71	17.82			
10	QPSK	25	0	17.64	17.66	17.52			
10	QPSK	25	12	17.57	17.70	17.54	18.5	0	
10	QPSK	25	25	17.57	17.66	17.56			
10	QPSK	12	0	17.47	17.43	17.61			
10	16QAM	1	0	17.51	17.47	17.36			
10	16QAM	1	25	17.48	17.36	17.44	18.5	0	
10	16QAM	25	0	17.45	17.46	17.45			
10	16QAM	25	0	17.48	17.50	17.43			
10	16QAM	25	12	17.55	17.53	17.29	18.5	0	
10	16QAM	25	25	17.57	17.46	17.41			
10	16QAM	50	0	17.57	17.54	17.45			
10	16QAM	1	0	17.52	17.49	17.52			
10	16QAM	1	25	17.48	17.65	17.57	18.5	0	
10	16QAM	1	49	17.54	17.59	17.62			
10	16QAM	25	0	17.47	17.46	17.46			
10	16QAM	25	12	17.57	17.58	17.63	18.5	0	
10	16QAM	25	25	17.57	17.53	17.45			
10	16QAM	50	0	17.57	17.55	17.45			
10	256QAM	1	0	17.44	17.45	17.52	18.5	0	
10	256QAM	1	25	17.53	17.46	17.55			
10	256QAM	1	49	17.53	17.46	17.55			
10	256QAM	25	0	17.27	17.46	17.39			
10	256QAM	25	12	17.56	17.44	17.34	18.5	0	
10	256QAM	25	25	17.58	17.57	17.57			
10	256QAM	50	0	17.46	17.46	17.36			
Channel									
Frequency (MHz)									
5	QPSK	1	0	17.62	17.47	17.51			
5	QPSK	1	12	17.55	17.66	17.63	18.5	0	
5	QPSK	1	24	17.65	17.75	17.67			
5	QPSK	12	0	17.61	17.71	17.56			
5	QPSK	12	7	17.63	17.71	17.57	18.5	0	
5	QPSK	12	13	17.49	17.66	17.63			
5	QPSK	25	0	17.60	17.66	17.53			
5	16QAM	1	0	17.42	17.58	17.47			
5	16QAM	1	12	17.43	17.45	17.36	18.5	0	
5	16QAM	1	24	17.42	17.46	17.41			
5	16QAM	12	0	17.47	17.66	17.46			
5	16QAM	12	7	17.70	17.58	17.53	18.5	0	
5	16QAM	12	13	17.60	17.65	17.58			
5	16QAM	25	0	17.67	17.67	17.42			
5	16QAM	1	0	17.55	17.49	17.58			
5	16QAM	1	12	17.33	17.67	17.51	18.5	0	
5	16QAM	1	24	17.54	17.60	17.44			
5	16QAM	12	0	17.51	17.47	17.42			
5	16QAM	12	7	17.64	17.58	17.62	18.5	0	
5	16QAM	12	13	17.64	17.66	17.42			
5	16QAM	25	0	17.61	17.55	17.59			
5	256QAM	1	0	17.43	17.52	17.50	18.5	0	
5	256QAM	1	12	17.44	17.56	17.49			
5	256QAM	1	24	17.45	17.55	17.41			
5	256QAM	12	0	17.59	17.52	17.41			
5	256QAM	12	7	17.64	17.58	17.53	18.5	0	
5	256QAM	12	13	17.62	17.51	17.52			
5	256QAM	25	0	17.50	17.45	17.50			

Band 66									
BW (MHz)	Modulation	RIS Size	RIS Offset	Power Low Ch. (MHz)	Power Main Ch. (MHz)	Power High Ch. (MHz)	Time-up limit (min)	MFR (dB)	
Channel									
Frequency (MHz)				130902	130922	130972			
20	QPSK	1	0	16.71	16.74	16.77			
20	QPSK	1	49	16.76	16.85	16.83	17.8	0	
20	QPSK	1	99	16.81	16.72	16.87			
20	QPSK	50	0	16.69	16.74	16.76			
20	QPSK	50	24	16.78	16.86	16.83	17.8	0	
20	QPSK	50	49	16.72	16.75	16.77			
20	QPSK	100	0	16.76	16.84	16.82			
20	16QAM	1	0	16.62	16.80	16.79			
20	16QAM	1	49	16.65	16.75	16.79	17.8	0	
20	16QAM	1	99	16.63	16.83	16.98			
20	16QAM	50	0	16.61	16.74	16.73			
20	16QAM	50	24	16.66	16.80	16.86	17.8	0	
20	16QAM	50	49	16.64	16.72	16.82			
20	16QAM	100	0	16.70	16.86	16.77			
20	16QAM	1	0	16.62	16.63	16.75	17.8	0	
20	16QAM	1	49	16.71	16.82	16.82			
20	16QAM	1	99	16.66	16.80	16.72			
20	16QAM	50	0	16.71	16.76	16.72			
20	16QAM	50	24	16.67	16.67	16.61	17.8	0	
20	16QAM	50	49	16.68	16.67	16.61			
20	16QAM	100	0	16.61	16.62	16.66			
20	256QAM	1	0	16.61	16.72	16.76	17.8	0	
20	256QAM	1	49	16.68	16.81	16.70			
20	256QAM	1	99	16.64	16.69	16.65			
20	256QAM	50	0	16.67	16.60	16.60			
20	256QAM	50	24	16.60	16.67	16.66	17.8	0	
20	256QAM	50	49	16.55	16.61	16.52			
20	256QAM	100	0	16.61	16.53	16.50			
Channel				130904	130922	130972	Time-up limit (min)	MFR (dB)	
Frequency (MHz)				1711.6	1744	1772.5			
15	QPSK	1	0	16.74	16.80	16.81			
15	QPSK	1	49	16.79	16.88	16.86	17.8	0	
15	QPSK	1	99	16.81	16.72	16.86			
15	QPSK	30	0	16.63	16.68	16.73			
15	QPSK	30	24	16.72	16.80	16.78	17.8	0	
15	QPSK	30	49	16.70	16.68	16.70			
15	QPSK	70	0	16.67	16.62	16.60			
15	QPSK	70	24	16.70	16.78	16.76	17.8	0	
15	QPSK	70	49	16.68	16.67	16.66			
15	16QAM	1	0	16.58	16.76	16.74			
15	16QAM	1	49	16.61	16.71	16.72	17.8	0	
15	16QAM	1	99	16.63	16.80	16.84			
15	16QAM	30	0	16.64	16.67	16.65			
15	16QAM	30	24	16.63	16.68	16.70	17.8	0	
15	16QAM	30	49	16.61	16.60	16.61			
15	16QAM	70	0	16.57	16.52	16.51			
15	16QAM	70	24	16.70	16.81	16.72	17.8	0	
15	16QAM	70	49	16.70	16.76	16.76			
15	16QAM	30	0	16.62	16.57	16.59			
15	16QAM	30	24	16.62	16.60	16.57	17.8	0	
15	16QAM	30	49	16.60	16.58	16.57			
15	16QAM	70	0	16.48	16.53	16.53			
15	16QAM	70	24	16.64	16.66	16.64	17.8	0	
15	16QAM	70	49	16.64	16.63	16.62			
15	256QAM	1	0	16.58	16.67	16.61			
15	256QAM	1	49	16.69	16.80	16.68	17.8	0	
15	256QAM	1	99	16.62	16.80	16.75			
15	256QAM	30	0	16.60	16.66	16.64	17.8	0	
15	256QAM	30	24	16.52	16.55	16.48			
15	256QAM	30	49	16.58	16.51	16.46			
Channel				1711.5	1744	1772.5	Time-up limit (min)	MFR (dB)	
Frequency (MHz)				1715	1745	1775			
10	QPSK	1	0	16.79	16.85	16.72			
10	QPSK	1	49	16.81	16.88	16.83	17.8	0	
10	QPSK	1	99	16.81	16.63	16.68			
10	QPSK	20	0	16.58	16.58	16.58			
10	QPSK	20	12	16.70	16.72	16.68	17.8	0	
10	QPSK	20	24	16.72	16.74	16.70			
10	QPSK	20	49	16.66	16.76	16.76			
10	16QAM	1	0	16.58	16.65	16.72			
10	16QAM	1	49	16.60	16.74	16.68	17.8	0	
10	16QAM	1	99	16.61	16.73	16.63			
10	16QAM	20	0	16.52	16.52	16.51			
10	16QAM	20	12	16.60	16.70	16.68	17.8	0	
10	16QAM	20	24	16.58	16.66	16.65			
10	16QAM	20	49	16.72	16.66	16.60			
10	16QAM	1	0	16.75	16.76	16.61			
10	16QAM	1	49	16.82	16.72	16.62	17.8	0	
10	16QAM	1	99	16.73	16.76	16.71			
10	16QAM	20	0	16.70	16.63	16.61			
10	16QAM	20	12	16.64	16.66	16.63	17.8	0	
10	16QAM	20	24	16.58	16.58	16.53			
10	16QAM	20	49	16.74	16.63	16.55			
10	16QAM	1	0	16.68	16.69	16.55			
10	16QAM	1	49	16.84	16.69	16.53	17.8	0	
10	16QAM	1	99	16.71	16.76	16.67			
10	16QAM	20	0	16.61	16.58	16.50			
10	16QAM	20	12	16.65	16.66	16.61	17.8	0	
10	16QAM	20	24	16.58	16.58	16.51			
10	16QAM	20	49	16.48	16.42	16.35			
Channel				1715.5	1745.5	1777.5	Time-up limit (min)	MFR (dB)	
Frequency (MHz)				1715.5	1745.5	1777.5			
5	QPSK	1	0	16.67	16.79	16.74			
5	QPSK	1	12	16.62	16.73	16.71	17.8	0	
5	QPSK	1	49	16.67	16.76	16.76			
5	QPSK	12	0	16.61	16.66	16.76			
5	QPSK	12	12	16.77	16.84	16.77	17.8	0	
5	QPSK	12	49	16.60	16.60	16.52			
5	QPSK	20	0	16.67	16.76	16.77			
5	16QAM	1	0	16.60	16.79	16.75			
5	16QAM	1	12	16.48	16.71	16.73	17.8	0	
5	16QAM	1	49	16.67	16.76	16.76			
5	16QAM	12	0	16.62	16.66	16.73			
5	16QAM	12	12	16.53	16.60	16.56	17.8	0	
5	16QAM	12	49	16.60	16.60	16.52			
5	16QAM	20	0	16.61	16.65	16.63			
5	16QAM	1	0	16.73	16.79	16.75			
5	16QAM	1	12	16.67	16.76	16.76	17.8	0	
5	16QAM	1	24	16.66	16.76	16.76			
5	16QAM	12	0	16.62	16.66	16.72			
5	16QAM	12	12	16.63	16.57	16.53	17.8	0	
5	16QAM	12	49	16.51	16.58	16.54			
5	256QAM	1	0	16.58	16.62	16.67			
5	256QAM	1	12	16.65	16.77	16.68	17.8	0	
5	256QAM	1	24	16.57	16.68	16.58			
5	256QAM	12	0	16.62	16.55	16.58			
5	256QAM	12	12	16.54	16.54	16.42	17.8	0	
5	256QAM	12	13	16.42	16.61	16.48			
5	256QAM	20	0	16.49	16.46	16.45			
Channel				131019	130922	130928	Time-up limit (min)	MFR (dB)	
Frequency (MHz)				16.70	17.06	17.06			
3	QPSK	1	0	16.79	16.81	16.83			
3	QPSK	1	8	16.87	16.82	16.78	17.8	0	
3	QPSK	1	16	16.81	16.74	16.81			
3	QPSK	8	0	16.60	16.62	16.59			
3	QPSK	8	4	16.74	16.81	16.78	17.8	0	
3	QPSK	16	0	16.62	16.67	16.66			
3	16QAM	1	0	16.53	16.71	16.75			
3	16QAM	1	8	16.49	16.60	16.64	17.8	0	
3	16QAM	1	16	16.71	16.74	16.74			
3	16QAM	8	0	16.46	16.67	16.70			
3	16QAM	8	4	16.51	16.57	16.54	17.8	0	
3	16QAM	16	0	16.67	16.66	16.66			
3	16QAM	16	8	16.71	16.64	16.71	17.8	0	
3	16QAM	1	0	16.72	16.81	16.72			
3	16QAM	1	8	16.71	16.62	16.77	17.8	0	
3	16QAM	1	16	16.74	16.64	16.68			
3	16QAM	8	0	16.71	16.62	16.62			
3	16QAM	8	4	16.74	16.58	16.58	17.8	0	
3	16QAM	16	0	16.67	16.67	16.67			
3	16QAM	16	8	16.57	16.52	16.55			
3	256QAM	1	0	16.67	16.61	16.64			
3	256QAM	1	8	16.71	16.61	16.61	17.8	0	
3	256QAM	1	16	16.49	16.66	16.64			
3	256QAM	8	0	16.67	16.55	16.51			
3	256QAM	8	4	16.56	16.62	16.61	17.8	0	
3	256QAM	16	0	16.60	16.50	16.42			
3	256QAM	16	8	16.37	16.53	16.40			
Channel				131019	130922	130928	Time-up limit (min)	MFR (dB)	
Frequency (MHz)				16.70	17.06	16.74			
1.4	QPSK	1	0	16.73	16.78	16.74			
1.4	QPSK	1	3	16.74	16.75	16.75	17.8	0	
1.4	QPSK	1	5	16.56	16.69	16.62			
1.4	QPSK	1	10	16.62	16.68	16.68	17.8	0	
1.4	QPSK	3	0	16.79	16.81	16.79			
1.4	QPSK	3	3	16.71	16.68	16.72	17.8	0	
1.4	QPSK	3	5	16.70	16.76	16.76			
1.4	16QAM	1	0	16.55	16.74	16.68			
1.4	16QAM	1	3	16.53	16.61	16.64	17.8	0	
1.4	16QAM	1	5	16.58	16.70	16.67			
1.4	16QAM	1	10	16.53	16.64				



Reduced power for Sensor on-Ant0

Band 7 (2400MHz Band)												
Part 27												
BW (MHz)	Modulation	RIS Size	RIS Offset	Power Low Ch. (Freq.)	Power Main Ch. (Freq.)	Power High Ch. (Freq.)	Time-up limit (min)	MFR (dB)				
Channel												
Frequency (MHz)												
20	QPSK	1	0	21.30	21.31	21.38	22	0				
20	QPSK	1	49	21.30	21.31	21.37						
20	QPSK	1	99	21.44	21.45	21.49						
20	QPSK	50	0	21.23	21.34	21.35	22	0				
20	QPSK	50	24	21.34	21.38	21.37						
20	QPSK	50	49	21.32	21.32	21.32						
20	QPSK	100	0	21.32	21.36	21.34	22	0				
20	16QAM	1	0	21.33	21.38	21.37						
20	16QAM	1	24	21.19	21.27	21.28						
20	16QAM	1	99	21.24	21.22	21.29	22	0				
20	16QAM	50	0	21.31	21.30	21.33						
20	16QAM	50	24	21.28	21.27	21.28						
20	16QAM	50	50	21.28	21.30	21.28	22	0				
20	16QAM	100	0	21.36	21.28	21.34						
20	16QAM	1	0	21.16	21.28	21.13						
20	16QAM	1	49	21.30	21.30	21.32	22	0				
20	16QAM	1	99	21.28	21.28	21.11						
20	16QAM	50	0	21.25	21.27	21.29						
20	16QAM	50	50	21.29	21.32	21.29	22	0				
20	16QAM	100	0	21.22	21.34	21.27						
20	25QAM	1	0	19.01	19.04	19.09	20	2				
20	25QAM	1	49	19.22	19.02	19.14						
20	25QAM	1	99	19.20	19.08	19.16						
20	25QAM	50	0	19.15	19.07	19.13	20	2				
20	25QAM	50	24	19.13	19.13	19.13						
20	25QAM	50	50	19.12	19.12	19.10						
20	25QAM	100	0	19.01	19.04	19.09	20					
Channel												
Frequency (MHz)												
15	QPSK	1	0	21.17	21.08	21.07	22	0				
15	QPSK	1	37	21.19	21.08	21.07						
15	QPSK	1	99	21.35	21.34	21.35						
15	QPSK	36	0	21.05	21.17	21.23	22	0				
15	QPSK	36	20	21.13	21.28	21.18						
15	QPSK	1	99	21.11	21.08	21.10						
15	QPSK	75	0	21.22	21.13	21.19	22	0				
15	16QAM	1	0	21.08	21.08	21.08						
15	16QAM	1	37	20.86	21.08	20.98						
15	16QAM	1	74	21.10	21.10	21.10	22	0				
15	16QAM	36	0	21.08	20.95	21.03						
15	16QAM	36	20	21.08	21.02	21.08						
15	16QAM	36	20	21.02	21.07	21.07	22	0				
15	16QAM	75	0	21.11	21.08	21.02						
15	25QAM	1	0	19.05	19.05	19.07						
15	25QAM	1	36	19.05	19.05	19.05	20	2				
15	25QAM	1	74	19.05	19.04	19.05						
15	25QAM	36	0	19.01	19.05	19.01						
15	25QAM	36	20	19.05	19.01	19.05	20	2				
15	25QAM	36	50	19.05	19.05	19.05						
15	25QAM	75	0	19.06	19.06	19.03						
Channel												
Frequency (MHz)												
10	QPSK	1	0	21.19	21.11	21.19	22	0				
10	QPSK	1	20	21.21	21.05	21.03						
10	QPSK	1	49	21.13	21.21	21.19						
10	QPSK	25	0	21.13	21.18	21.19	22	0				
10	QPSK	25	12	21.22	21.21	21.23						
10	QPSK	25	25	21.15	21.20	21.08						
10	QPSK	50	0	21.20	21.10	21.12	22	0				
10	16QAM	1	0	21.08	21.07	21.07						
10	16QAM	1	25	20.91	21.04	20.96						
10	16QAM	1	50	20.90	21.08	21.07	22	0				
10	16QAM	25	0	21.13	21.02	21.03						
10	16QAM	25	12	21.09	21.08	21.12						
10	16QAM	25	25	21.16	21.02	21.02	22	0				
10	16QAM	50	0	21.18	21.07	21.08						
10	16QAM	50	12	21.18	21.02	21.02						
10	16QAM	25	0	21.05	21.08	21.07	22	0				
10	16QAM	25	12	20.93	21.08	20.99						
10	16QAM	25	25	21.14	21.08	21.03						
10	16QAM	50	0	21.10	21.20	21.11	20	2				
10	25QAM	1	0	19.11	19.04	19.03						
10	25QAM	1	25	19.12	19.04	19.06						
10	25QAM	1	49	19.05	19.04	19.07	20	2				
10	25QAM	25	0	19.03	19.05	19.06						
10	25QAM	25	12	19.09	19.04	19.06						
10	25QAM	25	25	19.03	19.05	19.05	20	2				
10	25QAM	50	0	19.06	19.02	19.01						
Channel												
Frequency (MHz)												
5	QPSK	1	0	21.15	21.14	21.24	22	0				
5	QPSK	1	12	21.21	21.07	21.08						
5	QPSK	1	24	21.19	21.25	21.19						
5	QPSK	12	0	21.05	21.09	21.19	22	0				
5	QPSK	12	7	21.18	21.14	21.12						
5	QPSK	12	13	21.18	21.23	21.03						
5	QPSK	25	0	21.21	21.19	21.19	22	0				
5	16QAM	1	0	21.19	21.07	21.19						
5	16QAM	1	12	20.92	21.10	21.02						
5	16QAM	1	24	21.16	21.07	21.11	22	0				
5	16QAM	12	0	21.08	21.08	21.02						
5	16QAM	12	7	21.16	21.11	21.09						
5	16QAM	12	13	21.12	21.05	21.12	22	0				
5	16QAM	25	0	21.19	21.03	21.11						
5	16QAM	1	0	21.03	21.19	20.96						
5	16QAM	1	12	21.17	21.05	21.15	22	0				
5	16QAM	1	24	21.06	21.10	21.01						
5	16QAM	12	0	21.08	21.11	21.09						
5	16QAM	12	7	20.95	21.09	20.91	22	0				
5	16QAM	12	13	21.07	21.03	21.07						
5	16QAM	25	0	21.11	21.13	21.07						
5	25QAM	1	0	19.07	19.11	19.01	20	2				
5	25QAM	1	12	19.07	19.05	19.02						
5	25QAM	1	24	19.05	19.05	19.03						
5	25QAM	12	0	19.01	19.08	19.01	20	2				
5	25QAM	12	7	19.01	19.06	19.07						
5	25QAM	12	13	19.06	19.07	19.06						
5	25QAM	25	0	19.09	19.05	19.07	20	2				

Band 66									
BW (MHz)	Modulation	RIS Size	RIS Offset	Power Low Ch. (MHz)	Power Main Ch. (MHz)	Power High Ch. (MHz)	Time-up limit (min)	MFR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	18.33	18.37	18.28	19	0	
20	QPSK	1	49	18.05	18.33	18.14			
20	QPSK	1	99	18.18	18.27	18.04			
20	QPSK	50	0	18.11	18.33	18.10	19	0	
20	QPSK	50	24	18.30	18.34	18.16			
20	QPSK	50	99	18.14	18.25	18.12			
20	QPSK	100	0	18.28	18.32	18.14	19	0	
20	16QAM	1	0	18.31	18.32	18.22			
20	16QAM	1	24	18.22	18.29	18.14	19	0	
20	16QAM	1	99	18.28	18.36	18.26			
20	16QAM	50	0	18.14	18.27	18.16	19		
20	16QAM	50	24	18.30	18.34	18.16	19	0	
20	16QAM	50	99	18.18	18.28	18.12			
20	16QAM	100	0	18.28	18.32	18.14	19	0	
20	16QAM	100	24	18.30	18.34	18.16			
20	16QAM	100	99	18.18	18.28	18.12	19	0	
20	16QAM	100	100	18.30	18.34	18.16			
Channel									
Frequency (MHz)									
15	QPSK	1	0	18.08	18.15	17.98	15	0	
15	QPSK	1	49	17.80	18.15	17.98			
15	QPSK	1	99	17.88	18.03	17.85			
15	QPSK	30	0	17.83	18.08	17.85	15	0	
15	QPSK	30	24	18.02	18.14	17.88			
15	QPSK	30	99	17.97	18.03	17.85			
15	QPSK	70	0	18.02	18.03	17.88	15	0	
15	QPSK	70	24	17.99	18.10	17.88			
15	QPSK	70	99	17.99	18.02	17.85			
15	QPSK	100	0	18.01	18.03	17.88	15	0	
15	QPSK	100	24	17.98	18.09	17.85			
15	QPSK	100	99	17.98	18.01	17.85			
15	16QAM	1	0	18.05	18.13	18.05	15	0	
15	16QAM	1	24	18.05	18.13	18.05			
15	16QAM	1	99	17.84	17.98	17.82			
15	16QAM	30	0	17.88	18.03	17.85	15	0	
15	16QAM	30	24	18.04	18.09	17.88			
15	16QAM	30	99	17.90	18.02	17.85			
15	16QAM	70	0	17.90	17.94	17.85	15	0	
15	16QAM	70	24	18.03	18.09	17.88			
15	16QAM	70	99	17.92	18.00	17.85			
15	16QAM	100	0	17.98	18.03	17.88	15	0	
15	16QAM	100	24	18.04	18.09	17.88			
15	16QAM	100	99	17.92	18.00	17.85			
15	16QAM	1	0	17.88	18.03	17.85	15	0	
15	16QAM	1	24	17.93	17.94	17.82			
15	16QAM	1	99	17.83	17.94	17.82			
15	16QAM	30	0	17.89	17.93	17.85	15	0	
15	16QAM	30	24	18.04	18.09	17.88			
15	16QAM	30	99	17.91	17.97	17.85			
15	16QAM	70	0	17.93	17.94	17.85	15	0	
15	16QAM	70	24	18.03	18.08	17.88			
15	16QAM	70	99	17.92	17.97	17.85			
15	16QAM	100	0	17.98	18.03	17.88	15	0	
15	16QAM	100	24	18.04	18.09	17.88			
15	16QAM	100	99	17.92	17.97	17.85			
Channel									
Frequency (MHz)									
10	QPSK	1	0	18.12	18.11	17.98	10	0	
10	QPSK	1	24	17.76	18.03	17.84			
10	QPSK	1	49	17.82	17.93	17.77			
10	QPSK	20	0	17.84	18.04	17.84	10	0	
10	QPSK	20	12	17.97	18.09	17.88			
10	QPSK	20	24	17.88	17.95	17.81			
10	QPSK	50	0	17.98	18.10	17.81	10	0	
10	QPSK	50	12	18.01	18.04	17.82			
10	QPSK	50	24	17.87	17.98	17.80			
10	QPSK	100	0	17.99	18.09	17.85	10	0	
10	QPSK	100	12	18.02	18.03	17.85			
10	QPSK	100	24	17.82	17.85	17.69			
10	16QAM	1	0	17.93	17.89	17.85	10	0	
10	16QAM	1	24	17.88	17.95	17.84			
10	16QAM	1	49	17.84	17.96	17.82			
10	16QAM	20	0	17.90	18.01	17.85	10	0	
10	16QAM	20	12	17.93	17.89	17.85			
10	16QAM	20	24	17.88	17.95	17.84			
10	16QAM	50	0	17.98	18.09	17.85	10	0	
10	16QAM	50	12	18.01	18.02	17.85			
10	16QAM	50	24	17.82	17.85	17.69			
10	16QAM	100	0	17.99	18.01	17.85	10	0	
10	16QAM	100	12	18.02	18.03	17.85			
10	16QAM	100	24	17.82	17.85	17.69			
10	16QAM	1	0	17.99	17.95	17.84	10	0	
10	16QAM	1	24	17.97	17.93	17.81			
10	16QAM	1	49	17.89	17.94	17.83			
10	16QAM	20	0	17.94	17.95	17.84	10	0	
10	16QAM	20	12	17.96	17.94	17.84			
10	16QAM	20	24	17.90	17.95	17.83			
10	16QAM	50	0	17.98	18.08	17.81	10	0	
10	16QAM	50	12	18.01	18.02	17.81			
10	16QAM	50	24	17.87	17.83	17.68			
10	16QAM	100	0	17.99	18.01	17.85	10	0	
10	16QAM	100	12	18.02	18.03	17.85			
10	16QAM	100	24	17.82	17.85	17.69			
Channel									
Frequency (MHz)									
5	QPSK	1	0	18.08	18.18	17.90	5	0	
5	QPSK	1	12	17.77	18.09	17.88			
5	QPSK	1	24	17.82	17.93	17.77			
5	QPSK	12	0	17.77	18.12	17.87	5	0	
5	QPSK	12	7	18.02	18.08	17.88			
5	QPSK	12	13	17.82	17.87	17.68			
5	QPSK	20	0	17.85	18.05	17.84	5	0	
5	QPSK	20	7	18.07	18.12	17.88			
5	QPSK	20	13	17.85	17.87	17.68			
5	QPSK	50	0	17.87	18.08	17.88	5	0	
5	QPSK	50	12	18.05	18.07	17.83			
5	QPSK	50	24	17.88	17.93	17.74			
5	QPSK	100	0	17.98	18.03	17.84	5	0	
5	QPSK	100	12	18.01	18.02	17.84			
5	QPSK	100	24	17.82	17.85	17.69			
5	16QAM	1	0	17.94	17.95	17.84	5	0	
5	16QAM	1	12	17.96	17.94	17.84			
5	16QAM	1	24	17.90	17.95	17.83			
5	16QAM	20	0	17.98	18.08	17.81	5	0	
5	16QAM	20	12	18.01	18.02	17.81			
5	16QAM	20	24	17.87	17.83	17.68			
5	16QAM	50	0	17.99	18.01	17.85	5	0	
5	16QAM	50	12	18.02	18.03	17.85			
5	16QAM	50	24	17.82	17.85	17.69			
5	16QAM	100	0	17.99	18.01	17.85	5	0	
5	16QAM	100	12	18.02	18.03	17.85			
5	16QAM	100	24	17.82	17.85	17.69			
Channel									
Frequency (MHz)									
3	QPSK	1	0	18.08	18.08	17.84	3	0	
3	QPSK	1	8	17.82	18.08	17.78			
3	QPSK	1	14	17.84	17.87	17.68			
3	QPSK	14	0	17.87	18.01	17.84	3	0	
3	QPSK	14	4	18.08	18.08	17.78			
3	QPSK	14	8	17.80	17.93	17.73			
3	QPSK	8	0	17.99	18.04	18.02	3	0	
3	QPSK	8	4	18.07	18.07	17.84			
3	QPSK	8	8	17.86	17.93	17.82			
3	QPSK	1	0	17.99	18.04	18.02	3	0	
3	QPSK	1	8	17.87	17.88	17.64			
3	QPSK	1	14	17.84	17.87	17.68			
3	QPSK	14	0	17.87	18.01	17.84	3	0	
3	QPSK	14	4	18.07	18.07	17.84			
3	QPSK	14	8	17.86	17.93	17.82			
3	QPSK	8	0	17.99	18.04	18.02	3	0	
3	QPSK	8	4	18.02	18.08	17.88			
3	QPSK	8	8	17.76	17.79	17.66			
3	QPSK	1	0	17.99	18.04	18.02	3	0	
3	QPSK	1	8	17.87	17.88	17.64			
3	QPSK	1	14	17.84	17.87	17.68			
3	QPSK	14	0	17.87	18.01	17.84	3	0	
3	QPSK	14	4	18.07	18.07	17.84			
3	QPSK	14	8	17.86	17.93	17.82			
3	QPSK	8	0	17.99	18.04	18.02	3	0	
3	QPSK	8	4	18.02	18.08	17.88			
3	QPSK	8	8	17.76	17.79	17.66			
3	QPSK	1	0	17.99	18.04	18.02	3	0	
3	QPSK	1	8	17.87	17.88	17.64			
3	QPSK	1	14	17.84	17.87	17.68			
3	QPSK	14	0	17.87	18.01	17.84	3	0	
3	QPSK	14	4	18.07	18.07	17.84			
3	QPSK	14	8	17.86	17.93	17.82			
3	QPSK	8	0	17.99	18.04	18.02	3	0	
3	QPSK	8	4	18.02	18.08	17.88			
3	QPSK	8	8	17.76	17.79	17.66			
3	QPSK	1	0	17.99	18.04	18.02	3	0	
3	QPSK	1	8	17.87	17.88	17.64			
3	QPSK	1	14	17.84	17.87	17.68			
3	QPSK	14	0	17.87	18.01	17.84	3	0	
3	QPSK	14	4	18.07	18.07	17.84			
3	QPSK	14	8	17.86	17.93	17.82			
3	QPSK	8	0	17.99	18.04	18.02	3	0	
3	QPSK	8	4	18.02	18.08	17.88			
3	QPSK	8	8	17.76	17.79	17.66			
3	QPSK	1	0	17.99	18.04	18.02	3	0	
3	QPSK	1	8	17.87	17.88	17.64			
3	QPSK	1	14	17.84	17.87	17.68			
3	QPSK	14	0	17.87	18.01	17.84	3	0	
3	QPSK	14	4	18.07	18.07	17.84			
3	QPSK	14	8	17.86	17.93	17.82			
3	QPSK	8	0	17.99	18.04	18.02	3	0	
3	QPSK	8	4	18.02	18.08	17.88			
3	QPSK	8	8	17.76	17.79	17.66			
3	QPSK	1	0	17.99	18.04	18.02			



Full Power Mode - Ant1

Band 7 (2400MHz Band)									
Part 27									
BW (MHz)	Modulation	RIS Size	RIS Offset	Power Low Ch. (Freq.)	Power High Ch. (Freq.)	Power Top Ch. (Freq.)	Time-up time (min)	MFR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	24.13	24.10	23.96			
20	QPSK	1	49	24.12	24.10	23.96	24.8	0	
20	QPSK	1	99	24.15	24.10	24.00			
20	QPSK	50	0	23.21	23.20	23.12			
20	QPSK	50	24	23.26	23.26	23.13	23.8	1	
20	QPSK	50	24	23.24	23.24	23.10			
20	QPSK	100	0	23.24	23.25	23.10			
20	16QAM	1	0	23.53	23.51	23.34			
20	16QAM	1	49	23.50	23.49	23.30	23.8	1	
20	16QAM	1	99	23.51	23.49	23.30			
20	16QAM	50	0	22.33	22.30	22.15			
20	16QAM	50	24	22.28	22.23	22.17	22.8	2	
20	16QAM	50	50	22.27	22.27	22.11			
20	16QAM	100	0	22.26	22.25	22.12			
20	16QAM	1	0	22.43	22.39	22.26	22.8	2	
20	16QAM	1	49	22.42	22.39	22.26			
20	16QAM	1	99	22.11	22.10	22.07			
20	16QAM	50	0	21.16	21.20	21.17	21.8	3	
20	16QAM	50	24	21.13	21.20	21.10			
20	16QAM	50	50	20.92	21.20	21.13			
20	16QAM	100	0	20.92	21.20	21.10			
20	256QAM	1	0	19.12	19.10	19.00	19.8	5	
20	256QAM	1	49	19.23	19.24	19.20			
20	256QAM	1	99	19.22	19.23	19.24			
20	256QAM	50	0	19.09	19.22	19.19			
20	256QAM	50	24	19.12	19.11	19.10	19.8	5	
20	256QAM	50	50	19.22	19.10	19.10			
20	256QAM	100	0	19.16	19.05	19.14			
Channel									
Frequency (MHz)									
15	QPSK	1	0	24.08	24.14	23.82	24.8	0	
15	QPSK	1	37	24.10	24.14	23.91			
15	QPSK	1	74	24.06	24.10	23.90			
15	QPSK	36	0	23.30	23.19	23.11	23.8	1	
15	QPSK	36	20	23.30	23.24	23.15			
15	QPSK	36	17	23.17	23.20	23.10			
15	QPSK	75	0	23.14	23.13	23.10			
15	16QAM	1	0	23.58	23.67	23.91	23.8	1	
15	16QAM	1	37	23.58	23.71	23.91			
15	16QAM	1	74	23.42	23.37	23.91			
15	16QAM	36	0	22.20	22.20	22.04	22.8	2	
15	16QAM	36	20	22.24	22.27	22.09			
15	16QAM	36	17	22.22	22.20	22.10			
15	16QAM	75	0	22.18	22.15	22.02			
15	16QAM	1	0	22.44	22.44	22.24	22.8	2	
15	16QAM	1	37	22.12	22.10	22.00			
15	16QAM	1	74	21.99	22.00	22.12			
15	16QAM	36	0	21.10	21.20	21.10	21.8	3	
15	16QAM	36	20	21.25	21.20	21.00			
15	16QAM	36	17	21.21	21.20	21.00			
15	16QAM	75	0	21.04	21.10	21.00			
15	256QAM	1	0	19.14	19.02	19.19	19.8	5	
15	256QAM	1	37	19.11	19.14	19.10			
15	256QAM	1	74	19.18	19.10	19.20			
15	256QAM	36	0	19.15	19.30	19.30	19.8	5	
15	256QAM	36	20	19.22	19.10	19.20			
15	256QAM	36	17	19.23	19.08	19.12			
15	256QAM	75	0	19.13	19.04	19.17			
Channel									
Frequency (MHz)									
10	QPSK	1	0	24.00	24.17	23.99	24.8	0	
10	QPSK	1	20	23.92	23.94	23.96			
10	QPSK	1	49	23.97	24.00	23.99			
10	QPSK	25	0	23.20	23.20	23.12	23.8	1	
10	QPSK	25	12	23.20	23.20	23.09			
10	QPSK	25	25	23.28	23.17	23.09			
10	QPSK	50	0	23.20	23.18	23.12	23.8	1	
10	16QAM	1	0	23.07	23.17	23.07	23.8	1	
10	16QAM	1	25	23.21	23.20	23.01			
10	16QAM	25	0	23.31	23.30	23.09			
10	16QAM	25	0	23.14	23.10	23.10	22.8	2	
10	16QAM	25	12	22.13	22.20	22.16			
10	16QAM	25	25	22.33	22.33	21.87			
10	16QAM	50	0	22.34	22.25	22.00			
10	16QAM	1	0	22.40	22.20	22.34	22.8	2	
10	16QAM	1	25	22.45	22.25	22.12			
10	16QAM	1	49	22.05	22.30	21.00			
10	16QAM	25	0	21.11	21.31	21.06			
10	16QAM	25	12	21.10	21.20	21.10	21.8	3	
10	16QAM	25	25	21.01	21.27	21.11			
10	16QAM	50	0	20.98	21.25	21.12			
10	256QAM	1	0	19.22	19.05	19.30	19.8	5	
10	256QAM	1	25	19.04	19.10	19.01			
10	256QAM	1	49	19.10	19.10	19.10			
10	256QAM	25	0	19.31	19.20	19.10	19.8	5	
10	256QAM	25	12	19.04	19.07	19.17			
10	256QAM	25	25	19.02	19.10	19.20			
10	256QAM	50	0	19.22	19.05	19.31			
Channel									
Frequency (MHz)									
5	QPSK	1	0	23.98	24.10	23.94	24.8	0	
5	QPSK	1	12	24.03	24.00	23.99			
5	QPSK	1	24	24.09	24.05	23.94			
5	QPSK	12	0	23.21	23.20	23.14	23.8	1	
5	QPSK	12	7	23.22	23.24	23.00			
5	QPSK	12	13	23.25	23.21	23.06			
5	QPSK	25	0	23.20	23.20	23.08	23.8	1	
5	16QAM	1	0	23.62	23.72	23.09			
5	16QAM	1	12	23.62	23.70	23.25	23.8	1	
5	16QAM	1	24	23.68	23.60	23.02			
5	16QAM	12	0	22.30	22.20	22.02			
5	16QAM	12	7	22.28	22.20	22.02	22.8	2	
5	16QAM	12	13	22.27	22.21	21.98			
5	16QAM	25	0	22.28	22.31	22.11			
5	16QAM	1	0	22.26	22.10	22.10	22.8	2	
5	16QAM	1	12	22.38	22.01	21.89			
5	16QAM	1	24	21.90	22.00	22.00			
5	16QAM	12	0	21.10	21.10	20.99	21.8	3	
5	16QAM	12	7	21.29	21.27	21.07			
5	16QAM	12	13	21.42	21.40	20.90			
5	16QAM	25	0	21.13	21.25	20.91			
5	256QAM	1	0	19.00	19.10	19.21	19.8	5	
5	256QAM	1	12	19.23	19.24	19.27			
5	256QAM	1	24	19.17	19.10	19.20			
5	256QAM	12	0	19.19	19.20	19.06	19.8	5	
5	256QAM	12	7	19.02	19.07	19.09			
5	256QAM	12	13	19.02	19.00	19.10			
5	256QAM	25	0	19.24	19.05	19.20			

Band 66									
BW (MHz)	Modulation	RIS Size	RIS Offset	Power Low Ch. (MHz)	Power High Ch. (MHz)	Power Top Ch. (MHz)	Time-up time (min)	MFR (dB)	
Channel									
Frequency (MHz)				13092	130922	130972			
20	QPSK	1	0	23.78	23.74	23.75			
20	QPSK	1	49	23.72	23.80	23.80	24.8	0	
20	QPSK	1	99	23.81	23.58	23.53			
20	QPSK	50	0	22.75	22.77	22.72			
20	QPSK	50	24	22.78	22.81	22.73	23.8	1	
20	QPSK	50	50	22.79	22.71	22.71			
20	QPSK	100	0	22.75	22.79	22.70			
20	16QAM	1	0	23.10	23.17	23.11			
20	16QAM	1	49	23.10	23.02	23.06	23.8	1	
20	16QAM	1	99	22.99	22.86	22.87			
20	16QAM	50	0	21.90	21.79	21.76			
20	16QAM	50	24	21.93	21.82	21.72	22.8	2	
20	16QAM	50	50	21.85	21.73	21.70			
20	16QAM	100	0	21.87	21.76	21.66			
20	16QAM	1	0	22.01	21.98	21.94	22.8	2	
20	16QAM	1	49	21.90	21.86	21.87			
20	16QAM	1	99	21.84	21.79	21.71			
20	16QAM	50	0	20.75	20.81	20.77			
20	16QAM	50	24	20.80	20.83	20.76	21.8	3	
20	16QAM	50	50	20.72	20.70	20.71			
20	16QAM	100	0	20.77	20.78	20.72			
20	256QAM	1	0	19.14	19.06	19.10	19.8	5	
20	256QAM	1	49	19.02	19.11	19.13			
20	256QAM	1	99	19.03	19.12	19.06			
20	256QAM	50	0	19.06	19.10	19.06			
20	256QAM	50	24	19.07	19.08	19.04	19.8	5	
20	256QAM	50	50	19.04	19.00	19.02			
20	256QAM	100	0	19.02	19.03	19.00			
Channel				130947	130952	130997			
Frequency (MHz)				17114	17144	17214			
15	QPSK	1	0	23.82	23.71	23.76			
15	QPSK	1	49	23.76	23.80	23.80	24.8	0	
15	QPSK	1	99	23.85	23.62	23.57			
15	QPSK	50	0	22.85	22.74	22.72			
15	QPSK	50	24	22.82	22.84	22.76	23.8	1	
15	QPSK	50	50	22.84	22.72	22.73			
15	QPSK	100	0	22.80	22.78	22.73			
15	QPSK	1	0	23.82	23.69	23.74			
15	QPSK	1	49	23.76	23.80	23.80	24.8	0	
15	QPSK	1	99	23.85	23.62	23.57			
15	QPSK	50	0	22.85	22.74	22.72			
15	QPSK	50	24	22.82	22.84	22.76	23.8	1	
15	QPSK	50	50	22.84	22.72	22.73			
15	QPSK	100	0	22.80	22.78	22.73			
15	16QAM	1	0	23.82	23.69	23.74			
15	16QAM	1	49	23.76	23.80	23.80	24.8	0	
15	16QAM	1	99	23.85	23.62	23.57			
15	16QAM	50	0	22.85	22.74	22.72			
15	16QAM	50	24	22.82	22.84	22.76	23.8	1	
15	16QAM	50	50	22.84	22.72	22.73			
15	16QAM	100	0	22.80	22.78	22.73			
15	256QAM	1	0	19.18	19.06	19.11	19.8	5	
15	256QAM	1	49	19.10	19.05	19.08			
15	256QAM	1	99	19.07	19.08	19.04			
15	256QAM	50	0	19.09	19.10	19.06			
15	256QAM	50	24	19.10	19.09	19.05	19.8	5	
15	256QAM	50	50	19.07	19.03	19.01			
15	256QAM	100	0	19.02	19.03	19.00			
15	256QAM	1	0	19.18	19.05	19.09			
15	256QAM	1	49	19.10	19.05	19.08			
15	256QAM	1	99	19.07	19.08	19.04			
15	256QAM	50	0	19.09	19.10	19.06			
15	256QAM	50	24	19.10	19.09	19.05	19.8	5	
15	256QAM	50	50	19.07	19.03	19.01			
15	256QAM	100	0	19.02	19.03	19.00			
15	256QAM	1	0	19.18	19.05	19.09			
15	256QAM	1	49	19.10	19.05	19.08			
15	256QAM	1	99	19.07	19.08	19.04			
15	256QAM	50	0	19.09	19.10	19.06			
15	256QAM	50	24	19.10	19.09	19.05	19.8	5	
15	256QAM	50	50	19.07	19.03	19.01			
15	256QAM	100	0	19.02	19.03	19.00			
15	256QAM	1	0	19.18	19.05	19.09			
15	256QAM	1	49	19.10	19.05	19.08			
15	256QAM	1	99	19.07	19.08	19.04			
15	256QAM	50	0	19.09	19.10	19.06			
15	256QAM	50	24	19.10	19.09	19.05	19.8	5	
15	256QAM	50	50	19.07	19.03	19.01			
15	256QAM	100	0	19.02	19.03	19.00			
15	256QAM	1	0	19.18	19.05	19.09			
15	256QAM	1	49	19.10	19.05	19.08			
15	256QAM	1	99	19.07	19.08	19.04			
15	256QAM	50	0	19.09	19.10	19.06			
15	256QAM	50	24	19.10	19.09	19.05	19.8	5	
15	256QAM	50	50	19.07	19.03	19.01			
15	256QAM	100	0	19.02	19.03	19.00			
15	256QAM	1	0	19.18	19.05	19.09			
15	256QAM	1	49	19.10	19.05	19.08			
15	256QAM	1	99	19.07	19.08	19.04			
15	256QAM	50	0	19.09	19.10	19.06			
15	256QAM	50	24	19.10	19.09	19.05	19.8	5	
15	256QAM	50	50	19.07	19.03	19.01			
15	256QAM	100	0	19.02	19.03	19.00			
15	256QAM	1	0	19.18	19.05	19.09			
15	256QAM	1	49	19.10	19.05	19.08			
15	256QAM	1	99	19.07	19.08	19.04			
15	256QAM	50	0	19.09	19.10	19.06			
15	256QAM	50	24	19.10	19.09	19.05	19.8	5	
15	256QAM	50	50	19.07	19.03	19.01			
15	256QAM	100	0	19.02	19.03	19.00			
15	256QAM	1	0	19.18	19.05	19.09			
15	256QAM	1	49	19.10	19.05	19.08			
15	256QAM	1	99	19.07	19.08	19.04			
15	256QAM	50	0	19.09	19.10	19.06			
15	256QAM	50	24	19.10	19.09	19.05	19.8	5	
15	256QAM	50	50	19.07	19.03	19.01			
15	256QAM	100	0	19.02	19.03	19.00			
15	256QAM	1	0	19.18	19.05	19.09			
15	256QAM	1	49	19.10	19.05	19.08			
15	256QAM	1	99	19.07	19.08	19.04			
15	256QAM	50	0	19.09	19.10	19.06			
15	256QAM	50	24	19.10	19.09	19.05	19.8	5	
15	256QAM	50	50	19.07	19.03	19.01			
15	256QAM	100	0	19.02	19.03	19.00			
15	256QAM	1	0	19.18	19.05	19.09			
15	256QAM	1	49	19.10	19.05	19.08			
15	256QAM	1	99	19.07	19.08	19.04			
15	256QAM	50	0	19.09	19.10	19.06			
15	256QAM	50	24	19.10	19.09	19.05	19.8	5	
15	256QAM	50	50	19.07	19.03	19.01			
15	256QAM	100	0	19.02	19.03	19.00			
15	256QAM	1	0	19.18	19.05	19.09			
15	256QAM	1	49	19.10	19.05	19.08			
15	256QAM	1	99	19.07	19.08	19.04			
15	256QAM	50	0	19.09	19.10	19.06			
15	256QAM	50	24	19.10	19.09	19.05	19.8	5	
15	256QAM	50	50	19.07	19.03	19.01			
15	256QAM	100	0	19.02	19.03	19.00			
15	256QAM	1	0	19.18	19.05	19.09			
15	256QAM	1	49	19.10	19.05	19.08			
15	256QAM	1	99	19.07	19.08	19.04			
15	256QAM	50	0	19.09	19.10	19.06			
15	256QAM	50	24	19.10	19.09	19.05	19.8	5	
15	256QAM	50	50	19.07	19.03	19.01			
15	256QAM	100	0	19.02	19.03	19.00			
15	256QAM	1	0	19.18	19.05	19.09			
15	256QAM	1	49	19.10	19.05	19.08			
15	256QAM	1	99	19.07	19.08	19.04			
15	256QAM	50	0	19.09	19.10	19.06			
15	256QAM	50	24	19.10	19.09	19.05	19.8	5	
15	256QAM	50	50	19.07	19.03	19.01			
15	256QAM	100	0	19.02	19.03	19.00			
15	256QAM	1	0	19.18	19.05	19.09			
15	256QAM	1	49	19.10	19.05	19.08			
15	256QAM	1	99	19.07	19.08	19.04			
15	256QAM	50	0	19.09	19.10	19.06			
15	256QAM	50	24	19.10	19.09	19.05	19.8	5	
15	256QAM	50	50	19.07	19.03	19.01			
15	256QAM	100	0	19.02	19.03	19.00			
15	256QAM	1	0	19.18	19.05	19.09			
15	256QAM	1	49	19.10	19.05	19.08			
15	256QAM	1	99	19.07	19.08	19.04			
15	256QAM	50	0	19.09	19.10	19.06			
15	256QAM	50	24	19.10	19.09	19.05	19.8	5	
15	256QAM	50	50	19.07	19.03	19.01			
15	256QAM	100	0	19.02	19.03	19.00			
15	256QAM	1	0	19.18	19.05	19.09			
15	256QAM	1	49	19.10	19.05	19.08			
15	256QAM	1	99	19.07					



Full Power

BT BR/EDR

BT BREK												
Mode	Channel	Frequency (MHz)	Average power (dBm)									Tune-up Limit
			Packet Type									
			DH1	DH3	DH5	2DH1	2DH3	2DH5	3DH1	3DH3	3DH5	
Bluetooth	CH 0	2402	12.40	12.20	12.10	11.00	10.70	10.60	11.00	10.70	10.60	14.10
	CH 39	2441	14.20	14.00	13.90	12.80	12.60	12.50	12.80	12.60	12.50	15.90
	CH 78	2480	13.20	12.90	12.80	11.80	11.50	11.40	11.80	11.50	11.40	14.80

BT LE

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			GFSK	Tune-up Limit
LE	CH 00	2402	7.70	9.70
	CH 19	2440	9.60	11.60
	CH 39	2480	8.80	10.80

BT LE 5.0

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			GFSK	Tune-up Limit
LE	CH 00	2402	7.80	9.80
	CH 19	2440	9.80	11.80
	CH 39	2480	8.90	10.90

Ant+

Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-up Limit
Ant+	CH 02	2402	-7.40	-5.40
	CH 41	2441	-5.70	-3.70
	CH 80	2480	-5.90	-3.90



Reduced Power for Head

BT BR/EDR

Mode	Channel	Frequency (MHz)	Average power (dBm)									Tune-up Limit
			Packet Type									
			DH1	DH3	DH5	2DH1	2DH3	2DH5	3DH1	3DH3	3DH5	
Bluetooth	CH 0	2402	6.40	6.30	6.30	4.70	4.50	4.50	4.70	4.50	4.50	8.30
	CH 39	2441	7.70	7.60	7.60	6.10	6.00	5.90	6.10	6.00	6.00	9.60
	CH 78	2480	7.20	7.10	7.10	5.50	5.40	5.30	5.50	5.40	5.30	9.10



Full Power

Ant 2							
	Mode	RU Config.	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11b 1Mbps	Full	1	2412	14.80	16.50	100.00
		Full	6	2437	15.10	16.50	
		Full	11	2462	14.90	16.50	
	802.11g 6Mbps	Full	1	2412	14.50	15.50	98.98
		Full	6	2437	14.70	15.50	
		Full	11	2462	14.60	15.50	
	802.11n-HT20 MCS0	Full	1	2412	13.40	14.50	100.00
		Full	6	2437	13.70	14.50	
		Full	11	2462	13.60	14.50	
	802.11n-HT40 MCS0	Full	3	2422	12.40	13.50	100.00
		Full	6	2437	12.70	13.50	
		Full	9	2452	12.20	13.50	
	802.11ac-VHT20 MCS0	Full	1	2412	13.30	14.50	100.00
		Full	6	2437	13.60	14.50	
		Full	11	2462	13.50	14.50	
	802.11ac-VHT40 MCS0	Full	3	2422	12.20	13.50	100.00
		Full	6	2437	12.50	13.50	
		Full	9	2452	12.10	13.50	
	802.11ac-HE20 MCS0	Full	1	2412	13.30	14.50	100.00
		26/0	1	2412	4.40	5.50	
		52/37	1	2412	5.50	6.50	
		106/53	1	2412	8.80	9.50	
		Full	6	2437	13.70	14.50	
		26/4	6	2437	4.25	5.50	
		52/38	6	2437	5.35	6.50	
		106/53	6	2437	8.65	9.50	
		Full	11	2462	13.60	14.50	
		26/8	11	2462	3.30	4.50	
		52/40	11	2462	4.90	5.50	
		106/54	11	2462	7.70	8.50	
		Full	3	2422	13.50	14.50	
		26/0	3	2422	4.70	5.50	
	802.11ac-HE40 MCS0	52/37	3	2422	5.50	6.50	100.00
		106/53	3	2422	6.30	7.50	
		242/61	3	2422	8.00	8.50	
		Full	6	2437	13.60	14.50	
		26/8	6	2437	4.80	5.50	
		52/40	6	2437	5.60	6.50	
		106/54	6	2437	8.40	7.50	
		242/61	6	2437	8.10	8.50	
		Full	9	2452	13.20	14.50	
		26/18	9	2452	5.80	6.50	
		52/44	9	2452	6.00	7.50	
		106/56	9	2452	7.20	8.50	
		242/62	9	2452	7.00	9.50	

Full Power

Ant 1+2							
	Mode	RU Config.	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11b 1Mbps	Full	1	2412	17.96	19.50	100.00
		Full	6	2437	18.01	19.50	
		Full	11	2462	17.91	19.50	
	802.11g 6Mbps	Full	1	2412	17.22	18.50	98.98
		Full	6	2437	17.28	18.50	
		Full	11	2462	17.23	18.50	
	802.11n-HT20 MCS0	Full	1	2412	16.12	17.50	100.00
		Full	6	2437	16.28	17.50	
		Full	11	2462	16.23	17.50	
	802.11n-HT40 MCS0	Full	3	2422	14.98	16.50	100.00
		Full	6	2437	15.20	16.50	
		Full	9	2452	14.83	16.50	
	802.11ac-VHT20 MCS0	Full	1	2412	16.02	17.50	100.00
		Full	6	2437	16.18	17.50	
		Full	11	2462	16.13	17.50	
	802.11ac-VHT40 MCS0	Full	3	2422	14.83	16.50	100.00
		Full	6	2437	15.04	16.50	
		Full	9	2452	14.73	16.50	
	802.11ac-HE20 MCS0	Full	1	2412	16.02	17.50	100.00
		26/0	1	2412	7.20	8.50	
		52/37	1	2412	8.22	9.50	
		106/53	1	2412	11.57	12.50	
		Full	6	2437	16.20	17.50	
		26/4	6	2437	6.97	8.50	
		52/38	6	2437	8.07	9.50	
		106/53	6	2437	11.42	12.50	
		Full	11	2462	16.23	17.50	
		26/8	11	2462	6.02	7.50	
		52/40	11	2472	7.62	8.50	
		106/54	11	2472	10.66	11.50	
		Full	3	2422	16.00	17.50	
		26/0	3	2422	7.15	8.50	
	802.11ac-HE40 MCS0	52/37	3	2422	8.08	9.50	100.00
		106/53	3	2422	8.93	10.50	
		242/61	3	2422	10.72	11.50	
		Full	6	2437	16.10	17.50	
		26/8	6	2437	7.25	8.50	
		52/40	6	2437	8.18	9.50	
		106/54	6	2437	9.03	10.50	
		242/61	6	2437	10.62	11.50	
		Full	9	2452	15.92	17.50	
		26/18	9	2452	8.96	9.50	
		52/44	9	2452	9.71	10.50	
		106/56	9	2452	10.91	11.50	
		242/62	9	2452	11.44	12.50	

Ant 1+2							
	Mode	RU Config.	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	Full	36	5180	20.67	22.00	98.63
		Full	40	5200	20.52	22.00	
		Full	44	5220	20.61	22.00	
		Full	48	5240	20.60	22.00	
	802.11n-HT20 MCS0	Full	36	5180	19.62	21.00	100.00
		Full	40	5200	19.50	21.00	
		Full	44	5220	19.70	21.00	
		Full	48	5240	19.59	21.00	
	802.11n-HT40 MCS0	Full	38	5190	19.57	21.00	100.00
		Full	46	5230	19.59	21.00	
	802.11ac-VHT20 MCS0	Full	36	5180	19.59	21.00	100.00
		Full	40	5200	19.47	21.00	
		Full	44	5220	19.66	21.00	
	802.11ac-VHT40 MCS0	Full	48	5240	19.55	21.00	100.00
		Full	38	5190	19.47	21.00	
		Full	46	5230	19.50	21.00	
	802.11ac-VHT80 MCS0	Full	42	5210	20.37	22.00	100.00
	802.11ac-HE20 MCS0	Full	36	5180	19.61	21.00	100.00
		26/0	36	5180	10.36	12.00	
		52/37	36	5180	14.88	15.00	
		106/53	36	5180	17.08	18.00	
		Full	40	5200	19.53	21.00	
		26/2	40	5200	10.21	12.00	
		52/38	40	5200	14.73	15.00	
		106/53	40	5200	16.93	17.00	
		Full	44	5220	19.65	21.00	
		26/6	44	5220	10.70	12.50	
		52/39	44	5220	14.81	15.00	
		106/54	44	5220	16.88	17.00	
		Full	48	5240	19.56	21.00	
		26/8	48	5240	10.85	12.50	
		52/40	48	5240	14.96	15.00	
		106/54	48	5240	17.03	18.00	
	802.11ac-HE40 MCS0	Full	38	5190	19.62	21.00	100.00
		26/0	38	5190	9.62	11.00	
		52/37	38	5190	12.26	13.00	
		106/53	38	5190	14.28	15.00	
		242/61	38	5190	17.26	18.00	
		Full	46	5230	19.65	21.00	
		26/18	46	5230	9.53	11.00	
		52/44	46	5230	12.41	13.00	
		106/56	46	5230	14.43	15.00	
		242/62	46	5230	18.22	19.00	
	802.11ac-HE80 MCS0	Full	42	5210	20.51	22.00	100.00
		26/0	42	5210	6.85	8.00	
		52/37	42	5210	9.63	11.00	
		106/53	42	5210	13.30	14.00	
		242/61	42	5210	16.53	17.00	
		484/65	42	5210	18.39	19.00	
		484/66	42	5210	18.35	19.00	



Ant 1+2							
5.3GHz WLAN	Mode	RU Config.	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	Full	52	5260	20.57	22.00	98.63
		Full	56	5280	20.39	22.00	
		Full	60	5300	20.34	22.00	
		Full	64	5320	20.37	22.00	
	802.11n-HT20 MCS0	Full	52	5260	19.54	21.00	100.00
		Full	56	5280	20.30	22.00	
		Full	60	5300	20.19	22.00	
		Full	64	5320	20.24	22.00	
	802.11n-HT40 MCS0	Full	54	5270	19.41	21.00	100.00
		Full	62	5310	20.26	22.00	
	802.11ac-VHT20 MCS0	Full	52	5260	19.50	21.00	100.00
		Full	56	5280	20.27	22.00	
		Full	60	5300	20.15	22.00	
		Full	64	5320	20.23	22.00	
	802.11ac-VHT40 MCS0	Full	54	5270	19.35	21.00	100.00
	802.11ac-VHT40 MCS0	Full	62	5310	20.15	22.00	100.00
	802.11ac-VHT80 MCS0	Full	58	5290	20.26	22.00	100.00
	802.11ac-VHT160 MCS0	Full	50	5250	20.82	21.00	100
	802.11ac-HE20 MCS0	Full	52	5260	19.51	21.00	100.00
		26/0	52	5260	11.16	13.00	
		52/37	52	5260	14.90	15.00	
		106/53	52	5260	17.19	18.00	
		Full	56	5280	20.32	22.00	
		26/2	56	5280	11.03	13.00	
		52/38	56	5280	14.77	15.00	
		106/53	56	5280	17.06	18.00	
		Full	60	5300	20.14	22.00	
		26/8	60	5300	10.75	12.50	
		52/39	60	5300	14.77	15.00	
		106/54	60	5300	18.01	19.00	
		Full	64	5320	20.28	22.00	
		26/8	64	5320	10.88	12.50	
		52/40	64	5320	14.90	15.00	
		106/54	64	5320	18.14	19.00	
	802.11ac-HE40 MCS0	Full	54	5270	20.38	22.00	100.00
		26/0	54	5270	10.28	12.00	
		52/37	54	5270	13.43	14.00	
		106/53	54	5270	15.65	16.00	
		242/61	54	5270	18.39	19.00	
		Full	62	5310	20.24	22.00	
		26/18	62	5310	10.06	11.00	
		52/44	62	5310	11.78	13.00	
	802.11ac-HE80 MCS0	Full	58	5290	20.40	22.00	100.00
		26/36	58	5290	7.26	8.00	
		52/52	58	5290	10.07	11.00	
		106/60	58	5290	13.93	14.00	
		242/64	58	5290	17.16	18.00	
		484/65	58	5290	18.49	19.00	
	802.11ac-HE160 MCS0	Full	50	5250	21.00	21.00	100.00
		26/0	50	5250	4.12	5.00	
		52/37	50	5250	5.58	7.00	
		106/53	50	5250	8.53	10.00	
		242/61	50	5250	11.73	13.00	
		484/65	50	5250	15.64	16.00	
		996/67	50	5250	17.34	18.00	



	Mode	Ant 1+2					Duty Cycle %		
		RU Config	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit			
5.5GHz WLAN	802.11a 6Mbps	Full	100	5500	20.08	22.00	98.63		
		Full	116	5580	20.06	22.00			
		Full	124	5620	20.05	22.00			
		Full	132	5660	20.60	22.00			
		Full	140	5700	20.00	22.00			
		Full	144	5720	20.01	22.00			
	802.11n-HT20 MCS0	Full	100	5500	20.14	22.00	100.00		
		Full	116	5580	20.11	22.00			
		Full	124	5620	20.08	22.00			
		Full	132	5660	20.07	22.00			
		Full	140	5700	20.06	22.00			
		Full	144	5720	20.04	22.00			
	802.11n-HT40 MCS0	Full	102	5510	20.04	22.00	100.00		
		Full	110	5550	20.01	22.00			
		Full	126	5630	20.13	22.00			
		Full	134	5670	20.04	22.00			
		Full	142	5710	20.06	22.00			
		Full	100	5500	20.10	22.00			
	802.11ac-VHT20 MCS0	Full	116	5580	20.09	22.00	100.00		
		Full	124	5620	20.06	22.00			
		Full	132	5660	20.01	22.00			
		Full	140	5700	20.03	22.00			
		Full	144	5720	20.01	22.00			
		Full	102	5510	20.02	22.00			
	802.11ac-VHT40 MCS0	Full	110	5550	20.00	22.00	100.00		
		Full	126	5630	20.09	22.00			
		Full	134	5670	20.02	22.00			
		Full	142	5710	20.04	22.00			
		802.11ac-VHT80 MCS0	Full	106	5530	20.01		22.00	100.00
			Full	122	5610	20.02		22.00	
	Full		138	5690	20.08	22.00			
	802.11ac-VHT160 MCS0	Full	114	5570	20.56	21.00	100.00		
		Full	100	5500	20.01	22.00	100.00		
		26/0	100	5500	12.69	13.00			
		52/37	100	5500	14.79	15.00			
		106/53	100	5500	18.06	19.00			
		Full	116	5580	20.19	22.00			
		26/2	116	5580	12.55	13.00			
		52/37	116	5580	14.65	15.00			
		106/53	116	5580	17.92	19.00			
		Full	124	5620	20.00	22.00			
		26/4	124	5620	12.83	13.00			
		52/38	124	5620	14.93	15.00			
		106/53	124	5620	18.20	19.00			
		Full	132	5660	20.10	22.00			
		26/6	132	5660	12.49	13.00			
		52/39	132	5660	14.59	15.00			
		106/54	132	5660	17.86	18.00			
		Full	140	5700	20.11	22.00			
		26/7	140	5700	12.59	13.00			
		52/39	140	5700	14.61	15.00			
		106/54	140	5700	17.92	18.00			
		Full	144	5720	20.09	22.00			
		26/8	144	5720	12.66	13.00			
		52/40	144	5720	14.83	15.00			
		106/54	144	5720	17.90	18.00			
		Full	102	5510	20.07	22.00			
		26/0	102	5510	9.64	11.00			
		52/37	102	5510	12.68	14.00			
		106/53	102	5510	15.12	16.00			
		242/61	102	5510	18.21	19.00			
		Full	110	5550	20.01	22.00			
		26/4	110	5550	9.50	11.00			
		52/39	110	5550	12.54	14.00			
		106/53	110	5550	14.98	16.00			
		242/61	110	5550	18.07	19.00			
		Full	126	5630	20.01	22.00			
		26/8	126	5630	9.39	11.00			
		52/42	126	5630	12.15	14.00			
		106/54	126	5630	14.59	16.00			
		242/61	126	5630	18.13	19.00			
		Full	134	5670	20.16	22.00			
		26/13	134	5670	9.29	11.00			
		52/44	134	5670	12.29	14.00			
		106/55	134	5670	14.73	16.00			
		242/62	134	5670	18.51	19.00			
		Full	142	5710	20.15	22.00			
	26/18	142	5710	9.38	11.00				
	52/44	142	5710	12.42	14.00				
	106/56	142	5710	14.41	16.00				
	242/62	142	5710	17.88	18.00				
	802.11ac-HE20 MCS0	Full	106	5530	20.12	22.00	100.00		
		26/0	106	5530	7.87	9.00			
		52/37	106	5530	9.43	11.00			
		106/53	106	5530	12.40	14.00			
		242/61	106	5530	15.80	17.00			
		484/65	106	5530	18.89	19.00			
		Full	122	5610	20.15	22.00			
		26/18	122	5610	7.27	9.00			
		52/44	122	5610	9.07	11.00			
		106/56	122	5610	11.27	13.00			
		242/62	122	5610	14.93	16.00			
		484/65	122	5610	18.76	19.00			
		Full	138	5690	20.09	22.00			
		26/36	138	5690	6.39	8.00			
		52/52	138	5690	9.32	11.00			
		106/60	138	5690	11.82	13.00			
		242/64	138	5690	14.64	16.00			
		484/66	138	5690	18.17	19.00			
		802.11ac-HE160 MCS0	Full	114	5570	21.49		22.00	100.00
			26/0	114	5570	3.94		5.00	
	52/37		114	5570	5.71	7.00			
	106/53		114	5570	7.53	9.00			
	242/61		114	5570	10.39	12.00			
	484/65		114	5570	13.50	15.00			
		996/67	114	5570	17.15	18.00			



Ant 1+2							
5.8GHz WLAN	Mode	RU Config.	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	Full	149	5745	20.09	22.00	98.63
		Full	157	5785	20.08	22.00	
		Full	165	5825	20.14	22.00	
	802.11n-HT20 MCS0	Full	149	5745	20.17	22.00	100.00
		Full	157	5785	20.14	22.00	
		Full	165	5825	20.01	22.00	
	802.11n-HT40 MCS0	Full	151	5755	20.17	22.00	100.00
		Full	159	5795	20.09	22.00	
	802.11ac-VHT20 MCS0	Full	149	5745	20.07	22.00	100.00
		Full	157	5785	20.08	22.00	
		Full	165	5825	20.00	22.00	
	802.11ac-VHT40 MCS0	Full	151	5755	20.08	22.00	100.00
		Full	159	5795	20.05	22.00	
	802.11ac-VHT80 MCS0	Full	155	5775	20.18	22.00	100.00
	802.11ac-HE20 MCS0	Full	149	5745	20.01	22.00	100.00
		26/0	149	5745	11.71	13.00	
		52/37	149	5745	14.82	16.00	
		106/53	149	5745	17.60	19.00	
		Full	157	5785	20.08	22.00	
		26/4	157	5785	12.18	13.00	
		52/38	157	5785	15.09	16.00	
		106/53	157	5785	18.08	19.00	
		Full	165	5825	20.04	22.00	
		26/8	165	5825	12.40	13.00	
		52/40	165	5825	15.31	16.00	
		106/54	165	5825	18.30	19.00	
	802.11ac-HE40 MCS0	Full	151	5755	20.09	22.00	100.00
		26/0	151	5755	8.71	10.00	
		52/37	151	5755	11.07	13.00	
		106/53	151	5755	14.33	16.00	
		242/61	151	5755	17.65	19.00	
		Full	159	5795	20.07	22.00	
		26/18	159	5795	8.94	10.00	
		52/44	159	5795	11.40	13.00	
		106/56	159	5795	14.47	16.00	
		242/62	159	5795	18.17	19.00	
	802.11ac-HE80 MCS0	Full	155	5775	20.21	22.00	100.00
		26/0	155	5775	5.36	7.00	
		52/37	155	5775	8.26	10.00	
		106/53	155	5775	11.21	13.00	
		242/61	155	5775	14.33	16.00	
		484/65	155	5775	17.81	18.00	
			155	5775	18.01	19.00	



Reduced Power level 2

Ant 2						
2.4GHz WLAN	Mode	Channel	Frequency (Mhz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11b 1Mbps	1	2412	12.80	14.50	100.00
		6	2437	13.10	14.50	
		11	2462	12.90	14.50	
	802.11g 6Mbps	1	2412	12.50	13.50	98.98
		6	2437	12.70	13.50	
		11	2462	12.60	13.50	
	802.11n-HT20 MCS0	1	2412	11.40	12.50	100.00
		6	2437	11.70	12.50	
		11	2462	11.60	12.50	
	802.11n-HT40 MCS0	3	2422	10.40	11.50	100.00
		6	2437	10.70	11.50	
		9	2452	10.20	11.50	
	802.11ac-VHT20 MCS0	1	2412	11.30	12.50	100.00
		6	2437	11.60	12.50	
		11	2462	11.50	12.50	
	802.11ac-VHT40 MCS0	3	2422	10.20	11.50	100.00
		6	2437	10.50	11.50	
		9	2452	10.10	11.50	
	802.11ax-HE20 MCS0	1	2412	11.30	12.50	100.00
		6	2437	11.70	12.50	
		11	2462	11.60	12.50	
	802.11ax-HE40 MCS0	3	2422	11.50	12.50	100.00
		6	2437	11.60	12.50	
		9	2452	11.20	12.50	

Reduced Power for Head
Reduced Power level 1

Ant 1+2						
2.4GHz WLAN	Mode	Channel	Frequency (Mhz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11b 1Mbps	1	2412	15.96	17.50	100.00
		6	2437	16.01	17.50	
		11	2462	15.91	17.50	
	802.11g 6Mbps	1	2412	15.22	16.50	98.98
		6	2437	15.28	16.50	
		11	2462	15.23	16.50	
	802.11n-HT20 MCS0	1	2412	14.12	15.50	100.00
		6	2437	14.28	15.50	
		11	2462	14.23	15.50	
	802.11n-HT40 MCS0	3	2422	12.98	14.50	100.00
		6	2437	13.20	14.50	
		9	2452	12.83	14.50	
	802.11ac-VHT20 MCS0	1	2412	14.02	15.50	100.00
		6	2437	14.18	15.50	
		11	2462	14.13	15.50	
	802.11ac-VHT40 MCS0	3	2422	12.83	14.50	100.00
		6	2437	13.04	14.50	
		9	2452	12.73	14.50	
	802.11ax-HE20 MCS0	1	2412	14.02	15.50	100.00
		6	2437	14.20	15.50	
		11	2462	14.23	15.50	
	802.11ax-HE40 MCS0	3	2422	14.00	15.50	100.00
		6	2437	14.10	15.50	
		9	2452	13.92	15.50	



Reduced Power level 4

Ant. 2						
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11b 1Mbps	1	2412	10.80	12.50	100.00
		6	2437	11.10	12.50	
		11	2462	10.90	12.50	
	802.11g 6Mbps	1	2412	10.50	11.50	98.98
		6	2437	10.70	11.50	
		11	2462	10.60	11.50	
	802.11n-HT20 MCS0	1	2412	9.40	10.50	100.00
		6	2437	9.70	10.50	
		11	2462	9.60	10.50	
	802.11n-HT40 MCS0	3	2422	8.40	9.50	100.00
		6	2437	8.70	9.50	
		9	2452	8.20	9.50	
	802.11ac-VHT20 MCS0	1	2412	9.30	10.50	100.00
		6	2437	9.60	10.50	
		11	2462	9.50	10.50	
	802.11ac-VHT40 MCS0	3	2422	8.20	9.50	100.00
		6	2437	8.50	9.50	
		9	2452	8.10	9.50	
	802.11ax-HE20 MCS0	1	2412	9.30	10.50	100.00
		6	2437	9.70	10.50	
		11	2462	9.60	10.50	
	802.11ax-HE40 MCS0	3	2422	9.50	10.50	100.00
		6	2437	9.60	10.50	
		9	2452	9.20	10.50	

Reduced Power level 3

Ant. 1+2						
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11b 1Mbps	1	2412	13.96	15.50	100.00
		6	2437	14.01	15.50	
		11	2462	13.91	15.50	
	802.11g 6Mbps	1	2412	13.22	14.50	98.98
		6	2437	13.28	14.50	
		11	2462	13.23	14.50	
	802.11n-HT20 MCS0	1	2412	12.12	13.50	100.00
		6	2437	12.28	13.50	
		11	2462	12.23	13.50	
	802.11n-HT40 MCS0	3	2422	10.98	12.50	100.00
		6	2437	11.20	12.50	
		9	2452	10.83	12.50	
	802.11ac-VHT20 MCS0	1	2412	12.02	13.50	100.00
		6	2437	12.18	13.50	
		11	2462	12.13	13.50	
	802.11ac-VHT40 MCS0	3	2422	10.83	12.50	100.00
		6	2437	11.04	12.50	
		9	2452	10.73	12.50	
	802.11ax-HE20 MCS0	1	2412	12.02	13.50	100.00
		6	2437	12.20	13.50	
		11	2462	12.23	13.50	
	802.11ax-HE40 MCS0	3	2422	12.00	13.50	100.00
		6	2437	12.10	13.50	
		9	2452	11.92	13.50	



Reduced Power level 6

Ant. 2						
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11b 1Mbps	1	2412	9.80	11.50	100.00
		6	2437	10.10	11.50	
		11	2462	9.90	11.50	
	802.11g 6Mbps	1	2412	9.50	10.50	98.98
		6	2437	9.70	10.50	
		11	2462	9.60	10.50	
	802.11n-HT20 MCS0	1	2412	8.40	9.50	100.00
		6	2437	8.70	9.50	
		11	2462	8.60	9.50	
	802.11n-HT40 MCS0	3	2422	7.40	8.50	100.00
		6	2437	7.70	8.50	
		9	2452	7.20	8.50	
	802.11ac-VHT20 MCS0	1	2412	8.30	9.50	100.00
		6	2437	8.60	9.50	
		11	2462	8.50	9.50	
	802.11ac-VHT40 MCS0	3	2422	7.20	8.50	100.00
		6	2437	7.50	8.50	
		9	2452	7.10	8.50	
	802.11ax-HE20 MCS0	1	2412	8.30	9.50	100.00
		6	2437	8.70	9.50	
		11	2462	8.60	9.50	
	802.11ax-HE40 MCS0	3	2422	8.50	9.50	100.00
		6	2437	8.60	9.50	
		9	2452	8.20	9.50	

Reduced Power level 5

Ant. 1+2						
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11b 1Mbps	1	2412	13.96	15.50	100.00
		6	2437	14.01	15.50	
		11	2462	13.91	15.50	
	802.11g 6Mbps	1	2412	13.22	14.50	98.98
		6	2437	13.28	14.50	
		11	2462	13.23	14.50	
	802.11n-HT20 MCS0	1	2412	12.12	13.50	100.00
		6	2437	12.28	13.50	
		11	2462	12.23	13.50	
	802.11n-HT40 MCS0	3	2422	10.98	12.50	100.00
		6	2437	11.20	12.50	
		9	2452	10.83	12.50	
	802.11ac-VHT20 MCS0	1	2412	12.02	13.50	100.00
		6	2437	12.18	13.50	
		11	2462	12.13	13.50	
	802.11ac-VHT40 MCS0	3	2422	10.83	12.50	100.00
		6	2437	11.04	12.50	
		9	2452	10.73	12.50	
	802.11ax-HE20 MCS0	1	2412	12.02	13.50	100.00
		6	2437	12.20	13.50	
		11	2462	12.23	13.50	
	802.11ax-HE40 MCS0	3	2422	12.00	13.50	100.00
		6	2437	12.10	13.50	
		9	2452	11.92	13.50	



Reduced Power level 8

Art. 2						
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11b 1Mbps	1	2412	8.80	10.50	100.00
		6	2437	9.10	10.50	
		11	2462	8.90	10.50	
	802.11g 6Mbps	1	2412	8.50	9.50	98.98
		6	2437	8.70	9.50	
		11	2462	8.60	9.50	
	802.11n-HT20 MCS0	1	2412	7.40	8.50	100.00
		6	2437	7.70	8.50	
		11	2462	7.60	8.50	
	802.11n-HT40 MCS0	3	2422	6.40	7.50	100.00
		6	2437	6.70	7.50	
		9	2452	6.20	7.50	
	802.11ac-VHT20 MCS0	1	2412	7.30	8.50	100.00
		6	2437	7.60	8.50	
		11	2462	7.50	8.50	
	802.11ac-VHT40 MCS0	3	2422	6.20	7.50	100.00
		6	2437	6.50	7.50	
		9	2452	6.10	7.50	
	802.11ax-HE20 MCS0	1	2412	7.30	8.50	100.00
		6	2437	7.70	8.50	
		11	2462	7.60	8.50	
	802.11ax-HE40 MCS0	3	2422	7.50	8.50	100.00
		6	2437	7.60	8.50	
		9	2452	7.20	8.50	

Reduced Power level 7

Art. 1+2						
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11b 1Mbps	1	2412	11.96	13.50	100.00
		6	2437	12.01	13.50	
		11	2462	11.91	13.50	
	802.11g 6Mbps	1	2412	11.22	12.50	98.98
		6	2437	11.28	12.50	
		11	2462	11.23	12.50	
	802.11n-HT20 MCS0	1	2412	10.12	11.50	100.00
		6	2437	10.28	11.50	
		11	2462	10.23	11.50	
	802.11n-HT40 MCS0	3	2422	8.98	10.50	100.00
		6	2437	9.20	10.50	
		9	2452	8.83	10.50	
	802.11ac-VHT20 MCS0	1	2412	10.02	11.50	100.00
		6	2437	10.18	11.50	
		11	2462	10.13	11.50	
	802.11ac-VHT40 MCS0	3	2422	8.83	10.50	100.00
		6	2437	9.04	10.50	
		9	2452	8.73	10.50	
	802.11ax-HE20 MCS0	1	2412	10.02	11.50	100.00
		6	2437	10.20	11.50	
		11	2462	10.23	11.50	
	802.11ax-HE40 MCS0	3	2422	10.00	11.50	100.00
		6	2437	10.10	11.50	
		9	2452	9.92	11.50	

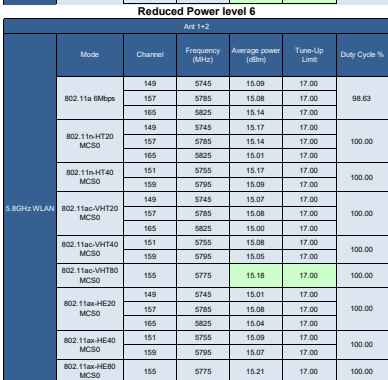
Reduced Power level 1						
Art 1+2						
Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Duty Cycle %	
802.11a 6Mbps	36	5180	19.67	21.00	98.63	
	40	5200	19.52	21.00		
	44	5220	19.61	21.00		
	48	5240	19.60	21.00		
802.11n-HT20 MCS0	36	5180	18.62	20.00	100.00	
	40	5200	18.50	20.00		
	44	5220	18.70	20.00		
	48	5240	18.59	20.00		
802.11n-HT40 MCS0	36	5180	18.57	20.00	100.00	
	40	5200	18.59	20.00		
	44	5220	18.59	20.00		
	36	5180	18.59	20.00		
802.11ac-VHT20 MCS0	40	5200	18.47	20.00	100.00	
	44	5220	18.66	20.00		
	48	5240	18.55	20.00		
	38	5190	18.47	20.00		
802.11ac-VHT40 MCS0	46	5230	18.50	20.00	100.00	
	46	5230	18.50	20.00		
	46	5230	18.50	20.00		
	46	5230	18.50	20.00		
802.11ac-VHT80 MCS0	42	5210	19.37	21.00	100.00	
	36	5180	18.61	20.00		
	40	5200	18.53	20.00		
	44	5220	18.65	20.00		
802.11ax-HE20 MCS0	48	5240	18.56	20.00	100.00	
	48	5240	18.56	20.00		
	38	5190	18.62	20.00		
	46	5230	18.68	20.00		
802.11ax-HE40 MCS0	46	5230	18.68	20.00	100.00	
	46	5230	18.68	20.00		
	46	5230	18.68	20.00		
	46	5230	18.68	20.00		
802.11ax-HE80 MCS0	42	5210	19.51	21.00	100.00	
	42	5210	19.51	21.00		
	42	5210	19.51	21.00		
	42	5210	19.51	21.00		

Reduced Power level 2						
Art 1+2						
Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Duty Cycle %	
802.11a 6Mbps	36	5180	19.67	21.00	98.63	
	40	5200	19.52	21.00		
	44	5220	19.61	21.00		
	48	5240	19.60	21.00		
802.11n-HT20 MCS0	36	5180	18.62	20.00	100.00	
	40	5200	18.50	20.00		
	44	5220	18.70	20.00		
	48	5240	18.59	20.00		
802.11n-HT40 MCS0	36	5180	18.57	20.00	100.00	
	40	5200	18.59	20.00		
	44	5220	18.59	20.00		
	36	5180	18.59	20.00		
802.11ac-VHT20 MCS0	40	5200	18.47	20.00	100.00	
	44	5220	18.66	20.00		
	48	5240	18.55	20.00		
	38	5190	18.47	20.00		
802.11ac-VHT40 MCS0	46	5230	18.50	20.00	100.00	
	46	5230	18.50	20.00		
	46	5230	18.50	20.00		
	46	5230	18.50	20.00		
802.11ac-VHT80 MCS0	42	5210	19.37	21.00	100.00	
	36	5180	18.61	20.00		
	40	5200	18.53	20.00		
	44	5220	18.65	20.00		
802.11ax-HE20 MCS0	48	5240	18.56	20.00	100.00	
	48	5240	18.56	20.00		
	38	5190	18.62	20.00		
	46	5230	18.68	20.00		
802.11ax-HE40 MCS0	46	5230	18.68	20.00	100.00	
	46	5230	18.68	20.00		
	46	5230	18.68	20.00		
	46	5230	18.68	20.00		
802.11ax-HE80 MCS0	42	5210	19.51	21.00	100.00	
	42	5210	19.51	21.00		
	42	5210	19.51	21.00		
	42	5210	19.51	21.00		

Reduced Power level 3						
Art 1+2						
Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Duty Cycle %	
802.11a 6Mbps	36	5180	17.67	19.00	98.63	
	40	5200	17.52	19.00		
	44	5220	17.61	19.00		
	48	5240	17.60	19.00		
802.11n-HT20 MCS0	36	5180	16.62	18.00	100.00	
	40	5200	16.50	18.00		
	44	5220	16.70	18.00		
	48	5240	16.59	18.00		
802.11n-HT40 MCS0	36	5180	16.57	18.00	100.00	
	40	5200	16.59	18.00		
	44	5220	16.59	18.00		
	36	5180	16.59	18.00		
802.11ac-VHT20 MCS0	40	5200	16.47	18.00	100.00	
	44	5220	16.66	18.00		
	48	5240	16.55	18.00		
	38	5190	16.47	18.00		
802.11ac-VHT40 MCS0	46	5230	16.50	18.00	100.00	
	46	5230	16.50	18.00		
	46	5230	16.50	18.00		
	46	5230	16.50	18.00		
802.11ac-VHT80 MCS0	42	5210	17.37	19.00	100.00	
	36	5180	16.61	18.00		
	40	5200	16.53	18.00		
	44	5220	16.65	18.00		
802.11ax-HE20 MCS0	48	5240	16.56	18.00	100.00	
	48	5240	16.56	18.00		
	38	5190	16.62	18.00		
	46	5230	16.68	18.00		
802.11ax-HE40 MCS0	46	5230	16.68	18.00	100.00	
	46	5230	16.68	18.00		
	46	5230	16.68	18.00		
	46	5230	16.68	18.00		
802.11ax-HE80 MCS0	42	5210	17.51	19.00	100.00	
	42	5210	17.51	19.00		
	42	5210	17.51	19.00		
	42	5210	17.51	19.00		

Reduced Power level 1						
Art 1+2						
Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Duty Cycle %	
802.11a 6Mbps	52	5260	19.57	21.00	98.63	
	56	5280	19.39	21.00		
	60	5300	19.34	21.00		
	64	5320	19.37	21.00		
802.11n-HT20 MCS0	52	5260	18.54	20.00	100.00	
	56	5280	19.30	21.00		
	60	5300	19.19	21.00		
	64	5320	19.24	21.00		
802.11n-HT40 MCS0	54	5270	18.41	20.00	100.00	
	62	5310	19.26	21.00		
	52	5260	18.50	20.00		
	56	5280	19.27	21.00		
802.11ac-VHT20 MCS0	60	5300	19.15	21.00	100.00	
	64	5320	19.23	21.00		
	54	5270	18.35	20.00		
	62	5310	19.15	21.00		
802.11ac-VHT40 MCS0	58	5290	19.26	21.00	100.00	
	58	5290	19.26	21.00		
	58	5290	19.26	21.00		
	58	5290	19.26	21.00		
802.11ac-VHT80 MCS0	50	5250	19.82	20.00	100	
	52	5260	18.51	20.00		
	56	5280	19.32	21.00		
	60	5300	19.14	21.00		
802.11ax-HE20 MCS0	64	5320	19.28	21.00	100.00	
	54	5270	19.38	21.00		
	62	5310	19.24	21.00		
	58	5290	19.40	21.00		
802.11ax-HE80 MCS0	58	5290	19.40	21.00	100.00	
	58	5290	19.40	21.00		
	58	5290	19.40	21.00		
	58	5290	19.40	21.00		
802.11ax-HE160 MCS0	50	5250	20.00	20.00	100.00	
	50	5250	20.00	20.00		
	50	5250	20.00	20.00		
	50	5250	20.00	20.00		

Reduced Power level 2								
Art 1+2								
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Duty Cycle %		
5.3GHz WLAN	802.11a 6Mbps	52	5260	19.57	21.00	98.63		
		56	5280	19.39	21.00			
		60	5300	19.34	21.00			
		64	5320	19.37	21.00			
	802.11n-HT20 MCS0	52	5260	18.54	20.00	100.00		
		56	5280	19.30	21.00			
		60	5300	19.19	21.00			
		64	5320	19.24	21.00			
	802.11n-HT40 MCS0	54	5270	18.41	21.00	100.00		
		62	5310	19.26	21.00			
		52	5260	18.50	20.00		100.00	
		56	5280	19.27	21.00			
	802.11ac-VHT20 MCS0	60	5300	19.15	21.00	100.00		
		64	5320	19.23	21.00			
		802.11ac-VHT40 MCS0	54	5270	18.35		20.00	100.00
			62	5310	19.15		21.00	
	802.11ac-VHT80 MCS0		58	5290	19.26	21.00	100.00	
			50	5250	19.82	20.00		
		802.11ac-VHT160 MCS0	52	5260	18.51	20.00		100.00
			56	5280	19.30	21.00		
802.11ax-HE20 MCS0	60		5300	19.14	21.00	100.00		
	64		5320	19.28	21.00			
	802.11ax-HE40 MCS0	54	5270	19.38	21.00		100.00	
		62	5310	19.24	21.00			
802.11ax-HE80 MCS0		58	5290	19.40	21.00	100.00		
		50	5250	20.00	20.00			
	802.11ax-HE160 MCS0	52	5260	19.34	21.00		100.00	
		56	5280	19.34	21.00			
802.11ax-HE320 MCS0		60	5300	19.34	21.00	100.00		
		64	5320	19.34	21.00			



Reduced Power level 7						
Art 1+2						
5.2GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Duty Cycle %
	802.11a (Mbps)	36	5180	14.67	16.00	98.63
		40	5200	14.52	16.00	
		44	5220	14.61	16.00	
		48	5240	14.60	16.00	
	802.11n-HT20 MCS0	36	5180	13.62	15.00	100.00
		40	5200	13.50	15.00	
		44	5220	13.70	15.00	
		48	5240	13.59	15.00	
	802.11n-HT40 MCS0	38	5190	13.37	16.00	100.00
		40	5200	13.59	15.00	
	802.11ac-VHT20 MCS0	36	5180	13.59	15.00	100.00
		40	5200	13.47	15.00	
		44	5220	13.66	15.00	
		48	5240	13.55	15.00	
	802.11ac-VHT40 MCS0	38	5190	13.47	15.00	100.00
		46	5230	13.50	15.00	
	802.11ac-VHT80 MCS0	42	5210	14.37	16.00	100.00
		36	5180	13.61	15.00	
	802.11ax-HE20 MCS0	40	5200	13.53	15.00	100.00
		44	5220	13.65	15.00	
		48	5240	13.56	15.00	
		38	5190	13.62	15.00	
	802.11ax-HE40 MCS0	46	5230	13.65	15.00	100.00
		42	5210	14.51	16.00	

Reduced Power level 8						
Art 1+2						
5.2GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Duty Cycle %
	802.11a (Mbps)	36	5180	14.67	16.00	98.63
		40	5200	14.52	16.00	
		44	5220	14.61	16.00	
		48	5240	14.60	16.00	
	802.11n-HT20 MCS0	36	5180	13.62	15.00	100.00
		40	5200	13.50	15.00	
		44	5220	13.70	15.00	
		48	5240	13.59	15.00	
	802.11n-HT40 MCS0	38	5190	13.37	16.00	100.00
		40	5200	13.59	15.00	
	802.11ac-VHT20 MCS0	36	5180	13.59	15.00	100.00
		40	5200	13.47	15.00	
		44	5220	13.66	15.00	
		48	5240	13.55	15.00	
	802.11ac-VHT40 MCS0	38	5190	13.47	15.00	100.00
		46	5230	13.50	15.00	
	802.11ac-VHT80 MCS0	42	5210	14.37	16.00	100.00
		36	5180	13.61	15.00	
	802.11ax-HE20 MCS0	40	5200	13.53	15.00	100.00
		44	5220	13.65	15.00	
		48	5240	13.56	15.00	
		38	5190	13.62	15.00	
	802.11ax-HE40 MCS0	46	5230	13.65	15.00	100.00
		42	5210	14.51	16.00	

Reduced Power level 7						
Art 1+2						
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Duty Cycle %
	802.11a (Mbps)	52	5260	14.57	16.00	98.63
		56	5280	14.39	16.00	
		60	5300	14.34	16.00	
		64	5320	14.37	16.00	
	802.11n-HT20 MCS0	52	5260	13.54	15.00	100.00
		56	5280	14.30	16.00	
		60	5300	14.19	16.00	
		64	5320	14.24	16.00	
	802.11n-HT40 MCS0	54	5270	13.41	16.00	100.00
		62	5310	14.26	16.00	
	802.11ac-VHT20 MCS0	52	5260	13.50	15.00	100.00
		56	5280	14.27	16.00	
		60	5300	14.15	16.00	
		64	5320	14.23	16.00	
	802.11ac-VHT40 MCS0	54	5270	13.35	15.00	100.00
		62	5310	14.15	16.00	
	802.11ac-VHT80 MCS0	58	5290	14.26	16.00	100.00
		50	5250	14.82	15.00	
	802.11ax-HE20 MCS0	52	5260	13.51	15.00	100.00
		56	5280	14.32	16.00	
		60	5300	14.14	16.00	
		64	5320	14.28	16.00	
	802.11ax-HE40 MCS0	54	5270	14.38	16.00	100.00
		62	5310	14.24	16.00	
	802.11ax-HE80 MCS0	58	5290	14.40	16.00	100.00
		50	5250	15.00	15.00	

Reduced Power level 8						
Art 1+2						
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Duty Cycle %
	802.11a (Mbps)	52	5260	14.57	16.00	98.63
		56	5280	14.39	16.00	
		60	5300	14.34	16.00	
		64	5320	14.37	16.00	
	802.11n-HT20 MCS0	52	5260	13.54	15.00	100.00
		56	5280	14.30	16.00	
		60	5300	14.19	16.00	
		64	5320	14.24	16.00	
	802.11n-HT40 MCS0	54	5270	13.41	16.00	100.00
		62	5310	14.26	16.00	
	802.11ac-VHT20 MCS0	52	5260	13.50	15.00	100.00
		56	5280	14.27	16.00	
		60	5300	14.15	16.00	
		64	5320	14.23	16.00	
	802.11ac-VHT40 MCS0	54	5270	13.35	15.00	100.00
		62	5310	14.15	16.00	
	802.11ac-VHT80 MCS0	58	5290	14.26	16.00	100.00
		50	5250	14.82	15.00	
	802.11ax-HE20 MCS0	52	5260	13.51	15.00	100.00
		56	5280	14.32	16.00	
		60	5300	14.14	16.00	
		64	5320	14.28	16.00	
	802.11ax-HE40 MCS0	54	5270	14.38	16.00	100.00
		62	5310	14.24	16.00	
	802.11ax-HE80 MCS0	58	5290	14.40	16.00	100.00
		50	5250	15.00	15.00	

Reduced Power level 7						
Art 1+2						
5.5GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Duty Cycle %
	802.11a (Mbps)	100	5500	12.08	14.00	98.63
		116	5580	12.06	14.00	
		124	5620	12.05	14.00	
		132	5660	12.00	14.00	
	802.11n-HT20 MCS0	100	5500	12.00	14.00	100.00
		116	5580	12.11	14.00	
		124	5620	12.08	14.00	
		132	5660	12.07	14.00	
	802.11n-HT40 MCS0	100	5500	12.04	14.00	100.00
		116	5580	12.09	14.00	
		124	5620	12.06	14.00	
		132	5660	12.01	14.00	
	802.11ac-VHT20 MCS0	100	5500	12.03	14.00	100.00
		116	5580	12.09	14.00	
		124	5620	12.06	14.00	
		132	5660	12.01	14.00	
	802.11ac-VHT40 MCS0	100	5500	12.02	14.00	100.00
		116	5580	12.05	14.00	
		124	5620	12.00	14.00	
		132	5660	12.00	14.00	
	802.11ac-VHT80 MCS0	100	5500	12.01	14.00	100.00
		116	5580	12.09	14.00	
		124	5620	12.06	14.00	
		132	5660	12.01	14.00	
	802.11ax-HE20 MCS0	100	5500	12.01	14.00	100.00
		116	5580	12.19	14.00	
		124	5620	12.00	14.00	
		132	5660	12.10	14.00	
	802.11ax-HE40 MCS0	100	5500	12.01	14.00	100.00
		116	5580	12.01	14.00	
		124	5620	12.00	14.00	
		132	5660	12.00	14.00	
	802.11ax-HE80 MCS0	100	5500	12.01	14.00	100.00
		116	5580	12.01	14.00	
		124	5620	12.00	14.00	
		132	5660	12.00	14.00	
	802.11ax-HE160 MCS0	100	5500	12.01	14.00	100.00
		116	5580	12.01	14.00	
		124	5620	12.00	14.00	
		132	5660	12.00	14.00	

Reduced Power level 8						
Art 1+2						
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Duty Cycle %
5.5GHz WLAN	802.11a 6Mbps	100	5500	12.08	14.00	98.63
		116	5580	12.06	14.00	
		124	5620	12.05	14.00	
		132	5660	12.60	14.00	
		140	5700	12.00	14.00	
		144	5720	12.01	14.00	
	802.11n-HT20 MCS0	100	5500	12.14	14.00	100.00
		116	5580	12.11	14.00	
		124	5620	12.08	14.00	
		132	5660	12.07	14.00	
		140	5700	12.06	14.00	
		144	5720	12.04	14.00	
	802.11n-HT40 MCS0	102	5510	12.04	14.00	100.00
		110	5550	12.01	14.00	
		126	5630	12.13	14.00	
		134	5670	12.04	14.00	
		142	5710	12.06	14.00	
		100	5500	12.10	14.00	
	802.11ac-VHT20 MCS0	116	5580	12.09	14.00	100.00
		124	5620	12.06	14.00	
		132	5660	12.07	14.00	
		140	5700	12.03	14.00	
		144	5720	12.01	14.00	
		102	5510	12.02	14.00	
802.11ac-VHT40 MCS0	110	5550	12.00	14.00	100.00	
	126	5630	12.09	14.00		
	134	5670	12.02	14.00		
	142	5710	12.04	14.00		
	106	5530	12.01	14.00		
	122	5610	12.02	14.00		
802.11ac-VHT80 MCS0	138	5690	12.08	14.00	100.00	
	114	5570	12.56	13.00		
802.11ax-HE20 MCS0	100	5500	12.01	14.00	100.00	
	116	5580	12.19	14.00		
	124	5620	12.00	14.00		
	132	5660	12.10	14.00		
	140	5700	12.11	14.00		
	144	5720	12.09	14.00		
802.11ax-HE40 MCS0	102	5510	12.07	14.00	100.00	
	110	5550	12.01	14.00		
	126	5630	12.01	14.00		
	134	5670	12.16	14.00		
	142	5710	12.15	14.00		
	106	5530	12.12	14.00		
802.11ax-HE80 MCS0	122	5610	12.15	14.00	100.00	
	138	5690	12.09	14.00		
802.11ax-HE160 MCS0	114	5570	13.49	14.00	100.00	



Reduced Power for Hotspot on

Reduced Power level 2

Art 2						
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11b 1Mbps	1	2412	12.80	14.50	100.00
		6	2437	13.10	14.50	
		11	2462	12.90	14.50	
		1	2412	12.50	13.50	
	802.11g 6Mbps	6	2437	12.70	13.50	98.98
		11	2462	12.60	13.50	
	802.11n-HT20 MCS0	1	2412	11.40	12.50	100.00
		6	2437	11.70	12.50	
		11	2462	11.60	12.50	
	802.11n-HT40 MCS0	3	2422	10.40	11.50	100.00
		6	2437	10.70	11.50	
		9	2452	10.20	11.50	
	802.11ac-VHT20 MCS0	1	2412	11.30	12.50	100.00
		6	2437	11.60	12.50	
		11	2462	11.50	12.50	
	802.11ac-VHT40 MCS0	3	2422	10.20	11.50	100.00
		6	2437	10.50	11.50	
		9	2452	10.10	11.50	
	802.11ax-HE20 MCS0	1	2412	11.30	12.50	100.00
		6	2437	11.70	12.50	
		11	2462	11.60	12.50	
	802.11ax-HE40 MCS0	3	2422	11.50	12.50	100.00
		6	2437	11.60	12.50	
		9	2452	11.20	12.50	

Reduced Power level 1

Art 1+2						
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11b 1Mbps	1	2412	15.96	17.50	100.00
		6	2437	16.01	17.50	
		11	2462	15.91	17.50	
		1	2412	15.22	16.50	
	802.11g 6Mbps	6	2437	15.28	16.50	98.98
		11	2462	15.23	16.50	
	802.11n-HT20 MCS0	1	2412	14.12	15.50	100.00
		6	2437	14.28	15.50	
		11	2462	14.23	15.50	
	802.11n-HT40 MCS0	3	2422	12.98	14.50	100.00
		6	2437	13.20	14.50	
		9	2452	12.83	14.50	
	802.11ac-VHT20 MCS0	1	2412	14.02	15.50	100.00
		6	2437	14.18	15.50	
		11	2462	14.13	15.50	
	802.11ac-VHT40 MCS0	3	2422	12.83	14.50	100.00
		6	2437	13.04	14.50	
		9	2452	12.73	14.50	
	802.11ax-HE20 MCS0	1	2412	14.02	15.50	100.00
		6	2437	14.20	15.50	
		11	2462	14.23	15.50	
	802.11ax-HE40 MCS0	3	2422	14.00	15.50	100.00
		6	2437	14.10	15.50	
		9	2452	13.92	15.50	



Reduced Power level 4

Ant 2						
2.4GHz WLAN	Mode	Channel	Frequency (Mhz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11b 1Mbps	1	2412	11.80	13.50	100.00
		6	2437	12.10	13.50	
		11	2462	11.90	13.50	
	802.11g 6Mbps	1	2412	11.50	12.50	98.98
		6	2437	11.70	12.50	
		11	2462	11.60	12.50	
	802.11n-HT20 MCS0	1	2412	10.40	11.50	100.00
		6	2437	10.70	11.50	
		11	2462	10.60	11.50	
	802.11n-HT40 MCS0	3	2422	9.40	10.50	100.00
		6	2437	9.70	10.50	
		9	2452	9.20	10.50	
	802.11ac-VHT20 MCS0	1	2412	10.30	11.50	100.00
		6	2437	10.60	11.50	
		11	2462	10.50	11.50	
	802.11ac-VHT40 MCS0	3	2422	9.20	10.50	100.00
		6	2437	9.50	10.50	
		9	2452	9.10	10.50	
	802.11ax-HE20 MCS0	1	2412	10.30	11.50	100.00
		6	2437	10.70	11.50	
		11	2462	10.60	11.50	
	802.11ax-HE40 MCS0	3	2422	10.50	11.50	100.00
		6	2437	10.60	11.50	
		9	2452	10.20	11.50	

Reduced Power level 3

Ant 1+2						
2.4GHz WLAN	Mode	Channel	Frequency (Mhz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11b 1Mbps	1	2412	14.96	16.50	100.00
		6	2437	15.01	16.50	
		11	2462	14.91	16.50	
	802.11g 6Mbps	1	2412	14.22	15.50	98.98
		6	2437	14.28	15.50	
		11	2462	14.23	15.50	
	802.11n-HT20 MCS0	1	2412	13.12	14.50	100.00
		6	2437	13.28	14.50	
		11	2462	13.23	14.50	
	802.11n-HT40 MCS0	3	2422	11.98	13.50	100.00
		6	2437	12.20	13.50	
		9	2452	11.83	13.50	
	802.11ac-VHT20 MCS0	1	2412	13.02	14.50	100.00
		6	2437	13.18	14.50	
		11	2462	13.13	14.50	
	802.11ac-VHT40 MCS0	3	2422	11.83	13.50	100.00
		6	2437	12.04	13.50	
		9	2452	11.73	13.50	
	802.11ax-HE20 MCS0	1	2412	13.02	14.50	100.00
		6	2437	13.20	14.50	
		11	2462	13.23	14.50	
	802.11ax-HE40 MCS0	3	2422	13.00	14.50	100.00
		6	2437	13.10	14.50	
		9	2452	12.92	14.50	



Reduced Power level 1

Ant 1+2						
5.2GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	36	5180	18.67	20.00	98.63
		40	5200	18.52	20.00	
		44	5220	18.61	20.00	
		48	5240	18.60	20.00	
	802.11n-HT20 MCS0	36	5180	17.62	19.00	100.00
		40	5200	17.50	19.00	
		44	5220	17.70	19.00	
		48	5240	17.59	19.00	
	802.11n-HT40 MCS0	38	5190	17.57	19.00	100.00
		46	5230	17.59	19.00	
	802.11ac-VHT20 MCS0	36	5180	17.59	19.00	100.00
		40	5200	17.47	19.00	
		44	5220	17.66	19.00	
	802.11ac-VHT40 MCS0	48	5240	17.55	19.00	100.00
		38	5190	17.47	19.00	
		46	5230	17.50	19.00	
	802.11ac-VHT80 MCS0	42	5210	18.37	20.00	100.00
		36	5180	17.61	19.00	
	802.11ax-HE20 MCS0	40	5200	17.53	19.00	100.00
		44	5220	17.65	19.00	
		48	5240	17.56	19.00	
	802.11ax-HE40 MCS0	38	5190	17.62	19.00	100.00
		46	5230	17.65	19.00	
	802.11ax-HE80 MCS0	42	5210	18.51	20.00	100.00

Reduced Power level 2

Ant 1+2						
5.2GHz WLAN	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
	36	5180	18.67	20.00	98.63	
	40	5200	18.52	20.00		
	44	5220	18.61	20.00		
	48	5240	18.60	20.00		
	36	5180	17.62	19.00	100.00	
	40	5200	17.50	19.00		
	44	5220	17.70	19.00		
	48	5240	17.59	19.00		
	38	5190	17.57	19.00	100.00	
	46	5230	17.59	19.00		
	36	5180	17.59	19.00	100.00	
	40	5200	17.47	19.00		
	44	5220	17.66	19.00		
	48	5240	17.55	19.00	100.00	
	38	5190	17.47	19.00		
	46	5230	17.50	19.00		
	42	5210	18.37	20.00	100.00	
	36	5180	17.61	19.00	100.00	
	40	5200	17.53	19.00		
	44	5220	17.65	19.00		
	48	5240	17.56	19.00	100.00	
	38	5190	17.62	19.00		
	46	5230	17.65	19.00	100.00	
	42	5210	18.51	20.00	100.00	

Reduced Power level 3

Ant 1+2						
5.2GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	36	5180	16.67	18.00	98.63
		40	5200	16.52	18.00	
		44	5220	16.61	18.00	
		48	5240	16.60	18.00	
	802.11n-HT20 MCS0	36	5180	15.62	17.00	100.00
		40	5200	15.50	17.00	
		44	5220	15.70	17.00	
		48	5240	15.59	17.00	
	802.11n-HT40 MCS0	38	5190	15.57	17.00	100.00
		46	5230	15.59	17.00	
	802.11ac-VHT20 MCS0	36	5180	15.59	17.00	100.00
		40	5200	15.47	17.00	
		44	5220	15.66	17.00	
	802.11ac-VHT40 MCS0	48	5240	15.55	17.00	100.00
		38	5190	15.47	17.00	
		46	5230	15.50	17.00	
	802.11ac-VHT80 MCS0	42	5210	16.37	18.00	100.00
		36	5180	15.61	17.00	
	802.11ax-HE20 MCS0	40	5200	15.53	17.00	100.00
		44	5220	15.65	17.00	
		48	5240	15.56	17.00	
	802.11ax-HE40 MCS0	38	5190	15.62	17.00	100.00
		46	5230	15.65	17.00	
	802.11ax-HE80 MCS0	42	5210	16.51	18.00	100.00

Reduced Power level 1

Ant 1+2						
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	149	5745	19.09	21.00	98.63
		157	5785	19.08	21.00	
		165	5825	19.14	21.00	
		149	5745	19.17	21.00	
	802.11n-HT20 MCS0	157	5785	19.14	21.00	100.00
		165	5825	19.01	21.00	
		151	5755	19.17	21.00	
		159	5795	19.09	21.00	
	802.11n-HT40 MCS0	149	5745	19.07	21.00	100.00
		157	5785	19.08	21.00	
	802.11ac-VHT20 MCS0	165	5825	19.00	21.00	100.00
		151	5755	19.08	21.00	
		159	5795	19.05	21.00	
	802.11ac-VHT40 MCS0	155	5775	19.18	21.00	100.00
		149	5745	19.01	21.00	
	802.11ax-HE20 MCS0	157	5785	19.08	21.00	100.00
		165	5825	19.04	21.00	
		151	5755	19.09	21.00	100.00
	802.11ax-HE40 MCS0	159	5795	19.07	21.00	
	802.11ax-HE80 MCS0	155	5775	19.21	21.00	100.00

Reduced Power level 2

Ant 1+2						
5.8GHz WLAN	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %	
	149	5745	19.09	21.00	98.63	
	157	5785	19.08	21.00		
	165	5825	19.14	21.00		
	149	5745	19.17	21.00		
	157	5785	19.14	21.00	100.00	
	165	5825	19.01	21.00		
	151	5755	19.17	21.00		
	159	5795	19.09	21.00		
	149	5745	19.07	21.00	100.00	
	157	5785	19.08	21.00		
	165	5825	19.00	21.00		
	151	5755	19.08	21.00	100.00	
	159	5795	19.05	21.00		
	155	5775	19.18	21.00	100.00	
	149	5745	19.01	21.00	100.00	
	157	5785	19.08	21.00		
	165	5825	19.04	21.00		
	151	5755	19.09	21.00	100.00	
	159	5795	19.07	21.00		
	155	5775	19.21	21.00	100.00	

Reduced Power level 3

Ant 1+2						
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	149	5745	18.09	20.00	98.63
		157	5785	18.08	20.00	
		165	5825	18.14	20.00	
		149	5745	18.17	20.00	
	802.11n-HT20 MCS0	157	5785	18.14	20.00	100.00
		165	5825	18.01	20.00	
		151	5755	18.17	20.00	
		159	5795	18.09	20.00	
	802.11n-HT40 MCS0	149	5745	18.07	20.00	100.00
		157	5785	18.08	20.00	
	802.11ac-VHT20 MCS0	165	5825	18.00	20.00	100.00
		151	5755	18.06	20.00	
		159	5795	18.05	20.00	
	802.11ac-VHT40 MCS0	155	5775	18.18	20.00	100.00
		149	5745	18.01	20.00	
	802.11ax-HE20 MCS0	157	5785	18.08	20.00	100.00
		165	5825	18.04	20.00	
		151	5755	18.09	20.00	100.00
	802.11ax-HE40 MCS0	159	5795	18.07	20.00	
	802.11ax-HE80 MCS0	155	5775	18.21	20.00	100.00



Reduced Power level 4

Ant 1+2						
5.2GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	36	5180	14.67	16.00	98.63
		40	5200	14.52	16.00	
		44	5220	14.61	16.00	
		48	5240	14.60	16.00	
	802.11n-HT20 MCS0	36	5180	13.62	15.00	100.00
		40	5200	13.50	15.00	
		44	5220	13.70	15.00	
		48	5240	13.59	15.00	
	802.11n-HT40 MCS0	38	5190	13.57	15.00	100.00
		46	5230	13.59	15.00	
		36	5180	13.59	15.00	
	802.11ac-VHT20 MCS0	40	5200	13.47	15.00	100.00
		44	5220	13.66	15.00	
		48	5240	13.55	15.00	
	802.11ac-VHT40 MCS0	38	5190	13.47	15.00	100.00
		46	5230	13.50	15.00	
	802.11ac-VHT80 MCS0	42	5210	14.37	16.00	100.00
		36	5180	13.61	15.00	
	802.11ax-HE20 MCS0	40	5200	13.53	15.00	100.00
		44	5220	13.65	15.00	
		48	5240	13.56	15.00	
		38	5190	13.62	15.00	
	802.11ax-HE40 MCS0	46	5230	13.65	15.00	100.00
		42	5210	14.51	16.00	

Reduced Power level 4

Ant 1+2						
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	149	5745	15.09	17.00	98.63
		157	5785	15.08	17.00	
		165	5825	15.14	17.00	
		149	5745	15.17	17.00	
	802.11n-HT20 MCS0	157	5785	15.14	17.00	100.00
		165	5825	15.01	17.00	
		151	5755	15.17	17.00	
		159	5795	15.09	17.00	
	802.11n-HT40 MCS0	149	5745	15.07	17.00	100.00
		157	5785	15.08	17.00	
		165	5825	15.00	17.00	
	802.11ac-VHT40 MCS0	151	5755	15.08	17.00	100.00
		159	5795	15.05	17.00	
	802.11ac-VHT80 MCS0	155	5775	15.18	17.00	100.00
		149	5745	15.01	17.00	
	802.11ax-HE20 MCS0	157	5785	15.08	17.00	100.00
		165	5825	15.04	17.00	
		151	5755	15.09	17.00	
	802.11ax-HE40 MCS0	159	5795	15.07	17.00	100.00
		155	5775	15.21	17.00	

Reduced Power level 5

Ant 1+2						
5.2GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	36	5180	16.67	18.00	98.63
		40	5200	16.52	18.00	
		44	5220	16.61	18.00	
		48	5240	16.60	18.00	
	802.11n-HT20 MCS0	36	5180	15.62	17.00	100.00
		40	5200	15.50	17.00	
		44	5220	15.70	17.00	
		48	5240	15.59	17.00	
	802.11n-HT40 MCS0	38	5190	15.57	17.00	100.00
		46	5230	15.59	17.00	
		36	5180	15.59	17.00	
	802.11ac-VHT20 MCS0	40	5200	15.47	17.00	100.00
		44	5220	15.66	17.00	
		48	5240	15.55	17.00	
	802.11ac-VHT40 MCS0	38	5190	15.47	17.00	100.00
		46	5230	15.50	17.00	
	802.11ac-VHT80 MCS0	42	5210	16.37	18.00	100.00
		36	5180	15.61	17.00	
	802.11ax-HE20 MCS0	40	5200	15.53	17.00	100.00
		44	5220	15.65	17.00	
		48	5240	15.56	17.00	
		38	5190	15.62	17.00	
	802.11ax-HE40 MCS0	46	5230	15.65	17.00	100.00
		42	5210	16.51	18.00	

Reduced Power level 5

Ant 1+2						
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	149	5745	18.09	20.00	98.63
		157	5785	18.08	20.00	
		165	5825	18.14	20.00	
		149	5745	18.17	20.00	
	802.11n-HT20 MCS0	157	5785	18.14	20.00	100.00
		165	5825	18.01	20.00	
		151	5755	18.17	20.00	
		159	5795	18.09	20.00	
	802.11n-HT40 MCS0	149	5745	18.07	20.00	100.00
		157	5785	18.08	20.00	
		165	5825	18.00	20.00	
	802.11ac-VHT40 MCS0	151	5755	18.08	20.00	100.00
		159	5795	18.05	20.00	
	802.11ac-VHT80 MCS0	155	5775	18.18	20.00	100.00
		149	5745	18.01	20.00	
	802.11ax-HE20 MCS0	157	5785	18.08	20.00	100.00
		165	5825	18.04	20.00	
		151	5755	18.09	20.00	
	802.11ax-HE40 MCS0	159	5795	18.07	20.00	100.00
		155	5775	18.21	20.00	

Reduced Power level 6

Ant 1+2						
5.2GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	36	5180	16.67	18.00	98.63
		40	5200	16.52	18.00	
		44	5220	16.61	18.00	
		48	5240	16.60	18.00	
	802.11n-HT20 MCS0	36	5180	15.62	17.00	100.00
		40	5200	15.50	17.00	
		44	5220	15.70	17.00	
		48	5240	15.59	17.00	
	802.11n-HT40 MCS0	38	5190	15.57	17.00	100.00
		46	5230	15.59	17.00	
		36	5180	15.59	17.00	
	802.11ac-VHT20 MCS0	40	5200	15.47	17.00	100.00
		44	5220	15.66	17.00	
		48	5240	15.55	17.00	
	802.11ac-VHT40 MCS0	38	5190	15.47	17.00	100.00
		46	5230	15.50	17.00	
	802.11ac-VHT80 MCS0	42	5210	16.37	18.00	100.00
		36	5180	15.61	17.00	
	802.11ax-HE20 MCS0	40	5200	15.53	17.00	100.00
		44	5220	15.65	17.00	
		48	5240	15.56	17.00	
		38	5190	15.62	17.00	
	802.11ax-HE40 MCS0	46	5230	15.65	17.00	100.00
		42	5210	16.51	18.00	

Reduced Power level 6

Ant 1+2						
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	149	5745	18.09	20.00	98.63
		157	5785	18.08	20.00	
		165	5825	18.14	20.00	
		149	5745	18.17	20.00	
	802.11n-HT20 MCS0	157	5785	18.14	20.00	100.00
		165	5825	18.01	20.00	
		151	5755	18.17	20.00	
		159	5795	18.09	20.00	
	802.11n-HT40 MCS0	149	5745	18.07	20.00	100.00
		157	5785	18.08	20.00	
		165	5825	18.00	20.00	
	802.11ac-VHT40 MCS0	151	5755	18.08	20.00	100.00
		159	5795	18.05	20.00	
	802.11ac-VHT80 MCS0	155	5775	18.18	20.00	100.00
		149	5745	18.01	20.00	
	802.11ax-HE20 MCS0	157	5785	18.08	20.00	100.00
		165	5825	18.04	20.00	
		151	5755	18.09	20.00	
	802.11ax-HE40 MCS0	159	5795	18.07	20.00	100.00
		155	5775	18.21	20.00	



Reduced Power level 7

Ant 1+2						
5.2GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	36	5180	14.67	16.00	98.63
		40	5200	14.52	16.00	
		44	5220	14.61	16.00	
		48	5240	14.60	16.00	
	802.11n-HT20 MCS0	36	5180	13.62	15.00	100.00
		40	5200	13.50	15.00	
		44	5220	13.70	15.00	
		48	5240	13.59	15.00	
	802.11n-HT40 MCS0	38	5190	13.57	15.00	100.00
		46	5230	13.59	15.00	
		36	5180	13.59	15.00	
		40	5200	13.47	15.00	
	802.11ac-VHT20 MCS0	44	5220	13.66	15.00	100.00
		48	5240	13.55	15.00	
		38	5190	13.47	15.00	
		46	5230	13.50	15.00	
	802.11ac-VHT40 MCS0	46	5230	13.50	15.00	100.00
		42	5210	14.37	16.00	
	802.11ac-VHT80 MCS0	42	5210	14.37	16.00	100.00
		36	5180	13.61	15.00	
	802.11ax-HE20 MCS0	40	5200	13.53	15.00	100.00
		44	5220	13.65	15.00	
		48	5240	13.56	15.00	
		38	5190	13.62	15.00	
	802.11ax-HE40 MCS0	46	5230	13.65	15.00	100.00
		42	5210	14.51	16.00	

Reduced Power level 8

Ant 1+2						
5.2GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	36	5180	14.67	16.00	98.63
		40	5200	14.52	16.00	
		44	5220	14.61	16.00	
		48	5240	14.60	16.00	
	802.11n-HT20 MCS0	36	5180	13.62	15.00	100.00
		40	5200	13.50	15.00	
		44	5220	13.70	15.00	
		48	5240	13.59	15.00	
	802.11n-HT40 MCS0	38	5190	13.57	15.00	100.00
		46	5230	13.59	15.00	
		36	5180	13.59	15.00	
		40	5200	13.47	15.00	
	802.11ac-VHT20 MCS0	44	5220	13.66	15.00	100.00
		48	5240	13.55	15.00	
		38	5190	13.47	15.00	
		46	5230	13.50	15.00	
	802.11ac-VHT40 MCS0	46	5230	13.50	15.00	100.00
		42	5210	14.37	16.00	
	802.11ac-VHT80 MCS0	42	5210	14.37	16.00	100.00
		36	5180	13.61	15.00	
	802.11ax-HE20 MCS0	40	5200	13.53	15.00	100.00
		44	5220	13.65	15.00	
		48	5240	13.56	15.00	
		38	5190	13.62	15.00	
	802.11ax-HE40 MCS0	46	5230	13.65	15.00	100.00
		42	5210	14.51	16.00	

Reduced Power level 7

Ant 1+2						
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	149	5745	15.09	17.00	98.63
		157	5785	15.08	17.00	
		165	5825	15.14	17.00	
		149	5745	15.17	17.00	
	802.11n-HT20 MCS0	157	5785	15.14	17.00	100.00
		165	5825	15.01	17.00	
	802.11n-HT40 MCS0	151	5755	15.17	17.00	100.00
		159	5795	15.09	17.00	
		149	5745	15.07	17.00	
		157	5785	15.08	17.00	
	802.11ac-VHT20 MCS0	165	5825	15.00	17.00	100.00
		151	5755	15.08	17.00	
		159	5795	15.05	17.00	
		155	5775	15.18	17.00	
	802.11ac-VHT40 MCS0	155	5775	15.18	17.00	100.00
		149	5745	15.01	17.00	
		157	5785	15.08	17.00	
		165	5825	15.04	17.00	
	802.11ac-VHT80 MCS0	151	5755	15.09	17.00	100.00
		159	5795	15.07	17.00	
		155	5775	15.21	17.00	
		149	5745	15.01	17.00	

Reduced Power level 8

Ant 1+2						
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	149	5745	15.09	17.00	98.63
		157	5785	15.08	17.00	
		165	5825	15.14	17.00	
		149	5745	15.17	17.00	
	802.11n-HT20 MCS0	157	5785	15.14	17.00	100.00
		165	5825	15.01	17.00	
	802.11n-HT40 MCS0	151	5755	15.17	17.00	100.00
		159	5795	15.09	17.00	
		149	5745	15.07	17.00	
		157	5785	15.08	17.00	
	802.11ac-VHT20 MCS0	165	5825	15.00	17.00	100.00
		151	5755	15.08	17.00	
		159	5795	15.05	17.00	
		155	5775	15.18	17.00	
	802.11ac-VHT40 MCS0	155	5775	15.18	17.00	100.00
		149	5745	15.01	17.00	
		157	5785	15.08	17.00	
		165	5825	15.04	17.00	
	802.11ac-VHT80 MCS0	151	5755	15.09	17.00	100.00
		159	5795	15.07	17.00	
		155	5775	15.21	17.00	
		149	5745	15.01	17.00	



Reduced Power level 3

Ant 1+2						
Mode	Channel	Frequency (MHz)	Average power (dBm)	Turn-Up Limit	Duty Cycle %	
802.11a 6Mbps	36	5180	16.67	18.00	98.63	
	40	5200	16.52	18.00		
	44	5220	16.61	18.00		
	48	5240	16.60	18.00		
802.11n HT20 MCS0	36	5180	15.62	17.00	100.00	
	40	5200	15.59	17.00		
	44	5220	15.70	17.00		
	48	5240	15.59	17.00		
802.11n HT40 MCS0	36	5180	15.57	17.00	100.00	
	46	5230	15.59	17.00		
	36	5180	15.59	17.00		
	40	5200	15.47	17.00		
802.11ac VHT20 MCS0	44	5220	15.66	17.00	100.00	
	48	5240	15.55	17.00		
	36	5180	15.47	17.00		
	46	5230	15.50	17.00		
802.11ac VHT40 MCS0	42	5210	16.37	18.00	100.00	
	36	5180	16.61	17.00		
802.11ax HE20 MCS0	40	5200	15.53	17.00	100.00	
	44	5220	15.65	17.00		
	48	5240	15.56	17.00		
	36	5180	15.62	17.00		
802.11ax HE40 MCS0	46	5230	15.65	17.00	100.00	
	42	5210	16.51	18.00		

Reduced Power level 3

Ant 1+2						
Mode	Channel	Frequency (MHz)	Average power (dBm)	Turn-Up Limit	Duty Cycle %	
802.11a 6Mbps	52	5260	16.57	18.00	98.63	
	56	5280	16.39	18.00		
	60	5300	16.34	18.00		
	64	5320	16.37	18.00		
802.11n HT20 MCS0	52	5260	15.54	17.00	100.00	
	56	5280	16.30	18.00		
	60	5300	16.19	18.00		
	64	5320	16.24	18.00		
802.11n HT40 MCS0	54	5270	15.41	17.00	100.00	
	52	5260	16.26	18.00		
802.11ac VHT20 MCS0	52	5260	15.50	17.00	100.00	
	56	5280	16.27	18.00		
	60	5300	16.15	18.00		
	64	5320	16.23	18.00		
802.11ac VHT40 MCS0	54	5270	15.35	17.00	100.00	
	62	5310	16.15	18.00		
802.11ac VHT80 MCS0	58	5290	16.26	18.00	100.00	
	50	5250	16.82	17.00		
802.11ac VHT160 MCS0	52	5260	15.51	17.00	100	
	56	5280	16.32	18.00		
802.11ax HE20 MCS0	60	5300	16.14	18.00	100.00	
	64	5320	16.28	18.00		
	54	5270	16.38	18.00		
	62	5310	16.24	18.00		
802.11ax HE40 MCS0	58	5290	16.40	18.00	100.00	
	50	5250	17.00	17.00		

Reduced Power for Body-worn&Extremity

Reduced Power level 4

Ant 1+2						
Mode	Channel	Frequency (MHz)	Average power (dBm)	Turn-Up Limit	Duty Cycle %	
802.11a 6Mbps	36	5180	16.67	18.00	98.63	
	40	5200	16.52	18.00		
	44	5220	16.61	18.00		
	48	5240	16.60	18.00		
802.11n HT20 MCS0	36	5180	15.62	17.00	100.00	
	40	5200	15.59	17.00		
	44	5220	15.70	17.00		
	48	5240	15.59	17.00		
802.11n HT40 MCS0	36	5180	15.57	17.00	100.00	
	46	5230	15.59	17.00		
	36	5180	15.59	17.00		
	40	5200	15.47	17.00		
802.11ac VHT20 MCS0	44	5220	15.66	17.00	100.00	
	48	5240	15.55	17.00		
802.11ac VHT40 MCS0	36	5180	15.47	17.00	100.00	
	46	5230	15.50	17.00		
802.11ac VHT80 MCS0	42	5210	16.37	18.00	100.00	
	36	5180	16.61	17.00		
802.11ax HE20 MCS0	40	5200	15.53	17.00	100.00	
	44	5220	15.65	17.00		
	48	5240	15.56	17.00		
	36	5180	15.62	17.00		
802.11ax HE40 MCS0	46	5230	15.65	17.00	100.00	
	42	5210	16.51	18.00		

Reduced Power level 4

Ant 1+2						
Mode	Channel	Frequency (MHz)	Average power (dBm)	Turn-Up Limit	Duty Cycle %	
802.11a 6Mbps	52	5260	16.57	18.00	98.63	
	56	5280	16.39	18.00		
	60	5300	16.34	18.00		
	64	5320	16.37	18.00		
802.11n HT20 MCS0	52	5260	15.54	17.00	100.00	
	56	5280	16.30	18.00		
	60	5300	16.19	18.00		
	64	5320	16.24	18.00		
802.11n HT40 MCS0	54	5270	15.41	17.00	100.00	
	52	5260	16.26	18.00		
802.11ac VHT20 MCS0	52	5260	15.50	17.00	100.00	
	56	5280	16.27	18.00		
	60	5300	16.15	18.00		
	64	5320	16.23	18.00		
802.11ac VHT40 MCS0	54	5270	15.35	17.00	100.00	
	62	5310	16.15	18.00		
802.11ac VHT80 MCS0	58	5290	16.26	18.00	100.00	
	50	5250	16.82	17.00		
802.11ac VHT160 MCS0	52	5260	15.51	17.00	100.00	
	56	5280	16.32	18.00		
802.11ax HE20 MCS0	60	5300	16.14	18.00	100.00	
	64	5320	16.28	18.00		
	54	5270	16.38	18.00		
	62	5310	16.24	18.00		
802.11ax HE40 MCS0	58	5290	16.40	18.00	100.00	
	50	5250	17.00	17.00		

Reduced Power level 5

Ant 1+2						
Mode	Channel	Frequency (MHz)	Average power (dBm)	Turn-Up Limit	Duty Cycle %	
802.11a 6Mbps	36	5180	16.67	18.00	98.63	
	40	5200	16.52	18.00		
	44	5220	16.61	18.00		
	48	5240	16.60	18.00		
802.11n HT20 MCS0	36	5180	15.62	17.00	100.00	
	40	5200	15.59	17.00		
	44	5220	15.70	17.00		
	48	5240	15.59	17.00		
802.11n HT40 MCS0	36	5180	15.57	17.00	100.00	
	46	5230	15.59	17.00		
	36	5180	15.59	17.00		
	40	5200	15.47	17.00		
802.11ac VHT20 MCS0	44	5220	15.66	17.00	100.00	
	48	5240	15.55	17.00		
802.11ac VHT40 MCS0	36	5180	15.47	17.00	100.00	
	46	5230	15.50	17.00		
802.11ac VHT80 MCS0	42	5210	16.37	18.00	100.00	
	36	5180	16.61	17.00		
802.11ax HE20 MCS0	40	5200	15.53	17.00	100.00	
	44	5220	15.65	17.00		
	48	5240	15.56	17.00		
	36	5180	15.62	17.00		
802.11ax HE40 MCS0	46	5230	15.65	17.00	100.00	
	42	5210	16.51	18.00		

Reduced Power level 5

Ant 1+2									
Mode	Channel	Frequency (MHz)	Average power (dBm)	Turn-Up Limit	Duty Cycle %				
802.11a 6Mbps	52	5260	16.57	18.00	98.63				
	56	5280	16.39	18.00					
	60	5300	16.34	18.00					
	64	5320	16.37	18.00					
802.11n-HT20 MCS0	52	5260	15.54	17.00	100.00				
	56	5280	16.30	18.00					
	60	5300	16.19	18.00					
	64	5320	16.24	18.00					
802.11n-HT40 MCS0	54	5270	15.41	17.00	100.00				
	62	5310	16.26	18.00					
	52	5260	15.50	17.00					
	56	5280	16.27	18.00					
802.11ac-VHT20 MCS0	60	5300	16.15	18.00	100.00				
	64	5320	16.23	18.00					
	802.11ac-VHT40 MCS0	54	5270	15.35			17.00	100.00	
		62	5310	16.11			18.00		
802.11ac-VHT80 MCS0	58	5290	16.38	18.00	100.00				
	802.11ac-VHT 160 MCS0	50	5250	16.82	17.00	100			
802.11n-HE20 MCS0	52	5260	15.51	17.00	100.00				
	56	5280	16.32	18.00					
	60	5300	16.16	18.00					
	64	5320	16.28	18.00					
802.11n-HE40 MCS0	54	5270	16.38	18.00	100.00				
	62	5310	16.24	18.00					
802.11n-HE80 MCS0	58	5290	16.40	18.00	100.00				
	802.11n-HE160 MCS0	50	5250	17.00			17.00	100.00	



Reduced Power level 6						
Art 142						
5.2GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Duty Cycle %
	802.11a @Mbps	36	5180	16.67	18.00	98.63
		40	5200	16.52	18.00	
		44	5220	16.61	18.00	
		48	5240	16.60	18.00	
	802.11a-HT20 MCS0	36	5180	15.62	17.00	100.00
		40	5200	15.50	17.00	
		44	5220	15.70	17.00	
		48	5240	15.59	17.00	
	802.11a-HT40 MCS0	36	5180	15.57	17.00	100.00
		46	5230	15.59	17.00	
		46	5180	15.59	17.00	
		40	5200	15.47	17.00	
	802.11ac-VHT20 MCS0	44	5220	15.66	17.00	100.00
		48	5240	15.55	17.00	
	802.11ac-VHT40 MCS0	38	5190	15.47	17.00	100.00
		46	5230	15.50	17.00	
	802.11ac-VHT80 MCS0	42	5210	16.37	16.00	100.00
		38	5180	15.61	17.00	
	802.11ax-HE30 MCS0	40	5200	15.53	17.00	100.00
		44	5220	15.65	17.00	
	802.11ax-HE40 MCS0	38	5190	15.62	17.00	100.00
		46	5230	15.65	17.00	
	802.11ax-HE80 MCS0	42	5210	16.51	18.00	100.00

Reduced Power level 6						
Art 142						
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Duty Cycle %
	802.11a @Mbps	52	5260	16.57	18.00	98.63
		56	5280	16.39	18.00	
		60	5300	16.34	18.00	
		64	5320	16.37	18.00	
	802.11a-HT20 MCS0	52	5260	15.54	17.00	100.00
		56	5280	16.30	18.00	
		60	5300	16.19	18.00	
		64	5320	16.24	18.00	
	802.11a-HT40 MCS0	54	5270	15.41	17.00	100.00
		62	5310	16.26	18.00	
	802.11ac-VHT20 MCS0	52	5260	15.50	17.00	100.00
		56	5280	16.27	18.00	
		60	5300	16.15	18.00	
		64	5320	16.23	18.00	
	802.11ac-VHT40 MCS0	54	5270	15.35	17.00	100.00
		62	5310	16.15	18.00	
	802.11ac-VHT80 MCS0	58	5290	16.26	18.00	100.00
		50	5250	16.82	17.00	
	802.11ac-VHT160 MCS0	52	5260	15.51	17.00	100.00
		56	5280	16.32	18.00	
	802.11ax-HE30 MCS0	60	5300	16.14	18.00	100.00
		64	5320	16.28	18.00	
	802.11ax-HE40 MCS0	54	5270	16.38	18.00	100.00
		62	5310	16.24	18.00	
	802.11ax-HE80 MCS0	58	5290	16.40	18.00	100.00
		50	5250	17.00	17.00	
	802.11ax-HE160 MCS0	50	5250	17.00	17.00	100.00

Reduced Power level 7						
Art 142						
5.2GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Duty Cycle %
	802.11a @Mbps	36	5180	16.67	18.00	98.63
		40	5200	16.52	18.00	
		44	5220	16.61	18.00	
		48	5240	16.60	18.00	
	802.11a-HT20 MCS0	36	5180	15.62	17.00	100.00
		40	5200	15.50	17.00	
		44	5220	15.70	17.00	
		48	5240	15.59	17.00	
	802.11a-HT40 MCS0	38	5190	15.57	17.00	100.00
		46	5230	15.59	17.00	
		36	5180	15.59	17.00	
		40	5200	15.47	17.00	
	802.11ac-VHT20 MCS0	44	5220	15.66	17.00	100.00
		48	5240	15.55	17.00	
	802.11ac-VHT40 MCS0	38	5190	15.47	17.00	100.00
		46	5230	15.50	17.00	
	802.11ac-VHT80 MCS0	42	5210	16.37	16.00	100.00
		38	5180	15.61	17.00	
	802.11ax-HE30 MCS0	40	5200	15.53	17.00	100.00
		44	5220	15.65	17.00	
	802.11ax-HE40 MCS0	38	5190	15.62	17.00	100.00
		46	5230	15.65	17.00	
	802.11ax-HE80 MCS0	42	5210	16.51	18.00	100.00

Reduced Power level 7						
Art 142						
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Duty Cycle %
	802.11a @Mbps	52	5260	16.57	18.00	98.63
		56	5280	16.39	18.00	
		60	5300	16.34	18.00	
		64	5320	16.37	18.00	
	802.11a-HT20 MCS0	52	5260	15.54	17.00	100.00
		56	5280	16.30	18.00	
		60	5300	16.19	18.00	
		64	5320	16.24	18.00	
	802.11a-HT40 MCS0	54	5270	15.41	17.00	100.00
		62	5310	16.26	18.00	
	802.11ac-VHT20 MCS0	52	5260	15.50	17.00	100.00
		56	5280	16.27	18.00	
		60	5300	16.15	18.00	
		64	5320	16.23	18.00	
	802.11ac-VHT40 MCS0	54	5270	15.35	17.00	100.00
		62	5310	16.15	18.00	
	802.11ac-VHT80 MCS0	58	5290	16.26	18.00	100.00
		50	5250	16.82	17.00	
	802.11ac-VHT160 MCS0	52	5260	15.51	17.00	100.00
		56	5280	16.32	18.00	
	802.11ax-HE30 MCS0	60	5300	16.14	18.00	100.00
		64	5320	16.28	18.00	
	802.11ax-HE40 MCS0	54	5270	16.38	18.00	100.00
		62	5310	16.24	18.00	
	802.11ax-HE80 MCS0	58	5290	16.40	18.00	100.00
		50	5250	17.00	17.00	
	802.11ax-HE160 MCS0	50	5250	17.00	17.00	100.00

Reduced Power level 8						
Art 142						
5.2GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Duty Cycle %
	802.11a @Mbps	36	5180	16.67	18.00	98.63
		40	5200	16.52	18.00	
		44	5220	16.61	18.00	
		48	5240	16.60	18.00	
	802.11a-HT20 MCS0	36	5180	15.62	17.00	100.00
		40	5200	15.50	17.00	
		44	5220	15.70	17.00	
		48	5240	15.59	17.00	
	802.11a-HT40 MCS0	38	5190	15.57	17.00	100.00
		46	5230	15.59	17.00	
		36	5180	15.59	17.00	
		40	5200	15.47	17.00	
	802.11ac-VHT20 MCS0	44	5220	15.66	17.00	100.00
		48	5240	15.55	17.00	
	802.11ac-VHT40 MCS0	38	5190	15.47	17.00	100.00
		46	5230	15.50	17.00	
	802.11ac-VHT80 MCS0	42	5210	16.37	16.00	100.00
		38	5180	15.61	17.00	
	802.11ax-HE30 MCS0	40	5200	15.53	17.00	100.00
		44	5220	15.65	17.00	
	802.11ax-HE40 MCS0	38	5190	15.62	17.00	100.00
		46	5230	15.65	17.00	
	802.11ax-HE80 MCS0	42	5210	16.51	18.00	100.00

Reduced Power level 8						
Art 142						
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Time-Up Limit	Duty Cycle %
5.3GHz WLAN	802.11a @Mbps	52	5260	16.57	18.00	98.63
		56	5280	16.39	18.00	
		60	5300	16.34	18.00	
		64	5320	16.37	18.00	
	802.11a-HT20 MCS0	52	5260	15.54	17.00	100.00
		56	5280	16.30	18.00	
		60	5300	16.19	18.00	
		64	5320	16.24	18.00	
	802.11a-HT40 MCS0	54	5270	15.41	17.00	100.00
		62	5310	16.26	18.00	
	802.11ac-VHT20 MCS0	52	5260	15.50	17.00	100.00
		56	5280	16.27	18.00	
		60	5300	16.15	18.00	
		64	5320	16.23	18.00	
	802.11ac-VHT40 MCS0	54	5270	15.35	17.00	100.00
		62	5310	16.15	18.00	
	802.11ac-VHT80 MCS0	52	5260	14.26	16.00	100.00
56		5280	16.82	17.00		
60		5300	16.82	17.00		
62		5320	15.51	17.00		
802.11a-HE20 MCS0	56	5280	16.32	18.00	100.00	
	60	5300	16.14	18.00		
	64	5320	16.28	18.00		
	62	5310	16.38	18.00		
802.11a-HE40 MCS0	54	5270	15.38	18.00	100.00	
	62	5310	16.24	18.00		
802.11a-HE80 MCS0	58	5290	16.40	18.00	100.00	
	56	5270	17.00	17.00		



Appendix F. Supplemental Tuner Head & Body SAR Results

The results are shown as follows.

RF exposure position – Ant1										Aperture 00										Aperture 01										Aperture 02										Aperture 03									
										Average Value of Time Sweep (W/kg)										Average Value of Time Sweep (W/kg)										Average Value of Time Sweep (W/kg)										Average Value of Time Sweep (W/kg)									
W90W_Ant 1 Head	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RS Sgn	RS Other	Test Position	Spacing	Measured 1g SAR (W/kg)	0	20	40	60	80	100	120	140	0	20	40	60	80	100	120	140	0	20	40	60	80	100	120	140	0	20	40	60	80	100	120	140							
	WCDMA-V	RMC 12.2Mbps	Full Power	4020	848.0	N/A	N/A	Right Cheek	Open	0.285	0	0	0	0	0	0	0	0	0	0.046	0.050	0.100	0.086	0.194	0	0.100	0.094	0.166	0.086	0.027	0.040	0.040	0.026	0.070	0	0.086	0.037	0.16	0.100	0.037	0	0.11							
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RS Sgn	RS Other	Test Position	Spacing	Measured 1g SAR (W/kg)	1	21	41	61	81	101	121	141	1	21	41	61	81	101	121	141	1	21	41	61	81	101	121	141	1	21	41	61	81	101	121	141							
	CDMA2000 1X	RC1-5GSS	Full Power	777	848.31	N/A	N/A	Right Cheek	Open	0.171	0	0	0	0	0	0	0	0	0	0.058	0.100	0.104	0.057	0.047	0.136	0.056	0.162	0.116	0.111	0.116	0	0.104	0.054	0	0.054	0.068	0.162	0.115	0.081	0.058	0.133								
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RS Sgn	RS Other	Test Position	Spacing	Measured 1g SAR (W/kg)	2	22	42	62	82	102	122	142	2	22	42	62	82	102	122	142	2	22	42	62	82	102	122	142	2	22	42	62	82	102	122	142							
	CDMA2000 1X	RC1-5GSS	Full Power	560	830.0	N/A	N/A	Right Cheek	Open	0.16	0	0	0	0	0	0	0	0	0.054	0	0.046	0.056	0.177	0.106	0.100	0.100	0.050	0.064	0.050	0.064	0	0.040	0	0	0.068	0.056	0.167	0.100	0.104	0.050	0.070								
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RS Sgn	RS Other	Test Position	Spacing	Measured 1g SAR (W/kg)	3	23	43	63	83	103	123	143	3	23	43	63	83	103	123	143	3	23	43	63	83	103	123	143	3	23	43	63	83	103	123	143							
	LTE Band 71	20M-QPSK	Full Power	13330	680	1	0	Right Cheek	Open	0.106	0	0	0	0	0	0.068	0	0	0	0	0.101	0.048	0	0	0	0.080	0	0	0	0	0	0	0	0	0	0.100	0.048	0	0	0	0.056	0							
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RS Sgn	RS Other	Test Position	Spacing	Measured 1g SAR (W/kg)	4	24	44	64	84	104	124	144	4	24	44	64	84	104	124	144	4	24	44	64	84	104	124	144	4	24	44	64	84	104	124	144							
	LTE Band 12	10M-QPSK	Full Power	23805	707.0	1	40	Right Cheek	Open	0.166	0	0	0	0.040	0	0	0	0	0	0.111	0.107	0	0.080	0	0.047	0	0	0	0	0	0	0	0	0	0	0.108	0.100	0	0.080	0	0.088	0							
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RS Sgn	RS Other	Test Position	Spacing	Measured 1g SAR (W/kg)	5	25	45	65	85	105	125	145	5	25	45	65	85	105	125	145	5	25	45	65	85	105	125	145	5	25	45	65	85	105	125	145							
	LTE Band 13	10M-QPSK	Full Power	23036	780	1	25	Right Cheek	Open	0.17	0	0	0	0	0	0	0	0	0	0.110	0.088	0.100	0.081	0.108	0.090	0	0.081	0	0	0	0	0	0	0.080	0.140	0.138	0.087	0.104	0.111	0.050	0								
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RS Sgn	RS Other	Test Position	Spacing	Measured 1g SAR (W/kg)	6	26	46	66	86	106	126	146	6	26	46	66	86	106	126	146	6	26	46	66	86	106	126	146	6	26	46	66	86	106	126	146							
	LTE Band 5	10M-QPSK	Full Power	20025	830.0	1	40	Right Cheek	Open	0.200	0	0	0	0	0	0.050	0	0	0	0.104	0.087	0.161	0.080	0.160	0.160	0	0.164	0.084	0.078	0	0.100	0.048	0	0.080	0.048	0.100	0.080	0.200	0.118	0.160	0.108	0							
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RS Sgn	RS Other	Test Position	Spacing	Measured 1g SAR (W/kg)	7	27	47	67	87	107	127	147	7	27	47	67	87	107	127	147	7	27	47	67	87	107	127	147	7	27	47	67	87	107	127	147							
	LTE Band 26	10M-QPSK	Full Power	28010	830.0	1	0	Right Cheek	Open	0.166	0	0	0	0	0	0	0	0	0	0.100	0.110	0.168	0.086	0.160	0.164	0	0.114	0	0.07	0	0.040	0	0	0.088	0.000	0.088	0.140	0.167	0.108	0.161	0.100	0							
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RS Sgn	RS Other	Test Position	Spacing	Measured 1g SAR (W/kg)	8	28	48	68	88	108	128	148	8	28	48	68	88	108	128	148	8	28	48	68	88	108	128	148	8	28	48	68	88	108	128	148							
	N71_Ant1	20M-BPSK	Full Power	138100	680.0	50	20	Right Cheek	Open	0.080	0	0	0	0.080	0	0	0	0	0	0.045	0	0.050	0	0.051	0	0	0	0	0	0	0	0	0	0	0	0.048	0	0	0.048	0	0	0	0						
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RS Sgn	RS Other	Test Position	Spacing	Measured 1g SAR (W/kg)	9	29	49	69	89	109	129	149	9	29	49	69	89	109	129	149	9	29	49	69	89	109	129	149	9	29	49	69	89	109	129	149							
	N0_Ant1	20M-BPSK	Full Power	167300	830.0	1	1	Right Cheek	Open	0.151	0	0	0	0	0	0	0	0	0	0	0.030	0	0	0.039	0	0	0	0	0	0	0	0	0	0	0.054	0.050	0.080	0.050	0.040	0	0								
W90W_Ant 1 Body	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RS Sgn	RS Other	Test Position	Spacing	Measured 1g SAR (W/kg)	10	30	50	70	90	110	130	150	7	10	30	50	70	90	110	130	7	10	30	50	70	90	110	130	7	10	30	50	70	90	110	130	150						
	WCDMA-V	RMC 12.2Mbps	Full Power	4100	830.0	N/A	N/A	Right Side	Open	0.034	0	0	0	0	0	0	0	0	0.068	0.040	0.200	0.340	0.340	0	0.107	0.080	0.140	0.081	0.284	0.119	0.106	0.097	0.408	0.481	0.148	0.301	0.360	0.300	0	0.080	0.08								
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RS Sgn	RS Other	Test Position	Spacing	Measured 1g SAR (W/kg)	11	31	51	71	91	111	131	151	8	11	31	51	71	91	111	131	8	11	31	51	71	91	111	131	8	11	31	51	71	91	111	131	151						
	CDMA2000 1X	RTAP 13.5Mbps	Full Power	777	848.31	N/A	N/A	Right Side	Open	0.070	0	0	0	0	0	0	0	0	0	0.066	0.200	0.208	0.30	0.340	0	0.084	0.11	0.284	0.114	0.380	0.194	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100							
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RS Sgn	RS Other	Test Position	Spacing	Measured 1g SAR (W/kg)	12	32	52	72	92	112	132	152	9	12	32	52	72	92	112	132	9	12	32	52	72	92	112	132	9	12	32	52	72	92	112	132	152						
	CDMA2000 1X	RTAP 13.5Mbps	Full Power	884	820.1	N/A	N/A	Right Side	Open	0.401	0	0	0	0	0	0	0	0	0	0.108	0.31	0.308	0.380	0	0	0.11	0.076	0.171	0.076	0.18	0.085	0.108	0.188	0.288	0.08	0.248	0.301	0.387	0.271	0.080	0	0.108	0.107						
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RS Sgn	RS Other	Test Position	Spacing	Measured 1g SAR (W/kg)	13	33	53	73	93	113	133	153	10	13	33	53	73	93	113	133	10	13	33	53	73	93	113	133	10	13	33	53	73	93	113	133	153						
	LTE Band 71	20M-QPSK	Full Power	13330	680	1	0	Right Side	Open	0.364	0.164	0.140	0.210	0.110	0	0	0.088	0.08	0.146	0.288	0.164	0.048	0.240	0.100	0.088	0.101	0	0	0	0	0	0	0	0.107	0.084	0.080	0	0.201	0	0.108	0.080								
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RS Sgn	RS Other	Test Position	Spacing	Measured 1g SAR (W/kg)	14	34	54	74	94	114	134	154	11	14	34	54	74	94	114	134	11	14	34	54	74	94	114	134	11	14	34	54	74	94	114	134	154						
	LTE Band 12	10M-QPSK	Full Power	23805	707.0	25	25	Right Side	Open	0.279	0.076	0.164	0	0	0	0	0.080	0.080	0.200	0.070	0.108	0	0.108	0	0.061	0.208	0	0	0	0	0	0	0	0.087	0	0.148	0.058	0.140	0	0.16	0	0.081	0.101						
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RS Sgn	RS Other	Test Position	Spacing	Measured 1g SAR (W/kg)	15	35	55	75	95	115	135	155	12	15	35	55	75	95	115	135	12	15	35	55	75	95	115	135	12	15	35	55	75	95	115	135	155						
	LTE Band 10	10M-QPSK	Full Power	23805	780	1	25	Right Side	Open	0.047	0	0.080	0	0	0	0	0.044	0	0.087	0.100	0.100	0	0.11	0	0.146	0.20	0.080	0	0.076	0.080	0.114	0.108	0	0.040	0.20	0.104	0.100	0	0.104	0.040	0.116	0.211							
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RS Sgn	RS Other	Test Position	Spacing	Measured 1g SAR (W/kg)	16	36	56	76	96	116	136	156	13	16	36	56	76	96	116	136	13	16	36	56	76	96	116	136	13	16	36	56	76	96	116	136	156						
	LTE Band 5	10M-QPSK	Full Power	20025	830.0	1	40	Right Side	Open	0.404	0	0	0.038	0	0	0	0	0	0	0.110	0	0.101	0.050	0.110	0.110	0.087	0.11	0.348	0.208	0.388	0.388	0.388	0.207	0.056	0.284	0.208	0	0.147	0.065	0.154	0.101	0.175	0.161						
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RS Sgn	RS Other	Test Position	Spacing	Measured 1g SAR (W/kg)	17	37	577																																					

Aperture 04														Aperture 06														Aperture 08														Aperture 07														Aperture 05														Aperture 09													
Average Value of Time Sweep (WHz)														Average Value of Time Sweep (WHz)														Average Value of Time Sweep (WHz)														Average Value of Time Sweep (WHz)														Average Value of Time Sweep (WHz)														Average Value of Time Sweep (WHz)													
0	20	40	60	80	100	120	140	0	20	40	60	80	100	120	140	0	20	40	60	80	100	120	140	0	20	40	60	80	100	120	140	0	20	40	60	80	100	120	140	0	20	40	60	80	100	120	140																																				
0	0.002	0.003	0.045	0.1	0.217	0	0.107	0	0	0.05	0.119	0.002	0.001	0	0.006	0	0.005	0.005	0.154	0.101	0.220	0	0.112	0	0.003	0.002	0.15	0.008	0.212	0	0.111	0	0.005	0.006	0.101	0.101	0.208	0	0.111	0	0.003	0.06	0.17	0.105	0.24	0	0.116																																				
1	21	41	61	81	101	121	141	1	21	41	61	81	101	121	141	1	21	41	61	81	101	121	141	1	21	41	61	81	101	121	141	1	21	41	61	81	101	121	141	1	21	41	61	81	101	121	141																																				
0	0.006	0.004	0.168	0.112	0.075	0.002	0.108	0	0	0.006	0.116	0.007	0.003	0	0.106	0	0.005	0.006	0.116	0.112	0.004	0.006	0.106	0	0.004	0.00	0.140	0.107	0.008	0.068	0.106	0	0.001	0.006	0.103	0.114	0.001	0.002	0.106	0	0.006	0.007	0.166	0.116	0.007	0.06	0.107																																				
2	22	42	62	82	102	122	142	2	22	42	62	82	102	122	142	2	22	42	62	82	102	122	142	2	22	42	62	82	102	122	142	2	22	42	62	82	102	122	142	2	22	42	62	82	102	122	142																																				
0	0.006	0.004	0.145	0.123	0.137	0.004	0.006	0	0.046	0.007	0.161	0.006	0.118	0.044	0.006	0	0.002	0.006	0.105	0.108	0.107	0.006	0.001	0	0.006	0.002	0.108	0.118	0.149	0.003	0.006	0	0.001	0.006	0.106	0.127	0.104	0.007	0.002	0	0.107	0.007	0.139	0.136	0.166	0.002	0.14																																				
3	23	43	63	83	103	123	143	3	23	43	63	83	103	123	143	3	23	43	63	83	103	123	143	3	23	43	63	83	103	123	143	3	23	43	63	83	103	123	143	3	23	43	63	83	103	123	143																																				
0	0.114	0.002	0	0	0	0.074	0	0	0.110	0.047	0	0	0	0.003	0	0	0.119	0.05	0	0	0	0.009	0	0	0.10	0.046	0	0	0	0.077	0	0	0.121	0.046	0	0	0	0.000	0	0	0.105	0.001	0	0	0	0.009	0																																				
4	24	44	64	84	104	124	144	4	24	44	64	84	104	124	144	4	24	44	64	84	104	124	144	4	24	44	64	84	104	124	144	4	24	44	64	84	104	124	144	4	24	44	64	84	104	124	144																																				
0	0.114	0.105	0	0.07	0	0.003	0	0	0.103	0.102	0	0.003	0	0.044	0	0	0.117	0.105	0	0.006	0	0.007	0	0	0.112	0.105	0	0.07	0	0.002	0	0	0.110	0.107	0	0.004	0	0.006	0	0	0.103	0.114	0	0.006	0	0.003	0																																				
5	25	45	65	85	105	125	145	5	25	45	65	85	105	125	145	5	25	45	65	85	105	125	145	5	25	45	65	85	105	125	145	5	25	45	65	85	105	125	145	5	25	45	65	85	105	125	145																																				
0	0.131	0.115	0.101	0.102	0.121	0.002	0	0	0.168	0.07	0.126	0.075	0.105	0.001	0	0	0.136	0.102	0.097	0.102	0.102	0.002	0	0	0.105	0.105	0.104	0.002	0.101	0.003	0	0	0.138	0.128	0.009	0.101	0.125	0.006	0	0	0.161	0.109	0.016	0.119	0.003	0																																					
6	26	46	66	86	106	126	146	6	26	46	66	86	106	126	146	6	26	46	66	86	106	126	146	6	26	46	66	86	106	126	146	6	26	46	66	86	106	126	146	6	26	46	66	86	106	126	146																																				
0	0.136	0.08	0.211	0.08	0.2	0.146	0	0	0.111	0.038	0.15	0.086	0.179	0.16	0	0	0.114	0.071	0.162	0.088	0.103	0.119	0	0	0.103	0.08	0.162	0.001	0.105	0.117	0	0	0.112	0.089	0.16	0.089	0.162	0.131	0	0	0.102	0.079	0.202	0.096	0.163	0.139	0																																				
7	27	47	67	87	107	127	147	7	27	47	67	87	107	127	147	7	27	47	67	87	107	127	147	7	27	47	67	87	107	127	147	7	27	47	67	87	107	127	147	7	27	47	67	87	107	127	147																																				
0.046	0.11	0.128	0.168	0.103	0.105	0.101	0	0	0.081	0.101	0.176	0.29	0.107	0.168	0	0.001	0.114	0.138	0.165	0.107	0.101	0.140	0	0.044	0.103	0.123	0.166	0.1	0.103	0.103	0	0.047	0.111	0.112	0.168	0.122	0.122	0.116	0	0	0.058	0.054	0.09	0	0.007	0.049	0																																				
8	28	48	68	88	108	128	148	8	28	48	68	88	108	128	148	8	28	48	68	88	108	128	148	8	28	48	68	88	108	128	148	8	28	48	68	88	108	128	148	8	28	48	68	88	108	128	148																																				
0.046	0	0.046	0	0.003	0	0	0	0	0	0.007	0	0.05	0	0	0	0.046	0	0	0.008	0	0	0	0	0.045	0	0.043	0	0.05	0	0	0	0.048	0	0.046	0	0.001	0	0	0	0.048	0	0.005	0	0.046	0	0	0																																				
9	29	49	69	89	109	129	149	9	29	49	69	89	109	129	149	9	29	49	69	89	109	129	149	9	29	49	69	89	109	129	149	9	29	49	69	89	109	129	149	9	29	49	69	89	109	129	149																																				
0	0	0.047	0.088	0.004	0	0	0	0	0	0	0	0.002	0	0	0	0	0	0.145	0	0	0	0.006	0	0	0	0.006	0	0	0	0	0	0	0	0.002	0	0	0	0	0	0.006	0	0.009	0	0	0	0																																					
10	30	50	70	90	110	130	150	10	30	50	70	90	110	130	150	10	30	50	70	90	110	130	150	10	30	50	70	90	110	130	150	10	30	50	70	90	110	130	150	10	30	50	70	90	110	130	150																																				
0.115	0.204	0.207	0.37	0.333	0	0.08	0.07	0.069	0.163	0.214	0.203	0.279	0	0.001	0.004	0.108	0.333	0.339	0.39	0.348	0	0.007	0.073	0.103	0.271	0.284	0.306	0.335	0	0.075	0.068	0.123	0.311	0.321	0.302	0.345	0	0.004	0.074	0.101	0.303	0.361	0.340	0.337	0	0.006	0.08																																				
11	31	51	71	91	111	131	151	11	31	51	71	91	111	131	151	11	31	51	71	91	111	131	151	11	31	51	71	91	111	131	151	11	31	51	71	91	111	131	151	11	31	51	71	91	111	131	151																																				
0.122	0.275	0.305	0.355	0.348	0	0.006	0.105	0.078	0.164	0.225	0.209	0.280	0	0.076	0.104	0.131	0.335	0.305	0.333	0.348	0	0.101	0.13	0.107	0.203	0.202	0.300	0.305	0	0.005	0.124	0.128	0.206	0.322	0.347	0.335	0	0.006	0.108	0.162	0.343	0.361	0.368	0.360	0	0.11	0.14																																				
12	32	52	72	92	112	132	152	12	32	52	72	92	112	132	152	12	32	52	72	92	112	132	152	12	32	52	72	92	112	132	152	12	32	52	72	92	112	132	152	12	32	52	72	92	112	132	152																																				
0.2	0.333	0.361	0.29	0.042	0	0.118	0.102	0.109	0.268	0.204	0.229	0	0	0.103	0.08	0.09	0.344	0.284	0.300	0.305	0	0.124	0.119	0.10	0.219	0.301	0.298	0.04	0	0.117	0.005	0.218	0.340	0.379	0.293	0.041	0	0.103	0.115	0.209	0.341	0.368	0.277	0.004	0	0.10	0.144																																				
13	33	53	73	93	113	133	153	13	33	53	73	93	113	133	153	13	33	53	73	93	113	133	153	13	33	53	73	93	113	133	153	13	33	53	73	93	113	133	153	13	33	53	73	93	113	133	153																																				
0.202	0.072	0.083	0.043	0.243	0	0.001	0.104	0.201	0.082	0.105	0.046	0.217	0	0.117	0.138	0.116	0.004	0.104	0.044	0.001	0	0.201	0.134	0.168	0.008	0.001	0.042	0.105	0	0	0.008	0.007	0	0.123	0.338	0.078	0.023	0	0.112	0.108	0	0.11	0.032	0.136	0.032	0.033	0.104																																				
14	34	54	74	94	114	134	154	14	34	54	74	94	114	134	154	14	34	54	74	94	114	134	154	14	34	54	74	94	114	134	154	14	34	54	74	94	114	134	154	14	34	54	74	94	114	134	154																																				
0.202	0.004	0.16	0	0.104	0	0.002	0.179	0.203	0.205	0.115	0	0.112	0	0.002	0.208	0.190	0.001	0.179	0	0.107	0	0.002	0.171	0.204	0.001	0.105	0	0.149	0	0.002	0.161	0.168	0.002	0.17	0	0.166	0	0.002	0.173	0.205	0.002	0.179	0	0.210	0	0.071	0.175																																				
15	35	55	75	95	115	135	155	15	35	55	75	95	115	135	155	15	35	55	75	95	115	135	155	15	35	55	75	95	115	135	155	15	35	55	75	95	115	135	155	15	35	55	75	95	115	135	155																																				
0.305	0.15	0.143	0	0.12	0.042	0.13	0.279	0.201	0.169	0.1	0	0.001	0	0.101	0.195	0.313	0.145	0.161	0.041	0.108	0.040	0.124																																																													

[illegible]

RF exposure position – ANTO											Aperture 90					
											Average Value of Time Sweep (W/kg)					
WWAN_Ant0 Head	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	0	30	60	90	120	
	WCDMA V	RMC 12.2Kbps	Reduced Power Level 1	4182	836.4	N/A	N/A	Right Cheek	0mm	0.966	0	0.152	0.279	0.754	0	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	1	31	61	91	121	
	CDMA2000 BC3	RC1-S055	Reduced Power Level 1	777	848.31	N/A	N/A	Right Cheek	0mm	0.926	0.066	0.171	0.419	0	0	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	2	32	62	92	122	
	CDMA2000 BC10	RC1-S055	Full Power	476	817.9	N/A	N/A	Right Cheek	0mm	0.999	0.094	0.28	0.562	0.907	0.048	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	3	33	63	93	123	
	LTE Band 71	20M-QPSK	Full Power	133322	863	1	0	Right Cheek	0mm	0.786	0.134	0.426	0.838	0.323	0.044	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	4	34	64	94	124	
	LTE Band 12	15M-QPSK	Full Power	23095	707.5	1	49	Right Cheek	0mm	0.862	0.141	0.525	0.998	0.398	0.073	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	5	35	65	95	125	
	LTE Band 13	15M-QPSK	Full Power	23230	762	1	25	Right Cheek	0mm	0.611	0.228	0.558	0.226	0.155	0.17	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	6	36	66	96	126	
	LTE Band 5	15M-QPSK	Reduced Power Level 1	20525	836.5	25	25	Right Cheek	0mm	0.917	0.202	0.632	0.148	0.257	0.87	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	7	37	67	97	127	
	LTE Band 26	15M-QPSK	Reduced Power Level 1	26965	841.5	36	20	Right Cheek	0mm	0.899	0.369	0	0.185	0.396	0	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	8	38	68	98	128	
	LTE Band 66_Ant0	20M-QPSK	Reduced Power Level 1/2/3	132572	1770	1	0	Right Tilted	0mm	0.783	0.383	0.397	0.369	0.269	0.27	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	9	39	69	99	129	
	LTE Band 7_Ant0	20M-QPSK	Reduced Power Level 1/2/3	20850	2510	50	24	Right Tilted	0mm	0.768	0.366	0.543	0.561	0.553	0.577	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	10	40	70	100	130	
	N71_Ant0	20M-BPSK	Full Power	136100	680.5	1	1	Right Cheek	0mm	0.572	0	0	0	0	0	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	11	41	71	101	131	
	N8_Ant0	20M-BPSK	Full Power	167300	836.5	1	1	Right Cheek	0mm	0.671	0.135	0.104	0.221	0	0.062	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	12	42	72	102	132	
	N88_Ant0	20M-BPSK	Reduced Power Level 1/2/3	354000	1770	1	1	Right Tilted	0mm	0.873	0.332	0.286	0.214	0.263	0.155	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	13	43	73	103	133	
	N41_Ant0	100M-BPSK	Reduced Power Level 1/2/3	528000	2640	1	1	Right Tilted	0mm	0.866	0.465	0.507	0.301	0.486	0.479	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	14	44	74	104	134	
	N41(9PUE)_Ant0	100M-BPSK	Reduced Power Level 1/2/3	528000	2640	1	1	Right Tilted	0mm	0.866	0.491	0.517	0.486	0.511	0.483	
WWAN_Ant0 Body	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	15	45	75	105	135	
	WCDMA V	RMC 12.2Kbps	Full Power	4233	846.6	N/A	N/A	Back	10mm	0.547	0.113	0	0	0.102	0	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	16	46	76	106	136	
	CDMA2000 BC3	RTAP 153.6Kbps	Full Power	777	848.31	N/A	N/A	Back	10mm	0.427	0.117	0	0	0.163	0	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	17	47	77	107	137	
	CDMA2000 BC10	RTAP 153.6Kbps	Full Power	664	823.1	N/A	N/A	Back	10mm	0.307	0.121	0	0	0.161	0	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	18	48	78	108	138	
	LTE Band 71	20M-QPSK	Full Power	133322	863	1	0	Back	10mm	0.232	0.089	0	0	0.111	0	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	19	49	79	109	139	
	LTE Band 12	15M-QPSK	Full Power	23095	707.5	1	49	Back	10mm	0.307	0.072	0.063	0.121	0	0.066	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	20	50	80	110	140	
	LTE Band 13	15M-QPSK	Full Power	23230	762	1	25	Back	10mm	0.213	0.094	0.056	0.113	0	0.054	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	21	51	81	111	141	
	LTE Band 5	15M-QPSK	Full Power	20525	836.5	1	49	Back	10mm	0.511	0.059	0.123	0	0	0.087	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	22	52	82	112	142	
	LTE Band 26	15M-QPSK	Full Power	26965	841.5	1	0	Back	10mm	0.362	0.083	0.165	0	0	0.117	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	23	53	83	113	143	
	LTE Band 66_Ant0	20M-QPSK	Hotspot on	132572	1770	50	24	Top Side	10mm	0.621	0.366	0.285	0.31	0.2	0.136	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	24	54	84	114	0	
	LTE Band 7_Ant0	20M-QPSK	Hotspot on	20850	2510	50	24	Top Side	10mm	0.674	0.519	0.534	0.493	0.528	0.196	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	25	55	85	115	1	
	N71_Ant0	20M-BPSK	Full Power	136100	680.5	1	1	Back	10mm	0.194	0	0	0	0	0	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	26	56	86	116	2	
	N8_Ant0	20M-BPSK	Full Power	167300	836.5	1	1	Back	10mm	0.203	0.096	0	0	0	0	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	27	57	87	117	3	
	N88_Ant0	20M-BPSK	Hotspot on	349000	1745	50	26	Top Side	10mm	0.661	0.443	0.407	0.424	0.376	0.289	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	28	58	88	118	4	
	N41_Ant0	100M-BPSK	Hotspot on	528000	2640	135	69	Top Side	10mm	0.636	0.16	0.354	0.391	0.23	0.342	
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	29	59	89	119	5	
	N41(9PUE)_Ant0	100M-BPSK	Hotspot on	528000	2640	135	69	Top Side	10mm	0.636	0.361	0.36	0.401	0.365	0.37	

RF exposure position – ANT2											Aperture 00					
											Average Value of Time Sweep (W/kg)					
WWAN_Ant 2 Head	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	0	27	55	83	111	139
	WCDMA IV_UAT	RMC 12.2Kbps	Reduced Power Level 1/2/3	1513	1732.6	N/A	N/A	Right Cheek	0mm	0.871	0.519	0.207	0.787	0.252	0.227	0.201
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	1	28	56	84	112	140
	WCDMA II_UAT	RMC 12.2Kbps	Reduced Power Level 1/2/3	9262	1852.4	N/A	N/A	Right Cheek	0mm	0.844	0.35	0.607	0.645	0.285	0.354	0.288
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	2	29	57	85	113	141
	CDMA2000 BC1_UAT	RC3 SC055	Reduced Power Level 1/2/3	1175	1908.75	N/A	N/A	Right Cheek	0mm	0.86	0.317	0.782	0.468	0.375	0.466	0.395
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	3	30	58	86	114	142
	LTE Band 6E_UAT	20M-QPSK	Reduced Power Level 1/2/3	132572	1770	50	24	Right Cheek	0mm	0.805	0.502	0.327	0.743	0.171	0.238	0.148
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	4	31	59	87	115	143
	LTE Band 25_UAT	20M-QPSK	Reduced Power Level 1/2/3	26590	1905	50	24	Right Cheek	0mm	0.874	0.404	0.823	0.527	0.39	0.528	0.395
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	5	32	60	88	116	0
	LTE Band 30_UAT	10M-QPSK	Reduced Power Level 1/2/3	27710	2310	1	25	Right Cheek	0mm	0.989	0.671	0.613	0.623	0.748	0.756	0.233
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	6	33	61	89	117	1
	LTE Band 7_UAT	20M-QPSK	Reduced Power Level 1/2/3	21100	2535	50	24	Right Cheek	0mm	0.891	0.607	0.57	0.573	0.466	0.613	0.737
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	7	34	62	90	118	2
	LTE Band 41_UAT	20M-QPSK	Reduced Power Level 1/2/3	41055	2636.5	50	24	Right Cheek	0mm	0.942	0.496	0.467	0.49	0.743	0.434	0.695
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	8	35	63	91	119	3
	LTE Band 41(HFUE)_UAT	20M-QPSK	Reduced Power Level 1/2/3	41490	2680	50	24	Right Cheek	0mm	0.947	0.172	0.162	0.192	0.199	0.131	0.21
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	9	36	64	92	120	4
	NB6_Ant2	20M-BPSK	Reduced Power Level 1/2/3	354000	1770	50	28	Right Cheek	0mm	0.854	0.819	0.288	0.271	0.214	0.203	0.458
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	10	37	65	93	121	5
	N05_Ant2	20M-BPSK	Reduced Power Level 1/2/3	381000	1905	50	28	Right Cheek	0mm	0.932	0.515	0.192	0.8	0.399	0.479	0.442
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	11	38	66	94	122	6
	N7_Ant2	20M-BPSK	Reduced Power Level 1/2/3	502000	2510	50	28	Right Cheek	0mm	0.988	0.681	0.902	0.715	0.584	0.556	0.733
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	12	39	67	95	123	7
	N41_Ant2	100M-BPSK	Reduced Power Level 1/2/3	528000	2640	1	1	Right Cheek	0mm	0.745	0.417	0.545	0.435	0.318	0.345	0.414
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	13	40	68	96	124	8
	N41(HFUE)_Ant2	100M-BPSK	Reduced Power Level 1/2/3	528000	2640	135	69	Right Cheek	0mm	0.935	0.498	0.509	0.387	0.287	0.344	0.44
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	14	41	69	97	125	9
	WCDMA IV_UAT	RMC 12.2Kbps	Hotspot on	1413	1732.6	N/A	N/A	Left Side	10mm	0.518	0.3	0.263	0.185	0.084	0.097	0.342
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	15	42	70	98	126	10
	WCDMA II_UAT	RMC 12.2Kbps	Hotspot on	9538	1907.6	N/A	N/A	Left Side	10mm	0.477	0.276	0.117	0.321	0.173	0.247	0.249
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	16	43	71	99	127	11	
CDMA2000 BC1_UAT	RTAP 153.6Kbps	Hotspot on	25	1851.25	N/A	N/A	Left Side	10mm	0.659	0.316	0.134	0.387	0.202	0.253	0.287	
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	17	44	72	100	128	12	
LTE Band 6E_UAT	20M-QPSK	Hotspot on	132572	1770	1	0	Left Side	10mm	0.595	0.258	0.235	0.105	0.198	0.175	0.318	
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	18	45	73	101	129	13	
LTE Band 25_UAT	20M-QPSK	Hotspot on	26140	1860	1	49	Left Side	10mm	0.592	0.354	0.268	0.152	0.164	0.188	0.358	
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	19	46	74	102	130	14	
LTE Band 30_UAT	10M-QPSK	Hotspot on	27710	2310	1	25	Left Side	10mm	0.744	0.429	0.34	0.728	0.66	0.662	0.698	
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	20	47	75	103	131	15	
LTE Band 7_UAT	20M-QPSK	Hotspot on	20850	2510	50	24	Left Side	10mm	0.946	0.514	0.482	0.445	0.409	0.409	0.52	
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	21	48	76	104	132	16	
LTE Band 41_UAT	20M-QPSK	Hotspot on	41055	2636.5	50	24	Left Side	10mm	0.996	0.536	0.415	0.389	0.389	0.375	0.412	
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	22	49	77	105	133	17	
LTE Band 41(HFUE)_UAT	20M-QPSK	Hotspot on	41055	2636.5	50	24	Left Side	10mm	0.987	0.353	0.289	0.26	0.255	0.237	0.371	
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	23	50	78	106	134	18	
NB6_Ant2	20M-BPSK	Hotspot on	354000	1770	50	28	Left Side	10mm	0.961	0.664	0.719	0.21	0.153	0.223	0.844	
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	24	51	79	107	135	19	
N05_Ant2	20M-BPSK	Hotspot on	381000	1905	50	28	Left Side	10mm	0.929	0.837	0.444	0.483	0.352	0.727	0.798	
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	25	52	80	108	136	20	
N7_Ant2	20M-BPSK	Hotspot on	512000	2560	50	28	Left Side	10mm	0.851	0.771	0.525	0.558	0.805	0.769	0.813	
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	26	53	81	109	137	21	
N41_Ant2	100M-BPSK	Hotspot on	528000	2640	135	69	Left Side	10mm	0.798	0.52	0.417	0.5	0.69	0.555	0.615	
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	27	54	82	110	138	22	
N41(HFUE)_Ant2	100M-BPSK	Hotspot on	528000	2640	135	69	Left Side	10mm	0.798	0.543	0.407	0.476	0.614	0.513	0.573	
WWAN_Ant 2 Body	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	28	55	83	111	139	
	WCDMA IV_UAT	RMC 12.2Kbps	Hotspot on	1413	1732.6	N/A	N/A	Left Side	10mm	0.518	0.3	0.263	0.185	0.084	0.097	0.342
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	15	42	70	98	126	10
	WCDMA II_UAT	RMC 12.2Kbps	Hotspot on	9538	1907.6	N/A	N/A	Left Side	10mm	0.477	0.276	0.117	0.321	0.173	0.247	0.249
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	16	43	71	99	127	11
	CDMA2000 BC1_UAT	RTAP 153.6Kbps	Hotspot on	25	1851.25	N/A	N/A	Left Side	10mm	0.659	0.316	0.134	0.387	0.202	0.253	0.287
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	17	44	72	100	128	12
	LTE Band 6E_UAT	20M-QPSK	Hotspot on	132572	1770	1	0	Left Side	10mm	0.595	0.258	0.235	0.105	0.198	0.175	0.318
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	18	45	73	101	129	13
	LTE Band 25_UAT	20M-QPSK	Hotspot on	26140	1860	1	49	Left Side	10mm	0.592	0.354	0.268	0.152	0.164	0.188	0.358
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	19	46	74	102	130	14
	LTE Band 30_UAT	10M-QPSK	Hotspot on	27710	2310	1	25	Left Side	10mm	0.744	0.429	0.34	0.728	0.66	0.662	0.698
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	20	47	75	103	131	15
	LTE Band 7_UAT	20M-QPSK	Hotspot on	20850	2510	50	24	Left Side	10mm	0.946	0.514	0.482	0.445	0.409	0.409	0.52
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	21	48	76	104	132	16
	LTE Band 41_UAT	20M-QPSK	Hotspot on	41055	2636.5	50	24	Left Side	10mm	0.996	0.536	0.415	0.389	0.389	0.375	0.412
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	22	49	77	105	133	17
	LTE Band 41(HFUE)_UAT	20M-QPSK	Hotspot on	41055	2636.5	50	24	Left Side	10mm	0.987	0.353	0.289	0.26	0.255	0.237	0.371
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	23	50	78	106	134	18
	NB6_Ant2	20M-BPSK	Hotspot on	354000	1770	50	28	Left Side	10mm	0.961	0.664	0.719	0.21	0.153	0.223	0.844
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	24	51	79	107	135	19
	N05_Ant2	20M-BPSK	Hotspot on	381000	1905	50	28	Left Side	10mm	0.929	0.837	0.444	0.483	0.352	0.727	0.798
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	25	52	80	108	136	20
	N7_Ant2	20M-BPSK	Hotspot on	512000	2560	50	28	Left Side	10mm	0.851	0.771	0.525	0.558	0.805	0.769	0.813
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	26	53	81	109	137	21
	N41_Ant2	100M-BPSK	Hotspot on	528000	2640	135	69									

RF exposure position – ANT3											Aperture 00					
											Average Value of Time Sweep (W/kg)					
WWAN_Ant 3 Head	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	0	27	55	83	111	139
	WCDMA IV_LAT	RMC 12.2Kbps	Full Power	1513	1752.6	N/A	N/A	Right Cheek	0mm	0.202	0	0	0.133	0.105	0	0.061
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	1	28	56	84	112	140
	WCDMA II_LAT	RMC 12.2Kbps	Full Power	9400	1880	N/A	N/A	Right Cheek	0mm	0.226	0	0.164	0.13	0.105	0.067	0.099
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	2	29	57	85	113	141
	CDMA2000 BC1_LAT	RC3 S055	Full Power	1175	1908.75	N/A	N/A	Right Cheek	0mm	0.271	0.056	0.187	0.142	0.118	0.087	0.11
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	3	30	58	86	114	142
	LTE Band 96_LAT	20M-QPSK	Full Power	132322	1745	1	0	Right Cheek	0mm	0.183	0	0.055	0.073	0.07	0	0
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	4	31	59	87	115	143
	LTE Band 25_LAT	20M-QPSK	Full Power	26590	1905	1	49	Right Cheek	0mm	0.219	0.065	0.175	0.135	0.119	0.09	0.069
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	5	32	60	88	116	0
	LTE Band 30_LAT	10M-QPSK	Full Power	27710	2310	1	25	Left Cheek	0mm	0.268	0.217	0.202	0.239	0.263	0.209	0.148
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	6	33	61	89	117	1
	LTE Band 7_LAT	20M-QPSK	Full Power	21100	2535	1	99	Left Cheek	0mm	0.367	0.224	0.291	0.262	0.216	0.311	0.289
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	7	34	62	90	118	2
	LTE Band 41_LAT	20M-QPSK	Full Power	39790	2510	1	99	Left Cheek	0mm	0.19	0.05	0.042	0.058	0.111	0.072	0.055
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	8	35	63	91	119	3
	LTE Band 41(HFUE)_LAT	20M-QPSK	Full Power	39750	2506	1	99	Right Cheek	0mm	0.207	0.061	0.056	0.067	0.121	0.088	0.076
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	9	36	64	92	120	4
	N66_Ant3	20M-BPSK	Full Power	349000	1745	50	28	Right Cheek	0mm	0.131	0.109	0.041	0.058	0.103	0.056	0
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	10	37	65	93	121	5
	N25_Ant3	20M-BPSK	Full Power	381000	1905	50	28	Right Cheek	0mm	0.244	0.067	0.049	0.151	0.108	0.085	0.056
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	11	38	66	94	122	6
	N7_Ant3	20M-BPSK	Full Power	502000	2510	1	1	Left Cheek	0mm	0.324	0.313	0.32	0.279	0.316	0.232	0.227
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	12	39	67	95	123	7
	N41_Ant3	100M-BPSK	Full Power	510000	2550	1	1	Left Cheek	0mm	0.338	0.318	0.297	0.258	0.279	0.199	0.187
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	13	40	68	96	124	8
	N41(HFUE)_Ant3	100M-BPSK	Full Power	509202	2546.01	1	1	Left Cheek	0mm	0.447	0.419	0.376	0.346	0.355	0.279	0.254
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	14	41	69	97	125	9
	WCDMA IV_LAT	RMC 12.2Kbps	Hotspot on	1513	1752.6	N/A	N/A	Bottom Side	10mm	0.495	0.28	0.192	0.188	0.249	0.11	0.397
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	15	42	70	98	126	10
	WCDMA II_LAT	RMC 12.2Kbps	Hotspot on	9538	1907.6	N/A	N/A	Bottom Side	10mm	0.502	0.226	0.239	0.278	0.251	0.247	0.223
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	16	43	71	99	127	11
	CDMA2000 BC1_LAT	RTAP 153.6Kbps	Hotspot on	1175	1908.75	N/A	N/A	Bottom Side	10mm	0.621	0.253	0.278	0.302	0.289	0.216	0.242
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	17	44	72	100	128	12
	LTE Band 96_LAT	20M-QPSK	Hotspot on	132572	1770	50	24	Bottom Side	10mm	0.429	0.223	0.187	0.162	0.232	0.103	0.371
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	18	45	73	101	129	13
	LTE Band 25_LAT	20M-QPSK	Hotspot on	26590	1905	1	49	Bottom Side	10mm	0.419	0.202	0.211	0.236	0.224	0.198	0.207
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	19	46	74	102	130	14
	LTE Band 30_LAT	10M-QPSK	Hotspot on	27710	2310	50	0	Bottom Side	10mm	0.592	0.326	0.213	0.189	0.202	0.167	0.224
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	20	47	75	103	131	15
	LTE Band 7_LAT	20M-QPSK	Hotspot on	21100	2535	50	24	Bottom Side	10mm	0.584	0.423	0.382	0.309	0.271	0.214	0.285
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	21	48	76	104	132	16
	LTE Band 41_LAT	20M-QPSK	Hotspot on	40620	2593	50	24	Bottom Side	10mm	0.536	0.299	0.286	0.217	0.219	0.211	0.189
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	22	49	77	105	133	17
	LTE Band 41(HFUE)_LAT	20M-QPSK	Hotspot on	40185	2549.5	50	24	Bottom Side	10mm	0.491	0.363	0.243	0.11	0.099	0.08	0.085
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	23	50	78	106	134	18
	N66_Ant3	20M-BPSK	Hotspot on	349000	1745	50	28	Bottom Side	10mm	0.4	0.33	0.24	0.165	0.182	0.085	0.228
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	24	51	79	107	135	19
	N25_Ant3	20M-BPSK	Hotspot on	381000	1905	50	28	Bottom Side	10mm	0.521	0.326	0.321	0.241	0.231	0.414	0.351
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	25	52	80	108	136	20
	N7_Ant3	20M-BPSK	Hotspot on	507000	2535	50	28	Bottom Side	10mm	0.584	0.307	0.304	0.256	0.435	0.321	0.486
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	26	53	81	109	137	21
	N41_Ant3	100M-BPSK	Hotspot on	509202	2546.01	135	69	Bottom Side	10mm	0.517	0.198	0.213	0.428	0.323	0.244	0.373
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	27	54	82	110	138	22
	N41(HFUE)_Ant3	100M-BPSK	Hotspot on	510000	2550	135	69	Bottom Side	10mm	0.58	0.156	0.368	0.432	0.295	0.223	0.325
WWAN_Ant 3 Body	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	0	27	55	83	111	139
	WCDMA IV_LAT	RMC 12.2Kbps	Hotspot on	1513	1752.6	N/A	N/A	Bottom Side	10mm	0.495	0.28	0.192	0.188	0.249	0.11	0.397
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	15	42	70	98	126	10
	WCDMA II_LAT	RMC 12.2Kbps	Hotspot on	9538	1907.6	N/A	N/A	Bottom Side	10mm	0.502	0.226	0.239	0.278	0.251	0.247	0.223
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	16	43	71	99	127	11
	CDMA2000 BC1_LAT	RTAP 153.6Kbps	Hotspot on	1175	1908.75	N/A	N/A	Bottom Side	10mm	0.621	0.253	0.278	0.302	0.289	0.216	0.242
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	17	44	72	100	128	12
	LTE Band 96_LAT	20M-QPSK	Hotspot on	132572	1770	50	24	Bottom Side	10mm	0.429	0.223	0.187	0.162	0.232	0.103	0.371
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	18	45	73	101	129	13
	LTE Band 25_LAT	20M-QPSK	Hotspot on	26590	1905	1	49	Bottom Side	10mm	0.419	0.202	0.211	0.236	0.224	0.198	0.207
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	19	46	74	102	130	14
	LTE Band 30_LAT	10M-QPSK	Hotspot on	27710	2310	50	0	Bottom Side	10mm	0.592	0.326	0.213	0.189	0.202	0.167	0.224
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	20	47	75	103	131	15
	LTE Band 7_LAT	20M-QPSK	Hotspot on	21100	2535	50	24	Bottom Side	10mm	0.584	0.423	0.382	0.309	0.271	0.214	0.285
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	21	48	76	104	132	16
	LTE Band 41_LAT	20M-QPSK	Hotspot on	40620	2593	50	24	Bottom Side	10mm	0.536	0.299	0.286	0.217	0.219	0.211	0.189
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	22	49	77	105	133	17
	LTE Band 41(HFUE)_LAT	20M-QPSK	Hotspot on	40185	2549.5	50	24	Bottom Side	10mm	0.491	0.363	0.243	0.11	0.099	0.08	0.085
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	23	50	78	106	134	18
	N66_Ant3	20M-BPSK	Hotspot on	349000	1745	50	28	Bottom Side	10mm	0.4	0.33	0.24	0.165	0.182	0.085	0.228
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	24	51	79	107	135	19
	N25_Ant3	20M-BPSK	Hotspot on	381000	1905	50	28	Bottom Side	10mm	0.521	0.326	0.321	0.241	0.231	0.414	0.351
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	25	52	80	108	136	20
	N7_Ant3	20M-BPSK	Hotspot on	507000	2535	50	28	Bottom Side	10mm	0.584	0.307	0.304	0.256	0.435	0.321	0.486
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	26	53	81	109	137	21
	N41_Ant3	100M-BPSK	Hotspot on	509202	2546.01	135	69	Bottom Side	10mm	0.517	0.198	0.213	0.428	0.323	0.244	0.373
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	27					