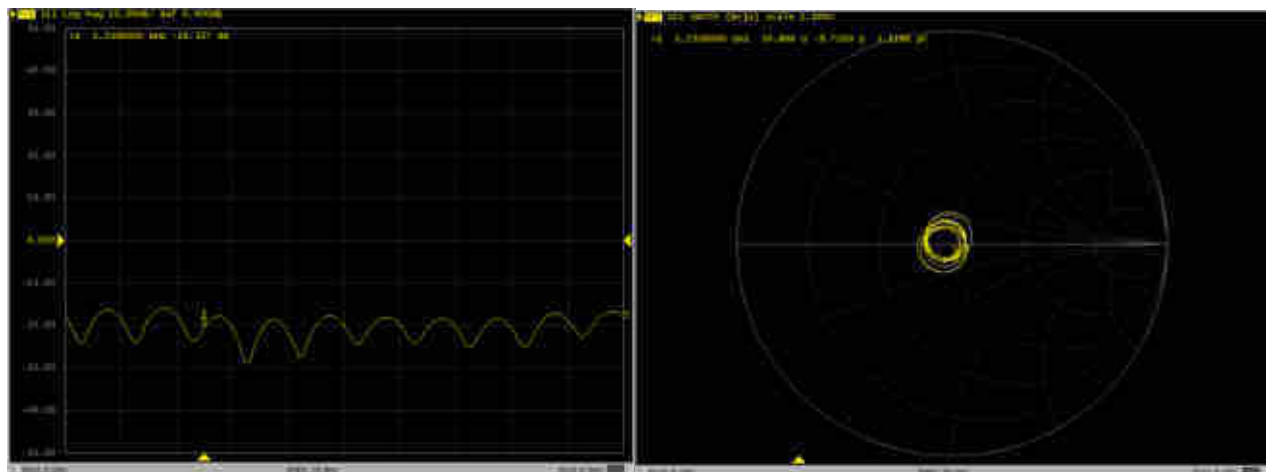


<Justification of the extended calibration>

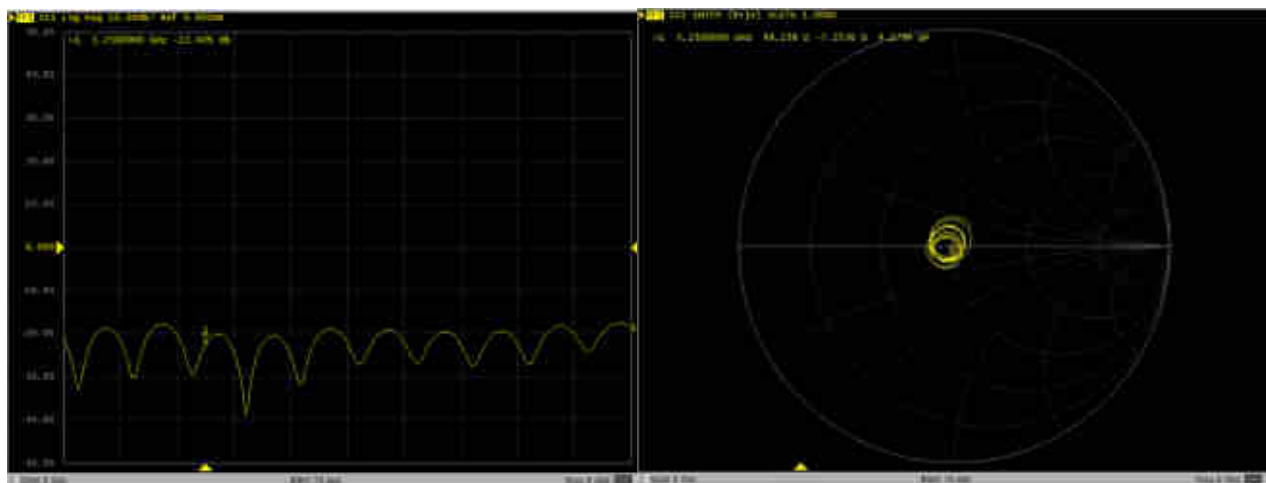
The return loss is $< -20\text{dB}$, within 20% of prior calibration; the impedance is within 5 ohm of prior calibration. Therefore the verification result should support extended calibration.

Dipole Verification Data> D5GHzV3, serial no. 1167

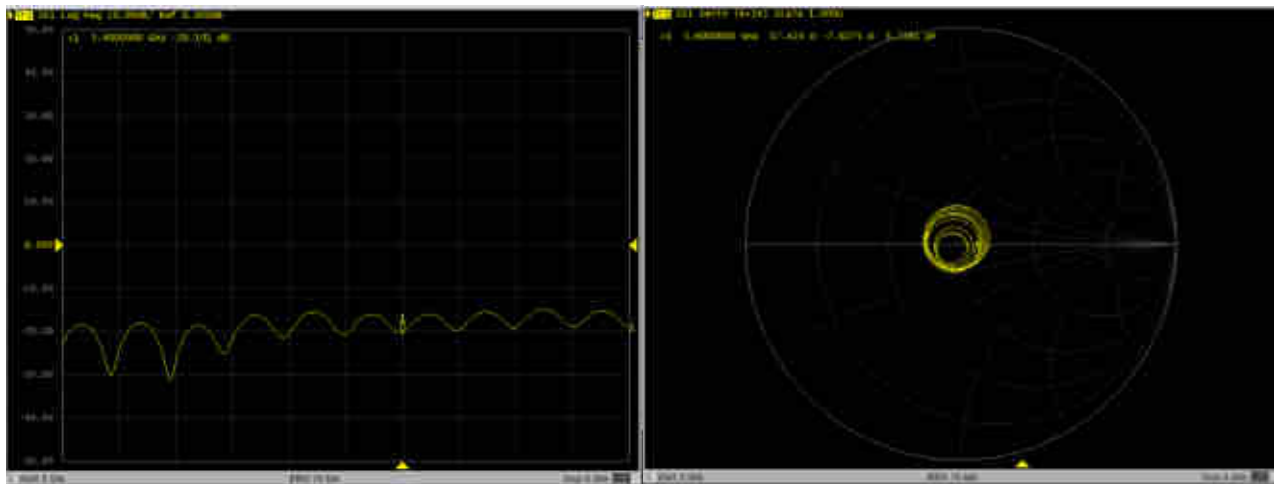
5250MHz - Head



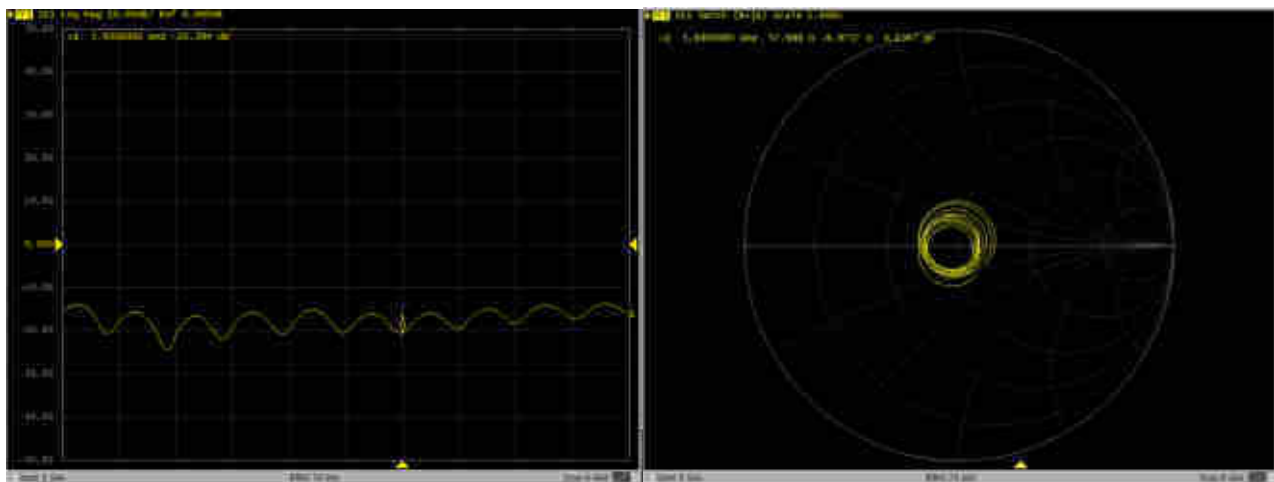
5250MHz – Body



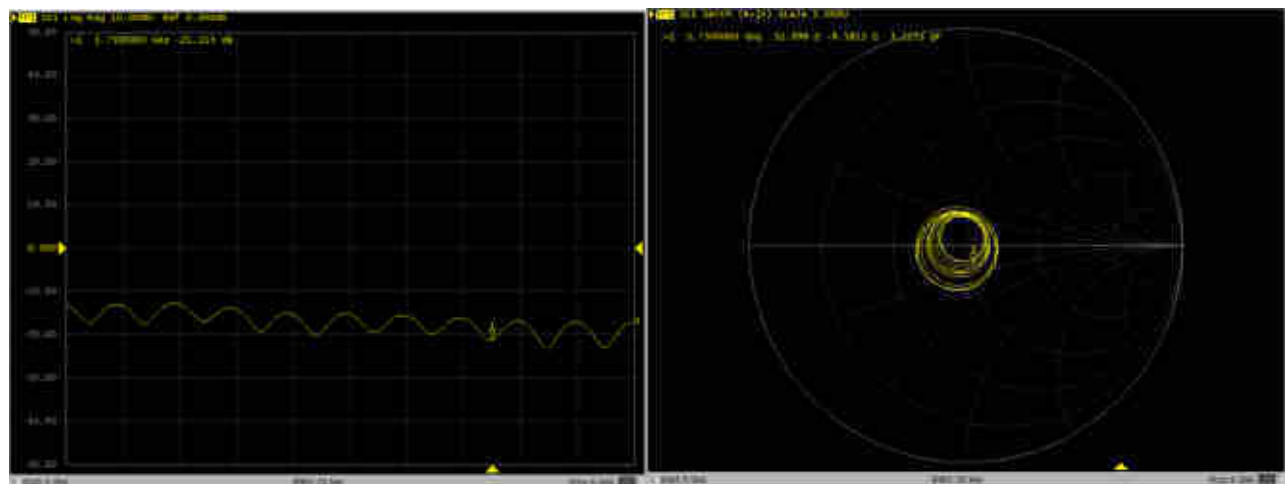
5600MHz – Head



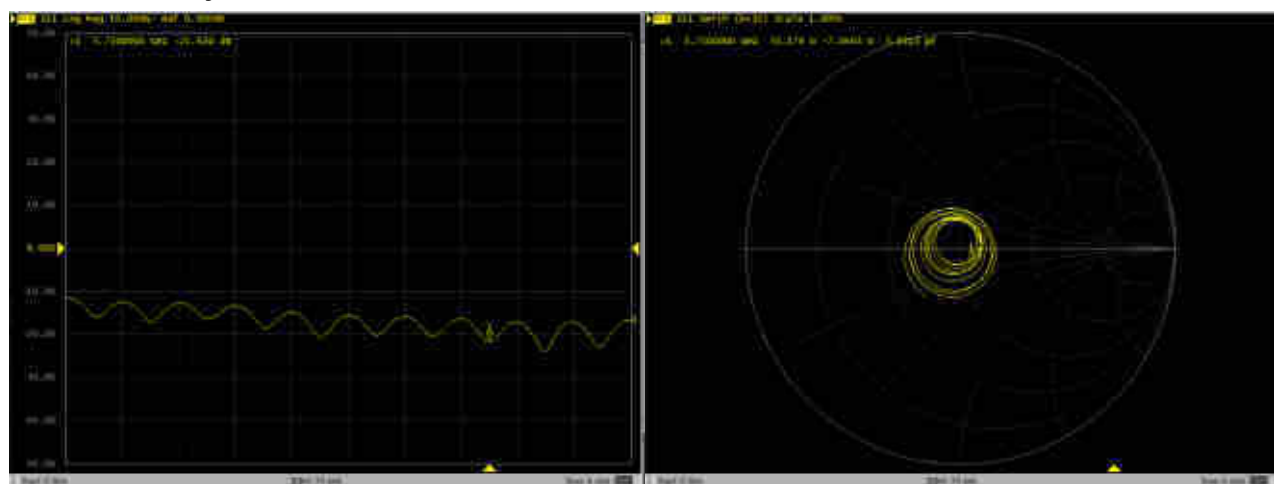
5600MHz – Body



5750MHz – Head



5750MHz – Body





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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

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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 $^{\circ}$
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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

IMPORTANT NOTICE



USAGE OF THE DAE4

The DAE unit is a delicate, high precision instrument and requires careful treatment by the user. There are no serviceable parts inside the DAE. Special attention shall be given to the following points:

Battery Exchange: The battery cover of the DAE4 unit is fixed using a screw, over tightening the screw may cause the threads inside the DAE to wear out.

Shipping of the DAE: Before shipping the DAE to SPEAG for calibration, remove the batteries and pack the DAE in an antistatic bag. This antistatic bag shall then be packed into a larger box or container which protects the DAE from impacts during transportation. The package shall be marked to indicate that a fragile instrument is inside.

E-Stop Failures: Touch detection may be malfunctioning due to broken magnets in the E-stop. Rough handling of the E-stop may lead to damage of these magnets. Touch and collision errors are often caused by dust and dirt accumulated in the E-stop. To prevent E-stop failure, the customer shall always mount the probe to the DAE carefully and keep the DAE unit in a non-dusty environment if not used for measurements.

Repair: Minor repairs are performed at no extra cost during the annual calibration. However, SPEAG reserves the right to charge for any repair especially if rough unprofessional handling caused the defect.

DASY Configuration Files: Since the exact values of the DAE input resistances, as measured during the calibration procedure of a DAE unit, are not used by the DASY software, a nominal value of 200 MOhm is given in the corresponding configuration file.

Important Note:

Warranty and calibration is void if the DAE unit is disassembled partly or fully by the Customer.

Important Note:

Never attempt to grease or oil the E-stop assembly. Cleaning and readjusting of the E-stop assembly is allowed by certified SPEAG personnel only and is part of the annual calibration procedure.

Important Note:

To prevent damage of the DAE probe connector pins, use great care when installing the probe to the DAE. Carefully connect the probe with the connector notch oriented in the mating position. Avoid any rotational movement of the probe body versus the DAE while turning the locking nut of the connector. The same care shall be used when disconnecting the probe from the DAE.



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Accreditation No.: SCS 0108

Client **Tejet (Auden)**

Certificate No: DAE4-1226_May20

CALIBRATION CERTIFICATE

Object: DAE4 - SD 000 D04 BM - SN: 1226

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

Calibration date: May 15, 2020

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

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

Calibration Equipment used (M&TE critical for calibration)

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

Calibrated by: Name
Eric Hainfeld Function
Laboratory Technician

Signature

Approved by: Sven Kühn Deputy Manager

Issued: May 15, 2020

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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	404.644 $\pm$ 0.02% (k=2)	404.410 $\pm$ 0.02% (k=2)	404.128 $\pm$ 0.02% (k=2)
Low Range	3.98010 $\pm$ 1.50% (k=2)	4.00441 $\pm$ 1.50% (k=2)	3.98517 $\pm$ 1.50% (k=2)

Connector Angle

Connector Angle to be used in DASY system	283.5 ° $\pm$ 1 °
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Appendix (Additional assessments outside the scope of SCS0108)

1. DC Voltage Linearity

High Range	Reading (μV)	Difference (μV)	Error (%)
Channel X + Input	200036.25	2.48	0.00
Channel X + Input	20007.54	2.38	0.01
Channel X - Input	-20005.86	0.51	-0.00
Channel Y + Input	200033.61	-0.21	-0.00
Channel Y + Input	20003.31	-1.72	-0.01
Channel Y - Input	-20007.95	-1.52	0.01
Channel Z + Input	200035.07	1.43	0.00
Channel Z + Input	20004.81	-0.10	-0.00
Channel Z - Input	-20007.44	-1.01	0.01

Low Range	Reading (μV)	Difference (μV)	Error (%)
Channel X + Input	2000.93	0.16	0.01
Channel X + Input	200.14	-0.66	-0.33
Channel X - Input	-199.83	-0.71	0.36
Channel Y + Input	2000.72	0.15	0.01
Channel Y + Input	199.44	-1.19	-0.59
Channel Y - Input	-200.55	-1.29	0.65
Channel Z + Input	2000.71	0.18	0.01
Channel Z + Input	200.02	-0.61	-0.31
Channel Z - Input	-199.97	-0.66	0.33

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	5.07	2.90
	-200	-2.74	-4.97
Channel Y	200	-8.89	-9.14
	-200	7.09	6.94
Channel Z	200	-7.29	-7.53
	-200	5.53	5.89

3. Channel separation

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

	Input Voltage (mV)	Channel X (μV)	Channel Y (μV)	Channel Z (μV)
Channel X	200	-	2.16	-3.66
Channel Y	200	8.16	-	3.69
Channel Z	200	9.32	5.65	-

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	16032	12468
Channel Y	15897	17438
Channel Z	16001	15611

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	-0.38	-1.14	0.42	0.38
Channel Y	-0.09	-1.14	0.85	0.39
Channel Z	-0.31	-1.86	1.00	0.41

6. Input Offset Current

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

7. Input Resistance (Typical values for information)

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

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

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

9. Power Consumption (Typical values for information)

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



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Accreditation No.: **SCS 0108**

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Client: **Sporton**

Certificate No: **EX3-3819_Apr20**

CALIBRATION CERTIFICATE

Object: **EX3DV4 - SN:3819**

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: **April 30, 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: 104775	01-Apr-20 (No. 217-03100/03101)	Apr-21
Power sensor NRP-Z91	SN: 103244	01-Apr-20 (No. 217-03100)	Apr-21
Power sensor NRP-Z91	SN: 103245	01-Apr-20 (No. 217-03101)	Apr-21
Reference 20 dB Attenuator	SN: CC2552 (20x)	31-Mar-20 (No. 217-03106)	Apr-21
DAE4	SN: 660	27-Dec-19 (No. DAE4-660_Dec19)	Dec-20
Reference Probe ES3DV2	SN: 3013	31-Dec-19 (No. ES3-3013_Dec19)	Dec-20
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
Power sensor E4412A	SN: MY41495087	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-18)	In house check: Jun-20
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-18)	In house check: Jun-20
Network Analyzer E8358A	SN: US41080477	31-Mar-14 (in house check Oct-19)	In house check: Oct-20

Calibrated by:	Name Leif Klysner	Function Laboratory Technician	Signature
Approved by:	Katja Pokovic	Technical Manager	

Issued: April 30, 2020

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Glossary:

TSL	tissue simulating liquid
NORM _{x,y,z}	sensitivity in free space
ConvF	sensitivity in TSL / NORM _{x,y,z}
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A, B, C, D	modulation dependent linearization parameters
Polarization φ	φ rotation around probe axis
Polarization θ	θ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\theta \approx 0$ 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:3819

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm ($\mu\text{V}/(\text{V}/\text{m})^2$) ^A	0.46	0.41	0.46	± 10.1 %
DCP (mV) ^B	104.6	101.5	102.0	

Calibration Results for Modulation Response

UID	Communication System Name		A dB	B dB/ μV	C	D dB	VR mV	Max dev.	Unc ^C (k=2)
0	CW	X	0.0	0.0	1.0	0.00	156.7	± 3.5 %	± 4.7 %
		Y	0.0	0.0	1.0		148.5		
		Z	0.0	0.0	1.0		139.2		

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 effect the E²-field uncertainty inside TSL (see Page 5).

^B Numerical linearization parameter; uncertainty not required.

^C 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:3819

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	113.9
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:3819

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) ^c	Relative Permittivity ^e	Conductivity (S/m) ^f	ConvF X	ConvF Y	ConvF Z	Alpha ^g	Depth (mm) ^g	Unc (k=2)
750	41.9	0.89	9.64	9.64	9.64	0.52	0.80	± 12.0 %
835	41.5	0.90	9.39	9.39	9.39	0.50	0.80	± 12.0 %
900	41.5	0.97	9.26	9.26	9.26	0.39	0.96	± 12.0 %
1750	40.1	1.37	8.43	8.43	8.43	0.34	0.80	± 12.0 %
1900	40.0	1.40	8.10	8.10	8.10	0.37	0.80	± 12.0 %
2000	40.0	1.40	7.95	7.95	7.95	0.30	0.88	± 12.0 %
2300	39.5	1.67	7.66	7.66	7.66	0.32	0.90	± 12.0 %
2450	39.2	1.80	7.42	7.42	7.42	0.38	0.90	± 12.0 %
2600	39.0	1.96	7.22	7.22	7.22	0.38	0.90	± 12.0 %
3300	38.2	2.71	6.91	6.91	6.91	0.20	1.20	± 14.0 %
3500	37.9	2.91	6.84	6.84	6.84	0.25	1.20	± 14.0 %
3700	37.7	3.12	6.75	6.75	6.75	0.25	1.25	± 14.0 %
3900	37.5	3.32	6.40	6.40	6.40	0.30	1.60	± 14.0 %
4100	37.2	3.53	6.39	6.39	6.39	0.30	1.60	± 14.0 %
4400	36.9	3.84	6.07	6.07	6.07	0.30	1.60	± 14.0 %
4600	36.7	4.04	5.98	5.98	5.98	0.30	1.70	± 14.0 %
4800	36.4	4.25	5.88	5.88	5.88	0.45	1.80	± 14.0 %
4950	36.3	4.40	5.72	5.72	5.72	0.45	1.80	± 14.0 %
5250	35.9	4.71	5.02	5.02	5.02	0.40	1.80	± 14.0 %
5600	35.5	5.07	4.56	4.56	4.56	0.40	1.80	± 14.0 %
5750	35.4	5.22	4.63	4.63	4.63	0.40	1.80	± 14.0 %

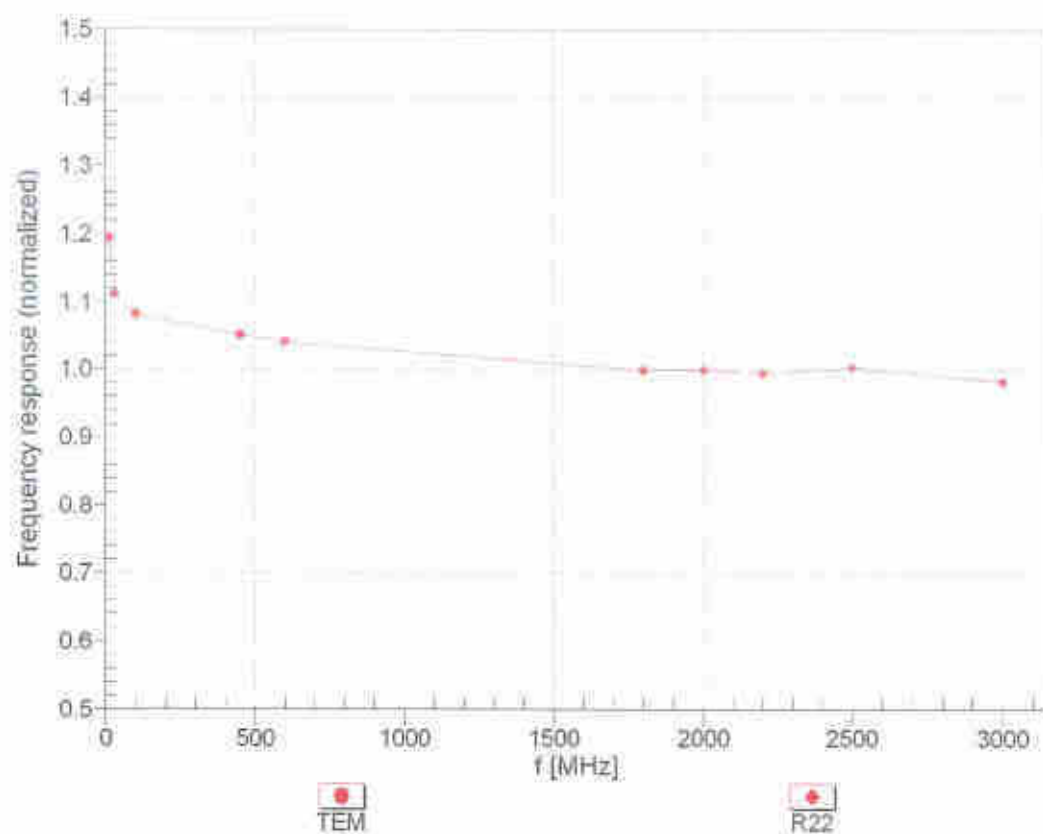
^c Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 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.

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

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

Frequency Response of E-Field

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



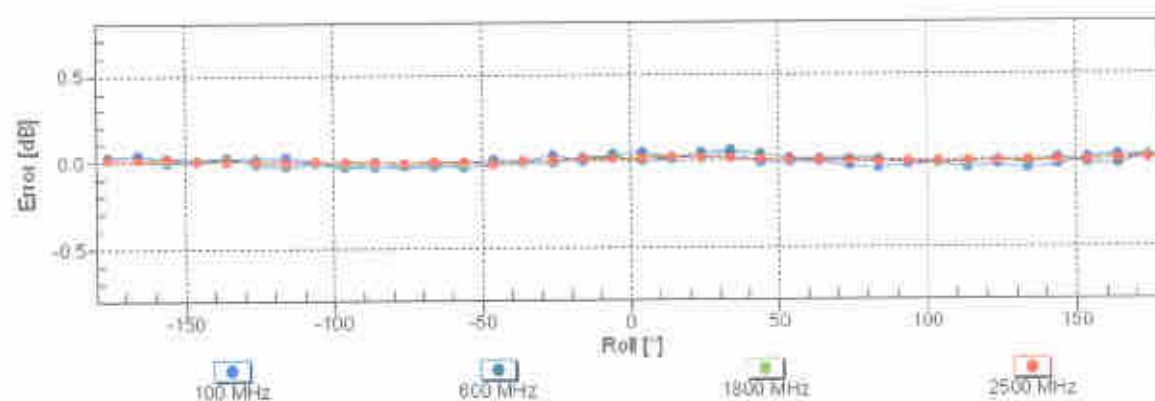
Uncertainty of Frequency Response of E-field: $\pm 6.3\%$ ($k=2$)

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

f=600 MHz,TEM

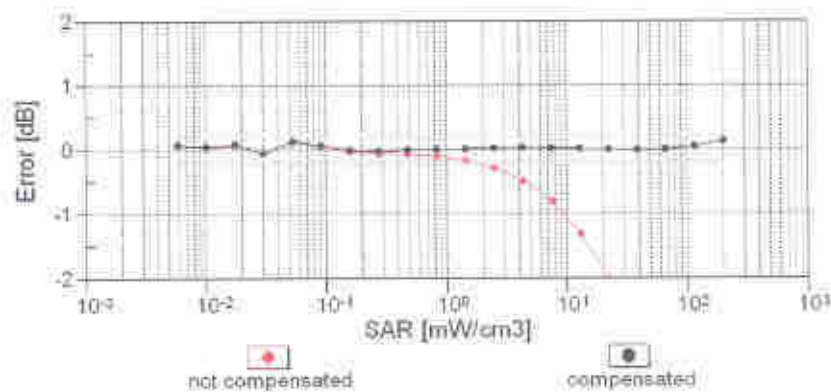
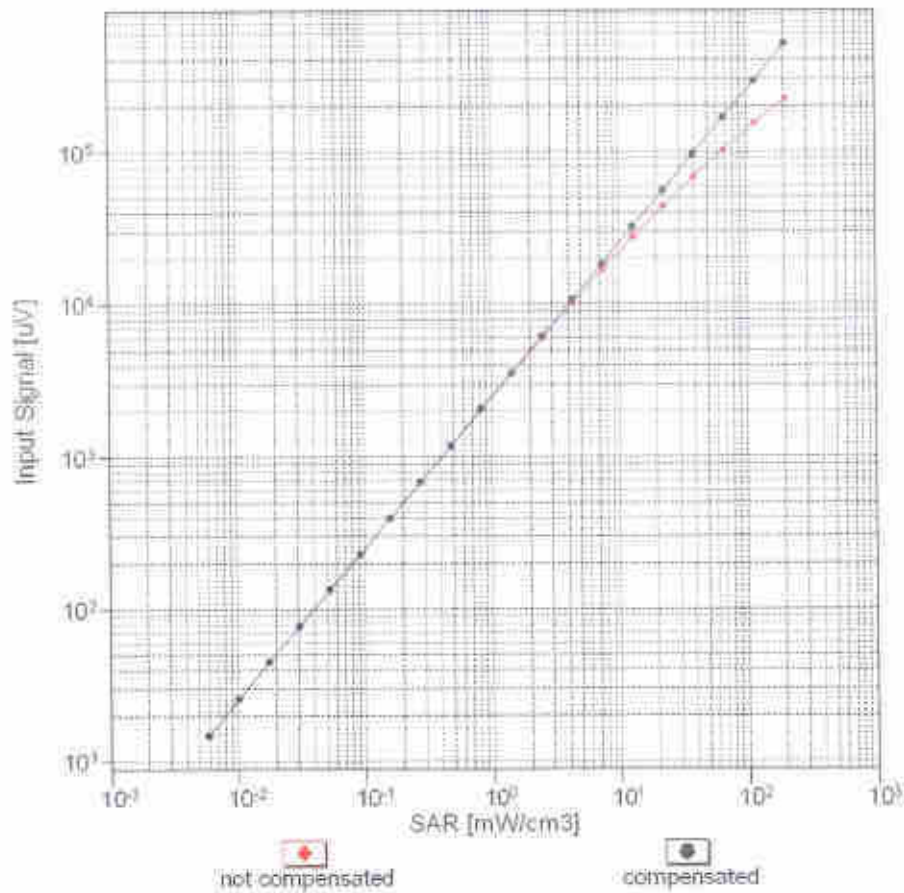


f=1800 MHz,R22



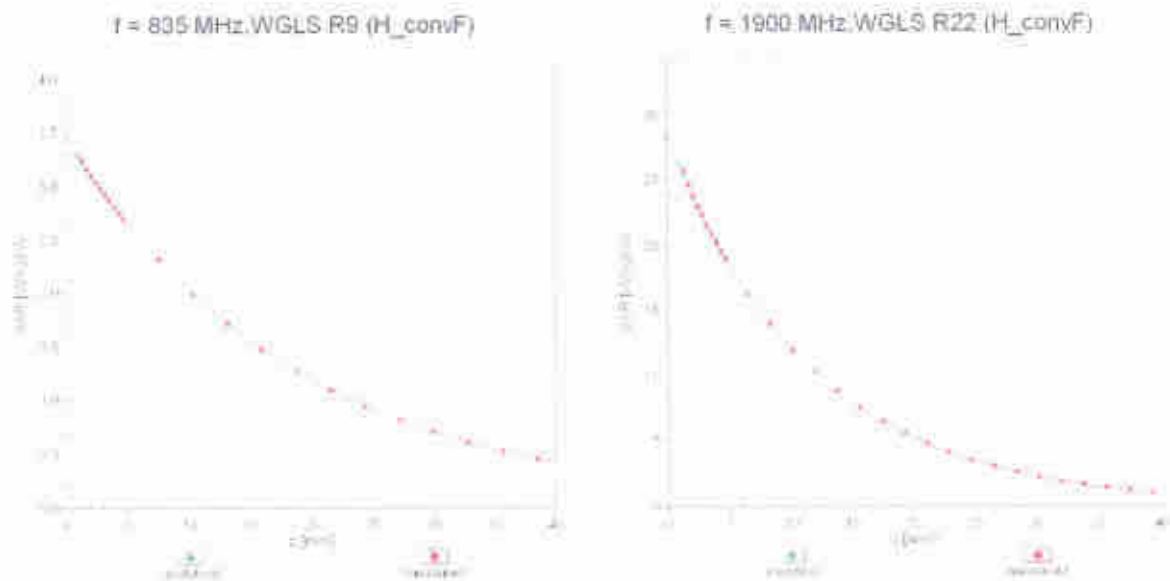
Uncertainty of Axial Isotropy Assessment: $\pm 0.5\%$ ($k=2$)

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



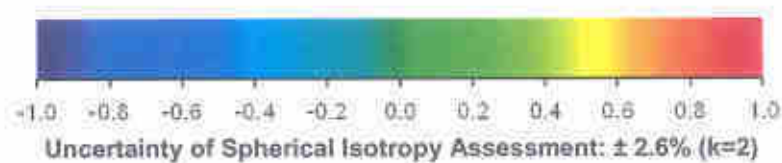
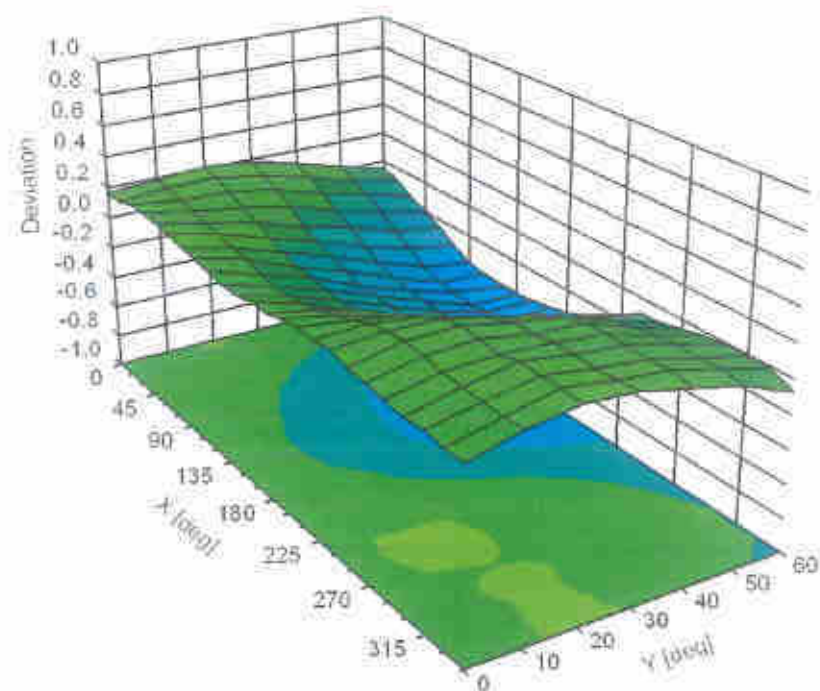
Uncertainty of Linearity Assessment: $\pm 0.6\%$ ($k=2$)

Conversion Factor Assessment



Deviation from Isotropy in Liquid

Error (ϕ , θ), $f = 900 \text{ MHz}$



Uncertainty of Spherical Isotropy Assessment: $\pm 2.6\%$ ($k=2$)



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&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: 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 %

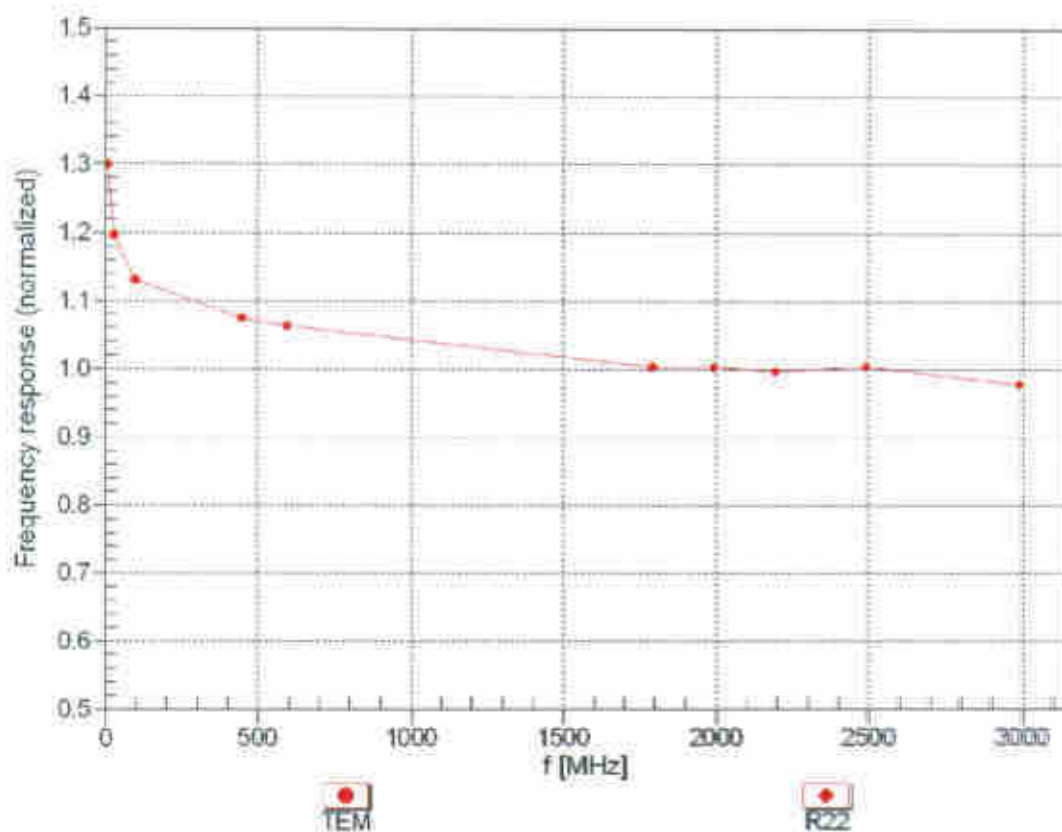
^c Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 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

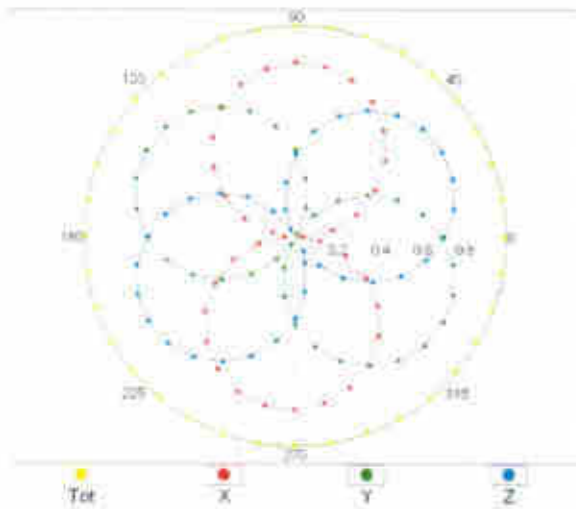
(TEM-Cell:ifi110 EXX, Waveguide: R22)



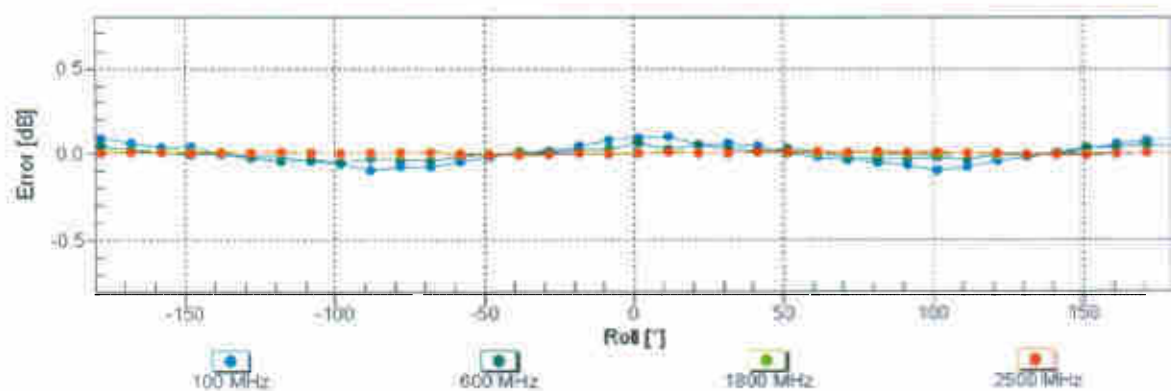
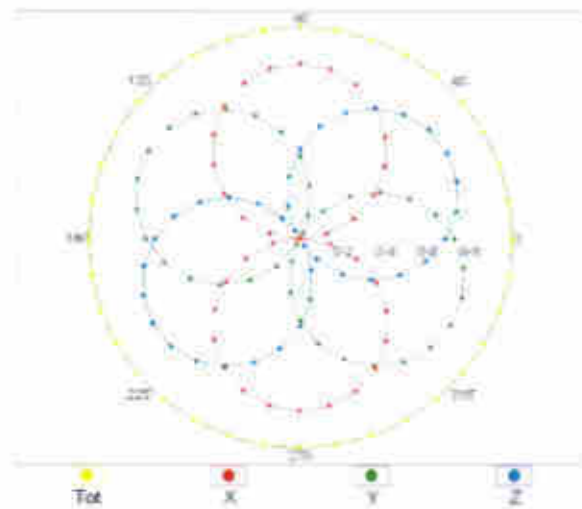
Uncertainty of Frequency Response of E-field: $\pm 6.3\%$ ($k=2$)

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

f=600 MHz,TEM



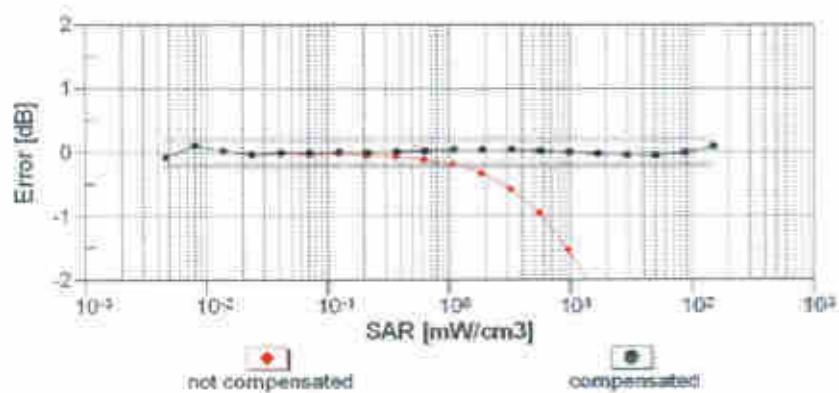
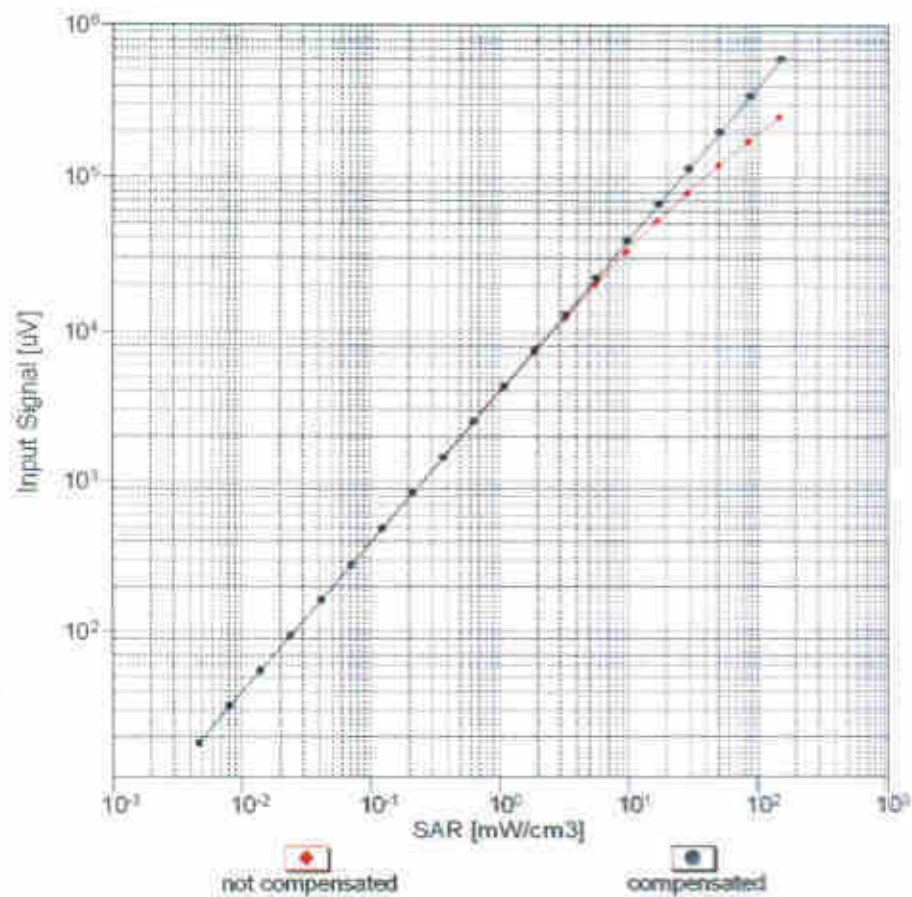
f=1800 MHz,R22



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

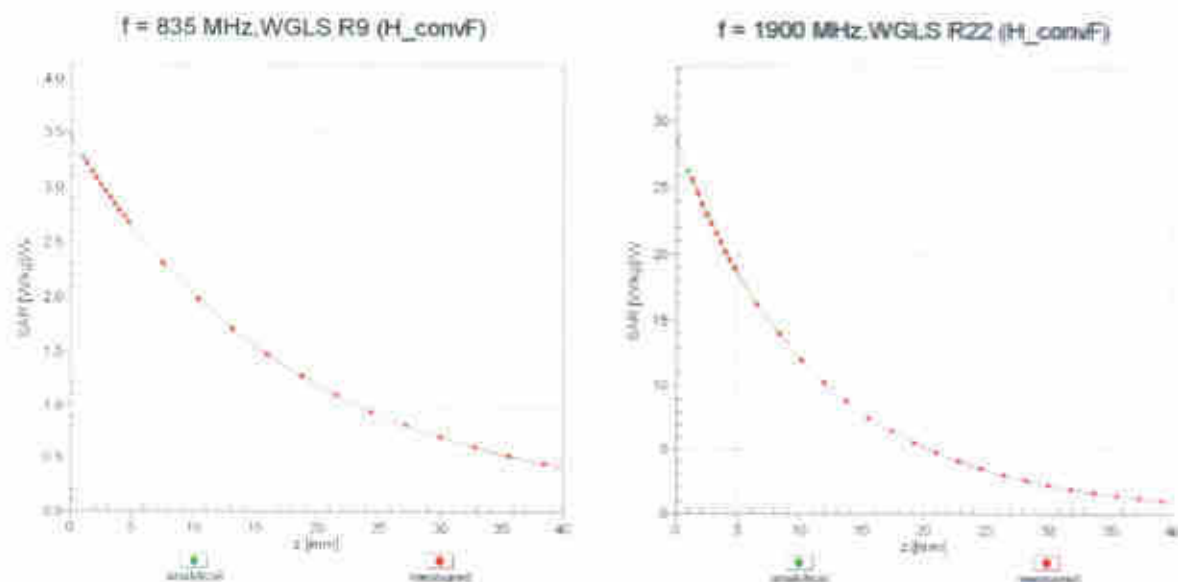
Dynamic Range f(SAR_{head})

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



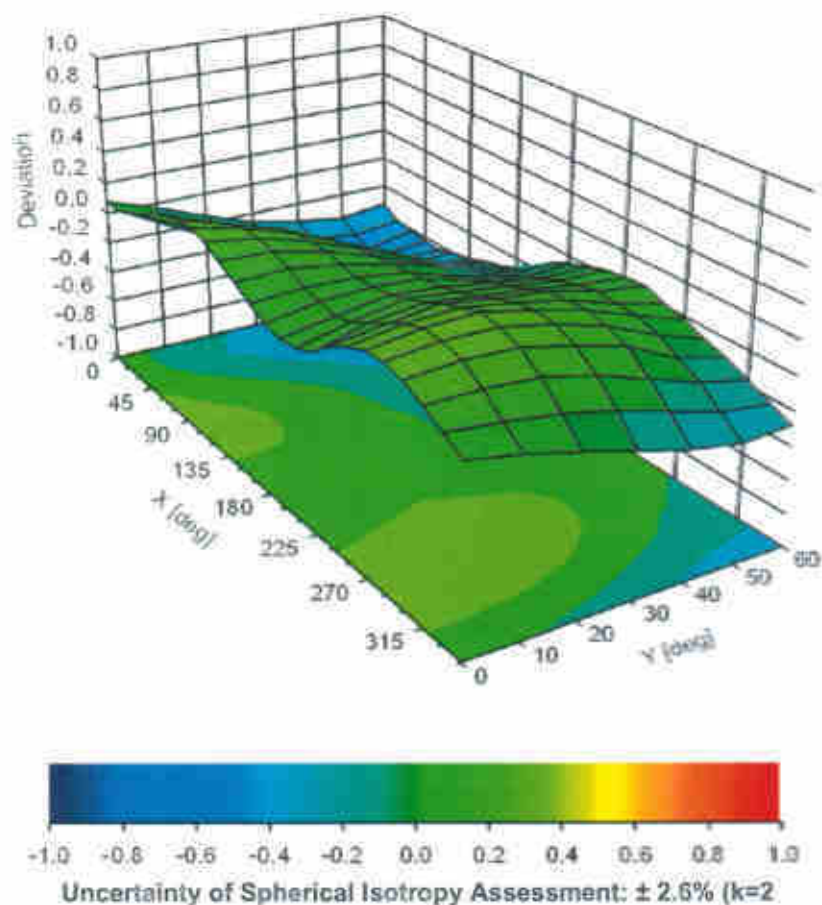
Uncertainty of Linearity Assessment: $\pm 0.6\%$ ($k=2$)

Conversion Factor Assessment



Deviation from Isotropy in Liquid

Error (ϕ, θ), $f = 900 \text{ MHz}$





Appendix E. Conducted RF Output Power Table

The detailed power tables are shown as follows.



Full Power for UAT

Base		Base Average Power (dBm)		Tx Channel		Frame Average Power (dBm)		Tx Channel	
TX Channel	Frequency (MHz)	844.2	844.4	844.6	Limit	844.2	844.4	844.6	Limit
CDMA 1 Tx-wid	20.86	20.82	21.87	22.32	21.86	21.82	22.87	23.30	22.86
CDMA 1 Tx-wid	30.81	30.80	31.01	32.30	21.81	21.82	22.01	23.30	22.80
OPRS 2 Tx-wid	20.01	20.46	20.42	30.80	23.01	23.46	23.42	24.80	24.80
OPRS 3 Tx-wid	21.05	21.74	21.87	26.30	23.26	23.48	23.81	25.04	25.04
OPRS 4 Tx-wid	26.81	26.60	26.72	28.00	22.81	23.68	23.72	25.00	25.00
EDGE 1 Tx-wid	24.83	24.80	25.37	26.30	15.83	15.90	16.27	17.30	17.30
EDGE 2 Tx-wid	23.23	23.20	23.86	24.30	17.23	17.25	17.66	18.30	18.30
EDGE 3 Tx-wid	22.42	22.40	22.49	24.30	17.46	17.47	17.87	18.04	18.04
EDGE 4 Tx-wid	21.44	21.82	21.75	22.70	16.44	16.82	16.75	18.70	18.70

Base		Base Average Power (dBm)		Tx Channel		Frame Average Power (dBm)		Tx Channel	
TX Channel	Frequency (MHz)	844.2	844.4	844.6	Limit	844.2	844.4	844.6	Limit
CDMA 1 Tx-wid	26.74	26.74	26.77	28.30	17.74	17.74	17.77	18.96	18.96
OPRS 1 Tx-wid	26.72	26.72	26.72	28.30	17.72	17.72	17.72	18.96	18.96
OPRS 3 Tx-wid	24.77	24.75	24.76	25.90	15.77	15.77	15.76	16.96	16.96
OPRS 3 Tx-wid	23.15	23.10	23.16	24.60	18.87	18.84	18.90	20.24	20.24
EDGE 1 Tx-wid	21.58	21.50	21.51	23.00	16.08	16.02	16.51	20.00	20.00
EDGE 1 Tx-wid	22.94	22.48	22.83	23.80	13.94	13.48	13.83	14.80	14.80
EDGE 2 Tx-wid	21.41	21.28	21.60	22.70	13.41	13.26	13.60	16.70	16.70
EDGE 3 Tx-wid	20.35	20.50	20.51	21.80	16.09	16.26	16.25	17.84	17.84
EDGE 4 Tx-wid	19.38	19.16	19.32	20.60	16.38	16.16	16.32	17.60	17.60

Base		WCDMA II		Tx Channel		WCDMA IV		Tx Channel		WCDMA V		Tx Channel	
TX Channel	Frequency (MHz)	988.2	988.0	988.8	Limit	1812	1810	1818	Limit	4152	4150	4158	Limit
CDMA 1 Tx-wid	20.86	20.82	21.87	22.32	21.86	21.82	22.87	23.30	22.86	4407	4407	4408	4408
OPRS 1 Tx-wid	21.05	21.65	21.87	22.80	21.38	21.47	21.49	22.80	23.05	23.18	23.18	24.30	24.30
OPRS 1 Tx-wid	20.84	20.87	20.81	21.80	20.39	20.51	20.49	21.80	21.87	21.90	21.91	23.30	23.30
OPRS 1 Tx-wid	20.80	20.84	20.81	21.80	20.42	20.51	20.52	21.80	21.85	21.82	21.82	23.30	23.30
OPRS 1 Tx-wid	19.80	20.71	20.60	21.30	19.83	20.01	20.01	21.30	21.39	21.44	21.57	22.80	22.80
OPRS 1 Tx-wid	20.14	20.10	20.08	21.30	19.98	20.02	19.98	21.30	21.38	21.41	21.38	22.80	22.80
OPRS 1 Tx-wid	20.46	20.45	20.39	21.80	20.19	20.27	20.32	21.80	21.89	21.87	21.75	23.30	23.30
OPRS 1 Tx-wid	20.44	20.50	20.43	21.80	20.27	20.35	20.35	21.80	21.85	21.77	21.71	23.30	23.30
OPRS 1 Tx-wid	19.98	19.99	19.85	21.30	19.78	19.86	19.82	21.30	21.30	21.25	21.23	22.80	22.80
OPRS 1 Tx-wid	19.14	20.51	19.86	21.30	19.82	19.80	19.76	21.30	21.21	21.14	21.15	22.80	22.80
OPRS 1 Tx-wid	20.83	20.71	20.81	21.80	20.45	20.60	20.56	21.80	21.85	21.80	21.85	23.30	23.30
OPRS 1 Tx-wid	19.66	19.60	19.64	20.80	19.41	19.58	19.62	20.80	19.66	19.30	19.57	21.30	21.30
OPRS 1 Tx-wid	17.64	17.68	17.68	18.80	18.30	18.52	18.43	19.80	20.71	20.89	20.91	22.30	22.30
OPRS 1 Tx-wid	16.42	16.45	16.44	17.80	16.29	16.37	16.31	19.80	19.85	19.86	19.86	21.30	21.30
OPRS 1 Tx-wid	20.80	20.70	20.80	21.80	20.50	20.50	20.50	21.80	21.90	21.90	21.90	23.30	23.30
OPRS 1 Tx-wid	18.21	18.24	18.17	19.30	19.17	19.27	19.15	19.30	19.53	19.61	19.73	20.80	20.80

Base		CDMA B/C2		Tx Channel		CDMA B/C1		Tx Channel		CDMA B/C10		Tx Channel	
TX Channel	Frequency (MHz)	844.2	844.4	844.6	Limit	844.2	844.4	844.6	Limit	844.2	844.4	844.6	Limit
CDMA 1 Tx-wid	22.84	22.85	22.89	24.30	21.85	21.76	21.83	22.80	22.84	22.91	22.83	24.30	24.30
CDMA 1 Tx-wid	22.82	22.91	22.87	24.30	21.83	21.73	21.85	22.80	22.82	22.85	22.82	24.30	24.30
CDMA 1 Tx-wid	22.81	22.80	22.80	24.30	21.85	21.73	21.64	22.80	22.82	22.84	22.80	24.30	24.30
CDMA 1 Tx-wid	22.76	22.70	22.74	24.30	21.82	21.66	22.80	22.71	22.71	22.71	22.60	24.30	24.30
CDMA 1 Tx-wid	22.81	22.81	22.84	24.30	21.47	21.59	21.51	22.80	22.82	22.80	22.81	24.30	24.30
CDMA 1 Tx-wid	22.79	22.81	22.80	24.30	21.45	21.46	21.37	22.80	22.79	22.80	22.80	24.30	24.30



Band 2 (1900MHz Band)														
Part 24E														
BW (MHz)	Modulation	RB Size	RB Offset	Power Ch / Freq 1800	Power Ch / Freq 1850	Power Ch / Freq 1900	Turn-up limit (dB)	MPR (dB)						
Channel														
Frequency (MHz)														
20	QPSK	1	0	20.65	20.72	20.54	21.8	0						
20	QPSK	1	49	20.56	20.82	20.69								
20	QPSK	1	99	20.49	20.50	20.48	20.8	1						
20	QPSK	50	0	19.70	19.78	19.82								
20	QPSK	50	24	19.68	19.75	19.60	20.8	1						
20	QPSK	50	50	19.69	19.65	19.65								
20	QPSK	100	0	19.67	19.73	19.72	20.8	1						
20	16QAM	1	0	19.99	20.07	19.98								
20	16QAM	1	49	19.94	19.95	19.94	20.8	1						
20	16QAM	1	99	19.83	19.82	19.74								
20	16QAM	50	0	18.72	18.78	18.85	19.8	2						
20	16QAM	50	24	18.69	18.72	18.72								
20	16QAM	50	50	18.72	18.67	18.68	19.8	2						
20	16QAM	100	0	18.66	18.71	18.69								
20	84QAM	1	0	18.82	18.87	18.73	19.8	2						
20	84QAM	1	49	18.77	18.75	18.75								
20	84QAM	1	99	18.76	18.65	18.72	19.8	2						
20	84QAM	50	0	17.74	17.80	17.82								
20	84QAM	50	24	17.72	17.78	17.72	18.8	3						
20	84QAM	100	0	17.70	17.74	17.71								
20	256QAM	1	0	16.07	15.88	15.70	17.3	4.5						
20	256QAM	1	49	15.87	15.88	15.94								
20	256QAM	1	99	16.08	16.05	16.12	17.3	4.5						
20	256QAM	50	0	15.92	15.96	15.88								
20	256QAM	50	24	15.86	15.83	15.89	17.3	4.5						
20	256QAM	50	50	15.88	15.95	15.79								
Channel														
Frequency (MHz)														
15	QPSK	1	0	20.63	20.64	20.61	21.8	0						
15	QPSK	1	31	20.62	20.60	20.62								
15	QPSK	1	74	20.66	20.61	20.69	20.8	1						
15	QPSK	36	0	19.83	19.79	19.71								
15	QPSK	36	18	19.83	19.86	19.75	20.8	1						
15	QPSK	36	36	19.80	19.85	19.80								
15	QPSK	75	0	19.82	19.78	19.72	20.8	1						
15	16QAM	1	0	20.11	20.07	20.08								
15	16QAM	1	37	20.00	20.03	19.98	20.8	1						
15	16QAM	1	74	19.99	19.97	19.95								
15	16QAM	36	0	18.83	18.85	18.73	19.8	2						
15	16QAM	36	20	18.83	18.80	18.75								
15	16QAM	36	39	18.79	18.82	18.81	19.8	2						
15	16QAM	75	0	18.82	18.82	18.80								
15	84QAM	1	0	18.96	18.92	18.87	19.8	2						
15	84QAM	1	37	18.94	18.96	18.90								
15	84QAM	1	74	18.94	18.90	18.85	18.8	3						
15	84QAM	36	0	17.85	17.81	17.79								
15	84QAM	36	20	17.87	17.83	17.79	17.3	4.5						
15	84QAM	36	39	17.82	17.87	17.85								
15	84QAM	75	0	17.82	17.78	17.75	17.3	4.5						
15	256QAM	1	0	16.13	15.89	15.86								
15	256QAM	1	37	15.77	15.75	15.80	17.3	4.5						
15	256QAM	1	74	16.00	16.15	16.08								
15	256QAM	36	0	15.82	15.90	15.87	17.3	4.5						
15	256QAM	36	20	15.78	15.81	15.79								
15	256QAM	36	39	15.93	15.90	15.79								
15	256QAM	75	0	15.83	15.85	15.82								
Channel														
Frequency (MHz)														
10	QPSK	1	0	20.68	20.66	20.63	21.8	0						
10	QPSK	1	24	20.63	20.60	20.64								
10	QPSK	1	49	20.62	20.60	20.64	20.8	1						
10	QPSK	25	0	19.79	19.75	19.74								
10	QPSK	25	12	19.84	19.78	19.75	20.8	1						
10	QPSK	25	25	19.83	19.86	19.77								
10	QPSK	50	0	19.81	19.74	19.74	20.8	1						
10	16QAM	0	20.07	20.03	20.05									
10	16QAM	1	26	20.02	20.08	20.04	19.8	2						
10	16QAM	1	49	20.02	20.08	19.98								
10	16QAM	25	0	18.79	18.71	18.80	19.8	2						
10	16QAM	25	12	18.82	18.74	18.78								
10	16QAM	25	25	18.80	18.79	18.76	18.8	3						
10	16QAM	50	0	18.81	18.72	18.73								
10	84QAM	1	0	18.95	18.88	18.81	19.8	2						
10	84QAM	1	25	18.95	18.90	18.82								
10	84QAM	1	49	18.93	18.94	18.88	18.8	3						
10	84QAM	25	0	17.85	17.80	17.81								
10	84QAM	25	12	17.88	17.81	17.81	17.3	4.5						
10	84QAM	25	25	17.85	17.94	17.91								
10	84QAM	50	0	17.85	17.84	17.87	17.3	4.5						
10	256QAM	1	0	16.08	16.13	16.13								
10	256QAM	1	25	15.87	16.14	16.15	17.3	4.5						
10	256QAM	25	0	15.87	15.92	15.85								
10	256QAM	25	12	15.84	15.83	15.87	17.3	4.5						
10	256QAM	25	25	15.91	15.85	15.87								
10	256QAM	50	0	15.84	15.82	15.77								
Channel														
Frequency (MHz)														
5	QPSK	1	0	20.58	20.62	20.55	21.8	0						
5	QPSK	1	12	20.71	20.68	20.65								
5	QPSK	1	24	20.62	20.60	20.66	20.8	1						
5	QPSK	12	0	19.83	19.78	19.86								
5	QPSK	12	7	19.84	19.81	19.72	20.8	1						
5	QPSK	12	13	19.81	19.83	19.72								
5	QPSK	25	0	19.83	19.78	19.84	20.8	1						
5	16QAM	1	0	20.07	19.93	19.83								
5	16QAM	1	12	20.05	20.07	19.96	20.8	1						
5	16QAM	1	24	20.08	20.04	20.05								
5	16QAM	12	0	18.85	18.74	18.88	19.8	2						
5	16QAM	12	7	18.84	18.85	18.70								
5	16QAM	12	13	18.83	18.82	18.75	18.8	3						
5	16QAM	25	0	18.82	18.78	18.70								
5	84QAM	1	0	18.97	18.88	18.85	19.8	2						
5	84QAM	1	8	19.07	19.00	18.93								
5	84QAM	1	12	19.08	19.02	18.98	18.8	3						
5	84QAM	12	0	17.90	17.82	17.85								
5	84QAM	12	7	17.89	17.88	17.82	17.3	4.5						
5	84QAM	12	13	17.87	17.87	17.83								
5	84QAM	25	0	17.85	17.80	17.83	17.3	4.5						
5	84QAM	25	12	17.89	17.83	17.83								
5	84QAM	25	25	17.86	17.83	17.79	17.3	4.5						
5	84QAM	50	0	17.85	17.84	17.87								
5	256QAM	1	0	16.09	16.14	16.13	17.3	4.5						
5	256QAM	1	24	15.87	16.04	16.03								
5	256QAM	12	0	15.88	15.88	15.87	17.3	4.5						
5	256QAM	12	9	15.89	15.89	15.89								
5	256QAM	12	18	15.86	15.85	15.82	17.3	4.5						
5	256QAM	25	0	15.82	15.88	15.87								
Channel														
Frequency (MHz)														
3	QPSK	1	0	18.61	18.60	18.60	21.8	0						
3	QPSK	1	0	20.68	20.63	20.63								
3	QPSK	1	14	20.69	20.65	20.69	20.8	1						
3	QPSK	1	14	20.69	20.70	20.63								
3	QPSK	8	0	19.84	19.74	19.71	20.8	1						
3	QPSK	8	8	19.81	19.72	19.71								
3	QPSK	15	0	19.79	19.76	19.67	20.8	1						
3	QPSK	15	8	19.76	19.73	19.71								
3	16QAM	1	8	20.16	20.07	20.08	20.8	1						
3	16QAM	1	14	20.07	20.02	19.98								
3	16QAM	8	0	18.82	18.76	18.81	19.8	2						
3	16QAM	8	8	18.83	18.80	18.76								
3	16QAM	8	7	18.87	18.83	18.74	19.8	2						
3	16QAM	8	14	18.85	18.77	18.73								
3	84QAM	1	0	18.94	18.87	18.87	19.8	2						
3	84QAM	1	8	19.04	19.01	18.97								
3	84QAM	1	14	18.99	18.98	18.94	18.8	3						
3	84QAM	8	0	17.91	17.81	17.85								
3	84QAM	8	4	17.90	17.88	17.89	17.3	4.5						
3	84QAM	8	14	17.87	17.84	17.80								
3	256QAM	1	0	16.10	16.12	16.08	17.3	4.5						
3	256QAM	1	14	15.92	16.07	16.03								
3	256QAM	8	0	16.02	16.00	15.96	17.3	4.5						
3	256QAM	8	8	15.98	15.98	15.96								
3	256QAM	8	7	15.96	15.98	15.89	17.3	4.5						
3	256QAM	15	0	15.86	15.94	15.87								
Channel														
Frequency (MHz)														
1.4	QPSK	1	0	20.66	20.61	20.53	21.8	0						
1.4	QPSK	1	0	20.79	20.65	20.60								
1.4	QPSK	1	0	20.66	20.62	20.54	20.8	1						
1.4	QPSK	3	0	20.68	20.61	20.57								
1.4	QPSK	3	3	20.69	20.64	20.54	20.8	1						
1.4	QPSK	3	3	20.68	20.61	20.57								
1.4	QPSK	8	0	19.78	19.72	19.83	20.8	1						
1.4	QPSK	8	8	19.77	19.74	19.73								
1.4	QPSK	15	0	19.77	19.74	19.73	20.8	1						
1.4	QPSK	15	8	19.79	19.79	19.72								
1.4	16QAM	1	8	19.77	19.76	19.63	20.8	1						
1.4	16QAM	1	14	19.77	19.74	19.63								
1.4	16QAM	8	0	18.85	18.79	18.81	19.8							



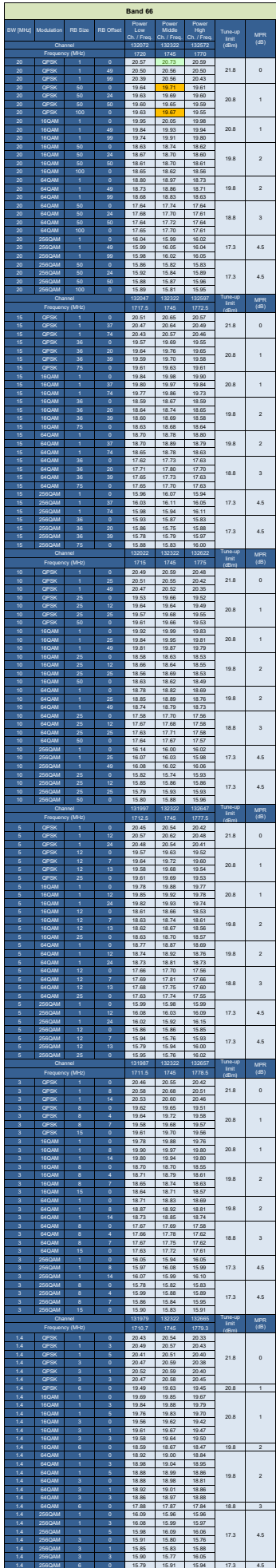
Band 7 (2600MHz Band)											
Part 27											
BW (MHz)	Modulation	RB Size	RB Offset	Power Ch / Freq.	Power Low Ch / Freq.	Power High Ch / Freq.	Turn-up limit (dBm)	MPE (dB)			
Channel											
20	QPSK	1	0	20.16	20.39	20.53		20.8	0		
20	QPSK	1	49	20.35	20.49	20.58					
20	QPSK	1	99	20.52	20.67	20.61					
20	QPSK	50	0	19.42	19.52	19.64					
20	QPSK	50	24	19.44	19.55	19.74		19.8	1		
20	QPSK	50	50	19.43	19.55	19.66					
20	16QAM	1	0	19.61	19.78	19.74					
20	16QAM	1	49	19.71	19.73	19.67					
20	16QAM	1	99	19.72	19.62	19.71		18.8	2		
20	16QAM	50	0	18.35	18.54	18.66					
20	16QAM	50	24	18.48	18.59	18.74					
20	16QAM	50	50	18.47	18.69	18.79		18.8	2		
20	64QAM	1	0	18.54	18.78	18.71					
20	64QAM	1	99	18.63	18.71	18.74					
20	64QAM	50	0	17.37	17.58	17.64					
20	64QAM	50	24	17.51	17.60	17.80		17.8	3		
20	64QAM	50	50	17.63	17.69	17.80					
20	256QAM	1	0	15.88	15.97	15.88					
20	256QAM	1	49	15.75	15.96	15.82		16.3	4.5		
20	256QAM	1	99	15.84	15.84	15.79					
20	256QAM	50	0	15.62	15.76	15.68					
20	256QAM	50	24	15.78	15.81	15.78					
20	256QAM	50	50	15.76	15.77	15.71		16.3	4.5		
20	256QAM	100	0	15.72	15.81	15.64					
Channel											
Frequency (MHz)				2050.5	2055.5	2060.5	Turn-up limit (dBm)			MPE (dB)	
16	QPSK	1	0	20.30	20.44	20.57		20.8	0		
16	QPSK	1	37	20.27	20.52	20.60					
16	QPSK	1	74	20.37	20.59	20.58					
16	QPSK	36	0	19.32	19.52	19.65					
16	QPSK	36	36	19.45	19.59	19.78		19.8	1		
16	QPSK	36	36	19.44	19.68	19.78					
16	QPSK	75	0	19.41	19.54	19.74					
16	16QAM	1	0	19.62	19.74	19.74		19.8	1		
16	16QAM	1	37	19.64	19.72	19.73					
16	16QAM	1	74	19.68	19.68	19.67					
16	16QAM	36	0	18.34	18.54	18.64					
16	16QAM	36	20	18.43	18.59	18.75		18.8	2		
16	16QAM	36	36	18.42	18.67	18.76					
16	16QAM	75	0	18.44	18.54	18.71					
16	16QAM	1	0	18.47	18.65	18.73					
16	64QAM	1	37	18.58	18.74	18.75		18.8	2		
16	64QAM	1	74	18.60	18.77	18.74					
16	64QAM	36	0	17.37	17.57	17.69					
16	64QAM	36	20	17.47	17.62	17.77		17.8	3		
16	64QAM	36	36	17.48	17.79	17.79					
16	64QAM	75	0	17.41	17.58	17.75					
15	256QAM	1	0	15.69	15.86	15.90		16.3	4.5		
15	256QAM	1	37	15.79	15.91	15.75					
15	256QAM	1	74	15.89	15.90	15.82					
15	256QAM	50	0	15.65	15.76	15.68					
15	256QAM	50	20	15.78	15.85	15.85		16.3	4.5		
15	256QAM	50	36	15.70	15.82	15.70					
15	256QAM	75	0	15.67	15.78	15.78					
Channel											
Frequency (MHz)				2055	2055.5	2056	Turn-up limit (dBm)	MPE (dB)			
10	QPSK	1	0	20.10	20.25	20.57		20.8	0		
10	QPSK	1	25	20.15	20.41	20.51					
10	QPSK	1	49	20.20	20.48	20.60					
10	QPSK	25	0	19.33	19.50	19.63					
10	QPSK	25	25	19.36	19.54	19.68		19.8	1		
10	QPSK	25	26	19.37	19.60	19.73					
10	QPSK	50	0	19.36	19.53	19.64					
10	16QAM	1	0	19.53	19.78	19.71					
10	16QAM	1	25	19.52	19.78	19.67		19.8	1		
10	16QAM	1	49	19.63	19.75	19.68					
10	16QAM	25	0	18.36	18.51	18.62					
10	16QAM	25	12	18.42	18.58	18.71					
10	16QAM	25	25	18.36	18.61	18.75		18.8	2		
10	16QAM	50	0	18.37	18.54	18.68					
10	64QAM	1	0	18.39	18.62	18.72					
10	64QAM	1	25	18.49	18.71	18.74		18.8	2		
10	64QAM	1	49	18.52	18.70	18.76					
10	64QAM	25	0	17.39	17.54	17.66					
10	64QAM	25	12	17.44	17.64	17.71		17.8	3		
10	64QAM	25	25	17.41	17.67	17.77					
10	64QAM	50	0	17.39	17.58	17.72					
10	256QAM	1	0	15.81	16.04	15.88		16.3	4.5		
10	256QAM	1	49	15.80	15.91	15.81					
10	256QAM	25	0	15.62	15.82	15.68					
10	256QAM	25	12	15.78	15.73	15.82					
10	256QAM	25	25	15.88	15.87	15.88		16.3	4.5		
10	256QAM	50	0	15.72	15.78	15.78					
Channel											
Frequency (MHz)				2070.5	2100.5	2140.5	Turn-up limit (dBm)	MPE (dB)			
5	QPSK	1	0	20.12	20.27	20.58		20.8	0		
5	QPSK	1	16	20.19	20.47	20.59					
5	QPSK	1	24	20.22	20.48	20.57					
5	QPSK	12	0	19.29	19.51	19.71					
5	QPSK	12	7	19.34	19.52	19.70		19.8	1		
5	QPSK	12	13	19.32	19.61	19.73					
5	QPSK	26	0	19.34	19.53	19.70					
5	16QAM	1	0	19.43	19.71	19.74					
5	16QAM	1	12	19.50	19.74	19.68		19.8	1		
5	16QAM	1	24	19.52	19.78	19.74					
5	16QAM	12	7	18.36	18.67	18.72					
5	16QAM	12	13	18.39	18.53	18.72		18.8	2		
5	16QAM	25	0	18.39	18.58	18.72					
5	16QAM	25	0	18.32	18.58	18.73					
5	64QAM	1	0	18.39	18.65	18.67		18.8	2		
5	64QAM	1	18	18.44	18.69	18.72					
5	64QAM	1	24	18.46	18.75	18.73					
5	64QAM	12	0	17.39	17.58	17.78					
5	64QAM	12	7	17.41	17.61	17.71		17.8	3		
5	64QAM	12	13	17.35	17.64	17.68					
5	64QAM	25	0	17.37	17.53	17.74					
5	256QAM	1	0	15.64	15.80	15.84		16.3	4.5		
5	256QAM	1	12	15.67	15.89	15.90					
5	256QAM	1	24	15.80	15.88	15.89					
5	256QAM	12	0	15.60	15.81	15.85					
5	256QAM	12	7	15.83	15.91	15.78		16.3	4.5		
5	256QAM	12	13	15.82	15.84	15.77					
5	256QAM	25	0	15.63	15.80	15.78					

Band 12 (700MHz Low Band)									
Part 27F (only on channel required)									
BW (MHz)	Modulation	Channel	RB Offset	Low Power Ch / Freq.	Power 2000W Ch / Freq.	High Power Ch / Freq.	Turn-up limit (dBm)	MPE (dB)	
Frequency (MHz)									
15	QPSK	1	0	22.18	22.21	22.17		23.3	0
15	QPSK	1	25	22.27	22.19	22.21			
15	QPSK	1	49	22.30	22.32	22.19			
15	QPSK	25	0	21.30	21.29	21.31			
15	QPSK	25	12	21.36	21.41	21.33		22.3	1
15	QPSK	25	25	21.38	21.43	21.34			
15	QPSK	50	0	21.34	21.39	21.32			
15	16QAM	1	0	21.60	21.63	21.61			
15	16QAM	1	25	21.60	21.62	21.59		22.3	1
15	16QAM	1	49	21.69	21.63	21.56			
15	16QAM	25	0	20.27	20.40	20.27			
15	16QAM	25	12	20.37	20.38	20.38		21.3	2
15	16QAM	50	0	20.27	20.28	20.17			
15	64QAM	1	0	20.41	20.45	20.45		21.3	2
15	64QAM	1	25	20.53	20.46	20.52			
15	64QAM	1	49	20.50	20.49	20.51			
15	64QAM	25	0	19.28	19.39	19.27			
15	64QAM	25	12	19.35	19.41	19.29		20.3	3
15	64QAM	25	25	19.41	19.40	19.40			
15	64QAM	50	0	19.28	19.38	19.29			
15	256QAM	1	0	17.75	17.81	17.68			
15	256QAM	1	25	17.78	17.73	17.68		18.8	4.5
15	256QAM	1	49	17.79	17.82	17.68			
15	256QAM	25	0	17.66	17.81	17.68			
15	256QAM	25	12	17.68	17.70	17.65			
15	256QAM	25	25	17.68	17.78	17.68		18.8	4.5
15	256QAM	50	0	17.66	17.69	17.58			
Frequency (MHz)									
				701.5 <th>707.5<th>713.5<th>Turn-up limit (dBm)</th><th colspan="2">MPE (dB)</th></th></th>	707.5 <th>713.5<th>Turn-up limit (dBm)</th><th colspan="2">MPE (dB)</th></th>	713.5 <th>Turn-up limit (dBm)</th> <th colspan="2">MPE (dB)</th>	Turn-up limit (dBm)	MPE (dB)	
5	QPSK	1	0	22.20	22.25	22.18		23.3	0
5	QPSK	1	12	22.23	22.25	22.18			
5	QPSK	1	25	22.22	22.24	22.18			
5	QPSK	12	0	21.29	21.35	21.30			
5	QPSK	12	7	21.32	21.39	21.30		22.3	1
5	QPSK	12	14	21.31	21.32	21.31			
5	QPSK	25	0	21.33	21.41	21.25			
5	16QAM	1	0	21.61	21.61	21.62			
5	16QAM	1	24	21.53	21.61	21.60		22.3	1
5	16QAM	12	0	20.33	20.37	20.37			
5	16QAM	12	7	20.35	20.41	20.35			
5	16QAM	12	13	20.33	20.38	20.30		21.3	2
5	16QAM	25	0	20.37	20.37	20.37			
5	16QAM	25	7	20.43	20.51	20.46		21.3	2
5	16QAM	1	12	20.46	20.52	20.48			
5	16QAM	12	19	20.46	20.50	20.46			
5	16QAM	12	25	19.34	19.40	19.38			
5	16QAM	12	7	19.38	19.48	19.43		20.3	3
5	16QAM	12	14	19.38	19.38	19.38			
5	16QAM	25	0	19.32	19.41	19.35			
5	256QAM	1	0	17.74	17.82	17.73			
5	256QAM	1	7	17.62	17.67	17.61		18.8	4.5
5	256QAM	1	24	17.72	17.72	17.72			
5	256QAM	12	0	17.76	17.51	17.68			
5	256QAM	12	7	17.76	17.51	17.68			
5	256QAM	12	13	17.68	17.68	17.68		18.8	4.5
5	256QAM	25	0	17.76	17.68	17.55			
Frequency (MHz)									
				705.5 <th>707.5<th>714.5<th>Turn-up limit (dBm)</th><th colspan="2">MPE (dB)</th></th></th>	707.5 <th>714.5<th>Turn-up limit (dBm)</th><th colspan="2">MPE (dB)</th></th>	714.5 <th>Turn-up limit (dBm)</th> <th colspan="2">MPE (dB)</th>	Turn-up limit (dBm)	MPE (dB)	
3	QPSK	1	0	22.20	22.24	22.23		23.3	0
3	QPSK	1	6	22.24	22.24	22.24			
3	QPSK	1	14	22.17	22.23	22.21			
3	QPSK	8	0	21.28	21.32	21.25			
3	QPSK	8	6	21.31	21.40	21.27		22.3	1
3	QPSK	8	7	21.26	21.35	21.28			
3	QPSK	15	0	21.28	21.35	21.30			
3	16QAM	1	0	21.61	21.62	21.61			
3	16QAM	1	8	21.56	21.65	21.57		22.3	1
3	16QAM	1	14	21.51	21.62	21.52			
3	16QAM	8	0	20.37	20.48	20.31			
3	16QAM	8	4	20.36	20.42	20.31		21.3	2
3	16QAM	15	0	20.41	20.41	20.41			
3	16QAM	1	0	20.43	20.53	20.50		21.3	2
3	16QAM	1	8	20.53	20.61	20.58			
3	16QAM	8	4	20.53	20.53	20.53			
3	16QAM	8	0	19.32	19.37	19.31			
3	16QAM	8	4	19.42	19.42	19.34		20.3	3
3	16QAM	15	0	19.35	19.37	19.31			
3	16QAM	15	0	19.32	19.38	19.30			
3	16QAM	1	8	17.69	17.77	17.74			
3	256QAM	1	14	17.88	17.72	17.74		18.8	4.5
3	256QAM	1	25	17.88	17.86	17.75			
3	256QAM	8	0	17.60	17.80	17.72			
3	256QAM	8	7	17.72	17.88	17.68			
3	256QAM	8	7	17.64	17.64	17.63		18.8	4.5
3	256QAM	8	7	17.72	17.88	17.68			
Channel									
				2900.5 <th>2906.5<th>2913.5<th>Turn-up limit (dBm)</th><th colspan="2">MPE (dB)</th></th></th>	2906.5 <th>2913.5<th>Turn-up limit (dBm)</th><th colspan="2">MPE (dB)</th></th>	2913.5 <th>Turn-up limit (dBm)</th> <th colspan="2">MPE (dB)</th>	Turn-up limit (dBm)	MPE (dB)	
1.4	QPSK	1	0	69.7	70.5	71.5		23.3	0
1.4	QPSK	1	0	22.07	22.14	22.12			
1.4	QPSK	1	1	22.13	22.15	22.12			
1.4	QPSK	1	14	22.06	22.19	22.12			
1.4	QPSK	1	14	22.10	22.14	22.12		22.3	1
1.4	QPSK	1	25	22.19	22.23	22.13			
1.4	QPSK	3	0	22.12	22.20	22.11			
1.4	QPSK	3	18	22.28	22.28	22.11			
1.4	16QAM	1	0	21.36	21.47	21.48		22.3	1
1.4	16QAM	1	3	21.44	21.57	21.47			
1.4	16QAM	3	0	21.28	21.27	21.28			
1.4	16QAM	3	1	21.28	21.29	21.23			
1.4	16QAM	6	0	20.37	20.33	20.25		21.8	2
1.4	16QAM	6	0	20.36	20.41	20.43			
1.4	16QAM	6	0	20.37	20.43	20.40		21.3	2
1.4	16QAM	6	0	20.37	20.45	20.40			
1.4	16QAM	3	0	20.33	20.36	20.38			
1.4	16QAM	3	0	20.32	20.38	20.39			
1.4	64QAM	6	0	19.31	19.38	19.33		20.3	3
1.4	64QAM	6	0	19.34	19.37	19.34			
1.4	256QAM	1	3	17.88	17.80	17.80		18.8	4.5
1.4	256QAM	1	5	17.70	17.71	17.65			
1.4	256QAM	1	23	17.82	17.73	17.65			
1.4	256QAM	3	1	17.64	17.63	17.65			
1.4	256QAM	3	0	17.72	17.68	17.61		18.8	4.5
1.4	256QAM	6	0	17.72	17.68	17.61			



Band 17 (700MHz Band)										
Part 27H(only on channel required)										
RF (MHz)	Modulation	RB Size	RB Offset	Power Ch / Freq.	Power Ch / Freq.	Power Ch / Freq.	Turn-up Time (min)	MPE (dB)		
Channel Frequency (MHz)										
				716.5	716	713.5				
5	QPSK	1	0	22.12	22.20	22.18				
5	QPSK	1	49	22.23	22.20	22.23				
5	QPSK	1	24	22.22	22.24	22.24				
5	QPSK	12	0	21.29	21.30	21.24				
5	QPSK	12	4	21.34	21.34	21.26				
5	QPSK	12	13	21.36	21.31	21.31				
5	QPSK	25	0	21.34	21.35	21.24				
5	16QAM	1	0	21.48	21.50	21.50				
5	16QAM	1	12	21.53	21.58	21.55				
5	16QAM	1	24	21.62	21.63	21.58				
5	16QAM	12	0	20.28	20.25	20.27				
5	16QAM	12	7	20.38	20.38	20.30				
5	16QAM	12	13	20.37	20.33	20.32				
5	16QAM	25	0	20.33	20.34	20.28				
5	64QAM	1	0	20.43	20.46	20.41				
5	64QAM	1	12	20.42	20.50	20.47				
5	64QAM	1	24	20.51	20.56	20.45				
5	64QAM	12	0	19.33	19.33	19.34				
5	64QAM	12	7	19.42	19.42	19.35				
5	64QAM	12	13	19.42	19.40	19.38				
5	64QAM	25	0	19.36	19.36	19.28				
5	256QAM	1	0	17.92	17.74	17.41				
5	256QAM	1	12	17.99	17.92	17.89				
5	256QAM	1	24	17.92	17.76	17.29				
5	256QAM	12	0	17.42	17.54	17.48				
5	256QAM	12	7	17.43	17.51	17.23				
5	256QAM	12	13	17.34	17.27	17.24				
5	256QAM	25	0	17.28	17.31	17.40				

Band 25 (100MHz Band)										
Part 24E										
RF (MHz)	Modulation	Channel	RB Size	RB Offset	Power Ch / Freq.	Power Ch / Freq.	Power Ch / Freq.	Turn-up Time (min)	MPE (dB)	
Channel Frequency (MHz)										
					2040	1980	1980			
20	QPSK	1	0	0	20.74	20.70	20.70			
20	QPSK	1	49	0	20.62	20.65	20.64	21.8	0	
20	QPSK	1	99	0	20.59	20.59	20.61			
20	QPSK	50	0	0	19.78	19.78	19.70			
20	QPSK	50	24	0	19.77	19.80	19.73	20.8	1	
20	QPSK	50	50	0	19.76	19.74	19.69			
20	QPSK	100	0	0	19.76	19.74	19.70			
20	16QAM	1	0	0	20.11	20.12	20.04			
20	16QAM	1	49	0	19.96	19.96	19.90			
20	16QAM	1	99	0	19.96	19.94	19.87			
20	16QAM	50	0	0	19.83	19.81	19.76	19.8	2	
20	16QAM	50	24	0	19.82	19.85	19.82			
20	16QAM	50	50	0	19.80	19.88	19.81			
20	16QAM	100	0	0	19.81	19.78	19.77			
20	64QAM	1	0	0	19.87	19.93	19.82			
20	64QAM	1	49	0	19.80	19.80	19.88	19.8	2	
20	64QAM	1	99	0	19.76	19.83	19.85			
20	64QAM	50	0	0	17.85	17.84	17.76			
20	64QAM	50	24	0	17.83	17.82	17.78			
20	64QAM	50	50	0	17.82	17.87	17.84			
20	64QAM	100	0	0	17.81	17.78	17.76			
20	256QAM	1	0	0	16.03	16.02	16.04			
20	256QAM	1	49	0	16.07	16.07	16.01	17.3	4.5	
20	256QAM	1	99	0	16.01	16.05	15.92			
20	256QAM	50	0	0	15.96	15.91	15.92			
20	256QAM	50	24	0	15.92	15.94	15.85	17.3	4.5	
20	256QAM	50	50	0	15.92	15.95	15.85			
20	256QAM	100	0	0	15.92	15.86	15.91			
					2040	1980	1980			
					1987.5	1880	1907.5			
15	QPSK	1	0	0	20.66	20.64	20.56			
15	QPSK	1	31	0	20.67	20.63	20.57	21.8	0	
15	QPSK	1	74	0	20.55	20.56	20.50			
15	QPSK	36	0	0	19.79	19.73	19.62			
15	QPSK	36	10	0	19.74	19.74	19.67	20.8	1	
15	QPSK	36	36	0	19.67	19.71	19.65			
15	QPSK	75	0	0	19.74	19.65	19.69			
15	16QAM	1	0	0	20.86	20.86	20.81	20.8	1	
15	16QAM	1	37	0	19.91	19.93	19.85			
15	16QAM	1	74	0	19.84	19.79	19.78			
15	16QAM	36	0	0	19.75	19.75	19.68			
15	16QAM	36	10	0	19.84	19.76	19.68	19.8	2	
15	16QAM	36	36	0	19.64	19.70	19.63			
15	16QAM	75	0	0	19.74	19.60	19.68			
15	64QAM	1	0	0	18.88	18.82	18.73	19.8	2	
15	64QAM	1	37	0	18.70	18.83	18.75			
15	64QAM	1	74	0	18.76	18.81	18.75			
15	64QAM	36	0	0	17.82	17.75	17.68	18.8	3	
15	64QAM	36	10	0	17.79	17.81	17.71			
15	64QAM	36	37	0	17.71	17.72	17.68			
15	64QAM	75	0	0	17.76	17.68	17.71			
15	256QAM	1	0	0	16.04	15.95	16.04			
15	256QAM	1	37	0	16.06	16.04	16.09	17.3	4.5	
15	256QAM	1	74	0	16.01	16.01	15.99			
15	256QAM	36	0	0	15.92	15.97	15.99			
15	256QAM	36	10	0	15.83	16.11	15.85	17.3	4.5	
15	256QAM	36	36	0	15.87	15.95	15.86			
15	256QAM	75	0	0	15.92	15.92	15.86			
					2040	1980	1980			
					1987.5	1880	1907.5			
10	QPSK	1	0	0	20.62	20.63	20.58			
10	QPSK	1	26	0	20.57	20.63	20.52	21.8	0	
10	QPSK	1	52	0	20.47	20.57	20.50			
10	QPSK	20	0	0	19.73	19.63	19.65			
10	QPSK	20	12	0	19.73	19.66	19.69	20.8	1	
10	QPSK	20	24	0	19.73	19.67	19.65			
10	QPSK	50	0	0	19.74	19.65	19.69			
10	QPSK	50	25	0	19.70	19.65	19.68	20.8	1	
10	QPSK	50	50	0	19.69	19.66	19.68			
10	QPSK	100	0	0	19.69	19.68	19.69			
10	16QAM	1	0	0	20.71	20.64	20.63	19.8	2	
10	16QAM	1	26	0	20.64	20.66	20.61			
10	16QAM	1	52	0	20.52	20.55	20.50			
10	16QAM	20	0	0	19.68	19.66	19.65	20.8	1	
10	16QAM	20	12	0	19.68	19.67	19.65			
10	16QAM	20	24	0	19.68	19.67	19.65			
10	16QAM	50	0	0	19.69	19.66	19.69			
10	16QAM	50	25	0	19.64	19.58	19.59	17.3	4.5	
10	16QAM	50	50	0	19.60	19.59	19.55			
					2040	1980	1980			
					1987.5	1880	1907.5			
5	QPSK	1	0	0	20.61	20.62	20.48			
5	QPSK	1	26	0	20.57	20.62	20.47	21.8	0	
5	QPSK	1	52	0	20.47	20.57	20.50			
5	QPSK	1	24	0	20.61	20.62	20.49			
5	QPSK	12	0	0	19.72	19.60	19.51	20.8	1	
5	QPSK	12	13	0	19.72	19.64	19.57			
5	QPSK	20	0	0	19.73	19.71	19.64			
5	QPSK	20	12	0	19.67	19.67	19.61	20.8	1	
5	QPSK	20	24	0	19.67	19.67	19.61			
5	QPSK	50	0	0	19.69	19.62	19.62			
5	QPSK	50	25	0	19.63	19.54	19.52	19.8	2	
5	QPSK	50	50	0	19.62	19.78	19.69			
5	QPSK	100	0	0	19.69	19.68	19.69	19.8	2	
5	16QAM	1	0	0	20.71	20.64	20.63			
5	16QAM	1	26	0	20.64	20.66	20.61			
5	16QAM	1	52	0	20.52	20.55	20.50	18.8	3	
5	16QAM	20	0	0	19.72	19.74	17.62			
5	16QAM	20	12	0	19.68	19.63	19.65			
5	16QAM	20	24	0	19.68	19.63	19.65			
5	16QAM	50	0	0	19.70	19.60	19.69	17.3	4.5	
5	16QAM	50	25	0	19.64	19.58	19.59			
5	16QAM	50	50	0	19.57	19.58	19.54	17.3	4.5	
5	16QAM	100	0	0	19.57	19.58	19.54			
5	256QAM	1	0	0	16.04	15.95	16.04			
5	256QAM	1	26	0	16.06	16.06	16.01	17.3	4.5	
5	256QAM	1	52	0	16.01	16.01	15.99			
5	256QAM	20	0	0	15.92	15.92	15.86			
5	256QAM	20	12	0	15.92	15.94	15.85			
5	256QAM	20	24	0	15.92	15.94	15.85			
5	256QAM	50	0	0	15.96	15.86	15.91			
					2040	1980	1980			
					1987.5	1880	1907.5			
3	QPSK	1	0	0	20.68	20.68	20.41			
3	QPSK	1	14	0	20.66	20.62	20.41	21.8	0	
3	QPSK	8	0	0	19.68	19.63	19.49			
3	QPSK	8	7	0	19.67	19.70	19.49	20.8	1	
3	QPSK	8	15	0	19.73	19.71	19.67			
3	QPSK	8	23	0	19.68	19.64	19.61	20.8	1	
3	QPSK	8	31	0	19.65	19.61	19.68			
3	QPSK	16	0	0	19.73	19.71	19.67	20.8	1	
3	QPSK	16	7	0	19.68	19.68	19.61			
3	QPSK	16	15	0	19.70	19.69	19.65			
3	QPSK	16	23	0	19.65	19.65	19.61	20.8	1	
3	QPSK	16	31	0	19.65	19.61	19.68			
3	QPSK	32	0	0	19.73	19.73	19.67	19.8	2	
3	QPSK	32	7	0	19.77	19.74	19.69			
3	QPSK	32	15	0	19.73	19.70	19.67	19.8	2	
3	QPSK	32	23	0	19.68	19.68	19.61			
3	QPSK	32	31	0	19.68	19.68	19.61			
3	QPSK	64	0	0	19.83	19.70	19.69	19.8	2	
3	QPSK	64	7	0	19.81	19.81	19.88			
3	QPSK	64	15	0	19.80	19.81	19.88			
3	QPSK	64	23	0	19.76	19.78	19.77	18.8	3	
3	QPSK	64	31	0	19.76	19.77	19.73			
3	QPSK	128	0	0	19.86	19.77	19.76	17.3	4.5	
3	QPSK	128	7	0	19.83	19.74	19.83			
3	QPSK	128	15	0	19.80	19.83	19.83			
3	QPSK	128	23	0	19.77	19.83	19.83	17.3	4.5	
3	QPSK	128	31	0	19.79	19.80	19.79			
3	QPSK	256	0	0	19.93	19.86	19.86	17.3	4.5	
3	QPSK	256	7	0	19.92	19.89	19.93			
3	QPSK	256	15	0	19.93	19.93	19.93			
3	QPSK	256	23	0	19.88	19.93	19.93	17.3	4.5	
3	QPSK	256	31	0	19.93	19.93	19.93			
3	QPSK	512	0	0	19.93	19.93	19.93			
3	QPSK	512	7	0	19.88	19.93	19.93	17.3	4.5	
3	QPSK	512	15	0	19.93	19.93	19.93			
3	QPSK	512	23	0	19.88	19.93	19.93	17.3	4.5	
3	QPSK	512	31	0	19.93	19.93	19.93			
3	QPSK	1024	0	0	19.93	19.93	19.93			
3	Q									





Band 71									
SW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq.	Power High Ch / Freq.	Power High Ch / Freq.	Power High Ch / Freq.	Time-up limit (dBm)	APRS (dB)
Channel				183222	183222	183222	183272	Time-up limit (dBm)	APRS (dB)
Frequency (MHz)				673	683	683	688		
20	QPSK	1	0	22.43	22.61	22.39		23.3	0
20	QPSK	1	48	22.18	22.35	22.28			
20	QPSK	1	96	22.22	22.22	22.16			
20	QPSK	50	0	21.39	21.42	21.40			
20	QPSK	50	24	21.40	21.39	21.41		22.3	1
20	QPSK	50	50	21.34	21.52	21.27			
20	QPSK	100	0	21.44	21.47	21.39			
20	16QAM	1	0	21.36	21.76	21.37			
20	16QAM	1	48	21.63	21.70	21.49		22.3	1
20	16QAM	1	96	21.49	21.51	21.57			
20	16QAM	50	0	20.51	20.47	20.47			
20	16QAM	50	24	20.48	20.43	20.50		21.3	2
20	16QAM	50	50	20.36	20.33	20.27			
20	16QAM	100	0	20.51	20.42	20.32			
20	84QAM	1	0	20.76	20.83	20.80		21.3	2
20	84QAM	1	48	20.61	20.62	20.61			
20	84QAM	1	96	20.38	20.47	20.41			
20	84QAM	50	0	19.54	19.52	19.46			
20	84QAM	50	24	19.57	19.38	19.41		20.3	3
20	84QAM	50	50	19.41	19.41	19.34			
20	84QAM	100	0	19.60	19.41	19.37			
20	25QAM	1	0	17.67	17.58	17.62		18.8	4.5
20	25QAM	1	48	17.63	17.68	17.59			
20	25QAM	1	96	17.62	17.55	17.65			
20	25QAM	50	0	17.49	17.58	17.49			
20	25QAM	50	24	17.59	17.51	17.49		18.8	4.5
20	25QAM	50	50	17.55	17.43	17.61			
20	25QAM	100	0	17.63	17.48	17.59			
Channel				133107	133107	133107	133107	Time-up limit (dBm)	APRS (dB)
Frequency (MHz)				670.5	680.5	680.5	686.5		
15	QPSK	1	0	22.60	22.38	22.34		23.3	0
15	QPSK	1	34	22.35	22.18	22.34			
15	QPSK	1	74	22.14	22.20	22.19			
15	QPSK	36	0	21.36	21.41	21.37			
15	QPSK	36	26	21.53	21.27	21.31		22.3	1
15	QPSK	36	36	21.33	21.31	21.27			
15	QPSK	75	0	21.42	21.47	21.37			
15	16QAM	1	0	21.03	21.76	21.03			
15	16QAM	1	37	21.62	21.62	21.49		22.3	1
15	16QAM	1	74	21.44	21.52	21.59			
15	16QAM	36	0	20.49	20.42	20.43			
15	16QAM	36	20	20.44	20.42	20.46		21.3	2
15	16QAM	36	39	20.37	20.26	20.26			
15	16QAM	75	0	20.45	20.40	20.28			
15	84QAM	1	0	20.69	20.58	20.79		21.3	2
15	84QAM	1	37	20.56	20.61	20.60			
15	84QAM	1	74	20.32	20.42	20.35			
15	84QAM	36	0	19.47	19.45	19.41			
15	84QAM	36	20	19.52	19.39	19.38		20.3	3
15	84QAM	36	39	19.34	19.37	19.23			
15	84QAM	75	0	19.56	19.37	19.38			
15	25QAM	1	0	17.74	17.61	17.62			
15	25QAM	1	37	17.61	17.63	17.54		18.8	4.5
15	25QAM	1	74	17.61	17.53	17.63			
15	25QAM	36	0	17.46	17.59	17.41			
15	25QAM	36	20	17.51	17.60	17.41			
15	25QAM	36	39	17.48	17.52	17.46		18.8	4.5
15	25QAM	75	0	17.64	17.69	17.67			
Channel				133172	133276	133422	133422	Time-up limit (dBm)	APRS (dB)
Frequency (MHz)				668	679	683	683		
10	QPSK	1	0	22.63	22.40	22.32		23.3	0
10	QPSK	1	26	22.27	22.13	22.29			
10	QPSK	1	48	22.14	22.17	22.08			
10	QPSK	25	0	21.34	21.42	21.46			
10	QPSK	25	12	21.46	21.31	21.37		22.3	1
10	QPSK	25	26	21.27	21.34	21.28			
10	QPSK	50	0	21.49	21.47	21.37			
10	16QAM	1	0	21.91	21.86	21.79			
10	16QAM	1	26	21.63	21.72	21.43		22.3	1
10	16QAM	1	48	21.51	21.47	21.59			
10	16QAM	25	0	20.45	20.46	20.42			
10	16QAM	25	12	20.48	20.45	20.42		21.3	2
10	16QAM	25	26	20.38	20.29	20.24			
10	16QAM	50	0	20.43	20.35	20.29			
10	84QAM	1	0	20.78	20.64	20.79		21.3	2
10	84QAM	1	26	20.63	20.69	20.63			
10	84QAM	1	48	20.35	20.46	20.41			
10	84QAM	25	0	19.52	19.52	19.47			
10	84QAM	25	12	19.56	19.39	19.38		20.3	3
10	84QAM	25	26	19.38	19.25	19.26			
10	84QAM	50	0	19.56	19.42	19.32			
10	25QAM	1	0	17.57	17.50	17.23			
10	25QAM	1	26	17.54	17.75	17.64		18.8	4.5
10	25QAM	1	48	17.62	17.58	17.60			
10	25QAM	25	0	17.42	17.56	17.26			
10	25QAM	25	12	17.64	17.43	17.52			
10	25QAM	25	26	17.46	17.53	17.41		18.8	4.5
10	25QAM	50	0	17.50	17.41	17.29			
Channel				133147	133247	133447	133447	Time-up limit (dBm)	APRS (dB)
Frequency (MHz)				665.5	675.5	685.5	685.5		
5	QPSK	1	0	22.60	22.37	22.34		23.3	0
5	QPSK	1	12	22.37	22.18	22.31			
5	QPSK	1	24	22.16	22.20	22.13			
5	QPSK	12	0	21.43	21.46	21.36			
5	QPSK	12	7	21.51	21.27	21.40		22.3	1
5	QPSK	12	19	21.29	21.35	21.19			
5	QPSK	26	0	21.46	21.44	21.37			
5	16QAM	1	0	21.86	21.74	21.62			
5	16QAM	1	12	21.59	21.68	21.50		22.3	1
5	16QAM	1	24	21.51	21.49	21.38			
5	16QAM	12	0	20.51	20.46	20.49			
5	16QAM	12	7	20.43	20.43	20.42		21.3	2
5	16QAM	12	19	20.30	20.30	20.23			
5	16QAM	25	0	20.47	20.35	20.29			
5	84QAM	1	0	20.77	20.60	20.77		21.3	2
5	84QAM	1	12	20.57	20.61	20.33			
5	84QAM	1	24	20.38	20.40	20.47			
5	84QAM	12	0	19.48	19.51	19.50			
5	84QAM	12	7	19.53	19.30	19.43		20.3	3
5	84QAM	12	13	19.39	19.33	19.24			
5	84QAM	25	0	19.62	19.38	19.36			
5	25QAM	1	0	17.75	17.53	17.65			
5	25QAM	1	12	17.51	17.60	17.64		18.8	4.5
5	25QAM	1	24	17.61	17.50	17.63			
5	25QAM	12	0	17.40	17.53	17.51			
5	25QAM	12	7	17.62	17.57	17.46			
5	25QAM	12	13	17.46	17.42	17.55		18.8	4.5
5	25QAM	25	0	17.48	17.53	17.54			



Band 38(only on channel required)													
RW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Mid Ch / Freq	Power High Ch / Freq	Time-up Int (dBm)	MPE (dB)					
Channel													
Frequency (MHz)													
20	QPSK	1	0	20.47	20.13	20.20	20.8	0					
20	QPSK	1	49	20.49	20.10	20.17							
20	QPSK	1	99	20.41	20.12	20.19							
20	QPSK	50	0	19.40	19.23	19.35	19.8	1					
20	QPSK	50	24	19.43	19.27	19.43							
20	QPSK	50	50	19.40	19.30	19.40							
20	16QAM	1	0	19.25	19.40	19.41	19.8	1					
20	16QAM	1	0	19.47	19.30	19.38							
20	16QAM	1	49	19.33	19.34	19.43							
20	16QAM	50	0	18.55	18.31	18.38	18.8	2					
20	16QAM	50	24	18.53	18.33	18.44							
20	16QAM	50	50	18.56	18.30	18.39							
20	16QAM	1	0	18.22	17.99	18.16	18.8	2					
20	16QAM	1	49	18.25	18.08	18.14							
20	16QAM	1	99	18.27	18.10	18.24							
20	16QAM	50	0	17.49	17.31	17.38	17.8	3					
20	16QAM	50	24	17.48	17.35	17.40							
20	16QAM	50	50	17.57	17.44	17.47							
20	25QAM	1	0	15.52	15.56	15.59	16.3	4.5					
20	25QAM	1	49	15.45	15.42	15.48							
20	25QAM	1	99	15.57	15.83	15.77							
20	25QAM	50	0	15.77	15.81	15.84	16.3	4.5					
20	25QAM	50	24	15.81	15.79	15.84							
20	25QAM	50	50	15.79	15.81	15.80							
20	25QAM	100	0	15.78	15.73	15.81	16.3	4.5					
20	25QAM	100	0	15.78	15.73	15.81							
20	25QAM	100	0	15.78	15.73	15.81							
Channel													
Frequency (MHz)													
15	QPSK	1	0	20.46	20.20	20.41	20.8	0					
15	QPSK	1	37	20.41	20.10	20.31							
15	QPSK	1	74	20.39	20.10	20.33							
15	QPSK	36	0	19.43	19.23	19.40	19.8	1					
15	QPSK	36	20	19.64	19.36	19.40							
15	QPSK	36	36	19.60	19.34	19.39							
15	QPSK	36	0	19.67	19.42	19.43	19.8	1					
15	16QAM	1	0	19.53	19.40	19.32							
15	16QAM	1	37	19.58	19.39	19.31							
15	16QAM	1	74	19.50	19.32	19.40	18.8	2					
15	16QAM	36	0	18.63	18.26	18.35							
15	16QAM	36	20	18.60	18.26	18.37							
15	16QAM	36	36	18.77	18.25	18.46	18.8	2					
15	16QAM	75	0	18.60	18.41	18.45							
15	16QAM	75	0	18.60	18.41	18.45							
15	16QAM	1	37	18.32	18.12	18.14	18.8	2					
15	16QAM	1	74	18.34	18.11	18.28							
15	16QAM	36	20	18.60	18.30	18.37							
15	16QAM	36	20	17.58	17.38	17.45	17.8	3					
15	16QAM	36	36	17.58	17.40	17.44							
15	16QAM	75	0	17.63	17.43	17.51							
15	25QAM	1	0	15.43	15.55	15.49	16.3	4.5					
15	25QAM	1	37	15.47	15.52	15.47							
15	25QAM	1	74	15.54	15.52	15.49							
15	25QAM	36	0	15.79	15.78	15.70	16.3	4.5					
15	25QAM	36	20	15.80	15.79	15.81							
15	25QAM	36	36	15.80	15.72	15.89							
15	25QAM	75	0	15.74	15.63	15.67	16.3	4.5					
15	25QAM	75	0	15.74	15.63	15.67							
15	25QAM	75	0	15.74	15.63	15.67							
Channel													
Frequency (MHz)													
10	QPSK	1	0	20.29	20.02	20.10	20.8	0					
10	QPSK	1	25	20.40	20.23	20.30							
10	QPSK	1	49	20.31	20.22	20.30							
10	QPSK	25	0	19.37	19.30	19.38	19.8	1					
10	QPSK	25	12	19.43	19.40	19.43							
10	QPSK	25	25	19.37	19.30	19.40							
10	QPSK	25	0	19.37	19.30	19.40	19.8	1					
10	QPSK	25	12	19.43	19.40	19.43							
10	QPSK	25	25	19.37	19.30	19.40							
10	16QAM	1	0	19.71	19.37	19.42	19.8	1					
10	16QAM	1	25	19.64	19.26	19.38							
10	16QAM	1	49	19.61	19.34	19.40							
10	16QAM	25	0	18.67	18.30	18.31	18.8	2					
10	16QAM	25	12	18.64	18.31	18.36							
10	16QAM	25	25	18.61	18.40	18.38							
10	16QAM	50	0	18.68	18.47	18.50	18.8	2					
10	16QAM	50	0	18.64	18.11	18.22							
10	16QAM	50	0	18.64	18.11	18.22							
10	16QAM	1	49	18.60	18.21	18.27	17.8	3					
10	16QAM	25	0	17.61	17.33	17.35							
10	16QAM	25	12	17.58	17.41	17.58							
10	16QAM	25	25	17.58	17.39	17.66	17.8	3					
10	25QAM	1	0	15.43	15.62	15.47							
10	25QAM	1	25	15.40	15.45	15.41							
10	25QAM	1	49	15.40	15.50	15.52	16.3	4.5					
10	25QAM	25	0	15.81	15.72	15.72							
10	25QAM	25	12	15.77	15.80	15.82							
10	25QAM	25	25	15.75	15.80	15.76	16.3	4.5					
10	25QAM	50	0	15.88	15.66	15.85							
10	25QAM	50	0	15.88	15.66	15.85							
Channel													
Frequency (MHz)													
5	QPSK	1	0	20.39	20.15	20.38	20.8	0					
5	QPSK	1	12	20.41	20.28	20.35							
5	QPSK	1	24	20.41	20.27	20.34							
5	QPSK	12	0	19.67	19.31	19.51	19.8	1					
5	QPSK	12	7	19.68	19.48	19.54							
5	QPSK	12	13	19.70	19.36	19.51							
5	QPSK	25	0	19.65	19.33	19.48	19.8	1					
5	QPSK	25	7	19.68	19.44	19.43							
5	QPSK	25	12	19.67	19.37	19.57							
5	16QAM	1	0	19.65	19.40	19.49	19.8	1					
5	16QAM	1	12	19.66	19.29	19.41							
5	16QAM	12	7	19.61	19.38	19.42							
5	16QAM	12	13	19.62	19.35	19.50	18.8	2					
5	16QAM	25	0	18.40	18.15	18.31							
5	16QAM	25	7	18.40	18.15	18.31							
5	16QAM	12	0	18.39	18.08	18.28	17.8	3					
5	16QAM	12	13	18.41	18.13	18.28							
5	16QAM	12	19	18.40	18.13	18.28							
5	16QAM	12	0	17.66	17.34	17.52	17.8	3					
5	16QAM	12	7	17.70	17.47	17.58							
5	16QAM	12	13	17.69	17.39	17.63							
5	25QAM	1	0	15.68	15.67	15.69	16.3	4.5					
5	25QAM	1	24	15.48	15.60	15.41							
5	25QAM	12	0	15.67	15.53	15.70							
5	25QAM	12	7	15.65	15.67	15.67	16.3	4.5					
5	25QAM	12	13	15.65	15.67	15.67							
5	25QAM	25	0	15.69	15.79	15.76							



Band 48 (3.5G Band)-FCC										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq.	Power Low Mid Ch / Freq.	Power High Mid Ch / Freq.	Power High Ch / Freq.	Turn-up limit (dBm)	MPR (dB)	
Channel				66340	66830	67114	66640			
Frequency (MHz)				66340	66830	67114	66640			
20	QPSK	1	0	22.55	22.80	22.89	22.96	23.8	0	
20	QPSK	1	49	22.53	22.71	22.74	22.85			
20	QPSK	1	99	22.53	22.78	22.73	22.83			
20	QPSK	36	0	21.57	21.85	21.93	22.00			
20	QPSK	50	34	21.58	21.86	21.94	22.04	22.8	1	
20	QPSK	36	99	21.57	21.86	21.88	22.04			
20	16QAM	1	0	21.83	21.80	21.92	22.04			
20	16QAM	1	49	21.82	21.81	21.91	21.94			
20	16QAM	1	99	21.84	21.84	21.93	21.96	22.8	1	
20	16QAM	50	0	20.85	20.93	20.97	21.03			
20	16QAM	50	34	20.83	20.90	20.98	21.05			
20	16QAM	50	50	20.90	20.89	20.95	21.07			
20	16QAM	100	0	20.84	20.93	20.96	21.06	21.8	2	
20	64QAM	1	0	20.84	20.84	20.95	21.00			
20	64QAM	1	49	20.87	20.79	20.81	20.92			
20	64QAM	1	99	20.89	20.89	20.90	20.97			
20	64QAM	50	0	19.87	19.94	20.00	20.07	20.8	3	
20	64QAM	50	34	19.88	19.95	19.95	20.00			
20	64QAM	50	50	19.85	19.91	19.95	20.08			
20	64QAM	100	0	19.82	19.89	19.93	20.05			
20	256QAM	1	0	17.53	17.94	17.71	17.83	19.3	4.5	
20	256QAM	1	49	17.45	17.98	17.98	17.98			
20	256QAM	1	99	17.37	17.53	17.51	17.68			
20	256QAM	50	0	17.82	17.92	17.96	17.94			
20	256QAM	50	34	17.78	17.95	17.98	17.98	19.3	4.5	
20	256QAM	50	50	17.67	17.85	17.82	17.88			
20	256QAM	100	0	17.74	17.84	17.84	17.90			
Channel				66975	66425	66975	66425			
Frequency (MHz)				66975 <th>66425<th>66975<th>66425<th>Turn-up limit (dBm)</th><th>MPR (dB)</th><th></th></th></th></th>	66425 <th>66975<th>66425<th>Turn-up limit (dBm)</th><th>MPR (dB)</th><th></th></th></th>	66975 <th>66425<th>Turn-up limit (dBm)</th><th>MPR (dB)</th><th></th></th>	66425 <th>Turn-up limit (dBm)</th> <th>MPR (dB)</th> <th></th>	Turn-up limit (dBm)	MPR (dB)	
15	QPSK	1	0	22.53	22.79	22.84	22.91	23.8	0	
15	QPSK	1	37	22.51	22.76	22.77	22.88			
15	QPSK	1	74	22.52	22.79	22.65	22.80			
15	QPSK	36	0	21.61	21.92	21.88	21.92			
15	QPSK	36	20	21.97	21.86	21.95	21.99	22.8	1	
15	QPSK	36	39	21.91	21.84	21.82	21.88			
15	QPSK	15	0	21.62	21.84	21.92	22.02			
15	16QAM	1	0	21.59	21.79	21.84	21.92			
15	16QAM	1	37	21.58	21.75	21.83	21.96	22.8	1	
15	16QAM	1	74	21.50	21.84	21.84	21.93			
15	16QAM	36	0	20.85	20.93	20.94	20.97			
15	16QAM	36	39	20.89	20.87	20.92	21.01			
15	16QAM	36	50	20.85	20.91	20.87	21.01	21.8	2	
15	16QAM	75	0	20.81	20.94	20.94	21.10			
15	64QAM	1	0	20.93	20.86	20.98	20.94			
15	64QAM	1	37	20.93	20.74	20.81	20.91			
15	64QAM	1	74	20.93	20.88	20.75	20.99	20.8	3	
15	64QAM	36	0	19.82	19.95	19.92	20.07			
15	64QAM	36	39	19.85	19.88	19.87	19.97			
15	64QAM	36	50	19.81	19.88	19.94	20.05			
15	256QAM	1	0	17.61	17.55	17.57	17.65	19.3	4.5	
15	256QAM	1	37	17.50	17.57	17.54	17.67			
15	256QAM	1	74	17.42	17.51	17.57	17.54			
15	256QAM	36	0	17.84	17.90	17.97	17.93			
15	256QAM	36	39	17.86	17.93	18.03	17.97	19.3	4.5	
15	256QAM	36	50	17.87	17.81	17.77	17.92			
15	256QAM	75	0	17.83	17.79	17.74	17.84			
Channel				66640	67114	66340	66640			
Frequency (MHz)				66640	66975	66425	66975	Turn-up limit (dBm)	MPR (dB)	
10	QPSK	1	0	22.50	22.76	22.83	22.89	23.8	0	
10	QPSK	1	25	22.42	22.87	22.68	22.87			
10	QPSK	1	49	22.47	22.80	22.68	22.93			
10	QPSK	25	0	21.62	21.80	21.93	21.95			
10	QPSK	25	10	21.58	21.82	21.88	22.05	22.8	1	
10	QPSK	25	25	21.58	21.80	21.85	21.99			
10	QPSK	10	0	21.61	21.87	21.90	21.97			
10	16QAM	1	0	21.65	21.83	21.92	21.94			
10	16QAM	1	25	21.59	21.74	21.84	21.81	22.8	1	
10	16QAM	1	49	21.64	21.79	21.82	21.85			
10	16QAM	25	0	20.60	20.93	20.90	21.00			
10	16QAM	25	12	20.94	20.88	20.94	21.00			
10	16QAM	25	25	20.95	20.86	20.87	21.06	21.8	2	
10	16QAM	50	0	20.59	20.91	20.89	21.05			
10	64QAM	1	0	20.60	20.89	20.96	20.94			
10	64QAM	1	25	20.57	20.75	20.75	20.86			
10	64QAM	1	49	20.59	20.88	20.75	20.99	20.8	3	
10	64QAM	25	0	19.89	19.89	19.94	19.99			
10	64QAM	25	12	19.87	19.89	19.92	20.01			
10	64QAM	25	25	19.88	19.84	19.88	20.06			
10	256QAM	1	0	17.46	17.54	17.77	17.59	19.3	4.5	
10	256QAM	1	25	17.38	17.81	17.84	17.85			
10	256QAM	1	49	17.33	17.53	17.41	17.61			
10	256QAM	25	0	17.73	17.90	18.06	17.99			
10	256QAM	25	12	17.94	17.90	17.94	18.01	19.3	4.5	
10	256QAM	25	25	17.71	17.85	17.85	17.98			
10	256QAM	50	0	17.69	17.75	17.77	17.90			
Channel				66975	66425	66975	66425			
Frequency (MHz)				66975 <th>66975<th>66425<th>66975<th>Turn-up limit (dBm)</th><th>MPR (dB)</th><th></th></th></th></th>	66975 <th>66425<th>66975<th>Turn-up limit (dBm)</th><th>MPR (dB)</th><th></th></th></th>	66425 <th>66975<th>Turn-up limit (dBm)</th><th>MPR (dB)</th><th></th></th>	66975 <th>Turn-up limit (dBm)</th> <th>MPR (dB)</th> <th></th>	Turn-up limit (dBm)	MPR (dB)	
5	QPSK	1	0	22.54	22.82	22.87	22.89	23.8	0	
5	QPSK	1	12	22.45	22.64	22.75	22.81			
5	QPSK	1	24	22.54	22.73	22.68	22.95			
5	QPSK	12	0	21.62	21.87	21.93	21.98			
5	QPSK	12	7	21.60	21.87	21.87	21.99	22.8	1	
5	QPSK	12	13	21.55	21.78	21.83	22.00			
5	QPSK	25	0	21.61	21.86	21.92	21.98			
5	16QAM	1	0	21.63	21.79	22.02	21.90			
5	16QAM	1	12	21.60	21.68	21.79	21.80	22.8	1	
5	16QAM	1	24	21.62	21.79	21.89	21.94			
5	16QAM	12	0	20.67	20.90	20.94	20.99			
5	16QAM	12	7	20.65	20.91	20.98	21.06			
5	16QAM	12	13	20.67	20.84	20.95	20.99	21.8	2	
5	16QAM	25	0	20.65	20.88	20.88	21.00			
5	64QAM	1	0	20.61	20.83	20.89	21.05			
5	64QAM	1	12	20.61	20.81	20.76	20.89			
5	64QAM	1	24	20.61	20.90	20.75	20.91	20.8	3	
5	64QAM	12	0	19.88	19.90	19.93	20.04			
5	64QAM	12	7	19.85	19.90	19.92	19.92			
5	64QAM	12	13	19.64	19.88	19.97	20.01			
5	256QAM	1	0	17.63	17.91	17.89	17.97	1		



Reduced power for Hotspot on-UAT

Cell Name	Base Average Power (dBm)			Turn-up Limit	Frame Average Power (dBm)			Turn-up Limit
	198	199	201		198	199	201	
Frequency (MHz)	84.2	84.4	84.6	Limit	84.2	84.4	84.6	Limit
OSM-1 Tx total	30.58	30.63	30.77	32.00	21.53	21.63	21.77	23.00
OSM-1 Tx total	30.51	30.52	30.71	32.00	21.51	21.52	21.71	23.00
OPRS-1 Tx total	21.56	21.59	21.50	23.00	21.60	21.60	21.50	23.00
OPRS-1 Tx total	25.08	25.09	25.02	27.00	21.72	21.69	21.76	23.00
OPRS-1 Tx total	24.53	24.56	24.40	26.00	21.53	21.56	21.40	23.00
EDGE-1 Tx total	24.32	24.50	24.63	26.00	15.30	15.59	15.63	17.00
EDGE-2 Tx total	21.82	21.80	21.38	22.00	15.82	15.85	15.68	16.00
EDGE-3 Tx total	20.77	20.70	20.86	21.00	16.51	16.53	16.60	17.00
EDGE-4 Tx total	19.51	19.50	19.48	20.00	16.51	16.59	16.66	17.00

Cell Name	Base Average Power (dBm)			Turn-up Limit	Frame Average Power (dBm)			Turn-up Limit
	192	191	195	Limit	192	191	195	Limit
Frequency (MHz)	160.2	159.9	160.3	(dBm)	160.2	159.6	160.3	(dBm)
OSM-1 Tx total	25.96	26.11	25.95	27.10	16.96	17.11	16.95	18.10
OPRS-1 Tx total	25.46	25.43	25.40	27.40	17.46	17.43	17.40	18.40
OPRS-2 Tx total	25.46	25.50	25.07	24.60	17.46	17.52	17.07	18.60
OPRS-3 Tx total	21.00	22.05	22.10	23.00	17.73	17.62	17.84	18.04
OPRS-4 Tx total	20.40	20.61	20.52	21.80	17.40	17.61	17.52	18.80
EDGE-1 Tx total	21.70	21.73	21.76	23.10	12.70	12.73	12.76	14.10
EDGE-2 Tx total	20.41	20.42	20.53	22.00	14.41	14.42	14.53	16.00
EDGE-3 Tx total	19.36	19.39	19.46	20.00	15.10	15.12	15.20	16.04
EDGE-4 Tx total	18.06	18.10	18.07	19.00	15.06	15.10	15.07	16.00

Base Tx Channel	WCDMA-6			Turn-up Limit	WCDMA-1V			Turn-up Limit	WCDMA-V			Turn-up Limit
	5052	5050	5038	Limit	1312	1415	1513	Limit	4132	4135	4233	Limit
Frequency (MHz)	9662	9660	9666	(dBm)	1637	1638	1738	(dBm)	4367	4467	4468	(dBm)
WCDMA-6	1991.6	1990.0	1997.2	2012.6	1272.6	1272.6	1302.6	2012.6	3916.6	3916.6	3916.6	2012.6
WCDMA-1V	19.28	19.35	19.25	20.00	20.39	20.41	20.42	21.10	21.04	21.05	20.97	21.90
WCDMA-V	19.30	19.38	19.28	20.00	20.42	20.44	20.45	21.10	21.08	21.07	20.98	21.90
WCDMA-6	19.35	19.44	19.35	19.00	19.43	19.48	19.45	20.10	19.88	19.79	19.73	20.90
WCDMA-1V	19.31	19.47	19.35	19.00	19.40	19.55	19.48	20.10	19.88	19.81	19.74	20.90
WCDMA-V	17.51	17.86	17.80	18.00	19.97	19.99	19.97	19.60	19.40	19.31	19.16	20.40
WCDMA-6	17.85	17.62	17.82	18.00	19.00	18.99	18.94	19.60	19.39	19.30	19.20	20.40
WCDMA-1V	18.11	18.22	18.12	19.00	19.23	19.24	19.28	20.10	19.39	19.36	19.37	20.90
WCDMA-V	18.15	18.27	18.17	19.00	19.31	19.30	19.31	20.10	19.67	19.68	19.53	20.90
WCDMA-6	17.29	17.73	17.69	18.00	18.82	18.83	18.78	19.60	19.21	19.09	19.05	20.40
WCDMA-1V	17.40	17.78	17.60	18.00	18.86	18.77	18.72	19.60	19.22	19.11	18.97	20.40
WCDMA-V	18.34	18.40	18.35	19.00	19.49	19.57	19.52	20.10	19.88	19.79	19.77	20.90
WCDMA-6	17.36	17.45	17.38	18.00	18.45	18.55	18.48	19.10	17.97	17.79	17.73	18.90
WCDMA-1V	15.35	15.43	15.40	16.00	17.34	17.49	17.30	18.10	18.72	18.78	18.73	19.90
WCDMA-V	16.13	16.22	16.16	17.00	18.53	18.54	18.52	19.10	17.68	17.75	17.78	18.90
WCDMA-6	18.31	18.47	18.34	19.00	19.54	19.47	19.48	20.10	19.91	19.79	19.72	20.90
WCDMA-1V	15.92	16.01	15.91	16.00	18.21	18.24	18.11	17.60	17.54	17.60	17.55	18.40

Base Tx Channel	CDMA-BC0			Turn-up Limit	CDMA-BC1			Turn-up Limit	CDMA-BC10			Turn-up Limit
	1013	994	997	Limit	95	990	1075	Limit	478	504	596	Limit
Frequency (MHz)	841.7	836.32	848.31	(dBm)	161.20	1660	1696.70	(dBm)	817.9	820.5	823.1	(dBm)
CDMA-BC0	20.60	20.60	20.62	22.20	19.33	19.46	19.31	20.40	20.77	20.81	20.75	22.10
CDMA-BC1	20.63	20.65	20.61	22.20	19.32	19.38	19.31	20.40	20.76	20.82	20.73	22.10
CDMA-BC10	20.62	20.65	20.59	22.20	19.30	19.36	19.29	20.40	20.74	20.78	20.72	22.10
CDMA-BC10	20.60	20.63	20.57	22.20	19.29	19.35	19.27	20.40	20.72	20.76	20.70	22.10
RTWP-100kops	20.59	20.60	20.55	22.20	19.27	19.33	19.26	20.40	20.71	20.75	20.68	22.10
RTWP-100kops	20.57	20.59	20.53	22.20	19.26	19.32	19.24	20.40	20.69	20.72	20.67	22.10

Band 2 (1900MHz Band)									
Part 24E									
WT (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power High Ch./Freq.	Power Ch./Freq.	Turn-off Time (s)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	18.03	18.12	18.08			
20	QPSK	1	49	18.02	18.05	17.94		19.1	0
20	QPSK	1	99	17.82	17.83	17.81			
20	QPSK	50	0	18.02	18.10	18.06			
20	QPSK	50	24	17.94	18.04	17.96		19.1	0
20	QPSK	50	50	17.83	17.82	17.85			
20	QPSK	100	0	17.98	18.07	18.03			
20	16QAM	1	0	17.99	17.91	17.99		19.1	0
20	16QAM	1	49	17.84	18.04	18.03			
20	16QAM	1	99	17.97	18.01	18.01			
20	16QAM	50	0	17.85	18.02	17.99			
20	16QAM	50	24	17.96	18.03	17.98		19.1	0
20	16QAM	50	50	17.92	18.02	18.01			
20	16QAM	100	0	17.84	18.04	18.03			
20	16QAM	1	0	17.91	18.07	18.08			
20	16QAM	1	49	17.95	18.02	17.79		19.1	0
20	16QAM	50	0	18.09	17.98	18.01			
20	16QAM	50	24	18.01	18.02	17.91		18.8	0.3
20	16QAM	50	50	17.97	17.95	18.00			
20	256QAM	1	0	16.94	16.75	16.57		17.3	1.8
20	256QAM	1	49	16.94	16.95	16.91			
20	256QAM	1	99	16.93	16.92	16.99			
20	256QAM	50	0	16.79	16.83	16.75		17.3	1.8
20	256QAM	50	24	16.73	16.82	16.75			
20	256QAM	50	50	16.73	16.82	16.75			
20	256QAM	100	0	16.71	16.76	16.66			
Channel									
Frequency (MHz)									
15	QPSK	1	0	17.92	17.92	18.08		19.1	0
15	QPSK	1	31	17.78	17.78	17.83			
15	QPSK	1	74	17.78	17.64	17.74			
15	QPSK	36	0	17.98	18.08	17.88			
15	QPSK	36	36	17.86	17.84	17.76		19.1	0
15	QPSK	36	39	17.80	18.02	17.75			
15	QPSK	75	0	17.83	17.87	17.88			
15	16QAM	1	74	17.84	17.87	17.88		19.1	0
15	16QAM	1	37	17.81	17.64	18.01			
15	16QAM	1	74	17.84	17.88	17.98			
15	16QAM	36	36	17.84	17.85	17.83		19.1	0
15	16QAM	36	20	17.85	17.92	17.96			
15	16QAM	36	39	17.94	18.05	18.02			
15	16QAM	75	0	17.81	17.85	17.85			
15	16QAM	1	0	17.81	17.95	17.99			
15	16QAM	1	37	17.74	18.06	17.88		19.1	0
15	16QAM	1	74	17.85	17.85	17.85			
15	16QAM	36	0	18.05	17.98	17.79			
15	16QAM	36	20	17.79	17.80	17.72		18.8	0.3
15	16QAM	36	39	17.82	17.86	17.86			
15	16QAM	75	0	17.87	17.83	17.83			
15	256QAM	1	0	16.75	16.72	16.60		17.3	1.8
15	256QAM	37	0	16.85	16.72	16.66			
15	256QAM	1	74	16.85	16.72	16.66		17.3	1.8
15	256QAM	36	0	16.77	16.88	16.54			
15	256QAM	36	20	16.51	16.65	16.59			
15	256QAM	36	39	16.55	16.68	16.65			
15	256QAM	75	0	16.46	16.60	16.60			
Channel									
Frequency (MHz)									
10	QPSK	1	0	17.85	17.82	17.95		19.1	0
10	QPSK	1	31	17.71	17.71	17.81			
10	QPSK	1	49	17.79	17.71	17.90			
10	QPSK	25	0	17.70	17.87	18.02			
10	QPSK	36	36	17.82	17.78	17.86		19.1	0
10	QPSK	25	26	17.85	17.93	17.70			
10	QPSK	50	0	17.92	18.02	17.82			
10	16QAM	1	49	18.01	17.82	17.85			
10	16QAM	25	0	17.88	17.88	17.85			
10	16QAM	25	12	17.85	18.03	17.74		19.1	0
10	16QAM	25	25	17.75	17.95	17.78			
10	16QAM	50	0	17.82	17.74	17.71			
10	16QAM	1	0	17.80	18.03	17.86			
10	16QAM	1	25	18.00	17.96	17.74		19.1	0
10	16QAM	1	49	17.81	17.85	17.85			
10	16QAM	25	0	18.03	17.72	17.96			
10	16QAM	25	12	18.02	17.90	17.73		18.8	0.3
10	16QAM	25	25	17.70	17.80	17.81			
10	16QAM	50	0	18.02	17.97	17.97			
10	256QAM	1	0	16.03	16.58	16.62		17.3	1.8
10	256QAM	1	25	16.05	16.57	16.55			
10	256QAM	1	49	16.05	16.57	16.59			
10	256QAM	25	0	16.00	16.71	16.76		17.3	1.8
10	256QAM	25	12	15.87	16.68	16.69			
10	256QAM	25	25	15.73	16.77	16.73			
10	256QAM	50	0	15.53	16.64	16.47			
Channel									
Frequency (MHz)									
5	QPSK	1	0	17.82	18.05	17.84		19.1	0
5	QPSK	1	14	17.72	17.99	17.73		19.1	0
5	QPSK	1	24	17.70	17.78	17.84			
5	QPSK	12	0	17.73	17.85	17.98			
5	QPSK	12	7	17.87	17.82	17.89		19.1	0
5	QPSK	12	13	17.80	18.00	18.03			
5	QPSK	25	0	17.89	17.89	17.82			
5	16QAM	1	0	17.82	17.76	18.04		19.1	0
5	16QAM	1	12	17.83	18.00	18.02			
5	16QAM	1	24	17.84	17.97	17.83			
5	16QAM	12	0	17.91	17.81	17.85			
5	16QAM	12	7	17.89	18.04	17.89		19.1	0
5	16QAM	12	13	17.90	18.01	17.86			
5	16QAM	25	0	17.86	17.77	17.82			
5	16QAM	1	0	17.89	17.82	17.91			
5	16QAM	1	12	17.94	17.78	17.89		19.1	0
5	16QAM	1	24	17.84	17.71	17.83			
5	16QAM	12	0	17.97	17.84	18.06			
5	16QAM	12	7	17.86	17.85	17.74		18.8	0.3
5	16QAM	12	13	17.85	17.75	18.09			
5	16QAM	25	0	18.02	17.83	17.82			
5	256QAM	1	0	16.06	16.59	16.65		17.3	1.8
5	256QAM	1	12	15.70	16.85	16.85			
5	256QAM	1	24	15.95	16.77	16.98			
5	256QAM	12	0	16.00	16.82	16.82		17.3	1.8
5	256QAM	12	7	15.75	16.88	16.98			
5	256QAM	12	13	15.75	16.88	16.98			
5	256QAM	25	0	15.58	16.83	16.84		17.3	1.8
5	256QAM	25	0	15.58	16.83	16.84			
Channel									
Frequency (MHz)									
1807	QPSK	1	0	18.07	18.09	18.03		19.1	0
1807	QPSK	1	8	18.07	18.09	18.03			
1807	QPSK	1	3	17.75	17.91	17.88			
1807	QPSK	1	5	17.82	17.84	17.82		19.1	0
1807	QPSK	3	0	17.73	17.85	17.85			
1807	QPSK	3	1	17.64	18.02	17.81			
1807	QPSK	3	3	17.85	17.80	17.74		19.1	0
1807	QPSK	3	6	17.86	17.86	17.86			
1807	QPSK	3	9	17.85	17.85	17.85			
1807	QPSK	3	12	17.85	17.85	17.85			
1807	QPSK	3	15	17.85	17.85	17.85			
1807	QPSK	3	18	17.85	17.85	17.85			
1807	QPSK	3	21	17.85	17.85	17.85			
1807	QPSK	3	24	17.85	17.85	17.85			
1807	QPSK	3	27	17.85	17.85	17.85			
1807	QPSK	3	30	17.85	17.85	17.85			
1807	QPSK	3	33	17.85	17.85	17.85			
1807	QPSK	3	36	17.85	17.85	17.85			
1807	QPSK	3	39	17.85	17.85	17.85			
1807	QPSK	3	42	17.85	17.85	17.85			
1807	QPSK	3	45	17.85	17.85	17.85			
1807	QPSK	3	48	17.85	17.85	17.85			
1807	QPSK	3	51	17.85	17.85	17.85			
1807	QPSK	3	54	17.85	17.85	17.85			
1807	QPSK	3	57	17.85	17.85	17.85			
1807	QPSK	3	60	17.85	17.85	17.85			
1807	QPSK	3	63	17.85	17.85	17.85			
1807	QPSK	3	66	17.85	17.85	17.85			
1807	QPSK	3	69	17.85	17.85	17.85			
1807	QPSK	3	72	17.85	17.85	17.85			
1807	QPSK	3	75	17.85	17.85	17.85			
1807	QPSK	3	78	17.85	17.85	17.85			
1807	QPSK	3	81	17.85	17.85	17.85			
1807	QPSK	3	84	17.85	17.85	17.85			
1807	QPSK	3	87	17.85	17.85	17.85			
1807	QPSK	3	90	17.85	17.85	17.85			
1807	QPSK	3	93	17.85	17.85	17.85			
1807	QPSK	3	96	17.85	17.85	17.85			
1807	QPSK	3	99	17.85	17.85	17.85			
1807	QPSK	3	102	17.85	17.85	17.85			
1807	QPSK	3	105	17.85	17.85	17.85			
1807	QPSK	3	108	17.85	17.85	17.85			
1807	QPSK	3	111	17.85	17.85	17.85			
1807	QPSK	3	114	17.85	17.85	17.85			
1807	QPSK	3	117	17.85	17.85	17.85			
1807	QPSK	3	120	17.85	17.85	17.85			
1807	QPSK	3	123	17.85	17.85	17.85			
1807	QPSK	3	126	17.85	17.85	17.85			



Band 7 (2600MHz Band)									
Part 27									
RF (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power High Ch./Freq.	Power High Ch./Freq.	Turn-up limit (dBm)	MPE (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	15.28	15.47	15.32			
20	QPSK	1	49	15.33	15.44	15.38	16.5	0	
20	QPSK	1	99	15.35	15.67	15.73			
20	QPSK	50	0	15.45	15.53	15.56			
20	QPSK	50	24	15.50	15.66	15.67	16.5	0	
20	QPSK	50	50	15.48	15.65	15.65			
20	QPSK	100	0	15.41	15.62	15.64			
20	16QAM	1	0	15.50	15.55	15.57	16.5	0	
20	16QAM	1	49	15.56	15.55	15.58			
20	16QAM	1	99	15.56	15.60	15.54			
20	16QAM	50	0	15.51	15.68	15.60			
20	16QAM	50	24	15.57	15.60	15.67	16.5	0	
20	16QAM	50	50	15.50	15.51	15.52			
20	16QAM	100	0	15.54	15.58	15.53			
20	16QAM	1	49	15.48	15.58	15.52	16.5	0	
20	16QAM	1	99	15.43	15.53	15.56			
20	16QAM	50	0	15.48	15.59	15.57			
20	16QAM	50	24	15.51	15.69	15.64	16.5	0	
20	16QAM	50	50	15.51	15.68	15.60			
20	16QAM	100	0	15.51	15.59	15.58			
20	256QAM	1	0	15.19	15.48	15.39			
20	256QAM	1	49	15.29	15.52	15.47	16.3	0.2	
20	256QAM	1	99	15.35	15.39	15.30			
20	256QAM	50	0	15.13	15.27	15.19			
20	256QAM	50	24	15.21	15.39	15.30			
20	256QAM	50	50	15.27	15.28	15.22	16.3	0.2	
20	256QAM	100	0	15.23	15.32	15.19			
Channel									
Frequency (MHz)									
15	QPSK	1	0	15.13	15.42	15.28	16.5	0	
15	QPSK	1	27	15.39	15.32	15.30			
15	QPSK	1	74	15.23	15.65	15.50			
15	QPSK	36	0	15.43	15.28	15.38			
15	QPSK	36	20	15.21	15.43	15.35	16.5	0	
15	QPSK	36	99	15.30	15.58	15.48			
15	QPSK	75	0	15.25	15.48	15.51			
15	16QAM	1	0	15.51	15.52	15.41	16.5	0	
15	16QAM	1	37	15.19	15.22	15.48			
15	16QAM	1	74	15.33	15.47	15.21			
15	16QAM	36	0	15.32	15.42	15.50			
15	16QAM	36	20	15.61	15.60	15.42	16.5	0	
15	16QAM	36	99	15.42	15.09	15.31			
15	16QAM	75	0	15.32	15.40	15.12			
15	16QAM	1	0	15.32	15.40	15.12	16.5	0	
15	16QAM	1	37	15.46	15.29	15.24			
15	16QAM	1	74	15.38	15.24	15.31			
15	16QAM	36	0	15.37	15.59	15.38			
15	16QAM	36	20	15.51	15.69	15.61	16.5	0	
15	16QAM	36	99	15.38	15.64	15.46			
15	16QAM	75	0	15.34	15.47	15.39			
15	256QAM	1	0	15.00	15.38	15.15			
15	256QAM	1	27	15.12	15.15	15.16	16.3	0.2	
15	256QAM	1	74	15.40	15.19	15.15			
15	256QAM	36	0	15.14	15.19	15.14			
15	256QAM	36	20	15.29	15.18	15.32	16.3	0.2	
15	256QAM	36	99	15.16	15.14	15.12			
15	256QAM	75	0	15.04	15.30	15.08			
Channel									
Frequency (MHz)									
10	QPSK	1	0	15.19	15.17	15.30	16.5	0	
10	QPSK	1	49	15.33	15.19	15.33			
10	QPSK	1	99	15.33	15.50	15.66			
10	QPSK	25	0	15.38	15.32	15.34			
10	QPSK	25	25	15.38	15.44	15.46	16.5	0	
10	QPSK	50	0	15.23	15.39	15.38			
10	16QAM	1	0	15.15	15.24	15.31	16.5	0	
10	16QAM	1	25	15.37	15.32	15.38			
10	16QAM	1	49	15.48	15.45	15.24			
10	16QAM	25	0	15.22	15.36	15.66			
10	16QAM	25	12	15.34	15.61	15.47	16.5	0	
10	16QAM	25	25	15.34	15.69	15.68			
10	16QAM	50	0	15.23	15.63	15.59			
10	16QAM	1	0	15.17	15.37	15.36			
10	16QAM	1	25	15.43	15.26	15.19	16.5	0	
10	16QAM	1	49	15.34	15.13	15.36			
10	16QAM	25	0	15.34	15.54	15.37			
10	16QAM	25	12	15.29	15.60	15.44	16.5	0	
10	16QAM	25	25	15.49	15.44	15.67			
10	16QAM	50	0	15.47	15.38	15.63			
10	256QAM	1	0	15.24	15.51	15.36			
10	256QAM	1	25	15.10	15.26	15.22	16.3	0.2	
10	256QAM	1	49	15.23	15.24	15.10			
10	256QAM	25	0	15.10	15.04	15.10			
10	256QAM	25	12	15.29	15.18	15.32	16.3	0.2	
10	256QAM	25	25	15.31	15.06	15.20			
10	256QAM	50	0	15.17	15.12	15.14			
Channel									
Frequency (MHz)									
5	QPSK	1	0	15.08	15.23	15.24	16.5	0	
5	QPSK	1	19	15.33	15.19	15.33			
5	QPSK	1	24	15.19	15.60	15.67			
5	QPSK	12	0	15.33	15.26	15.42			
5	QPSK	12	7	15.38	15.54	15.53	16.5	0	
5	QPSK	12	18	15.37	15.62	15.45			
5	QPSK	25	0	15.35	15.36	15.49			
5	16QAM	1	0	15.64	15.20	15.33	16.5	0	
5	16QAM	1	12	15.28	15.19	15.65			
5	16QAM	1	24	15.44	15.44	15.09			
5	16QAM	12	0	15.32	15.61	15.62	16.5	0	
5	16QAM	12	7	15.45	15.61	15.60			
5	16QAM	12	18	15.27	15.27	15.34			
5	16QAM	25	0	15.34	15.39	15.48			
5	16QAM	1	0	15.26	15.19	15.28	16.5	0	
5	16QAM	1	12	15.37	15.10	15.19			
5	16QAM	1	24	15.38	15.13	15.28			
5	16QAM	12	0	15.48	15.36	15.49	16.5	0	
5	16QAM	12	7	15.50	15.66	15.63			
5	16QAM	12	18	15.28	15.51	15.68			
5	16QAM	25	0	15.45	15.39	15.61			
5	256QAM	1	12	15.03	15.36	15.29	16.3	0.2	
5	256QAM	1	24	15.40	15.39	15.17			
5	256QAM	12	0	15.18	15.09	15.16			
5	256QAM	12	7	15.19	15.34	15.09	16.3	0.2	
5	256QAM	12	18	15.28	15.32	15.17			
5	256QAM	25	0	15.14	15.24	15.16			

Band 12 (700MHz Low Band)									
Part 27 (only on channel required)									
RF (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power High Ch./Freq.	Power High Ch./Freq.	Turn-up limit (dBm)	MPE (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	0	19.48	19.42	19.52			
10	QPSK	1	25	19.45	19.52	19.48	20.7	0	
10	QPSK	1	49	19.67	19.57	19.52			
10	QPSK	25	0	19.41	19.41	19.44			
10	QPSK	25	12	19.47	19.45	19.42	20.7	0	
10	QPSK	25	25	19.46	19.41	19.45			
10	QPSK	50	0	19.49	19.39	19.42			
10	16QAM	1	0	19.54	19.57	19.40	20.7	0	
10	16QAM	1	25	19.58	19.56	19.57			
10	16QAM	1	49	19.54	19.58	19.51			
10	16QAM	25	0	19.52	19.51	19.50	20.7	0	
10	16QAM	25	12	19.52	19.52	19.50			
10	16QAM	25	25	19.51	19.54	19.59			
10	16QAM	50	0	19.50	19.58	19.40			
10	16QAM	1	25	19.53	19.51	19.58	20.7	0	
10	16QAM	1	49	19.54	19.52	19.53			
10	16QAM	25	0	19.54	19.58	19.59			
10	16QAM	25	12	19.53	19.56	19.57	20.3	0.4	
10	16QAM	50	0	19.55	19.57	19.55			
10	256QAM	1	0	17.80	17.47	17.63			
10	256QAM	1	24	17.63	17.68	17.50	18.8	1.9	
10	256QAM	1	49	17.64	17.47	17.50			
10	256QAM	25	0	17.51	17.48	17.51			
10	256QAM	25	7	17.63	17.48	17.50	18.8	1.9	
10	256QAM	25	25	17.54	17.43	17.44			
10	256QAM	50	0	17.50	17.44	17.43			
Channel									
Frequency (MHz)									
5	QPSK	1	0	19.43	19.35	19.52	20.7	0	
5	QPSK	1	12	19.47	19.45	19.45			
5	QPSK	1	25	19.48	19.48	19.48	20.7	0	
5	QPSK	1	49	19.68	19.58	19.58			
5	QPSK	12	7	19.45	19.43	19.38	20.7	0	
5	QPSK	25	0	19.43	19.43	19.43			
5	QPSK	25	0	19.39	19.39	19.39			
5	16QAM	1	0	19.54	19.61	19.38	20.7	0	
5	16QAM	1	12	19.53	19.53	19.38			
5	16QAM	1	24	19.54	19.53	19.40	20.7	0	
5	16QAM	12	0	19.51	19.39	19.38			
5	16QAM	12	13	19.52	19.47	19.38	20.7	0	
5	16QAM	12	13	19.53	19.29	19.34			
5	16QAM	25	0	19.46	19.51	19.38			
5	16QAM	25	0	19.43	19.50	19.38	20.3	0.4	
5	16QAM	1	12	19.56	19.44	19.40			
5	16QAM	1	24	19.57	19.46	19.36	20.7	0	
5	16QAM	12	7	19.48	19.48	19.36			
5	16QAM	12	7	19.49	19.43	19.36	20.3	0.4	
5	16QAM	12	7	19.45	19.31	19.35			
5	256QAM	1	0	17.51	17.50	17.47			
5	256QAM	1	12	17.66	17.58	17.41	18.8	1.9	
5	256QAM	1	25	17.52	17.52	17.41			
5	256QAM	12	0	17.37	17.45	17.47			
5	256QAM	12	13	17.41	17.45	17.42	18.8	1.9	
5	256QAM	25	0	17.38	17.39	17.44			
Channel									
Frequency (MHz)									
3	QPSK	1	0	19.41	19.18	19.30	20.7	0	
3	QPSK	1	8	19.28	19.40	19.24			
3	QPSK	1	16	19.47	19.43	19.37	20.7	0	
3	QPSK	8	0	19.33	19.13	19.26			
3	QPSK	8	8	19.44	19.32	19.22			
3	QPSK	8	16	19.47	19.43	19.37	20.7	0	
3	QPSK	16	0	19.34	19.19	19.26			
3	QPSK	16	8	19.42	19.41	19.35	20.7	0	
3	16QAM	1	0	19.55	19.31	19.59	20.7	0	
3	16QAM	1	14	19.47	19.69	19.32			
3	16QAM	1	28	19.47	19.47	19.32	20.7	0	
3	16QAM	8	0	19.55	19.35	19.54			
3	16QAM	8	7	19.26	19.34	19.33	20.7	0	
3	16QAM	8	14	19.42	19.53	19.42			
3	16QAM	1	0	19.53	19.68	19.37			
3	16QAM	1	8	19.51	19.44	19.49	20.7	0	
3	16QAM	1	16	19.42	19.53	19.46			
3	16QAM	8	0	19.42	19.38	19.46			
3	16QAM	8	8	19.49	19.56	19.36	20.3	0.4	
3	16QAM	8	16	19.49	19.49	19.36			
3	256QAM	1	0	19.43	19.50	19.32			
3	256QAM	1	16	17.49	17.48	17.54			
3	256QAM	1	16	17.47	17.49	17.50	18.8	1.9	
3	256QAM	1	16	17.67	17.53	17.51			
3	256QAM	8	0	17.86	17.81	17.81			
3	256QAM	8	8	17.82	17.81	17.81	18.8	1.9	
3	256QAM	8	7	17.29	17.32	17.47			
3	256QAM	16	0	17.45	17.26	17.45			
Channel									
Frequency (MHz)									
1.4	QPSK	1	0	19.38	19.20	19.36	20.7	0	
1.4	QPSK	1	8	19.25	19.46	19.43			
1.4	QPSK	1	16	19.46	19.57	19.25	20.7	0	
1.4	QPSK	8	0	19.28	19.37	19.31			
1.4	QPSK	8	8	19.29	19.24	19.37	20.7	0	
1.4	QPSK	3	0	19.30	19.60	19.42			
1.4	QPSK	8	0	19.39	19.39	19.25			
1.4	QPSK	8	8	19.33	19.39	19.34	20.7	0	
1.4	16QAM	1	0	19.50	19.49	19.50			
1.4	16QAM	1	8	19.47	19.39	19.49			
1.4	16QAM	1	16	19.53	19.39	19.38	20.7	0	
1.4	16QAM	3	0	19.42	19.61	19.38			
1.4	16QAM	8	0	19.39	19.39	19.25			
1.4	16QAM	8	8	19.39	19.31	19.48	20.7	0	
1.4	16QAM	1	0	19.30	19.33	19.38			
1.4	16QAM	1	8	19.43	19.43	19.38	20.7	0	
1.4	16QAM	3	0	19.57	19.47	19.54			
1.4	16QAM	3	8	19.43	19.41	19.54			
1.4	16QAM	3	16	19.39	19.41	19.38			
1.4	16QAM	8	0	19.50	19.62	19.50	20.3	0.4	
1.4	16QAM	8	8	17.32	17.32	17.42			
1.4	256QAM	1	0	17.40	17.36	17.27			
1.4	256QAM	1	16	17.60	17.51	17.52			
1.4	256QAM	1	16	17.60	17.51	17.52	18.8	1.9	
1.4	256QAM	3	0	17.42	17.28	17.33			
1.4	256QAM	3	1	17.47	17.50	17.28			
1.4	256QAM	3	3	17.29	17.26	17.33			
1.4	256QAM	3	7	17.24	17.24	17.33	18.8	1.9	



Band 17 (700MHz Band) Part 27H(only on channel required)										
RF (MHz)	Modulation	RF Bw	RF Offset	Power Ch / Freq 20W	Power Ch / Freq 23W	Power Ch / Freq 25W	Turn-up init (dBm)	MPE (dB)		
Channel Frequency (MHz)										
10	QPSK	1	0	19.19	19.25	19.25				
10	QPSK	1	25	19.34	19.36	19.33	20.7	0		
10	QPSK	1	49	19.49	19.29	19.27				
10	QPSK	25	0	19.35	19.36	19.37				
10	QPSK	25	12	19.48	19.42	19.43	20.7	0		
10	QPSK	25	25	19.41	19.46	19.42				
10	QPSK	50	0	19.42	19.37	19.38				
10	16QAM	1	0	19.38	19.37	19.35				
10	16QAM	1	25	19.37	19.36	19.31	20.7	0		
10	16QAM	1	49	19.31	19.31	19.32				
10	16QAM	25	0	19.36	19.27	19.29				
10	16QAM	25	12	19.24	19.24	19.25	20.7	0		
10	16QAM	25	25	19.29	19.28	19.27				
10	16QAM	50	0	19.28	19.23	19.26				
10	16QAM	1	0	19.24	19.24	19.27				
10	16QAM	1	25	19.32	19.33	19.32	20.7	0		
10	16QAM	1	49	19.22	19.21	19.26				
10	16QAM	25	0	19.23	19.36	19.31				
10	16QAM	25	12	19.29	19.29	19.29	20.3	0.4		
10	16QAM	25	25	19.25	19.31	19.33				
10	16QAM	50	0	19.35	19.33	19.32				
10	256QAM	1	0	17.47	17.34	17.50	18.8	1.9		
10	256QAM	1	25	17.50	17.46	17.37				
10	256QAM	1	49	17.51	17.34	17.42				
10	256QAM	25	0	17.38	17.33	17.38				
10	256QAM	25	12	17.40	17.42	17.32	18.8	1.9		
10	256QAM	25	25	17.41	17.39	17.31				
10	256QAM	50	0	17.37	17.31	17.36				
Channel Frequency (MHz)										
5	QPSK	1	0	19.14	19.02	19.06	20.7	0		
5	QPSK	1	24	19.30	19.06	19.17				
5	QPSK	12	0	19.27	19.32	19.33				
5	QPSK	12	7	19.26	19.21	19.22	20.7	0		
5	QPSK	12	13	19.24	19.21	19.23				
5	QPSK	25	0	19.29	19.22	19.08				
5	16QAM	1	0	19.37	19.36	19.37				
5	16QAM	1	12	19.35	19.33	19.31	20.7	0		
5	16QAM	1	24	19.31	19.33	19.30				
5	16QAM	12	0	19.30	19.08	19.32				
5	16QAM	12	7	19.11	19.01	19.00	20.7	0		
5	16QAM	12	13	19.13	19.16	19.17				
5	16QAM	25	0	19.15	19.06	19.20				
5	16QAM	25	0	19.17	19.03	19.18				
5	16QAM	1	12	19.31	19.28	19.21	20.7	0		
5	16QAM	1	24	19.15	19.22	19.26				
5	16QAM	12	0	19.10	19.14	19.34				
5	16QAM	12	7	19.22	19.21	19.30	20.3	0.4		
5	16QAM	12	13	19.00	19.11	19.17				
5	16QAM	25	0	19.22	19.07	19.24				
5	256QAM	1	0	17.47	17.13	17.36	18.8	1.9		
5	256QAM	1	24	17.47	17.36	17.24				
5	256QAM	12	0	17.37	17.09	17.41				
5	256QAM	12	7	17.38	17.46	17.18	18.8	1.9		
5	256QAM	12	13	17.29	17.22	17.19				
5	256QAM	25	0	17.21	17.26	17.36				

Band 25 (100MHz Band) Part 24E										
RF (MHz)	Modulation	RF Bw	RF Offset	Power Ch / Freq 20W	Power Ch / Freq 23W	Power Ch / Freq 25W	Turn-up init (dBm)	MPE (dB)		
Channel Frequency (MHz)										
20	QPSK	1	0	18.19	18.30	18.19				
20	QPSK	1	49	18.21	18.05	18.21	19.1	0		
20	QPSK	1	99	18.07	18.18	18.07				
20	QPSK	50	0	18.13	18.21	18.17				
20	QPSK	50	24	18.24	18.28	18.23	19.1	0		
20	QPSK	50	50	18.19	18.20	18.13				
20	QPSK	100	0	18.24	18.25	18.19				
20	16QAM	1	0	18.13	18.20	18.15	19.1	0		
20	16QAM	1	49	18.16	18.13	18.10				
20	16QAM	1	99	18.29	18.13	18.27				
20	16QAM	50	24	18.27	18.21	18.27	19.1	0		
20	16QAM	50	50	18.21	18.21	18.26				
20	16QAM	100	0	18.17	18.12	18.29				
20	16QAM	1	0	18.17	18.12	18.29				
20	16QAM	1	49	18.14	18.10	18.12	19.1	0		
20	16QAM	1	99	18.16	18.16	18.16				
20	16QAM	50	0	18.17	18.25	18.23				
20	16QAM	50	24	18.12	18.29	18.21	18.8	0.3		
20	16QAM	50	50	18.26	18.19	18.20				
20	16QAM	100	0	18.21	18.16	18.23				
20	256QAM	1	0	16.89	16.83	16.87	17.3	1.8		
20	256QAM	1	49	16.92	16.90	16.87				
20	256QAM	1	99	16.87	16.91	16.79				
20	256QAM	50	0	16.82	16.77	16.78				
20	256QAM	50	24	16.78	16.81	16.71	17.3	1.8		
20	256QAM	50	50	16.78	16.72	16.77				
Channel				20115	20140	20115	Turn-up init (dBm)	MPE (dB)		
15	QPSK	1	0	17.91	18.26	18.16	19.1	0		
15	QPSK	1	49	17.93	17.79	17.93				
15	QPSK	1	74	18.10	18.03	17.88				
15	QPSK	36	0	17.98	18.20	18.12	19.1	0		
15	QPSK	36	24	18.07	18.27	18.16				
15	QPSK	36	39	18.07	18.23	17.83				
15	QPSK	75	0	18.05	18.23	18.08				
15	16QAM	1	0	18.07	18.27	18.16	19.1	0		
15	16QAM	1	37	18.14	18.08	18.00				
15	16QAM	1	74	18.24	17.92	18.24				
15	16QAM	36	24	18.07	18.20	18.20	19.1	0		
15	16QAM	36	39	18.07	18.23	18.13				
15	16QAM	75	0	18.09	18.07	18.10				
15	16QAM	75	24	18.16	18.08	18.11				
15	16QAM	1	0	17.94	17.95	18.17				
15	16QAM	1	37	18.01	17.85	17.87	19.1	0		
15	16QAM	1	74	17.99	17.81	17.82				
15	16QAM	36	0	18.08	18.13	18.22				
15	16QAM	36	20	18.09	18.10	18.07	18.8	0.3		
15	16QAM	36	39	18.02	18.09	18.14				
15	16QAM	75	0	18.14	18.18	18.17				
15	16QAM	75	24	18.22	18.24	18.13				
15	16QAM	75	25	17.98	18.11	18.04				
15	256QAM	1	0	16.77	16.90	16.83	17.3	1.8		
15	256QAM	1	37	16.81	16.92	16.79				
15	256QAM	1	74	16.79	16.73	16.82				
15	256QAM	36	0	16.80	16.71	16.87				
15	256QAM	36	39	16.75	16.78	16.74	17.3	1.8		
15	256QAM	75	0	16.76	16.68	16.66				
15	256QAM	50	0	16.75	16.58	16.56				
Channel				20099	20100	20099	Turn-up init (dBm)	MPE (dB)		
10	QPSK	1	0	18.01	18.18	18.04	19.1	0		
10	QPSK	1	24	18.15	18.13	18.07				
10	QPSK	1	49	17.99	17.93	18.04				
10	QPSK	25	0	17.89	18.18	18.10	19.1	0		
10	QPSK	25	12	17.97	18.27	18.16				
10	QPSK	25	25	18.15	18.10	18.12				
10	QPSK	50	0	17.97	18.20	18.18				
10	16QAM	1	0	18.05	18.16	18.20	19.1	0		
10	16QAM	1	25	18.00	18.19	17.88				
10	16QAM	1	49	18.23	18.17	18.11				
10	16QAM	25	0	18.10	18.17	18.14	19.1	0		
10	16QAM	25	12	18.22	18.24	18.13				
10	16QAM	25	25	17.98	18.11	18.04				
10	16QAM	50	0	18.17	18.18	18.20				
10	16QAM	1	0	18.03	18.16	18.16				
10	16QAM	1	25	18.05	18.05	18.15	19.1	0		
10	16QAM	1	49	18.10	17.93	18.04				
10	16QAM	25	0	18.08	18.08	18.08				
10	16QAM	25	12	18.08	18.17	18.20	18.8	0.3		
10	16QAM	25	25	18.21	18.07	18.19				
10	16QAM	50	0	18.22	18.20	18.14				
10	256QAM	1	0	16.84	16.85	16.84	17.3	1.8		
10	256QAM	1	25	16.83	16.90	16.88				
10	256QAM	1	49	16.81	16.82	16.80				
10	256QAM	25	0	16.84	16.82	16.83				
10	256QAM	25	12	16.76	16.79	16.76	17.3	1.8		
10	256QAM	25	25	16.56	16.56	16.64				
10	256QAM	50	0	16.74	16.76	16.66				
Channel				18825	18860	18825	Turn-up init (dBm)	MPE (dB)		
5	QPSK	1	0	17.89	18.15	18.01	19.1	0		
5	QPSK	1	24	18.05	17.85	17.89				
5	QPSK	1	49	18.08	18.08	18.02				
5	QPSK	12	0	18.02	18.07	17.87	19.1	0		
5	QPSK	12	12	18.13	18.23	18.01				
5	QPSK	12	18	18.17	18.13	17.97				
5	QPSK	20	0	18.18	18.05	18.05				
5	QPSK	20	12	18.03	18.03	17.86				
5	QPSK	1	0	18.03	18.16	18.16				
5	QPSK	1	12	18.12	18.14	18.00	19.1	0		
5	QPSK	1	24	18.06	18.10	18.11				
5	QPSK	12	0	18.01	18.01	17.86				
5	QPSK	12	7	18.04	18.14	18.04	19.1	0		
5	QPSK	12	18	18.23	18.20	18.04				
5	QPSK	20	0	18.13	18.04	18.22				
5	QPSK	1	0	17.96	18.04	18.04				
5	QPSK	1	12	18.03	17.95	17.89	19.1	0		
5	QPSK	1	24	18.17	18.07	18.07				
5	QPSK	12	0	18.19	18.09	18.27				
5	QPSK	12	7	17.94	18.11	17.91	18.8	0.3		
5	QPSK	12	18	18.11	18.01	18.01				
5	QPSK	20	0	18.19	18.01	18.06				
5	256QAM	1	0	16.85	16.84	16.71	17.3	1.8		
5	256QAM	1	12	16.86	16.86	16.73				
5	256QAM	1	24	16.74	16.82	16.85				
5	256QAM	12	0	16.87	16.84	16.85				
5	256QAM	12	18	16.76	16.77	16.76	17.3	1.8		
5	256QAM	12	18	16.70	16.76	16.72				
5	256QAM	20	0	16.71	16.64	16.62				
Channel				18815	18860	18815	Turn-up init (dBm)	MPE (dB)		
3	QPSK	1	0	17.92	18.20	18.09	19.1	0		
3	QPSK	1	49	18.05	17.91	18.05				
3	QPSK	1	74	18.18	18.08	18.08				
3	QPSK	8	0	17.97	18.20	18.21	19.1	0		
3	QPSK	15	0	18.09	18.20	18.02				
3	QPSK	15	8	18.20	18.20	18.09				
3	QPSK	1	0	17.91	18.06	17.99	19.1	0		
3	QPSK	1	14	18.21	18.08	18.16				
3	QPSK	1	49	18.06	18.16	18.22				
3	QPSK	1	74	17.98	18.11	18.22				
3	QPSK	15	0	18.18	17.95	18.00				
3	QPSK	1	0	17.94	18.12	18.21				
3	QPSK	1	8	17.97	17.89	18.07	19.1	0		
3	QPSK	1	14	18.21	18.08	18.16				
3	QPSK	1	49	18.06	18.16	18.22				
3	QPSK	1	74	17.98	18.11	18.22				
3	QPSK	15	0	18.18	17.95	18.00				
3	QPSK	1	0	17.94	18.12	18.21				
3	QPSK	1	8	17.97	17.89	18.07	19.1	0		
3	QPSK	1	14	18.21	18.08	18.16				
3	QPSK	1	49	18.06	18.16	18.22				
3	QPSK	1	74	17.98	18.11	18.22				
3	QPSK	15	0	18.18	17.95	18.00				
3	QPSK	1	0	17.94	18.12	18.21				
3	QPSK	1	8	17.97	17.89	18.07	19.1	0		
3	QPSK	1	14	18.21	18.08	18.16				
3	QPSK	1	49	18.06	18.16	18.22				
3	QPSK	1	74	17.98	18.11	18.22				
3	QPSK	15	0	18.18	17.95	18.00				
3	QPSK	1	0	17.94	18.12	18.21				
3	QPSK	1	8	17.97	17.89	18.07	19.1	0		
3	QPSK	1	14	18.21	18.08	18.16				
3	QPSK	1	49	18.06	18.16	18.22				
3	QPSK	1	74	17.98	18.11	18.22				
3	QPSK	15	0	18.18	17.95	18.00				
3	QPSK	1	0	17						

Band 30									
NR (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Frac.	Power High Ch./Frac.	Power High Ch./Frac.	Time-up limit (dB)	MPR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	0	15.08			19	0	
10	QPSK	1	25	17.75					
10	QPSK	1	49	17.81					
10	QPSK	25	0	17.50					
10	QPSK	25	12	17.50			19	0	
10	QPSK	25	25	17.50					
10	QPSK	50	0	17.50					
10	16QAM	1	0	17.50			19	0	
10	16QAM	1	25	17.50					
10	16QAM	1	49	17.50					
10	16QAM	25	12	17.50			19	0	
10	16QAM	25	25	17.50					
10	16QAM	50	0	17.50					
10	64QAM	1	0	17.89					
10	64QAM	1	25	17.84			19	0	
10	64QAM	1	49	17.91					
10	64QAM	25	0	17.47					
10	64QAM	25	12	17.37			18.5	0.5	
10	64QAM	25	25	17.34					
10	64QAM	50	0	17.33					
10	256QAM	1	0	15.58			17.3	1.7	
10	256QAM	1	25	15.73					
10	256QAM	1	49	15.64					
10	256QAM	25	0	15.48			17.3	1.7	
10	256QAM	25	12	15.63					
10	256QAM	25	25	15.58					
10	256QAM	50	0	15.49					
Channel									
Frequency (MHz)									
5	QPSK	1	0	17.82	17.91	17.92	19	0	
5	QPSK	1	12	17.76	17.80	17.88			
5	QPSK	1	24	17.64	17.68	17.71			
5	QPSK	12	0	17.78	17.83	17.73			
5	QPSK	12	7	18.04	17.80	18.00	19	0	
5	QPSK	12	13	17.68	17.79	17.70			
5	QPSK	25	0	17.89	17.85	17.85			
5	16QAM	1	0	18.03	17.88	17.86	19	0	
5	16QAM	1	12	17.70	17.75	17.77			
5	16QAM	1	24	17.85	17.75	17.73			
5	16QAM	12	0	17.70	17.75	17.77	19	0	
5	16QAM	12	7	17.81	17.80	17.80			
5	16QAM	12	13	17.71	17.74	17.68			
5	16QAM	25	0	17.70	17.66	17.73			
5	64QAM	1	0	17.90	17.91	17.92	19	0	
5	64QAM	1	12	17.95	17.85	17.88			
5	64QAM	1	24	17.76	17.87	17.87			
5	64QAM	12	0	17.27	17.35	17.51			
5	64QAM	12	7	17.21	17.26	17.23	18.5	0.5	
5	64QAM	12	13	17.80	17.15	17.12			
5	64QAM	25	0	17.29	17.26	17.21			
5	256QAM	1	0	15.43	15.48	15.47	17.3	1.7	
5	256QAM	1	12	15.77	15.76	15.54			
5	256QAM	1	24	15.53	15.60	15.47			
5	256QAM	12	0	15.50	15.40	15.44	17.3	1.7	
5	256QAM	12	7	15.40	15.50	15.49			
5	256QAM	12	13	15.43	15.59	15.85			
5	256QAM	25	0	15.38	15.45	15.36			

Band 66									
NR (MHz)	Modulation	RB Size	RB Offset	Power Low 130072	Power High 130224	Power High 130272	Time-up limit (dB)	MPR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	18.78	18.51	18.98			
20	QPSK	1	49	18.92	18.87	18.76	19.8	0	
20	QPSK	1	99	18.77	18.88	18.76			
20	QPSK	50	0	18.92	18.87	18.95			
20	QPSK	50	24	18.89	18.94	18.95	19.8	0	
20	QPSK	50	50	18.91	18.92	18.88			
20	QPSK	100	0	18.89	18.91	18.81			
20	16QAM	1	0	18.86	18.81	18.86			
20	16QAM	1	49	18.82	18.88	18.87	19.8	0	
20	16QAM	1	99	18.81	18.86	18.89			
20	16QAM	50	0	18.90	18.89	18.84			
20	16QAM	50	24	18.87	18.82	18.85	19.8	0	
20	16QAM	50	50	18.88	18.88	18.83			
20	16QAM	100	0	18.81	18.82	18.92			
20	64QAM	1	0	18.95	18.85	18.88			
20	64QAM	1	49	18.81	18.82	18.82	19.8	0	
20	64QAM	1	99	18.81	18.88	18.86			
20	64QAM	50	0	17.95	17.99	17.84	18.8	1	
20	64QAM	50	24	17.88	17.93	17.87			
20	64QAM	50	50	17.89	17.93	17.82			
20	256QAM	1	0	15.91	15.86	15.89	17.3	2.5	
20	256QAM	1	49	15.86	15.92	15.81			
20	256QAM	1	99	15.85	15.89	15.92			
20	256QAM	50	0	15.73	15.69	15.70	17.3	2.5	
20	256QAM	50	24	15.79	15.71	15.76			
20	256QAM	50	50	15.74	15.74	15.83			
20	256QAM	100	0	15.76	15.68	15.82			
Channel									
Frequency (MHz)									
15	QPSK	1	0	18.75	18.86	18.77	19.8	0	
15	QPSK	1	24	18.89	18.76	18.88			
15	QPSK	1	74	18.50	18.41	18.64			
15	QPSK	36	0	18.81	18.84	18.87			
15	QPSK	36	26	18.75	18.68	18.83	19.8	0	
15	QPSK	36	36	18.69	18.62	18.68			
15	QPSK	75	0	18.74	18.84	18.81			
15	16QAM	1	0	18.86	18.75	18.78	19.8	0	
15	16QAM	1	37	18.68	18.81	18.76			
15	16QAM	1	74	18.84	18.87	18.87			
15	16QAM	36	0	18.82	18.83	18.78			
15	16QAM	36	20	18.85	18.77	18.75	19.8	0	
15	16QAM	36	39	18.66	18.82	18.82			
15	16QAM	75	0	18.81	18.84	18.81			
15	64QAM	1	0	18.81	18.82	18.88			
15	64QAM	1	37	18.69	18.87	18.85	19.8	0	
15	64QAM	1	74	18.80	18.71	18.71			
15	64QAM	36	0	17.81	17.74	17.71	18.8	1	
15	64QAM	36	20	17.87	17.89	17.86			
15	64QAM	36	39	17.86	17.87	17.83			
15	64QAM	75	0	17.84	17.86	17.81			
15	256QAM	1	0	15.84	15.68	15.71	17.3	2.5	
15	256QAM	1	37	15.72	15.71	15.50			
15	256QAM	1	74	15.76	15.69	15.76			
15	256QAM	36	0	15.54	15.63	15.69	17.3	2.5	
15	256QAM	36	20	15.77	15.52	15.60			
15	256QAM	36	39	15.87	15.51	15.86			
15	256QAM	75	0	15.68	15.71	15.65			
Channel									
Frequency (MHz)									
10	QPSK	1	0	18.47	18.83	18.82	19.8	0	
10	QPSK	1	24	18.75	18.68	18.87			
10	QPSK	1	49	18.71	18.64	18.74			
10	QPSK	25	0	18.85	18.67	18.76			
10	QPSK	25	12	18.80	18.83	18.81	19.8	0	
10	QPSK	25	25	18.83	18.81	18.79			
10	QPSK	50	0	18.72	18.86	18.77			
10	16QAM	1	0	18.87	18.82	18.78	19.8	0	
10	16QAM	1	25	18.82	18.79	18.73			
10	16QAM	1	49	18.59	18.72	18.81			
10	16QAM	25	0	18.87	18.68	18.84			
10	16QAM	25	12	18.80	18.85	18.81	19.8	0	
10	16QAM	25	25	18.86	18.82	18.86			
10	16QAM	50	0	18.82	18.82	18.69			
10	64QAM	1	0	18.80	18.60	18.72	19.8	0	
10	64QAM	1	25	18.86	18.82	18.80			
10	64QAM	1	49	18.85	18.83	18.85			
10	64QAM	25	0	17.85	17.86	17.81			
10	64QAM	25	12	17.78	17.89	17.86	18.8	1	
10	64QAM	25	25	17.70	17.79	17.69			
10	64QAM	50	0	17.85	17.78	17.73			
10	256QAM	1	0	15.86	15.85	15.84	17.3	2.5	
10	256QAM	1	25	15.69	15.88	15.75			
10	256QAM	1	49	15.79	15.64	15.77			
10	256QAM	25	0	15.81	15.70	15.82	17.3	2.5	
10	256QAM	25	12	15.59	15.58	15.52			
10	256QAM	25	25	15.60	15.65	15.83			
10	256QAM	50	0	15.59	15.47	15.60			
Channel									
Frequency (MHz)									
5	QPSK	1	0	18.51	18.85	18.77	19.8	0	
5	QPSK	1	12	18.70	18.84	18.81			
5	QPSK	1	24	18.65	18.36	18.65			
5	QPSK	12	0	18.72	18.85	18.74			
5	QPSK	12	7	18.80	18.85	18.86	19.8	0	
5	QPSK	12	13	18.77	18.80	18.81			
5	16QAM	1	0	18.86	18.75	18.78	19.8	0	
5	16QAM	1	12	18.68	18.81	18.76			
5	16QAM	1	24	18.85	18.89	18.87			
5	16QAM	12	0	18.82	18.83	18.78			
5	16QAM	12	7	18.85	18.77	18.75	19.8	0	
5	16QAM	12	13	18.66	18.82	18.82			
5	16QAM	24	0	18.80	18.84	18.87			
5	16QAM	24	7	18.83	18.79	18.73			
5	16QAM	24	13	18.76	18.82	18.80			
5	64QAM	1	0	18.98	18.83	18.84			
5	64QAM	1	12	18.78	18.78	18.78			
5	64QAM	1	24	18.78	18.80	18.76			
5	64QAM	12	0	18.77	18.78	18.81			
5	64QAM	12	7	18.80	18.81	18.81	19.8	0	
5	64QAM	12	13	18.77	18.77	18.87			
5	64QAM	24	0	17.77	17.89	17.81			
5	64QAM	24	7	17.78	17.79	17.75	18.8	1	
5	64QAM	24	13	17.75	17.75	17.85			
5	256QAM	1	0	15.82	15.66	15.69	17.3	2.5	
5	256QAM	1	12	15.73	15.65	15.56			
5	256QAM	1	24	15.70	15.63	15.70			
5	256QAM	12	0	15.52	15.58	15.54	17.3	2.5	
5	256QAM	12	7	15.71	15.49	15.56			
5	256QAM	12	13	15.67	15.54	15.60			
5	256QAM	24	0	15.78	15.46	15.55			
Channel									
Frequency (MHz)									
3	QPSK	1	0	18.71	18.80	18.80	19.8	0	
3	QPSK	1	8	18.84	18.79	18.87			
3	QPSK	1	16	18.58	18.50	18.60			
3	QPSK	8	0	18.80	18.87	18.81	19.8	0	
3	QPSK	8	8	18.82	18.86	18.85			
3	QPSK	16	0	18.87	18.82	18.84			
3	16QAM	1	0	18.92	18.79	18.87	19.8	0	
3	16QAM	1	8	18.86	18.85	18.79			
3	16QAM	1	16	18.85	18.86	18.78			
3	16QAM	8	0	18.83	18.80	18.79			
3	16QAM	8	8	18.82	18.87	18.87			
3	16QAM	16	0	18.81	18.74	18.87	19.8	0	
3	16QAM	16	8	18.79	18.77	18.87			
3	64QAM	1	0	17.86	17.86	17.78			
3	64QAM	1	8	17.87	17.87	17.87			
3	64QAM	1	16	17.73	17.73	17.82	18.8	1	
3	64QAM	8	0	17.70	17.75	17.86			
3	64QAM	8	8	17.72	17.72	17.82			
3	256QAM	1	0	15.64	15.56	15.57	17.3	2.5	
3	256QAM	1	8	15.65	15.77	15.90			
3	256QAM	1	16	15.72	15.47	15.60			
3	256QAM	8	0	15.61	15.65	15.78	17.3	2.5	
3	256QAM	8	8	15.63	15.58	15.68			
Channel									
Frequency (MHz)									
1.4	QPSK	1	0	18.79	18.92	18.99	19.8	0	
1.4	QPSK	1	8	18.74	18.74	18.73			
1.4	QPSK	1	16	18.72	18.84	18.87			
1.4	QPSK	1	24	18.72	18.84	18.87			
1.4	QPSK	3	0	18.98	18.87	18.88			
1.4	QPSK	3	8	18.87	18.83	18.85	19.8	0	
1.4	QPSK	3	16	18.97	18.96	18.95			
1.4	16QAM	1	0	18.94	18.73	18.75			
1.4	16QAM	1	8	18.74	18.83	18.78			
1.4	16QAM	1	16	18.76	18.76	18.76			
1.4	16QAM	3	0	18.84	18.64	18.75	19.8	0	
1.4	16QAM	3	8	18.85	18.89	18.78			
1.4	16QAM	3	16	18.73	18.73	18.73			
1.4	16QAM	6	0	18.82	18.86	18.70	19.8	0	
1.4	16QAM	6	8	18.71	18.77	18.87			
1.4	16QAM	6	16	18.80	18.80	18.80			
1.4	16QAM	12	0	18.72	18.82	18.66			
1.4	16QAM	12	8	18.72	18.80	18.81	19.8	0	
1.4	16QAM	12	16	18.84	18.86	18.86			
1.4	16QAM	24	0	18.67	18.70	18.76			
1.4	16QAM	24</							

Band 71									
RF MHz	Modulation	RF Size	RF Offset	Power Lvl Ch / Freq	Power Lvl Ch / Freq	Power Lvl Ch / Freq	Power Lvl Ch / Freq	Turn-up amt. (dB)	APR (dB)
Channel				13322	683	683	688	22	0
Frequency (MHz)				673	683	688	688		
20	QPSK	1	0	21.05	21.05	21.01	21.01	22	0
20	QPSK	1	49	20.90	20.82	20.74	20.74		
20	QPSK	1	99	20.99	20.92	20.87	20.87		
20	QPSK	50	0	20.93	20.95	20.82	20.82		
20	QPSK	50	24	20.92	20.85	21.01	21.01	22	0
20	QPSK	50	50	20.99	21.03	20.94	20.94		
20	QPSK	100	0	21.01	21.04	21.00	21.00		
20	16QAM	1	0	20.97	20.92	21.05	21.05		
20	16QAM	1	49	20.98	21.03	20.98	20.98	22	0
20	16QAM	1	99	20.91	21.05	20.99	20.99		
20	16QAM	50	0	21.04	21.01	21.06	21.06		
20	16QAM	50	24	20.98	20.96	20.92	20.92		
20	16QAM	50	50	20.96	20.93	20.87	20.87	22	0
20	64QAM	1	0	20.92	20.99	20.94	20.94		
20	64QAM	1	0	20.83	20.93	20.92	20.92		
20	64QAM	1	49	20.82	20.84	20.76	20.76		
20	64QAM	1	99	20.78	20.90	20.71	20.71	20.3	1.7
20	64QAM	50	0	19.55	19.63	19.60	19.60		
20	64QAM	50	24	19.41	19.48	19.53	19.53		
20	64QAM	100	0	19.55	19.46	19.38	19.38		
20	256QAM	1	0	19.58	19.55	19.54	19.54	18.8	3.2
20	256QAM	1	0	17.54	17.49	17.56	17.56		
20	256QAM	1	49	17.47	17.55	17.57	17.57		
20	256QAM	1	99	17.52	17.50	17.49	17.49		
20	256QAM	50	0	17.45	17.48	17.43	17.43	18.8	3.2
20	256QAM	50	24	17.42	17.42	17.44	17.44		
20	256QAM	50	50	17.42	17.41	17.33	17.33		
20	256QAM	100	0	17.47	17.44	17.53	17.53		
Channel				13317	13352	13352	13357	Turn-up amt. (dB)	APR (dB)
Frequency (MHz)				670.5	680.5	680.5	680.5		
15	QPSK	1	0	20.76	20.79	20.88	20.88	22	0
15	QPSK	1	31	20.79	20.74	20.88	20.88		
15	QPSK	1	74	20.83	20.78	20.87	20.87		
15	QPSK	36	0	20.72	20.92	20.73	20.73		
15	QPSK	36	20	20.78	20.75	20.78	20.78	22	0
15	QPSK	36	39	20.78	20.83	20.85	20.85		
15	QPSK	75	0	20.94	20.91	20.71	20.71		
15	16QAM	1	0	21.00	20.97	21.38	21.38		
15	16QAM	1	31	21.04	21.04	20.92	20.92	22	0
15	16QAM	1	74	20.94	21.04	20.97	20.97		
15	16QAM	36	0	20.81	20.94	21.26	21.26		
15	16QAM	36	20	20.91	20.97	20.92	20.92		
15	16QAM	36	39	20.94	20.91	20.81	20.81	22	0
15	16QAM	75	0	20.71	20.84	20.85	20.85		
15	64QAM	1	0	20.59	20.91	20.89	20.89		
15	64QAM	1	31	20.75	20.76	20.71	20.71		
15	64QAM	1	74	20.82	20.83	20.51	20.51	20.3	1.7
15	64QAM	36	0	19.38	19.23	19.44	19.44		
15	64QAM	36	20	19.40	19.51	19.59	19.59		
15	64QAM	36	39	19.58	19.43	19.38	19.38		
15	64QAM	75	0	19.61	19.44	19.42	19.42	18.8	3.2
15	256QAM	1	0	17.31	17.51	17.63	17.63		
15	256QAM	1	31	17.41	17.30	17.54	17.54		
15	256QAM	1	74	17.34	17.36	17.23	17.23		
15	256QAM	36	0	17.33	17.42	17.34	17.34	18.8	3.2
15	256QAM	36	20	17.25	17.44	17.29	17.29		
15	256QAM	36	39	17.29	17.23	17.37	17.37		
15	256QAM	75	0	17.62	17.25	17.47	17.47		
Channel				13317	13352	13352	13357	Turn-up amt. (dB)	APR (dB)
Frequency (MHz)				688	678	683	683		
10	QPSK	1	0	21.05	21.06	20.86	20.86	22	0
10	QPSK	1	24	20.75	20.78	20.72	20.72		
10	QPSK	1	49	20.94	20.81	20.79	20.79		
10	QPSK	25	0	20.87	20.84	20.77	20.77		
10	QPSK	35	14	20.68	20.83	20.76	20.76	22	0
10	QPSK	35	26	20.77	20.75	20.72	20.72		
10	QPSK	50	0	20.90	20.91	20.77	20.77		
10	16QAM	1	0	20.81	20.74	20.38	20.38		
10	16QAM	1	26	21.01	20.97	20.82	20.82	22	0
10	16QAM	1	49	20.75	20.92	20.76	20.76		
10	16QAM	25	0	21.00	20.81	20.32	20.32		
10	16QAM	35	12	20.75	20.90	20.76	20.76		
10	16QAM	25	25	20.77	20.88	20.63	20.63	22	0
10	16QAM	50	0	20.94	21.02	20.38	20.38		
10	64QAM	1	0	20.64	20.86	20.82	20.82		
10	64QAM	1	25	20.76	20.74	20.62	20.62		
10	64QAM	1	49	20.72	20.84	20.51	20.51	20.3	1.7
10	64QAM	25	0	19.41	19.62	19.36	19.36		
10	64QAM	25	12	19.25	19.52	19.36	19.36		
10	64QAM	25	25	19.34	19.44	19.27	19.27		
10	64QAM	50	0	19.80	19.34	19.31	19.31	18.8	3.2
10	256QAM	1	0	17.39	17.41	17.36	17.36		
10	256QAM	1	25	17.32	17.60	17.50	17.50		
10	256QAM	1	49	17.35	17.47	17.28	17.28		
10	256QAM	25	0	17.23	17.43	17.31	17.31	18.8	3.2
10	256QAM	25	12	17.45	17.32	17.46	17.46		
10	256QAM	25	25	17.31	17.41	17.35	17.35		
10	256QAM	50	0	17.49	17.43	17.42	17.42		
Channel				13317	13352	13352	13357	Turn-up amt. (dB)	APR (dB)
Frequency (MHz)				685.5	676.5	680.5	680.5		
5	QPSK	1	0	20.90	20.85	20.95	20.95	22	0
5	QPSK	1	14	20.84	20.72	20.43	20.43		
5	QPSK	1	24	20.85	20.73	20.68	20.68		
5	QPSK	12	0	20.91	20.82	20.68	20.68		
5	QPSK	12	7	20.77	20.87	20.37	20.37	22	0
5	QPSK	12	13	20.93	20.91	20.84	20.84		
5	QPSK	25	0	20.94	20.99	20.99	20.99		
5	16QAM	1	0	20.86	20.75	20.37	20.37		
5	16QAM	1	12	20.78	21.05	20.92	20.92	22	0
5	16QAM	1	24	20.69	21.02	20.89	20.89		
5	16QAM	12	0	21.04	20.84	20.59	20.59		
5	16QAM	12	7	20.89	20.71	20.77	20.77		
5	16QAM	12	13	20.84	20.77	20.71	20.71	22	0
5	16QAM	25	0	20.80	20.73	20.59	20.59		
5	64QAM	1	0	20.68	20.86	20.71	20.71		
5	64QAM	1	12	20.68	20.77	20.66	20.66		
5	64QAM	1	24	20.63	20.72	20.67	20.67	20.3	1.7
5	64QAM	12	0	19.51	19.44	19.55	19.55		
5	64QAM	12	7	19.24	19.47	19.48	19.48		
5	64QAM	12	13	19.43	19.21	19.42	19.42		
5	64QAM	25	0	19.51	19.49	19.37	19.37	18.8	3.2
5	256QAM	1	0	17.34	17.49	17.38	17.38		
5	256QAM	1	12	17.62	17.44	17.56	17.56		
5	256QAM	1	24	17.28	17.39	17.45	17.45		
5	256QAM	12	0	17.25	17.27	17.19	17.19	18.8	3.2
5	256QAM	12	7	17.29	17.38	17.44	17.44		
5	256QAM	12	13	17.28	17.38	17.36	17.36		
5	256QAM	25	0	17.32	17.26	17.42	17.42		

Band 3(only on channel required)									
Ref ID	Modulation	RB Size	RD Offset	Power Level Ch 1/Freq	Power Level Ch 2/Freq	Power Level Ch 3/Freq	Time-up limit (min)	KPIR (dB)	
Channel									
				37655	38005	38155			
20	QPSK	1	0	17.10	16.90	17.00			
20	QPSK	1	49	17.06	16.89	16.98	17.4	0	
20	QPSK	1	99	17.02	16.82	16.92			
20	QPSK	50	0	17.07	16.81	16.92			
20	QPSK	50	24	17.06	16.87	16.92			
20	QPSK	50	49	16.99	16.80	16.82	17.4	0	
20	QPSK	100	0	17.07	16.85	16.95			
20	16QAM	1	0	16.99	16.79	16.94			
20	16QAM	1	49	16.91	16.72	16.76			
20	16QAM	1	99	16.86	16.62	16.83			
20	16QAM	50	0	16.93	16.73	16.88			
20	16QAM	50	24	16.82	16.62	16.85			
20	16QAM	50	49	16.87	16.76	16.87			
20	16QAM	100	0	17.06	16.89	16.94			
20	16QAM	100	24	16.99	16.76	16.88			
20	16QAM	100	49	16.94	16.73	16.82			
20	64QAM	1	0	16.81	16.62	16.85			
20	64QAM	1	49	16.69	16.76	16.88			
20	64QAM	1	99	16.64	16.64	16.80			
20	64QAM	50	0	16.66	16.61	16.69			
20	64QAM	50	24	16.67	16.67	16.74			
20	64QAM	50	49	16.55	16.71	16.84			
20	64QAM	100	0	16.62	16.62	16.66			
20	64QAM	100	24	15.75	15.47	15.49			
20	256QAM	1	0	15.75	15.47	15.49			
20	256QAM	1	49	15.34	15.31	15.39	16.3	1.1	
20	256QAM	1	99	15.30	15.30	15.37			
20	256QAM	50	0	15.30	15.30	15.37			
20	256QAM	50	24	15.70	15.68	15.73			
20	256QAM	50	49	15.68	15.70	15.80			
20	256QAM	100	0	15.68	15.70	15.80			
Channel									
				37655	38005	38175	Time-up limit (min)	KPIR (dB)	
Frequency Margin									
16	QPSK	1	0	16.87	16.67	16.84			
16	QPSK	1	37	16.86	16.88	16.97	17.4	0	
16	QPSK	1	74	16.89	16.45	16.83			
16	QPSK	36	0	16.82	16.67	16.73			
16	QPSK	36	20	16.87	16.80	16.72			
16	QPSK	36	37	16.84	16.79	16.78	17.4	0	
16	QPSK	75	0	16.87	16.62	16.70			
16	16QAM	1	0	16.79	16.59	16.69			
16	16QAM	1	37	16.70	16.62	16.77	17.4	0	
16	16QAM	1	74	16.78	16.75	16.71			
16	16QAM	36	0	16.74	16.64	16.73			
16	16QAM	36	20	16.36	16.77	16.73			
16	16QAM	36	37	16.72	16.73	16.62			
16	16QAM	75	0	16.79	16.69	16.81			
16	64QAM	1	0	16.61	16.65	16.90			
16	64QAM	1	37	16.64	16.60	16.40			
16	64QAM	1	74	16.67	16.70	16.70			
16	64QAM	36	0	16.60	16.58	16.71			
16	64QAM	36	20	16.64	16.67	16.70			
16	64QAM	36	37	16.62	16.67	16.67			
16	64QAM	75	0	16.67	16.66	16.66			
16	64QAM	75	37	15.75	15.47	15.49			
16	256QAM	1	0	15.75	15.47	15.49			
16	256QAM	1	49	15.34	15.31	15.39	16.3	1.1	
16	256QAM	1	99	15.30	15.30	15.37			
16	256QAM	50	0	15.30	15.30	15.37			
16	256QAM	50	24	15.70	15.68	15.73			
16	256QAM	50	49	15.68	15.70	15.80			
Channel									
				37655	38005	38000	Time-up limit (min)	KPIR (dB)	
Frequency Margin									
10	QPSK	1	0	16.93	16.78	16.98			
10	QPSK	1	25	16.93	16.71	16.81			
10	QPSK	1	49	16.93	16.77	16.88			
10	QPSK	25	0	16.83	16.58	16.67			
10	QPSK	25	12	16.89	16.67	16.74			
10	QPSK	25	25	16.89	16.68	16.88	17.4	0	
10	QPSK	50	0	16.88	16.67	16.81			
10	QPSK	50	12	16.89	16.68	16.88			
10	QPSK	50	25	16.89	16.68	16.88			
10	16QAM	1	25	16.82	16.51	16.72			
10	16QAM	1	49	16.83	16.62	16.68			
10	16QAM	25	0	16.73	16.58	16.63			
10	16QAM	25	12	16.80	16.62	16.81			
10	16QAM	25	25	16.84	16.62	16.86			
10	16QAM	50	0	16.83	16.67	16.82			
10	16QAM	50	12	16.86	16.68	16.81			
10	64QAM	1	0	16.66	16.70	16.63			
10	64QAM	1	25	16.61	16.79	16.63	17.4	0	
10	64QAM	1	49	16.71	16.80	16.81			
10	64QAM	25	0	16.66	16.62	16.67			
10	64QAM	25	12	16.67	16.67	16.74			
10	64QAM	25	25	16.73	16.62	16.71			
10	64QAM	50	0	16.62	16.66	16.57			
10	256QAM	1	0	15.75	15.47	15.49			
10	256QAM	1	25	15.25	15.32	15.34	16.3	1.1	
10	256QAM	1	49	15.35	15.27	15.38			
10	256QAM	25	0	15.35	15.35	15.51			
10	256QAM	25	12	15.50	15.49	15.58			
10	256QAM	25	25	15.68	15.62	15.71			
10	256QAM	50	0	15.68	15.62	15.68			
10	256QAM	50	12	15.68	15.62	15.68			
Channel									
				37775	38005	38225	Time-up limit (min)	KPIR (dB)	
Frequency Margin									
5	QPSK	1	0	16.96	16.83	16.97			
5	QPSK	1	12	17.00	16.61	16.98	17.4	0	
5	QPSK	1	25	16.93	16.71	16.88			
5	QPSK	12	0	16.82	16.68	16.79			
5	QPSK	12	12	16.79	16.67	16.88			
5	QPSK	12	25	16.84	16.69	16.79	17.4	0	
5	QPSK	25	0	16.87	16.84	16.84			
5	QPSK	25	12	16.87	16.84	16.89			
5	16QAM	1	12	16.92	16.69	16.87	17.4	0	
5	16QAM	1	24	17.00	16.82	16.60			
5	16QAM	1	25	16.75	16.65	16.60			
5	16QAM	12	7	16.84	16.74	16.74	17.4	0	
5	16QAM	12	15	16.70	16.70	16.81			
5	16QAM	25	0	16.83	16.69	16.79			
5	64QAM	1	0	16.66	16.62	16.66			
5	64QAM	1	12	16.67	16.72	16.68	17.4	0	
5	64QAM	1	25	16.84	16.83	16.85			
5	64QAM	12	0	16.64	16.62	16.77			
5	64QAM	12	12	16.64	16.62	16.77			
5	64QAM	12	15	16.69	16.67	16.62			
5	64QAM	25	0	16.60	16.60	16.34			
5	256QAM	1	0	15.75	15.47	15.50			
5	256QAM	1	12	15.15	15.29	15.30	16.3	1.1	
5	256QAM	1	24	15.24	15.39	15.39			
5	256QAM	12	0	15.35	15.35	15.42			
5	256QAM	12	12	15.73	15.64	15.71			
5	256QAM	12	15	15.73	15.64	15.71			
5	256QAM	25	0	15.65	15.45	15.47			

Band 41 (2.60 Band)-Class 3											
RF (MHz)	Modulation	RB Size	RB Offset	Power Fwd (mW)	Power Fwd (mW)	Power Fwd (mW)	Power Fwd (mW)	Power Fwd (mW)	Power Fwd (mW)	Turn-up end (dBm)	MPR (dB)
Channel											
Frequency (MHz)				39750	40185	40600	41005	41400	41800		
20	QPSK	5	0	16.95	17.13	16.92	17.02	16.95			
20	QPSK	5	48	17.21	17.15	17.02	17.08	16.92		17.4	0
20	QPSK	5	96	16.98	17.14	17.02	17.08	16.92			
20	QPSK	50	0	16.90	17.06	16.98	17.08	16.90			
20	QPSK	50	24	16.98	17.07	16.98	17.03	16.85		17.4	0
20	QPSK	50	48	16.98	17.04	17.02	17.03	16.85			
20	QPSK	100	0	16.90	16.96	16.97	17.03	16.80			
20	QPSK	100	50	16.90	16.96	16.97	17.03	16.80			
20	16QAM	5	48	16.95	16.94	16.90	16.90	16.91			
20	16QAM	5	96	16.81	16.88	16.88	16.88	16.84			
20	16QAM	50	0	16.80	16.80	16.80	16.80	16.83			
20	16QAM	50	24	16.88	17.00	16.94	16.94	16.80			
20	16QAM	50	50	16.88	16.85	16.89	16.89	16.85			
20	16QAM	100	0	16.88	16.87	16.85	16.89	16.80			
20	64QAM	5	0	16.82	16.93	16.93	16.93	16.83			
20	64QAM	5	48	16.87	17.00	17.00	16.97	16.83		17.4	0
20	64QAM	5	96	16.80	16.84	16.88	16.85	16.82			
20	64QAM	50	0	16.90	16.82	16.82	16.80	16.88			
20	64QAM	50	24	16.88	16.88	16.88	16.88	16.88			
20	64QAM	50	48	16.90	16.97	16.87	16.84	16.94		17.4	0
20	64QAM	100	0	16.82	16.82	16.82	16.86	16.84			
20	256QAM	5	0	15.38	15.32	15.27	15.27	15.30			
20	256QAM	5	48	15.28	15.39	15.21	15.17	15.10		16.3	1.1
20	256QAM	50	0	15.33	15.29	15.19	15.17	15.31			
20	256QAM	50	50	15.60	15.47	15.31	15.49	15.30			
20	256QAM	50	24	15.64	15.48	15.48	15.45	15.34		16.3	1.1
20	256QAM	100	0	15.62	15.40	15.32	15.43	15.35			
20	256QAM	100	50	15.65	15.45	15.38	15.48	15.34			
Channel											
Frequency (MHz)				39750	40185	40600	41005	41410	41810	Turn-up end (dBm)	MPR (dB)
15	QPSK	5	0	16.75	16.81	16.81	16.83	16.90	16.87		
15	QPSK	5	37	16.71	16.83	16.81	16.84	16.71			
15	QPSK	5	75	16.80	16.87	16.87	16.87	16.75			
15	QPSK	36	0	16.72	16.91	16.88	16.78	16.64			
15	QPSK	36	20	16.74	16.80	16.76	16.91	16.71			
15	QPSK	36	40	16.79	16.84	16.84	16.84	16.71			
15	QPSK	75	0	16.90	16.88	16.91	16.92	16.85			
15	QPSK	75	37	16.80	16.87	16.87	16.87	16.67			
15	16QAM	5	37	16.77	16.80	16.91	16.92	16.77			
15	16QAM	5	74	16.80	16.90	16.94	16.92	16.67			
15	16QAM	36	0	16.82	16.86	16.86	16.86	16.80			
15	16QAM	36	20	16.85	16.83	16.99	16.88	16.68		17.4	0
15	16QAM	36	39	16.88	16.81	16.82	16.83	16.69			
15	16QAM	75	0	16.86	16.92	16.92	16.92	16.80			
15	64QAM	5	0	16.62	16.71	16.82	16.81	16.65			
15	64QAM	5	37	16.69	16.88	16.95	16.75	16.71			
15	64QAM	5	74	16.79	16.98	16.98	16.82	16.62		17.4	0
15	64QAM	36	0	16.79	16.84	16.84	16.84	16.68			
15	64QAM	36	20	16.79	16.88	16.92	16.82	16.73			
15	64QAM	36	40	16.80	16.84	16.84	16.84	16.73			
15	64QAM	75	0	16.79	16.80	16.95	16.93	16.91		17.4	0
15	64QAM	75	37	16.89	16.81	16.81	16.71	16.77			
15	256QAM	5	0	15.26	15.18	15.26	15.26	15.08			
15	256QAM	5	37	15.06	15.23	15.01	15.01	15.02		16.3	1.1
15	256QAM	50	0	15.26	15.24	15.17	15.22	15.26			
15	256QAM	50	50	15.53	15.44	15.31	15.42	15.31			
15	256QAM	50	24	15.62	15.31	15.41	15.20	15.26		16.3	1.1
15	256QAM	100	0	15.50	15.31	15.41	15.27	15.31			
15	256QAM	100	50	15.53	15.38	15.33	15.39	15.26			
Channel											
Frequency (MHz)				39750	40185	40600	41005	41410	41810	Turn-up end (dBm)	MPR (dB)
5	QPSK	5	0	16.81	16.81	16.71	16.79	16.85			
5	QPSK	5	25	16.81	16.84	16.86	16.91	16.92			
5	QPSK	5	49	16.86	16.83	16.83	16.82	16.69			
5	QPSK	25	0	16.85	16.76	16.79	16.85	16.73		17.4	0
5	QPSK	25	12	16.87	16.97	16.81	16.84	16.73			
5	QPSK	25	37	16.79	16.87	16.86	16.83	16.61			
5	QPSK	50	0	16.87	16.96	16.86	16.87	16.72			
5	QPSK	50	25	16.87	16.93	16.83	16.84	16.69			
5	16QAM	5	49	16.80	16.93	16.79	16.85	16.73		17.4	0
5	16QAM	5	48	16.84	16.85	16.91	16.80	16.68			
5	16QAM	25	0	16.82	16.76	16.87	16.81	16.62			
5	16QAM	25	12	16.82	16.84	16.82	16.83	16.83			
5	16QAM	50	0	16.88	16.91	16.82	16.77	16.69			
5	16QAM	50	25	16.87	16.93	16.83	16.82	16.69			
5	64QAM	5	0	16.87	16.75	16.79	16.85	16.67			
5	64QAM	5	25	16.86	17.00	16.90	16.83	16.67		17.4	0
5	64QAM	5	49	16.79	16.87	16.87	16.81	16.70			
5	64QAM	25	0	16.79	16.86	16.87	16.94	16.94			
5	64QAM	25	12	16.80	16.87	16.87	16.77	16.72			
5	64QAM	25	37	16.88	16.87	16.88	16.85	16.72		17.4	0
5	64QAM	50	0	16.81	16.94	16.97	16.86	16.88			
5	256QAM	5	0	15.31	15.24	15.19	15.19	15.05			
5	256QAM	5	25	15.29	15.22	15.26	15.02	15.28		16.3	1.1
5	256QAM	25	0	15.30	15.29	15.15	15.14	15.28			
5	256QAM	25	12	15.63	15.43	15.43	15.43	15.26			
5	256QAM	25	37	15.46	15.28	15.40	15.20	15.20		16.3	1.1
Channel											
Frequency (MHz)				39675	40148	40600	41005	41410	41810	Turn-up end (dBm)	MPR (dB)
5	QPSK	5	0	16.95	16.92	16.96	16.91	16.84			
5	QPSK	5	12	16.77	16.97	16.84	16.92	16.86		17.4	0
5	QPSK	5	25	16.87	16.84	16.84	16.84	16.73			
5	QPSK	12	0	16.76	16.77	16.90	16.73	16.68			
5	QPSK	12	7	16.87	16.76	16.76	16.80	16.72		17.4	0
5	QPSK	12	14	16.87	16.84	16.79	16.87	16.84			
5	QPSK	25	0	16.83	16.90	16.81	16.94	16.75			
5	QPSK	25	12	16.89	16.86	16.83	16.86	16.69			
5	16QAM	5	12	16.82	16.97	16.89	16.74	16.87			
5	16QAM	5	24	16.77	16.83	16.80	16.91	16.61			
5	16QAM	12	7	16.87	16.83	16.84	16.73	16.61			
5	16QAM	12	7	16.94	16.82	16.86	16.84	16.74		16.4	0
5	16QAM	12	13	16.99	16.96	16.80	16.84	16.76			
5	16QAM	25	0	16.84	16.90	16.80	16.97	16.80			
5	64QAM	5	0	16.80	16.87	16.72	16.97	16.67			
5	64QAM	5	12	16.89	16.75	16.79	16.83	16.68		17.4	0
5	64QAM	5	24	16.82	16.82	16.84	16.83	16.69			
5	64QAM	12	0	16.84	16.86	16.93	16.70	16.76			
5	64QAM	12	7	16.89	16.87	16.87	16.89	16.69			
5	64QAM	12	13	16.79	16.82	16.83	16.93	16.84		17.4	0
5	64QAM	25	0	16.99	16.91	16.91	16.84	16.84			
5	256QAM	5	0	15.33	15.27	15.27	15.27	15.07			
5	256QAM	5	12	15.04	15.20	15.19	15.22	15.21		16.3	1.1
5	256QAM	25	0	15.27	15.10	15.08	15.08	15.26			
5	256QAM	25	12	15.51	15.24	15.24	15.24	15.11			
5	256QAM	25	37	15.46	15.48	15.29	15.20	15.34			
5	256QAM	50	0	15.45	15.40	15.22	15.22	15.22			
5	256QAM	50	25	15.45	15.40	15.22	15.22	15.22			

Band 41 (2.6G Band) HPUe (Limit 27)												
RW (MHz)	Modulation	RB Size	RB Offset	Power Loss (Ch)	Power Loss (Ch)	Power Loss (Ch)	Power Loss (Ch)	Power Loss (Ch)	Power Loss (Ch)	Turn-on time (sec)	MPE (dB)	
Channel				9979.5	40185	40626	41065	41400				
Frequency (MHz)												
20	QPSK	1	0	17.90	18.13	18.13	18.10	17.93				
20	QPSK	1	49	18.08	18.20	18.18	18.12	17.97	19	0		
20	QPSK	1	98	18.00	18.08	18.07	18.06	17.95				
20	QPSK	1	147	17.96	18.07	18.07	18.04	17.92				
20	QPSK	50	24	18.03	18.12	18.09	18.08	17.94				
20	QPSK	50	73	18.06	18.17	18.15	18.14	18.00	19	0		
20	QPSK	100	0	18.05	18.14	18.12	18.07	17.93				
20	QPSK	100	49	18.07	18.16	18.15	18.14	18.00				
20	16QAM	1	49	18.05	18.11	18.11	18.09	17.99				
20	16QAM	1	98	18.08	18.15	18.15	18.12	18.06				
20	16QAM	1	147	17.97	18.06	18.06	18.04	17.89				
20	16QAM	50	24	18.00	18.02	18.02	17.99	17.91				
20	16QAM	50	73	18.00	18.06	18.06	18.04	17.89				
20	16QAM	100	0	18.00	18.00	18.00	17.98	17.85				
20	16QAM	100	49	17.82	17.93	17.93	18.03	17.88				
20	16QAM	1	49	17.87	18.00	18.00	17.97	17.83	19	0		
20	16QAM	1	98	17.90	18.04	18.04	18.01	17.88				
20	16QAM	50	24	17.90	18.02	18.02	17.96	17.89				
20	16QAM	50	73	17.90	18.02	18.02	17.96	17.88				
20	16QAM	100	0	17.90	18.02	18.02	18.04	17.94				
20	16QAM	100	0	17.88	18.02	18.02	17.98	17.84				
20	16QAM	100	49	17.88	17.87	17.87	17.88	17.68				
20	256QAM	1	49	17.88	17.74	17.77	17.76	17.57	18.8	0.2		
20	256QAM	1	99	17.87	17.73	17.77	17.68	17.55				
20	256QAM	1	149	17.88	17.76	17.78	17.69	17.51				
20	256QAM	50	24	18.10	18.02	17.91	17.88	17.77	18.8	0.2		
20	256QAM	50	74	18.05	17.92	17.86	17.89	17.78				
20	256QAM	100	0	18.05	17.92	17.87	17.79	17.67				
20	256QAM	100	49	17.99	18.07	18.07	18.04	17.84				
20	256QAM	100	0	17.98	18.02	18.02	17.98	17.84				
20	256QAM	100	49	17.98	17.87	17.87	17.88	17.68				
Channel <th>9979.5</th> <th>40185</th> <th>40626</th> <th>41065</th> <th>41400</th> <th>41565</th> <th>Turn-on time (sec)</th> <th>MPE (dB)</th>				9979.5	40185	40626	41065	41400	41565	Turn-on time (sec)	MPE (dB)	
Frequency (MHz)												
10	QPSK	1	0	17.87	17.84	18.00	17.96	17.93				
10	QPSK	1	33	17.81	17.99	18.12	18.06	17.89				
10	QPSK	1	67	17.74	17.97	18.08	17.98	17.87				
10	QPSK	1	100	17.78	17.80	17.82	17.92	17.76				
10	QPSK	1	133	17.73	18.10	18.02	17.92	17.72	19	0		
10	QPSK	1	166	17.96	18.04	18.04	18.01	17.98				
10	QPSK	1	199	17.82	17.97	17.88	17.89	17.76				
10	QPSK	1	232	17.84	17.96	17.96	17.93	17.82				
10	16QAM	1	33	17.85	18.14	18.05	18.15	17.89	19	0		
10	16QAM	1	74	17.94	18.04	18.02	18.01	17.74				
10	16QAM	1	115	17.77	17.84	17.84	17.83	17.62				
10	16QAM	1	156	17.83	17.77	17.77	17.88	17.78				
10	16QAM	50	39	17.89	17.87	17.81	17.94	17.94				
10	16QAM	50	79	17.86	17.96	17.96	17.94	17.74				
10	16QAM	1	0	17.71	17.74	17.73	18.01	17.91				
10	16QAM	1	33	17.68	18.00	17.87	17.72	17.83				
10	16QAM	1	67	17.91	17.84	17.84	17.92	17.78				
10	16QAM	50	0	17.65	17.82	17.86	17.78	17.63				
10	16QAM	50	33	17.94	17.86	17.86	17.98	17.70				
10	16QAM	50	66	17.85	17.94	17.93	18.08	17.73				
10	16QAM	50	99	17.83	18.01	17.86	17.97	17.80				
10	16QAM	1	74	17.68	17.87	17.87	17.98	17.78	19	0		
10	16QAM	1	147	17.77	17.84	17.84	17.93	17.74				
10	16QAM	1	220	17.88	17.67	17.76	17.64	17.45	18.8	0.2		
10	16QAM	1	293	17.68	17.73	17.74	17.72	17.47				
10	16QAM	50	124	17.94	17.82	17.73	17.82	17.78				
10	16QAM	50	248	18.01	17.92	17.88	17.90	17.54	18.8	0.2		
10	16QAM	50	372	17.87	17.77	17.76	17.87	17.67				
10	16QAM	100	19	17.77	17.75	17.74	17.91	17.51				
Channel <th>9979.5</th> <th>40185</th> <th>40626</th> <th>41065</th> <th>41400</th> <th>41565</th> <th>Turn-on time (sec)</th> <th>MPE (dB)</th>				9979.5	40185	40626	41065	41400	41565	Turn-on time (sec)	MPE (dB)	
Frequency (MHz)												
5	QPSK	1	0	17.63	18.03	18.03	17.98	17.91				
5	QPSK	1	25	18.07	18.11	17.98	17.88	17.76	19	0		
5	QPSK	1	50	17.88	17.78	17.83	17.80	17.67				
5	QPSK	1	75	17.63	18.04	18.03	17.97	17.68				
5	QPSK	25	12	18.02	17.94	17.92	17.88	17.76				
5	QPSK	25	37	17.91	18.01	17.97	17.90	17.77	19	0		
5	QPSK	50	0	17.68	17.92	17.88	17.83	17.70				
5	QPSK	50	25	17.87	17.86	17.86	17.86	17.66				
5	16QAM	1	25	18.03	17.97	18.03	17.94	17.98				
5	16QAM	1	49	18.08	18.01	18.11	18.08	17.84				
5	16QAM	1	73	17.88	17.83	17.82	17.82	17.61				
5	16QAM	25	12	18.00	17.83	17.84	17.99	17.6				
5	16QAM	25	25	18	17.96	18	17.81	17.9				
5	16QAM	50	0	17.86	17.87	17.88	17.84	17.68				
5	16QAM	1	0	17.62	17.74	17.80	17.94	17.82				
5	16QAM	1	25	17.68	17.83	17.77	17.81	17.62				
5	16QAM	1	50	17.78	17.84	17.86	17.92	17.83				
5	16QAM	25	0	17.66	18.00	17.82	17.77	17.60				
5	16QAM	25	25	17.79	17.81	17.82	17.82	17.64				
5	16QAM	50	25	17.88	18.10	18.07	17.85	17.92				
5	16QAM	50	0	17.76	17.86	17.86	17.86	17.79				
5	16QAM	100	0	17.60	17.65	17.67	17.83	17.65				
5	256QAM	1	28	17.73	17.52	17.60	17.37	17.34	18.8	0.2		
5	256QAM	1	49	17.63	17.68	17.68	17.51	17.44				
5	256QAM	1	70	17.67	17.67	17.67	17.67	17.57				
5	256QAM	25	12	18.09	17.81	17.68	17.65	17.47	18.8	0.2		
5	256QAM	25	25	17.93	17.76	17.84	17.70	17.68				
5	256QAM	50	0	17.60	17.78	17.84	17.70	17.68				
5	256QAM	50	25	17.63	17.82	17.81	17.81	17.64				
5	256QAM	100	0	17.62	17.87	17.87	17.87	17.64				
5	256QAM	100	25	17.61	18.06	18.09	18.08	17.84	19	0		
5	256QAM	50	0	17.81	17.94	17.86	17.81	17.67				
5	256QAM	50	25	17.67	17.68	17.68	17.67	17.47				
5	256QAM	1	12	18.11	17.70	17.68	17.52	17.33				
5	256QAM	1	25	17.66	17.80	17.60	17.56	17.32				
5	256QAM	1	50	17.83	17.69	17.69	17.69	17.58				
5	256QAM	25	12	18.02	17.91	17.79	17.65	17.47	18.8	0.2		
5	256QAM	25	13	17.64	17.82	17.71	17.71	17.52				
5	256QAM	50	0	17.84	17.82	17.71	17.71	17.52				

Band 48 (3.5G Band)-FCC											
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)		
Channel				55340	55360	55380	55400				
Frequency (MHz)				3600	3608	3616	3620				
20	QPSK	1	0	16.08	16.11	16.15	16.21	17.1	0		
20	QPSK	1	48	15.93	15.96	15.98	16.01				
20	QPSK	1	96	15.97	15.98	16.02	16.05				
20	QPSK	50	0	16.02	16.05	16.03	16.05				
20	QPSK	50	24	16.04	16.03	16.04	16.06	17.1	0		
20	QPSK	50	50	15.92	15.89	15.92	16.02				
20	QPSK	100	0	16.03	16.02	16.02	16.04				
20	16QAM	1	0	16.05	16.03	16.08	16.01				
20	16QAM	1	48	16.02	16.05	16.08	15.92	17.1	0		
20	16QAM	1	96	16.00	16.02	16.06	16.00				
20	16QAM	50	0	16.09	16.02	16.01	16.02				
20	16QAM	50	24	16.07	16.09	16.04	16.03				
20	16QAM	100	0	16.04	16.05	16.02	16.06	17.1	0		
20	16QAM	100	0	16.09	16.04	15.99	16.02				
20	16QAM	1	0	15.95	15.96	15.96	15.93				
20	16QAM	1	48	15.97	16.01	16.06	15.96				
20	16QAM	1	96	16.01	16.06	16.03	16.09	17.1	0		
20	16QAM	50	0	16.00	16.06	16.02	16.00				
20	16QAM	50	24	16.06	16.05	16.03	16.06				
20	16QAM	50	50	16.08	16.08	16.02	16.08				
20	16QAM	100	0	16.00	16.03	16.08	16.05	17.1	0		
20	256QAM	1	0	15.92	15.94	15.94	15.89				
20	256QAM	1	48	15.90	15.95	15.99	15.96				
20	256QAM	1	96	15.98	15.96	16.00	16.02				
20	256QAM	50	0	16.06	16.06	16.01	16.02	17.1	0		
20	256QAM	50	24	16.00	16.03	16.01	16.03				
20	256QAM	50	50	16.05	16.03	16.06	16.01				
20	256QAM	100	0	16.06	16.09	16.00	16.00				
Channel				55811	55830	55850	55870	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				3607.5	3608	3612	3602.5				
15	QPSK	1	0	16.90	16.07	16.10	16.10	17.1	0		
15	QPSK	1	37	15.72	15.68	15.82	15.71				
15	QPSK	1	74	15.77	15.93	15.99	15.99				
15	QPSK	36	0	15.78	15.68	15.88	15.90				
15	QPSK	36	36	15.87	15.85	15.93	16.11	17.1	0		
15	QPSK	36	36	15.71	15.64	15.81	15.89				
15	QPSK	75	0	15.82	15.82	15.91	15.99				
15	16QAM	1	0	15.80	15.89	15.89	16.00				
15	16QAM	1	37	15.89	15.89	15.82	16.04	17.1	0		
15	16QAM	1	74	15.81	16.07	15.97	16.07				
15	16QAM	36	0	16.10	15.85	15.84	16.01				
15	16QAM	36	20	16.02	15.85	16.01	15.95				
15	16QAM	36	36	15.99	15.88	15.95	16.04	17.1	0		
15	16QAM	75	0	15.97	15.95	15.95	15.82				
15	16QAM	1	0	15.89	15.88	15.97	16.73				
15	16QAM	1	37	15.76	15.82	15.84	15.85				
15	16QAM	1	74	15.77	15.87	15.98	15.94	17.1	0		
15	16QAM	36	0	15.97	15.83	15.89	15.92				
15	16QAM	36	20	15.84	15.85	15.88	15.86				
15	16QAM	36	36	15.99	15.88	15.82	16.93				
15	16QAM	75	0	15.78	15.86	15.98	16.04	17.1	0		
15	256QAM	1	0	15.89	15.75	15.88	16.72				
15	256QAM	1	37	15.89	15.99	15.88	16.79				
15	256QAM	1	74	15.85	15.84	15.75	16.76				
15	256QAM	36	0	15.88	16.09	15.91	15.96	17.1	0		
15	256QAM	36	20	15.86	16.13	15.95	16.78				
15	256QAM	36	36	16.00	16.04	15.88	16.76				
15	256QAM	75	0	16.11	15.83	15.80	15.80				
Channel				55990	55915	56180	56000	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				36065	3607.5	36100	36005				
10	QPSK	1	0	15.97	15.89	16.16	16.15	17.1	0		
10	QPSK	1	25	15.83	15.68	15.97	15.80				
10	QPSK	1	48	15.81	15.86	15.79	15.99				
10	QPSK	25	0	15.77	15.77	15.90	15.87				
10	QPSK	25	12	15.83	16.01	16.87	16.09	17.1	0		
10	QPSK	25	25	15.87	15.83	15.93	16.92				
10	QPSK	50	0	15.96	15.87	16.00	16.83				
10	16QAM	1	0	16.09	15.87	16.13	16.76				
10	16QAM	1	25	15.77	16.02	15.89	16.79	17.1	0		
10	16QAM	1	48	15.93	15.87	16.10	16.82				
10	16QAM	25	0	16.13	15.80	15.78	15.84				
10	16QAM	25	12	15.87	16.08	15.92	15.97				
10	16QAM	25	25	15.96	16.07	15.91	16.08	17.1	0		
10	16QAM	50	0	16.04	16.06	16.00	16.76				
10	16QAM	1	0	15.93	15.75	15.93	16.76				
10	16QAM	1	25	15.92	15.86	16.90	16.76				
10	16QAM	1	48	15.76	16.10	15.87	16.76	17.1	0		
10	16QAM	25	0	15.90	15.93	16.03	16.03				
10	16QAM	25	12	16.05	16.10	15.96	16.06				
10	16QAM	25	25	16.09	15.97	15.75	15.09				
10	16QAM	50	0	16.04	15.99	16.88	16.81	17.1	0		
10	256QAM	1	0	15.75	15.84	15.98	15.73				
10	256QAM	1	25	15.91	15.70	15.92	15.91				
10	256QAM	1	48	16.02	15.94	15.88	16.78				
10	256QAM	25	0	16.03	15.90	15.90	15.83	17.1	0		
10	256QAM	25	12	16.04	15.92	15.85	16.91				
10	256QAM	25	25	15.83	15.86	15.92	15.81				
10	256QAM	50	0	15.96	15.93	15.86	15.86				
Channel				56065	56010	56170	56115	Tune-up limit (dBm)	MPR (dB)		
Frequency (MHz)				3602.5	3600	36020	36015				
5	QPSK	1	0	16.01	15.98	16.10	16.13	17.1	0		
5	QPSK	1	12	15.87	15.68	15.78	16.84				
5	QPSK	1	24	15.73	15.83	15.96	16.85				
5	QPSK	12	0	15.95	15.84	15.96	16.95				
5	QPSK	12	7	15.98	15.94	15.87	16.90	17.1	0		
5	QPSK	12	13	15.72	15.81	15.85	15.97				
5	QPSK	25	0	16.02	15.90	16.82	16.86				
5	16QAM	1	0	15.85	15.83	16.01	16.96				
5	16QAM	1	12	16.00	16.05	15.99	15.87	17.1	0		
5	16QAM	1	24	15.79	15.84	15.96	16.75				
5	16QAM	12	7	16.12	15.82	15.86	15.89				
5	16QAM	12	7	15.96	16.03	15.98	15.95				
5	16QAM	12	13	16.02	15.92	15.82	16.00	17.1	0		
5	16QAM	25	0	15.86	15.81	15.91	16.79				
5	16QAM	1	0	15.80	15.77	15.90	16.78				
5	16QAM	1	12	16.73	15.87	16.92	16.82				
5	16QAM	1	24	15.83	15.88	15.92	15.96	17.1	0		
5	16QAM	1	12	15.94	15.94	15.74	16.85	17.1	0		
5	256QAM	1	12	15.84	15.88	15.80	16.81	17.1	0		
5	256QAM	1	24	15.87	15.98	15.81	16.84	17.1	0		
5	256QAM	1	12	15.89	15.89	15.92	16.87	17.1	0		
5	256QAM	1	24	15.84	15.87	15.81	16.86	17.1	0		
5	256QAM	25	13	15.94	15.92	15.94	16.86	17.1	0		



Reduced power for Sensor on-UAT

Band 48 (3.9G Band)-FCC										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Middle Ch / Freq	Power High Middle Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MFR (dB)	
Channel				55340	55350	55150	55650			
Frequency (MHz)				3690	3690	3642	3690			
20	QPSK	1	0	19.15	19.18	19.20	19.24	20.3	0	
20	QPSK	1	49	18.98	18.98	19.00	18.94			
20	QPSK	1	99	19.04	18.98	19.08	19.07			
20	QPSK	50	0	19.04	19.05	19.07	19.04			
20	QPSK	50	24	19.13	19.15	19.17	19.22	20.3	0	
20	QPSK	50	50	18.98	18.97	19.02	19.05			
20	QPSK	100	0	19.12	19.13	19.15	19.16			
20	QPSK	1	0	19.05	18.98	18.97	19.10			
20	16QAM	1	49	18.91	18.95	18.97	18.94	20.3	0	
20	16QAM	1	99	19.08	19.10	19.07	19.05			
20	16QAM	50	0	19.12	19.13	19.09	19.10			
20	16QAM	50	24	19.10	19.10	19.14	19.07			
20	16QAM	50	50	19.04	18.99	18.95	19.05	20.3	0	
20	16QAM	100	0	19.14	19.05	19.11	19.15			
20	64QAM	1	0	18.97	18.98	18.98	18.99			
20	64QAM	1	49	18.74	18.69	18.68	18.83			
20	64QAM	1	99	18.94	18.94	19.06	18.84	20.3	0	
20	64QAM	50	0	18.90	18.94	18.92	18.86			
20	64QAM	50	24	19.11	19.06	19.11	18.88			
20	64QAM	50	50	19.05	19.07	19.06	19.00			
20	64QAM	100	0	19.08	19.04	19.04	19.12	20.3	0	
20	256QAM	1	0	17.80	17.68	17.78	17.73			
20	256QAM	1	49	17.59	17.57	17.49	17.48			
20	256QAM	1	99	17.49	17.63	17.54	17.46			
20	256QAM	50	0	17.76	17.85	17.93	17.77	19.3	1	
20	256QAM	50	24	17.94	17.75	17.91	17.86			
20	256QAM	50	50	17.61	17.65	17.67	17.71			
20	256QAM	100	0	17.66	17.84	17.74	17.80			
Channel				59315	59320	59160	59660			
Frequency (MHz)				3712	3712	3642	3712			
15	QPSK	1	0	19.19	19.08	19.10	19.21	20.3	0	
15	QPSK	1	37	18.94	19.00	18.86	19.05			
15	QPSK	1	74	18.94	18.94	19.00	19.00			
15	QPSK	36	0	18.93	18.98	19.00	19.07			
15	QPSK	36	20	18.99	19.18	19.01	18.99	20.3	0	
15	QPSK	36	36	18.81	18.88	18.78	19.02			
15	QPSK	75	0	19.02	19.11	19.08	19.09			
15	16QAM	1	0	18.93	18.95	18.94	19.08			
15	16QAM	1	37	18.99	19.00	19.03	19.03	20.3	0	
15	16QAM	1	74	19.09	18.98	18.91	19.02			
15	16QAM	36	0	19.20	19.11	19.19	19.21			
15	16QAM	36	20	19.02	19.05	19.14	19.13			
15	16QAM	36	36	19.00	18.96	19.10	19.04	20.3	0	
15	16QAM	75	0	18.99	18.94	19.07	19.02			
15	64QAM	1	0	18.95	19.04	19.02	19.09			
15	64QAM	1	37	18.78	18.80	18.81	18.78			
15	64QAM	1	74	18.94	18.91	18.98	19.01	20.3	0	
15	64QAM	36	0	19.20	19.22	19.19	19.20			
15	64QAM	36	20	19.18	19.16	19.22	18.97			
15	64QAM	36	36	19.17	19.05	19.16	19.06			
15	64QAM	75	0	19.20	19.18	19.12	19.09	19.3	1	
15	256QAM	1	0	17.81	17.80	17.70	17.71			
15	256QAM	1	37	17.64	17.44	17.61	17.60			
15	256QAM	1	74	17.84	17.62	17.67	17.57			
15	256QAM	36	0	17.98	17.86	17.95	17.89			
15	256QAM	36	20	17.91	17.85	18.00	17.86	19.3	1	
15	256QAM	36	36	17.71	17.68	17.67	17.84			
15	256QAM	75	0	17.81	17.77	17.90	17.86			
Channel				59290	59295	59160	59660			
Frequency (MHz)				3713	3717.5	3642.5	3713			
10	QPSK	1	0	19.13	18.89	19.10	19.08	20.3	0	
10	QPSK	1	25	19.04	19.01	18.90	18.88			
10	QPSK	1	49	18.91	18.95	18.80	19.01			
10	QPSK	25	0	19.00	19.08	19.08	19.03			
10	QPSK	25	12	19.00	19.12	18.97	19.22	20.3	0	
10	QPSK	25	25	18.83	18.87	18.90	18.78			
10	QPSK	50	0	18.97	19.05	19.00	18.99			
10	16QAM	1	0	19.17	18.92	19.11	19.12			
10	16QAM	1	25	19.00	19.00	19.02	19.09	20.3	0	
10	16QAM	1	49	19.21	19.22	19.10	19.14			
10	16QAM	25	0	19.19	19.00	19.04	19.18			
10	16QAM	25	19	19.23	19.17	19.22	19.07			
10	16QAM	25	25	19.12	18.98	19.10	18.88	20.3	0	
10	16QAM	50	0	19.08	19.07	19.17	19.14			
10	16QAM	1	0	19.05	18.88	19.00	19.05			
10	64QAM	1	25	18.75	18.64	18.72	18.88			
10	64QAM	1	49	19.00	18.92	18.92	19.00	20.3	0	
10	64QAM	25	0	19.05	19.17	19.11	19.11			
10	64QAM	25	12	19.08	19.01	19.09	19.03			
10	64QAM	25	25	18.99	19.11	19.07	19.02			
10	64QAM	50	0	19.19	19.12	19.15	19.17	20.3	0	
10	256QAM	1	0	17.71	17.65	17.62	17.80			
10	256QAM	1	25	17.52	17.62	17.54	17.62			
10	256QAM	1	49	17.59	17.59	17.75	17.59			
10	256QAM	25	0	17.86	17.86	17.89	17.91	19.3	1	
10	256QAM	25	19	17.69	17.73	17.71	17.87			
10	256QAM	25	25	17.60	17.85	17.75	17.71			
10	256QAM	50	0	17.92	17.66	17.62	17.88			
Channel				59275	59281	59161	59671.5			
Frequency (MHz)				3692.5	3697	3643	3697.5			
5	QPSK	1	0	19.02	19.10	19.08	19.02	20.3	0	
5	QPSK	1	12	18.90	19.00	18.79	18.99			
5	QPSK	1	24	18.81	19.00	19.09	18.81			
5	QPSK	12	0	18.99	18.80	18.96	18.80			
5	QPSK	12	7	18.98	19.12	19.10	19.17	20.3	0	
5	QPSK	12	13	18.85	18.99	18.87	18.97			
5	QPSK	25	0	18.95	18.88	19.08	19.02			
5	16QAM	1	0	19.10	19.08	19.20	19.04			
5	16QAM	1	12	18.78	18.80	18.82	19.10	20.3	0	
5	16QAM	1	24	19.08	19.07	19.10	19.00			
5	16QAM	12	0	19.21	19.18	19.10	19.13			
5	16QAM	12	7	18.96	19.12	19.12	19.18			
5	16QAM	12	13	19.10	19.11	19.00	18.89	20.3	0	
5	16QAM	25	0	19.15	19.14	19.20	19.23			
5	16QAM	1	0	19.12	19.00	19.06	19.02			
5	64QAM	1	12	18.82	18.82	18.88	19.77			
5	64QAM	1	24	18.83	18.85	18.96	19.01	20.3	0	
5	64QAM	12	0	19.20	19.22	19.10	19.16			
5	64QAM	12	7	19.11	19.10	19.20	19.19			
5	64QAM	12	13	18.90	19.07	18.99	19.03			
5	256QAM	1	0	19.18	19.13	19.15	19.03	19.3	1	
5	256QAM	1	0	17.85	17.69	17.61	17.85			
5	256QAM	1	12	17.44	17.46	17.83	17.80			
5	256QAM	1	24	17.60	17.88	17.60	17.49			
5	256QAM	12	0	17.86	17.60	17.69	18.00	19.3	1	
5	256QAM	12	7	17.83	17.87	17.95	17.86			
5	256QAM	12	13	17.74	17.75	17.95	17.74			
5	256QAM	25	0	18.03	17.90	17.82	17.85			



Band 2 (1900MHz Band) Part 24E											
BW (MHz)	Modulation	RIS Size	RIS Offset	Power Ch / Freq 1880	Power Ch / Freq 1890	Power Ch / Freq 1910	Turn-on Time (s)	MPE (dB)			
Frequency (MHz)											
20	QPSK	1	0	15.90	15.94	15.97					
20	QPSK	1	49	15.98	15.98	15.95	17	0			
20	QPSK	1	99	15.94	15.98	15.95					
20	QPSK	50	0	15.97	15.96	15.95					
20	QPSK	50	24	15.96	15.96	15.91	17	0			
20	QPSK	50	50	15.93	15.92	15.94					
20	16QAM	1	0	15.92	15.99	15.91					
20	16QAM	1	49	15.90	15.97	15.90	17	0			
20	16QAM	1	99	15.97	15.97	15.95					
20	16QAM	50	0	15.98	15.98	15.94					
20	16QAM	50	24	15.90	15.97	15.97					
20	16QAM	50	50	15.97	15.91	15.90	17	0			
20	16QAM	100	0	15.98	15.94	15.96					
20	16QAM	1	9	15.98	15.95	15.91					
20	16QAM	1	99	15.98	15.99	15.96					
20	16QAM	50	0	15.98	15.98	15.95					
20	16QAM	50	24	15.97	15.92	15.98	17	0			
20	16QAM	50	50	15.98	15.98	15.93					
20	16QAM	100	0	15.98	15.98	15.98					
20	256QAM	1	0	15.74	15.52	15.77					
20	256QAM	1	99	15.74	15.52	15.77	17	0			
20	256QAM	1	99	15.73	15.72	15.79					
20	256QAM	50	0	15.59	15.63	15.55					
20	256QAM	50	24	15.53	15.62	15.57					
20	256QAM	50	50	15.63	15.62	15.59	17	0			
20	256QAM	100	0	15.51	15.58	15.46					
Channel											
Frequency (MHz)											
15	QPSK	1	0	15.88	15.96	15.94					
15	QPSK	1	37	15.94	15.92	15.92	17	0			
15	QPSK	1	74	15.91	15.98	15.96					
15	QPSK	36	0	15.90	15.92	15.94					
15	QPSK	36	20	15.91	15.91	15.96	17	0			
15	QPSK	36	36	15.94	15.96	15.99					
15	QPSK	75	0	15.99	15.92	15.91					
15	16QAM	1	37	15.96	15.94	15.94	17	0			
15	16QAM	1	74	15.93	15.92	15.91					
15	16QAM	36	0	15.99	15.97	15.98					
15	16QAM	36	20	15.99	15.99	15.99					
15	16QAM	36	36	15.94	15.99	15.99					
15	16QAM	75	0	15.92	15.91	15.95					
15	16QAM	1	37	15.95	15.98	15.92	17	0			
15	16QAM	1	74	15.96	15.96	15.96					
15	16QAM	36	0	15.99	15.92	15.91					
15	16QAM	36	20	15.92	15.97	15.95	17	0			
15	16QAM	36	36	15.97	15.99	15.99					
15	16QAM	75	0	15.98	15.90	15.90					
15	256QAM	1	0	15.80	15.86	15.79					
15	256QAM	1	37	15.84	15.82	15.82	17	0			
15	256QAM	1	74	15.87	15.82	15.75					
15	256QAM	36	0	15.49	15.57	15.64					
15	256QAM	36	20	15.45	15.57	15.60	17	0			
15	256QAM	36	36	15.60	15.57	15.40					
15	256QAM	75	0	15.50	15.52	15.49					
Channel											
Frequency (MHz)											
1850	QPSK	1	0	15.85	15.80	15.85	Turn-on Time (s)	MPE (dB)			
5	QPSK	1	0	15.93	15.98	15.75					
5	QPSK	1	20	15.95	15.71	15.71					
5	QPSK	1	49	15.97	15.76	15.74					
5	QPSK	25	0	15.76	15.98	15.97					
5	QPSK	25	12	15.76	15.98	15.98	17	0			
5	QPSK	25	25	15.77	15.77	15.76					
5	QPSK	50	0	15.78	15.98	15.93					
5	16QAM	1	20	15.70	15.96	15.78	17	0			
5	16QAM	1	25	15.98	15.79	15.70					
5	16QAM	1	49	15.76	15.83	15.79					
5	16QAM	25	0	15.75	15.96	15.98					
5	16QAM	25	12	15.73	15.73	15.77	17	0			
5	16QAM	25	25	15.70	15.76	15.76					
5	16QAM	50	0	15.73	15.96	15.90					
5	16QAM	1	0	15.71	15.97	15.99					
5	16QAM	1	25	15.76	15.84	15.74	17	0			
5	16QAM	1	49	15.75	15.82	15.78					
5	16QAM	25	0	15.79	15.71	15.73					
5	16QAM	25	12	15.73	15.73	15.77	17	0			
5	16QAM	25	25	15.70	15.76	15.76					
5	256QAM	1	0	15.65	15.56	15.60					
5	256QAM	1	20	15.68	15.44	15.67	17	0			
5	256QAM	1	49	15.75	15.81	15.82					
5	256QAM	25	0	15.64	15.59	15.52					
5	256QAM	25	12	15.51	15.50	15.44	17	0			
5	256QAM	25	25	15.58	15.53	15.53					
5	256QAM	50	0	15.61	15.56	15.44					
Channel											
Frequency (MHz)											
1851.5	QPSK	1	0	15.83	15.84	15.98	Turn-on Time (s)	MPE (dB)			
3	QPSK	1	0	15.73	15.74	15.72	17	0			
3	QPSK	1	12	15.73	15.74	15.72					
3	QPSK	1	24	15.97	15.76	15.76					
3	QPSK	12	0	15.70	15.99	15.99					
3	QPSK	12	12	15.72	15.72	15.73	17	0			
3	QPSK	12	13	15.75	15.74	15.71					
3	QPSK	25	0	15.70	15.70	15.83					
3	16QAM	1	12	15.73	15.81	15.78	17	0			
3	16QAM	1	12	15.71	15.78	15.72					
3	16QAM	1	24	15.82	15.84	15.84					
3	16QAM	12	0	15.71	15.74	15.87					
3	16QAM	12	7	15.75	15.74	15.95	17	0			
3	16QAM	12	13	15.78	15.77	15.75					
3	16QAM	25	0	15.74	15.98	15.97					
3	16QAM	1	0	15.73	15.97	15.73					
3	16QAM	1	12	15.73	15.85	15.70	17	0			
3	16QAM	1	24	15.83	15.87	15.80					
3	16QAM	12	0	15.74	15.73	15.77					
3	16QAM	12	7	15.74	15.76	15.71	17	0			
3	16QAM	12	13	15.71	15.72	15.84					
3	256QAM	1	0	15.68	15.60	15.60					
3	256QAM	1	12	15.69	15.57	15.57	17	0			
3	256QAM	1	24	15.64	15.71	15.70					
3	256QAM	12	0	15.53	15.53	15.54					
3	256QAM	12	7	15.62	15.70	15.62	17	0			
3	256QAM	12	13	15.56	15.72	15.60					
3	256QAM	25	0	15.49	15.55	15.54					
Channel											
Frequency (MHz)											
1851.5	QPSK	1	0	15.83	15.95	15.75	Turn-on Time (s)	MPE (dB)			
1.4	QPSK	1	0	15.90	15.91	15.96	17	0			
1.4	QPSK	1	2	15.73	15.72	15.76					
1.4	QPSK	1	14	15.74	15.77	15.73					
1.4	QPSK	3	0	15.71	15.97	15.74					
1.4	QPSK	3	4	15.71	15.72	15.73	17	0			
1.4	QPSK	3	7	15.77	15.70	15.70					
1.4	QPSK	15	0	15.76	15.70	15.86					
1.4	16QAM	1	8	15.75	15.80	15.71	17	0			
1.4	16QAM	1	8	15.72	15.78	15.84					
1.4	16QAM	1	14	15.81	15.77	15.79					
1.4	16QAM	8	0	15.72	15.77	15.78	17	0			
1.4	16QAM	8	4	15.84	15.78	15.78					
1.4	16QAM	8	7	15.72	15.77	15.78					
1.4	16QAM	25	0	15.76	15.79	15.70					
1.4	16QAM	1	0	15.70	15.96	15.75					
1.4	16QAM	1	8	15.85	15.83	15.79	17	0			
1.4	16QAM	1	14	15.79	15.87	15.75					
1.4	16QAM	8	0	15.75	15.72	15.77					
1.4	16QAM	8	4	15.75	15.72	15.75	17	0			
1.4	16QAM	8	7	15.75	15.70	15.85					
1.4	16QAM	15	0	15.79	15.73	15.77					
1.4	256QAM	1	0	15.77	15.67	15.77					
1.4	256QAM	1	8	15.79	15.70	15.85	17	0			
1.4	256QAM	1	8	15.76	15.77	15.77					
1.4	256QAM	1	14	15.81	15.77	15.79					
1.4	256QAM	8	0	15.71	15.77	15.78	17	0			
1.4	256QAM	8	4	15.84	15.78	15.78					
1.4	256QAM	8	7	15.72	15.77	15.78					
1.4	256QAM	25	0	15.76	15.79	15.70					
1.4	256QAM	1	0	15.70	15.96	15.75					
1.4	256QAM	1	8	15.83	15.85	15.86	17	0			
1.4	256QAM	1	14	15.79	15.87	15.75					
1.4	256QAM	8	0	15.75	15.72	15.77					
1.4	256QAM	8	4	15.75	15.72	15.75	17	0			



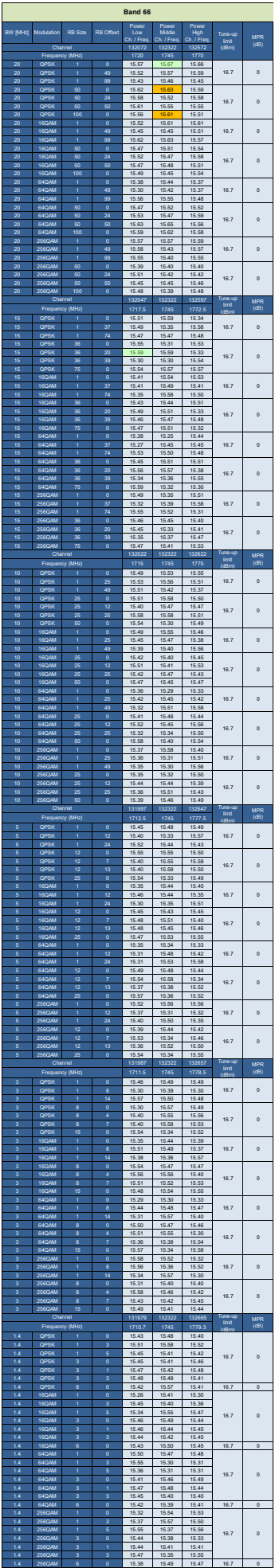
Band 7 (2600MHz Band)									
Part 27									
BW (MHz)	Modulation	RB Size	RB Offset	Power Pilot Ch / Freq	Power Pilot Ch / Freq	Power Pilot Ch / Freq	Turn-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)	Channel	2535	2535	2535	21100	21100	21100	Turn-up limit (dBm)	MPR (dB)
20	QPSK	1	0	14.75	14.88	14.93			
20	QPSK	1	49	14.75	14.87	15.00	16	0	
20	QPSK	1	99	14.87	15.00	15.13			
20	QPSK	50	0	14.82	15.00	15.03			
20	QPSK	50	24	14.88	15.03	15.09	16	0	
20	QPSK	50	50	14.84	15.00	15.14			
20	QPSK	100	0	14.84	15.02	15.07			
20	16QAM	1	0	15.07	14.97	14.96	16	0	
20	16QAM	1	49	15.01	15.01	15.00			
20	16QAM	50	0	14.83	15.01	15.04			
20	16QAM	50	24	14.90	15.06	15.08	16	0	
20	16QAM	50	50	14.95	14.97	14.97			
20	16QAM	100	0	14.89	15.03	15.05			
20	64QAM	1	0	14.85	15.06	15.02			
20	64QAM	1	49	14.95	14.96	14.94	16	0	
20	64QAM	1	99	14.98	14.98	14.98			
20	64QAM	50	0	14.87	15.00	15.07			
20	64QAM	50	24	14.99	15.03	15.04	16	0	
20	64QAM	50	50	14.94	15.04	15.02			
20	256QAM	1	0	14.66	14.90	14.89			
20	256QAM	1	49	14.78	14.88	14.82	16	0	
20	256QAM	1	99	14.89	14.88	14.80			
20	256QAM	50	0	14.63	14.81	14.68			
20	256QAM	50	24	14.77	14.84	14.80	16	0	
20	256QAM	50	50	14.74	14.80	14.78			
20	256QAM	100	0	14.75	14.81	14.86			
Channel									
Frequency (MHz)	Channel	2535	2535	2535	21100	21100	21100	Turn-up limit (dBm)	MPR (dB)
18	QPSK	1	0	14.79	14.93	14.97			
18	QPSK	1	37	14.87	14.90	14.92	16	0	
18	QPSK	1	74	14.72	14.88	14.98			
18	QPSK	36	0	14.72	14.90	14.94			
18	QPSK	36	20	14.88	14.97	14.98	16	0	
18	QPSK	36	36	14.88	14.85	14.88			
18	QPSK	75	0	14.82	14.91	14.95			
18	16QAM	1	0	14.85	14.90	14.90			
18	16QAM	1	37	14.90	14.88	14.92	16	0	
18	16QAM	1	74	14.95	14.95	14.90			
18	16QAM	36	0	14.82	14.94	14.93			
18	16QAM	36	20	14.85	14.92	14.97	16	0	
18	16QAM	36	39	14.90	14.95	14.94			
18	64QAM	1	0	14.89	14.94	14.94			
18	64QAM	1	37	14.93	14.92	14.98	16	0	
18	64QAM	1	74	14.85	14.92	14.96			
18	64QAM	36	0	14.87	14.91	14.97			
18	64QAM	36	20	14.91	14.90	14.94	16	0	
18	64QAM	36	39	14.92	14.90	14.98			
18	64QAM	75	0	14.85	14.98	14.90			
18	256QAM	1	0	14.67	14.88	14.91			
18	256QAM	1	37	14.84	14.90	14.95	16	0	
18	256QAM	1	74	14.94	14.92	14.83			
18	256QAM	36	0	14.68	14.81	14.86			
18	256QAM	36	20	14.80	14.88	14.90	16	0	
18	256QAM	36	39	14.88	14.85	14.75			
18	256QAM	75	0	14.70	14.73	14.71			
Channel									
Frequency (MHz)	Channel	2535	2535	2535	21100	21100	21100	Turn-up limit (dBm)	MPR (dB)
16	QPSK	1	0	14.59	14.84	14.97			
16	QPSK	1	26	14.55	14.89	14.93	16	0	
16	QPSK	1	49	14.55	14.87	14.98			
16	QPSK	25	0	14.73	14.98	14.92			
16	QPSK	25	13	14.77	14.90	14.93	16	0	
16	QPSK	25	26	14.81	14.95	14.93			
16	QPSK	50	0	14.76	14.90	14.94			
16	16QAM	1	0	14.68	14.88	14.92			
16	16QAM	1	26	14.88	14.92	14.96	16	0	
16	16QAM	1	49	14.92	14.94	14.97			
16	16QAM	25	0	14.64	14.88	14.96			
16	16QAM	25	12	14.84	14.95	14.93	16	0	
16	16QAM	25	26	14.84	14.89	14.93			
16	16QAM	50	0	14.81	14.91	14.92			
16	64QAM	1	0	14.81	14.91	14.93			
16	64QAM	1	26	14.90	14.89	14.97	16	0	
16	64QAM	1	49	14.87	14.90	14.90			
16	64QAM	25	0	14.88	14.98	14.96			
16	64QAM	25	12	14.88	14.95	14.98	16	0	
16	64QAM	25	26	14.87	14.91	14.91			
16	64QAM	50	0	14.83	14.98	14.97			
16	256QAM	1	0	14.76	14.95	14.98			
16	256QAM	1	49	14.85	14.93	14.82	16	0	
16	256QAM	25	0	14.63	14.87	14.88			
16	256QAM	25	12	14.77	14.75	14.84	16	0	
16	256QAM	25	26	14.84	14.90	14.73			
16	256QAM	50	0	14.76	14.76	14.76			
Channel									
Frequency (MHz)	Channel	2535	2535	2535	21100	21100	21100	Turn-up limit (dBm)	MPR (dB)
5	QPSK	1	0	14.61	14.86	14.96			
5	QPSK	1	18	14.58	14.85	14.91	16	0	
5	QPSK	1	24	14.57	14.97	14.97			
5	QPSK	12	0	14.69	14.91	14.90			
5	QPSK	12	7	14.75	14.80	14.83	16	0	
5	QPSK	12	13	14.76	14.90	14.93			
5	QPSK	25	0	14.75	14.80	14.91			
5	16QAM	1	0	14.88	14.93	14.93			
5	16QAM	1	12	14.88	14.98	14.97	16	0	
5	16QAM	1	24	14.81	14.97	14.93			
5	16QAM	12	0	14.84	14.94	14.96			
5	16QAM	12	7	14.78	14.90	14.94	16	0	
5	16QAM	12	13	14.81	14.92	14.94			
5	16QAM	25	0	14.76	14.93	14.97			
5	64QAM	1	0	14.81	14.94	14.98			
5	64QAM	1	12	14.85	14.87	14.95	16	0	
5	64QAM	1	24	14.81	14.93	14.97			
5	64QAM	12	0	14.81	14.98	14.92			
5	64QAM	12	7	14.85	14.91	14.98	16	0	
5	64QAM	12	13	14.81	14.98	14.92			
5	64QAM	25	0	14.82	14.92	14.90			
5	256QAM	1	0	14.70	14.88	14.90			
5	256QAM	1	24	14.95	14.90	14.81	16	0	
5	256QAM	12	0	14.80	14.96	14.95			
5	256QAM	12	7	14.82	14.87	14.82	16	0	
5	256QAM	12	13	14.80	14.87	14.82			
5	256QAM	25	0	14.88	14.89	14.76			

Band 12 (700MHz Low Band)									
Part 27 (only on channel required)									
BW (MHz)	Modulation	RB Size	RB Offset	Power Pilot Ch / Freq	Power Ch / Freq	Power Ch / Freq	Turn-up limit (dBm)	MPR (dB)	
Channel									
Frequency (MHz)	Channel	2360	2360	2360	2360	2360	Turn-up limit	MPR	(dB)
16	QPSK	1	0	20.02	20.03	20.12			
16	QPSK	1	25	20.11	20.13	20.07	21	0	
16	QPSK	1	49	20.15	20.07	20.15			
16	QPSK	25	0	20.11	20.23	20.13			
16	QPSK	25	12	20.12	20.25	20.13	21	0	
16	QPSK	25	25	20.14	20.21	20.14			
16	QPSK	50	0	20.11	20.23	20.12			
16	16QAM	1	0	19.98	19.97	20.02			
16	16QAM	1	25	19.96	19.95	20.01	21	0	
16	16QAM	1	49	20.06	20.00	19.94			
16	16QAM	25	0	20.04	20.04	20.05			
16	16QAM	25	12	20.05	20.05	20.04	21	0	
16	16QAM	25	25	20.04	20.03	20.03			
16	16QAM	50	0	20.03	20.03	20.00			
16	64QAM	1	0	19.99	19.93	20.03			
16	64QAM	1	25	19.98	19.91	19.94	21	0	
16	64QAM	1	49	20.06	20.00	19.94			
16	64QAM	25	0	19.87	19.80	19.84			
16	64QAM	25	12	19.91	19.96	19.84	20.3	0.7	
16	64QAM	25	25	19.88	19.91	19.86			
16	64QAM	50	0	19.91	19.97	19.86			
16	256QAM	1	0	18.33	18.13	18.35			
16	256QAM	1	25	18.34	18.20	18.20	18.8	2.2	
16	256QAM	1	49	18.36	18.23	18.26			
16	256QAM	25	0	18.17	18.17	18.23			
16	256QAM	25	12	18.18	18.18	18.20	18.8	2.2	
16	256QAM	25	25	18.24	18.15	18.19			
16	256QAM	50	0	18.22	18.20	18.20			
Part 27									
Channel	2360	2360	2360	2360	2360	2360	Turn-up limit	MPR	(dB)
5	QPSK	1	0	20.04	20.07	20.13			
5	QPSK	1	12	20.07	20.19	20.02	21	0	
5	QPSK	1	24	20.07	20.19	20.02			
5	QPSK	12	0	20.07	20.19	20.02			
5	QPSK	12	7	20.10	20.08	20.02			
5	QPSK	12	7	20.08	20.03	20.15			
5	QPSK	12	19	20.02	20.04	20.15			
5	QPSK	25	0	20.10	20.05	20.05			
5	16QAM	1	0	19.99	19.94	19.93			
5	16QAM	1	12	19.97	19.97	19.97	21	0	
5	16QAM	1	24	19.97	19.98	19.97			
5	16QAM	12	0	19.90	19.93	19.95			
5	16QAM	12	7	19.91	19.97	19.97			
5	16QAM	12	19	20.00	20.05	20.03	21	0	
5	16QAM	25	0	20.08	20.02	20.04			
5	16QAM	25	12	20.02	20.01	20.01			
5	16QAM	1	12	19.91	20.07	19.95			
5	16QAM	12	24	19.92	19.91	19.95			
5	16QAM	12	7	19.95	20.01	19.98			
5	16QAM	12	19	20.00	20.00	19.95	20.3	0.7	
5	16QAM	25	0	19.91	19.97	19.97			
5	256QAM	1	0	18.32	18.18	18.32			
5	256QAM	1	12	18.34	18.24	18.23			
5	256QAM	1	24	18.39	18.18	18.27	18.8	2.2	
5	256QAM	12	0	18.27	18.27	18.26			
5	256QAM	12	7	18.28	18.22	18.21	18.8	2.2	
5	256QAM	12	19	18.33	18.22	18.26			
5	256QAM	25	0	18.32	18.27	18.25			
Part 27									
Channel	700.5	700.5	714.5	714.5	714.5	714.5	Turn-up limit	MPR	(dB)
3	QPSK	1	0	20.04	20.08	20.18			
3	QPSK	1	14	20.07	20.18	20.01			
3	QPSK	1	14	20.07	20.19	20.01			
3	QPSK	8	0	20.09	20.08	20.07			
3	QPSK	8	7	20.04	20.07	20.07	21	0	
3	QPSK	8	7	20.02	20.18	20.08			
3	QPSK	15	0	20.03	20.19	20.10			
3	QPSK	15	7	20.07	20.06	20.10			
3	16QAM	1	0	19.96	19.96	19.96			
3	16QAM	1	14	19.95	19.98	19.98	21	0	
3	16QAM	1	14	19.93	19.90	19.98			
3	16QAM	8	0	19.93	19.92	19.93			
3	16QAM	8	7	20.03	20.09	20.10			
3	16QAM	8	7	19.98	19.98	19.97			
3	16QAM	15	0	20.03	20.05	20.05			
3	16QAM	1	0	19.96	19.96	19.96			
3	16QAM	1	14	19.92	19.94	19.94	21	0	
3	16QAM	8	0	19.93	19.98	19.98			
3	16QAM	8	7	19.92	19.95	19.97	20.3	0.7	
3	16QAM	15	0	19.91	19.94	19.96			
3	256QAM	1	0	18.25	18.22	18.25			
3	256QAM	1	14	18.25	18.23	18.25	18.8	2.2	
3	256QAM	1	14	18.25	18.25	18.25			
3	256QAM	8	0	18.17	18.26	18.22	18.8	2.2	
3	256QAM	8	7	18.27	18.25	18.26			
3	256QAM	15	0	18.22	18.21	18.21			
Part 27									
Channel	2301.7	2309.6	2373.3	2373.3	2373.3	2373.3	Turn-up limit	MPR	(dB)
1.4	QPSK	1	0	19.97	20.13	20.13			
1.4	QPSK	1	3	19.97	20.15	20.13			
1.4	QPSK	1	5	19.91	20.15	20.08	21	0	
1.4	QPSK	1	5	19.96	20.15	20.08			
1.4	QPSK	3	0	19.95	19.97	19.97			
1.4	QPSK	3	3	19.95	19.97	19.97			
1.4	QPSK	3	3	19.98	19.93	19.91			
1.4	QPSK	3	5	19.95	19.92	19.98	21	0	
1.4	16QAM	1	0	19.84	19.81	19.89			
1.4	16QAM	1	3	19.83	19.90	19.82			
1.4	16QAM	1	5	19.79	19.88	19.83	20.3	0.7	
1.4	16QAM	3	0	20.01	20.14	20.11			
1.4	16QAM	3	3	20.02	20.03	20.05			
1.4	16QAM	3	5	19.96	20.08	20.05	21	0	
1.4	16QAM	5	0	20.03	20.08	20.08			
1.4	16QAM	5	0	19.96	19.93	19.91			
1.4	16QAM	5	3	19.94	19.98	19.98	21	0	
1.4	16QAM	5	5	19.93	19.96	19.81			
1.4	16QAM	3	0	19.87	19.93	19.89			
1.4	16QAM	3	3	19.94	19.93	19.95			
1.4	16QAM	3	5	19.99	19.99	19.95	20.3	0.7	
1.4	16QAM	5	0	19.92	19.92	19.92			
1.4	16QAM	5	0	19.26	19.05	19.18			
1.4	256QAM	1	0	18.44	18.35	18.23			
1.4	256QAM	1	3	18.44	18.35	18.23	18.8	2.2	
1.4	256QAM	1	5	18.44	18.35	18.23			
1.4	256QAM	3	0	18.21	18.13	18.22			
1.4	256QAM	3	3	18.21	18.13	18.22	18.8	2.2	
1.4	256QAM	3	5	18.21	18.19	18.20			
1.4	256QAM	5	0	18.22	18.13	18.20			
1.4	256QAM	5	0	18.25	18.15	18.28	18.8	2.2	



Band 17 (700MHz Band) Part 27H(only one channel required)														
RV	Modulation	RB Size	RB Offset	Power Ch / Freq 23780	Power Ch / Freq 23790	Power Ch / Freq 23800	Turn-up limit (dBm)	MFR (dB)						
Frequency (MHz)														
10	QPSK	1	0	19.88	19.89	19.85	21	0						
10	QPSK	1	26	19.91	19.90	19.90								
10	QPSK	1	46	20.01	19.96	19.91								
10	QPSK	25	0	19.95	19.91	19.83								
10	QPSK	25	12	19.99	19.95	19.88								
10	QPSK	25	26	19.93	19.96	19.95	21	0						
10	QPSK	50	0	19.98	19.93	19.87								
10	16QAM	1	0	19.83	19.83	19.83								
10	16QAM	1	26	19.92	19.90	19.92								
10	16QAM	1	46	19.91	19.91	19.91								
10	16QAM	25	0	19.95	19.96	19.99	21	0						
10	16QAM	25	12	19.95	19.96	19.98								
10	16QAM	25	26	19.92	19.99	19.99								
10	16QAM	50	0	19.91	19.94	19.91								
10	64QAM	1	26	19.97	19.97	19.98								
10	64QAM	1	46	19.92	19.96	19.98	20.3	0.7						
10	64QAM	25	0	19.89	19.86	19.84								
10	64QAM	25	12	19.94	19.96	19.94								
10	64QAM	25	26	19.89	19.97	19.98								
10	64QAM	50	0	19.88	19.90	19.88								
10	256QAM	1	0	18.24	18.06	18.24	18.8	2.2						
10	256QAM	25	0	18.12	18.11	18.17								
10	256QAM	1	46	18.18	18.15	18.20								
10	256QAM	25	0	18.03	18.18	17.98								
10	256QAM	25	26	18.24	18.06	18.19								
10	256QAM	50	0	18.09	18.07	18.10	21	0						
Channel														
Frequency (MHz)														
5	QPSK	1	0	19.96	19.82	19.83	21	0						
5	QPSK	1	12	19.87	19.84	19.89								
5	QPSK	1	24	19.87	19.80	19.80								
5	QPSK	12	0	19.80	19.84	19.86								
5	QPSK	12	13	19.80	19.86	19.86								
5	QPSK	25	0	19.81	19.89	19.84	21	0						
5	16QAM	1	0	19.84	19.84	19.81								
5	16QAM	1	12	19.82	19.81	19.80								
5	16QAM	1	24	19.86	19.81	19.84								
5	16QAM	12	0	19.86	19.84	19.87								
5	16QAM	12	13	19.84	19.80	19.80	21	0						
5	64QAM	1	0	19.83	19.86	19.89								
5	64QAM	1	12	19.87	19.85	19.89								
5	64QAM	1	24	19.86	19.87	19.87								
5	64QAM	12	0	19.81	19.84	19.81								
5	64QAM	12	7	19.88	19.87	19.80	20.3	0.7						
5	64QAM	12	13	19.89	19.81	19.84								
5	64QAM	25	0	19.85	19.82	19.88								
5	256QAM	1	0	18.13	17.99	17.90								
5	256QAM	1	24	18.12	18.15	18.15								
5	256QAM	1	24	18.21	18.22	17.84	18.8	2.2						
5	256QAM	12	0	18.05	18.07	18.15								
5	256QAM	12	7	18.15	18.11	18.05								
5	256QAM	12	13	18.07	18.11	17.98								
5	256QAM	25	0	18.01	18.12	18.11								

Band 25 (1900MHz Band) Part 24E												
RV	Modulation	RB Size	RB Offset	Power Ch / Freq 26140	Power Ch / Freq 26145	Power Ch / Freq 26150	Turn-up limit (dBm)	MFR (dB)				
Frequency (MHz)												
20	QPSK	1	0	16.13	16.16	16.12	17	0				
20	QPSK	1	49	16.08	16.15	16.09						
20	QPSK	1	99	16.02	16.08	16.04						
20	QPSK	50	0	16.02	16.11	16.06						
20	QPSK	50	24	16.09	16.13	16.10						
20	QPSK	50	49	16.08	16.12	16.07	17	0				
20	QPSK	100	0	16.06	16.11	16.08						
20	16QAM	1	0	15.91	15.94	15.86						
20	16QAM	1	49	15.99	15.92	15.97						
20	16QAM	1	99	15.97	15.98	15.96						
20	16QAM	50	0	15.93	15.97	15.96	17	0				
20	16QAM	50	24	15.91	15.99	15.96						
20	16QAM	50	49	15.96	15.91	15.92						
20	16QAM	100	0	15.91	15.91	15.92						
20	64QAM	1	0	15.91	15.90	15.93						
20	64QAM	1	49	15.90	15.92	15.92	17	0				
20	64QAM	1	99	15.95	15.95	15.95						
20	64QAM	50	0	15.91	15.90	15.94						
20	64QAM	50	24	15.91	15.90	15.95						
20	64QAM	50	49	15.97	15.99	15.99						
20	256QAM	1	0	15.90	15.94	15.91	17	0				
20	256QAM	1	49	15.92	15.90	15.91						
20	256QAM	50	0	15.88	15.93	15.90						
20	256QAM	50	24	15.90	15.91	15.98						
20	256QAM	50	49	15.90	15.91	15.77						
20	256QAM	50	0	15.84	15.79	15.79	17	0				
20	256QAM	50	24	15.86	15.84	15.86						
20	256QAM	50	49	15.81	15.81	15.70						
20	256QAM	100	0	15.80	15.74	15.78						
Channel												
Frequency (MHz)												
15	QPSK	1	0	16.05	15.94	15.98	17	0				
15	QPSK	1	37	15.96	15.92	15.97						
15	QPSK	1	74	15.96	15.93	15.93						
15	QPSK	36	0	15.96	15.98	15.91						
15	QPSK	36	20	15.96	15.97	15.95						
15	QPSK	75	0	15.95	15.99	15.93	17	0				
15	QPSK	75	0	15.94	15.98	15.97						
15	16QAM	1	0	15.90	15.95	15.90						
15	16QAM	1	37	15.94	15.95	15.96						
15	16QAM	1	74	15.95	15.93	15.97						
15	16QAM	36	0	15.91	15.96	15.98	17	0				
15	16QAM	36	20	15.95	15.93	15.98						
15	16QAM	36	39	15.90	15.92	15.92						
15	16QAM	75	0	15.92	15.90	15.94						
15	64QAM	1	37	15.99	15.95	15.99	17	0				
15	64QAM	1	74	15.98	15.93	15.97						
15	64QAM	36	0	15.97	15.99	15.98						
15	64QAM	36	20	15.95	15.94	15.95						
15	64QAM	75	0	15.95	15.94	15.95						
15	256QAM	1	0	15.88	15.83	15.91	17	0				
15	256QAM	1	37	15.90	15.87	15.90						
15	256QAM	1	74	15.90	15.87	15.84						
15	256QAM	36	0	15.89	15.75	15.86						
15	256QAM	36	20	15.76	15.79	15.84						
15	256QAM	36	39	15.76	15.81	15.71	17	0				
15	256QAM	36	74	15.76	15.81	15.71						
15	256QAM	75	0	15.80	15.80	15.87	17	0				
Channel												
Frequency (MHz)												
10	QPSK	1	0	15.91	15.93	15.90	17	0				
10	QPSK	1	25	15.93	15.93	15.87						
10	QPSK	1	50	15.97	15.93	15.91						
10	QPSK	25	0	15.90	15.98	15.94						
10	QPSK	25	12	15.95	15.98	15.92						
10	QPSK	50	0	15.90	15.93	15.90	17	0				
10	QPSK	50	0	15.94	15.98	15.95						
10	16QAM	1	0	15.90	15.97	15.93						
10	16QAM	1	25	15.94	15.93	15.97						
10	16QAM	1	50	15.90	15.92	15.93						
10	16QAM	25	0	15.90	15.92	15.90	17	0				
10	16QAM	25	12	15.91	15.90	15.89						
10	16QAM	25	37	15.94	15.93	15.97						
10	16QAM	25	50	15.95	15.94	15.97						
10	16QAM	50	0	15.95	15.98	15.99						
10	64QAM	1	25	15.90	15.90	15.89	17	0				
10	64QAM	49	15.96	15.91	15.91							
10	64QAM	25	37	15.97	15.97	15.91						
10	64QAM	25	50	15.98	15.98	15.91						
10	64QAM	50	0	15.94	15.98	15.95						
10	256QAM	1	0	15.82	15.86	15.88	17	0				
10	256QAM	1	25	15.90	15.87	15.92						
10	256QAM	1	50	15.96	15.92	15.92						
10	256QAM	25	0	15.88	15.88	15.91						
10	256QAM	25	12	15.90	15.89	15.91						
10	256QAM	25	37	15.90	15.89	15.91	17	0				
10	256QAM	25	50	15.90	15.89	15.91						
10	256QAM	50	0	15.86	15.86	15.88						
10	256QAM	50	12	15.88	15.87	15.91						
10	256QAM	50	25	15.73	15.82	15.75						
10	256QAM	50	37	15.78	15.78	15.88	17	0				
10	256QAM	50	50	15.74	15.76	15.78						
Channel												
Frequency (MHz)												
5	QPSK	1	0	16.02	15.90	15.92	17	0				
5	QPSK	1	12	15.90	15.97	15.93						
5	QPSK	1	25	15.94	15.99	15.91						
5	QPSK	12	0	15.99	15.95	15.95						
5	QPSK	12	7	15.91	15.97	15.92						
5	QPSK	25	0	15.93	15.93	15.91	17	0				
5	QPSK	25	12	15.95	15.94	15.92						
5	QPSK	25	25	15.93	15.94	15.92						
5	QPSK	50	0	15.91	15.91	15.90						
5	QPSK	50	12	15.96	15.95	15.95						
5	16QAM	1	24	15.94	15.98	15.91	17	0				
5	16QAM	1	37	15.97	15.97	15.91						
5	16QAM	12	0	15.92	15.93	15.95						
5	16QAM	12	13	15.98	15.97	15.94						
5	16QAM	12	25	15.96	15.96	15.96						
5	16QAM	1	0	15.91	15.97	15.97	17	0				
5	16QAM	1	12	15.95	15.93	15.98						
5	16QAM	1	25	15.97	15.97	15.97						
5	16QAM	12	0	15.92	15.97	15.94						
5	16QAM	12	7	15.92	15.97	15.99						
5	16QAM	12	13	15.91	15.90	15.98	17	0				
5	16QAM	12	25	15.91	15.90	15.98						
5	256QAM	1	0	15.88	15.91	15.92						
5	256QAM	1	12	15.90	15.90	15.92						
5	256QAM	1	24	15.93	15.91	15.74						
5	256QAM	12	0	15.85	15.88	15.71	17	0				
5	256QAM	12	13	15.87	15.88	15.84						
5	256QAM	12	25	15.76	15.79	15.74						
5	256QAM	12	13	15.81	15.74	15.61						
5	256QAM	25	0	15.74	15.76	15.76						
Channel												
Frequency (MHz)												
3	QPSK	1	0	16.07	15.88	15.83	17	0				
3	QPSK	1	14	15.99	15.91	15.94						
3	QPSK	1	14	15.99	15.91	15.94						
3	QPSK	8	0	15.95	15.98	15.88						
3	QPSK	8	7	15.93	15.99	15.94						
3	QPSK	15	0	15.93	15.94	15.95	17	0				
3	QPSK	15	0	15.97	15.96	15.96						
3	QPSK	8	7	15.93	15.99	15.94						
3	16QAM	1	8	15.98	15.90	15.93						
3	16QAM	1	14	15.90	15.93	15.99						
3	16QAM	8	0	15.94	15.90	15.94	17	0				
3	16QAM	8	7	15.99	15.92	15.91						
3	16QAM	8	14	15.99	15.92	15.92						
3	16QAM	1	0	15.97	15.78	15.78						
3	16QAM	1	8	15.94	15.93	15.93						
3	16QAM	8	0	15.92	15.82	15.82	17	0				
3	16QAM	8	7	15.93	15.94	15.98						
3	16QAM	8	14	15.91	15.94	15.94						
3	16QAM	15	0	15.97	15.97	15.97						
3	16QAM	15	0	15.98	15.98	15.91						
3	16QAM	1	0	15.97	15.97	15.97	17	0				
3	16QAM	1	8	15.97	15.97	15.97						
3	16QAM	1	14	15.91	15.99	15.99						
3	16QAM	8	0	15.97	15.97	15.97						
3	16QAM	8	7	15.92	15.97	15.97						
3	256QAM	1	0	15.84	15.81	15.84	17	0				
3	256QAM	8	7	15.91	15.75	15.78						
3	256QAM	8	14	15.70	15.70	15.70						
Channel												
Frequency (MHz)												
1.4	QPSK	1	0	16.01	15.86	15.78	17	0				
1.4	QPSK	1	0	15.97	15.90	15.94						
1.4	QPSK	1	5	15.90	15.92	15.95						
1.4	QPSK	3	0	15.80	15.86	15.85						
1.4	QPSK	3	0	15.87	15.87	15.87						
1.4	QPSK	3	3	15.80	15.83	15.83	17	0				
1.4	QPSK	3	3	15.86	15.84	15.84						
1.4	QPSK	1	0	15.87	15.94	15.94						
1.4	QPSK	1	5	15.94	15.92	15.91						
1.4	QPSK	3	3	15.83	15.82	15.82						
1.4	16QAM	1	0	15.90	15.90	15.90	17	0				
1.4	16QAM	1	5	15.93	15.84	15.82						
1.4	16QAM	1	5	15.90	15.86	15.86						
1.4	16QAM	6	0	15.96	15.90	15.90						
1.4	16QAM	6	0	15.96	15.89	15.91						
1.4	16QAM	6	0	15.91	15.89	15.89	17	0				
1.4	16QAM	6	0	15.94	15.88	15.87						
1.4	16QAM	6	0									



Band 71									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Mid Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPR (dB)	
Channel				133222	133222	133372			
Frequency (MHz)				673	683	688			
20	QPSK	1	0	20.95	20.95	20.91	21.9	0	
20	QPSK	1	48	20.80	20.80	20.72			
20	QPSK	1	96	20.80	20.80	20.82			
20	QPSK	50	0	20.83	20.85	20.72			
20	QPSK	50	24	20.82	20.85	20.81	21.9	0	
20	QPSK	50	50	20.80	20.83	20.84			
20	QPSK	100	0	20.91	20.84	20.90			
20	16QAM	1	0	20.87	20.82	20.85	21.9	0	
20	16QAM	1	48	20.89	20.90	20.88			
20	16QAM	1	96	20.81	20.95	20.86			
20	16QAM	50	0	20.94	20.81	20.86			
20	16QAM	50	24	20.89	20.85	20.92	21.3	0.6	
20	16QAM	50	50	20.85	20.83	20.77			
20	16QAM	100	0	20.82	20.88	20.74			
20	16QAM	1	0	20.73	20.83	20.82			
20	16QAM	1	48	20.72	20.74	20.68	21.3	0.6	
20	16QAM	1	96	20.68	20.70	20.61			
20	16QAM	50	0	19.95	20.03	20.00			
20	16QAM	50	24	19.81	19.88	19.83			
20	16QAM	50	50	19.95	19.88	19.78	20.3	1.6	
20	16QAM	100	0	19.98	19.96	19.84			
20	256QAM	1	0	18.14	18.09	18.16			
20	256QAM	1	48	18.07	18.10	18.17	18.8	3.1	
20	256QAM	1	96	18.12	18.10	18.06			
20	256QAM	50	0	18.05	18.08	18.03			
20	256QAM	50	24	18.02	18.02	18.04			
20	256QAM	50	50	18.02	18.01	17.93	18.8	3.1	
20	256QAM	100	0	18.07	18.04	18.13			
Channel				133117	133072	133172			
Frequency (MHz)				670.5	660.5	660.5	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	0	20.72	20.70	20.68	21.9	0	
15	QPSK	1	37	20.62	20.70	20.65			
15	QPSK	1	74	20.78	20.70	20.70			
15	QPSK	36	0	20.78	20.85	20.87			
15	QPSK	36	36	20.68	20.88	20.88	21.9	0	
15	QPSK	36	36	20.80	20.78	20.79			
15	QPSK	75	0	20.35	20.51	20.45			
15	16QAM	1	0	20.79	20.69	20.72	21.9	0	
15	16QAM	1	37	20.64	20.65	20.78			
15	16QAM	1	74	20.77	20.70	20.77			
15	16QAM	36	0	20.90	20.85	20.75			
15	16QAM	36	20	20.64	20.62	20.68	21.3	0.6	
15	16QAM	36	36	20.68	20.72	20.68			
15	16QAM	75	0	20.42	20.54	20.48			
15	16QAM	1	0	20.80	20.68	20.84			
15	16QAM	1	37	20.86	20.84	20.80	21.3	0.6	
15	16QAM	1	74	20.73	20.64	20.65			
15	16QAM	36	0	19.71	19.95	19.95			
15	16QAM	36	20	20.06	19.84	19.92			
15	16QAM	36	36	19.72	19.90	19.88	20.3	1.6	
15	16QAM	75	0	20.03	19.90	19.90			
15	256QAM	1	0	18.18	17.88	18.06			
15	256QAM	1	37	18.11	18.16	18.15	18.8	3.1	
15	256QAM	1	74	18.17	18.03	18.17			
15	256QAM	36	0	17.89	17.99	18.02			
15	256QAM	36	20	17.66	18.16	17.83			
15	256QAM	36	36	17.97	18.08	18.00	18.8	3.1	
15	256QAM	75	0	18.13	18.14	18.21			
Channel				133112	133072	133172			
Frequency (MHz)				669	678	683	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	0	20.75	20.77	20.84	21.9	0	
10	QPSK	1	28	20.84	20.73	20.80			
10	QPSK	1	48	20.78	20.70	20.80			
10	QPSK	25	0	20.76	20.88	20.88			
10	QPSK	25	12	20.70	20.80	20.84	21.9	0	
10	QPSK	25	28	20.74	20.81	20.79			
10	QPSK	50	0	20.42	20.51	20.45			
10	16QAM	1	0	20.77	20.63	20.78	21.9	0	
10	16QAM	1	28	20.65	20.70	20.72			
10	16QAM	1	48	20.74	20.71	20.78			
10	16QAM	25	0	20.86	20.60	20.74			
10	16QAM	25	12	20.68	20.65	20.62	21.3	0.6	
10	16QAM	25	28	20.69	20.75	20.68			
10	16QAM	50	0	20.40	20.55	20.50			
10	16QAM	1	0	20.89	20.78	20.84			
10	16QAM	1	25	20.63	20.85	20.73	21.3	0.6	
10	16QAM	1	48	20.76	20.70	20.63			
10	16QAM	25	0	19.76	20.02	19.89			
10	16QAM	25	12	20.12	19.83	19.83			
10	16QAM	25	28	19.76	19.90	19.83	20.3	1.6	
10	16QAM	50	0	20.03	19.95	19.86			
10	256QAM	1	0	18.01	17.97	18.04			
10	256QAM	1	25	18.04	18.30	18.05	18.8	3.1	
10	256QAM	1	48	18.18	18.06	18.14			
10	256QAM	25	0	17.66	18.05	18.05			
10	256QAM	25	12	18.11	18.01	17.84			
10	256QAM	25	28	17.85	18.08	17.85	18.8	3.1	
10	256QAM	50	0	17.99	17.97	18.23			
Channel				133112	133072	133172			
Frequency (MHz)				665.5	675.5	665.5	Tune-up limit (dBm)	MPR (dB)	
5	QPSK	1	0	20.72	20.74	20.66	21.9	0	
5	QPSK	1	12	20.64	20.78	20.63			
5	QPSK	1	24	20.70	20.73	20.75			
5	QPSK	12	0	20.85	20.90	20.89			
5	QPSK	12	7	20.60	20.88	20.87	21.9	0	
5	QPSK	12	13	20.76	20.82	20.70			
5	QPSK	25	0	20.39	20.48	20.45			
5	16QAM	1	0	20.72	20.67	20.71	21.9	0	
5	16QAM	1	12	20.61	20.72	20.79			
5	16QAM	1	24	20.74	20.73	20.75			
5	16QAM	12	0	20.62	20.60	20.81			
5	16QAM	12	7	20.43	20.63	20.62	21.3	0.6	
5	16QAM	12	13	20.61	20.78	20.64			
5	16QAM	25	0	20.44	20.55	20.28			
5	16QAM	1	0	20.88	20.72	20.82			
5	16QAM	1	12	20.67	20.84	20.73	21.3	0.6	
5	16QAM	1	24	20.79	20.70	20.63			
5	16QAM	12	0	19.72	20.01	20.02			
5	16QAM	12	7	20.07	19.75	19.87			
5	16QAM	12	13	19.77	19.88	19.81	20.3	1.6	
5	16QAM	25	0	20.09	19.51	19.90			
5	256QAM	1	0	18.19	18.00	18.16			
5	256QAM	1	12	18.11	18.15	18.06	18.8	3.1	
5	256QAM	1	24	18.17	18.00	18.17			
5	256QAM	12	0	17.83	18.00	18.06			
5	256QAM	12	7	18.09	18.15	17.88			
5	256QAM	12	13	17.95	17.98	18.09	18.8	3.1	
5	256QAM	25	0	17.97	18.09	18.08			



Band 38(only on channel required)										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Mod Ch / Freq	Power Mod Ch / Freq	Power High Mod Ch / Freq	Power Low Mod Ch / Freq	Power High Mod Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel										
Frequency (MHz)										
20	QPSK	1	0	17.26	17.10	17.10	17.26	17.26	17.9	0
20	QPSK	1	49	17.26	17.08	17.07	17.18	17.18		
20	QPSK	1	99	17.26	17.02	17.02	17.12	17.12		
20	QPSK	50	0	17.28	17.07	17.18	17.28	17.28	17.9	0
20	QPSK	50	24	17.28	17.07	17.18	17.28	17.28		
20	QPSK	50	50	17.25	17.05	17.15	17.25	17.25	19.5	0
20	QPSK	100	0	17.27	17.05	17.15	17.27	17.27		
20	16QAM	1	0	17.12	16.92	16.99	17.19	17.19	17.9	0
20	16QAM	1	99	17.15	16.92	16.99	17.28	17.28		
20	16QAM	50	0	17.26	16.92	16.96	17.26	17.26	17.9	0
20	16QAM	50	24	17.22	16.96	16.97	17.15	17.15		
20	16QAM	50	50	17.07	16.86	16.86	17.07	17.07	19.5	0
20	16QAM	100	0	17.26	17.02	17.02	17.26	17.26		
20	64QAM	1	0	17.21	17.02	17.05	17.26	17.26	17.9	0
20	64QAM	1	49	17.19	16.86	16.86	17.19	17.19		
20	64QAM	1	99	16.87	17.05	17.05	16.87	16.87	17.9	0
20	64QAM	50	0	16.86	17.07	17.07	16.86	16.86		
20	64QAM	50	24	16.86	16.92	16.92	16.86	16.86	17.8	0.1
20	64QAM	50	50	17.15	16.91	17.07	17.15	17.15		
20	64QAM	100	0	17.22	16.82	16.82	17.22	17.22		
20	256QAM	1	49	16.51	15.32	15.32	16.77	16.77	16.3	1.6
20	256QAM	1	99	15.48	15.40	15.41	15.48	15.48		
20	256QAM	50	0	15.67	15.69	15.70	15.67	15.67	16.3	1.6
20	256QAM	50	24	15.85	15.87	15.87	15.85	15.85		
20	256QAM	50	50	15.82	15.82	15.83	15.82	15.82	16.3	1.6
20	256QAM	100	0	15.74	15.73	15.74	15.74	15.74	16.3	1.6
Channel										
Frequency (MHz)										
15	QPSK	1	0	17.29	17.17	17.17	17.29	17.29	17.9	0
15	QPSK	1	37	17.25	17.14	17.02	17.24	17.24		
15	QPSK	1	74	17.25	16.82	16.82	17.24	17.24	17.9	0
15	QPSK	36	0	17.09	17.13	17.13	17.07	17.07		
15	QPSK	36	20	17.29	17.16	17.13	17.29	17.29	17.9	0
15	QPSK	36	36	17.25	17.01	17.01	17.25	17.25		
15	QPSK	75	0	17.09	17.07	17.17	17.09	17.09	17.9	0
15	16QAM	1	0	17.16	17.08	16.96	17.16	17.16		
15	16QAM	1	37	17.13	16.73	16.73	17.13	17.13	17.9	0
15	16QAM	1	74	17.19	16.99	17.05	17.19	17.19		
15	16QAM	36	0	17.22	16.94	16.94	17.22	17.22	17.9	0
15	16QAM	36	20	17.28	17.06	17.06	17.28	17.28		
15	16QAM	36	36	17.28	16.98	16.98	17.28	17.28	17.9	0
15	16QAM	75	0	17.21	16.91	16.97	17.23	17.23		
15	16QAM	75	37	17.26	17.05	16.88	17.26	17.26	17.8	0.1
15	64QAM	1	0	17.04	17.09	17.09	17.04	17.04		
15	64QAM	1	37	17.26	17.05	16.88	17.26	17.26	17.9	0
15	64QAM	1	74	17.26	17.05	16.88	17.26	17.26		
15	64QAM	36	0	16.86	17.09	17.20	16.86	16.86	17.8	0.1
15	64QAM	36	20	16.82	16.77	17.03	16.82	16.82		
15	64QAM	36	36	17.25	16.91	16.91	17.25	17.25	19.5	0
15	64QAM	75	0	16.97	17.03	17.03	16.97	16.97		
15	256QAM	1	0	15.53	15.58	15.60	15.53	15.53	16.3	1.6
15	256QAM	1	37	15.45	15.42	15.45	15.45	15.45		
15	256QAM	1	74	15.50	15.59	15.46	15.50	15.50	16.3	1.6
15	256QAM	36	0	15.75	15.75	15.75	15.75	15.75		
15	256QAM	36	20	15.75	15.55	15.59	15.75	15.75	16.3	1.6
15	256QAM	36	36	15.86	15.87	15.88	15.86	15.86		
15	256QAM	75	0	15.61	15.72	15.68	15.61	15.61	16.3	1.6
Channel										
Frequency (MHz)										
30	QPSK	1	0	17.12	17.19	17.19	17.12	17.12	17.9	0
30	QPSK	1	25	17.29	17.26	17.26	17.29	17.29		
30	QPSK	1	49	17.18	16.92	16.92	17.25	17.25	17.9	0
30	QPSK	25	0	17.15	17.09	17.09	17.21	17.21		
30	QPSK	25	12	17.29	17.11	17.24	17.29	17.29	17.9	0
30	QPSK	25	25	17.25	17.11	17.11	17.25	17.25		
30	QPSK	50	0	17.08	16.97	17.23	17.08	17.08	17.9	0
30	16QAM	1	0	17.16	17.05	17.06	17.16	17.16		
30	16QAM	1	49	17.19	17.01	17.13	17.19	17.19	17.9	0
30	16QAM	25	0	17.21	17.05	17.05	17.26	17.26	17.9	0
30	16QAM	25	12	17.23	17.22	17.27	17.23	17.23		
30	16QAM	25	25	17.12	17.08	17.08	17.12	17.12	19.5	0
30	16QAM	50	0	17.23	17.12	17.12	17.23	17.23		
30	16QAM	50	0	17.13	17.14	17.11	17.13	17.13	17.9	0
30	64QAM	1	0	16.96	17.03	17.03	16.96	16.96	17.8	0.1
30	64QAM	1	49	17.09	16.98	16.95	17.07	17.07		
30	64QAM	1	99	16.91	17.15	16.95	17.07	17.07	17.9	0
30	64QAM	12	0	17.07	17.06	17.02	17.07	17.07		
30	64QAM	12	13	17.16	17.04	17.04	17.16	17.16	17.9	0
30	64QAM	12	24	17.16	17.07	17.02	17.16	17.16		
30	64QAM	12	50	17.12	17.04	17.05	17.12	17.12	19.5	0
30	64QAM	12	7	17.26	17.09	17.13	17.26	17.26		
30	64QAM	12	13	17.11	16.98	17.18	17.11	17.11	17.9	0
30	64QAM	25	0	17.22	17.07	17.17	17.22	17.22		
30	64QAM	25	12	17.05	17.01	17.01	17.25	17.25	17.9	0
30	64QAM	25	25	17.12	17.04	17.10	17.12	17.12		
30	256QAM	1	0	15.55	15.40	15.43	15.55	15.55	16.3	1.6
30	256QAM	1	49	15.40	15.38	15.45	15.39	15.39		
30	256QAM	25	0	15.82	15.58	15.78	15.82	15.82	16.3	1.6
30	256QAM	25	12	15.84	15.58	15.88	15.80	15.80		
30	256QAM	25	25	15.74	15.57	15.86	15.85	15.85	16.3	1.6
30	256QAM	50	0	15.79	15.54	15.71	15.75	15.75		
Channel										
Frequency (MHz)										
5	QPSK	1	0	17.12	17.19	17.19	17.12	17.12	17.9	0
5	QPSK	1	12	17.21	17.27	17.17	17.23	17.23		
5	QPSK	1	24	17.28	16.97	17.03	17.28	17.28	17.9	0
5	QPSK	12	0	17.15	17.09	17.09	17.21	17.21		
5	QPSK	12	7	17.03	17.28	17.28	17.03	17.03	17.9	0
5	QPSK	12	13	17.05	17.13	17.26	17.05	17.05		
5	QPSK	25	0	17.07	16.98	17.27	17.07	17.07	17.9	0
5	16QAM	1	0	17.29	17.09	17.09	17.29	17.29		
5	16QAM	1	12	17.16	17.06	17.06	17.17	17.17	17.9	0
5	16QAM	1	24	17.24	17.07	17.13	17.24	17.24		
5	16QAM	12	0	17.20	16.90	17.09	17.20	17.20	19.5	0
5	16QAM	12	7	17.26	17.09	17.13	17.26	17.26		
5	16QAM	12	13	17.11	16.98	17.18	17.11	17.11	17.9	0
5	16QAM	25	0	17.22	17.07	17.17	17.22	17.22		
5	64QAM	1	0	17.06	17.01	17.01	17.06	17.06	17.9	0
5	64QAM	1	12	17.04	17.06	16.94	17.18	16.95		
5	64QAM	1	24	17.18	17.15	17.14	17.07	16.94	17.9	0
5	64QAM	12	0	16.97	17.17	17.13	17.04	17.03		
5	64QAM	12	7	17.14	17.18	17.06	17.18	16.95	17.8	0.1
5	64QAM	12	13	17.13	17.09	17.02	17.03	16.90		
5	256QAM	1	0	15.59	15.47	15.67	15.49	15.38	16.3	1.6
5	256QAM	1	12	15.42	15.44	15.53	15.45	15.47		
5	256QAM	12	0	15.82	15.60	15.81	15.82	15.68	16.3	1.6
5	256QAM	12	7	15.73	15.58	15.84	15.74	15.58		
5	256QAM	12	13	15.73	15.50	15.80	15.84	15.52	16.3	1.6
5	256QAM	25	0	15.78	15.72	15.70	15.71	15.63		

Band 41 (2.6G Band)-Class 3										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Mod Ch / Freq	Power Low Mod Ch / Freq	Power Mod Ch / Freq	Power High Mod Ch / Freq	Power High Mod Ch / Freq	Tune-up limit (dBm)	MPR (dB)
Channel										
Frequency (MHz)										
20	QPSK	1	0	17.15	17.13	17.12	17.22	17.22	17.9	0
20	QPSK	1	49	17.21	17.31	17.22	17.28	17.28		
20	QPSK	1	99	17.18	17.34	17.20	17.23	17.17		
20	QPSK	1	149	17.15	17.26	17.18	17.23	17.20		
20	QPSK	50	24	17.16	17.27	17.18	17.23	17.05		
20	QPSK	50	74	17.16	17.26	17.12	17.25	17.05		
20	16QAM	1	0	17.05	17.06	17.01	17.01	17.01		
20	16QAM	1	49	17.15	17.16	17.01	17.01	17.01		
20	16QAM	1	99	17.21	17.28	17.28	17.28	17.04		
20	16QAM	1	149	17.19	17.19	17.17	17.17	17.03		
20	16QAM	50	24	17.16	17.20	17.16	17.16	17.02		
20	16QAM	50	74	17.26	17.25	17.19	17.19	17.05		
20	16QAM	100	0	17.26	17.21	17.27	17.27	17.12		
20	16QAM	100	50	17.32	17.13	17.23	17.23	17.08		
20	16QAM	1	49	17.07	17.20	17.20	17.17	17.03		
20	16QAM	1	99	17.16	17.16	17.20	17.20	17.03		
20	16QAM	50	0	17.10	17.22	17.22	17.18	17.00		
20	16QAM	50	24	17.20	17.20	17.20	17.19	17.08		
20	16QAM	50	74	17.28	17.22	17.22	17.20	17.14		
20	16QAM	100	0	17.16	17.22	17.22	17.18	17.04		
20	256QAM	1	0	16.92	16.96	16.91	16.98	16.91		
20	256QAM	1	49	16.90	16.93	16.95	16.91	16.91		
20	256QAM	1	99	16.87	16.93	16.93	16.91	16.91		
20	256QAM	1	149	16.74	16.96	16.96	16.96	16.89		
20	256QAM	50	24	16.76	16.92	16.92	16.90	16.88		
20	256QAM	50	74	16.76	16.94	16.96	16.97	16.90		
20	256QAM	100	0	16.90	16.92	16.92	16.92	16.88		
Channel										
Frequency (MHz)										
15	QPSK	1	0	17.08	17.01	17.05	17.06	17.06		
15	QPSK	1	37	17.04	17.04	17.11	17.11	16.91		
15	QPSK	1	74	17.06	17.00	17.00	17.01	16.93		
15	QPSK	36	0	17.10	17.01	17.01	17.01	16.87		
15	QPSK	36	20	17.12	17.13	17.01	17.15	17.00		
15	QPSK	36	36	17.13	17.03	17.01	17.01	16.87		
15	QPSK	75	0	17.05	17.06	17.00	17.00	17.07		
15	16QAM	1	0	16.94	17.00	17.00	17.00	16.89		
15	16QAM	1	37	17.12	17.02	16.99	16.93	16.89		
15	16QAM	1	74	17.14	17.09	17.06	17.16	17.02		
15	16QAM	36	0	17.10	17.13	16.97	17.00	16.82		
15	16QAM	36	20	17.14	17.14	17.11	17.09	16.92		
15	16QAM	36	36	17.15	17.01	17.08	17.00	16.95		
15	16QAM	75	0	17.11	17.11	17.01	17.01	16.86		
15	64QAM	1	0	16.86	17.00	16.91	17.00	17.00		
15	64QAM	1	37	17.11	17.06	16.98	17.06	17.00		
15	64QAM	1	74	17.06	16.96	16.96	16.96	16.89		
15	64QAM	36	0	16.90	17.05	17.13	17.00	17.12		
15	64QAM	36	20	17.10	17.13	17.01	17.08	16.89		
15	64QAM	36	36	17.07	17.02	17.00	17.00	16.98		
15	64QAM	75	0	17.16	17.15	17.10	17.06	16.96		
15	256QAM	1	0	16.93	16.96	16.90	16.93	16.84		
15	256QAM	1	37	16.98	16.94	16.94	16.94	16.85		
15	256QAM	1	74	16.90	16.94	16.97	16.92	16.88		
15	256QAM	36	0	16.92	16.95	16.95	16.95	16.85		
15	256QAM	36	20	16.70	16.95	16.99	16.99	16.97		
15	256QAM	36	36	16.98	16.97	16.98	16.98	16.92		
15	256QAM	75	0	16.94	17.12	17.02	16.91	16.86		
Channel										
Frequency (MHz)										
15	QPSK	1	0	17.03	17.04	17.04	17.03	17.03		
15	QPSK	1	25	17.06	17.06	17.07	17.03	17.03		
15	QPSK	1	49	17.09	17.07	17.03	17.03	16.91		
15	QPSK	25	0	17.09	17.00	17.18	17.14	16.89		
15	QPSK	25	12	17.12	17.11	17.16	17.16	17.09		
15	QPSK	25	25	17.11	17.01	17.01	17.01	16.93		
15	QPSK	50	0	17.02	17.05	17.10	17.06	17.09		
15	16QAM	1	0	16.89	17.02	17.05	17.08	17.02		
15	16QAM	1	25	17.04	17.04	17.00	17.00	17.00		
15	16QAM	1	49	17.12	17.01	16.92	17.03	16.99		
15	16QAM	25	0	17.01	17.17	17.17	17.17	16.97		
15	16QAM	25	12	17.00	17.17	17.15	16.99	17.01		
15	16QAM	25	25	17.14	17.01	17.12	17.11	16.88		
15	16QAM	50	0	17.06	17.10	17.06	17.06	17.00		
15	64QAM	1	0	16.90	17.13	16.98	17.16	16.95		
15	64QAM	1	25	16.96	17.09	16.95	17.01	17.02		
15	64QAM	1	49	16.91	16.16	16.92	17.01	16.92		
15	64QAM	25	0	17.08	17.19	17.16	17.16	17.00		
15	64QAM	25	12	17.17	17.01	17.01	17.15	17.06		
15	64QAM	25	25	17.20	17.04	17.00	17.00	17.00		
15	64QAM	50	0	17.15	17.04	17.10	17.03	17.02		
15	256QAM	1	0	16.95	16.94	16.94	16.94	16.84		
15	256QAM	1	25	16.98	16.93	16.94	16.97	16.85		
15	256QAM	1	49	16.80	16.98	16.95	16.98	16.85		
15	256QAM	25	0	16.92	16.98	16.98	16.98	16.85		
15	256QAM	25	12	16.94	16.98	16.98	16.90	16.85		
15	256QAM	25	25	16.74	16.97	16.96	16.91	16.85		
15	256QAM	50	0	16.93	16.92	16.97	16.97	16.82		
Channel										
Frequency (MHz)										
15	QPSK	1	0	17.03	17.04	17.04	17.03	17.03		
15	QPSK	1	12	17.14	17.01	17.17	17.07	17.03		
15	QPSK	1	25	17.06	17.06	17.07	17.03	17.03		
15	QPSK	12	0	17.00	17.02	17.00	17.11	16.91		
15	QPSK	12	7	17.14	17.19	17.05	17.00	17.12		
15	QPSK	12	13	17.06	17.06	17.06	17.06	17.00		
15	QPSK	25	0	17.03	17.04	17.19	17.08	17.11		
15	16QAM	1	0	16.94	17.04	17.08	17.07	17.14		
15	16QAM	1	12	17.07	17.04	17.00	17.00	17.17		
15	16QAM	1	24	17.19	17.07	17.02	17.02	17.07		
15	16QAM	12	7	17.15	17.02	17.02	17.02	17.06		
15	16QAM	12	13	17.15	17.03	17.03	17.03	17.06		
15	16QAM	25	0	17.00	17.03	17.07	17.06	16.99		
15	64QAM	1	0	17.00	17.03	16.98	17.17	17.01		
15	64QAM	1	12	17.04	17.06	16.94	17.19	16.95		
15	64QAM	1	24	17.16	17.04	17.00	17.00	17.04		
15	64QAM	12	0	16.97	17.17	17.13	17.04	17.07		
15	64QAM	12	7	17.15	17.17	17.07	17.07	17.03		
15	64QAM	12	13	17.15	17.06	17.02	17.03	17.03		
15	64QAM	25	0	17.17	17.16	17.12	17.03	16.99		
15	256QAM	1	0	16.95	16.97	16.97	16.97	16.88		
15	256QAM	1	12	16.98	16.94	16.94	16.94	16.85		
15	256QAM	1	24	16.82	16.94	16.93	16.80	16.97		
15	256QAM	12	0	16.93	16.90	16.90	16.90	16.85		
15	256QAM	12	7	16.73	16.98	16.94	16.94	16.92		
15	256QAM	12	13	16.73	16.90	16.96	16.94	16.92		



Band 48 (3.5G Band)-FCC												
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Middle Ch. / Freq.	Power High Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPE (dB)			
Channel				55340	55830	56150	56640					
Frequency (MHz)				5600	5600	5641	5650					
20	QPSK	1	0	17.26	17.31	17.35	17.38	18.1	0			
20	QPSK	1	48	17.13	17.16	17.18	17.11					
20	QPSK	1	96	17.17	17.18	17.22	17.15					
20	QPSK	50	0	17.22	17.25	17.23	17.25					
20	QPSK	50	24	17.24	17.23	17.24	17.24					
20	QPSK	50	50	17.12	17.28	17.12	17.25	18.1	0			
20	QPSK	100	0	17.23	17.22	17.22	17.24					
20	16QAM	1	0	17.25	17.25	17.28	17.21					
20	16QAM	1	48	17.22	17.25	17.25	17.12					
20	16QAM	1	96	17.20	17.29	17.28	17.19					
20	16QAM	50	0	17.20	17.22	17.21	17.22	18.1	0			
20	16QAM	50	24	17.27	17.29	17.24	17.23					
20	16QAM	50	50	17.24	17.25	17.25	17.26					
20	16QAM	100	0	17.20	17.24	17.19	17.22					
20	64QAM	1	0	17.15	17.16	17.16	17.13					
20	64QAM	1	48	17.17	17.21	17.26	17.16	18.1	0			
20	64QAM	1	96	17.21	17.26	17.23	17.18					
20	64QAM	50	0	17.20	17.28	17.22	17.20					
20	64QAM	50	24	17.25	17.25	17.22	17.25					
20	64QAM	50	50	17.28	17.28	17.22	17.25					
20	64QAM	100	0	17.20	17.20	17.28	17.25	18.1	0			
20	256QAM	1	0	17.12	17.14	17.14	17.08					
20	256QAM	1	48	17.10	17.15	17.19	17.16					
20	256QAM	1	96	17.18	17.16	17.16	17.22					
20	256QAM	50	0	17.26	17.26	17.21	17.26					
20	256QAM	50	24	17.20	17.29	17.21	17.22	18.1	0			
20	256QAM	50	50	17.26	17.20	17.26	17.21					
20	256QAM	100	0	17.26	17.28	17.20	17.20					
Channel				56115	56603	56160	56663					
Frequency (MHz)				56117	56117	56117	56117					
15	QPSK	1	0	17.05	17.30	17.26	17.25	18.1	0			
15	QPSK	1	37	16.92	17.01	17.09	17.12					
15	QPSK	1	74	16.91	17.21	17.03	17.22					
15	QPSK	36	0	17.07	17.21	17.24	17.17					
15	QPSK	36	20	16.98	17.15	17.26	17.19					
15	QPSK	36	36	16.93	17.14	17.14	17.14	18.1	0			
15	QPSK	75	0	16.96	17.11	17.26	17.23					
15	16QAM	1	0	16.89	16.96	17.24	17.21					
15	16QAM	1	37	16.97	17.01	17.26	17.09					
15	16QAM	1	74	16.68	16.94	17.02	17.16					
15	16QAM	36	0	16.92	17.24	17.21	17.16	18.1	0			
15	16QAM	36	20	16.94	17.20	17.27	17.18					
15	16QAM	36	36	16.90	17.23	17.17	17.20					
15	16QAM	75	0	16.90	17.26	17.23	17.26					
15	64QAM	1	0	16.82	17.02	17.13	17.07					
15	64QAM	1	37	16.89	17.13	17.17	17.15	18.1	0			
15	64QAM	1	74	16.70	17.27	16.99	17.21					
15	64QAM	36	0	16.93	17.19	17.23	17.20					
15	64QAM	36	20	16.97	17.25	17.19	17.28					
15	64QAM	36	36	16.98	17.18	17.21	17.28					
15	64QAM	75	0	16.94	17.16	17.27	17.17	18.1	0			
15	256QAM	1	0	17.02	16.99	17.16	17.05					
15	256QAM	1	37	17.15	17.27	17.22	17.06					
15	256QAM	1	74	17.22	17.29	17.27	17.23					
15	256QAM	36	0	17.14	17.22	17.17	17.25					
15	256QAM	36	20	17.20	17.22	17.27	17.15	18.1	0			
15	256QAM	36	36	17.07	17.25	17.27	17.27					
15	256QAM	75	0	17.23	17.16	17.14	17.17					
Channel				56200	56815	56165	56668					
Frequency (MHz)				56202	56202	56202	56202					
10	QPSK	1	0	17.09	17.29	17.25	17.21	18.1	0			
10	QPSK	1	25	16.90	17.02	17.04	17.13					
10	QPSK	1	48	16.89	17.22	17.06	17.25					
10	QPSK	25	0	17.08	17.19	17.29	17.20					
10	QPSK	25	12	16.97	17.11	17.29	17.25					
10	QPSK	25	25	16.90	17.10	17.17	17.15	18.1	0			
10	QPSK	50	0	16.96	17.14	17.24	17.18					
10	16QAM	1	0	16.85	17.00	17.22	17.23					
10	16QAM	1	25	17.01	17.00	17.26	17.06					
10	16QAM	1	48	16.72	16.89	17.00	17.16					
10	16QAM	25	0	16.87	17.24	17.17	17.19	18.1	0			
10	16QAM	25	12	16.93	17.21	17.29	17.17					
10	16QAM	25	25	16.86	17.18	17.17	17.25					
10	16QAM	50	0	16.88	17.26	17.16	17.16					
10	64QAM	1	0	16.90	16.96	17.21	17.09					
10	64QAM	1	25	16.93	17.14	17.11	17.10	18.1	0			
10	64QAM	1	48	16.65	17.25	17.01	17.21					
10	64QAM	25	0	16.90	17.12	17.25	17.12					
10	64QAM	25	12	16.88	17.17	17.21	17.27					
10	64QAM	25	25	17.02	17.14	17.25	17.26					
10	64QAM	50	0	16.87	17.10	17.26	17.27	18.1	0			
10	256QAM	1	0	16.87	16.88	17.16	17.17					
10	256QAM	1	25	17.04	17.03	17.22	17.24					
10	256QAM	1	48	17.13	17.21	17.21	17.27					
10	256QAM	25	0	17.03	17.18	17.29	17.11					
10	256QAM	25	12	17.16	17.29	17.28	17.29	18.1	0			
10	256QAM	25	25	17.27	17.24	17.25	17.17					
10	256QAM	50	0	17.06	17.15	17.17	17.21					
Channel				56205	56815	56176	56676					
Frequency (MHz)				56223	56223	56223	56223					
5	QPSK	1	0	17.06	17.29	17.29	17.21	18.1	0			
5	QPSK	1	12	16.83	16.99	17.13	17.06					
5	QPSK	1	24	16.92	17.15	17.06	17.27					
5	QPSK	12	0	17.08	17.16	17.29	17.23					
5	QPSK	12	7	16.91	17.16	17.28	17.16					
5	QPSK	12	13	16.87	17.08	17.15	17.16	18.1	0			
5	QPSK	25	0	16.95	17.13	17.29	17.19					
5	16QAM	1	0	16.93	16.96	17.22	17.21					
5	16QAM	1	12	17.02	16.94	17.21	17.07					
5	16QAM	1	24	16.71	16.89	17.07	17.19					
5	16QAM	12	0	16.94	17.21	17.21	17.16	18.1	0			
5	16QAM	12	7	17.00	17.24	17.23	17.23					
5	16QAM	12	13	16.87	17.16	17.25	17.18					
5	16QAM	25	0	16.94	17.21	17.17	17.14					
5	64QAM	1	0	16.96	16.96	17.14	17.13					
5	64QAM	1	12	16.87	17.20	17.12	17.13	18.1	0			
5	64QAM	1	24	16.87	17.29	17.01	17.13					
5	64QAM	12	0	16.99	17.13	17.24	17.17					
5	64QAM	12	7	16.95	17.18	17.21	17.16					
5	64QAM	12	13	17.01	17.18	17.24	17.21					
5	64QAM	25	0	17.03	17.18	17.29	17.11	18.1	0			
5	256QAM	1	0	16.98	17.07	17.04	17.16					
5	256QAM	1	12	17.13	17.21	17.16	17.25					
5	256QAM	1	24	17.15	17.24	17.23	17.24					
5	256QAM	12	0	17.04	17.22	17.25	17.23					
5	256QAM	12	7	17.21	17.26	17.26	17.26	18.1	0			
5	256QAM	12	13	17.15	17.21	17.22	17.26					
5	256QAM	25	0	17.06	17.15	17.16	17.21					



Band 2 (1900MHz Band) Part 24E									
RV (MHz)	Modulation	RIS Size	RIS Offset	Power Ch / Freq 1800	Power Ch / Freq 18700	Power Ch / Freq 18800	Power Ch / Freq 19100	Turn-on Time (s)	MPE (dB)
Channel									
Frequency (MHz)									
20	QPSK	1	0	15.23	15.31	15.25			
20	QPSK	1	49	15.16	15.25	15.21		16.2	0
20	QPSK	1	99	15.07	15.14	15.12			
20	QPSK	50	0	15.21	15.24	15.24			
20	QPSK	50	24	15.20	15.25	15.20		16.2	0
20	QPSK	50	50	15.18	15.25	15.20			
20	QPSK	100	0	15.20	15.27	15.23			
20	16QAM	1	0	15.21	15.22	15.27		16.2	0
20	16QAM	30	49	15.30	15.27	15.18			
20	16QAM	1	99	15.19	15.20	15.30			
20	16QAM	50	0	15.28	15.26	15.26			
20	16QAM	50	24	15.20	15.25	15.26		16.2	0
20	16QAM	50	50	15.29	15.26	15.27			
20	16QAM	100	0	15.28	15.30	15.29			
20	64QAM	1	49	15.27	15.10	15.06		16.2	0
20	64QAM	1	99	15.20	15.25	15.23			
20	64QAM	50	74	15.11	15.28	15.26			
20	64QAM	50	24	15.01	15.19	15.26		16.2	0
20	64QAM	50	50	15.25	15.23	15.26			
20	64QAM	100	0	15.28	15.26	15.25			
20	256QAM	1	0	14.94	15.18	14.97		16.2	0
20	256QAM	1	99	15.07	15.09	14.93			
20	256QAM	1	99	15.25	15.24	15.21			
20	256QAM	50	24	14.91	15.14	15.14		16.2	0
20	256QAM	50	50	15.18	15.15	15.06			
20	256QAM	100	0	15.22	15.18	15.20			
Channel									
Frequency (MHz)									
15	QPSK	1	0	15.26	15.18	15.30			
15	QPSK	1	37	15.01	15.13	15.02		16.2	0
15	QPSK	1	74	14.98	15.01	15.00			
15	QPSK	36	0	15.09	15.05	15.13			
15	QPSK	36	20	14.96	15.04	15.08		16.2	0
15	QPSK	36	38	15.23	15.30	15.25			
15	QPSK	75	0	15.12	15.27	15.02			
15	16QAM	1	37	15.07	15.09	14.93		16.2	0
15	16QAM	1	37	15.21	15.03	15.11			
15	16QAM	1	74	14.99	15.10	15.22			
15	16QAM	36	0	15.27	15.09	14.93		16.2	0
15	16QAM	36	20	15.24	15.24	15.25			
15	16QAM	36	38	15.23	15.28	15.29			
15	16QAM	75	0	15.15	15.07	15.14			
15	64QAM	1	0	15.15	15.07	15.14			
15	64QAM	1	37	15.15	14.88	14.85		16.2	0
15	64QAM	36	0	15.11	15.17	15.07			
15	64QAM	36	20	14.84	15.14	15.18		16.2	0
15	64QAM	36	38	15.21	14.99	15.11			
15	64QAM	75	0	15.24	15.30	15.14			
15	256QAM	1	0	15.15	14.89	15.18		16.2	0
15	256QAM	1	37	15.07	15.10	15.06			
15	256QAM	1	74	15.08	15.27	15.14			
15	256QAM	36	0	14.89	15.23	15.03		16.2	0
15	256QAM	36	14	15.20	15.30	15.20			
15	256QAM	36	38	15.03	15.04	15.17			
15	256QAM	75	0	15.25	15.17	15.06			
Channel									
Frequency (MHz)									
15	QPSK	1	0	15.05	15.08	15.14			
15	QPSK	1	26	14.84	15.24	15.04		16.2	0
15	QPSK	8	49	15.08	14.88	14.85			
15	QPSK	25	0	15.25	15.23	15.21			
15	QPSK	25	12	14.85	15.19	15.06		16.2	0
15	QPSK	25	26	15.19	15.30	15.04			
15	QPSK	50	0	14.99	15.28	15.08			
15	16QAM	1	26	15.07	15.10	15.09		16.2	0
15	16QAM	1	26	15.29	15.22	15.09			
15	16QAM	25	12	15.07	15.27	15.20			
15	16QAM	25	26	15.10	15.04	15.06		16.2	0
15	16QAM	50	0	15.08	15.30	15.08			
15	64QAM	1	0	15.21	15.18	14.91			
15	64QAM	1	25	15.27	15.09	14.93		16.2	0
15	64QAM	1	49	15.21	15.15	15.05			
15	64QAM	25	0	14.97	15.21	15.17			
15	64QAM	25	12	14.83	15.06	15.21		16.2	0
15	64QAM	50	0	15.03	15.04	15.21			
15	64QAM	50	26	15.05	15.04	15.21			
15	256QAM	1	0	15.06	15.22	15.30		16.2	0
15	256QAM	1	26	15.09	15.29	15.06			
15	256QAM	1	49	14.99	15.29	14.86			
15	256QAM	25	0	14.95	15.07	15.06		16.2	0
15	256QAM	25	12	15.22	15.05	14.87			
15	256QAM	25	26	15.24	15.28	15.24			
15	256QAM	50	0	15.11	15.24	15.09			
Channel									
Frequency (MHz)									
15	QPSK	1	0	15.06	15.20	15.10			
15	QPSK	1	12	15.08	15.03	14.97		16.2	0
15	QPSK	1	24	14.85	15.19	15.00			
15	QPSK	12	0	15.18	15.23	15.06			
15	QPSK	12	7	15.25	15.25	15.03		16.2	0
15	QPSK	12	13	15.01	15.20	15.14			
15	QPSK	25	0	15.14	15.24	14.88			
15	16QAM	1	14	15.00	14.90	15.08		16.2	0
15	16QAM	1	12	15.22	15.08	15.12			
15	16QAM	1	24	15.12	14.99	15.26			
15	16QAM	12	0	15.09	15.18	15.07		16.2	0
15	16QAM	12	7	15.22	15.05	15.30			
15	16QAM	12	13	15.18	15.26	15.08			
15	64QAM	1	0	14.94	15.17	14.92			
15	64QAM	1	12	15.08	14.90	14.85		16.2	0
15	64QAM	1	24	15.00	15.04	15.29			
15	64QAM	12	0	14.91	15.25	15.23			
15	64QAM	12	7	14.89	15.21	15.01		16.2	0
15	64QAM	12	13	15.21	15.14	15.20			
15	64QAM	25	0	15.29	15.14	15.20			
15	256QAM	1	0	14.86	15.22	15.09		16.2	0
15	256QAM	1	12	15.21	14.85	14.87			
15	256QAM	1	24	15.20	15.25	15.20			
15	256QAM	1	24	15.20	15.25	15.20			
15	256QAM	12	0	14.80	15.06	15.15		16.2	0
15	256QAM	12	7	15.29	14.91	14.85			
15	256QAM	12	13	15.03	15.27	15.03			
15	256QAM	25	0	15.30	15.30	15.15			
Channel									
Frequency (MHz)									
15	QPSK	1	0	15.10	15.27	15.18			
15	QPSK	1	8	14.96	15.20	14.96		16.2	0
15	QPSK	1	14	15.12	15.06	14.88			
15	QPSK	8	0	14.99	15.09	15.14			
15	QPSK	8	4	15.13	15.20	15.22		16.2	0
15	QPSK	8	7	14.84	15.27	15.18			
15	QPSK	15	0	15.12	15.30	15.17			
15	16QAM	1	0	15.22	15.04	15.27		16.2	0
15	16QAM	1	8	15.26	15.16	15.09			
15	16QAM	1	14	15.05	15.05	15.24			
15	16QAM	8	0	15.19	15.29	15.14		16.2	0
15	16QAM	8	4	14.88	15.03	15.30			
15	16QAM	15	7	15.10	15.30	15.20			
15	16QAM	15	7	15.07	15.20	15.26			
15	64QAM	1	0	15.05	15.10	15.14			
15	64QAM	1	8	15.21	14.99	14.98		16.2	0
15	64QAM	1	8	15.11	15.20	15.14			
15	64QAM	8	0	14.83	15.23	15.10			
15	64QAM	8	4	14.89	15.02	15.27		16.2	0
15	64QAM	8	7	15.06	14.98	15.11			
15	64QAM	15	0	15.22	15.14	15.25			
15	64QAM	15	8	15.10	15.10	15.10			
15	64QAM	1	8	15.09	15.08	14.89		16.2	0
15	256QAM	1	14	14.98	15.25	15.15			
15	256QAM	8	0	14.81	15.15	15.08		16.2	0
15	256QAM	8	4	15.28	14.85	14.91			
15	256QAM	8	7	15.17	15.30	15.17			
15	256QAM	15	0	15.07	15.03	15.13			
Channel									
Frequency (MHz)									
15	QPSK	1	0	15.16	15.08	15.26			
15	QPSK	1	3	14.96	15.07	14.96		16.2	0
15	QPSK	1	5	15.09	15.18	15.05			
15	QPSK	3	0	15.15	15.28	15.16			
15	QPSK	3							



Band 7 (2600MHz Band)										
Part 27										
BW (MHz)	Modulation	RB Size	RB Offset	Power Ch / Freq	Power Ch / Freq	Power Ch / Freq	Turn-up limit (dBm)	MPE (dB)		
Channel				2085	2100	2105				
Frequency (MHz)										
20	QPSK	1	0	13.89	13.91	14.00	15.1	0		
20	QPSK	1	49	13.90	14.01	14.05				
20	QPSK	1	99	13.93	14.00	14.11				
20	QPSK	50	0	14.00	14.04	14.10				
20	QPSK	50	24	13.92	14.07	14.10	15.1	0		
20	QPSK	50	50	13.99	13.99	14.10				
20	QPSK	100	0	13.90	13.94	14.05				
20	16QAM	1	0	13.88	13.82	13.84	15.1	0		
20	16QAM	1	49	13.75	13.91	13.93				
20	16QAM	1	99	13.82	13.92	13.95				
20	16QAM	50	0	13.77	13.90	13.94				
20	16QAM	50	24	13.90	13.98	13.99	15.1	0		
20	16QAM	50	50	13.91	14.02	14.05				
20	16QAM	100	0	13.85	13.93	13.94				
20	64QAM	1	0	13.69	13.73	13.81	15.1	0		
20	64QAM	1	49	13.69	13.94	13.91				
20	64QAM	1	99	13.80	13.91	13.91				
20	64QAM	50	0	13.83	13.90	14.00				
20	64QAM	50	24	13.89	13.97	14.03	15.1	0		
20	64QAM	50	50	13.83	14.05	13.91				
20	64QAM	100	0	13.88	13.95	13.98				
20	256QAM	1	0	13.62	13.68	13.64	15.1	0		
20	256QAM	1	49	13.59	13.71	13.80				
20	256QAM	1	99	13.72	13.69	13.65				
20	256QAM	50	0	13.64	13.72	13.66				
20	256QAM	50	24	13.77	13.67	13.65	15.1	0		
20	256QAM	50	50	13.61	13.85	13.68				
20	256QAM	100	0	13.64	13.75	13.71				
20	256QAM	100	0	13.73	13.87	13.93				
Part 27										
Channel				2502.5	2535	2570	Turn-up limit (dBm)	MPE (dB)		
Frequency (MHz)										
15	QPSK	1	0	13.79	13.73	13.97	15.1	0		
15	QPSK	1	37	13.83	13.84	13.98				
15	QPSK	1	74	13.70	13.80	14.11				
15	QPSK	36	0	13.95	13.89	13.90				
15	QPSK	36	20	13.91	13.83	13.88	15.1	0		
15	QPSK	36	36	13.91	13.73	14.05				
15	QPSK	75	0	13.74	13.70	14.05				
15	16QAM	1	0	13.58	13.62	13.81	15.1	0		
15	16QAM	1	37	13.53	13.79	13.81				
15	16QAM	1	74	13.53	13.86	13.92				
15	16QAM	36	20	13.87	13.68	13.83				
15	16QAM	36	39	13.68	13.75	13.72	15.1	0		
15	16QAM	36	59	13.74	14.01	13.84				
15	16QAM	75	0	13.75	13.63	13.71				
15	16QAM	75	0	13.88	13.57	13.71				
15	64QAM	1	37	13.62	13.72	13.88	15.1	0		
15	64QAM	1	74	13.54	13.58	13.80				
15	64QAM	36	20	13.71	13.72	13.89				
15	64QAM	36	39	13.62	13.60	13.80				
15	64QAM	75	0	13.67	13.50	13.68	15.1	0		
15	256QAM	1	0	13.49	13.43	13.97				
15	256QAM	1	37	13.59	13.60	13.80				
15	256QAM	1	74	13.56	13.98	13.54				
15	256QAM	36	0	13.38	13.71	13.72	15.1	0		
15	256QAM	36	20	13.50	13.50	13.80				
15	256QAM	36	39	13.50	13.62	13.53				
15	256QAM	75	0	13.58	13.61	13.84				
Part 27										
Channel				2505	2535	2565	Turn-up limit (dBm)	MPE (dB)		
Frequency (MHz)										
10	QPSK	1	0	13.89	13.82	13.93	15.1	0		
10	QPSK	1	25	13.89	13.78	13.99				
10	QPSK	1	49	13.90	13.86	14.00				
10	QPSK	25	0	13.78	14.02	13.92				
10	QPSK	25	12	13.87	13.93	13.94	15.1	0		
10	QPSK	25	25	13.83	13.72	14.10				
10	QPSK	50	0	13.61	14.02	14.10				
10	16QAM	1	0	13.50	13.88	13.90	15.1	0		
10	16QAM	1	25	13.56	13.62	13.69				
10	16QAM	1	49	13.65	13.69	13.75				
10	16QAM	25	0	13.51	13.86	13.85				
10	16QAM	25	12	13.80	13.90	13.89	15.1	0		
10	16QAM	25	25	13.88	13.62	13.94				
10	16QAM	50	0	13.64	13.93	13.87				
10	64QAM	1	0	13.63	13.51	13.64	15.1	0		
10	64QAM	1	25	13.68	13.75	13.69				
10	64QAM	1	49	13.76	13.80	13.87				
10	64QAM	25	0	13.78	13.91	13.95				
10	64QAM	25	12	13.69	13.70	13.78	15.1	0		
10	64QAM	25	25	13.64	13.60	13.80				
10	64QAM	50	0	13.60	13.73	13.88				
10	256QAM	1	0	13.34	13.48	13.96	15.1	0		
10	256QAM	1	25	13.38	13.61	13.73				
10	256QAM	1	49	13.51	13.64	13.64				
10	256QAM	25	0	13.57	13.68	13.86				
10	256QAM	25	12	13.50	13.39	13.57	15.1	0		
10	256QAM	25	25	13.44	13.68	13.68				
10	256QAM	50	0	13.63	13.61	13.67				
10	256QAM	50	0	13.62	13.60	13.65				
Part 27										
Channel				2507.5	2535	2567.5	Turn-up limit (dBm)	MPE (dB)		
Frequency (MHz)										
5	QPSK	1	0	13.87	13.87	13.88	15.1	0		
5	QPSK	1	18	13.60	13.71	13.81				
5	QPSK	1	24	13.67	14.01	14.06				
5	QPSK	12	0	13.78	13.88	13.86				
5	QPSK	12	7	13.77	13.86	14.05	15.1	0		
5	QPSK	12	13	13.90	13.71	13.97				
5	QPSK	25	0	13.78	14.00	13.92				
5	16QAM	1	0	13.68	13.61	13.72	15.1	0		
5	16QAM	1	12	13.69	13.91	13.81				
5	16QAM	1	24	13.79	13.85	13.72				
5	16QAM	12	0	13.65	13.70	13.85				
5	16QAM	12	7	13.77	13.88	13.90	15.1	0		
5	16QAM	12	13	13.91	13.72	13.93				
5	16QAM	25	0	13.61	13.86	13.64				
5	64QAM	1	0	13.66	13.47	13.58	15.1	0		
5	64QAM	1	12	13.64	13.70	13.70				
5	64QAM	1	24	13.80	13.62	13.81				

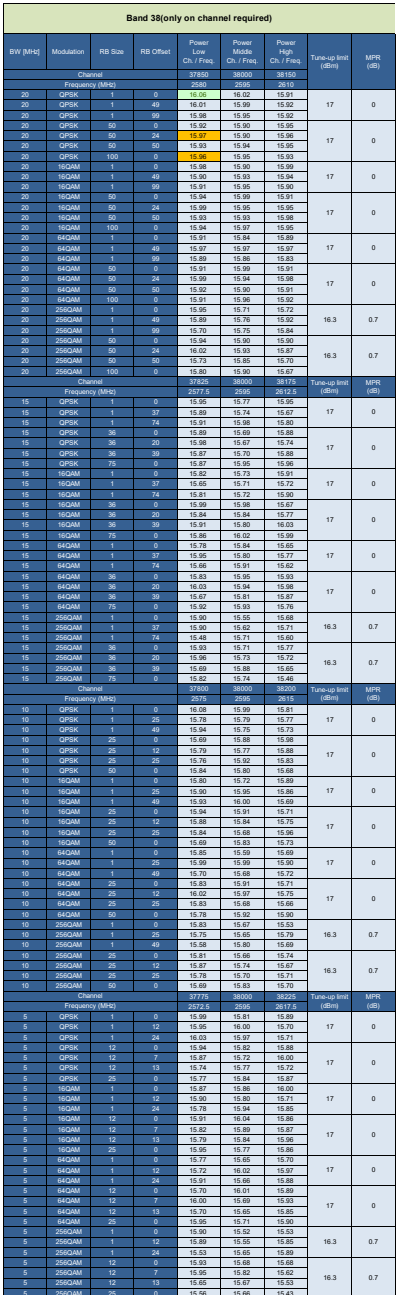


Band 17 (750MHz Band)									
Part 27H(only on channel required)									
RV	Modulation	RB Size	RB Offset	Power Ch / Freq	Power Ch / Freq	Power Ch / Freq	Turn-up limit (dBm)	MFR (dB)	
Channel									
Frequency (MHz)									
10	QPSK	1	0	18.04	18.07	18.01			
10	QPSK	1	26	18.08	18.09	18.04	19.1	0	
10	QPSK	1	46	18.11	18.03	18.06			
10	QPSK	25	0	18.04	18.06	18.03			
10	QPSK	25	12	18.08	18.01	18.02	19.1	0	
10	QPSK	25	26	17.99	17.94	17.95			
10	QPSK	50	0	18.08	18.06	18.05			
10	16QAM	1	0	18.04	18.03	18.00	19.1	0	
10	16QAM	1	26	18.09	18.09	18.03			
10	16QAM	1	46	18.09	18.07	18.04			
10	16QAM	25	0	18.05	18.06	18.07			
10	16QAM	25	12	17.99	17.93	17.95	19.1	0	
10	16QAM	50	0	18.09	18.09	18.06			
10	64QAM	1	0	18.02	18.07	18.06			
10	64QAM	1	26	18.01	18.05	18.05	19.1	0	
10	64QAM	25	0	18.05	18.05	18.09			
10	64QAM	25	12	17.92	17.92	17.92	19.1	0	
10	64QAM	50	0	17.96	17.96	17.94			
10	256QAM	1	0	18.02	17.96	17.96			
10	256QAM	25	12	17.91	18.00	18.03	18.8	0.3	
10	256QAM	1	46	17.98	17.99	17.91			
10	256QAM	25	0	17.77	17.78	18.06			
10	256QAM	25	12	17.69	17.73	17.83	18.8	0.3	
10	256QAM	25	26	17.82	17.84	17.85			
10	256QAM	50	0	17.78	17.85	17.89			
Channel									
Frequency (MHz)									
5	QPSK	1	0	17.98	17.83	17.79	19.1	0	
5	QPSK	1	12	17.83	17.86	17.99			
5	QPSK	1	24	18.09	17.86	18.06			
5	QPSK	12	0	18.03	18.06	18.03			
5	QPSK	12	12	18.08	17.86	17.81	19.1	0	
5	QPSK	12	13	17.71	17.72	17.72			
5	QPSK	25	0	17.79	17.89	18.02			
5	16QAM	1	0	17.79	17.89	17.86			
5	16QAM	1	12	17.85	18.04	17.89	19.1	0	
5	16QAM	1	24	17.89	18.09	17.79			
5	16QAM	12	0	17.73	17.95	17.88	19.1	0	
5	16QAM	12	13	17.74	17.72	17.88			
5	64QAM	1	0	17.98	17.89	17.95			
5	64QAM	1	12	17.79	17.76	17.97	19.1	0	
5	64QAM	1	24	17.97	17.86	17.81			
5	64QAM	12	0	17.90	17.75	17.92			
5	64QAM	12	7	17.72	17.84	17.86	19.1	0	
5	64QAM	12	13	17.75	17.82	17.82			
5	64QAM	25	0	17.87	17.78	17.82			
5	256QAM	1	0	17.84	17.86	17.73			
5	256QAM	1	12	17.65	17.80	17.86	18.8	0.3	
5	256QAM	1	24	17.83	17.75	17.83			
5	256QAM	12	0	18.08	18.00	18.00			
5	256QAM	12	13	18.01	17.86	17.80	18.8	0.3	
5	256QAM	12	13	18.14	17.85	18.10			
5	256QAM	25	0	17.85	18.08	18.06			

Band 25 (1900MHz Band)									
Part 24E									
RV	Modulation	RB Size	RB Offset	Power Ch / Freq	Power Ch / Freq	Power Ch / Freq	Turn-up limit (dBm)	MFR (dB)	
Channel									
Frequency (MHz)									
20	QPSK	1	0	16.33	15.40	15.32			
20	QPSK	1	49	16.18	15.18	15.14	16.2	0	
20	QPSK	1	99	16.08	15.11	15.13			
20	QPSK	50	0	16.30	15.35	15.28			
20	QPSK	50	24	16.36	15.37	15.31	16.2	0	
20	QPSK	50	50	16.33	15.34	15.25			
20	QPSK	100	0	16.21	15.23	15.28			
20	16QAM	1	0	16.23	15.20	15.27	16.2	0	
20	16QAM	1	49	16.27	15.27	15.25			
20	16QAM	1	99	16.28	15.21	15.21			
20	16QAM	50	0	16.20	15.25	15.22			
20	16QAM	50	24	16.26	15.26	15.23	16.2	0	
20	16QAM	50	50	16.22	15.26	15.24			
20	16QAM	100	0	16.28	15.29	15.21			
20	64QAM	1	0	16.25	15.23	15.25			
20	64QAM	1	49	16.28	15.23	15.24	16.2	0	
20	64QAM	50	0	16.29	15.22	15.27			
20	64QAM	50	24	16.29	15.25	15.25	16.2	0	
20	64QAM	50	50	16.27	15.22	15.23			
20	256QAM	1	0	16.20	15.10	15.01			
20	256QAM	1	49	16.28	15.19	15.13	16.2	0	
20	256QAM	1	99	16.08	15.05	15.06			
20	256QAM	50	0	16.02	15.13	15.09			
20	256QAM	50	24	16.04	15.16	15.10	16.2	0	
20	256QAM	50	50	16.15	15.11	15.10			
20	256QAM	100	0	16.32	15.25	15.04			
Channel									
Frequency (MHz)									
15	QPSK	1	0	16.23	15.20	15.28	16.2	0	
15	QPSK	1	37	16.18	15.20	14.88			
15	QPSK	1	74	16.18	14.88	15.12			
15	QPSK	36	0	16.11	15.18	15.12	16.2	0	
15	QPSK	36	20	16.19	15.33	15.24			
15	QPSK	36	50	16.21	15.33	15.13			
15	QPSK	75	0	16.11	15.16	15.21			
15	16QAM	1	0	16.21	15.19	15.18	16.2	0	
15	16QAM	1	37	16.11	15.09	15.18			
15	16QAM	1	74	16.14	15.07	15.14			
15	16QAM	36	0	16.19	15.19	15.10	16.2	0	
15	16QAM	36	20	16.19	15.23	15.11			
15	16QAM	36	50	16.19	15.17	15.18			
15	16QAM	75	0	16.19	15.16	15.26			
15	64QAM	1	0	16.14	15.16	15.04			
15	64QAM	1	37	16.26	15.27	15.21	16.2	0	
15	64QAM	1	74	16.26	15.27	15.21			
15	64QAM	36	0	16.15	14.95	15.02			
15	64QAM	36	20	16.18	15.05	15.04	16.2	0	
15	64QAM	36	50	16.28	15.06	15.04			
15	64QAM	75	0	16.27	15.22	15.12			
15	256QAM	1	0	16.32	15.10	15.14			
15	256QAM	1	37	16.12	15.30	15.10	16.2	0	
15	256QAM	1	74	16.12	15.30	15.10			
15	256QAM	36	0	16.03	15.18	15.28			
15	256QAM	36	20	16.03	15.18	15.28	16.2	0	
15	256QAM	36	50	16.25	15.10	15.31			
15	256QAM	75	0	16.05	15.22	15.11			
Channel									
Frequency (MHz)									
10	QPSK	1	0	16.15	15.15	15.09	16.2	0	
10	QPSK	1	29	16.01	15.12	15.19			
10	QPSK	1	49	16.01	15.04	15.11			
10	QPSK	25	0	16.19	15.19	15.12	16.2	0	
10	QPSK	25	12	16.19	15.19	15.12			
10	QPSK	25	26	16.21	15.32	15.30			
10	QPSK	50	0	16.19	15.29	15.03			
10	16QAM	1	0	16.17	15.17	15.10	16.2	0	
10	16QAM	1	26	16.32	15.18	15.09			
10	16QAM	1	49	16.19	14.98	15.12			
10	16QAM	25	0	16.06	15.06	15.06	16.2	0	
10	16QAM	25	12	16.18	15.01	15.03			
10	16QAM	25	26	16.07	15.01	14.99			
10	16QAM	50	0	16.08	14.98	15.10			
10	64QAM	1	0	16.08	14.98	15.10			
10	64QAM	1	26	16.22	15.02	15.24	16.2	0	
10	64QAM	1	49	16.10	15.14	15.17			
10	64QAM	25	0	16.20	15.02	15.19			
10	64QAM	25	12	16.01	15.03	15.26	16.2	0	
10	64QAM	25	26	16.21	15.26	15.10			
10	256QAM	1	0	16.24	15.14	15.24			
10	256QAM	1	26	16.25	15.26	15.10	16.2	0	
10	256QAM	1	49	16.29	15.17	15.26			
10	256QAM	25	0	14.97	15.27	15.16			
10	256QAM	25	12	15.16	15.14	14.99	16.2	0	
10	256QAM	25	26	16.01	14.98	15.28			
10	256QAM	50	0	16.30	15.08	15.26			
Channel									
Frequency (MHz)									
5	QPSK	1	0	16.27	15.26	15.18	16.2	0	
5	QPSK	1	14	16.11	15.14	15.14			
5	QPSK	1	24	16.04	14.86	14.97			
5	QPSK	12	0	16.27	15.26	15.10	16.2	0	
5	QPSK	12	13	16.34	15.34	15.34			
5	QPSK	12	26	16.32	15.32	15.28			
5	QPSK	25	0	16.21	15.04	15.21			
5	QPSK	25	12	16.22	15.05	15.22	16.2	0	
5	QPSK	25	26	16.25	15.25	15.08			
5	16QAM	1	0	16.25	15.25	15.08			
5	16QAM	1	24	16.12	15.19	14.96			
5	16QAM	1	49	16.28	15.18	15.18	16.2	0	
5	16QAM	12	0	16.02	15.28	15.23			
5	16QAM	12	13	16.24	15.14	15.15			
5	16QAM	12	26	16.26	15.26	15.10	16.2	0	
5	16QAM	25	0	16.29	15.08	15.23			
5	16QAM	25	12	16.18	15.01	15.03			
5	16QAM	25	26	16.21	15.21	15.04	16.2	0	
5	64QAM	1	0	16.20	15.00	14.92			
5	64QAM	1	24	16.29	15.20	15.05			
5	64QAM	1	49	16.22	14.99	15.05	16.2	0	
5	64QAM	12	0	16.05	15.05	15.11			
5	64QAM	12	13	16.25	15.05	15.20			
5	64QAM	12	26	16.28	15.20	15.28	16.2	0	
5	256QAM	1	0	16.19	15.11	15.25			
Channel									
Frequency (MHz)									
3	QPSK	1	0	16.32	15.23	16.37	16.2	0	
3	QPSK	1	14	16.11	15.14	15.14			
3	QPSK	1	24	16.04	14.87	14.98			
3	QPSK	12	0	16.11	14.89	15.07	16.2	0	
3	QPSK	12	13	16.27	15.32	15.21			
3	QPSK	12	26	16.25	15.32	15.28			
3	QPSK	25	0	16.22	15.37	15.18			
3	QPSK	25	12	16.00	15.14	15.04	16.2	0	
3	QPSK	25	26	16.01	15.16	15.14			
3	16QAM	1	0	16.11	15.24	15.00	16.2	0	
3	16QAM	1	14	16.23	15.10	15.04			
3	16QAM	1	24	16.04	14.82	14.93			
3	16QAM	12	0	16.11	14.89	15.03			
3	16QAM	12	13	16.24	15.14	15.14	16.2	0	
3	16QAM	12	26	16.26	15.16	15.16			
3	16QAM	25	0	16.03	15.11	15.11			
3	16QAM	25	12	16.19	15.08	15.29	16.2	0	
3	16QAM	25	26	16.21	15.18	15.18			
3	64QAM	1	0	16.03	15.06	15.05			
3	64QAM	1	14	16.15	15.03	15.11	16.2	0	
3	64QAM	1	24	16.04	14.86	14.97			
3	64QAM	12	0	16.07	15.11	15.14			
3	64QAM	12	13	16.24	15.14	15.14	16.2	0	
3	64QAM	12	26	16.26	15.16	15.16			
3	256QAM	1	0	16.03	15.22	15.03			
3	256QAM	1	14	16.13	15.03	15.13	16.2	0	
3	256QAM	1	24	16.04	14.86	14.97			
3	256QAM	12	0	16.23	15.10	15.12			
3	256QAM	12	13	16.24	15.11	15.14	16.2	0	
3	256QAM	12	26	16.26	15.12	15.14			
3	256QAM	25	0	16.14	15.11	15.24			
3	256QAM	25	12	16.13	15.03	15.21	16.2	0	
Channel									
Frequency (MHz)									
1.4	QPSK	1	0	16.37	16.29	16.32			
1.4	QPSK	1	14	16.11	15.14	15.14	16.2	0	
1.4	QPSK	1	24	16.04	14.86	14.97			
1.4	QPSK	3	0	16.46	15.13	15.03	16.2	0	
1.4	QPSK	3	14	16.34	15.11	15.09			
1.4	QPSK	3	24	16.37	15.11	15.14	16.2	0	
1.4	QPSK	3	37	16.22	15.28	15.17			
1.4	QPSK	6	0	16.17	15.31	15.17	16.2	0	
1.4	QPSK	6	14	16.11	15.10	15.10			
1.4	QPSK	3	3	16.15	15.10	15.02			
1.4	QPSK	3	6	16.12	14.86	15.21	16.2	0	
1.4	QPSK	3	9	16.24	15.14	15.14			
1.4	QPSK	3	12	16.26	15.14	15.14			
1.4	QPSK	3	15	16.28	15.01	15.26			
1.4	QPSK	3	18	16.03	15.12	14.88	16.2	0	
1.4	QPSK	3	21	16.22	15.20	15.07			
1.4	QPSK	3	24	16.07	15.18	15.18	16.2	0	
1.4	QPSK	3	27	16.08	15.27	15.27			
1.4	QPSK	3	30	16.22	15.13	15.			



Band 30									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Mode Ch / Freq	Power High Ch / Freq	Turn-up Time (ms)	MPR (dB)	
Channel									
Frequency (MHz)				213.5					
16	QPSK	1	0	15.20					
16	QPSK	1	25	15.09				16.4	0
16	QPSK	1	49	15.14					
16	QPSK	25	0	15.12					
16	QPSK	25	12	15.16				16.4	0
16	QPSK	25	25	15.13					
16	QPSK	50	0	15.14					
16	16QAM	1	0	15.11				16.4	0
16	16QAM	1	25	15.17					
16	16QAM	1	49	15.14					
16	16QAM	25	0	15.14					
16	16QAM	25	12	15.15				16.4	0
16	16QAM	25	25	15.10					
16	16QAM	50	0	15.13					
16	16QAM	1	0	15.13					
16	16QAM	1	25	15.10				16.4	0
16	16QAM	25	0	15.17					
16	16QAM	25	12	15.11					
16	16QAM	25	25	15.12				16.4	0
16	16QAM	50	0	15.17					
16	256QAM	1	0	15.13				16.4	0
16	256QAM	1	25	15.06					
16	256QAM	1	49	14.97					
16	256QAM	25	0	15.13				16.4	0
16	256QAM	25	12	15.11					
16	256QAM	25	25	15.08					
16	256QAM	50	0	14.96					
Channel									
Frequency (MHz)				230.5			213.5	213.5	
5	QPSK	1	0	15.10	14.96	15.10			
5	QPSK	1	12	15.08	15.12	15.08		16.4	0
5	QPSK	1	24	14.95	15.07	14.95			
5	QPSK	12	0	15.14	14.91	15.09			
5	QPSK	12	7	15.10	15.10	14.93		16.4	0
5	QPSK	12	13	14.97	15.05	15.13			
5	QPSK	25	0	15.00	15.06	15.03			
5	QPSK	25	12	15.06	15.08	15.03		16.4	0
5	QPSK	25	25	15.12	15.14	14.98			
5	16QAM	1	0	15.08	15.14	14.95			
5	16QAM	1	12	15.11	14.99	15.10		16.4	0
5	16QAM	1	24	15.00	15.13	15.00			
5	16QAM	12	7	15.07	14.98	15.09			
5	16QAM	12	13	15.10	14.96	15.15		16.4	0
5	16QAM	25	0	14.99	15.07	14.98			
5	16QAM	25	12	15.12	15.12	15.05		16.4	0
5	16QAM	25	25	15.11	14.99	15.00			
5	16QAM	50	0	15.04	15.13	14.97			
5	16QAM	1	0	14.93	15.10	15.13		16.4	0
5	16QAM	1	12	15.03	15.10	15.13			
5	16QAM	1	24	14.93	15.09	15.00			
5	16QAM	12	7	15.16	15.07	15.16		16.4	0
5	16QAM	12	13	15.07	14.98	15.09			
5	16QAM	25	0	15.06	14.88	15.12		16.4	0



Band 41 (2.60 Band)-Class 3										
RF (MHz)	Modulation	RF Size	RF Offset	Power Level (Power Flow Ch / Freq)	Power Level (Power Flow Ch / Freq)	Power Level (Power Flow Ch / Freq)	Power Level (Power Flow Ch / Freq)	Power Level (Power Flow Ch / Freq)	Turn-up limit (dBm)	MFR (dB)
Channel										
Frequency (MHz)				397350	40185	40630	41080	41600		
10 QPSK	1	0		16.00	14.05	16.00	16.00	16.00	16.00	
10 QPSK	1	49	10.00	16.01	16.11	16.09	16.03	16.04	17	0
10 QPSK	1	99	16.04	16.11	16.03	16.09	16.03			
10 QPSK	1	149	16.03	16.08	16.04	16.04	16.04			
10 QPSK	50	24	16.00	15.92	16.06	16.04	16.03		17	0
10 QPSK	50	74	16.00	15.97	16.01	16.01	16.00			
10 QPSK	100	0		16.02	16.08	16.04	16.03			
10 HQAM	1	0		16.01	16.02	15.98	15.93	16.03		
10 HQAM	1	49	16.00	16.01	16.03	16.03	16.03			
10 HQAM	1	99	16.04	16.04	15.96	16.09	16.05			
10 HQAM	50	0		16.07	16.02	16.08	15.96	16.07		
10 HQAM	50	49	16.00	15.99	16.03	16.03	16.03			
10 HQAM	50	99	16.00	15.96	15.96	15.96	15.92	16.07		0
10 HQAM	100	0		16.07	16.03	16.06	15.95	16.01		
10 HQAM	1	49	16.00	15.98	15.89	15.98	15.97	15.78		0
10 HQAM	1	99	16.00	15.92	15.92	15.94	15.94	15.92		
10 HQAM	50	0		16.05	16.01	16.07	16.03	16.03		
10 HQAM	50	24	16.04	15.98	16.09	16.06	16.02	16.02		
10 HQAM	50	74	16.00	16.01	16.03	16.03	16.07	16.07		0
10 HQAM	100	0		16.00	15.99	16.08	16.04	16.01		
10 HQAM	1	0		15.94	16.00	15.93	15.99	16.03		0.7
10 HQAM	1	49	16.00	15.97	15.93	15.93	16.01	16.02		
10 HQAM	1	99	16.02	15.91	15.91	15.96	16.03			
10 HQAM	50	24	16.00	15.72	15.85	16.03	16.01	16.03		16.3
10 HQAM	50	74	16.00	15.80	16.06	16.04	16.01	16.03		
10 HQAM	100	0		15.97	15.86	16.04	15.95	16.01		
Channel										
Frequency (MHz)				39735	40183	40630	41080	41610		
10 QPSK	1	0		16.12	14.03	16.09	16.11	16.07	16.00	
10 QPSK	1	37	15.92	15.97	15.94	15.91	16.03		17	0
10 QPSK	1	74	15.99	15.78	15.78	16.02	15.99			
10 QPSK	1	111	15.97	15.87	15.86	15.94	16.00			
10 QPSK	36	20	15.90	15.96	15.82	16.07	16.08			
10 QPSK	36	70	15.92	15.82	15.82	15.96	15.98		17	0
10 QPSK	36	115	15.92	15.81	15.99	16.07	16.04			
10 HQAM	1	0		15.85	16.11	15.99	16.07	15.94		
10 HQAM	1	0		15.88	16.88	15.92	15.94			
10 HQAM	1	49	15.88	16.01	15.93	15.93	15.77			
10 HQAM	1	74	16.00	15.90	15.78	16.13	16.00			
10 HQAM	36	0		15.91	15.78	15.83	16.09	15.82		
10 HQAM	36	49	15.90	15.87	15.81	15.99	15.98			
10 HQAM	36	99	15.84	16.75	15.78	15.86	15.97			
10 HQAM	75	0		16.00	16.10	16.08	16.04	16.05		
10 HQAM	36	20	15.90	15.91	15.88	16.02	16.04			
10 HQAM	36	70	15.92	15.82	15.82	15.96	15.98			
10 HQAM	36	115	15.92	15.81	15.99	16.07	16.04			
10 HQAM	75	0		16.00	16.06	15.99	16.07	15.83		
10 HQAM	1	0		15.87	16.01	15.81	15.88	15.90		
10 HQAM	1	49	15.88	16.01	15.93	15.93	15.77			
10 HQAM	1	74	15.90	15.83	15.79	16.08	15.82		16.3	0.7
10 HQAM	1	111	15.97	15.87	15.86	15.94	16.00			
10 HQAM	36	20	15.75	15.92	16.01	15.99	15.96		16.3	0.7
10 HQAM	36	70	15.90	15.82	15.95	15.98	16.05			
10 HQAM	36	115	15.90	15.83	15.83	15.91	16.00			
Channel										
Frequency (MHz)				397350	40180	40630	41080	41600		
10 QPSK	1	0		16.03	15.91	15.74	15.99	16.00	16.00	
10 QPSK	1	28	15.88	15.95	15.95	15.89	15.91	15.95		
10 QPSK	1	57	15.89	15.82	15.84	16.02	15.89		17	0
10 QPSK	1	85	15.90	15.83	15.83	15.96	16.00			
10 QPSK	25	12	16.00	15.92	15.89	15.84	16.08			
10 QPSK	25	40	15.90	15.85	15.83	15.85	15.98			
10 QPSK	50	0		15.94	15.91	15.97	16.07	15.97		
10 HQAM	1	0		15.96	15.88	15.78	15.88	15.83		
10 HQAM	1	28	15.87	16.01	15.94	15.91	15.93			
10 HQAM	1	49	15.87	15.98	15.80	16.11	15.89			
10 HQAM	25	0		15.94	15.87	15.81	15.90	15.91		
10 HQAM	25	40	15.90	15.86	15.83	15.85	15.98			
10 HQAM	50	25	15.92	15.95	15.95	15.94	15.97			
10 HQAM	50	75	15.90	15.85	15.85	15.85	15.97			
10 HQAM	1	0		15.73	16.06	15.80	15.86	15.73		
10 HQAM	1	25	15.81	15.79	15.76	15.82	15.72			
10 HQAM	25	0		15.83	15.87	15.84	15.84	15.73		
10 HQAM	25	0		15.95	15.84	16.00	15.90	15.78		
10 HQAM	50	25	15.90	15.90	15.92	15.99	15.86		17	0
10 HQAM	50	75	15.90	15.86	15.86	15.86	15.86			
10 HQAM	1	0		15.82	16.10	16.01	16.08	15.78		
10 HQAM	1	0		15.98	15.91	15.77	15.73	15.86		
10 HQAM	1	28	15.88	15.86	15.79	15.86	15.86		16.3	0.7
10 HQAM	1	49	15.88	15.96	15.72	15.98	16.01			
10 HQAM	25	12	16.00	15.90	15.84	15.84	15.98			
10 HQAM	25	12	15.81	15.83	15.83	15.86	15.83		16.3	0.7
10 HQAM	25	25	15.88	15.83	15.88	15.73	15.88			
10 HQAM	25	25	15.84	15.84	15.84	15.86	15.86			
Channel										
Frequency (MHz)				39675	40148	40600	41050	41550		
10 QPSK	1	0		16.11	14.04	16.11	16.11	16.11	16.11	
10 QPSK	1	12	16.11	15.97	15.96	16.03	16.02			
10 QPSK	1	24	16.07	15.83	15.84	15.82	15.88			
10 QPSK	1	36	15.95	16.01	16.01	16.03	15.89			
10 QPSK	12	7	15.94	16.02	16.02	16.04	15.79	17		
10 QPSK	12	19	15.94	15.84	15.84	15.84	15.84			
10 QPSK	25	0		15.82	16.07	15.95	16.08	15.95		
10 HQAM	1	0		16.02	16.02	15.84	15.79	15.88		
10 HQAM	1	12	15.90	15.84	15.84	15.87	15.78		17	0
10 HQAM	1	24	15.82	16.00	15.92	16.09	15.92			
10 HQAM	12	0		16.11	16.09	15.89	15.96	15.94		
10 HQAM	12	0		15.82	16.12	16.03	15.89	15.89		
10 HQAM	12	19	15.91	15.70	15.97	15.87	16.03			
10 HQAM	25	0		16.00	16.07	15.87	15.97	15.87		
10 HQAM	1	0		15.71	16.83	16.03	15.77	15.64		
10 HQAM	1	12	15.83	15.80	15.77	15.75	15.63	17		
10 HQAM	12	7	15.89	15.93	15.93	15.93	15.71			
10 HQAM	12	0		15.87	15.90	16.08	15.84	15.90		
10 HQAM	25	0		15.98	15.86	16.09	15.83	15.95		
10 HQAM	1	0		15.78	16.01	16.01	15.94	15.79		
10 HQAM	1	12	15.89	15.87	15.74	15.89	15.89		16.3	0.7
10 HQAM	1	24	15.88	15.88	15.85	15.99	15.83			
10 HQAM	12	7	15.89	15.90	15.89	15.89	15.79			
10 HQAM	12	7	15.91	15.76	16.03	16.00	15.98		16.3	0.7
10 HQAM	12	13	15.81	15.71	15.98	15.76	15.61			

Band 41 (2.60 Band) HPUE (Limit 27)												
Env [MHz]	Modulation	RB Size	RB Offset	Power/Loss Ch./Frac.	Power/Loss Ch./Frac.	Power/Loss Ch./Frac.	Power/Loss Ch./Frac.	Power/Loss Ch./Frac.	Power/Loss Ch./Frac.	Turn-up limit (dBm)	MFR (dB)	
Channel												
Frequency (MHz)												
20	QPSK	1	0	18.70	18.70	18.70	18.70	18.70	18.70	18.70	18.70	
20	QPSK	1	49	18.07	18.33	18.29	18.30	18.16	18.16	18.6	0	
20	QPSK	1	99	18.10	18.25	18.20	18.23	18.11	18.12			
20	QPSK	1	149	18.11	18.11	18.12	18.10	18.10	18.12			
20	QPSK	50	24	18.10	18.11	18.14	18.10	18.11	18.11			
20	QPSK	50	74	18.10	18.11	18.12	18.10	18.12	18.14			
20	QPSK	100	0	18.11	18.14	18.12	18.11	18.08	18.08			
20	HQAM	1	0	18.14	18.11	18.18	18.14	18.15	18.15			
20	HQAM	1	49	18.15	18.18	18.15	18.16	18.17	18.17	18.6	0	
20	HQAM	1	99	18.11	18.12	18.16	18.12	18.12	18.12			
20	HQAM	50	24	18.16	18.13	18.16	18.14	18.17	18.17			
20	HQAM	50	74	18.13	18.17	18.17	18.13	18.17	18.17			
20	HQAM	50	124	18.18	18.12	18.18	18.12	18.18	18.18			
20	HQAM	100	0	18.12	18.11	18.16	18.14	18.15	18.14			
20	HQAM	100	50	18.12	18.21	18.14	18.15	18.14	18.14			
20	HQAM	1	49	18.20	18.18	18.14	18.12	18.27	18.28	18.6	0	
20	HQAM	1	99	18.23	18.18	18.18	18.13	18.27	18.27			
20	HQAM	50	0	18.13	18.19	18.14	18.13	18.14	18.14			
20	HQAM	50	24	18.13	18.11	18.10	18.13	18.14	18.14	18.6	0	
20	HQAM	50	74	18.17	18.17	18.17	18.17	18.18	18.18			
20	HQAM	100	0	18.11	18.19	18.15	18.12	18.12	18.12			
20	SSBAM	1	0	18.12	18.09	18.03	18.00	18.01	18.01			
20	SSBAM	1	49	18.17	18.17	18.08	18.11	18.14	18.14	18.6	0	
20	SSBAM	1	99	18.14	18.07	17.92	18.05	17.93	17.93			
20	SSBAM	50	24	17.92	17.97	17.94	17.94	17.97	17.98			
20	SSBAM	50	74	18.20	17.93	18.19	18.04	17.94	17.94	18.6	0	
20	SSBAM	50	124	18.19	18.15	18.01	18.16	18.17	18.17			
20	SSBAM	100	0	17.89	18.09	18.03	18.06	18.06	18.06			
Channel												
Frequency (MHz)												
15	QPSK	1	0	18.72	18.72	18.72	18.72	18.72	18.72	18.72	18.72	
15	QPSK	1	37	18.08	18.24	18.08	18.25	18.05	18.05	18.6	0	
15	QPSK	1	74	18.08	18.10	18.20	18.25	18.08	18.08			
15	QPSK	1	111	17.97	18.02	18.02	18.02	18.02	18.02			
15	QPSK	36	20	17.87	18.03	18.11	18.00	18.10	18.10			
15	QPSK	36	68	18.00	18.00	18.00	18.00	18.00	18.00			
15	QPSK	75	0	17.98	18.13	18.15	18.10	17.98	17.98			
15	HQAM	1	0	17.86	17.88	18.05	18.06	18.01	18.01	18.6	0	
15	HQAM	1	37	18	18.01	18.01	18.01	18.01	18.01			
15	HQAM	1	74	18.02	17.98	17.92	17.88	17.89	17.89			
15	HQAM	36	20	17.85	18.18	18.08	18.06	18.07	18.07			
15	HQAM	36	68	18.10	18.17	18.17	18.10	18.13	18.13			
15	HQAM	36	116	18.21	17.99	17.93	18.17	18.22	18.22	18.6	0	
15	HQAM	75	0	18.15	18.09	18.11	18.07	17.93	17.93			
15	HQAM	1	37	18.03	18.03	18.03	18.03	18.03	18.03			
15	HQAM	36	0	18.07	18.00	17.98	18.00	17.98	17.98			
15	HQAM	36	20	17.88	18.05	18.07	18.07	17.89	17.89			
15	HQAM	36	68	18.15	18.10	18.07	18.03	18.00	18.00			
15	HQAM	75	0	17.91	18.04	18.02	18.15	18.22	18.22			
15	SSBAM	1	0	18.04	18.04	18.15	17.91	18.01	18.01			
15	SSBAM	1	37	18.17	18.17	18.08	18.11	18.14	18.14	18.6	0	
15	SSBAM	1	74	18.08	18.08	18.05	18.02	18.01	18.01			
15	SSBAM	36	20	18.00	18.06	18.06	18.00	18.03	18.03			
15	SSBAM	36	68	18.09	18.09	18.09	18.09	18.09	18.09			
15	SSBAM	36	116	18.09	18.10	17.95	18.12	18.04	18.04			
15	SSBAM	75	0	18.19	17.99	17.95	18.15	18.05	18.05			
15	SSBAM	75	37	18.05	18.05	18.04	18.04	18.05	18.05			
Channel												
Frequency (MHz)												
10	QPSK	1	0	17.70	17.70	17.70	17.70	17.70	17.70	17.70	17.70	
10	QPSK	1	25	18.03	18.27	18.07	18.17	18.17	18.17	18.6	0	
10	QPSK	1	49	18.11	18.29	18.04	18.08	18.18	18.18			
10	QPSK	1	73	17.99	18.02	18.02	18.02	18.02	18.02			
10	QPSK	25	12	17.87	18.04	17.89	18.07	18.07	18.07	18.6	0	
10	QPSK	25	37	18.03	18.03	18.03	18.03	18.03	18.03			
10	QPSK	50	0	17.95	18.17	18.01	17.91	17.99	17.99			
10	HQAM	1	0	17.83	17.89	18.22	18.11	18.11	18.11	18.6	0	
10	HQAM	1	25	18.14	17.88	18.05	18.05	18.05	18.05			
10	HQAM	1	49	18.14	18.11	18.19	18.18	18.17	18.17			
10	HQAM	25	12	17.97	18.13	18.11	18.18	18.07	18.07			
10	HQAM	25	37	18.09	17.9	18.09	18.09	18.09	18.09			
10	HQAM	25	62	18.05	17.84	18.03	17.94	18.07	18.07	18.6	0	
10	HQAM	50	0	18.10	18.02	17.94	17.81	18.07	18.07			
10	HQAM	1	25	18.24	17.87	18.08	18.08	18.07	18.07	18.6	0	
10	HQAM	25	49	18.14	18.14	18.14	18.14	18.15	18.15			
10	HQAM	25	73	17.99	17.99	18.06	18.10	17.92	17.92			
10	HQAM	25	12	17.86	17.89	17.96	17.87	17.87	17.87	18.6	0	
10	HQAM	25	37	18.15	17.96	18.06	18.07	18.01	18.01			
10	HQAM	50	0	18.02	17.99	18.04	18.15	18.16	18.16			
10	HQAM	50	25	18.05	17.83	18.07	18.08	17.99	17.99	18.6	0	
10	SSBAM	1	0	18.05	18.04	18.15	18.15	18.04	18.04			
10	SSBAM	1	25	18.07	17.88	18.07	18.07	18.07	18.07			
10	SSBAM	1	49	18.29	18.06	17.97	17.97	18.23	18.23			
10	SSBAM	25	12	17.95	18.06	18.06	18.06	17.96	17.96			
10	SSBAM	25	37	17.92	18.12	17.98	17.91	18.01	18.01			
10	SSBAM	25	62	18.06	18.20	18.03	18.23	18.07	18.07	18.6	0	
10	SSBAM	50	0	18.04	18.04	18.04	18.04	18.05	18.05			
Channel												
Frequency (MHz)												
5	QPSK	1	0	18.676	18.676	18.676	18.676	18.676	18.676	18.676	18.676	
5	QPSK	1	12	17.84	18.16	18.25	18.32	18.03	18.03	18.6	0	
5	QPSK	1	24	17.94	18.23	18.11	18.24	17.95	17.95			
5	QPSK	1	36	18.12	18.14	18.14	18.13	18.13	18.13			
5	QPSK	12	7	18.05	18.08	17.93	18.02	18.14	18.14			
5	QPSK	12	19	18.11	17.97	18.01	18.01	18.01	18.01			
5	QPSK	25	0	17.99	17.90	18.15	17.88	17.94	17.94			
5	HQAM	1	0	18.02	17.88	18.03	18.15	17.91	17.91	18.6	0	
5	HQAM	1	12	18.08	18.08	18.07	18.01	17.95	17.95			
5	HQAM	1	24	17.87	18.12	18.20	18.17	17.87	17.87			
5	HQAM	12	0	18.06	18.16	18.10	17.89	18.03	18.03			
5	HQAM	12	12	18.09	18.18	18.15	18.09	18.20	18.20			
5	HQAM	12	13	18.19	18.00	17.97	18.19	18.13	18.13			
5	HQAM	25	0	18.06	17.96	17.96	18.06	17.89	17.89			
5	HQAM	1	0	17.91	18.27	18.05	18.13	17.98	17.98			
5	HQAM	1	12	18.04	18.08	18.01	18.08	18.02	18.02	18.6	0	
5	HQAM	1	24	18.13	18.12	18.12	18.06	18.10	18.10			
5	HQAM	12	0	18.09	18.05	18.13	18.09	18.14	18.14			
5	HQAM	12	7	17.89	18.01	18.07	18.03	17.92	17.92			
5	HQAM	25	0	18.00	18.00	18.13	18.02	18.11	18.11			
5	HQAM	25	0	17.99	18.23	18.00	18.08	17.95	17.95			
5	HQAM	1	12	18.00	18.20	17.97	18.00	18.10	18.10			
5	HQAM	12	12	18.02	18.07	18.12	17.88	18.20	18.20			
5	SSBAM	1	24	18.31	18.03	18.08	18.05	18.19	18.19			
5	SSBAM	12	13	18.10	18.24	18.06	18.10	18.10	18.10			
5	SSBAM	12	7	17.93	18.03	18.03	18.13	17.94	17.94	18.6	0	
5	SSBAM	12	13	18.18	17.95	17.94	18.02	18.05	18.05			



Band 48 (3.5G Band)-FCC										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq.	Power Low Mode Ch / Freq.	Power High Mode Ch / Freq.	Power High Ch / Freq.	Tune-up limit (dBm)	MPR (dB)	
Channel Frequency (MHz)				55340	55350	56150	56650			
20	QPSK	1	0	16.25	16.26	16.26	16.42			
20	QPSK	1	40	16.26	16.19	16.19	16.34	17.2	0	
20	QPSK	1	99	16.26	16.36	16.31	16.20			
20	QPSK	50	0	16.38	16.29	16.35	16.33			
20	QPSK	50	24	16.27	16.31	16.28	16.40	17.2	0	
20	QPSK	50	50	16.21	16.37	16.24	16.25			
20	QPSK	100	0	16.35	16.32	16.30	16.40			
20	16QAM	1	0	16.33	16.27	16.27	16.34			
20	16QAM	1	40	16.07	16.19	16.07	16.27	17.2	0	
20	16QAM	1	99	16.16	16.06	16.16	16.17			
20	16QAM	50	0	16.30	16.29	16.29	16.33			
20	16QAM	50	24	16.37	16.23	16.34	16.37	17.2	0	
20	16QAM	50	50	16.29	16.23	16.26	16.23			
20	16QAM	100	0	16.24	16.25	16.30	16.36			
20	64QAM	1	0	16.32	16.25	16.36	16.40			
20	64QAM	1	40	16.26	16.12	16.22	16.27	17.2	0	
20	64QAM	1	99	16.11	16.15	16.09	16.37			
20	64QAM	50	0	16.30	16.26	16.33	16.26			
20	64QAM	50	24	16.35	16.32	16.25	16.36	17.2	0	
20	64QAM	50	50	16.20	16.27	16.18	16.27			
20	64QAM	100	0	16.28	16.21	16.27	16.23			
20	256QAM	1	0	16.15	16.22	16.16	16.48			
20	256QAM	1	40	15.92	16.06	16.07	15.93	17.2	0	
20	256QAM	1	99	15.99	15.88	15.98	15.95			
20	256QAM	50	0	16.29	16.18	16.26	16.31			
20	256QAM	50	24	16.38	16.21	16.30	16.40	17.2	0	
20	256QAM	50	50	16.17	16.16	16.20	16.32			
20	256QAM	100	0	16.21	16.24	16.17	16.38			
Channel Frequency (MHz)				56815	56820	56160	56660	Tune-up limit (dBm)	MPR (dB)	
15	QPSK	1	0	16.24	16.19	16.23	16.24			
15	QPSK	1	37	16.34	16.19	15.95	16.36	17.2	0	
15	QPSK	1	74	16.22	16.33	16.07	16.06			
15	QPSK	36	0	16.13	16.31	16.21	16.14			
15	QPSK	36	20	16.28	16.16	16.12	16.26	17.2	0	
15	QPSK	36	39	16.14	16.22	16.12	16.06			
15	QPSK	75	0	16.32	16.33	16.33	16.23			
15	16QAM	1	0	16.18	16.24	16.07	16.36			
15	16QAM	1	37	15.92	16.15	15.90	16.18	17.2	0	
15	16QAM	1	74	15.83	16.01	16.11	16.14			
15	16QAM	36	0	16.27	16.15	16.08	16.25			
15	16QAM	36	20	16.13	16.00	16.05	16.22	17.2	0	
15	16QAM	36	39	16.07	16.11	16.06	16.19			
15	16QAM	75	0	16.00	16.26	16.21	16.15			
15	64QAM	1	0	16.14	16.13	16.22	16.26			
15	64QAM	1	37	16.10	16.17	16.26	16.12	17.2	0	
15	64QAM	1	74	15.92	16.16	16.08	16.30			
15	64QAM	36	0	16.33	16.17	16.14	16.30			
15	64QAM	36	20	16.05	16.09	16.13	16.04	17.2	0	
15	64QAM	36	39	16.00	16.24	16.02	16.24			
15	64QAM	75	0	16.13	16.07	16.25	16.00			
15	256QAM	1	0	16.01	16.24	16.18	16.10			
15	256QAM	1	37	16.16	16.20	16.13	16.05	17.2	0	
15	256QAM	1	74	16.08	16.24	16.24	16.11			
15	256QAM	36	0	15.94	16.07	15.94	16.26			
15	256QAM	36	20	16.20	16.06	16.01	16.19	17.2	0	
15	256QAM	36	39	16.17	16.01	16.08	16.14			
15	256QAM	75	0	16.07	16.02	16.05	16.37			
Channel Frequency (MHz)				56900	56815	56160	56660	Tune-up limit (dBm)	MPR (dB)	
10	QPSK	1	0	16.10	16.09	16.13	16.21			
10	QPSK	1	25	16.37	16.24	16.04	16.24	17.2	0	
10	QPSK	1	49	16.32	16.31	16.36	16.16			
10	QPSK	25	0	16.13	16.16	16.26	16.21			
10	QPSK	25	12	16.13	16.33	16.04	16.17	17.2	0	
10	QPSK	25	25	16.21	16.42	16.04	16.34			
10	QPSK	50	0	16.34	16.07	16.23	16.36			
10	16QAM	1	0	16.09	16.12	16.15	16.14			
10	16QAM	1	25	16.08	16.03	15.98	16.25	17.2	0	
10	16QAM	1	49	16.06	15.99	16.29	15.97			
10	16QAM	25	0	16.16	16.06	16.12	16.14			
10	16QAM	25	12	16.12	16.26	16.09	16.33	17.2	0	
10	16QAM	25	25	16.13	16.16	16.10	16.20			
10	16QAM	50	0	16.19	16.26	16.27	16.10			
10	64QAM	1	0	16.27	16.27	16.29	16.36			
10	64QAM	1	25	16.35	16.15	16.06	16.05	17.2	0	
10	64QAM	1	49	16.15	16.17	16.02	16.36			
10	64QAM	25	0	16.18	16.01	16.10	16.01			
10	64QAM	25	12	16.02	16.32	16.25	16.01	17.2	0	
10	64QAM	25	25	16.10	16.13	16.22	16.21			
10	64QAM	50	0	16.11	16.07	16.11	16.16			
10	256QAM	1	0	16.06	16.13	16.17	16.24			
10	256QAM	1	25	16.27	16.35	16.06	16.16	17.2	0	
10	256QAM	1	49	16.15	16.23	16.09	16.09			
10	256QAM	25	0	16.00	16.04	16.03	16.17			
10	256QAM	25	12	15.90	15.84	16.15	16.06	17.2	0	
10	256QAM	25	25	16.18	16.07	16.10	16.31			
10	256QAM	50	0	16.10	16.12	16.07	16.36			
Channel Frequency (MHz)				56965	56810	56170	56715	Tune-up limit (dBm)	MPR (dB)	
5	QPSK	1	0	16.07	16.07	16.10	16.30			
5	QPSK	1	12	16.13	16.02	16.14	16.33	17.2	0	
5	QPSK	1	24	16.11	16.38	16.06	16.96			
5	QPSK	50	0	16.14	16.19	16.25	16.30			
5	QPSK	12	7	16.06	16.11	16.12	16.38	17.2	0	
5	QPSK	12	13	16.24	16.22	16.06	16.26			
5	QPSK	25	0	16.33	16.08	16.14	16.36			
5	16QAM	1	0	16.07	16.16	16.04	16.22			
5	16QAM	1	12	16.07	16.09	15.99	16.03	17.2	0	
5	16QAM	1	24	15.97	16.08	16.04	15.92			
5	16QAM	12	0	16.35	16.15	16.06	16.29			
5	16QAM	12	7	16.13	16.02	16.29	16.32	17.2	0	
5	16QAM	12	13	16.29	16.08	16.04	16.14			
5	16QAM	25	0	16.04	16.06	16.26	16.08			
5	64QAM	1	0	16.37	16.18	16.29	16.42			
5	64QAM	1	12	16.32	15.99	16.14	16.26	17.2	0	
5	64QAM	1	24	16.02	16.20	16.13	16.15			
5	64QAM	12	0	16.19	16.10	16.24	16.06			
5	64QAM	12	7	16.30	16.21	16.12	16.24	17.2	0	
5	64QAM	12	13	16.05	16.16	16.07	16.16			
5	64QAM	25	0	16.32	16.06	16.24	16.03			
5	256QAM	1	0	16.16	16.35	16.15	16.17			
5	256QAM	1	12	16.36	16.11	16.13	16.16	17.2	0	
5	256QAM	1	24	16.08	16.26	16.32	16.01			
5	256QAM	12	0	16.08	16.06	15.97	16.24			
5	256QAM	12	7	16.08	16.06	15.98	16.12	17.2	0	
5	256QAM	12	13	16.14	16.00	16.11	16.16			
5	256QAM	25	0	16.28	16.13	16.04	16.13			



Reduced power level 3/4 for Head-UAT

Channel	Baseband Average Power (dBm)			Tx Power Limit (dBm)	E-UTRAN Average Power (dBm)			Tx Power Limit (dBm)
	Baseband	Baseband	Baseband		Baseband	Baseband	Baseband	
Frequency (MHz)	836.2	836.4	836.6	836.2	836.4	836.6	836.2	836.6
CDMA 1 Tx (W)	27.13	27.05	26.89	27.00	18.13	18.05	17.89	18.00
GPB5 1 Tx (W)	27.14	27.13	26.99	27.00	18.14	18.13	17.99	18.00
GPB5 2 Tx (W)	24.06	23.92	23.82	24.00	16.06	15.92	15.82	16.00
GPB5 3 Tx (W)	22.07	22.10	22.05	22.00	14.07	14.10	14.05	14.00
GPB5 4 Tx (W)	20.87	20.84	20.74	20.80	12.87	12.84	12.74	12.80
EDGE 1 Tx (W)	23.09	23.05	22.85	23.00	14.09	14.05	13.85	14.00
EDGE 2 Tx (W)	22.08	22.05	21.97	22.00	13.08	13.05	12.97	13.00
EDGE 3 Tx (W)	20.86	20.80	20.79	20.80	12.86	12.80	12.83	12.84
EDGE 4 Tx (W)	19.56	19.60	19.70	20.00	10.56	10.60	10.70	11.00

Channel	Baseband Average Power (dBm)			Tx Power Limit (dBm)	E-UTRAN Average Power (dBm)			Tx Power Limit (dBm)
	Baseband	Baseband	Baseband		Baseband	Baseband	Baseband	
Frequency (MHz)	836.2	836.4	836.6	836.2	836.4	836.6	836.2	836.6
CDMA 1 Tx (W)	27.13	27.05	26.89	27.00	18.13	18.05	17.89	18.00
GPB5 1 Tx (W)	24.06	23.92	23.82	24.00	16.06	15.92	15.82	16.00
GPB5 2 Tx (W)	22.07	22.10	22.05	22.00	14.07	14.10	14.05	14.00
GPB5 3 Tx (W)	20.87	20.84	20.74	20.80	12.87	12.84	12.74	12.80
EDGE 1 Tx (W)	23.09	23.05	22.85	23.00	14.09	14.05	13.85	14.00
EDGE 2 Tx (W)	22.08	22.05	21.97	22.00	13.08	13.05	12.97	13.00
EDGE 3 Tx (W)	20.86	20.80	20.79	20.80	12.86	12.80	12.83	12.84
EDGE 4 Tx (W)	19.56	19.60	19.70	20.00	10.56	10.60	10.70	11.00

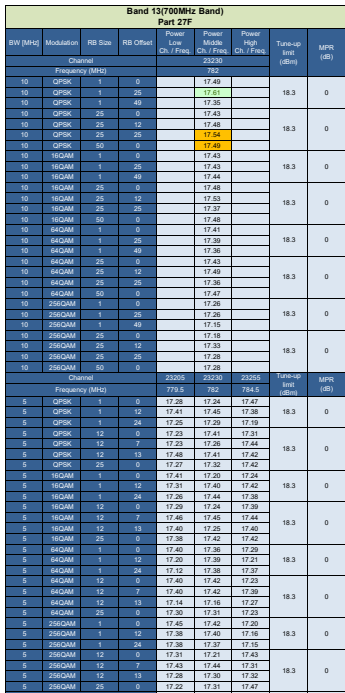
Channel	Baseband Average Power (dBm)			Tx Power Limit (dBm)	E-UTRAN Average Power (dBm)			Tx Power Limit (dBm)
	Baseband	Baseband	Baseband		Baseband	Baseband	Baseband	
Frequency (MHz)	836.2	836.4	836.6	836.2	836.4	836.6	836.2	836.6
CDMA 1 Tx (W)	27.13	27.05	26.89	27.00	18.13	18.05	17.89	18.00
GPB5 1 Tx (W)	24.06	23.92	23.82	24.00	16.06	15.92	15.82	16.00
GPB5 2 Tx (W)	22.07	22.10	22.05	22.00	14.07	14.10	14.05	14.00
GPB5 3 Tx (W)	20.87	20.84	20.74	20.80	12.87	12.84	12.74	12.80
EDGE 1 Tx (W)	23.09	23.05	22.85	23.00	14.09	14.05	13.85	14.00
EDGE 2 Tx (W)	22.08	22.05	21.97	22.00	13.08	13.05	12.97	13.00
EDGE 3 Tx (W)	20.86	20.80	20.79	20.80	12.86	12.80	12.83	12.84
EDGE 4 Tx (W)	19.56	19.60	19.70	20.00	10.56	10.60	10.70	11.00

Channel	Baseband Average Power (dBm)			Tx Power Limit (dBm)	E-UTRAN Average Power (dBm)			Tx Power Limit (dBm)
	Baseband	Baseband	Baseband		Baseband	Baseband	Baseband	
Frequency (MHz)	836.2	836.4	836.6	836.2	836.4	836.6	836.2	836.6
CDMA 1 Tx (W)	27.13	27.05	26.89	27.00	18.13	18.05	17.89	18.00
GPB5 1 Tx (W)	24.06	23.92	23.82	24.00	16.06	15.92	15.82	16.00
GPB5 2 Tx (W)	22.07	22.10	22.05	22.00	14.07	14.10	14.05	14.00
GPB5 3 Tx (W)	20.87	20.84	20.74	20.80	12.87	12.84	12.74	12.80
EDGE 1 Tx (W)	23.09	23.05	22.85	23.00	14.09	14.05	13.85	14.00
EDGE 2 Tx (W)	22.08	22.05	21.97	22.00	13.08	13.05	12.97	13.00
EDGE 3 Tx (W)	20.86	20.80	20.79	20.80	12.86	12.80	12.83	12.84
EDGE 4 Tx (W)	19.56	19.60	19.70	20.00	10.56	10.60	10.70	11.00

Channel	Baseband Average Power (dBm)			Tx Power Limit (dBm)	E-UTRAN Average Power (dBm)			Tx Power Limit (dBm)
	Baseband	Baseband	Baseband		Baseband	Baseband	Baseband	
Frequency (MHz)	836.2	836.4	836.6	836.2	836.4	836.6	836.2	836.6
CDMA 1 Tx (W)	27.13	27.05	26.89	27.00	18.13	18.05	17.89	18.00
GPB5 1 Tx (W)	24.06	23.92	23.82	24.00	16.06	15.92	15.82	16.00
GPB5 2 Tx (W)	22.07	22.10	22.05	22.00	14.07	14.10	14.05	14.00
GPB5 3 Tx (W)	20.87	20.84	20.74	20.80	12.87	12.84	12.74	12.80
EDGE 1 Tx (W)	23.09	23.05	22.85	23.00	14.09	14.05	13.85	14.00
EDGE 2 Tx (W)	22.08	22.05	21.97	22.00	13.08	13.05	12.97	13.00
EDGE 3 Tx (W)	20.86	20.80	20.79	20.80	12.86	12.80	12.83	12.84
EDGE 4 Tx (W)	19.56	19.60	19.70	20.00	10.56	10.60	10.70	11.00



Band 2 (1900MHz Band)														
Part 24E														
BW (MHz)	Modulation	RB Size	RB Offset	Low Power Ch / Freq	Mid Power Ch / Freq	High Power Ch / Freq	Turn-up limit	MPE (dB)						
Channel														
Frequency (MHz)														
20	QPSK	1	0	12.38	12.53	12.51	13.6	0						
20	QPSK	1	49	12.42	12.42	12.51								
20	QPSK	1	99	12.38	12.33	12.51								
20	QPSK	50	0	12.46	12.50	12.41	13.6	0						
20	QPSK	50	24	12.48	12.48	12.42								
20	QPSK	50	50	12.49	12.45	12.51								
20	QPSK	100	0	12.46	12.47	12.46	13.6	0						
20	16QAM	1	0	12.39	12.43	12.40								
20	16QAM	1	49	12.38	12.48	12.51								
20	16QAM	50	0	12.40	12.47	12.51	13.6	0						
20	16QAM	50	0	12.38	12.39	12.53								
20	16QAM	50	24	12.27	12.44	12.50								
20	16QAM	50	50	12.44	12.23	12.50	13.6	0						
20	16QAM	100	0	12.44	12.23	12.49								
20	16QAM	50	49	12.38	12.49	12.53								
20	64QAM	1	0	12.32	12.46	12.40	13.6	0						
20	64QAM	1	99	12.36	12.44	12.57								
20	64QAM	50	0	12.47	12.49	12.53								
20	64QAM	50	24	12.47	12.28	12.49	13.6	0						
20	64QAM	100	0	12.21	12.49	12.23								
20	64QAM	50	49	12.21	12.49	12.23								
20	256QAM	1	0	12.43	12.39	12.32	13.6	0						
20	256QAM	1	99	12.19	12.13	12.26								
20	256QAM	50	0	12.44	12.17	12.39								
20	256QAM	50	24	12.43	12.15	12.21	13.6	0						
20	256QAM	50	50	12.15	12.21	12.27								
20	256QAM	100	0	12.35	12.27	12.34								
Channel														
Frequency (MHz)														
15	QPSK	1	0	12.42	12.42	12.44	13.6	0						
15	QPSK	1	31	12.31	12.37	12.29								
15	QPSK	1	74	12.24	12.21	12.30								
15	QPSK	36	0	12.24	12.52	12.45	13.6	0						
15	QPSK	36	29	12.26	12.28	12.31								
15	QPSK	36	39	12.26	12.28	12.31								
15	QPSK	75	0	12.38	12.32	12.34	13.6	0						
15	16QAM	1	37	12.29	12.30	11.99								
15	16QAM	1	37	12.29	12.30	11.99								
15	16QAM	1	74	12.17	12.33	12.34	13.6	0						
15	16QAM	36	29	12.35	12.46	12.38								
15	16QAM	36	29	12.35	12.46	12.38								
15	16QAM	36	29	12.03	12.22	12.35	13.6	0						
15	16QAM	36	39	12.29	12.64	12.43								
15	16QAM	75	0	12.13	12.15	12.35								
15	64QAM	1	0	12.13	12.15	12.35	13.6	0						
15	64QAM	1	37	12.33	12.49	12.22								
15	64QAM	1	74	12.17	12.33	12.34								
15	64QAM	36	0	12.30	12.34	12.36	13.6	0						
15	64QAM	36	0	12.30	12.34	12.36								
15	64QAM	36	20	12.25	12.14	12.34								
15	64QAM	36	39	12.29	12.46	12.42	13.6	0						
15	64QAM	75	0	12.13	12.15	12.35								
15	256QAM	1	0	12.37	12.39	12.34								
15	256QAM	1	31	12.37	12.39	12.34	13.6	0						
15	256QAM	1	74	12.29	12.21	12.16								
15	256QAM	36	0	12.30	12.23	12.12								
15	256QAM	36	29	12.30	12.23	12.12	13.6	0						
15	256QAM	36	39	12.12	12.03	12.05								
15	256QAM	75	0	12.25	12.21	12.19								
Channel														
Frequency (MHz)														
10	QPSK	1	0	12.39	12.56	12.37	13.6	0						
10	QPSK	1	29	12.27	12.37	12.29								
10	QPSK	1	49	12.13	12.14	12.19								
10	QPSK	25	0	12.38	12.39	12.20	13.6	0						
10	QPSK	25	12	12.38	12.46	12.39								
10	QPSK	25	25	12.25	12.25	12.29								
10	QPSK	50	0	12.23	12.46	12.46	13.6	0						
10	16QAM	1	0	12.23	12.28	12.28								
10	16QAM	1	25	12.45	12.13	12.31								
10	16QAM	1	49	12.21	12.10	12.11	13.6	0						
10	16QAM	25	0	12.25	12.37	12.16								
10	16QAM	25	25	12.11	12.35	12.25								
10	16QAM	25	26	12.37	12.11	12.28	13.6	0						
10	16QAM	50	0	12.30	12.26	12.43								
10	16QAM	50	25	12.23	12.28	12.38								
10	64QAM	1	0	12.38	12.23	12.36	13.6	0						
10	64QAM	1	25	12.33	12.21	12.36								
10	64QAM	1	49	12.35	12.21	12.36								
10	64QAM	25	0	12.42	12.44	12.06	13.6	0						
10	64QAM	25	12	12.50	12.06	12.54								
10	64QAM	25	25	12.52	12.24	12.54								
10	64QAM	50	0	12.06	12.35	12.16	13.6	0						
10	64QAM	50	0	12.40	12.16	12.24								
10	256QAM	1	0	12.51	12.22	12.54								
10	256QAM	1	25	12.16	12.34	12.23	13.6	0						
10	256QAM	1	49	12.16	12.34	12.23								
10	256QAM	25	0	12.11	12.44	12.05								
10	256QAM	25	12	12.22	12.30	12.15	13.6	0						
10	256QAM	25	25	12.11	12.02	12.30								
10	256QAM	50	0	12.23	12.18	12.31								
Channel														
Frequency (MHz)														
5	QPSK	1	0	12.32	12.58	12.29	13.6	0						
5	QPSK	1	12	12.24	12.23	12.34								
5	QPSK	1	24	12.28	12.22	12.20								
5	QPSK	12	0	12.44	12.40	12.46	13.6	0						
5	QPSK	12	7	12.48	12.34	12.41								
5	QPSK	12	13	12.30	12.31	12.34								
5	QPSK	25	0	12.39	12.36	12.27	13.6	0						
5	16QAM	1	12	12.27	12.52	12.08								
5	16QAM	1	12	12.16	12.26	12.18								
5	16QAM	1	24	12.23	12.21	12.14	13.6	0						
5	16QAM	12	7	12.04	12.26	12.37								
5	16QAM	12	7	12.04	12.26	12.37								
5	16QAM	12	13	12.25	12.27	12.34	13.6	0						
5	16QAM	25	0	12.42	12.01	12.01								
5	64QAM	1	0	12.15	12.27	12.12								
5	64QAM	1	12	12.19	12.29	12.40	13.6	0						
5	64QAM	1	24	12.11	12.44	12.42								
5	64QAM	12	7	12.07	12.32	12.30	13.6	0						
5	64QAM	12	7	12.07	12.32	12.30								
5	64QAM	12	7	12.07	12.32	12.30								
5	64QAM	12	13	12.26	12.21	12.35	13.6	0						
5	64QAM	25	0	12.39	12.26	12.32								
5	64QAM	25	0	12.23	12.28	12.27								
5	256QAM	1	0	12.41	12.40	12.23	13.6	0						
5	256QAM	1	25	12.16	12.34	12.23								
5	256QAM	1	49	12.16	12.34	12.23								
5	256QAM	1	24	12.43	12.26	12.34	13.6	0						
5	256QAM	12	0	12.50	12.24	12.50								
5	256QAM	12	0	12.50	12.24	12.50								
5	256QAM	12	13	12.09	12.30	12.11	13.6	0						
5	256QAM	25	0	12.16	12.26	12.50								
5	256QAM	25	0	12.16	12.26	12.50								
Channel														
Frequency (MHz)														
3	QPSK	1	0	12.27	12.44	12.44	13.6	0						
3	QPSK	1	14	12.24	12.24	12.31								
3	QPSK	1	14	12.24	12.24	12.31								
3	QPSK	8	0	12.44	12.33	12.33	13.6	0						
3	QPSK	8	7	12.48	12.18	12.31								
3	QPSK	8	7	12.48	12.18	12.31								
3	QPSK	15	0	12.22	12.23	12.31	13.6	0						
3	QPSK	15	0	12.22	12.23	12.31								
3	QPSK	15	0	12.22	12.23	12.31								
3	QPSK	8	8	12.40	12.28	12.16	13.6	0						
3	QPSK	1	14	12.23	12.06	12.22								
3	QPSK	1	14	12.23	12.06	12.22								
3	QPSK	8	8	12.42	12.28	12.16	13.6	0						
3	QPSK	8	8	12.42	12.28	12.16								
3	QPSK	8	8	12.42	12.28	12.16								
3	QPSK	8	7	12.27	12.24	12.13	13.6	0						
3	QPSK	8	7	12.27	12.24	12.13								
3	QPSK	8	7	12.27	12.24	12.13								
3	QPSK	8	7	12.29	12.27	12.17	13.6	0						
3	QPSK	8	7	12.29	12.27	12.17								
3	QPSK	8	7	12.29	12.27	12.17								
3	QPSK	8	0	12.25	12.48	12.07	13.6	0						
3	QPSK	8	0	12.25	12.48	12.07								
3	QPSK	8	0	12.25	12.48	12.07								
3	QPSK	15	0	12.08	12.25	12.08	13.6	0						
3	QPSK	15	0	12.08	12.25	12.08								
3	QPSK	15	0	12.08	12.25	12.08								
3	QPSK	1	0	12.30	12.44	12.19	13.6	0						
3	QPSK	1	0	12.30	12.44	12.19								
3	QPSK	1	0	12.30	12.44	12.19								
3	QPSK	1	14	12.20	12.23	12.36	13.6	0						
3	QPSK	1	14	12.20	12.23	12.36								
3	QPSK	1	14	12.20	12.23	12.36								
3	QPSK	8	8	12.23	12.07	12.19	13.6	0						
3	QPSK	8	8	12.23	12.07	12.19								
3	QPSK	8	8	12.23	12.07	12.19								
3	QPSK	8	7	11.93	12.05	12.24	13.6	0						
3	QPSK	8	7	11.93	12.05	12.24								
3	QPSK	8	7	11.93	12.05	12.24								
Channel														
Frequency (MHz)														
1.4														





Band 17 (700MHz Band)														
Part 27H(only on channel required)														
RFV (MHz)	Modulation	RB Size	RB Offset	Power Ch / Freq	Power Ch / Freq	Power Ch / Freq	Turn-up limit (dBm)	MPE (dB)						
Channel														
Frequency (MHz)														
706.5 710 713.5														
10	QPSK	1	0	10.37	10.34	10.39								
10	QPSK	1	26	10.44	10.42	10.44	17.6	0						
10	QPSK	1	49	10.52	10.49	10.49								
10	QPSK	25	0	10.40	10.47	10.46								
10	QPSK	25	12	10.41	10.50	10.51	17.6	0						
10	QPSK	25	26	10.50	10.53	10.51								
10	QPSK	50	0	10.51	10.49	10.49								
10	16QAM	1	0	10.43	10.41	10.42								
10	16QAM	1	26	10.41	10.48	10.44	17.6	0						
10	16QAM	1	49	10.49	10.49	10.47								
10	16QAM	25	0	10.44	10.44	10.46								
10	16QAM	25	12	10.40	10.49	10.49	17.6	0						
10	16QAM	25	26	10.55	10.50	10.50								
10	16QAM	50	0	10.40	10.46	10.46								
10	16QAM	1	0	10.50	10.41	10.57								
10	16QAM	1	26	10.48	10.48	10.49	17.6	0						
10	16QAM	1	49	10.48	10.50	10.50								
10	16QAM	25	0	10.40	10.47	10.47								
10	16QAM	25	12	10.54	10.55	10.50	17.6	0						
10	16QAM	25	26	10.42	10.42	10.50								
10	16QAM	50	0	10.48	10.50	10.50								
10	256QAM	1	0	10.40	10.27	10.47								
10	256QAM	1	26	10.52	10.51	10.41	17.6	0						
10	256QAM	1	49	10.45	10.29	10.38								
10	256QAM	25	0	10.27	10.29	10.45								
10	256QAM	25	12	10.41	10.50	10.50	17.6	0						
10	256QAM	25	26	10.26	10.39	10.39								
10	256QAM	50	0	10.43	10.47	10.25								
Channel														
706.5 710 713.5														
Frequency (MHz)														
5	QPSK	1	0	10.31	10.23	10.25								
5	QPSK	1	12	10.44	10.34	10.49	17.6	0						
5	QPSK	1	24	10.54	10.34	10.49								
5	QPSK	12	0	10.44	10.22	10.50								
5	QPSK	12	7	10.60	10.60	10.51	17.6	0						
5	QPSK	12	13	10.35	10.33	10.28								
5	QPSK	25	0	10.38	10.54	10.42								
5	16QAM	1	0	10.19	10.21	10.36								
5	16QAM	1	12	10.36	10.37	10.47	17.6	0						
5	16QAM	1	24	10.45	10.41	10.24								
5	16QAM	12	0	10.51	10.29	10.40								
5	16QAM	12	7	10.51	10.29	10.31	17.6	0						
5	16QAM	12	13	10.43	10.34	10.55								
5	16QAM	25	0	10.36	10.44	10.40								
5	16QAM	25	0	10.26	10.40	10.46								
5	256QAM	1	0	10.44	10.43	10.55								
5	256QAM	1	12	10.42	10.31	10.43	17.6	0						
5	256QAM	1	24	10.53	10.45	10.59								
5	256QAM	12	7	10.31	10.52	10.44								
5	256QAM	12	13	10.35	10.32	10.52	17.6	0						
5	256QAM	12	13	10.41	10.48	10.42								
5	256QAM	25	0	10.31	10.43	10.34								
5	256QAM	25	0	10.28	10.44	10.31	17.6	0						

Band 25 (100MHz Band)														
Part 24E														
RF (MHz)	Modulation	RB Size	RB Offset	Power Ch / Freq	Power Ch / Freq	Power Ch / Freq	Turn-up limit (dBm)	MPE (dB)						
Channel														
Frequency (MHz)														
20140 20140 20140														
20	QPSK	1	0	12.79	12.81	12.79								
20	QPSK	1	49	12.70	12.78	12.68	13.6	0						
20	QPSK	1	99	12.67	12.67	12.70								
20	QPSK	50	0	12.66	12.71	12.83								
20	QPSK	50	24	12.66	12.77	12.83	13.6	0						
20	QPSK	50	50	12.76	12.74	12.88								
20	16QAM	1	0	12.75	12.70	12.71	13.6	0						
20	16QAM	1	49	12.71	12.67	12.83								
20	16QAM	1	99	12.66	12.66	12.42								
20	16QAM	50	0	12.76	12.71	12.82								
20	16QAM	50	24	12.72	12.70	12.80	13.6	0						
20	16QAM	50	50	12.66	12.73	12.83								
20	256QAM	1	0	12.64	12.68	12.89								
20	256QAM	1	49	12.59	12.63	12.89	13.6	0						
20	256QAM	1	99	12.59	12.63	12.93								
20	256QAM	50	0	12.57	12.67	12.84								
20	256QAM	50	24	12.70	12.65	12.88	13.6	0						
20	256QAM	50	50	12.55	12.45	12.87								
20	256QAM	100	0	12.59	12.49	12.36								
Channel														
Frequency (MHz)														
20115 20040 20019.5														
15	QPSK	1	0	12.62	12.72	12.82								
15	QPSK	1	37	12.60	12.65	12.86	13.6	0						
15	QPSK	1	74	12.58	12.66	12.86								
15	QPSK	36	0	12.58	12.53	12.87								
15	QPSK	36	12	12.65	12.65	12.83	13.6	0						
15	QPSK	36	39	12.68	12.65	12.43								
15	QPSK	75	0	12.67	12.79	12.81								
15	16QAM	1	0	12.65	12.61	12.87								
15	16QAM	1	37	12.65	12.61	12.87	13.6	0						
15	16QAM	1	74	12.45	12.51	12.87								
15	16QAM	36	0	12.59	12.54	12.89								
15	16QAM	36	20	12.59	12.44	12.89	13.6	0						
15	16QAM	36	39	12.49	12.50	12.30								
15	16QAM	75	0	12.58	12.46	12.84								
15	16QAM	1	0	12.70	12.55	12.81								
15	16QAM	1	37	12.54	12.72	12.86	13.6	0						
15	16QAM	1	74	12.58	12.58	12.86								
15	16QAM	36	0	12.43	12.55	12.88								
15	16QAM	36	20	12.62	12.61	12.62	13.6	0						
15	16QAM	36	39	12.58	12.70	12.84								
15	256QAM	1	0	12.43	12.55	12.88								
15	256QAM	1	37	12.42	12.66	12.81	13.6	0						
15	256QAM	1	74	12.42	12.66	12.81								
15	256QAM	36	0	12.63	12.59	12.81								
15	256QAM	36	20	12.67	12.67	12.81	13.6	0						
15	256QAM	36	39	12.50	12.68	12.44								
15	256QAM	75	0	12.53	12.70	12.82								
Channel														
Frequency (MHz)														
20000 20000 20000														
10	QPSK	1	0	12.65	12.67	12.73								
10	QPSK	1	26	12.60	12.67	12.72	13.6	0						
10	QPSK	1	49	12.48	12.67	12.72								
10	QPSK	25	0	12.63	12.57	12.84								
10	QPSK	25	12	12.70	12.49	12.81	13.6	0						
10	QPSK	25	26	12.70	12.49	12.89								
10	QPSK	50	0	12.51	12.81	12.68								
10	16QAM	1	0	12.60	12.70	12.87								
10	16QAM	1	26	12.74	12.55	12.89	13.6	0						
10	16QAM	1	49	12.42	12.62	12.89								
10	16QAM	25	0	12.63	12.66	12.82								
10	16QAM	25	12	12.71	12.49	12.81	13.6	0						
10	16QAM	25	26	12.69	12.49	12.80								
10	16QAM	50	0	12.49	12.74	12.89								
10	16QAM	50	12	12.71	12.49	12.81	13.6	0						
10	16QAM	50	26	12.69	12.49	12.80								
10	256QAM	1	0	12.43	12.55	12.88								
10	256QAM	1	26	12.63	12.59	12.81	13.6	0						
10	256QAM	1	49	12.42	12.66	12.81								
10	256QAM	25	0	12.63	12.66	12.82								
10	256QAM	25	12	12.71	12.49	12.81	13.6	0						
10	256QAM	25	26	12.63	12.49	12.80								
10	256QAM	50	0	12.51	12.84	12.65								
10	256QAM	50	12	12.71	12.49	12.81	13.6	0						
10	256QAM	50	26	12.63	12.49	12.80								
Channel														
Frequency (MHz)														
1852.5 1855 1860														
5	QPSK	1	0	12.77	12.76	12.65								
5	QPSK	1	12	12.58	12.62	12.82	13.6	0						
5	QPSK	1	24	12.58	12.62	12.82								
5	QPSK	12	0	12.51	12.67	12.60								
5	QPSK	12	7	12.51	12.55	12.45								
5	QPSK	25	0	12.73	12.73	12.82								
5	QPSK	25	6	12.48	12.63	12.49								
5	QPSK	1	0	12.75	12.73	12.62								
5	QPSK	1	12	12.53	12.53	12.82	13.6	0						
5	QPSK	1	24	12.53	12.53	12.82								
5	QPSK	12	0	12.67	12.63	12.30								
5	QPSK	12	6	12.68	12.45	12.43								
5	QPSK	12	13	12.67	12.55	12.48								
5	QPSK	25	0	12.73	12.73	12.82								
5	QPSK	25	6	12.49	12.60	12.44								
5	QPSK	1	0	12.59	12.50	12.45								
5	QPSK	1	12	12.74	12.75	12.45	13.6	0						
5	QPSK	1	24	12.53	12.50	12.40								
5	QPSK	12	0	12.63	12.60	12.40								
5	QPSK	12	7	12.75	12.62	12.42	13.6	0						
5	QPSK	25	0	12.70	12.60	12.40								
5	QPSK	25	6	12.50	12.58	12.38								
5	QPSK	1	0	12.46	12.55	12.67								
5	QPSK	1	12	12.60	12.50	12.40	13.6	0						
5	QPSK	1	24	12.55	12.50	12.38								
5	QPSK	12	0	12.69	12.60	12.53								
5	QPSK	12	6	12.68	12.48	12.48	13.6	0						
5	QPSK	25	0	12.68	12.63	12.68								
5	QPSK	25	6	12.71	12.51	12.46								
Channel														
Frequency (MHz)														
1851.5 1850 1849.5														
3	QPSK	1	0	12.56	12.64	12.65								
3	QPSK	1	12	12.56	12.62	12.82	13.6	0						
3	QPSK	1	24	12.56	12.62	12.82								
3	QPSK	1	14	12.56	12.60	12.55								
3	QPSK	8	0	12.43	12.63	12.68								
3	QPSK	8	7	12.43	12.57	12.47								
3	QPSK	7	0	12.76	12.74	12.60	13.6	0						
3	QPSK	15	0	12.70	12.71	12.49								
3	QPSK	15	7	12.60	12.60	12.30								
3	QPSK	1	0	12.60	12.60	12.30	13.6	0						
3	QPSK	1	14	12.68	12.60	12.53								
3	QPSK	8	0	12.56	12.55	12.45								
3	QPSK	8	4	12.56	12.53	12.46	13.6	0						
3	QPSK	8	7	12.46	12.47	12.31								
3	QPSK	15	0	12.70	12.70	12.40								
3	QPSK	15	7	12.57	12.57	12.40	13.6	0						
3	QPSK	1	0	12.50	12.50	12.67								
3	QPSK	1	14	12.60	12.63	12.67								
3	QPSK	8	0	12.56	12.58	12.67								
3	QPSK	8	4	12.72	12.70	12.48								
3	QPSK	8	7	12.57	12.57	12.40	13.6	0						
3	QPSK	15	0	12.63	12.68	12.29								
3	QPSK	15	7	12.67	12.59	12.57								
3	QPSK	1	0	12.57	12.57	12.67	13.6	0						
3	QPSK	1	14	12.56	12.55	12.26								
3	QPSK	8	0	12.56	12.56	12.46								
3	QPSK	8	4	12.55	12.55	12.50	13.6	0						
3	QPSK	8	7	12.54	12.64	12.33								
3	QPSK	15	0	12.71	12.61	12.38								
Channel														
Frequency (MHz)														
1850.5 1850 1849.5														
1.4	QPSK	1	0	12.72	12.72	12.33								
1.4	QPSK	1	24	12.64	12.64	12.41	13.6	0						
1.4	QPSK	3	0	12.76	12.47	12.49								
1.4	QPSK	3	24	12.73	12.73	12.49								
1.4	QPSK	3	3	12.67	12.66	12.35								
1.4	QPSK	6	0	12.66	12.53	12.69								
1.4	QPSK	6	24	12.68	12.68	12.45	13.6	0						
1.4	QPSK	3	3	12.73	12.74	12.32								
1.4	QPSK	3	24	12.66	12.44	12.44								
1.4	QPSK	3	0	12.66	12.43	12.35	13.6	0						
1.4	QPSK	1	0	12.49	12.62	12.34								
1.4	QPSK	1	24	12.62	12.62	12.33								
1.4	QPSK	1												

Band 30										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./F/Freq.	Power Mid Ch./F/Freq.	Power High Ch./F/Freq.	Turn-up limit (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
10	QPSK	1	0	12.05			13.0	0		
10	QPSK	1	25	12.65						
10	QPSK	1	49	12.89						
10	QPSK	25	0	12.82			13.0	0		
10	QPSK	25	12	12.85						
10	QPSK	25	25	12.89						
10	QPSK	50	0	12.85			13.0	0		
10	16QAM	1	0	12.89						
10	16QAM	1	25	12.91			13.0	0		
10	16QAM	1	49	12.91						
10	16QAM	25	0	12.95			13.0	0		
10	16QAM	25	12	12.95						
10	16QAM	25	25	12.95						
10	16QAM	50	0	12.98			13.0	0		
10	64QAM	1	0	12.84						
10	64QAM	1	25	12.85			13.0	0		
10	64QAM	1	49	12.83						
10	64QAM	25	0	12.85			13.0	0		
10	64QAM	25	12	12.88						
10	64QAM	25	25	12.84						
10	64QAM	50	0	12.95			13.0	0		
10	256QAM	1	0	12.81			13.0	0		
10	256QAM	1	25	12.74						
10	256QAM	1	49	12.73						
10	256QAM	25	0	12.88			13.0	0		
10	256QAM	25	12	12.83						
10	256QAM	25	25	12.85						
10	256QAM	50	0	12.85			13.0	0		
				27.885	27.915	27.935	27.955	27.975		
Channel										
Frequency (MHz)										
5	QPSK	1	0	12.83	12.85	12.92	13.0	0		
5	QPSK	1	12	12.62	12.84	12.82				
5	QPSK	1	24	12.73	12.87	12.80				
5	QPSK	12	0	12.69	12.94	12.81	13.0	0		
5	QPSK	12	13	12.82	12.83	12.89				
5	QPSK	25	0	12.78	12.89	12.75	13.0	0		
5	16QAM	1	0	12.75	12.87	12.79				
5	16QAM	1	12	12.76	12.87	12.78	13.0	0		
5	16QAM	1	24	12.62	12.87	12.87				
5	16QAM	12	0	12.74	12.84	12.82	13.0	0		
5	16QAM	12	7	12.77	12.85	12.83				
5	16QAM	12	13	12.79	12.85	12.79	13.0	0		
5	16QAM	25	0	12.69	12.83	12.85	13.0	0		
5	64QAM	1	0	12.72	12.75	12.61				
5	64QAM	1	12	12.68	12.90	12.83	13.0	0		
5	64QAM	1	24	12.76	12.73	12.71				
5	64QAM	12	0	12.81	12.77	12.87	13.0	0		
5	64QAM	12	13	12.85	12.65	12.78				
5	64QAM	25	0	12.84	12.72	12.76	13.0	0		
5	256QAM	1	0	12.61	12.79	12.85	13.0	0		
5	256QAM	1	12	12.70	12.77	12.66				
5	256QAM	1	24	12.79	12.84	12.71	13.0	0		
5	256QAM	12	0	12.86	12.75	12.75				
5	256QAM	12	13	12.82	12.65	12.75				
5	256QAM	25	0	12.75	12.64	12.64	13.0	0		
5	256QAM	25	12	12.84	12.75	12.75				
5	256QAM	25	0	12.94	12.85	12.81				

Band 66										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low 150072	Power Mid 150072	Power High 150072	Turn-up limit (dBm)	APRS (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	12.70	12.74	12.71	13.3	0		
20	QPSK	1	49	12.30	12.29	12.34				
20	QPSK	1	99	12.26	12.33	12.27				
20	QPSK	50	0	12.35	12.42	12.35	13.3	0		
20	QPSK	50	24	12.27	12.33	12.40				
20	QPSK	50	50	12.35	12.35	12.35				
20	16QAM	1	0	12.83	12.84	12.85				
20	16QAM	1	49	12.39	12.37	12.39	13.3	0		
20	16QAM	1	99	12.32	12.35	12.38				
20	16QAM	50	0	12.38	12.33	12.32	13.3	0		
20	16QAM	50	24	12.39	12.35	12.31				
20	16QAM	50	50	12.35	12.37	12.37				
20	16QAM	100	0	12.30	12.32	12.37	13.3	0		
20	64QAM	1	0	12.34	12.30	12.37				
20	64QAM	1	49	12.38	12.39	12.31	13.3	0		
20	64QAM	1	99	12.35	12.34	12.33				
20	64QAM	50	0	12.27	12.31	12.31	13.3	0		
20	64QAM	50	24	12.28	12.29	12.20				
20	64QAM	50	50	12.35	12.39	12.38	13.3	0		
20	256QAM	1	0	12.09	12.31	12.13	13.3	0		
20	256QAM	1	49	12.26	12.44	12.23				
20	256QAM	1	99	12.07	12.05	12.13				
20	256QAM	50	0	12.09	12.22	12.14	13.3	0		
20	256QAM	50	24	12.15	12.16	12.08				
20	256QAM	50	50	12.35	12.15	12.44				
20	256QAM	100	0	11.99	12.28	12.15	13.3	0		
Channel										
Frequency (MHz)										
15	QPSK	1	0	12.30	12.41	12.38	13.3	0		
15	QPSK	1	37	12.19	12.30	12.16				
15	QPSK	1	74	12.15	12.35	12.29	13.3	0		
15	QPSK	36	0	12.19	12.35	12.06	13.3	0		
15	QPSK	36	37	12.17	12.35	12.08				
15	QPSK	36	75	12.17	12.38	12.38				
15	QPSK	75	0	12.14	12.40	12.38	13.3	0		
15	16QAM	1	0	12.36	12.37	12.33				
15	16QAM	1	37	12.26	12.40	12.34	13.3	0		
15	16QAM	1	74	12.24	12.12	12.42				
15	16QAM	36	0	12.35	12.35	12.13	13.3	0		
15	16QAM	36	37	12.35	12.35	12.15				
15	16QAM	36	75	12.30	12.15	12.07				
15	16QAM	75	0	12.30	12.35	12.07	13.3	0		
15	64QAM	1	0	12.36	12.35	12.06				
15	64QAM	1	37	12.40	12.20	12.35	13.3	0		
15	64QAM	1	74	12.31	12.31	12.17				
15	64QAM	36	0	12.17	12.31	12.17	13.3	0		
15	64QAM	36	37	12.13	12.33	12.19				
15	64QAM	36	75	12.23	12.27	12.22				
15	64QAM	75	0	12.23	12.27	12.22	13.3	0		
15	256QAM	1	0	12.38	12.32	12.35	13.3	0		
15	256QAM	1	37	12.41	12.35	12.35				
15	256QAM	1	74	12.26	12.24	12.23	13.3	0		
15	256QAM	36	0	12.27	12.25	12.04				
15	256QAM	36	37	12.35	12.35	12.05	13.3	0		
15	256QAM	36	75	12.18	12.14	12.23				
15	256QAM	75	0	12.16	12.21	12.14				
Channel										
Frequency (MHz)										
10	QPSK	1	0	12.30	12.22	12.42	13.3	0		
10	QPSK	1	25	12.29	12.29	12.31				
10	QPSK	1	49	12.29	12.31	12.11				
10	QPSK	25	0	12.12	12.37	12.23	13.3	0		
10	QPSK	25	12	12.37	12.37	12.28				
10	QPSK	50	0	12.31	12.32	12.30				
10	16QAM	1	0	12.26	12.38	12.25				
10	16QAM	1	25	12.33	12.33	12.28	13.3	0		
10	16QAM	1	49	12.18	12.13	12.29				
10	16QAM	25	0	12.38	12.38	12.31	13.3	0		
10	16QAM	25	12	12.33	12.33	12.28				
10	16QAM	25	49	12.34	12.34	12.28				
10	16QAM	1	26	12.35	12.34	12.23				
10	16QAM	1	49	12.38	12.35	12.31	13.3	0		
10	16QAM	25	0	12.31	12.31	12.28				
10	16QAM	25	12	12.14	12.06	12.03	13.3	0		
10	16QAM	25	49	12.35	12.35	12.25				
10	16QAM	50	0	12.13	12.13	12.21				
10	256QAM	1	0	12.07	12.34	12.41				
10	256QAM	1	26	12.17	12.35	12.35	13.3	0		
10	256QAM	1	49	12.28	12.21	12.19				
10	256QAM	25	0	12.19	12.11	11.99				
10	256QAM	25	12	12.15	12.15	12.15	13.3	0		
10	256QAM	25	49	12.28	12.28	12.15				
10	256QAM	50	0	12.06	12.35	12.19	13.3	0		
Channel										
Frequency (MHz)										
5	QPSK	1	0	12.44	12.21	12.36	13.3	0		
5	QPSK	1	12	12.35	12.11	12.11				
5	QPSK	12	0	12.12	12.37	12.23	13.3	0		
5	QPSK	12	12	12.36	12.26	12.35				
5	QPSK	12	13	12.19	12.25	12.35	13.3	0		
5	QPSK	25	0	12.13	12.17	12.37				
5	QPSK	25	12	12.34	12.34	12.25	13.3	0		
5	QPSK	1	12	12.19	12.39	12.33	13.3	0		
5	16QAM	1	24	12.35	12.29	12.40				
5	16QAM	1	49	12.38	12.38	12.31	13.3	0		
5	16QAM	12	7	12.41	12.31	12.33				
5	16QAM	12	13	12.14	12.24	12.14				
5	16QAM	1	12	12.15	12.26	12.32	13.3	0		
5	16QAM	12	0	12.34	12.30	12.25				
5	16QAM	12	0	12.34	12.30	12.25				
5	16QAM	12	7	12.16	12.08	11.95	13.3	0		
5	16QAM	25	0	12.35	12.21	12.32				
5	16QAM	25	0	12.20	12.23	12.26				
5	16QAM	1	0	12.17	12.09	12.38	13.3	0		
5	16QAM	1	12	12.35	12.35	12.25				
5	256QAM	1	24	12.07	12.37	12.25				
5	256QAM	12	9	12.11	12.33	12.25	13.3	0		
5	256QAM	12	13	12.32	12.16	12.15				
5	256QAM	25	0	12.20	12.09	12.18				
Channel										
Frequency (MHz)										
3	QPSK	1	0	12.30	12.30	12.31	13.3	0		
3	QPSK	1	14	12.28	12.07	12.12				
3	QPSK	1	28	12.14	12.14	12.17	13.3	0		
3	QPSK	1	42	12.25	12.23	12.14				
3	QPSK	1	56	12.28	12.34	12.34	13.3	0		
3	QPSK	8	7	12.19	12.34	12.34				
3	QPSK	15	6	12.11	12.22	12.35				
3	QPSK	15	6	12.12	12.22	12.22	13.3	0		
3	16QAM	1	8	12.30	12.28	12.08				
3	16QAM	1	14	12.15	12.40	12.30				
3	16QAM	1	28	12.36	12.16	12.28	13.3	0		
3	16QAM	8	4	12.35	12.13	12.18				
3	16QAM	8	7	12.25	12.41	12.08				
3	16QAM	15	6	12.09	12.33	12.19	13.3	0		
3	16QAM	1	0	12.16	12.12	12.11				
3	16QAM	1	8	12.16	12.43	12.12				
3	16QAM	8	4	12.15	12.14	12.08	13.3	0		
3	16QAM	8	4	12.15	12.14	12.08				
3	16QAM	15	6	12.20	12.20	12.12				
3	256QAM	1	0	12.09	12.34	12.17	13.3	0		
3	256QAM	1	14	12.27	12.22	12.26				
3	256QAM	1	28	12.11	12.23	12.28	13.3	0		
3	256QAM	1	42	12.15	12.26	12.17				
3	256QAM	8	7	12.36	12.34	12.27	13.3	0		
3	256QAM	15	6	12.14	12.07	12.14				
Channel										
Frequency (MHz)										
1.4	QPSK	1	0	12.20	12.29	12.26	13.3	0		
1.4	QPSK	1	5	12.11	12.17	12.26				
1.4	QPSK	1	9	12.29	12.36	12.31	13.3	0		
1.4	QPSK	3	0	12.17	12.08	12.12				
1.4	QPSK	3	3	12.37	12.31	12.34	13.3	0		
1.4	QPSK	6	0	12.30	12.24	12.27	13.3	0		
1.4	16QAM	1	5	12.11	12.18	12.25				
1.4	16QAM	1	9	12.23	12.28	12.25				
1.4	16QAM	3	0	12.15	12.32	12.29	13.3	0		
1.4	16QAM	3	0	12.28	12.34	12.37				
1.4	16QAM	1	1	12.39	12.13	12.36				
1.4	16QAM	1	5	12.30	12.30	12.31	13.3	0		
1.4	16QAM	1	9	12.36	12.34	12.12				
1.4	16QAM	3	0	12.29	12.38	12.38				
1.4	16QAM	1	6	12.23	12.17	12.08	13.3	0		
1.4	16QAM	3	0	12.30	12.31	12.13				
1.4	16QAM	3	3	12.21	12.21	12.12	13.3	0		
1.4	16QAM	3	3	12.17	12.40	12.45				
1.4	256QAM	1	0	12.09	12.33	12.26	13.3	0		
1.4	256QAM	1	5	12.27	12.23	12.29				
1.4	256QAM	1	9	12.33	12.33	12.26	13.3	0		
1.4	256QAM	3	1	12.14	12.10	12.23				



Band 38(only on channel required)									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Mod Ch / Freq	Power Mod Ch / Freq	Power High Mod Ch / Freq	Turn-up limit (dBm)	MPR (dB)	
Channel									
Frequency [MHz]				37850	38050	38150			
20	QPSK	1	0	13.47	13.04	13.19			
20	QPSK	1	49	13.25	13.05	13.11	14.5	0	
20	QPSK	1	99	13.26	13.03	13.08			
20	QPSK	50	0	13.34	13.25	13.25			
20	QPSK	50	24	13.46	13.24	13.27	14.5	0	
20	QPSK	50	50	13.33	13.24	13.25			
20	16QAM	1	0	13.25	13.25	13.25	14.5	0	
20	16QAM	1	49	13.36	13.13	13.19			
20	16QAM	50	0	13.26	13.15	13.13			
20	16QAM	50	24	13.39	13.25	13.23	14.5	0	
20	16QAM	50	50	13.36	13.24	13.26			
20	16QAM	100	0	13.41	13.24	13.27			
20	64QAM	1	0	12.85	12.84	12.85			
20	64QAM	1	49	13.00	12.86	12.92	14.5	0	
20	64QAM	1	99	13.15	12.79	12.95			
20	64QAM	50	0	13.30	13.14	13.16			
20	64QAM	50	24	13.26	13.13	13.27	14.5	0	
20	64QAM	50	50	13.36	13.12	13.24			
20	256QAM	1	0	12.86	12.81	12.81			
20	256QAM	1	49	12.89	12.79	12.96	14.5	0	
20	256QAM	1	99	13.11	12.73	12.75			
20	256QAM	50	0	13.22	13.03	12.99			
20	256QAM	50	24	13.22	12.88	13.26	14.5	0	
20	256QAM	50	50	13.33	13.18	13.04			
20	256QAM	100	0	13.37	13.18	13.14			
Channel									
Frequency [MHz]				37875	38050	38175	Turn-up limit (dBm)	MPR (dB)	
15	QPSK	1	0	13.30	12.89	13.06			
15	QPSK	1	37	13.23	13.25	13.26	14.5	0	
15	QPSK	1	74	13.34	13.09	13.08			
15	QPSK	36	0	13.34	13.10	13.20			
15	QPSK	36	20	13.32	13.14	13.18	14.5	0	
15	QPSK	36	39	13.32	13.02	12.99			
15	QPSK	75	0	13.19	13.15	13.14			
15	16QAM	1	0	13.29	13.11	13.05			
15	16QAM	1	37	13.16	12.94	12.99	14.5	0	
15	16QAM	1	74	13.09	13.09	13.05			
15	16QAM	36	0	13.16	13.13	13.01			
15	16QAM	36	20	13.25	13.18	13.12	14.5	0	
15	16QAM	36	39	13.28	13.24	13.06			
15	16QAM	75	0	13.05	13.07	13.06			
15	64QAM	1	0	13.15	13.06	13.24	14.5	0	
15	64QAM	1	37	13.33	13.25	13.25			
15	64QAM	1	74	13.31	13.04	13.05			
15	64QAM	36	0	13.21	12.91	13.25			
15	64QAM	36	20	13.18	13.06	13.24	14.5	0	
15	64QAM	36	39	13.25	13.05	13.01			
15	64QAM	75	0	13.33	13.14	13.28			
15	256QAM	1	0	13.15	13.12	13.07			
15	256QAM	1	37	13.19	13.05	13.01	14.5	0	
15	256QAM	1	74	13.15	12.88	13.07			
15	256QAM	36	0	13.15	13.03	13.04			
15	256QAM	36	20	13.24	13.21	13.07	14.5	0	
15	256QAM	36	39	13.24	13.21	13.07			
15	256QAM	75	0	13.12	13.14	13.12			
Channel									
Frequency [MHz]				37775	38050	38225	Turn-up limit (dBm)	MPR (dB)	
5	QPSK	1	0	13.41	13.15	13.05			
5	QPSK	1	25	13.19	13.01	13.04	14.5	0	
5	QPSK	1	49	13.20	13.22	12.91			
5	QPSK	1	74	13.35	13.09	13.09			
5	QPSK	25	0	13.29	13.29	13.05	14.5	0	
5	QPSK	25	12	13.36	13.26	13.12			
5	QPSK	25	25	13.36	13.26	13.12			
5	QPSK	50	0	13.43	13.09	13.25			
5	16QAM	1	0	13.22	13.28	13.16			
5	16QAM	1	25	13.35	13.17	13.01	14.5	0	
5	16QAM	1	49	13.27	13.24	13.06			
5	16QAM	25	0	13.24	13.12	13.28			
5	16QAM	25	12	13.38	13.12	13.25	14.5	0	
5	16QAM	25	25	13.22	13.29	13.25			
5	16QAM	50	0	13.44	13.11	13.44			
5	64QAM	1	0	13.34	12.99	13.30			
5	64QAM	1	25	13.24	13.12	13.29	14.5	0	
5	64QAM	25	0	13.31	13.19	13.04			
5	64QAM	25	12	13.18	13.09	13.31	14.5	0	
5	64QAM	25	25	13.32	13.05	13.31			
5	256QAM	1	0	13.25	13.04	13.18			
5	256QAM	1	25	13.17	13.12	13.18	14.5	0	
5	256QAM	1	49	13.31	13.17	13.17			
5	256QAM	25	0	13.31	13.07	13.27			
5	256QAM	25	12	13.17	13.03	13.07	14.5	0	
5	256QAM	25	25	13.38	13.19	13.21			
5	256QAM	50	0	13.44	13.13	13.44			
5	256QAM	50	12	13.12	13.05	13.25			
5	256QAM	50	25	13.33	13.09	13.31	14.5	0	
5	256QAM	50	50	13.24	13.21	13.07			
5	256QAM	50	75	13.12	13.14	13.12			
5	256QAM	75	0	13.24	13.03	13.26	14.5	0	
5	256QAM	75	12	13.12	13.07	13.27			
5	256QAM	75	25	13.33	13.05	13.33			
5	256QAM	75	50	13.44	13.13	13.44			
5	256QAM	75	75	13.12	13.07	13.27	14.5	0	
5	256QAM	75	100	13.12	13.07	13.27			
5	256QAM	100	0	13.33	13.18	13.04			
5	256QAM	100	24	13.22	12.88	13.26	14.5	0	
5	256QAM	100	50	13.33	13.18	13.04			
5	256QAM	100	74	13.31	13.04	13.05			
5	256QAM	100	99	13.25	13.05	13.01			
5	256QAM	100	124	13.28	13.24	13.06			
5	256QAM	100	149	13.31	13.04	13.05			
5	256QAM	100	174	13.31	13.04	13.05			
5	256QAM	100	199	13.31	13.04	13.05			
5	256QAM	100	224	13.31	13.04	13.05			
5	256QAM	100	249	13.31	13.04	13.05			
5	256QAM	100	274	13.31	13.04	13.05			
5	256QAM	100	299	13.31	13.04	13.05			
5	256QAM	100	324	13.31	13.04	13.05			
5	256QAM	100	349	13.31	13.04	13.05			
5	256QAM	100	374	13.31	13.04	13.05			
5	256QAM	100	399	13.31	13.04	13.05			
5	256QAM	100	424	13.31	13.04	13.05			
5	256QAM	100	449	13.31	13.04	13.05			
5	256QAM	100	474	13.31	13.04	13.05			
5	256QAM	100	499	13.31	13.04	13.05			
5	256QAM	100	524	13.31	13.04	13.05			
5	256QAM	100	549	13.31	13.04	13.05			
5	256QAM	100	574	13.31	13.04	13.05			
5	256QAM	100	599	13.31	13.04	13.05			
5	256QAM	100	624	13.31	13.04	13.05			
5	256QAM	100	649	13.31	13.04	13.05			
5	256QAM	100	674	13.31	13.04	13.05			
5	256QAM	100	699	13.31	13.04	13.05			
5	256QAM	100	724	13.31	13.04	13.05			
5	256QAM	100	749	13.31	13.04	13.05			
5	256QAM	100	774	13.31	13.04	13.05			
5	256QAM	100	799	13.31	13.04	13.05			
5	256QAM	100	824	13.31	13.04	13.05			
5	256QAM	100	849	13.31	13.04	13.05			
5	256QAM	100	874	13.31	13.04	13.05			
5	256QAM	100	899	13.31	13.04	13.05			
5	256QAM	100	924	13.31	13.04	13.05			
5	256QAM	100	949	13.31	13.04	13.05			
5	256QAM	100	974	13.31	13.04	13.05			
5	256QAM	100	999	13.31	13.04	13.05			
5	256QAM	100	1024	13.31	13.04	13.05			
5	256QAM	100	1049	13.31	13.04	13.05			
5	256QAM	100	1074	13.31	13.04	13.05			
5	256QAM	100	1099	13.31	13.04	13.05			
5	256QAM	100	1124	13.31	13.04	13.05			
5	256QAM	100	1149	13.31	13.04	13.05			
5	256QAM	100	1174	13.31	13.04	13.05			
5	256QAM	100	1199	13.31	13.04	13.05			
5	256QAM	100	1224	13.31	13.04	13.05			
5	256QAM	100	1249	13.31	13.04	13.05			
5	256QAM	100	1274	13.31	13.04	13.05			
5	256QAM	100	1299	13.31	13.04	13.05			
5	256QAM	100	1324	13.31	13.04	13.05			
5	256QAM	100	1349	13.31	13.04	13.05			
5	256QAM	100	1374	13.31	13.04	13.05			
5	256QAM	100	1399	13.31	13.04	13.05			
5	256QAM	100	1424	13.31	13.04	13.05			
5	256QAM	100	1449	13.31	13.04	13.05			
5	256QAM	100	1474	13.31	13.04	13.05			
5	256QAM	100	1499	13.31	13.04	13.05			
5	256QAM	100	1524						



Band 48 (3.5G Band)-FCC											
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power Low Mid Ch / Freq	Power High Mid Ch / Freq	Power High Ch / Freq	Tune-up limit (dBm)	MPE (dB)		
Channel				55340	55830	56150	56640				
Frequency (MHz)				56000	56000	56410	56900				
20	QPSK	1	0	13.64	13.65	13.67	13.64	14.7	0		
20	QPSK	1	49	13.41	13.42	13.45	13.63				
20	QPSK	1	99	13.59	13.61	13.63	13.66				
20	QPSK	59	0	13.66	13.67	13.74	13.70				
20	QPSK	59	24	13.74	13.67	13.74	13.64				
20	QPSK	59	50	13.75	13.72	13.75	13.64	14.7	0		
20	QPSK	100	0	13.61	13.62	13.69	13.64				
20	16QAM	1	0	13.69	13.63	13.61	13.60				
20	16QAM	1	49	13.75	13.63	13.62	13.65				
20	16QAM	1	99	13.78	13.71	13.72	13.60				
20	16QAM	59	0	13.70	13.61	13.66	13.69	14.7	0		
20	16QAM	59	24	13.69	13.67	13.66	13.74				
20	16QAM	59	50	13.71	13.74	13.75	13.78				
20	16QAM	100	0	13.77	13.73	13.68	13.70				
20	64QAM	1	0	13.62	13.56	13.59	13.53				
20	64QAM	1	49	13.68	13.52	13.60	13.57	14.7	0		
20	64QAM	1	99	13.65	13.61	13.48	13.56				
20	64QAM	59	0	13.78	13.79	13.61	13.77				
20	64QAM	59	24	13.74	13.67	13.68	13.69				
20	64QAM	59	50	13.56	13.51	13.55	13.55				
20	64QAM	100	0	13.68	13.72	13.61	13.63	14.7	0		
20	256QAM	1	0	13.73	13.59	13.61	13.67				
20	256QAM	1	49	13.44	13.54	13.55	13.48				
20	256QAM	1	99	13.45	13.44	13.56	13.68				
20	256QAM	59	0	13.65	13.70	13.69	13.63				
20	256QAM	59	24	13.68	13.72	13.74	13.66	14.7	0		
20	256QAM	59	50	13.62	13.55	13.67	13.62				
20	256QAM	100	0	13.68	13.69	13.69	13.60				
Channel				56815	56830	56160	56660				
Frequency (MHz)				56117	56117	56117	56117				
15	QPSK	0	0	13.66	13.60	13.42	13.75	14.7	0		
15	QPSK	1	37	13.22	13.29	13.38	13.65				
15	QPSK	1	74	13.59	13.40	13.59	13.52				
15	QPSK	38	0	13.70	13.63	13.59	13.61				
15	QPSK	38	20	13.72	13.45	13.51	13.67				
15	QPSK	38	39	13.60	13.77	13.63	13.47	14.7	0		
15	QPSK	75	0	13.39	13.40	13.38	13.68				
15	16QAM	1	0	13.71	13.59	13.62	13.58				
15	16QAM	1	37	13.74	13.50	13.41	13.59				
15	16QAM	1	74	13.67	13.63	13.64	13.57				
15	16QAM	38	0	13.70	13.57	13.65	13.46	14.7	0		
15	16QAM	38	20	13.59	13.67	13.48	13.79				
15	16QAM	38	39	13.51	13.70	13.76	13.69				
15	16QAM	75	0	13.56	13.76	13.60	13.46				
15	64QAM	1	0	13.67	13.61	13.64	13.55				
15	64QAM	1	37	13.47	13.47	13.68	13.49	14.7	0		
15	64QAM	1	74	13.50	13.64	13.59	13.54				
15	64QAM	38	0	13.69	13.79	13.57	13.71				
15	64QAM	38	20	13.70	13.52	13.60	13.50				
15	64QAM	38	39	13.35	13.45	13.45	13.40				
15	64QAM	75	0	13.49	13.71	13.64	13.52	14.7	0		
15	256QAM	1	0	13.48	13.49	13.65	13.65				
15	256QAM	1	37	13.25	13.58	13.54	13.53				
15	256QAM	1	74	13.31	13.33	13.59	13.50				
15	256QAM	38	0	13.54	13.59	13.78	13.53				
15	256QAM	38	20	13.65	13.49	13.52	13.65	14.7	0		
15	256QAM	38	39	13.48	13.38	13.60	13.54				
15	256QAM	75	0	13.40	13.50	13.52	13.45				
Channel				56900	56815	56165	56665				
Frequency (MHz)				56117	56117	56117	56117				
10	QPSK	0	0	13.43	13.69	13.70	13.67	14.7	0		
10	QPSK	1	25	13.46	13.25	13.31	13.62				
10	QPSK	1	49	13.62	13.64	13.48	13.69				
10	QPSK	25	0	13.64	13.47	13.75	13.65				
10	QPSK	25	12	13.69	13.36	13.60	13.68				
10	QPSK	25	25	13.77	13.64	13.69	13.49	14.7	0		
10	QPSK	59	0	13.66	13.62	13.58	13.55				
10	16QAM	1	0	13.62	13.61	13.62	13.42				
10	16QAM	1	25	13.75	13.44	13.52	13.46				
10	16QAM	1	49	13.83	13.65	13.65	13.44				
10	16QAM	25	0	13.62	13.64	13.54	13.74	14.7	0		
10	16QAM	25	12	13.65	13.66	13.54	13.70				
10	16QAM	25	25	13.68	13.69	13.61	13.69				
10	16QAM	59	0	13.73	13.51	13.41	13.46				
10	64QAM	1	0	13.48	13.45	13.46	13.34				
10	64QAM	1	25	13.44	13.40	13.49	13.59	14.7	0		
10	64QAM	1	49	13.53	13.46	13.43	13.61				
10	64QAM	25	0	13.67	13.76	13.51	13.68				
10	64QAM	25	12	13.73	13.61	13.69	13.50				
10	64QAM	25	25	13.54	13.47	13.52	13.56				
10	64QAM	59	0	13.42	13.58	13.56	13.65	14.7	0		
10	256QAM	1	0	13.72	13.58	13.59	13.61				
10	256QAM	1	25	13.52	13.35	13.50	13.45				
10	256QAM	1	49	13.38	13.38	13.42	13.46				
10	256QAM	25	0	13.42	13.63	13.64	13.40				
10	256QAM	25	12	13.69	13.55	13.51	13.41	14.7	0		
10	256QAM	25	25	13.43	13.46	13.53	13.57				
10	256QAM	59	0	13.46	13.45	13.43	13.55				
Channel				56950	56815	56165	56665				
Frequency (MHz)				56525	56525	56525	56525				
5	QPSK	1	0	13.68	13.63	13.69	13.77	14.7	0		
5	QPSK	1	12	13.44	13.59	13.40	13.55				
5	QPSK	1	24	13.64	13.41	13.62	13.42				
5	QPSK	12	0	13.42	13.67	13.63	13.46				
5	QPSK	12	7	13.58	13.50	13.52	13.74				
5	QPSK	12	13	13.62	13.63	13.54	13.44	14.7	0		
5	QPSK	24	0	13.51	13.51	13.67	13.47				
5	16QAM	1	0	13.72	13.56	13.48	13.59				
5	16QAM	1	12	13.64	13.59	13.48	13.56				
5	16QAM	1	24	13.68	13.58	13.57	13.48				
5	16QAM	12	0	13.54	13.39	13.54	13.52	14.7	0		
5	16QAM	12	7	13.70	13.71	13.61	13.74				
5	16QAM	12	13	13.70	13.76	13.61	13.75				
5	64QAM	25	0	13.76	13.63	13.47	13.72				
5	64QAM	1	0	13.57	13.54	13.41	13.48				
5	64QAM	1	12	13.62	13.34	13.67	13.60	14.7	0		
5	64QAM	1	24	13.59	13.66	13.52	13.31				
5	64QAM	12	0	13.72	13.73	13.46	13.63				
5	64QAM	12	7	13.75	13.44	13.51	13.67				
5	64QAM	12	13	13.59	13.57	13.59	13.50				
5	256QAM	25	0	13.35	13.69	13.59	13.56	14.7	0		
5	256QAM	1	0	13.70	13.45	13.57	13.67				
5	256QAM	1	12	13.59	13.51	13.46	13.59				
5	256QAM	1	24	13.33	13.42	13.55	13.73				
5	256QAM	12	0	13.38	13.53	13.55	13.65				
5	256QAM	12	7	13.68	13.71	13.60	13.68	14.7	0		
5	256QAM	12	13	13.39	13.53	13.52	13.63				
5	256QAM	25	0	13.36	13.65	13.53	13.47				



Full Power for LAT

GSM-R	Band Average Power (dBm)			Tx Power			Frame Average Power (dBm)			Tx Power		
	TX Channel	Band	Power	Limit	Band	Power	TX Channel	Band	Power	Limit	Band	Power
Frequency (MHz)	845.2	836.4	846.8		845.2	836.4	846.8		845.2	836.4	846.8	
GSM T Tx-W	31.52	31.53	31.61	32.80	22.52	22.53	22.61	23.80				
GPRS 1 Tx-W	31.50	31.50	31.50	32.80	22.50	22.50	22.50	23.80				
GPRS 2 Tx-W	29.69	29.70	29.80	31.30	23.69	23.70	23.80	25.30				
GPRS 3 Tx-W	26.07	26.10	26.10	28.80	23.81	23.80	23.80	25.30				
GPRS 4 Tx-W	27.10	27.13	27.17	28.50	24.10	24.13	24.17	25.60				
EDGE 1 Tx-W	25.38	25.45	25.49	28.80	18.38	18.46	18.49	19.80				
EDGE 2 Tx-W	23.85	23.95	23.98	24.80	17.85	17.94	17.98	19.80				
EDGE 3 Tx-W	22.84	22.85	23.00	23.80	18.58	18.59	18.74	19.54				
EDGE 4 Tx-W	22.18	22.03	22.40	23.20	18.18	18.03	18.40	19.20				

GSM-R	Band Average Power (dBm)			Tx Power			Frame Average Power (dBm)			Tx Power		
	TX Channel	Band	Power	Limit	Band	Power	TX Channel	Band	Power	Limit	Band	Power
Frequency (MHz)	110.12	85.00	110.12	30.30	110.12	85.00	110.12	30.30				
GSM 1 Tx-W	28.94	28.94	29.00	30.30	18.94	18.94	20.00	21.80				
GPRS 1 Tx-W	26.36	26.35	26.36	27.80	20.36	20.35	20.36	21.80				
GPRS 2 Tx-W	25.14	25.22	25.28	28.50	20.88	20.94	21.02	22.24				
GPRS 3 Tx-W	24.81	24.86	24.78	28.50	20.81	20.86	20.78	22.24				
GPRS 4 Tx-W	24.63	24.50	24.71	28.50	18.63	18.50	18.71	19.80				
EDGE 1 Tx-W	23.49	23.55	23.59	24.70	17.49	17.55	17.59	18.70				
EDGE 2 Tx-W	22.47	22.54	22.58	23.60	16.47	16.54	16.58	17.34				
EDGE 4 Tx-W	21.37	21.60	21.27	22.60	15.37	15.60	15.27	16.60				

Band	WCDMA-E			WCDMA-F			WCDMA-V			Tx Power		
	TX Channel	Band	Power	Limit	Band	Power	TX Channel	Band	Power	Limit	Band	Power
Frequency (MHz)	110.12	85.00	110.12	30.30	110.12	85.00	110.12	85.00	110.12	85.00	110.12	85.00
GSM 1 Tx-W	23.80	23.80	23.80	24.80	21.18	21.17	21.18	21.18	21.18	21.18	21.18	21.18
GPRS 1 Tx-W	23.82	23.82	23.85	24.80	21.61	21.70	21.73	24.80	23.52	23.50	23.50	24.80
GPRS 2 Tx-W	22.61	22.72	22.66	23.80	22.62	22.70	22.70	23.80	22.68	22.68	22.68	23.80
GPRS 3 Tx-W	22.37	22.75	22.65	23.80	22.62	22.70	22.70	23.80	22.64	22.61	22.67	23.80
GPRS 4 Tx-W	22.15	22.20	22.15	23.30	22.13	22.17	22.19	23.30	22.09	22.14	22.14	23.30
GPRS 5 Tx-W	22.15	22.24	22.21	23.30	22.13	22.23	22.24	23.30	22.03	22.14	21.95	23.30
GPRS 6 Tx-W	22.48	22.53	22.44	23.80	22.43	22.45	22.54	23.80	22.38	22.40	22.52	23.80
GPRS 7 Tx-W	22.16	22.48	22.48	23.80	22.42	22.51	22.56	23.80	22.38	22.39	22.51	23.80
GPRS 8 Tx-W	21.93	22.04	21.96	23.30	21.94	21.09	22.02	23.30	21.86	21.91	21.98	23.30
GPRS 9 Tx-W	21.67	22.08	22.07	23.30	21.84	22.09	22.07	23.30	21.78	22.04	21.84	23.30
GPRS 10 Tx-W	22.63	22.71	22.70	23.80	22.61	22.71	22.68	23.80	22.67	22.64	22.61	23.80
GPRS 11 Tx-W	21.66	21.74	21.68	22.80	21.63	21.75	21.71	21.80	20.62	20.62	20.68	21.80
GPRS 12 Tx-W	19.86	19.91	19.91	21.80	20.09	20.09	20.09	21.80	21.64	21.61	21.68	22.80
GPRS 13 Tx-W	20.44	20.52	20.48	21.80	21.24	21.30	21.28	21.80	20.58	20.61	20.65	21.80
GPRS 14 Tx-W	22.60	22.70	22.60	23.80	22.60	22.70	22.70	23.80	22.60	22.60	22.70	23.80
GPRS 15 Tx-W	20.87	20.90	20.91	22.30	21.19	21.22	21.13	22.30	20.28	20.29	20.41	21.30

Band	GSM-BCL			GSM-BCL			GSM-BCL			Tx Power		
	TX Channel	Band	Power	Limit	Band	Power	TX Channel	Band	Power	Limit	Band	Power
Frequency (MHz)	845.2	836.4	846.8		845.2	836.4	846.8		845.2	836.4	846.8	
BC1 BC5	23.43	23.60	23.15	24.80	23.49	23.05	23.05	24.80	23.44	23.40	23.39	24.80
BC2 BC6	22.42	23.00	22.14	24.80	23.48	23.03	23.04	24.80	23.47	23.44	23.37	24.80
BC3 BC4 (P-SCH)	22.41	23.00	22.13	24.80	23.48	23.01	23.02	24.80	23.40	23.41	23.34	24.80
BC4 BC6 (P-SCH)	23.33	23.43	23.12	24.80	23.49	23.00	23.44	24.80	23.33	23.37	23.31	24.80
RTAP (S-SCH)	23.43	23.57	23.11	24.80	23.51	23.07	23.03	24.80	23.39	23.42	23.37	24.80
RTAP (S-SCH)	23.43	23.56	23.10	24.80	23.49	23.06	23.01	24.80	23.37	23.41	23.35	24.80



Band 2 (1900MHz Band) Part 24E											
SR (MHz)	Modulation	RB Size	RB Offset	Power Ch / Freq 18700 18600	Power Ch / Freq 18800 18900	Power Ch / Freq 18900 19000	Turn-up time (s)	MPE (dB)			
Channel Frequency (MHz)											
20	QPSK	1	0	22.39	22.41	22.40	23.8	0			
20	QPSK	1	49	22.25	22.38	22.34					
20	QPSK	1	99	22.21	22.34	22.32	22.8	1			
20	QPSK	50	0	21.44	21.48	21.43					
20	QPSK	50	24	21.43	21.43	21.42	22.8	1			
20	QPSK	50	50	21.39	21.44	21.41					
20	QPSK	100	0	21.43	21.45	21.44	22.8	1			
20	16QAM	1	0	21.77	21.78	21.79					
20	16QAM	1	49	21.65	21.74	21.72	21.8	2			
20	16QAM	1	99	21.60	21.72	21.68					
20	16QAM	50	0	20.41	20.47	20.45	21.8	2			
20	16QAM	50	24	20.49	20.48	20.38					
20	16QAM	50	50	20.45	20.55	20.47	21.8	2			
20	16QAM	1	0	20.73	20.55	20.54					
20	16QAM	1	49	20.59	20.58	20.52	20.8	3			
20	16QAM	50	0	19.52	19.52	19.44					
20	16QAM	50	50	19.48	19.55	19.48	19.3	4.5			
20	16QAM	1	0	17.86	17.87	17.83					
20	16QAM	1	49	17.73	17.83	17.84	19.3	4.5			
20	16QAM	50	0	17.52	17.52	17.48					
20	25QAM	50	24	17.55	17.63	17.58	19.3	4.5			
20	25QAM	50	50	17.58	17.56	17.57					
20	25QAM	100	0	17.64	17.67	17.63	21.8	2			
Channel Frequency (MHz)											
18675	QPSK	1	0	22.34	22.38	22.37	23.8	0			
18675	QPSK	1	49	22.29	22.37	22.34					
18675	QPSK	1	99	22.29	22.37	22.34	22.8	1			
18675	QPSK	36	0	21.43	21.44	21.40					
18675	QPSK	36	24	21.45	21.46	21.42	22.8	1			
18675	QPSK	36	50	21.41	21.52	21.51					
18675	QPSK	75	0	21.45	21.46	21.42	22.8	1			
18675	QPSK	1	0	21.65	21.70	21.68					
18675	QPSK	1	37	21.64	21.70	21.69	21.8	2			
18675	16QAM	1	74	21.55	21.65	21.61					
18675	16QAM	36	0	20.46	20.44	20.34	21.8	2			
18675	16QAM	36	24	20.46	20.44	20.34					
18675	16QAM	36	50	20.44	20.53	20.48	21.8	2			
18675	16QAM	75	0	20.45	20.45	20.36					
18675	16QAM	1	0	20.53	20.58	20.56	20.8	3			
18675	16QAM	1	37	20.53	20.59	20.61					
18675	16QAM	1	74	20.51	20.57	20.55	20.8	3			
18675	16QAM	36	0	19.51	19.50	19.45					
18675	16QAM	36	24	19.49	19.51	19.48	19.3	4.5			
18675	16QAM	36	50	19.46	19.46	17.54					
18675	16QAM	75	0	19.47	19.45	19.44	19.3	4.5			
18675	25QAM	1	0	17.84	17.88	17.81					
18675	25QAM	1	37	17.80	17.87	17.84	19.3	4.5			
18675	25QAM	1	74	17.77	17.83	17.81					
18675	25QAM	36	0	17.54	17.55	17.58	19.3	4.5			
18675	25QAM	36	24	17.54	17.59	17.60					
18675	25QAM	36	50	17.52	17.47	17.63	21.8	2			
18675	25QAM	75	0	17.52	17.65	17.57					
Channel Frequency (MHz)											
18675	QPSK	1	0	22.30	22.33	22.28	23.8	0			
18675	QPSK	1	25	22.32	22.28	22.23					
18675	QPSK	1	50	22.28	22.33	22.23	22.8	1			
18675	QPSK	25	0	21.33	21.35	21.29					
18675	QPSK	25	12	21.32	21.35	21.28	22.8	1			
18675	QPSK	25	25	21.32	21.44	21.40					
18675	QPSK	50	0	21.36	21.32	21.38	22.8	1			
18675	QPSK	1	0	21.67	21.67	21.63					
18675	QPSK	1	25	21.60	21.65	21.61	21.8	2			
18675	16QAM	1	49	21.61	21.60	21.60					
18675	16QAM	25	0	20.38	20.38	20.27	21.8	2			
18675	16QAM	25	12	20.40	20.38	20.40					
18675	16QAM	25	25	20.37	20.43	20.35	21.8	2			
18675	16QAM	50	0	20.42	20.35	20.38					
18675	16QAM	1	0	21.12	21.10	21.09	20.8	3			
18675	16QAM	1	25	21.12	21.20	21.16					
18675	16QAM	1	49	21.05	21.13	21.12	20.8	3			
18675	16QAM	25	0	20.03	20.00	19.98					
18675	16QAM	25	12	20.04	20.01	20.04	19.3	4.5			
18675	16QAM	25	25	20.01	20.05	20.01					
18675	16QAM	50	0	20.03	19.95	19.91	19.3	4.5			
18675	25QAM	1	0	17.91	17.94	17.86					
18675	25QAM	1	25	17.88	17.83	17.83	19.3	4.5			
18675	25QAM	1	49	17.75	17.87	17.87					
18675	25QAM	36	0	17.86	17.43	17.53	19.3	4.5			
18675	25QAM	36	12	17.51	17.61	17.58					
18675	25QAM	36	25	17.58	17.50	17.62	21.8	2			
18675	25QAM	75	0	17.63	17.68	17.65					
Channel Frequency (MHz)											
18675	QPSK	1	0	22.32	22.32	22.29	23.8	0			
18675	QPSK	1	12	22.35	22.34	22.33					
18675	QPSK	1	24	22.32	22.33	22.28	22.8	1			
18675	QPSK	12	0	21.45	21.40	21.38					
18675	QPSK	12	7	21.43	21.47	21.41	22.8	1			
18675	QPSK	12	13	21.45	21.44	21.38					
18675	QPSK	25	0	21.44	21.45	21.27	22.8	1			
18675	QPSK	1	0	21.63	21.66	21.63					
18675	QPSK	1	12	21.63	21.66	21.58	21.8	2			
18675	16QAM	1	24	21.62	21.69	21.58					
18675	16QAM	12	0	20.45	20.38	20.28	21.8	2			
18675	16QAM	12	7	20.45	20.47	20.33					
18675	16QAM	12	13	20.45	20.48	20.34	21.8	2			
18675	16QAM	25	0	20.36	20.36	20.28					
18675	16QAM	1	0	21.23	21.08	21.11	21.8	2			
18675	16QAM	1	12	21.16	21.15	21.13					
18675	16QAM	1	24	21.12	21.18	21.13	20.8	3			
18675	16QAM	12	7	20.11	20.09	19.97					
18675	16QAM	12	13	20.11	20.13	19.97	20.8	3			
18675	16QAM	25	0	20.04	20.00	19.99					
18675	25QAM	1	0	17.87	17.97	17.96	19.3	4.5			
18675	25QAM	1	24	17.72	17.89	17.79					
18675	25QAM	12	0	17.42	17.41	17.41	19.3	4.5			
18675	25QAM	12	7	17.45	17.50	17.45					
18675	25QAM	12	13	17.66	17.66	17.64	19.3	4.5			
18675	25QAM	25	0	17.53	17.54	17.46					
18675	25QAM	25	12	17.53	17.54	17.46	21.8	2			
18675	25QAM	75	0	17.47	17.63	17.53					
Channel Frequency (MHz)											
18675	QPSK	1	0	22.28	22.22	22.21	23.8	0			
18675	QPSK	1	25	22.35	22.30	22.22					
18675	QPSK	1	50	22.23	22.30	22.27	22.8	1			
18675	QPSK	25	0	21.40	21.32	21.30					
18675	QPSK	25	12	21.38	21.40	21.32	22.8	1			
18675	QPSK	25	25	21.42	21.38	21.36					
18675	QPSK	50	0	21.43	21.33	21.32	22.8	1			
18675	QPSK	1	0	21.63	21.55	21.50					
18675	QPSK	1	8	21.72	21.72	21.67	22.8	1			
18675	QPSK	1	14	21.68	21.62	21.60					
18675	QPSK	36	0	20.37	20.37	20.27	21.8	2			
18675	QPSK	36	24	20.37	20.37	20.27					
18675	QPSK	36	50	20.35	20.39	20.30	21.8	2			
18675	QPSK	75	0	20.48	20.49	20.39					
18675	QPSK	1	0	20.73	20.55	20.54	20.8	3			
18675	QPSK	1	0	21.13	21.08	21.11					
18675	QPSK	1	8	21.01	21.26	21.17	21.8	2			
18675	QPSK	1	14	21.07	21.18	21.13					
18675	QPSK	36	0	20.07	19.99	19.95	20.8	3			
18675	QPSK	36	24	20.06	20.07	19.97					
18675	QPSK	36	50	20.04	20.07	19.97	20.8	3			
18675	QPSK	75	0	19.98	19.94	19.93					
18675	QPSK	1	0	17.80	17.81	17.80	19.3	4.5			
18675	QPSK	1	8	17.77	17.80	17.80					
18675	QPSK	1	14	17.81	17.87	17.83	19.3	4.5			
18675	QPSK	36	0	17.48	17.47	17.47					
18675	QPSK	36	24	17.48	17.48	17.47	19.3	4.5			
18675	QPSK	36	50	17.45	17.66	17.65					
18675	QPSK	75	0	17.67	17.67	17.48	21.8	2			
18675	QPSK	1	0	17.47	17.63	17.53					
Channel Frequency (MHz)											
18675	QPSK	1	0	22.24	22.22	22.21	23.8	0			
18675	QPSK	1	25	22.30	22.25	22.18					
18675	QPSK	1	50	22.23	22.23	22.15	22				



Band 7 (2600MHz Band)										
Part 27										
SV (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Turn-up time (s)	MPR (dB)		
Channel Frequency (MHz)										
20	QPSK	1	0	22.21	22.42	22.43		23.8	0	
20	QPSK	1	49	22.30	22.47	22.51				
20	QPSK	1	99	22.33	22.53	22.51				
20	QPSK	50	0	21.33	21.49	21.55				
20	QPSK	50	24	21.42	21.52	21.57		22.8	1	
20	QPSK	50	50	21.39	21.50	21.55				
20	QPSK	100	0	21.41	21.52	21.61				
20	16QAM	1	0	21.58	21.77	21.77				
20	16QAM	1	49	21.66	21.81	21.87		22.8	1	
20	16QAM	1	99	21.67	21.90	22.00				
20	16QAM	50	0	20.33	20.49	20.57				
20	16QAM	50	24	20.40	20.53	20.72				
20	16QAM	50	50	20.40	20.48	20.59		21.8	2	
20	16QAM	100	0	20.44	20.48	20.55				
20	64QAM	1	0	20.42	20.59	20.57				
20	64QAM	1	49	20.48	20.54	20.76				
20	64QAM	1	99	20.59	20.75	20.89		21.8	2	
20	64QAM	50	0	19.37	19.52	19.59				
20	64QAM	50	24	19.47	19.55	19.73				
20	64QAM	50	50	19.46	19.64	19.73				
20	64QAM	100	0	19.44	19.52	19.61		20.8	3	
20	256QAM	1	0	17.78	17.85	17.75				
20	256QAM	1	49	17.77	17.79	17.64				
20	256QAM	1	99	17.74	17.76	17.63				
20	256QAM	50	0	17.63	17.70	17.52		19.3	4.5	
20	256QAM	50	24	17.68	17.66	17.54				
20	256QAM	50	50	17.64	17.68	17.53				
20	256QAM	100	0	17.71	17.65	17.60				
Channel Frequency (MHz)										
16	QPSK	1	0	22.25	22.40	22.51		23.8	0	
16	QPSK	1	49	22.30	22.47	22.51				
16	QPSK	1	98	22.36	22.54	22.51				
16	QPSK	36	0	21.31	21.48	21.56				
16	QPSK	36	20	21.42	21.51	21.68		22.8	1	
16	QPSK	75	0	21.40	21.50	21.70				
16	QPSK	75	0	21.42	21.50	21.66				
16	16QAM	1	0	21.52	21.76	21.79				
16	16QAM	1	37	21.58	21.78	21.87		22.8	1	
16	16QAM	1	74	21.64	21.84	21.93				
16	16QAM	36	0	20.45	20.54	20.55				
16	16QAM	36	20	20.41	20.53	20.58				
16	16QAM	36	59	20.42	20.61	20.70		21.8	2	
16	16QAM	75	0	20.52	20.61	20.62				
16	64QAM	1	0	20.43	20.63	20.65				
16	64QAM	1	37	20.57	20.70	20.79				
16	64QAM	1	74	20.63	20.75	20.85		21.8	2	
16	64QAM	36	0	19.34	19.53	19.62				
16	64QAM	36	20	19.46	19.57	19.74				
16	64QAM	36	59	19.45	19.54	19.74				
16	64QAM	75	0	19.43	19.51	19.68		20.8	3	
16	256QAM	1	0	17.78	17.85	17.75				
16	256QAM	1	37	17.77	17.79	17.64				
16	256QAM	1	74	17.74	17.76	17.63				
16	256QAM	36	0	17.63	17.70	17.52		19.3	4.5	
16	256QAM	36	20	17.68	17.66	17.54				
16	256QAM	36	59	17.64	17.68	17.53				
16	256QAM	75	0	17.71	17.65	17.60				
Channel Frequency (MHz)										
10	QPSK	1	0	22.05	22.35	22.65		23.8	0	
10	QPSK	1	0	22.15	22.31	22.40				
10	QPSK	1	15	22.20	22.38	22.49				
10	QPSK	1	49	22.20	22.38	22.49				
10	QPSK	25	0	21.32	21.44	21.56		22.8	1	
10	QPSK	25	20	21.38	21.48	21.58				
10	QPSK	25	26	21.35	21.57	21.66				
10	QPSK	50	0	21.34	21.46	21.56				
10	16QAM	1	0	21.52	21.73	21.65		22.8	1	
10	16QAM	1	26	21.48	21.74	21.81				
10	16QAM	1	49	21.57	21.81	21.93				
10	16QAM	25	0	20.29	20.48	20.55				
10	16QAM	25	12	20.34	20.59	20.59		21.8	2	
10	16QAM	25	26	20.33	20.55	20.65				
10	16QAM	50	0	20.33	20.45	20.57				
10	64QAM	1	0	20.36	20.54	20.68				
10	64QAM	1	26	20.40	20.66	20.81		21.8	2	
10	64QAM	1	49	20.46	20.70	20.82				
10	64QAM	25	0	19.34	19.50	19.55				
10	64QAM	25	12	19.41	19.54	19.63				
10	64QAM	25	26	19.37	19.58	19.69		20.8	3	
10	64QAM	50	0	19.38	19.52	19.58				
10	256QAM	1	0	17.78	17.85	17.75				
10	256QAM	1	26	17.77	17.79	17.64				
10	256QAM	1	49	17.74	17.76	17.63		19.3	4.5	
10	256QAM	12	0	17.63	17.70	17.52				
10	256QAM	12	12	17.68	17.66	17.54				
10	256QAM	25	0	17.68	17.68	17.54				
10	256QAM	25	25	17.64	17.68	17.53		19.3	4.5	
10	256QAM	50	0	17.71	17.65	17.60				
10	256QAM	50	25	17.67	17.65	17.53				
Channel Frequency (MHz)										
5	QPSK	1	0	22.12	22.24	22.50		23.8	0	
5	QPSK	1	18	22.17	22.42	22.56				
5	QPSK	1	24	22.22	22.45	22.52				
5	QPSK	12	0	21.27	21.46	21.64				
5	QPSK	12	7	21.29	21.49	21.55		22.8	1	
5	QPSK	12	13	21.29	21.54	21.63				
5	QPSK	26	0	21.30	21.50	21.61				
5	16QAM	1	0	21.46	21.67	21.88				
5	16QAM	1	12	21.46	21.73	21.85		22.8	1	
5	16QAM	1	24	21.52	21.80	21.91				
5	16QAM	12	0	20.29	20.50	20.64				
5	16QAM	12	7	20.29	20.49	20.70				
5	16QAM	12	13	20.30	20.58	20.65		21.8	2	
5	16QAM	25	0	20.32	20.48	20.63				
5	64QAM	1	0	20.41	20.60	20.78				
5	64QAM	1	18	20.40	20.62	20.76				
5	64QAM	1	24	20.45	20.68	20.80		21.8	2	
5	64QAM	12	0	19.33	19.55	19.71				
5	64QAM	12	25	19.37	19.53	19.69				
5	64QAM	12	13	19.39	19.60	19.70				
5	64QAM	25	0	19.33	19.48	19.66		20.8	3	
5	256QAM	1	0	17.76	17.88	17.75				
5	256QAM	1	12	17.77	17.79	17.64				
5	256QAM	1	24	17.74	17.76	17.63				
5	256QAM	12	0	17.63	17.70	17.52		19.3	4.5	
5	256QAM	12	7	17.68	17.66	17.54				
5	256QAM	12	17	17.65	17.69	17.54				
5	256QAM	25	7	17.68	17.68	17.54				
5	256QAM	25	25	17.64	17.65	17.53		19.3	4.5	
5	256QAM	50	0	17.71	17.65	17.60				
5	256QAM	50	25	17.67	17.65	17.53				
Channel Frequency (MHz)										

Band 12 (700MHz Low Band)											
Part 27F (only on channel required)											
SV (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Turn-up time (s)	MPR (dB)			
Channel Frequency (MHz)											
10	QPSK	1	0	22.48	22.52	22.53		23.8	0		
10	QPSK	1	25	22.51	22.61	22.54					
10	QPSK	1	49	22.52	22.62	22.56					
10	QPSK	25	0	21.68	21.69	21.70					
10	QPSK	25	12	21.69	21.73	21.68		22.8	1		
10	QPSK	25	25	21.72	21.76	21.71					
10	QPSK	50	0	21.73	21.74	21.70					
10	16QAM	1	0	21.94	21.92	21.90					
10	16QAM	1	25	21.92	22.02	21.89		22.8	1		
10	16QAM	1	49	21.99	22.05	21.95					
10	16QAM	25	0	20.98	20.97	20.98		21.8	2		
10	16QAM	25	12	20.99	21.03	20.97					
10	16QAM	25	25	20.76	20.76	20.77					
10	16QAM	50	0	20.76	20.76	20.68					
10	16QAM	50	12	20.77	20.77	20.70		21.8	2		
10	16QAM	50	25	20.76	20.76	20.70					
10	16QAM	1	25	20.94	20.95	20.92					
10	16QAM	1	49	20.90	20.87	20.90					
10	16QAM	25	0	20.93	20.93	20.86		20.8	3		
10	16QAM	25	12	20.90	20.91	20.78					
10	16QAM	25	25	20.77	20.77	20.77					
10	16QAM	50	0	20.77	20.77	20.70					
10	16QAM	1	0	17.98	18.02	18.02		19.3	4.5		
10	16QAM	1	25	17.97	17.99	18.06					
10	16QAM	1	49	17.98	18.00	18.00					
10	16QAM	25	0	18.01	17.94	18.02					
10	16QAM	25	12	17.89	17.99	17.96		19.3	4.5		
10	16QAM	25	25	17.92	17.95	17.98					
10	16QAM	50	0	17.92	17.95	17.98					
10	16QAM	50	12	17.83	17.83	17.82					
Channel Frequency (MHz)							700.5	700.7	713.5	Turn-up time (s)	MPR (dB)
3	QPSK	1	0	22.03	22.09	22.04		23.8	0		
3	QPSK	1	12	22.51	22.60	22.57					
3	QPSK	1	25	22.51	22.61	22.54					
3	QPSK	12	0	21.66	21.67	21.67					
3	QPSK	12	7	21.73	21.79	21.70		22.8	1		
3	QPSK	12	14	21.77	21.77	21.63					
3	QPSK	25	0	21.68	21.74	21.62					
3	16QAM	1	0	21.91	22.00	21.90					
3	16QAM	1	12	21.92	22.01	21.93		22.8	1		
3	16QAM	1	25	21.92	22.01	21.91					
3	16QAM	12	0	20.68	20.73	20.72		21.8	2		
3	16QAM	12	7	20.72	20.78	20.67					
3	16QAM	12	14	20.72	20.76	20.67					
3	16QAM	25	0	20.68	20.68	20.67					
3	16QAM	25	12	20.62	20.68	20.64		21.8	2		
3	16QAM	25	25	20.61	20.65	20.60					
3	16QAM	1	12	20.81	20.80	20.80					
3	16QAM	1	25	20.81	20.80	20.80					
3	16QAM	12	0	19.71	19.78	19.72		20.8	3		
3	16QAM	12	7	19.77	19.80	19.77					
3	16QAM	12	14	19.77	19.78	19.77					
3	16QAM	25	0	19.78	19.78	19.78					
3	16QAM	1	0	17.88	17.95	18.01		19.3	4.5		
3	16QAM	1	12	18.00	18.00	18.00					
3	16QAM	1	25	18.00	18.02	18.07					
3	16QAM	12	0	17.93	17.94	17.93					
3	16QAM	12	7	17.96	17.96	17.96		19.3	4.5		
3	16QAM	12	14	17.96	17.96	17.96					
3	16QAM	25	0	17.82	17.82	17.82					
3	16QAM	25	12	17.78	18.00	17.87					
Channel Frequency (MHz)							700.5	700.7	714.5	Turn-up time (s)	MPR (dB)
3	QPSK	1	0	22.07	22.08	22.09		23.8	0		
3	QPSK	1	12	22.53	22.61	22.58					
3	QPSK	1	25	22.53	22.61	22.55					
3	QPSK	12	0	21.60	21.67	21.63					
3	QPSK	12	7	21.67	21.73	21.68		22.8	1		
3	QPSK	12	14	21.67	21.73	21.68					
3	QPSK	25	0	21.60	21.72	21.64					
3	16QAM	1	0	21.89	21.92	21.89					
3	16QAM	1	8	21.93	22.00	22.01		22.8	1		
3	16QAM	1	14	21.87	21.95	21.89					
3	16QAM	12	0	20.72	20.74	20.72		21.8	2		
3	16QAM	12	7	20.71	20.77	20.71					
3	16QAM	12	14	20.71	20.74	20.71					
3	16QAM	25	0	20.81	20.95	20.80					
3	16QAM	25	12	20.89	21.00	20.89		20.8	3		
3	16QAM	25	25	20.85	20.92	20.85					
3	16QAM	1	14	19.74	19.81	19.74					
3	16QAM	1	25	19.73	19.77	19.78					
3	16QAM	12	0	19.69	19.78	19.67		19.3	4.5		
3	16QAM	12	7	19.74	19.78	19.78					
3	16QAM	12	14	19.74	19.75	19.75					
3	16QAM	25	0	17.94	18.05	18.07					
3	16QAM	25	12	17.95	18.05	18.05		19.3	4.5		
3	16QAM	25	25	17.97	18.05	18.05					
3	16QAM	50	0	17.97	18.05	18.06					
3	16QAM	50	12	17.88	17.85	17.88					
Channel Frequency (MHz)							200.7	200.9	201.3	Turn-up time (s)	MPR (dB)
14	QPSK	1	0	22.47	22.51	22.51		23.8	0		
14	QPSK	1	25	22.53	22.61	22.58					
14	QPSK	1	49	22.57	22.67	22.60					
14	QPSK	25	0	21.65	21.67	21.67					
14	QPSK	25	12	21.65	21.67	21.67		22.8	1		
14	QPSK	25	25	21.65	21.67	21.67					
14	QPSK	50	0	21.65	21.67	21.67					
14	16QAM	1	0	21.80	21.83	21.84					
14	16QAM	1	1	21.87	21.96	21.89		22.8	1		
14	16QAM	1	2	21.86	21.96	21.84					
14	16QAM	3	0	21.59	21.66	21.64		21.8	2		
14	16QAM	3	1	21.61	21.77	21.68					
14	16QAM	3	2	21.68	21.68	21.68					
14	16QAM	6	0	20.67	20.73	20.62					
14	16QAM	6	1	20.66	21.08	21.01		21.8	2		
14	16QAM	6	2	20.67	21.17	21.02					
14	16QAM	6	3	20.66	21.10	21.00					
14	16QAM	15	0	20.94	20.98	20.90					
14	16QAM	15	1	21.12	21.12	21.02		20.8	3		
14	16QAM	15	2	20.94	20.97	20.90					
14	16QAM	30	0	20.94	20.94	20.86					
14	16QAM	30	1	20.94	20.94	20.86					
14	16QAM	1	3	17.99	17.92	17.98		19.3	4.5		
14	16QAM	1	4	18.04	18.01	17.98					
14	16QAM	1	5	17.95	18.02	18.03					
14	16QAM	3	1	17.85	17.88	18.06					
14	16QAM	3	2	17.85	17.88	18.06		19.3	4.5		
14	16QAM	3	3	17.85	17.88	18.06					
14	16QAM	3	4	17.96	17.95	17.97					
14	16QAM	6	0	17.96	17.95	17.97					

Band 17 (150MHz Band)										
Part 27H(only on channel required)										
RF (MHz)	Modulation	RB Size	RB Offset	Power Ch / Freq	Power Ch / Freq	Power Ch / Freq	Power Ch / Freq	Turn-up time (dBm)	MPR (dB)	
Channel Frequency (MHz)										
10	QPSK	1	0	22.59	22.51	22.55				
10	QPSK	1	25	22.54	22.56	22.58				23.8
10	QPSK	1	49	22.50	22.57	22.57				
10	QPSK	25	0	21.61	21.62	21.60				
10	QPSK	25	12	21.63	21.67	21.64				
10	QPSK	25	25	21.67	21.65	21.62				22.8
10	QPSK	50	0	21.63	21.60	21.61				
10	16QAM	1	25	21.94	21.98	21.93				22.8
10	16QAM	1	49	21.99	21.98	21.95				
10	16QAM	1	73	21.93	21.95	21.96				
10	16QAM	25	12	20.86	20.77	20.88				21.8
10	16QAM	25	25	20.74	20.76	20.73				2
10	64QAM	1	49	20.59	20.51	20.68				
10	64QAM	1	0	20.73	20.55	20.79				
10	64QAM	1	25	20.87	20.89	20.83				21.8
10	64QAM	1	49	20.89	20.91	20.88				2
10	64QAM	25	0	19.85	19.84	19.86				
10	64QAM	25	12	19.73	19.77	19.70				20.8
10	64QAM	50	0	19.85	19.86	19.72				3
10	256QAM	1	0	17.80	17.73	17.48				
10	256QAM	1	25	17.44	17.46	17.58				19.3
10	256QAM	1	49	17.45	17.62	17.57				4.5
10	256QAM	25	0	17.83	17.77	17.71				
10	256QAM	25	12	17.67	17.83	17.64				19.3
10	256QAM	25	25	17.69	17.58	17.53				4.5
10	256QAM	50	0	17.69	17.75	17.47				
Channel Frequency (MHz)										
5	QPSK	1	0	22.52	22.57	22.54				23.8
5	QPSK	1	12	22.49	22.50	22.54				
5	QPSK	1	24	22.43	22.54	22.51				
5	QPSK	12	0	21.63	21.65	21.61				
5	QPSK	12	13	21.73	21.74	21.67				22.8
5	QPSK	25	0	21.73	21.73	21.63				
5	16QAM	1	0	21.69	21.66	21.60				
5	16QAM	1	12	21.65	22.07	21.56				22.8
5	16QAM	1	24	22.02	22.07	21.97				
5	16QAM	12	0	20.70	20.67	20.66				
5	16QAM	12	7	20.77	20.76	20.55				21.8
5	16QAM	12	13	20.73	20.77	20.69				2
5	64QAM	1	0	20.78	20.80	20.87				
5	64QAM	1	12	20.85	20.93	20.86				21.8
5	64QAM	1	24	20.73	20.75	20.86				2
5	64QAM	12	0	19.73	19.72	19.69				
5	64QAM	12	7	19.81	19.80	19.73				20.8
5	64QAM	12	13	19.78	19.81	19.73				3
5	256QAM	1	0	17.74	17.64	17.51				19.3
5	256QAM	1	12	17.73	17.52	17.53				4.5
5	256QAM	1	24	17.64	17.74	17.59				
5	256QAM	12	0	17.57	17.66	17.55				
5	256QAM	12	7	17.63	17.66	17.55				19.3
5	256QAM	12	13	17.64	17.59	17.72				4.5
5	256QAM	25	0	17.51	17.60	17.61				

Band 25 (190MHz Band)										
Part 24E										
RF (MHz)	Modulation	RB Size	RB Offset	Power Ch / Freq	Power Ch / Freq	Power Ch / Freq	Power Ch / Freq	Turn-up time (dBm)	MPR (dB)	
Channel Frequency (MHz)										
20	QPSK	1	0	22.42	22.47	22.41				23.8
20	QPSK	1	49	22.30	22.43	22.34				
20	QPSK	1	99	22.34	22.41	22.30				
20	QPSK	50	0	21.47	21.49	21.49				22.8
20	QPSK	50	24	21.44	21.44	21.53				1
20	QPSK	50	49	21.47	21.49	21.52				
20	QPSK	100	0	21.47	21.50	21.47				
20	16QAM	1	0	21.51	21.51	21.30				
20	16QAM	1	49	21.67	21.73	21.73				22.8
20	16QAM	1	99	21.52	21.69	21.64				
20	16QAM	50	0	20.55	20.55	20.26				
20	16QAM	50	24	20.50	20.51	20.59				21.8
20	16QAM	50	49	20.46	20.55	20.54				2
20	64QAM	1	99	20.53	20.57	20.54				
20	64QAM	1	0	20.58	20.61	20.52				21.8
20	64QAM	1	49	20.59	20.61	20.60				2
20	64QAM	50	0	19.58	19.57	19.52				
20	64QAM	50	24	19.55	19.52	19.58				20.8
20	256QAM	1	0	17.79	17.79	17.61				
20	256QAM	1	49	17.71	17.62	17.45				19.3
20	256QAM	1	99	17.66	17.73	17.51				4.5
20	256QAM	50	0	17.58	17.78	17.58				
20	256QAM	50	24	17.47	17.69	17.61				19.3
20	256QAM	50	49	17.69	17.83	17.67				4.5
20	256QAM	100	0	17.72	17.85	17.50				
Channel Frequency (MHz)										
15	QPSK	1	0	22.45	22.48	22.43				23.8
15	QPSK	1	24	22.37	22.40	22.37				
15	QPSK	36	0	21.62	21.51	21.51				22.8
15	QPSK	36	18	21.47	21.47	21.47				1
15	QPSK	36	36	21.41	21.53	21.47				
15	QPSK	75	0	21.47	21.53	21.58				
15	16QAM	1	24	21.72	21.72	21.72				22.8
15	16QAM	1	37	21.65	21.77	21.72				1
15	16QAM	1	74	21.54	21.73	21.65				
15	16QAM	36	0	20.54	20.50	20.57				21.8
15	16QAM	36	36	20.41	20.52	20.52				2
15	64QAM	1	0	20.59	20.67	20.61				
15	64QAM	1	37	20.61	20.72	20.60				21.8
15	64QAM	1	74	20.58	20.74	20.65				2
15	64QAM	36	0	19.59	19.58	19.55				20.8
15	64QAM	36	20	19.55	19.62	19.58				3
15	256QAM	1	0	17.89	17.72	17.51				
15	256QAM	1	37	17.78	17.59	17.53				19.3
15	256QAM	1	74	17.70	17.78	17.53				4.5
15	256QAM	36	0	17.56	17.75	17.55				
15	256QAM	36	20	17.75	17.73	17.61				19.3
15	256QAM	36	36	17.64	17.77	17.53				4.5
15	256QAM	75	0	17.72	17.89	17.51				

Band 26 for FCC										
(only on channel required)										
RF (MHz)	Modulation	Channel	RB Size	RB Offset	Power Low Ch / Freq	Power Ch / Freq	Power Ch / Freq	Power Ch / Freq	Turn-up time (sec)	MPR (dB)
Channel Frequency (MHz)					812.1	813.1	813.5	844.1		
15	QPSK	1	0	0	22.29	22.28	22.29	22.3		
15	QPSK	1	37	22.24	22.22	22.21	22.21		23.8	0
15	QPSK	1	74	22.26	22.26	22.26	22.26			
15	QPSK	36	0	21.40	21.36	21.40	21.40			22.8
15	QPSK	36	20	21.47	21.37	21.51				1
15	QPSK	36	36	21.41	21.36	21.45				
15	16QAM	1	0	21.55	21.57	21.62				
15	16QAM	1	37	21.59	21.59	21.69			22.8	1
15	16QAM	1	74	21.54	21.62	21.58				
15	16QAM	36	0	20.26	20.33	20.49				21.8
15	16QAM	36	20	20.45	20.33	20.49				2
15	16QAM	36	36	20.44	20.40	20.47				
15	16QAM	75	0	20.46	20.46	20.53				
15	64QAM	1	0	20.46	20.46	20.53				
15	64QAM	1	37	20.50	20.51	20.59			21.8	2
15	64QAM	1	74	20.52	20.57	20.44				
15	64QAM	36	0	19.41	19.45	19.53				
15	64QAM	36	20	19.48	19.39	19.55				20.8
15	64QAM	75	0	19.40	19.41	19.40				3
15	256QAM	1	0	18.04	18.15	18.09				
15	256QAM	1	37	18.02	18.12	18.05			19.3	4.5
15	256QAM	1	74	18.06	18.07	18.06				
15	256QAM	36	0	17.50	18.00	17.69				
15	256QAM	36	20	17.51	17.89	17.67				19.3
15	256QAM	36	36	17.58	17.87	17.56				4.5
15	256QAM	75	0	18.01	17.92	17.86				
Channel Frequency (MHz)					819	819.1	843.5	844		
10	QPSK	1	0	0	22.19	22.23	22.32			
10	QPSK	1	24	22.22	22.22	22.29			23.8	0
10	QPSK	1	48	22.22	22.22	22.22				
10	QPSK	25	0	21.33	21.33	21.38				22.8
10	QPSK	25	1	21.34	21.32	21.46				1
10	QPSK	25	25	21.34	21.33	21.37				
10	QPSK	160	0	21.31	21.29	21.31			22.8	1
10	QPSK	160	1	21.36	21.43	21.52				
10	QPSK	160	2	21.36	21.63	21.64				
10	QPSK	1	49	21.57	21.59	21.62				
10	16QAM	25	0	20.36	20.37	20.37				21.8
10	16QAM	25	12	20.42	20.36	20.47				
10	16QAM	160	0	20.34	20.30	20.37				
10	16QAM	160	1	20.34	20.30	20.37				21.8
10	16QAM	1	26	20.51	20.54	20.56				
10	64QAM	1	49	20.47	20.49	20.53				
10	64QAM	25	0	19.36	19.36	19.36				20.8
10	64QAM	25	12	19.43	19.38	19.48				
10	64QAM	25	25	19.38	19.36	19.36				
10	256QAM	1	0	18.02	18.17	18.09				
10	256QAM	1	25	18.08	18.04	18.13			19.3	4.5
10	256QAM	1	49	18.04	18.17	18.07				
10	256QAM	25	0	17.88	17.94	17.92				
10	256QAM	25	12	17.89	17.85	17.87				19.3
10	256QAM	25	25	17.94	17.84	17.97				4.5
10	256QAM	1	0	17.94	17.85	18.00				



Band 30									
RF (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Mid Ch./Freq.	Power High Ch./Freq.	Turn-up Int. (dB)	MPR (dB)	
Channel Frequency (MHz)									
19	QPSK	1	0	22.41	22.41	22.41	23.8	0	
19	QPSK	1	25	22.39	22.39	22.39			
19	QPSK	1	49	22.37	22.37	22.37			
19	QPSK	25	0	21.43	21.43	21.43	22.8	1	
19	QPSK	25	12	21.46	21.46	21.46			
19	QPSK	25	25	21.45	21.45	21.45			
19	QPSK	50	0	21.47	21.47	21.47	22.8	1	
19	16QAM	1	0	21.51	21.51	21.51			
19	16QAM	1	25	21.78	21.78	21.78			
19	16QAM	1	49	21.74	21.74	21.74	21.8	2	
19	16QAM	25	0	20.42	20.42	20.42			
19	16QAM	25	12	20.48	20.48	20.48			
19	16QAM	25	25	20.48	20.48	20.48	20.8	3	
19	16QAM	50	0	20.59	20.59	20.59			
19	16QAM	50	12	20.52	20.52	20.52			
19	16QAM	50	25	20.52	20.52	20.52	19.3	4.5	
19	256QAM	1	0	17.38	17.38	17.38			
19	256QAM	1	25	17.60	17.60	17.60			
19	256QAM	25	0	17.46	17.46	17.46	19.3	4.5	
19	256QAM	25	12	17.53	17.53	17.53			
19	256QAM	25	25	17.47	17.47	17.47			
19	256QAM	50	0	17.43	17.43	17.43	19.3	4.5	
19	256QAM	50	12	17.43	17.43	17.43			
19	256QAM	50	25	17.43	17.43	17.43			
19	256QAM	50	25	17.43	17.43	17.43			
Channel Frequency (MHz)									
20	QPSK	1	0	22.05	22.05	22.05	23.8	0	
20	QPSK	1	19	22.27	22.27	22.27			
20	QPSK	1	24	22.39	22.39	22.34			
20	QPSK	12	0	21.37	21.48	21.47	22.8	1	
20	QPSK	12	13	21.47	21.48	21.53			
20	QPSK	25	0	21.48	21.43	21.49			
20	16QAM	1	0	21.54	21.63	21.66	22.8	1	
20	16QAM	1	12	21.63	21.70	21.68			
20	16QAM	1	24	21.71	21.68	21.67			
20	16QAM	12	0	20.38	20.46	20.52	21.8	2	
20	16QAM	12	7	20.50	20.51	20.58			
20	16QAM	12	13	20.52	20.51	20.51			
20	16QAM	25	0	20.48	20.47	20.52	21.8	2	
20	16QAM	25	0	20.47	20.34	20.39			
20	16QAM	25	12	20.46	20.14	20.39			
20	16QAM	25	13	20.24	20.19	20.51	20.8	3	
20	16QAM	25	0	19.42	19.17	19.26			
20	16QAM	25	7	19.38	19.15	19.37			
20	16QAM	25	13	19.23	19.17	19.41	19.3	4.5	
20	256QAM	1	0	17.48	17.58	17.50			
20	256QAM	1	12	17.54	17.52	17.44			
20	256QAM	1	24	17.60	17.59	17.54	19.3	4.5	
20	256QAM	12	0	17.45	17.44	17.39			
20	256QAM	12	7	17.56	17.53	17.49			
20	256QAM	12	13	17.45	17.42	17.46	19.3	4.5	
20	256QAM	25	0	17.33	17.49	17.38			
20	256QAM	25	0	17.33	17.49	17.38			

Band 66									
RF (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power Mid Ch./Freq.	Power High Ch./Freq.	Turn-up Int. (dB)	MPR (dB)	
Channel Frequency (MHz)									
20	QPSK	1	0	22.35	22.35	22.44		23.8	0
20	QPSK	1	49	22.25	22.44	22.30			
20	QPSK	1	99	22.18	22.35	22.21			
20	QPSK	50	0	21.39	21.59	21.42		22.8	1
20	QPSK	50	24	21.37	21.50	21.37			
20	QPSK	50	50	21.36	21.50	21.38			
20	QPSK	100	0	21.40	21.49	21.35		22.8	1
20	16QAM	1	0	21.52	21.62	21.74			
20	16QAM	1	49	21.63	21.62	21.65			
20	16QAM	1	99	21.61	21.70	21.60		21.8	2
20	16QAM	50	0	20.45	20.45	20.43			
20	16QAM	50	24	20.46	20.52	20.39			
20	16QAM	50	50	20.43	20.50	20.40		21.8	2
20	16QAM	100	0	20.45	20.51	20.38			
20	16QAM	1	0	20.57	20.73	20.59		20.8	3
20	16QAM	1	49	20.50	20.69	20.50			
20	16QAM	1	99	20.46	20.61	20.38			
20	16QAM	50	0	19.43	19.55	19.42		20.8	3
20	16QAM	50	24	19.48	19.53	19.38			
20	16QAM	50	50	19.42	19.53	19.38			
20	16QAM	100	0	19.45	19.51	19.36		19.3	4.5
20	256QAM	1	0	17.91	17.74	17.82			
20	256QAM	1	49	17.84	17.84	17.85			
20	256QAM	1	99	17.78	17.88	17.82		19.3	4.5
20	256QAM	50	0	17.62	17.66	17.66			
20	256QAM	50	24	17.75	17.72	17.67			
20	256QAM	50	50	17.73	17.64	17.67		19.3	4.5
20	256QAM	100	0	17.72	17.63	17.68			
20	256QAM	100	0	17.72	17.63	17.68			
Channel Frequency (MHz)									
15	QPSK	1	0	22.31	22.44	22.35		23.8	0
15	QPSK	1	24	22.31	22.44	22.35			
15	QPSK	1	74	22.22	22.37	22.22			
15	QPSK	36	0	21.33	21.48	21.35		22.8	1
15	QPSK	36	36	21.41	21.54	21.47			
15	QPSK	36	39	21.38	21.50	21.35			
15	QPSK	75	0	21.41	21.45	21.38		22.8	1
15	16QAM	1	0	21.62	21.68	21.64			
15	16QAM	1	37	21.58	21.74	21.60			
15	16QAM	1	74	21.49	21.63	21.53		22.8	1
15	16QAM	36	0	20.35	20.50	20.42			
15	16QAM	36	39	20.37	20.49	20.34			
15	16QAM	75	0	20.36	20.49	20.36		21.8	2
15	16QAM	1	37	20.49	20.71	20.49			
15	16QAM	1	74	20.41	20.51	20.41			
15	16QAM	36	0	19.43	19.52	19.36		20.8	3
15	16QAM	36	20	19.45	19.55	19.45			
15	16QAM	36	39	19.46	19.52	19.34			
15	16QAM	75	0	19.41	19.45	19.41		19.3	4.5
15	256QAM	1	0	17.91	17.74	17.82			
15	256QAM	1	37	17.84	17.84	17.85			
15	256QAM	1	74	17.78	17.88	17.82		19.3	4.5
15	256QAM	36	0	17.62	17.66	17.66			
15	256QAM	36	39	17.73	17.64	17.67			
15	256QAM	75	0	17.72	17.63	17.68		19.3	4.5
15	256QAM	75	0	17.72	17.63	17.68			
15	256QAM	75	0	17.72	17.63	17.68			
Channel Frequency (MHz)									
10	QPSK	1	0	22.30	22.42	22.24		23.8	0
10	QPSK	1	24	22.31	22.43	22.25			
10	QPSK	1	49	22.21	22.31	22.14			
10	QPSK	25	0	21.33	21.42	21.29		22.8	1
10	QPSK	25	12	21.36	21.43	21.27			
10	QPSK	25	25	21.32	21.49	21.29			
10	QPSK	50	0	21.37	21.41	21.25		22.8	1
10	16QAM	1	0	21.68	21.62	21.64			
10	16QAM	1	25	21.61	21.79	21.67			
10	16QAM	1	49	21.58	21.73	21.52		21.8	2
10	16QAM	25	0	20.31	20.46	20.26			
10	16QAM	25	12	20.41	20.48	20.38			
10	16QAM	25	25	20.34	20.48	20.33		21.8	2
10	16QAM	50	0	20.38	20.44	20.27			
10	16QAM	50	12	20.51	20.50	20.47			
10	16QAM	1	25	20.60	20.68	20.53		20.8	3
10	16QAM	1	49	20.54	20.58	20.52			
10	16QAM	25	0	19.34	19.50	19.35			
10	16QAM	25	12	19.46	19.49	19.33		19.3	4.5
10	16QAM	25	25	19.48	19.48	19.35			
10	16QAM	50	0	19.41	19.48	19.29			
10	256QAM	1	0	17.91	17.74	17.82		19.3	4.5
10	256QAM	1	25	17.84	17.84	17.85			



Band 2B (only on channel required)									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. [Frac]	Power High Ch. [Frac]	Power Low Ch. [Frac]	Power High Ch. [Frac]	Turn-up time (dBm)	MFR (dB)
Channel									
Frequency [MHz]									
20	QPSK	1	0	22.52	22.52	22.52	22.52	23.8	0
20	QPSK	1	46	22.52	22.52	22.52	22.52		
20	QPSK	1	92	22.52	22.52	22.52	22.52		
20	QPSK	50	0	21.61	21.61	21.61	21.61		
20	QPSK	50	24	21.61	21.61	21.61	21.61	22.8	1
20	QPSK	50	50	21.61	21.61	21.61	21.61		
20	QPSK	100	0	21.61	21.61	21.61	21.61		
20	HQAM	1	0	21.72	21.72	21.72	21.72	22.8	1
20	HQAM	1	46	21.72	21.72	21.72	21.72		
20	HQAM	1	92	21.72	21.72	21.72	21.72		
20	HQAM	50	0	20.59	20.59	20.59	20.59	21.8	2
20	HQAM	50	24	20.59	20.59	20.59	20.59		
20	HQAM	50	50	20.59	20.59	20.59	20.59		
20	HQAM	100	0	20.59	20.59	20.59	20.59		
20	HQAM	1	0	20.31	20.31	20.31	20.31	21.8	2
20	HQAM	1	46	20.32	20.32	20.32	20.32		
20	HQAM	1	92	20.32	20.32	20.32	20.32		
20	HQAM	50	0	19.53	19.53	19.53	19.53	20.8	3
20	HQAM	50	24	19.56	19.56	19.56	19.56		
20	HQAM	50	50	19.59	19.59	19.59	19.59		
20	HQAM	100	0	19.54	19.54	19.54	19.54		
20	256QAM	1	0	17.58	17.58	17.58	17.58	19.3	4.5
20	256QAM	1	46	17.52	17.52	17.52	17.52		
20	256QAM	1	92	17.53	17.53	17.53	17.53		
20	256QAM	50	0	17.52	17.52	17.52	17.52	19.3	4.5
20	256QAM	50	24	17.55	17.55	17.55	17.55		
20	256QAM	50	50	17.55	17.55	17.55	17.55		
20	256QAM	100	0	17.52	17.52	17.52	17.52		
Channel									
Frequency [MHz]									
15	QPSK	1	0	22.52	22.51	22.42	22.42	23.8	0
15	QPSK	1	37	22.47	22.38	22.27	22.27		
15	QPSK	1	74	22.46	22.21	22.44	22.44		
15	QPSK	36	0	21.61	21.61	21.61	21.61	22.8	1
15	QPSK	36	20	21.64	21.47	21.44	21.44		
15	QPSK	36	36	21.70	21.49	21.58	21.58		
15	QPSK	72	0	21.76	21.68	21.60	21.60	22.8	1
15	HQAM	1	0	21.68	21.59	21.67	21.67		
15	HQAM	1	37	21.63	21.38	21.31	21.31	21.8	2
15	HQAM	1	74	21.51	21.23	21.54	21.54		
15	HQAM	36	0	20.86	20.36	20.42	20.42	21.8	2
15	HQAM	36	20	20.81	20.47	20.42	20.42		
15	HQAM	36	36	20.89	20.65	20.60	20.60		
15	HQAM	72	0	20.77	20.41	20.52	20.52	21.8	2
15	HQAM	72	0	20.30	20.21	20.25	20.25		
15	HQAM	72	37	20.28	20.21	20.27	20.27		
15	HQAM	1	74	20.24	20.23	20.34	20.34	20.8	3
15	HQAM	36	0	19.56	19.40	19.46	19.46	19.3	4.5
15	HQAM	36	20	19.63	19.50	19.60	19.60		
15	HQAM	72	0	17.53	17.70	17.67	17.67	19.3	4.5
15	256QAM	1	0	17.52	17.63	17.50	17.50		
15	256QAM	1	37	17.50	17.43	17.54	17.54		
15	256QAM	1	74	17.48	17.47	17.57	17.57		
15	256QAM	36	0	17.79	17.86	17.77	17.77	19.3	4.5
15	256QAM	36	20	17.80	17.82	17.86	17.86		
15	256QAM	36	36	17.85	17.83	17.86	17.86		
15	256QAM	72	0	17.78	17.82	17.80	17.80		
Channel									
Frequency [MHz]									
10	QPSK	1	0	22.44	22.40	22.46	22.46	23.8	0
10	QPSK	1	24	22.44	22.35	22.46	22.46		
10	QPSK	1	46	22.38	22.22	22.32	22.32		
10	QPSK	25	0	21.64	21.46	21.63	21.63	22.8	1
10	QPSK	25	12	21.67	21.57	21.63	21.63		
10	QPSK	25	24	21.64	21.58	21.73	21.73		
10	QPSK	50	0	21.66	21.63	21.68	21.68	22.8	1
10	HQAM	1	0	21.57	21.56	21.66	21.66		
10	HQAM	1	24	21.60	21.62	21.66	21.66		
10	HQAM	1	46	21.66	21.62	21.66	21.66	21.8	2
10	HQAM	25	0	20.36	20.48	20.66	20.66	21.8	2
10	HQAM	25	12	20.36	20.53	20.70	20.70		
10	HQAM	25	24	20.35	20.49	20.69	20.69		
10	HQAM	50	0	20.37	20.60	20.77	20.77	21.8	2
10	HQAM	50	1	20.24	20.48	20.42	20.42		
10	HQAM	1	24	20.16	20.17	20.40	20.40	21.8	2
10	HQAM	1	46	20.37	20.59	20.62	20.62	20.8	3
10	HQAM	25	0	19.57	19.57	19.63	19.63		
10	HQAM	25	12	19.54	19.59	19.64	19.64		
10	HQAM	25	24	19.56	19.59	19.67	19.67		
10	HQAM	50	0	19.58	19.59	19.79	19.79	19.3	4.5
10	HQAM	1	46	17.48	17.48	17.63	17.63		
10	256QAM	1	0	17.51	17.51	17.55	17.55	19.3	4.5
10	256QAM	25	0	17.51	17.51	17.55	17.55		
10	256QAM	25	12	17.53	17.51	17.56	17.56		
10	256QAM	25	24	17.76	17.61	17.64	17.64		
10	256QAM	50	0	17.63	17.77	17.80	17.80		

Band 41 (2.6G Band)-Class 3									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. [Frac]	Power High Ch. [Frac]	Power Low Ch. [Frac]	Power High Ch. [Frac]	Turn-up time (dBm)	MFR (dB)
Channel									
Frequency [MHz]									
20	QPSK	1	0	22.47	22.52	22.45	22.50	23.8	0
20	QPSK	1	46	22.43	22.46	22.53	22.54		
20	QPSK	1	92	22.43	22.56	22.53	22.54		
20	QPSK	50	0	21.55	21.66	21.61	21.71	22.8	1
20	QPSK	50	24	21.58	21.75	21.71	21.71		
20	QPSK	50	50	21.58	21.80	21.73	21.73		
20	HQAM	1	0	21.60	21.70	21.71	21.83	22.8	1
20	HQAM	1	46	21.55	21.73	21.77	21.72		
20	HQAM	1	92	21.59	21.76	21.78	21.71		
20	HQAM	50	0	20.66	20.66	20.62	20.72	21.8	2
20	HQAM	50	24	20.67	20.84	20.63	20.79		
20	HQAM	50	50	20.65	20.85	20.75	20.75		
20	HQAM	100	0	20.64	20.86	20.73	20.89	21.8	2
20	HQAM	1	0	20.37	20.31	20.39	20.53		
20	HQAM	1	46	20.27	20.33	20.38	20.48		
20	HQAM	1	92	20.26	20.47	20.44	20.59	20.8	3
20	HQAM	50	0	19.64	19.75	19.71	19.82		
20	HQAM	50	24	19.66	19.91	19.81	19.78		
20	HQAM	50	50	19.66	19.79	19.73	19.76	19.3	4.5
20	HQAM	100	0	19.63	19.81	19.73	19.81		
20	256QAM	1	0	17.64	17.43	17.48	17.48		
20	256QAM	1	46	17.61	17.37	17.42	17.31	19.3	4.5
20	256QAM	1	92	17.55	17.34	17.30	17.37		
20	256QAM	50	0	17.61	17.68	17.73	17.73		
20	256QAM	50	24	17.61	17.71	17.72	17.68	19.3	4.5
20	256QAM	50	50	17.67	17.66	17.75	17.71		
20	256QAM	100	0	17.62	17.63	17.66	17.62		
Channel									
Frequency [MHz]									
15	QPSK	1	0	22.44	22.55	22.43	22.69	23.8	0
15	QPSK	1	37	22.37	22.62	22.33	22.45		
15	QPSK	1	74	22.40	22.67	22.62	22.67		
15	QPSK	36	0	21.62	21.75	21.62	21.61	22.8	1
15	QPSK	36	20	21.61	21.76	21.62	21.77		
15	QPSK	36	36	21.51	21.70	21.62	21.77		
15	HQAM	1	0	21.60	21.73	21.63	21.68	22.8	1
15	HQAM	1	37	21.59	21.42	21.68	21.76		
15	HQAM	1	74	21.51	21.23	21.79	21.82		
15	HQAM	36	0	20.50	20.66	20.50	20.65	21.8	2
15	HQAM	36	20	20.47	20.71	20.59	20.73		
15	HQAM	36	36	20.46	20.72	20.60	20.75		
15	HQAM	72	0	20.61	20.74	20.85	20.77	21.8	2
15	HQAM	72	0	20.29	20.36	20.57	20.48		
15	HQAM	72	37	20.32	20.41	20.52	20.63		
15	HQAM	1	74	20.25	20.63	20.44	20.60	20.8	3
15	HQAM	36	0	19.52	19.66	19.61	19.73		
15	HQAM	36	20	19.59	19.82	19.74	19.80		
15	HQAM	72	0	17.68	17.63	17.75	17.76	19.3	4.5
15	256QAM	1	0	17.62	17.64	17.63	17.62		
15	256QAM	1	37	17.62	17.64	17.63	17.62		
15	256QAM	1	74	17.61	17.62	17.74	17.72	19.3	4.5
15	256QAM	36	0	17.87	17.86	17.83	17.82		
15	256QAM	36	20	17.86	17.87	17.85	17.84		
15	256QAM	72	0	17.85	17.86	17.87	17.85	19.3	4.5
15	256QAM	72	37	17.85	17.87	17.85	17.84		
15	256QAM	100	0	17.85	17.87	17.83	17.84		
Channel									
Frequency [MHz]									
10	QPSK	1	0	22.33	22.42	22.41	22.57	23.8	0
10	QPSK	1	25	22.40	22.45	22.43	22.48		
10	QPSK	1	50	22.43	22.46	22.53	22.53		
10	QPSK	25	0	21.59	21.71	21.61	21.64	22.8	1
10	QPSK	25	12	21.51	21.78	21.63	21.63		
10	QPSK	25	25	21.61	21.81	21.76	21.76		
10	QPSK	50	0	21.57	21.74	21.60	21.71	22.8	1
10	QPSK	50	12	21.58	21.76	21.71	21.71		
10	HQAM	1	25	21.50	21.68	21.73	21.75		
10	HQAM	1	49	21.61	21.62	21.77	21.81	22.8	1
10	HQAM	1	73	21.51	21.23	21.79	21.83		
10	HQAM	25	0	20.62	20.79	20.60	20.64		
10	HQAM	25	12	20.62	20.79	20.60	20.64	21.8	2
10	HQAM	25	25	20.59	20.68	20.64	20.80		
10	HQAM	50	0	20.57	20.71	20.62	20.81		
10	HQAM	1	0	20.37	20.38	20.33	20.43	21.8	2
10	HQAM	1	25	20.34	20.40	20.31	20.59		
10	HQAM	1	50	20.38	20.44	20.40	20.46		
10	HQAM	25	0	19.61	19.68	19.62	19.78	20.8	3
10	HQAM	25	12	19.60	19.81	19.72	19.81		
10	HQAM	25	25	19.74	19.80	19.70	19.77		
10	HQAM	50	0	19.66	19.82	19.65	19.71	19.3	4.5
10	HQAM	50	12	19.68	19.82	19.65	19.71		
10	HQAM	50	25	19.78	19.82	19.72	19.78		
10	256QAM	1	25	17.69	17.66	17.49	17.67	19.3	4.5
10	256QAM	1	49	17.68	17.64	17.49	17.67		
10	256QAM	1	73	17.65	17.64	17.77	17.72		
10	256QAM	25	0	17.82	17.76	17.76	17.59	19.3	4.5
10	256QAM	25	12	17.82	17.76	17.76	17.59		
10	256QAM	25	25	17.85	17.87	17.83	17.84		
Channel									
Frequency [MHz]									
5	QPSK	1	0	22.33	22.43	22.49	22.63	23.8	0
5	QPSK	1	12	22.46	22.54	22.56	22.60		
5	QPSK	1	24	22.48	22.52	22.53	22.63		
5	QPSK	12	0	21.60	21.73	21.66	21.72	22.8	1
5	QPSK	12	7	21.62	21.79	21.69	21.74		
5	QPSK	12	14	21.66	21.77	21.68	21.79		
5	QPSK	25	0	21.56	21.74	21.66	21.69	22.8	1
5	HQAM	1	12	21.63	21.73	21.69	21.73		
5	HQAM	1	24	21.67	21.81	21.72	21.79		
5	HQAM	12	0	20.58	20.68	20.59	20.68	21.8	2
5	HQAM	12	7	20.56	20.74	20.67	20.71		
5	HQAM	12	14	20.60	20.72	20.64	20.77		
5	HQAM	25	0	20.67	20.76	20.64	20.80	20.8	3
5	HQAM	25	0	20.42	20.47	20.34	20.51		
5	HQAM	25	12	20.32	20.48	20.42	20.56		
5	HQAM	25	24	19.41	19.41	19.68	19.67	19.3	4.5
5	HQAM	50	0	19.61	19.81	19.68	19.78		
5	HQAM	50	12	19.61	19.87	19.69	19.78		
5	256QAM	1	12	17.68	17.63	17.69	17.73	19.3	4.5
5	256QAM	1	24	17.69	17.62	17.48	17.50		
5	256QAM	12	0	17.65	17.33	17.39	17.42		
5	256QAM	12	7	17.66	17.37	17.42	17.31	19.3	4.5
5	256QAM	12	14	17.66	17.37	17.42	17.31		
5	256QAM	25	0	17.86	17.79	17.66	17.72		
5	256QAM	25	12	17.86	17.79	17.72	17.66	19.3	4.5
5	256QAM	25	24	17.87	17.83	17.82	17.59		
5	256QAM	50	0	17.86	17.87	17.76	17.72		

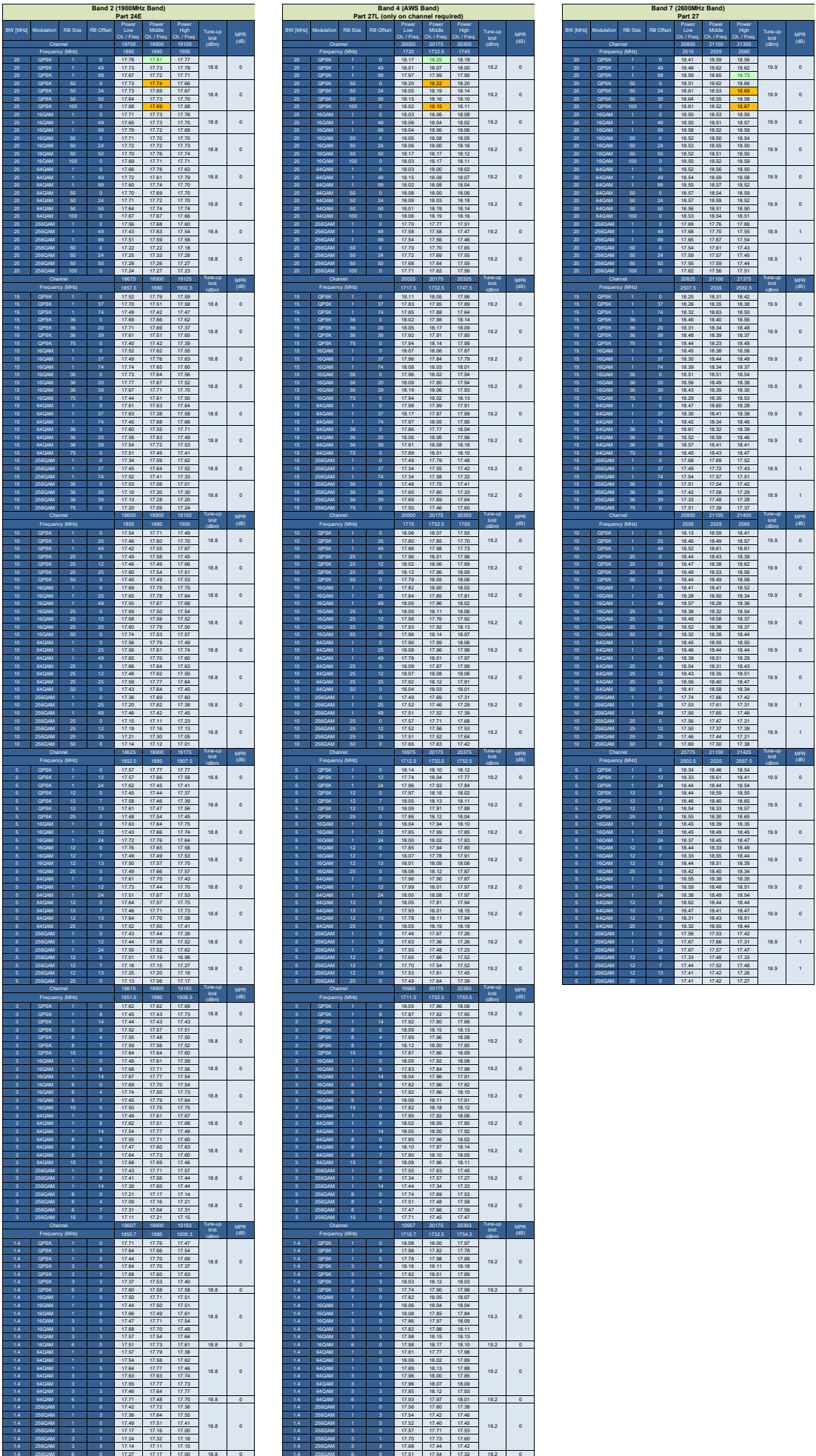


Reduced power for Hotspot on-LAT

COM1900	Burst Average Power (dBm)			TxPower Limit	Frame Average Power (dBm)			TxPower Limit
	500	800	1000		512	800	1000	
Frequency (MHz)	1850.2	1850	1850.8	(dBm)	1850.2	1850	1850.8	(dBm)
GPB 1 Tx mode	27.56	27.58	27.60	28.70	18.56	18.59	18.60	19.70
GPB 1 Tx rate	27.53	27.55	27.62	28.70	18.53	18.55	18.62	19.70
GPB 2 Tx mode	25.07	24.85	25.03	26.20	19.07	18.86	19.03	20.20
GPB 3 Tx mode	23.44	23.71	23.83	24.90	19.18	19.45	19.57	20.64
GPB 4 Tx mode	22.09	22.05	22.08	23.40	19.09	19.05	19.08	20.40
EDGE 1 Tx mode	22.19	22.21	22.16	23.21	19.10	19.21	19.16	19.20
EDGE 2 Tx mode	22.89	22.14	22.22	23.10	18.98	18.14	18.22	17.19
EDGE 3 Tx mode	21.06	21.11	21.08	22.00	18.80	18.86	18.82	17.04
EDGE 4 Tx mode	19.76	19.81	20.02	21.00	18.76	18.81	19.02	19.00

Burst	MCCM4.0			TxPower Limit	MCCM4.0V			TxPower Limit
	5000	8000	10000		14112	14410	14510	
TX Channel	5000	8000	10000	(dBm)	14112	14410	14510	(dBm)
Frequency (MHz)	1852.4	1850	1857.6	(dBm)	17152.4	17324.6	17524.6	(dBm)
ICPP Rule 00	18.31	18.38	18.34	19.40	18.65	18.76	18.82	19.80
ICPP Rule 01	16.35	16.35	16.36	16.40	16.66	16.60	16.64	16.60
ICPP Rule 02	17.34	17.44	17.39	18.40	17.69	17.76	17.81	18.80
ICPP Rule 03	17.06	17.44	17.36	18.40	17.60	17.80	17.81	18.80
ICPP Rule 04	16.86	16.91	16.86	17.60	17.20	17.27	17.36	18.30
ICPP Rule 05	16.86	16.86	16.86	17.60	17.20	17.20	17.20	18.30
ICPP Rule 06	17.19	17.24	17.15	18.40	17.50	17.55	17.65	18.80
ICPP Rule 07	16.87	17.20	17.19	18.40	17.49	17.61	17.67	18.80
ICPP Rule 08	16.44	16.75	16.47	17.60	17.01	17.09	17.13	18.30
ICPP Rule 09	16.68	16.60	16.78	17.60	17.01	17.19	17.18	18.30
ICPP Rule 10	17.14	17.42	17.41	18.40	17.65	17.81	17.80	18.80
ICPP Rule 11	16.37	16.45	16.39	17.40	16.70	16.65	16.62	16.80
ICPP Rule 12	14.51	14.60	14.42	16.40	15.66	15.79	15.80	16.80
ICPP Rule 13	15.15	15.21	15.16	16.40	16.31	16.40	16.30	16.80
ICPP Rule 14	17.31	17.41	17.31	18.40	17.67	17.60	17.81	18.80
ICPP Rule 15	15.08	15.47	15.62	16.90	16.26	16.32	16.24	17.30

Burst	CCM4.0C1			TxPower Limit	CCM4.0C1			TxPower Limit	CCM4.0C10			TxPower Limit
	1010	364	777		26	400	8190		476	580	884	
Frequency (MHz)	22.13	22.42	22.15	(dBm)	19.82	19.60	19.76	(dBm)	22.14	22.15	22.11	(dBm)
ICI B005	22.22	22.39	22.04	23.60	19.82	19.60	19.87	20.90	22.11	22.14	22.07	23.30
ICI B005 (HSD)	22.21	22.31	22.03	23.60	19.81	19.60	19.80	20.90	22.10	22.11	22.04	23.30
ICI B005 (HSD)	22.13	22.23	22.02	23.60	19.80	19.67	19.84	20.90	22.03	22.07	22.01	23.30
ICI B005 (HSD)	22.23	22.33	22.07	23.60	19.79	19.81	19.82	20.90	22.09	22.12	22.07	23.30
ICI B005 (HSD)	22.23	22.30	22.00	23.60	19.78	19.84	19.81	20.90	22.07	22.11	22.05	23.30



[illegible][illegible]

Band 30									
SW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq.	Power High Ch./Freq.	Power Low Ch./Freq.	Power High Ch./Freq.	Turn-up limit (dB)	MPE (dB)
Channel									
Frequency (MHz)									
10	QPSK	1	0		17.17			18.5	0
10	QPSK	1	49		17.06				
10	QPSK	1	49		17.04				
10	QPSK	25	0		17.12				
10	QPSK	25	12		17.06			18.5	0
10	QPSK	25	25		17.05				
10	QPSK	50	0		17.16				
10	16QAM	1	0		17.09				
10	16QAM	1	25		17.11			18.5	0
10	16QAM	1	49		17.07				
10	16QAM	25	12		17.09			18.5	0
10	16QAM	25	25		17.08				
10	16QAM	50	0		17.05				
10	64QAM	1	0		17.07				
10	64QAM	1	25		17.11			18.5	0
10	64QAM	1	49		17.12				
10	64QAM	25	12		17.09			18.5	0
10	64QAM	25	25		17.08				
10	64QAM	50	0		17.05				
10	256QAM	1	0		16.83				
10	256QAM	1	25		16.86			18.5	0
10	256QAM	1	49		17.05				
10	256QAM	25	0		16.91				
10	256QAM	25	12		16.86			18.5	0
10	256QAM	25	25		16.92				
10	256QAM	50	0		16.88				
Channel									
Frequency (MHz)									
5	QPSK	1	0	17.12	17.08	17.14		18.5	0
5	QPSK	1	24	16.87	16.91	16.79			
5	QPSK	1	24	16.95	16.94	16.85			
5	QPSK	12	0	16.88	16.85	16.92			
5	QPSK	12	13	16.76	16.94	16.80		18.5	0
5	QPSK	25	0	17.07	17.07	16.88			
5	16QAM	1	0	16.97	17.03	16.87			
5	16QAM	1	12	16.97	17.04	16.99		18.5	0
5	16QAM	1	24	16.94	17.05	17.00			
5	16QAM	12	0	17.15	17.05	17.16			
5	16QAM	12	7	16.83	16.90	16.85		18.5	0
5	16QAM	12	13	17.07	16.88	16.92			
5	16QAM	25	0	17.03	17.03	17.07			
5	64QAM	1	0	16.98	17.06	16.93			
5	64QAM	1	12	16.98	17.11	16.97		18.5	0
5	64QAM	1	24	17.12	17.02	16.96			
5	64QAM	12	0	16.93	17.08	16.96			
5	64QAM	12	7	17.08	16.95	17.07		18.5	0
5	64QAM	12	13	16.94	16.84	16.94			
5	64QAM	25	0	16.95	17.00	17.05			
5	256QAM	1	0	16.82	16.82	16.87			
5	256QAM	1	12	16.85	16.77	16.90		18.5	0
5	256QAM	1	24	16.88	16.92	16.85			
5	256QAM	12	0	16.95	16.93	16.88			
5	256QAM	12	7	17.03	16.90	16.96		18.5	0
5	256QAM	12	13	16.86	16.92	16.88			
5	256QAM	25	0	16.75	16.76	16.74			

Band 66									
SW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch./Freq. 150072	Power High Ch./Freq. 150252	Power Low Ch./Freq. 150572	Power High Ch./Freq. 150792	Turn-up limit (dB)	MPE (dB)
Channel									
Frequency (MHz)									
20	QPSK	1	0	16.17	16.34	16.27			
20	QPSK	1	49	16.10	16.17	16.16		19.2	0
20	QPSK	1	99	16.00	16.07	16.05			
20	QPSK	50	0	16.22	16.29	16.29			
20	QPSK	50	24	16.07	16.04	16.04		19.2	0
20	QPSK	50	50	16.19	16.25	16.25			
20	QPSK	100	0	16.25	16.26	16.23			
20	16QAM	1	0	16.15	16.10	16.15			
20	16QAM	1	49	16.13	16.12	16.11		19.2	0
20	16QAM	1	99	16.01	16.04	16.00			
20	16QAM	50	0	16.16	16.28	16.28			
20	16QAM	50	24	16.26	16.24	16.16		19.2	0
20	16QAM	50	50	16.17	16.22	16.14			
20	16QAM	100	0	16.16	16.21	16.18			
20	64QAM	1	0	16.02	16.11	16.14			
20	64QAM	1	49	16.02	16.08	16.12		19.2	0
20	64QAM	1	99	16.26	16.24	16.18			
20	64QAM	50	0	16.20	16.25	16.17			
20	64QAM	50	24	16.26	16.28	16.16		19.2	0
20	64QAM	50	50	16.20	16.25	16.17			
20	64QAM	100	0	16.23	16.23	16.11			
20	256QAM	1	0	17.86	17.69	17.77			
20	256QAM	1	49	17.79	17.79	17.83		19.2	0
20	256QAM	1	99	17.73	17.83	17.77			
20	256QAM	50	0	17.57	17.61	17.61			
20	256QAM	50	24	17.70	17.67	17.67		19.2	0
20	256QAM	50	50	17.68	17.59	17.62			
20	256QAM	100	0	17.67	17.68	17.63			
Channel									
Frequency (MHz)									
15	QPSK	1	0	17.96	18.16	18.03			
15	QPSK	1	37	17.96	18.14	17.98		19.2	0
15	QPSK	1	74	17.70	17.77	17.79			
15	QPSK	36	0	17.92	18.17	18.22			
15	QPSK	36	26	17.97	18.16	18.11		19.2	0
15	QPSK	36	36	17.99	18.13	18.20			
15	QPSK	75	0	18.11	18.02	18.06			
15	16QAM	1	0	17.94	18.02	18.06			
15	16QAM	1	37	18.03	17.97	17.94		19.2	0
15	16QAM	1	74	17.93	18.03	17.94			
15	16QAM	36	0	18.16	18.03	18.23			
15	16QAM	36	26	18.29	18.07	18.06		19.2	0
15	16QAM	36	36	18.04	18.22	18.06			
15	16QAM	75	0	18.21	17.96	18.21			
15	64QAM	1	0	17.83	18.02	17.96			
15	64QAM	1	37	17.84	17.98	18.08		19.2	0
15	64QAM	1	74	18.15	18.06	17.94			
15	64QAM	36	0	18.03	18.32	18.07			
15	64QAM	36	26	18.10	18.29	18.09		19.2	0
15	64QAM	36	36	17.95	18.02	18.15			
15	64QAM	75	0	18.16	17.99	17.97			
15	256QAM	1	0	17.74	17.54	17.64			
15	256QAM	1	37	17.54	17.58	17.64		19.2	0
15	256QAM	1	74	17.86	17.85	17.92			
15	256QAM	36	0	17.49	17.36	17.52			
15	256QAM	36	26	17.61	17.50	17.53		19.2	0
15	256QAM	36	36	17.66	17.50	17.61			
15	256QAM	75	0	17.53	17.39	17.67			
Channel									
Frequency (MHz)									
10	QPSK	1	0	18.01	18.21	18.10			
10	QPSK	1	24	17.81	18.08	18.02		19.2	0
10	QPSK	1	49	17.76	18.03	17.81			
10	QPSK	25	0	17.96	18.07	18.21			
10	QPSK	25	12	17.98	18.08	18.01		19.2	0
10	QPSK	25	25	17.97	18.21	18.12			
10	QPSK	50	0	18.25	18.28	18.22			
10	16QAM	1	0	18.03	18.13	18.03			
10	16QAM	1	25	18.05	18.16	18.16		19.2	0
10	16QAM	1	49	17.87	17.83	17.89			
10	16QAM	25	0	17.98	18.03	18.11			
10	16QAM	25	12	18.30	18.25	18.21		19.2	0
10	16QAM	25	25	18.21	18.09	18.01			
10	16QAM	50	0	18.13	18.23	18.17			
10	64QAM	1	0	17.78	18.09	18.02			
10	64QAM	1	25	17.96	17.97	17.97		19.2	0
10	64QAM	1	49	18.05	17.99	18.12			
10	64QAM	25	0	17.96	18.34	17.85			
10	64QAM	25	12	18.10	18.18	18.19		19.2	0
10	64QAM	25	25	18.19	18.17	17.96			
10	64QAM	50	0	18.28	18.19	18.09			
10	256QAM	1	0	17.91	17.94	17.91			
10	256QAM	1	25	17.94	17.93	17.91		19.2	0
10	256QAM	1	49	17.94	17.85	17.73			
10	256QAM	25	0	17.91	17.49	17.86			
10	256QAM	25	12	17.75	17.52	17.67		19.2	0
10	256QAM	25	25	17.47	17.54	17.62			
10	256QAM	50	0	17.44	17.29	17.44			
Channel									
Frequency (MHz)									
5	QPSK	1	0	18.17	18.23	17.87			
5	QPSK	1	12	18.02	18.10	17.88		19.2	0
5	QPSK	1	24	17.85	17.86	17.88			
5	QPSK	12	0	17.94	18.09	18.00			
5	QPSK	12	7	18.02	18.10	18.14		19.2	0
5	QPSK	12	13	18.19	18.10	18.06			
5	QPSK	25	0	18.00	18.08	18.23			
5	16QAM	1	0	18.03	18.13	18.03			
5	16QAM	1	12	18.03	18.13	18.10		19.2	0
5	16QAM	1	24	17.98	17.84	17.84			
5	16QAM	1	12	18.02	18.13	18.13			
5	16QAM	12	7	18.28	18.08	18.22		19.2	0
5	16QAM	12	13	18.18	18.18	18.06			
5	16QAM	25	0	18.02	18.01	17.96			
5	16QAM	1	12	17.92	17.87	17.88		19.2	0
5	16QAM	12	7	18.10	18.27	18.01			
5	16QAM	12	13	18.11	18.20	18.10			
5	16QAM	25	0	18.28	18.20	18.10			
5	256QAM	1	0	17.81	17.94	17.81			
5	256QAM	1	12	17.84	17.82	17.77		19.2	0
5	256QAM	1	24	17.81	17.62	17.72			
5	256QAM	12	7	17.99	17.90	17.86			
5	256QAM	12	13	17.84	17.65	17.46		19.2	0
5	256QAM	12	13	17.69	17.40	17.69			
5	256QAM	25	0	17.52	17.44	17.44			
Channel									
Frequency (MHz)									
3	QPSK	1	0	18.05	18.11	17.88			
3	QPSK	1	7	18.01	18.08	17.86		19.2	0
3	QPSK	1	14	17.97	17.88	17.86			
3	QPSK	8	0	18.13	18.28	18.21			
3	QPSK	8	7	18.20	18.22	18.10		19.2	0
3	QPSK	8	7	18.16	17.98	18.16			
3	16QAM	1	0	18.00	18.27	18.13			
3	16QAM	1	14	18.05	18.14	18.05		19.2	0
3	16QAM	1	14	18.04	18.12	18.04			
3	16QAM	8	0	18.02	18.14	18.07			
3	16QAM	8	7	18.02	18.16	18.02		19.2	0
3	16QAM	8	7	18.03	18.10	18.03			
3	16QAM	15	0	17.93	18.11	17.93			
3	16QAM	15	7	17.97	17.98	17.98		19.2	0
3	16QAM	15	7	18.07	18.06	18.10			
3	16QAM	14	0	18.27	18.06	18.10			
3	64QAM	1	0	18.09	18.34	18.06			
3	64QAM	1	7	18.11	18.10	18.07		19.2	0
3	64QAM	8	0	18.10	18.25	17.92			
3	64QAM	8	7	18.16	18.20	17.91			
3	64QAM	15	0	17.98	17.83	17.88		19.2	0
3	64QAM	15	7	17.95	17.96	17.95			
3	256QAM	1	0	17.89	17.82	17.72			
3	256QAM	1	14	17.90	17.82	17.73		19.2	0
3	256QAM	8	0	17.97	17.83	17.88			
3	256QAM	8	7	17.97	17.43	17.69			
3	256QAM	8	7	17.87	17.45	17.69		19.2	0
3	256QAM	15	0	17.70	17.63	17.46			
Channel									
Frequency (MHz)									
1.4	QPSK	1	0	19.979	19.922	19.986			
1.4	QPSK	1	14	19.974	19.924	19.974		19.2	0
1.4	QPSK	1	28	19.96	19.92	19.95			
1.4	QPSK	1	56	19.87	19.88	19.88		19.2	0
1.4	QPSK	3	0	19.91	19.92	19.91			
1.4	QPSK	3	14	19.94	19.94	19.92			
1.4	QPSK	3	28	19.96	19.88	19.88		19.2	0
1.4	QPSK	3	56	19.83	19.84	19.84			
1.4	16QAM	1	0	19.94	19.95	19.94			
1.4	16QAM	1	14	19.94	19.88	19.88		19.2	0
1.4	16QAM	1	28	19.94	19.94	19.94			
1.4	16QAM	3	0	19.90	19.90	19.94			
1.4	16QAM	3	14	19.91	19.93	19.94		19.2	0
1.4	16QAM	3	28	19.93	19.86	19.86			
1.4	16QAM	3	56	19.89	19.93	19.93			
1.4	16QAM	6	0	19.96	19.92	19.96		19.2	0
1.4	16QAM	6	14	19.96	19.92	19.91			
1.4	16QAM	6	28	19.94	19.88	19.88		19.2	0
1.4	16QAM	6	56	19.84	19.88	19.88			
1.4	16QAM	12	0	19.92	19.92	19.92			



Band 3R(only on channel required)										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Mod Ch / Freq	Power High Mod Ch / Freq	Power Low Mod Ch / Freq	Power High Mod Ch / Freq	Turn-up limit (dBm)	MPR (dB)	
Channel Frequency (MHz)										
37500 38500 39100										
20	QPSK	1	0	25.35	25.38	25.17		21.7	0	
20	QPSK	1	49	25.11	25.17	25.17				
20	QPSK	1	99	25.15	25.21	25.18				
20	QPSK	50	0	25.35	25.38	25.24		21.7	0	
20	QPSK	50	24	25.35	25.38	25.24				
20	QPSK	50	25	25.35	25.38	25.24				
20	QPSK	100	0	25.35	25.37	25.31				
20	16QAM	1	0	25.15	25.27	25.23		21.7	0	
20	16QAM	1	49	25.10	25.25	25.18				
20	16QAM	1	99	25.19	25.29	25.28				
20	16QAM	50	0	25.15	25.18	25.17				
20	16QAM	50	24	25.15	25.14	25.16		21.7	0	
20	16QAM	50	25	25.14	25.19	25.18				
20	16QAM	100	0	25.15	25.18	25.15				
20	64QAM	1	0	19.96	19.99	19.99		20.7	1	
20	64QAM	1	49	20.06	20.07	20.04				
20	64QAM	1	99	20.11	20.15	20.12				
20	64QAM	50	0	19.80	19.87	19.86		20.7	1	
20	64QAM	50	24	19.85	19.89	19.89				
20	64QAM	50	25	19.84	19.81	19.82				
20	64QAM	100	0	19.88	19.93	19.94				
20	256QAM	1	0	17.51	17.59	17.64		19.3	2.4	
20	256QAM	1	49	17.45	17.44	17.44				
20	256QAM	1	99	17.46	17.44	17.44				
20	256QAM	50	0	17.75	17.81	17.84		19.3	2.4	
20	256QAM	50	24	17.83	17.80	17.87				
20	256QAM	50	25	17.76	17.82	17.85				
20	256QAM	100	0	17.75	17.73	17.73				
Channel Frequency (MHz)										
37525 38525 39125										
15	QPSK	1	0	25.35	25.38	25.17		21.7	0	
15	QPSK	1	37	25.31	25.38	25.11				
15	QPSK	1	74	25.15	25.21	25.18				
15	QPSK	36	0	25.35	25.38	25.24		21.7	0	
15	QPSK	36	20	25.33	25.33	25.34				
15	QPSK	75	0	25.33	25.27	25.31				
15	16QAM	1	0	25.15	25.25	25.23		21.7	0	
15	16QAM	1	37	25.10	25.25	25.18				
15	16QAM	1	74	25.19	25.29	25.28				
15	16QAM	36	0	25.15	25.18	25.17		21.7	0	
15	16QAM	36	20	25.15	25.14	25.16				
15	16QAM	75	0	25.14	25.19	25.18				
15	64QAM	1	0	19.96	19.99	19.99		20.7	1	
15	64QAM	1	37	20.02	20.01	20.04				
15	64QAM	1	74	20.11	20.15	20.12				
15	64QAM	36	0	19.82	19.87	19.86		20.7	1	
15	64QAM	36	20	19.84	19.81	19.82				
15	64QAM	75	0	19.88	19.93	19.94				
15	256QAM	1	0	17.51	17.59	17.64		19.3	2.4	
15	256QAM	1	37	17.45	17.44	17.44				
15	256QAM	1	74	17.46	17.44	17.44				
15	256QAM	36	0	17.83	17.80	17.87		19.3	2.4	
15	256QAM	36	20	17.76	17.82	17.85				
15	256QAM	75	0	17.75	17.73	17.73				
Channel Frequency (MHz)										
37550 38550 39150										
5	QPSK	1	0	25.35	25.37	25.31		21.7	0	
5	QPSK	1	25	25.30	25.18	25.22				
5	QPSK	49	0	25.35	25.38	25.24		21.7	0	
5	QPSK	25	0	25.19	25.33	25.24				
5	QPSK	25	12	25.38	25.36	25.30				
5	QPSK	50	0	25.23	25.32	25.30		21.7	0	
5	16QAM	1	0	25.01	25.38	25.38		21.7	0	
5	16QAM	1	25	25.07	25.39	25.39				
5	16QAM	1	49	25.08	25.38	25.32				
5	16QAM	25	0	25.07	25.30	25.36		21.7	0	
5	16QAM	25	12	25.11	25.15	25.30				
5	16QAM	25	25	25.09	25.27	25.38				
5	64QAM	1	0	25.06	25.37	25.35		20.7	1	
5	64QAM	1	49	25.04	25.33	25.30				
5	64QAM	1	25	19.98	19.87	19.83		20.7	1	
5	64QAM	25	0	19.94	19.85	19.81				
5	64QAM	25	12	19.93	19.87	19.89		20.7	1	
5	64QAM	25	25	19.87	19.80	19.89				
5	64QAM	50	0	19.82	19.81	19.82				
5	256QAM	1	0	17.58	17.64	17.66		19.3	2.4	
5	256QAM	1	24	17.51	17.65	17.62				
5	256QAM	12	0	17.85	17.84	17.85				
5	256QAM	12	7	17.82	17.81	17.80		19.3	2.4	
5	256QAM	12	13	17.73	17.85	17.81				
5	256QAM	25	0	17.82	17.73	17.85				

Band 41 (2.6G Band)-Class 3										
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Mod Ch / Freq	Power High Mod Ch / Freq	Power Low Mod Ch / Freq	Power High Mod Ch / Freq	Turn-up limit (dBm)	MPR (dB)	
Channel Frequency (MHz)										
39750 40185 40600 41055 41460										
20	QPSK	1	0	25.84	25.80	25.73	25.67	25.69	21.7	0
20	QPSK	1	49	25.82	25.84	25.68	25.69	25.82		
20	QPSK	1	99	25.81	25.70	25.74	25.74	25.65		
20	QPSK	50	0	25.78	25.75	25.76	25.75	25.69		
20	QPSK	50	24	25.78	25.83	25.75	25.82	25.70	21.7	0
20	QPSK	50	25	25.78	25.83	25.82	25.82	25.74		
20	QPSK	100	0	25.80	25.83	25.75	25.68	25.70		
20	16QAM	1	0	25.57	25.55	25.52	25.52	25.52	21.7	0
20	16QAM	1	49	25.68	25.57	25.59	25.53	25.67		
20	16QAM	1	99	25.81	25.52	25.54	25.59	25.81		
20	16QAM	50	0	25.53	25.55	25.59	25.59	25.54		
20	16QAM	50	24	25.53	25.52	25.52	25.54	25.51	21.7	0
20	16QAM	50	25	25.59	25.58	25.53	25.57	25.57		
20	16QAM	100	0	25.54	25.51	25.59	25.59	25.50		
20	64QAM	1	0	25.52	25.41	25.53	25.43	25.47	20.7	1
20	64QAM	1	49	25.44	25.46	25.52	25.53	25.41		
20	64QAM	1	99	25.43	25.51	25.59	25.50	25.42		
20	64QAM	50	0	25.52	25.59	25.50	25.51	25.45	20.7	1
20	64QAM	50	24	25.53	25.58	25.50	25.50	25.46		
20	64QAM	50	25	25.57	25.57	25.50	25.50	25.45		
20	64QAM	100	0	25.52	25.59	25.50	25.51	25.45		
20	256QAM	1	0	17.60	17.47	17.42	17.41	17.47	19.3	2.4
20	256QAM	1	49	17.43	17.49	17.54	17.47	17.47		
20	256QAM	1	99	17.47	17.46	17.42	17.48	17.48		
20	256QAM	50	24	17.83	17.83	17.84	17.89	17.88	19.3	2.4
20	256QAM	50	25	17.79	17.86	17.89	17.89	17.89		
20	256QAM	100	0	17.74	17.67	17.67	17.58	17.63		
Channel Frequency (MHz)										
39775 40175 40620 41065 41510										
15	QPSK	1	0	25.58	25.31	25.66	25.52	25.44	21.7	0
15	QPSK	1	37	25.38	25.60	25.49	25.62	25.56		
15	QPSK	1	74	25.42	25.84	25.75	25.75	25.63		
15	QPSK	36	0	25.60	25.71	25.81	25.68	25.51	21.7	0
15	QPSK	36	20	25.69	25.71	25.57	25.75	25.47		
15	QPSK	75	0	25.75	25.78	25.72	25.67	25.49		
15	QPSK	75	0	25.69	25.81	25.78	25.67	25.71		
15	16QAM	1	0	25.50	25.45	25.57	25.57	25.55	21.7	0
15	16QAM	1	37	25.35	25.43	25.31	25.32	25.32		
15	16QAM	1	74	25.38	25.30	25.57	25.37	25.38		
15	16QAM	36	0	25.50	25.55	25.50	25.51	25.35	21.7	0
15	16QAM	36	20	25.35	25.55	25.51	25.49	25.35		
15	16QAM	75	0	25.38	25.53	25.58	25.62	25.51		
15	64QAM	1	0	25.47	25.58	25.58	25.58	25.40	20.7	1
15	64QAM	1	37	25.26	25.44	25.45	25.29	25.36		
15	64QAM	1	74	25.34	25.23	25.29	25.27	25.42	20.7	1
15	64QAM	36	0	25.52	25.55	25.50	25.51	25.34		
15	64QAM	36	20	25.69	25.69	25.61	25.64	25.69		
15	64QAM	75	0	19.84	19.85	19.76	19.79	19.79	20.7	1
15	256QAM	1	0	17.50	17.37	17.42	17.37	17.43	19.3	2.4
15	256QAM	1	37	17.37	17.38	17.50	17.37	17.41		
15	256QAM	1	74	17.52	17.31	17.38	17.37	17.40		
15	256QAM	36	0	17.65	17.55	17.68	17.63	17.49	19.3	2.4
15	256QAM	36	20	17.65	17.43	17.51	17.39	17.46		
15	256QAM	75	0	17.72	17.60	17.55	17.45	17.48	19.3	2.4
15	256QAM	75	20	17.75	17.60	17.58	17.51	17.48		
Channel Frequency (MHz)										
39775 40160 40620 41060 41460										
10	QPSK	1	0	25.30	25.33	25.50	25.51	25.30	21.7	0
10	QPSK	1	25	25.30	25.63	25.70	25.57	25.37		
10	QPSK	1	50	25.52	25.53	25.65	25.67	25.58		
10	QPSK	25	0	25.70	25.64	25.63	25.59	25.68		
10	QPSK	25	12	25.70	25.79	25.64	25.73	25.70	21.7	0
10	QPSK	25	13	25.68	25.79	25.67	25.74	25.74		
10	QPSK	50	0	25.76	25.74	25.67	25.61	25.73		
10	QPSK	50	25	25.69	25.59	25.57	25.53	25.69		
10	16QAM	1	0	25.49	25.55	25.47	25.47	25.28	21.7	0
10	16QAM	1	25	25.41	25.56	25.48	25.47	25.50		
10	16QAM	25	12	25.47	25.43	25.44	25.54	25.36	21.7	0
10	16QAM	25	13	25.53	25.46	25.49	25.58	25.45		
10	64QAM	1	0	25.30	25.34	25.36	25.27	25.33	20.7	1
10	64QAM	1	25	25.36	25.46	25.41	25.34	25.33		
10	64QAM	25	12	25.39	25.41	25.41	25.49	25.34		
10	64QAM	25	13	25.26	25.97	19.99	19.99	19.99		
10	256QAM	1	0	17.50	17.37	17.36	17.42	17.36	20.7	1
10	256QAM	25	12	17.66	17.56	17.63	17.49	17.51		
10	256QAM	25	13	17.66	17.51	17.62	17.58	17.67	19.3	2.4
Channel Frequency (MHz)										
39675 40145 40620 41060 41465										
5	QPSK	1	0	25.30	25.48	25.74	25.63	25.63	21.7	0
5	QPSK	1	12	25.59	25.77	25.65	25.68	25.67		
5	QPSK	1	25	25.52	25.43	25.67	25.67	25.68		
5	QPSK	12	0	25.75	25.51	25.75	25.52	25.68		
5	QPSK	12	7	25.79	25.56	25.70	25.77	25.48	21.7	0
5	QPSK	25	0	25.71	25.67	25.73	25.67	25.74		
5	QPSK	25	0	25.65	25.70	25.76	25.72	25.72		
5	16QAM	1	0	25.44	25.50	25.52	25.46	25.28	21.7	0
5	16QAM	1	12	25.73	25.36	25.62	25.36	25.62		
5	16QAM	1	24	25.38	25.47	25.42	25.39	25.38		
5	16QAM	12	0	25.43	25.51	25.49	25.51	25.41		
5	16QAM	12	7	25.57	25.52	25.56	25.50	25.52		
5	16QAM	25	0	25.48	25.32	25.33	25.49	25.47	20.7	1
5	64QAM	1	0	25.24	25.32	25.33	25.24	25.28	20.7	1
5	64QAM	1	25	25.30	25.21	25.34	25.45	25.34		
5	64QAM	12	0	25.30	25.30	25.31	25.36	25.45	20.7	1
5	64QAM	12	7	25.40	25.30	25.31	25.36	25.24		
5	64QAM	25	0	19.85	19.80	19.78	19.89	19.79		
5	256QAM	1	0	17.67	17.54	17.56	17.47	17.57	19.3	2.4
5	256QAM	12	13	17.67	17.55	17.57	17.59	17.52	19.3	2.4
5	256QAM	25	13	17.72	17.58	17.45	17.45	17.50		
5	256QAM	25	14	17.71	17.58	17.46	17.46	17.53		



Reduced power for Sensor on-LAT

Band		VCDMA-B			Tune-up		VCDMA-IV			Tune-up	
TX Channel	Rx Channel	9882	9900	9938	Link	(dBm)	9932	9950	9988	Link	(dBm)
Frequency (MHz)		1702.4	1700	1707.6			1712.4	1710	1717.6		
SCPP Pkt 90	RAW 12 20bps	19.85	19.72	19.72	20.00		19.81	19.58	19.93		21.00
SCPP Pkt 90	RMC 12 20bps	19.70	19.75	19.87	20.00		19.84	20.00	20.01		21.00
SCPP Rpt6	HS-PA Subcar-1	19.71	19.81	19.70	19.00		19.85	19.08	19.08		20.00
SCPP Rpt6	HS-PA Subcar-2	19.45	19.81	19.87	19.00		19.85	19.00	19.98		20.00
SCPP Rpt6	HS-PA Subcar-3	19.23	19.23	19.17	19.40		19.38	19.07	19.47		19.50
SCPP Rpt6	HS-PA Subcar-4	19.23	19.20	19.23	19.40		19.38	19.53	19.52		19.50
SCPP Rpt6	DC-HSDPA Subcar-1	19.58	19.61	19.46	19.00		19.68	19.35	19.82		20.00
SCPP Rpt6	DC-HSDPA Subcar-2	19.24	19.57	19.50	19.00		19.85	19.81	19.84		20.00
SCPP Rpt6	DC-HSDPA Subcar-3	19.21	19.52	17.08	19.40		19.17	19.59	19.30		19.50
SCPP Rpt6	DC-HSDPA Subcar-4	19.05	19.77	19.00	19.40		19.17	19.00	19.50		19.50
SCPP Rpt6	HS-PA Subcar-1	19.71	19.79	19.72	19.00		19.84	19.01	19.97		20.00
SCPP Rpt6	HS-PA Subcar-2	17.74	17.60	17.03	19.00		17.88	19.00	17.99		19.00
SCPP Rpt6	HS-PA Subcar-3	15.34	15.00	15.05	17.00		15.85	16.00	16.07		15.00
SCPP Rpt6	HS-PA Subcar-4	16.82	16.60	16.80	17.00		17.47	17.60	17.59		18.00
SCPP Rpt6	HS-PA Subcar-5	19.88	19.76	19.82	19.00		19.83	19.00	19.98		20.00
SCPP Pkt 7	HS-PA (12QAM) Subcar-1	19.95	17.04	19.93	18.40		17.42	17.52	17.41		18.50

Band		CDMA-B/C1			Tune-up	
TX Channel	Rx Channel	25	800	1575	Link	(dBm)
Frequency (MHz)		180.25	1800	1808.75		
BC1 BOSS		20.45	20.53	20.49	21.00	
BC1 SOS		20.44	20.51	20.45	21.00	
BC1 BQSD (F+DCH)		20.42	20.50	20.47	21.00	
BC1 BQSD (F+DCH)		20.40	20.48	20.45	21.00	
RETAP 180MHz		20.39	20.46	20.44	21.00	
RETAP 400MHz		20.38	20.45	20.42	21.00	



Band 2 (1900MHz Band) Part 24E														
RV (MHz)	Modulation	RB Size	RB Offset	Power Ch / Freq 1800	Power Ch / Freq 1850	Power Ch / Freq 1900	Turn-up limit (dBm)	MPE (dB)						
Channel														
Frequency (MHz)														
20	QPSK	1	0	18.70	18.63	18.68	19.8	0						
20	QPSK	1	49	18.54	18.65	18.64								
20	QPSK	1	99	18.53	18.67	18.63								
20	QPSK	50	0	18.75	18.74	18.74								
20	QPSK	50	24	18.73	18.75	18.73								
20	QPSK	50	50	18.73	18.75	18.73								
20	16QAM	1	0	18.73	18.71	18.73	19.8	0						
20	16QAM	1	49	18.60	18.75	18.75								
20	16QAM	1	99	18.61	18.68	18.66								
20	16QAM	50	0	18.75	18.74	18.76								
20	16QAM	50	24	18.73	18.77	18.73								
20	16QAM	50	50	18.69	18.63	18.61								
20	16QAM	100	0	18.70	18.71	18.69								
20	16QAM	1	99	18.70	18.76	18.76								
20	64QAM	1	99	18.70	18.76	18.76								
20	64QAM	50	0	18.77	18.76	18.73								
20	64QAM	50	24	18.75	18.79	18.75								
20	64QAM	50	50	18.70	18.71	18.71								
20	256QAM	1	0	17.75	17.87	17.79								
20	256QAM	1	99	17.70	17.82	17.77	19.3	0.5						
20	256QAM	50	0	17.41	17.41	17.37								
20	256QAM	50	24	17.44	17.52	17.47								
20	256QAM	50	50	17.47	17.45	17.46								
20	256QAM	100	0	17.43	17.48	17.42								
Channel														
Frequency (MHz)														
1850	QPSK	1	0	18.60	18.65	18.38	19.8	0						
18	QPSK	1	37	18.52	18.58	18.55								
18	QPSK	1	74	18.52	18.59	18.56								
18	QPSK	36	0	18.74	18.55	18.58								
18	QPSK	36	20	18.68	18.57	18.52								
18	QPSK	36	36	18.58	18.57	18.55								
18	QPSK	75	0	18.45	18.64	18.54								
18	16QAM	1	0	18.48	18.72	18.61	19.8	0						
18	16QAM	1	37	18.53	18.68	18.71								
18	16QAM	1	74	18.42	18.50	18.64								
18	16QAM	36	20	18.48	18.71	18.57								
18	16QAM	36	36	18.49	18.63	18.70								
18	16QAM	75	0	18.58	18.62	18.62								
18	64QAM	1	37	18.53	18.41	18.57	19.8	0						
18	64QAM	1	74	18.46	18.56	18.66								
18	64QAM	36	20	18.75	18.73	18.55								
18	64QAM	36	36	18.59	18.58	18.57								
18	64QAM	75	0	18.78	18.71	18.56								
18	256QAM	1	0	17.50	17.85	17.77								
18	256QAM	1	37	17.65	17.82	17.67	19.3	0.5						
18	256QAM	1	74	17.69	17.87	17.59								
18	256QAM	36	0	17.37	17.51	17.34								
18	256QAM	36	20	17.42	17.48	17.43								
18	256QAM	36	36	17.51	17.49	17.49								
18	256QAM	75	0	17.33	17.54	17.35								
Channel														
Frequency (MHz)														
1850	QPSK	1	0	18.67	18.60	18.55	19.8	0						
18	QPSK	1	25	18.44	18.62	18.43								
18	QPSK	1	49	18.35	18.35	18.35								
18	QPSK	25	0	18.64	18.53	18.64								
18	QPSK	25	12	18.47	18.74	18.59								
18	QPSK	25	25	18.53	18.64	18.66								
18	QPSK	50	0	18.73	18.54	18.63								
18	16QAM	1	25	18.53	18.67	18.68								
18	16QAM	1	49	18.54	18.64	18.53								
18	16QAM	25	12	18.59	18.69	18.66								
18	16QAM	25	25	18.70	18.63	18.61								
18	16QAM	50	0	18.69	18.69	18.66								
18	64QAM	1	0	18.64	18.52	18.53								
18	64QAM	1	25	18.53	18.68	18.57	19.8	0						
18	64QAM	1	49	18.50	18.62	18.61								
18	64QAM	25	0	18.53	18.74	18.61								
18	64QAM	25	12	18.50	18.66	18.68								
18	64QAM	25	25	18.60	18.74	18.65								
18	64QAM	50	0	18.50	18.74	18.65								
18	256QAM	1	0	17.50	17.87	17.55								
18	256QAM	1	25	17.48	17.61	17.52	19.3	0.5						
18	256QAM	1	49	17.74	17.86	17.71								
18	256QAM	25	0	17.58	17.57	17.51								
18	256QAM	25	12	17.46	17.49	17.47								
18	256QAM	25	25	17.62	17.51	17.33								
18	256QAM	50	0	17.46	17.48	17.54								
18	256QAM	50	25	17.43	17.61	17.38								
Channel														
Frequency (MHz)														
1850	QPSK	1	0	18.51	18.58	18.65	19.8	0						
3	QPSK	1	0	18.49	18.72	18.58								
3	QPSK	1	24	18.51	18.71	18.44								
3	QPSK	1	14	18.52	18.53	18.57								
3	QPSK	8	0	18.48	18.55	18.74								
3	QPSK	8	7	18.52	18.52	18.62								
3	QPSK	15	0	18.69	18.59	18.52								
3	16QAM	1	14	18.65	18.74	18.48								
3	16QAM	1	8	18.57	18.52	18.46								
3	16QAM	1	14	18.46	18.47	18.48								
3	16QAM	1	24	18.51	18.71	18.44								
3	16QAM	8	4	18.71	18.71	18.64								
3	16QAM	7	0	18.45	18.62	18.58								
3	16QAM	7	15	18.52	18.58	18.62								
3	16QAM	8	0	18.67	18.76	18.57								
3	16QAM	8	0	18.77	18.48	18.38	19.8	0						
3	16QAM	8	7	18.74	18.74	18.68								
3	16QAM	15	0	18.68	18.53	18.56								
3	256QAM	1	0	17.70	17.79	17.58								
3	256QAM	1	14	17.77	17.86	17.71								
3	256QAM	1	14	17.74	17.74	17.64								
3	256QAM	1	14	17.74	17.74	17.64								
3	256QAM	8	7	17.34	17.55	17.47								
3	256QAM	8	7	17.37	17.32	17.35	19.3	0.5						
3	256QAM	16	0	17.57	17.57	17.57								
Channel														
Frequency (MHz)														
1850	QPSK	1	0	18.40	18.61	18.56	19.8	0						
1.4	QPSK	1	0	18.42	18.59	18.59								
1.4	QPSK	1	5	18.39	18.40	18.51								
1.4	QPSK	1	0	18.50	18.72	18.71								
1.4	QPSK	1	8	18.48	18.58	18.62								
1.4	QPSK	3	3	18.54	18.59	18.56								
1.4	QPSK	1	0	18.73	18.61	18.59	19.8	0						
1.4	QPSK	1	3	18.62	18.63	18.71								
1.4	QPSK	1	3	18.42	18.71	18.68								
1.4	QPSK	1	0	18.63	18.63	18.75								
1.4	QPSK	1	3	18.73	18.72	18.75								
1.4	QPSK	1	3	18.68	18.68	18.62								
1.4	QPSK	6	0	18.57	18.64	18.59	19.8	0						
1.4	QPSK	1	0	18.60	18.67	18.47								
1.4	QPSK	1	3	18.66	18.66	18.63								
1.4	QPSK	3	0	18.59	18.62	18.75								
1.4	QPSK	3	0	18.62	18.68	18.66	19.8	0						
1.4	QPSK	3	0	17.77	17.77	17.73								
1.4	QPSK	1	0	17.74	17.77	17.62	19.3	0.5						
1.4	QPSK	1	3	17.45	17.52	17.43								
1.4	QPSK	1	3	17.56	17.50	17.49								
1.4	QPSK	3	3	17.47	17.48	17.33								
1.4	QPSK	3	3	17.50	17.50	17.46								
1.4	QPSK	3	3	17.47	17.48	17.37	19.3	0.5						

Band 25 (1900MHz Band)										
Part 24E										
RF (MHz)	Modulation	RF Size	RF Offset	Ch. Freq. (MHz)	Ch. Freq. (MHz)	Ch. Freq. (MHz)	Ch. Freq. (MHz)	Turn-on time (sec)	MPR (dB)	
Frequency (MHz)										
20	QPSK	1	0	18.80	18.80	18.80	18.80			
20	QPSK	1	49	18.81	18.78	18.78	18.82	19.8	0	
20	QPSK	1	99	18.58	18.73	18.68	18.74			
20	QPSK	1	149	18.77	18.73	18.73	18.77			
20	QPSK	50	24	18.82	18.83	18.83	18.81			
20	QPSK	50	60	18.80	18.77	18.77	18.77			
20	QPSK	50	100	18.83	18.79	18.79	18.83	19.8	0	
20	QPSK	1	0	18.70	18.70	18.70	18.70			
20	QPSK	1	49	18.67	18.72	18.63	18.75			
20	QPSK	50	0	18.75	18.75	18.75	18.75			
20	QPSK	50	24	18.73	18.71	18.73	18.73			
20	QPSK	50	60	18.75	18.74	18.74	18.76	19.8	0	
20	QPSK	50	100	18.73	18.76	18.76	18.73			
20	QPSK	1	0	18.68	18.68	18.68	18.68			
20	QPSK	1	99	18.70	18.59	18.59	18.74	19.8	0	
20	QPSK	50	0	18.77	18.76	18.76	18.77			
20	QPSK	50	60	18.76	18.76	18.76	18.77	19.8	0	
20	QPSK	50	100	18.73	18.79	18.79	18.76			
20	QPSK	1	0	18.63	18.63	18.63	18.63			
20	QPSK	1	49	18.74	18.61	18.61	18.73	19.8	0.5	
20	QPSK	1	99	18.52	18.59	18.59	18.57			
20	QPSK	50	24	18.53	18.67	18.67	18.47	19.8	0.5	
20	QPSK	50	60	18.55	18.69	18.69	18.53			
20	QPSK	50	100	18.57	18.69	18.69	18.58			
20	QPSK	1	0	18.48	18.48	18.48	18.48			
20	QPSK	1	49	18.73	18.74	18.74	18.73	19.8	0	
20	QPSK	1	99	18.47	18.59	18.59	18.47			
20	QPSK	50	24	18.48	18.62	18.62	18.48	19.8	0	
20	QPSK	50	60	18.48	18.62	18.62	18.48			
20	QPSK	50	100	18.48	18.62	18.62	18.48			
20	QPSK	1	0	18.35	18.35	18.35	18.35			
20	QPSK	1	49	18.36	18.35	18.35	18.37			
20	QPSK	50	24	18.35	18.37	18.37	18.35			
20	QPSK	50	60	18.35	18.37	18.37	18.35			
20	QPSK	50	100	18.35	18.37	18.37	18.35			
20	QPSK	1	0	18.25	18.25	18.25	18.25			
20	QPSK	1	49	18.26	18.25	18.25	18.27			
20	QPSK	50	24	18.25	18.27	18.27	18.25			
20	QPSK	50	60	18.25	18.27	18.27	18.25			
20	QPSK	50	100	18.25	18.27	18.27	18.25			
20	QPSK	1	0	18.15	18.15	18.15	18.15			
20	QPSK	1	49	18.16	18.15	18.15	18.17			
20	QPSK	50	24	18.15	18.17	18.17	18.15			
20	QPSK	50	60	18.15	18.17	18.17	18.15			
20	QPSK	50	100	18.15	18.17	18.17	18.15			
20	QPSK	1	0	18.05	18.05	18.05	18.05			
20	QPSK	1	49	18.06	18.05	18.05	18.07			
20	QPSK	50	24	18.05	18.07	18.07	18.05			
20	QPSK	50	60	18.05	18.07	18.07	18.05			
20	QPSK	50	100	18.05	18.07	18.07	18.05			
20	QPSK	1	0	17.95	17.95	17.95	17.95			
20	QPSK	1	49	17.96	17.95	17.95	17.97			
20	QPSK	50	24	17.95	17.97	17.97	17.95			
20	QPSK	50	60	17.95	17.97	17.97	17.95			
20	QPSK	50	100	17.95	17.97	17.97	17.95			
20	QPSK	1	0	17.85	17.85	17.85	17.85			
20	QPSK	1	49	17.86	17.85	17.85	17.87			
20	QPSK	50	24	17.85	17.87	17.87	17.85			
20	QPSK	50	60	17.85	17.87	17.87	17.85			
20	QPSK	50	100	17.85	17.87	17.87	17.85			
20	QPSK	1	0	17.75	17.75	17.75	17.75			
20	QPSK	1	49	17.76	17.75	17.75	17.77			
20	QPSK	50	24	17.75	17.77	17.77	17.75			
20	QPSK	50	60	17.75	17.77	17.77	17.75			
20	QPSK	50	100	17.75	17.77	17.77	17.75			
20	QPSK	1	0	17.65	17.65	17.65	17.65			
20	QPSK	1	49	17.66	17.65	17.65	17.67			
20	QPSK	50	24	17.65	17.67	17.67	17.65			
20	QPSK	50	60	17.65	17.67	17.67	17.65			
20	QPSK	50	100	17.65	17.67	17.67	17.65			
20	QPSK	1	0	17.55	17.55	17.55	17.55			
20	QPSK	1	49	17.56	17.55	17.55	17.57			
20	QPSK	50	24	17.55	17.57	17.57	17.55			
20	QPSK	50	60	17.55	17.57	17.57	17.55			
20	QPSK	50	100	17.55	17.57	17.57	17.55			
20	QPSK	1	0	17.45	17.45	17.45	17.45			
20	QPSK	1	49	17.46	17.45	17.45	17.47			
20	QPSK	50	24	17.45	17.47	17.47	17.45			
20	QPSK	50	60	17.45	17.47	17.47	17.45			
20	QPSK	50	100	17.45	17.47	17.47	17.45			
20	QPSK	1	0	17.35	17.35	17.35	17.35			
20	QPSK	1	49	17.36	17.35	17.35	17.37			
20	QPSK	50	24	17.35	17.37	17.37	17.35			
20	QPSK	50	60	17.35	17.37	17.37	17.35			
20	QPSK	50	100	17.35	17.37	17.37	17.35			
20	QPSK	1	0	17.25	17.25	17.25	17.25			
20	QPSK	1	49	17.26	17.25	17.25	17.27			
20	QPSK	50	24	17.25	17.27	17.27	17.25			
20	QPSK	50	60	17.25	17.27	17.27	17.25			
20	QPSK	50	100	17.25	17.27	17.27	17.25			
20	QPSK	1	0	17.15	17.15	17.15	17.15			
20	QPSK	1	49	17.16	17.15	17.15	17.17			
20	QPSK	50	24	17.15	17.17	17.17	17.15			
20	QPSK	50	60	17.15	17.17	17.17	17.15			
20	QPSK	50	100	17.15	17.17	17.17	17.15			
20	QPSK	1	0	17.05	17.05	17.05	17.05			
20	QPSK	1	49	17.06	17.05	17.05	17.07			
20	QPSK	50	24	17.05	17.07	17.07	17.05			
20	QPSK	50	60	17.05	17.07	17.07	17.05			
20	QPSK	50	100	17.05	17.07	17.07	17.05			
20	QPSK	1	0	16.95	16.95	16.95	16.95			
20	QPSK	1	49	16.96	16.95	16.95	16.97			
20	QPSK	50	24	16.95	16.97	16.97	16.95			
20	QPSK	50	60	16.95	16.97	16.97	16.95			
20	QPSK	50	100	16.95	16.97	16.97	16.95			
20	QPSK	1	0	16.85	16.85	16.85	16.85			
20	QPSK	1	49	16.86	16.85	16.85	16.87			
20	QPSK	50	24	16.85	16.87	16.87	16.85			
20	QPSK	50	60	16.85	16.87	16.87	16.85			
20	QPSK	50	100	16.85	16.87	16.87	16.85			
20	QPSK	1	0	16.75	16.75	16.75	16.75			
20	QPSK	1	49	16.76	16.75	16.75	16.77			
20	QPSK	50	24	16.75	16.77	16.77	16.75			
20	QPSK	50	60	16.75	16.77	16.77	16.75			
20	QPSK	50	100	16.75	16.77	16.77	16.75			
20	QPSK	1	0	16.65	16.65	16.65	16.65			
20	QPSK	1	49	16.66	16.65	16.65	16.67			
20	QPSK	50	24	16.65	16.67	16.67	16.65			
20	QPSK	50	60	16.65	16.67	16.67	16.65			
20	QPSK	50	100	16.65	16.67	16.67	16.65			
20	QPSK	1	0	16.55	16.55	16.55	16.55			
20	QPSK	1	49	16.56	16.55	16.55	16.57			
20	QPSK	50	24	16.55	16.57	16.57	16.55			
20	QPSK	50	60	16.55	16.57	16.57	16.55			
20	QPSK	50	100	16.55	16.57	16.57	16.55			
20	QPSK	1	0	16.45	16.45	16.45	16.45			
20	QPSK	1	49	16.46	16.45	16.45	16.47			
20	QPSK	50	24	16.45	16.47	16.47	16.45			
20	QPSK	50	60	16.45	16.47	16.47	16.45			
20	QPSK	50	100	16.45	16.47	16.47	16.45			
20	QPSK	1	0	16.35	16.35	16.35	16.35			
20	QPSK	1	49	16.36	16.35	16.35	16.37			
20	QPSK	50	24	16.35	16.37	16.37	16.35			
20	QPSK	50	60	16.35	16.37	16.37	16.35			
20	QPSK	50	100	16.35	16.37	16.37	16.35			
20	QPSK	1	0	16.25	16.25	16.25	16.25			
20	QPSK	1	49	16.26	16.25	16.25	16.27			
20	QPSK	50	24	16.25	16.27	16.27	16.25			
20	QPSK	50	60	16.25	16.27	16.27	16.25			
20	QPSK	50	100	16.25	16.27	16.27	16.25			
20	QPSK	1	0	16.15	16.15	16.15	16.15			
20	QPSK	1	49	16.16	16.15	16.15	16.17			
20	QPSK	50	24	16.15	16.17	16.17	16.15			
20	QPSK	50	60	16.15	16.17	16.17				

Band 30							
RF (MHz)	Modulation	RIS Size	RB Offset	Power Low Ch./Freq.	Power Mid Ch./Freq.	Power High Ch./Freq.	Take-off angle (deg)
Case 1							
Frequency (MHz)							
10	QPSK	1	0	20.10	20.10		
10	QPSK	1	1	20.10	20.10		18.0
10	QPSK	1	49	18.00	18.00		
10	QPSK	25	0	18.00	18.00		
10	QPSK	25	12	18.00	18.00		18.0
10	QPSK	25	25	18.00	18.00		
10	QPSK	50	0	18.00	18.00		
10	QPSK	50	12	18.00	18.00		18.0
10	QPSK	1	25	18.00	18.00		
10	QPSK	1	49	18.00	18.00		18.0
10	QPSK	1	73	18.00	18.00		
10	QPSK	25	12	18.00	18.00		18.0
10	QPSK	25	25	18.00	18.00		
10	QPSK	50	0	18.00	18.00		18.0
10	QPSK	50	12	18.00	18.00		
10	QPSK	1	0	18.00	18.00		18.0
10	QPSK	1	25	18.00	18.00		
10	QPSK	25	0	18.00	18.00		18.0
10	QPSK	25	12	18.00	18.00		
10	QPSK	25	25	18.00	18.00		18.0
10	QPSK	50	0	18.00	18.00		
10	QPSK	50	12	18.00	18.00		18.0
10	QPSK	1	0	17.42	17.42		
10	QPSK	1	49	17.42	17.42		18.0
10	QPSK	25	0	17.42	17.42		
10	QPSK	25	12	17.42	17.42		18.0
10	QPSK	25	25	17.42	17.42		
10	QPSK	50	0	17.42	17.42		18.0
10	QPSK	50	12	17.42	17.42		
Frequency (MHz)							
5	QPSK	1	0	18.00	18.00	17.78	
5	QPSK	1	12	17.94	17.83	18.01	
5	QPSK	1	24	17.88	17.81	17.87	
5	QPSK	12	9	17.78	17.83	18.01	
5	QPSK	12	7	17.87	18.00	17.88	18.0
5	QPSK	12	13	17.80	17.83	18.03	
5	QPSK	25	9	17.79	17.83	17.89	
5	QPSK	1	0	17.88	18.00	18.01	
5	QPSK	1	13	17.83	17.88	18.04	18.0
5	QPSK	1	24	17.87	17.87	18.02	
5	QPSK	12	9	17.88	17.81	17.88	
5	QPSK	12	7	17.87	17.96	18.00	18.0
5	QPSK	12	13	17.80	17.85	18.06	
5	QPSK	25	9	18.04	17.87	17.88	
5	QPSK	1	0	17.88	17.99	17.84	
5	QPSK	1	12	17.81	17.87	18.00	18.0
5	QPSK	1	24	17.85	17.85	17.79	
5	QPSK	12	9	17.86	17.86	17.86	
5	QPSK	12	7	18.08	17.94	17.87	18.0
5	QPSK	12	13	17.93	17.90	17.83	
5	QPSK	25	9	18.00	17.95	18.00	
5	QPSK	1	0	17.96	17.97	17.84	
5	QPSK	1	12	17.42	17.54	17.67	18.0
5	QPSK	1	24	17.58	17.57	17.61	
5	QPSK	12	9	17.56	17.54	17.54	
5	QPSK	12	7	17.50	17.53	17.60	18.0
5	QPSK	12	13	17.67	17.64	17.64	
5	QPSK	25	9	17.68	17.68	17.68	

[illegible]



Full Power for ANTO

Band 2 (1800MHz Band)											
Part 24E											
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq. 1800.0	Power High Ch / Freq. 1800.0	Power Low Ch / Freq. 1800.0	Power High Ch / Freq. 1800.0	Turn-up (dBm)	Turn-down (dBm)	MPE (dB)	
Channel											
Frequency (MHz)											
20	QPSK	1	0	22.87	22.85	22.88					
20	QPSK	1	48	22.86	22.90	22.86	23.0	0			
20	QPSK	1	96	22.82	22.82	22.82					
20	QPSK	80	0	22.01	22.05	21.99					
20	QPSK	50	24	21.93	22.01	21.86	22.8	1			
20	QPSK	50	50	21.96	21.96	21.96					
20	QPSK	100	0	21.96	22.04	22.03					
20	16QAM	1	0	22.25	22.27	22.18	22.8	1			
20	16QAM	1	48	22.22	22.27	22.18					
20	16QAM	1	96	22.16	22.19	22.21					
20	16QAM	50	0	21.03	21.08	21.08	21.8	2			
20	16QAM	50	24	20.95	21.02	21.05					
20	16QAM	50	50	20.98	21.04	20.97					
20	16QAM	100	0	20.96	20.98	21.00					
20	64QAM	1	0	21.17	21.18	21.08					
20	64QAM	1	48	21.13	21.11	21.13	21.8	2			
20	64QAM	1	96	21.04	21.01	21.04					
20	64QAM	50	0	20.05	20.08	20.05					
20	64QAM	50	24	20.02	20.04	20.09	20.8	3			
20	64QAM	50	50	19.98	20.02	19.99					
20	64QAM	100	0	19.98	20.00	20.04					
20	256QAM	1	0	18.00	18.12	18.04					
20	256QAM	1	48	17.97	17.97	17.98	19.3	4.5			
20	256QAM	1	96	17.95	18.03	18.02					
20	256QAM	50	0	17.68	17.68	17.62					
20	256QAM	50	24	17.66	17.77	17.62	19.3	4.5			
20	256QAM	50	50	17.72	17.70	17.71					
20	256QAM	100	0	17.68	17.71	17.67					
Channel											
Frequency (MHz)											
15	QPSK	1	0	18.87	18.90	19.15	23.8	0			
15	QPSK	1	36	22.84	22.89	22.89					
15	QPSK	1	74	22.89	22.89	22.80	23.8	0			
15	QPSK	36	0	21.97	22.03	22.05					
15	QPSK	36	20	22.01	22.01	22.05	22.8	1			
15	QPSK	36	36	21.92	21.97	21.97					
15	QPSK	75	0	21.90	21.96	22.04					
15	16QAM	1	0	22.23	22.25	22.19					
15	16QAM	1	36	22.17	22.25	22.19	22.8	1			
15	16QAM	36	0	20.97	21.03	21.00					
15	16QAM	36	20	21.04	20.98	21.05	21.8	2			
15	16QAM	36	36	20.94	21.02	20.95					
15	16QAM	75	0	20.93	20.97	21.03					
15	64QAM	1	0	21.12	21.16	21.16					
15	64QAM	1	36	21.11	21.15	21.15	21.8	2			
15	64QAM	1	74	21.03	21.04	21.04					
15	64QAM	36	0	20.01	20.11	20.08					
15	64QAM	36	20	20.98	20.98	20.98	20.8	3			
15	64QAM	36	36	19.98	20.02	19.99					
15	64QAM	75	0	19.93	20.00	20.06					
15	256QAM	1	0	17.68	18.02	17.65					
15	256QAM	1	36	17.94	18.11	18.08	19.3	4.5			
15	256QAM	1	74	17.68	17.64	17.72					
15	256QAM	36	0	17.78	17.83	17.74	19.3	4.5			
15	256QAM	36	36	17.66	17.75	17.68					
15	256QAM	75	0	17.66	17.69	17.71					
Channel											
Frequency (MHz)											
10	QPSK	1	0	22.83	22.89	22.83	23.8	0			
10	QPSK	1	25	22.83	22.87	22.84					
10	QPSK	1	48	22.83	22.86	22.82					
10	QPSK	36	0	21.92	22.00	21.98					
10	QPSK	36	12	21.95	21.98	22.02	22.8	1			
10	QPSK	36	24	22.00	21.98	22.02					
10	QPSK	50	0	21.97	21.96	22.01					
10	16QAM	1	0	22.21	22.32	22.22					
10	16QAM	1	25	22.25	22.32	22.24	22.8	1			
10	16QAM	1	48	22.21	22.28	22.23					
10	16QAM	25	0	20.99	21.03	20.99					
10	16QAM	25	12	20.99	21.00	21.04	21.8	2			
10	16QAM	25	25	20.98	20.94	21.01					
10	16QAM	50	0	20.97	20.98	21.02					
10	64QAM	1	0	21.10	21.25	21.19	21.8	2			
10	64QAM	1	25	21.10	21.24	21.15					
10	64QAM	1	48	21.16	21.14	21.02					
10	64QAM	25	0	19.96	20.04	20.01					
10	64QAM	25	12	20.04	20.02	20.06	20.8	3			
10	64QAM	25	25	20.01	20.01	20.03					
10	64QAM	50	0	20.04	19.99	20.05					
10	256QAM	1	0	18.05	18.05	18.05					
10	256QAM	1	25	17.83	17.97	17.87	19.3	4.5			
10	256QAM	25	0	17.76	17.77	17.72					
10	256QAM	25	12	17.65	17.75	17.72	19.3	4.5			
10	256QAM	25	25	17.72	17.64	17.64					
10	256QAM	50	0	17.77	17.70	17.68					
Channel											
Frequency (MHz)											
5	QPSK	1	0	22.83	22.89	22.83	23.8	0			
5	QPSK	1	12	22.89	22.92	22.85					
5	QPSK	1	24	22.86	22.89	22.86					
5	QPSK	12	0	21.92	21.98	21.94					
5	QPSK	12	7	21.86	21.99	21.96	22.8	1			
5	QPSK	12	13	21.96	21.91	21.95					
5	QPSK	25	0	21.93	21.91	21.93					
5	16QAM	1	0	22.19	22.25	22.20					
5	16QAM	1	12	22.22	22.23	22.14	22.8	1			
5	16QAM	1	24	22.21	22.19	22.21					
5	16QAM	12	0	20.96	20.95	20.93					
5	16QAM	12	7	20.96	21.02	20.98	21.8	2			
5	16QAM	12	13	20.94	20.92	20.94					
5	16QAM	25	0	20.97	20.93	20.95					
5	64QAM	1	0	21.11	21.18	21.12					
5	64QAM	1	12	21.09	21.16	21.08	21.8	2			
5	64QAM	1	24	21.16	21.15	21.15					
5	64QAM	12	0	20.01	20.07	20.00					
5	64QAM	12	7	20.04	20.09	20.00	20.8	3			
5	64QAM	12	13	20.01	20.01	20.03					
5	64QAM	25	0	19.94	19.96	19.95					
5	256QAM	1	0	18.01	18.11	18.10	19.3	4.5			
5	256QAM	1	12	17.93	18.08	18.02					
5	256QAM	1	24	17.86	18.03	17.93					
5	256QAM	12	0	17.68	17.75	17.65					
5	256QAM	12	7	17.73	17.84	17.75	19.3	4.5			
5	256QAM	12	13	17.80	17.80	17.78					
5	256QAM	25	0	17.67	17.68	17.60					
Channel											
Frequency (MHz)											
1.4	QPSK	1	0	22.86	22.89	22.81	23.8	0			
1.4	QPSK	1	8	22.87	22.82	22.82					
1.4	QPSK	1	14	22.86	22.85	22.86					
1.4	QPSK	8	0	21.91	21.96	21.90					
1.4	QPSK	8	4	21.95	21.99	21.93	22.8	1			
1.4	QPSK	8	7	21.92	21.95	21.91					
1.4	QPSK	15	0	21.93	21.99	21.96					
1.4	QPSK	15	8	22.17	22.18	22.16	22.8	1			
1.4	16QAM	1	0	22.26	22.30	22.22					
1.4	16QAM	1	8	22.21	22.22	22.14					
1.4	16QAM	1	16	22.18	22.22	22.09	22.8	1			
1.4	16QAM	1	24	22.15	22.19	22.04					
1.4	16QAM	15	0	21.03	21.08	21.08	21.8	2			
1.4	16QAM	15	8	20.94	20.98	21.01					
1.4	16QAM	15	16	20.98	21.01	20.99					
1.4	16QAM	30	0	21.08	21.11	21.07					
1.4	16QAM	30	8	21.11	21.14	21.10	21.8	2			
1.4	16QAM	30	16	21.08	21.12	21.09					
1.4	16QAM	60	0	21.03	21.03	21.03	20.8	3			
1.4	16QAM	60	8	21.04	21.12	21.09					
1.4	16QAM	60	16	21.09	21.09	21.09					
1.4	16QAM	120	0	21.01	21.01	21.01					
1.4	16QAM	120	8	21.01	21.12	21.09	20.8	3			
1.4	16QAM	120	16	21.08	21.18	21.14					
1.4	16QAM	30	0	19.94	19.94	19.94					
1.4	16QAM	30	8	20.01	20.01	20.01					
1.4	16QAM	30	16	20.04	20.04	20.04					
1.4	16QAM	60									



Reduced power level 12/3/4 for Head - Ant0

Band 2 (1900MHz Band)														
Part 24E														
SV (MHz)	Modulation	RB Size	RB Offset	Power Low Ch / Freq	Power High Ch / Freq	Power High Ch / Freq	Tune-up Unit (dB)	MPE (dB)						
Channel														
Frequency (MHz)														
20	QPSK	1	0	18.87	18.93	18.88	19.8	0						
20	QPSK	1	49	18.88	18.90	18.89								
20	QPSK	1	99	18.82	18.85	18.80								
20	QPSK	50	0	18.91	18.91	18.90								
20	QPSK	50	24	18.90	18.91	18.92	19.8	0						
20	QPSK	50	50	18.86	18.87	18.87								
20	QPSK	100	0	18.96	18.96	18.95								
20	16QAM	1	0	18.90	18.91	18.91								
20	16QAM	1	49	18.88	18.88	18.88	19.8	0						
20	16QAM	50	0	18.90	18.90	18.90								
20	16QAM	50	24	18.90	18.87	18.93								
20	16QAM	100	0	18.90	18.93	18.93								
20	16QAM	100	0	18.90	18.93	18.93	19.8	0						
20	16QAM	50	24	18.90	18.87	18.93								
20	16QAM	100	0	18.90	18.93	18.93								
20	16QAM	100	0	18.90	18.93	18.93								
20	64QAM	1	0	18.92	18.93	18.93	19.8	0						
20	64QAM	1	99	18.89	18.88	18.89								
20	64QAM	50	0	18.90	18.93	18.90								
20	64QAM	50	24	18.87	18.90	18.94								
20	64QAM	100	0	18.93	18.95	18.89	19.8	0						
20	256QAM	1	0	17.72	17.74	17.76								
20	256QAM	1	49	17.59	17.79	17.70								
20	256QAM	1	99	17.67	17.78	17.74								
20	256QAM	50	0	17.78	17.78	17.78	19.3	0.5						
20	256QAM	50	24	17.41	17.49	17.44								
20	256QAM	50	50	17.44	17.42	17.43								
20	256QAM	100	0	17.40	17.43	17.43								
Channel														
Frequency (MHz)														
15	QPSK	1	0	18.86	18.91	18.87	19.8	0						
15	QPSK	1	37	18.81	18.86	18.86								
15	QPSK	1	74	18.88	18.86	18.87								
15	QPSK	36	0	18.94	18.90	18.93								
15	QPSK	36	20	18.88	18.88	18.92	19.8	0						
15	QPSK	36	39	18.89	18.94	18.94								
15	QPSK	75	0	18.97	18.93	18.91								
15	16QAM	1	0	18.90	18.92	18.90								
15	16QAM	1	37	18.94	18.92	18.96	19.8	0						
15	16QAM	36	0	18.90	18.90	18.92								
15	16QAM	36	20	18.91	18.95	18.92								
15	16QAM	75	0	18.90	18.94	18.90								
15	64QAM	1	0	18.89	18.93	18.93	19.8	0						
15	64QAM	1	37	18.88	18.93	18.92								
15	64QAM	1	74	18.90	18.91	18.91								
15	64QAM	36	0	18.88	18.88	18.95								
15	64QAM	36	20	18.93	18.92	18.95	19.8	0						
15	64QAM	36	39	18.95	18.89	18.96								
15	64QAM	75	0	18.90	18.97	18.93								
15	256QAM	1	0	17.72	17.76	17.69								
15	256QAM	1	37	17.68	17.85	17.82	19.3	0.5						
15	256QAM	1	74	17.65	17.71	17.79								
15	256QAM	36	0	17.42	17.38	17.48								
15	256QAM	36	20	17.82	17.87	17.48								
15	256QAM	36	39	17.40	17.35	17.51	19.3	0.5						
15	256QAM	75	0	17.40	17.43	17.45								
15	256QAM	75	0	17.40	17.43	17.45								
15	256QAM	75	0	17.40	17.43	17.45								
Channel														
Frequency (MHz)														
10	QPSK	1	0	18.83	18.91	18.83	19.8	0						
10	QPSK	1	24	18.83	18.87	18.84								
10	QPSK	1	49	18.80	18.90	18.82								
10	QPSK	36	0	18.92	18.92	18.88								
10	QPSK	36	20	18.96	18.98	18.92	19.8	0						
10	QPSK	36	39	18.90	18.98	18.92								
10	QPSK	75	0	18.97	18.96	18.91								
10	16QAM	1	0	18.91	18.92	18.92								
10	16QAM	1	24	18.95	18.92	18.94	19.8	0						
10	16QAM	1	49	18.91	18.98	18.93								
10	16QAM	36	0	18.93	18.92	18.93								
10	16QAM	36	20	18.99	18.90	18.94								
10	16QAM	75	0	18.96	18.94	18.91	19.8	0						
10	16QAM	75	0	18.96	18.94	18.91								
10	16QAM	75	0	18.96	18.94	18.91								
10	16QAM	75	0	18.96	18.94	18.91								
10	64QAM	1	0	18.90	18.95	18.95	19.8	0						
10	64QAM	1	24	18.90	18.94	18.94								
10	64QAM	1	49	18.96	18.94	18.92								
10	64QAM	36	0	18.96	18.94	18.91								
10	64QAM	36	20	18.92	18.92	18.92	19.8	0						
10	64QAM	36	39	18.91	18.91	18.93								
10	64QAM	75	0	18.90	18.95	18.95								
10	64QAM	75	0	18.90	18.94	18.95								
10	256QAM	1	0	17.60	17.74	17.78	19.3	0.5						
10	256QAM	1	24	17.46	17.74	17.74								
10	256QAM	36	0	17.47	17.34	17.34								
10	256QAM	36	20	17.82	17.87	17.48								
10	256QAM	36	39	17.40	17.35	17.51	19.3	0.5						
10	256QAM	75	0	17.40	17.43	17.45								
10	256QAM	75	0	17.40	17.43	17.45								
10	256QAM	75	0	17.40	17.43	17.45								
Channel														
Frequency (MHz)														
5	QPSK	1	0	18.83	18.90	18.85	19.8	0						
5	QPSK	1	12	18.82	18.95	18.88								
5	QPSK	1	24	18.89	18.92	18.89								
5	QPSK	12	0	18.93	18.91	18.97								
5	QPSK	12	7	18.91	18.92	18.89	19.8	0						
5	QPSK	12	13	18.99	18.94	18.98								
5	QPSK	25	0	18.96	18.94	18.99								
5	16QAM	1	0	18.92	18.98	18.93								
5	16QAM	1	12	18.96	18.96	18.97	19.8	0						
5	16QAM	1	24	18.94	18.92	18.94								
5	16QAM	12	0	18.99	18.98	18.96								
5	16QAM	12	7	18.98	18.95	18.99								
5	16QAM	12	13	18.97	18.95	18.97	19.8	0						
5	16QAM	25	0	19.00	18.96	18.98								
5	64QAM	1	0	18.94	18.91	18.95								
5	64QAM	1	12	18.92	18.99	18.91								
5	64QAM	1	24	18.99	18.98	18.98	19.8	0						
5	64QAM													



Reduced power for Hotspot on - ANT0

Band 2 (1000MHz Band)										
Part 24E										
RF (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. (MHz)	Power Mode Freq. (MHz)	Power High Freq. (MHz)	Turn-up Int. (dBm)	MPR (dB)		
Channel										
Frequency (MHz)										
20	QPSK	1	0	19.87	19.87	19.88				
20	QPSK	1	49	19.88	19.90	19.88	20.8	0		
20	QPSK	1	99	19.92	19.90	19.88				
20	QPSK	50	0	19.98	19.98	19.98				
20	QPSK	50	24	19.90	19.98	19.98	20.8	0		
20	QPSK	100	0	19.93	19.91	19.90				
20	QPSK	100	0	19.93	19.91	19.90				
20	16QAM	1	0	19.85	19.86	19.86				
20	16QAM	1	49	19.90	19.87	19.88	20.8	0		
20	16QAM	1	99	19.86	19.89	19.91				
20	16QAM	50	0	20.02	19.85	19.84				
20	16QAM	50	24	19.94	20.01	19.97	20.8	0		
20	16QAM	50	50	19.97	20.03	19.98				
20	16QAM	100	0	19.94	19.97	20.01				
20	64QAM	1	0	19.86	19.87	19.87				
20	64QAM	1	49	19.92	19.90	19.92	20.8	0		
20	64QAM	1	99	19.86	19.89	19.91				
20	64QAM	50	0	19.95	19.98	19.95				
20	64QAM	50	24	19.92	19.94	19.99	20.8	0		
20	64QAM	50	50	19.86	19.92	19.91				
20	64QAM	100	0	19.88	19.90	19.94				
20	256QAM	1	0	17.51	17.63	17.65	19.3	1.5		
20	256QAM	1	49	17.78	17.68	17.69				
20	256QAM	1	99	17.86	17.84	17.83				
20	256QAM	50	0	17.57	17.57	17.53	19.3	1.5		
20	256QAM	50	24	17.60	17.68	17.63				
20	256QAM	50	50	17.63	17.61	17.62				
20	256QAM	100	0	17.59	17.62	17.61				
Channel										
Frequency (MHz)										
15	QPSK	1	0	19.87	19.80	19.60.5	Turn-up Int. (dBm)	MPR (dB)		
15	QPSK	1	0	19.89	19.84	19.83				
15	QPSK	1	37	19.84	19.89	19.89	20.8	0		
15	QPSK	1	74	19.89	19.89	19.90				
15	QPSK	36	0	19.84	19.89	19.88	20.8	0		
15	QPSK	36	25	19.98	19.85	19.82				
15	QPSK	36	39	19.89	19.84	19.84				
15	QPSK	75	0	19.87	19.93	19.91				
15	16QAM	1	0	19.80	19.82	19.85				
15	16QAM	1	37	19.84	19.82	19.85	20.8	0		
15	16QAM	1	74	19.82	19.89	19.85				
15	16QAM	36	0	19.93	19.90	19.98				
15	16QAM	36	20	20.00	19.94	19.81	20.8	0		
15	16QAM	36	39	19.90	19.88	19.82				
15	16QAM	75	0	19.89	19.93	19.99				
15	64QAM	1	0	19.85	19.82	19.82				
15	64QAM	1	37	19.87	19.82	19.82	20.8	0		
15	64QAM	1	74	19.99	20.00	20.00				
15	64QAM	36	0	19.86	19.98	19.95				
15	64QAM	36	20	19.93	19.92	19.95	20.8	0		
15	64QAM	36	39	19.85	19.89	19.86				
15	64QAM	75	0	19.89	19.93	19.93				
15	256QAM	1	0	17.86	17.90	17.83	19.3	1.5		
15	256QAM	1	37	17.82	17.89	17.86				
15	256QAM	1	74	17.79	17.85	17.83				
15	256QAM	36	0	17.56	17.52	17.49	19.3	1.5		
15	256QAM	36	20	17.66	17.71	17.62				
15	256QAM	36	39	17.54	17.49	17.46				
15	256QAM	75	0	17.54	17.57	17.59				
Channel										
Frequency (MHz)										
10	QPSK	1	0	19.77	19.75	19.77	Turn-up Int. (dBm)	MPR (dB)		
10	QPSK	1	0	19.77	19.75	19.77				
10	QPSK	1	25	19.77	19.81	19.78				
10	QPSK	1	49	19.74	19.84	19.75	20.8	0		
10	QPSK	25	0	19.83	19.91	19.89				
10	QPSK	25	12	19.86	19.89	19.88				
10	QPSK	25	25	19.91	19.89	19.93	20.8	0		
10	QPSK	50	0	19.88	19.87	19.82				
10	16QAM	1	0	19.82	19.83	19.83				
10	16QAM	1	25	19.76	19.83	19.75	20.8	0		
10	16QAM	1	49	19.82	19.79	19.74				
10	16QAM	25	0	19.83	19.92	19.83				
10	16QAM	25	12	19.89	19.90	19.94	20.8	0		
10	16QAM	25	25	19.96	19.94	19.91				
10	16QAM	50	0	19.87	19.86	19.82				
10	64QAM	1	0	19.80	19.75	19.79	20.8	0		
10	64QAM	1	25	19.82	19.74	19.75				
10	64QAM	1	49	19.76	19.74	19.72				
10	64QAM	25	0	19.77	19.85	19.82	20.8	0		
10	64QAM	25	12	19.83	19.83	19.85				
10	64QAM	25	25	19.92	19.82	19.84				
10	64QAM	50	0	19.85	19.80	19.86				
10	256QAM	1	0	17.59	17.62	17.65	19.3	1.5		
10	256QAM	1	25	17.77	17.91	17.81				
10	256QAM	1	49	17.83	17.91	18.05				
10	256QAM	25	0	17.64	17.81	17.81	19.3	1.5		
10	256QAM	25	12	17.59	17.69	17.69				
10	256QAM	25	25	17.66	17.58	17.66				
10	256QAM	50	0	17.71	17.64	17.64	19.3	1.5		
10	256QAM	50	0	17.71	17.64	17.64				
Channel										
Frequency (MHz)										
5	QPSK	1	0	19.80	19.91	19.82	Turn-up Int. (dBm)	MPR (dB)		
5	QPSK	1	0	19.80	19.91	19.82				
5	QPSK	1	12	19.83	19.86	19.79				
5	QPSK	1	24	19.80	19.83	19.82				
5	QPSK	12	0	19.81	19.89	19.85				
5	QPSK	12	7	19.89	19.90	19.87	20.8	0		
5	QPSK	12	19	19.87	19.82	19.88				
5	QPSK	25	0	19.84	19.82	19.84				
5	16QAM	1	0	19.80	19.76	19.81				
5	16QAM	1	12	19.83	19.74	19.77	20.8	0		
5	16QAM	1	24	19.82	19.80	19.82				
5	16QAM	12	0	19.86	19.80	19.83				
5	16QAM	12	7	19.85	19.92	19.89	20.8	0		
5	16QAM	12	13	19.84	19.82	19.84				
5	16QAM	25	0	19.87	19.83	19.86				
5	64QAM	1	0	19.81	19.76	19.82	20.8	0		
5	64QAM	1	12	19.79	19.76	19.76				
5	64QAM	1	24	19.76	19.76	19.75				
5	64QAM	12	0	19.82	19.85	19.81				
5	64QAM	12	7	19.85	19.90	19.81	20.8	0		
5	64QAM	12	13	19.82	19.83	19.84				
5	64QAM	25	0	19.75	19.77	19.76				
5	256QAM	1	0	17.83	17.83	17.82	19.3	1.5		
5	256QAM	1	12	17.75	17.90	17.84				
5	256QAM	1	24	17.88	17.85	17.79				
5	256QAM	12	0	17.58	17.57	17.55	19.3	1.5		
5	256QAM	12	7	17.65	17.66	17.58				
5	256QAM	12	13	17.62	17.42	17.49				
5	256QAM	25		17.48	17.48	17.48				
Channel										
Frequency (MHz)										
3	QPSK	1	0	19.87	19.80	19.60.5	Turn-up Int. (dBm)	MPR (dB)		
3	QPSK	1	0	19.87	19.80	19.60.5				
3	QPSK	1	8	19.84	19.81	19.78	20.8	0		
3	QPSK	1	14	19.80	19.80	19.79				
3	QPSK	8	0	19.81	19.81	19.81	20.8	0		
3	QPSK	8	7	19.82	19.83	19.81				
3	QPSK	8	14	19.85	19.84	19.81				
3	QPSK	16	0	19.77	19.78	19.79				
3	16QAM	1	0	19.78	19.77	19.77	20.8	0		
3	16QAM	1	8	19.83	19.77	19.81				
3	16QAM	1	14	19.79	19.82	19.83				
3	16QAM	8	0	19.83	19.87	19.91				
3	16QAM	8	7	19.86	19.89	19.90				
3	16QAM	8	14	19.91	19.90	19.92				
3	64QAM	1	0	19.84	19.86	19.81	20.8	0		
3	64QAM	1	8	19.83	19.85	19.86				
3	64QAM	1	14	19.82	19.76	19.79				
3	64QAM	8	0	19.89	19.83	19.87	20.8	0		
3	64QAM	8	7	19.92	19.78	19.79				
3	64QAM	8	14	19.92	19.90	19.92				
3	256QAM	1	0	17.81	17.80	17.80				
3	256QAM	1	8	17.82	17.73	17.80	19.3	1.5		
3	256QAM	1	14	17.83	17.77	17.78				
3	256QAM	8	0	17.45	17.42	17.46				
3	256QAM	8	7	17.47	17.50	17.52	19.3	1.5		
3	256QAM	8	14	17.48	17.40	17.43				
3	256QAM	15	0	17.48	17.40	17.43				
Channel										
Frequency (MHz)										
1.4	QPSK	1	0	19.82	19.88	19.77	Turn-up Int. (dBm)	MPR (dB)		
1.4	QPSK	1	0	19.82	19.88	19.77				
1.4	QPSK	1	8	19.76	19.84	19.78	20.8	0		
1.4	QPSK	1	14	19.80	19.80	19.79				
1.4	QPSK	3	0	19.87	19.83	19.85	20.8	0		
1.4	QPSK	3	7	19.84	19.82	19.86				



SPORTON LAB

CA_66C											
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					
132072	132270	QPSK	1	0	0	0	1	0	Full	22.25	22.80
132322	132124	QPSK	1	0	0	0	1	0	Full	22.34	22.80
132572	132374	QPSK	1	0	0	0	1	0	Full	22.24	22.80
132072	132270	QPSK	50	0	0	0	1	0	Full	21.42	21.80
132322	132124	QPSK	50	0	0	0	1	0	Full	21.52	21.80
132572	132374	QPSK	50	0	0	0	1	0	Full	21.35	21.80
132072	132270	QPSK	100	0	0	0	1	0	Full	21.42	21.80
132322	132124	QPSK	100	0	0	0	1	0	Full	21.35	21.80
132572	132374	QPSK	100	0	0	0	1	0	Full	21.36	21.80
132072	132270	QPSK	1	0	0	0	1	0	Reduced	18.14	19.20
132322	132124	QPSK	1	0	0	0	1	0	Reduced	18.23	19.20
132572	132374	QPSK	1	0	0	0	1	0	Reduced	18.17	19.20
132072	132270	QPSK	50	0	0	0	1	0	Reduced	19.72	20.50
132322	132124	QPSK	50	0	0	0	1	0	Reduced	19.76	20.50
132572	132374	QPSK	50	0	0	0	1	0	Reduced	19.71	20.50

CA_41C-Class 3											
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	49	0	0	1	0	Full	22.55	23.80
39750	39948	QPSK	1	49	0	0	1	0	Full	22.55	23.80
40185	39987	QPSK	1	49	0	0	1	0	Full	22.68	23.80
40620	40422	QPSK	1	49	0	0	1	0	Full	22.64	23.80
41055	40857	QPSK	1	49	0	0	1	0	Full	22.65	23.80
41490	41292	QPSK	1	49	0	0	1	0	Full	22.57	23.80
39790	39988	QPSK	50	50	0	0	1	0	Full	21.62	22.80
39750	39948	QPSK	50	50	0	0	1	0	Full	21.59	22.80
40185	39987	QPSK	50	50	0	0	1	0	Full	21.76	22.80
40620	40422	QPSK	50	50	0	0	1	0	Full	21.71	22.80
41055	40857	QPSK	50	50	0	0	1	0	Full	21.73	22.80
41490	41292	QPSK	50	50	0	0	1	0	Full	21.70	22.80
39790	39988	QPSK	100	0	0	0	1	0	Full	21.58	22.80
39750	39948	QPSK	100	0	0	0	1	0	Full	21.57	22.80
40185	39987	QPSK	100	0	0	0	1	0	Full	21.74	22.80
40620	40422	QPSK	100	0	0	0	1	0	Full	21.70	22.80
41055	40857	QPSK	100	0	0	0	1	0	Full	21.65	22.80
41490	41292	QPSK	100	0	0	0	1	0	Full	21.68	22.80
39790	39988	QPSK	50	50	0	0	1	0	Reduced	20.63	21.70
39750	39948	QPSK	50	50	0	0	1	0	Reduced	20.60	21.70
40185	39987	QPSK	50	50	0	0	1	0	Reduced	20.74	21.70
40620	40422	QPSK	50	50	0	0	1	0	Reduced	20.71	21.70
41055	40857	QPSK	50	50	0	0	1	0	Reduced	20.72	21.70
41490	41292	QPSK	50	50	0	0	1	0	Reduced	20.68	21.70

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	49	0	0	1	0	Full	24.61	25.60
39750	39948	QPSK	1	49	0	0	1	0	Full	24.60	25.60
40185	39987	QPSK	1	49	0	0	1	0	Full	24.72	25.60
40620	40422	QPSK	1	49	0	0	1	0	Full	24.70	25.60
41055	40857	QPSK	1	49	0	0	1	0	Full	24.63	25.60
41490	41292	QPSK	1	49	0	0	1	0	Full	24.62	25.60
39790	39988	QPSK	50	50	0	0	1	0	Full	23.68	24.60
39750	39948	QPSK	50	50	0	0	1	0	Full	23.73	24.60
40185	39987	QPSK	50	50	0	0	1	0	Full	23.83	24.60
40620	40422	QPSK	50	50	0	0	1	0	Full	23.81	24.60
41055	40857	QPSK	50	50	0	0	1	0	Full	23.80	24.60
41490	41292	QPSK	50	50	0	0	1	0	Full	23.77	24.60
39790	39988	QPSK	100	0	0	0	1	0	Full	23.71	24.60
39750	39948	QPSK	100	0	0	0	1	0	Full	23.69	24.60
40185	39987	QPSK	100	0	0	0	1	0	Full	23.90	24.60
40620	40422	QPSK	100	0	0	0	1	0	Full	23.85	24.60
41055	40857	QPSK	100	0	0	0	1	0	Full	23.79	24.60
41490	41292	QPSK	100	0	0	0	1	0	Full	23.73	24.60
39790	39988	QPSK	50	50	0	0	1	0	Reduced	22.20	23.30
39750	39948	QPSK	50	50	0	0	1	0	Reduced	22.23	23.30
40185	39987	QPSK	50	50	0	0	1	0	Reduced	22.38	23.30
40620	40422	QPSK	50	50	0	0	1	0	Reduced	22.35	23.30
41055	40857	QPSK	50	50	0	0	1	0	Reduced	22.34	23.30
41490	41292	QPSK	50	50	0	0	1	0	Reduced	22.27	23.30

CA 48C-FCC												
Combination 20MHz+20MHz (100RB+100RB)												
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	MPR Lev	Power Reduction	Measured Power (dBm)	Tune up Power (dBm)	
			RB Size	RB offset	RB Size	RB offset						
55340	55538	QPSK	1	0	0	0	1	0	Full	5.51	7.5	
55830	55632	QPSK	1	0	0	0	1	0	Full	5.70	7.5	
56150	55952	QPSK	1	0	0	0	1	0	Full	5.64	7.5	
56640	56442	QPSK	1	0	0	0	1	0	Full	5.72	7.5	
55340	55538	QPSK	50	24	0	0	1	0	Full	18.88	20.8	
55830	55632	QPSK	50	24	0	0	1	0	Full	19.13	20.8	
56150	55952	QPSK	50	24	0	0	1	0	Full	19.10	20.8	
56640	56442	QPSK	50	24	0	0	1	0	Full	19.16	20.8	
55340	55538	QPSK	100	0	0	0	1	0	Full	18.85	20.8	
55830	55632	QPSK	100	0	0	0	1	0	Full	19.10	20.8	
56150	55952	QPSK	100	0	0	0	1	0	Full	18.06	20.8	
56640	56442	QPSK	100	0	0	0	1	0	Full	19.13	20.8	
55340	55538	QPSK	1	0	0	0	1	0	Reduced Power level 1	5.51	7.5	
55830	55632	QPSK	1	0	0	0	1	0	Reduced Power level 1	5.70	7.5	
56150	55952	QPSK	1	0	0	0	1	0	Reduced Power level 1	5.64	7.5	
56640	56442	QPSK	1	0	0	0	1	0	Reduced Power level 1	5.72	7.5	
55340	55538	QPSK	50	24	0	0	1	0	Reduced Power level 1	17.03	18.1	
55830	55632	QPSK	50	24	0	0	1	0	Reduced Power level 1	17.20	18.1	
56150	55952	QPSK	50	24	0	0	1	0	Reduced Power level 1	17.18	18.1	
56640	56442	QPSK	50	24	0	0	1	0	Reduced Power level 1	17.27	18.1	
55340	55538	QPSK	100	0	0	0	1	0	Reduced Power level 1	17.00	18.1	
55830	55632	QPSK	100	0	0	0	1	0	Reduced Power level 1	17.17	18.1	
56150	55952	QPSK	100	0	0	0	1	0	Reduced Power level 1	17.15	18.1	
56640	56442	QPSK	100	0	0	0	1	0	Reduced Power level 1	17.22	18.1	
55340	55538	QPSK	1	0	0	0	1	0	Reduced Power level 2	5.51	7.5	
55830	55632	QPSK	1	0	0	0	1	0	Reduced Power level 2	5.70	7.5	
56150	55952	QPSK	1	0	0	0	1	0	Reduced Power level 2	5.64	7.5	
56640	56442	QPSK	1	0	0	0	1	0	Reduced Power level 2	5.72	7.5	
55340	55538	QPSK	50	24	0	0	1	0	Reduced Power level 2	15.95	17.2	
55830	55632	QPSK	50	24	0	0	1	0	Reduced Power level 2	16.08	17.2	
56150	55952	QPSK	50	24	0	0	1	0	Reduced Power level 2	16.03	17.2	
56640	56442	QPSK	50	24	0	0	1	0	Reduced Power level 2	16.10	17.2	
55340	55538	QPSK	100	0	0	0	1	0	Reduced Power level 2	15.93	17.2	
55830	55632	QPSK	100	0	0	0	1	0	Reduced Power level 2	16.11	17.2	
56150	55952	QPSK	100	0	0	0	1	0	Reduced Power level 2	16.00	17.2	
56640	56442	QPSK	100	0	0	0	1	0	Reduced Power level 2	16.07	17.2	
55340	55538	QPSK	1	0	0	0	1	0	Reduced Power level 3/4	5.51	7.5	
55830	55632	QPSK	1	0	0	0	1	0	Reduced Power level 3/4	5.70	7.5	
56150	55952	QPSK	1	0	0	0	1	0	Reduced Power level 3/4	5.64	7.5	
56640	56442	QPSK	1	0	0	0	1	0	Reduced Power level 3/4	5.72	7.5	
55340	55538	QPSK	50	24	0	0	1	0	Reduced Power level 3/4	13.55	14.7	
55830	55632	QPSK	50	24	0	0	1	0	Reduced Power level 3/4	13.73	14.7	
56150	55952	QPSK	50	24	0	0	1	0	Reduced Power level 3/4	13.75	14.7	
56640	56442	QPSK	50	24	0	0	1	0	Reduced Power level 3/4	13.80	14.7	
55340	55538	QPSK	100	0	0	0	1	0	Reduced Power level 3/4	13.52	14.7	
55830	55632	QPSK	100	0	0	0	1	0	Reduced Power level 3/4	13.70	14.7	
56150	55952	QPSK	100	0	0	0	1	0	Reduced Power level 3/4	13.73	14.7	
56640	56442	QPSK	100	0	0	0	1	0	Reduced Power level 3/4	13.77	14.7	
55340	55538	QPSK	1	0	0	0	1	0	Reduced	5.51	7.5	
55830	55632	QPSK	1	0	0	0	1	0	Reduced	5.70	7.5	
56150	55952	QPSK	1	0	0	0	1	0	Reduced	5.64	7.5	
56640	56442	QPSK	1	0	0	0	1	0	Reduced	5.72	7.5	
55340	55538	QPSK	50	24	0	0	1	0	Reduced	15.97	17.1	
55830	55632	QPSK	50	24	0	0	1	0	Reduced	16.15	17.1	
56150	55952	QPSK	50	24	0	0	1	0	Reduced	16.06	17.1	
56640	56442	QPSK	50	24	0	0	1	0	Reduced	16.17	17.1	
55340	55538	QPSK	100	0	0	0	1	0	Reduced	15.95	17.1	
55830	55632	QPSK	100	0	0	0	1	0	Reduced	16.13	17.1	
56150	55952	QPSK	100	0	0	0	1	0	Reduced	16.03	17.1	
56640	56442	QPSK	100	0	0	0	1	0	Reduced	16.15	17.1	



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)
			RB Size	RB offset	RB Size	RB offset					
18700	20050	QPSK	1	0	1	0	21.91	16.91	23.10	22.70	17.50
			1	49	1	49	21.94	16.37	23.00	22.70	17.50
			1	99	1	99	21.99	16.87	23.15	22.70	17.50
			50	0	50	0	21.21	18.23	22.98	21.80	19.50
			50	24	50	24	21.16	18.13	22.91	21.80	19.50
			50	50	50	50	21.25	18.03	22.94	21.80	19.50
			100	0	100	0	21.22	18.11	22.95	21.80	19.50
18900	20175	QPSK	1	0	1	0	21.98	16.11	22.98	22.70	17.50
			1	49	1	49	22.23	16.12	23.18	22.70	17.50
			1	99	1	99	21.96	16.19	22.98	22.70	17.50
			50	0	50	0	21.37	18.27	23.10	21.80	19.50
			50	24	50	24	21.38	18.18	23.08	21.80	19.50
			50	50	50	50	21.05	18.32	22.91	21.80	19.50
			100	0	100	0	21.23	18.29	23.01	21.80	19.50
19100	20300	QPSK	1	0	1	0	21.91	16.87	23.09	22.70	17.50
			1	49	1	49	21.88	16.32	22.95	22.70	17.50
			1	99	1	99	21.95	16.64	23.07	22.70	17.50
			50	0	50	0	21.20	18.11	22.93	21.80	19.50
			50	24	50	24	21.13	18.15	22.90	21.80	19.50
			50	50	50	50	21.25	18.18	22.99	21.80	19.50
			100	0	100	0	21.20	18.14	22.94	21.80	19.50

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)
			RB Size	RB offset	RB Size	RB offset					
18700	132072	QPSK	1	0	1	0	21.54	16.98	22.84	22.7	17.5
			1	49	1	49	21.68	17.09	22.98	22.7	17.5
			1	99	1	99	21.72	16.87	22.95	22.7	17.5
			50	0	50	0	20.87	18.77	22.96	21.8	19.5
			50	24	50	24	20.96	18.72	22.99	21.8	19.5
			50	50	50	50	21.01	18.76	23.04	21.8	19.5
			100	0	100	0	20.91	18.64	22.93	21.8	19.5
18900	132322	QPSK	1	0	1	0	21.68	17.18	23.00	22.7	17.5
			1	49	1	49	21.64	17.13	22.96	22.7	17.5
			1	99	1	99	21.71	16.99	22.97	22.7	17.5
			50	0	50	0	20.89	18.85	23.00	21.8	19.5
			50	24	50	24	21.09	18.85	23.12	21.8	19.5
			50	50	50	50	20.97	18.71	23.00	21.8	19.5
			100	0	100	0	20.96	18.73	23.00	21.8	19.5
19100	132572	QPSK	1	0	1	0	21.57	16.98	22.87	22.7	17.5
			1	49	1	49	21.63	17.17	22.96	22.7	17.5
			1	99	1	99	21.64	16.87	22.89	22.7	17.5
			50	0	50	0	20.77	18.88	22.94	21.8	19.5
			50	24	50	24	20.96	18.92	23.07	21.8	19.5
			50	50	50	50	20.91	18.68	22.95	21.8	19.5
			100	0	100	0	21.03	18.75	23.05	21.8	19.5

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)
			RB Size	RB offset	RB Size	RB offset					
20050	18700	QPSK	1	0	1	0	21.71	15.82	22.71	22.7	17.5
			1	49	1	49	21.62	15.89	22.65	22.7	17.5
			1	99	1	99	21.88	16.23	22.93	22.7	17.5
			50	0	50	0	20.87	18.38	22.81	21.8	19.5
			50	24	50	24	20.81	18.65	22.87	21.8	19.5
			50	50	50	50	20.98	18.61	22.97	21.8	19.5
			100	0	100	0	20.87	18.73	22.94	21.8	19.5
20175	18900	QPSK	1	0	1	0	21.63	15.76	22.63	22.7	17.5
			1	49	1	49	21.53	16.05	22.61	22.7	17.5
			1	99	1	99	21.98	16.14	22.99	22.7	17.5
			50	0	50	0	20.95	18.45	22.89	21.8	19.5
			50	24	50	24	20.78	18.77	22.90	21.8	19.5
			50	50	50	50	20.86	18.65	22.90	21.8	19.5
			100	0	100	0	20.99	18.65	22.99	21.8	19.5
20300	19100	QPSK	1	0	1	0	21.78	15.87	22.77	22.7	17.5
			1	49	1	49	21.58	16.17	22.66	22.7	17.5
			1	99	1	99	21.79	16.26	22.86	22.7	17.5
			50	0	50	0	20.99	18.27	22.85	21.8	19.5
			50	24	50	24	20.85	18.86	22.98	21.8	19.5
			50	50	50	50	20.97	18.78	23.02	21.8	19.5
			100	0	100	0	21.02	18.51	22.95	21.8	19.5

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)
			RB Size	RB offset	RB Size	RB offset					
132072	18700	QPSK	1	0	1	0	21.94	15.97	22.92	22.70	17.50
			1	49	1	49	21.67	16.09	22.73	22.70	17.50
			1	99	1	99	21.66	15.87	22.68	22.70	17.50
			50	0	50	0	20.58	18.73	22.76	21.80	19.50
			50	24	50	24	20.73	18.61	22.81	21.80	19.50
			50	50	50	50	20.69	18.84	22.87	21.80	19.50
			100	0	100	0	20.71	18.58	22.78	21.80	19.50
132322	18900	QPSK	1	0	1	0	21.89	15.99	22.88	22.70	17.50
			1	49	1	49	21.53	16.13	22.63	22.70	17.50
			1	99	1	99	21.72	15.76	22.70	22.70	17.50
			50	0	50	0	20.71	18.68	22.82	21.80	19.50
			50	24	50	24	20.64	18.66	22.77	21.80	19.50
			50	50	50	50	20.88	18.71	22.94	21.80	19.50
			100	0	100	0	20.89	18.46	22.85	21.80	19.50
132572	19100	QPSK	1	0	1	0	21.94	15.72	22.87	22.70	17.50
			1	49	1	49	21.75	16.03	22.78	22.70	17.50
			1	99	1	99	21.65	15.89	22.67	22.70	17.50
			50	0	50	0	20.89	18.71	22.95	21.80	19.50
			50	24	50	24	20.77	18.78	22.90	21.80	19.50
			50	50	50	50	20.76	18.64	22.84	21.80	19.50
			100	0	100	0	20.94	18.57	22.93	21.80	19.50



CA_2A-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)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset						
18700	23060	QPSK	1	0	1	0	21.86	16.67	23.01	22.7	17.5	23.8
			1	49	1	25	21.89	16.74	23.05	22.7	17.5	23.8
			1	99	1	49	21.78	16.38	22.88	22.7	17.5	23.8
			50	0	25	0	20.87	18.79	22.96	21.8	19.5	23.8
			50	24	25	12	20.84	18.96	23.01	21.8	19.5	23.8
			50	50	25	25	20.98	18.43	22.90	21.8	19.5	23.8
18900	23095	QPSK	100	0	50	0	20.92	18.61	22.93	21.8	19.5	23.8
			1	0	1	0	21.99	16.76	23.13	22.7	17.5	23.8
			1	49	1	25	21.81	16.61	22.96	22.7	17.5	23.8
			1	99	1	49	21.72	16.26	22.81	22.7	17.5	23.8
			50	0	25	0	20.92	18.77	22.99	21.8	19.5	23.8
			50	24	25	12	20.91	18.84	23.01	21.8	19.5	23.8
19100	23130	QPSK	50	50	25	25	20.94	18.35	22.85	21.8	19.5	23.8
			100	0	50	0	20.89	18.61	22.91	21.8	19.5	23.8
			1	0	1	0	21.87	16.65	23.01	22.7	17.5	23.8
			1	49	1	25	21.93	16.69	23.07	22.7	17.5	23.8
			1	99	1	49	21.75	16.34	22.85	22.7	17.5	23.8
			50	0	25	0	20.98	18.84	23.05	21.8	19.5	23.8
			50	24	25	12	20.86	18.73	22.93	21.8	19.5	23.8
			50	50	25	25	20.87	18.53	22.87	21.8	19.5	23.8
			100	0	50	0	20.78	18.56	22.82	21.8	19.5	23.8

CA_2A-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)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset						
18700	23230	QPSK	1	0	1	0	21.90	16.54	23.01	22.7	17.5	23.8
			1	49	1	25	21.86	16.68	23.01	22.7	17.5	23.8
			1	99	1	49	21.84	16.84	23.03	22.7	17.5	23.8
			50	0	25	0	20.97	18.52	22.93	21.8	19.5	23.8
			50	24	25	12	21.11	18.52	23.02	21.8	19.5	23.8
			50	50	25	25	21.12	18.49	23.01	21.8	19.5	23.8
18900	23230	QPSK	100	0	50	0	21.02	18.37	22.90	21.8	19.5	23.8
			1	0	1	0	21.67	17.13	22.96	22.7	17.5	23.8
			1	49	1	25	21.82	17.12	23.09	22.7	17.5	23.8
			1	99	1	49	21.66	17.04	22.95	22.7	17.5	23.8
			50	0	25	0	20.81	18.46	22.80	21.8	19.5	23.8
			50	24	25	12	20.67	18.42	22.70	21.8	19.5	23.8
19100	23230	QPSK	50	50	25	25	20.94	18.57	22.93	21.8	19.5	23.8
			100	0	50	0	20.94	18.54	22.91	21.8	19.5	23.8
			1	0	1	0	21.85	16.81	23.03	22.7	17.5	23.8
			1	49	1	25	21.96	16.45	23.04	22.7	17.5	23.8
			1	99	1	49	21.90	16.50	23.00	22.7	17.5	23.8
			50	0	25	0	21.02	18.37	22.90	21.8	19.5	23.8
			50	24	25	12	20.96	18.43	22.89	21.8	19.5	23.8
			50	50	25	25	20.93	18.45	22.87	21.8	19.5	23.8
			100	0	50	0	21.01	18.49	22.94	21.8	19.5	23.8

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	21.99	16.70	23.12	22.7	17.5	23.8
			1	25	1	49	21.75	16.65	22.92	22.7	17.5	23.8
			1	49	1	99	21.63	16.49	22.79	22.7	17.5	23.8
			25	0	50	0	21.12	18.78	23.12	21.8	19.5	23.8
			25	12	50	24	21.04	18.86	23.10	21.8	19.5	23.8
			25	25	50	50	20.78	18.86	22.94	21.8	19.5	23.8
23095	18900	QPSK	50	0	100	0	21.01	18.78	23.05	21.8	19.5	23.8
			1	0	1	0	21.80	16.42	22.91	22.7	17.5	23.8
			1	25	1	49	21.52	16.10	22.62	22.7	17.5	23.8
			1	49	1	99	21.03	16.27	22.28	22.7	17.5	23.8
			25	0	50	0	20.87	18.65	22.91	21.8	19.5	23.8
			25	12	50	24	20.62	18.71	22.78	21.8	19.5	23.8
23130	19100	QPSK	25	25	50	50	20.80	18.68	22.88	21.8	19.5	23.8
			50	0	100	0	20.54	18.67	22.72	21.8	19.5	23.8
			1	0	1	0	21.46	16.27	22.61	22.7	17.5	23.8
			1	25	1	49	21.47	16.36	22.64	22.7	17.5	23.8
			1	49	1	99	20.42	16.98	22.04	22.7	17.5	23.8
			25	0	50	0	20.90	18.75	22.97	21.8	19.5	23.8
			25	12	50	24	20.64	18.67	22.78	21.8	19.5	23.8
			25	25	50	50	20.41	18.78	22.68	21.8	19.5	23.8
			50	0	100	0	20.59	18.78	22.79	21.8	19.5	23.8

CA_13A-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						
23230	18700	QPSK	1	0	1	0	21.78	16.76	22.97	22.7	17.5	23.8
			1	25	1	49	22.04	16.55	23.12	22.7	17.5	23.8
			1	49	1	99	22.12	16.51	23.17	22.7	17.5	23.8
			25	0	50	0	20.93	18.61	22.93	21.8	19.5	23.8
			25	12	50	24	21.03	18.61	23.00	21.8	19.5	23.8
			25	25	50	50	21.15	18.48	23.03	21.8	19.5	23.8
23230	18900	QPSK	50	0	100	0	21.02	18.56	22.97	21.8	19.5	23.8
			1	0	1	0	21.66	16.78	22.88	22.7	17.5	23.8
			1	25	1	49	21.91	16.62	23.04	22.7	17.5	23.8
			1	49	1	99	21.94	16.45	23.02	22.7	17.5	23.8
			25	0	50	0	20.89	18.67	22.93	21.8	19.5	23.8
			25	12	50	24	20.87	18.62	22.90	21.8	19.5	23.8
23230	19100	QPSK	25	25	50	50	20.86	18.56	22.87	21.8	19.5	23.8
			50	0	100	0	21.12	18.36	22.97	21.8	19.5	23.8
			1	0	1	0	21.58	16.69	22.80	22.7	17.5	23.8
			1	25	1	49	21.78	16.73	22.96	22.7	17.5	23.8
			1	49	1	99	21.82	16.54	22.95	22.7	17.5	23.8
			25	0	50	0	20.95	18.75	23.00	21.8	19.5	23.8
23230	19100	QPSK	25	12	50	24	20.93	18.57	22.92	21.8	19.5	23.8
			25	25	50	50	21.05	18.69	23.00	21.8	19.5	23.8
			50	0	100	0	21.01	18.47	22.93	21.8	19.5	23.8

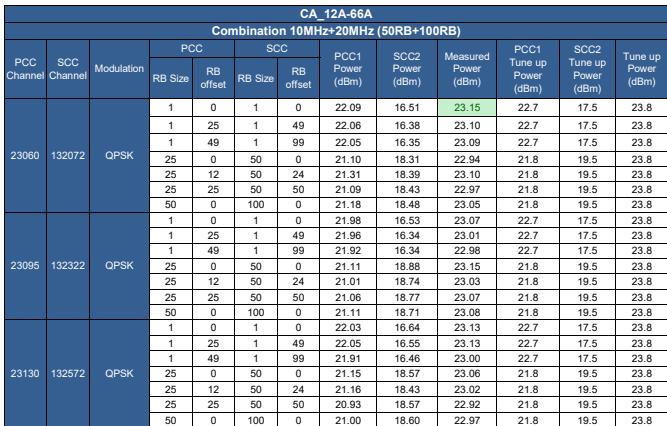


CA_4A-12A												
Combination 20MHz+10MHz (100RB+50RB)												
PCC Channel	SCC Channel	Modulation	PCC		SCC		PCC1 Power (dBm)	SCC2 Power (dBm)	Measured Power (dBm)	PCC1 Tune up Power (dBm)	SCC2 Tune up Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset						
20050	23060	QPSK	1	0	1	0	21.78	16.82	22.98	22.70	17.50	23.8
			1	49	1	25	21.74	16.77	22.94	22.70	17.50	23.8
			1	99	1	49	21.51	16.42	22.68	22.70	17.50	23.8
			50	0	25	0	21.12	18.91	23.16	21.80	19.50	23.8
			50	24	25	12	20.89	18.56	22.89	21.80	19.50	23.8
			50	50	25	25	20.54	18.45	22.63	21.80	19.50	23.8
20175	23095	QPSK	100	0	50	0	20.61	18.59	22.73	21.80	19.50	23.8
			1	0	1	0	21.80	16.68	22.96	22.70	17.50	23.8
			1	49	1	25	21.62	16.56	22.80	22.70	17.50	23.8
			1	99	1	49	21.65	16.13	22.72	22.70	17.50	23.8
			50	0	25	0	21.03	18.98	23.14	21.80	19.50	23.8
			50	24	25	12	20.85	18.38	22.80	21.80	19.50	23.8
20300	23130	QPSK	50	50	25	25	20.43	18.36	22.53	21.80	19.50	23.8
			100	0	50	0	20.60	18.65	22.74	21.80	19.50	23.8
			1	0	1	0	21.77	16.79	22.97	22.70	17.50	23.8
			1	49	1	25	21.73	16.67	22.91	22.70	17.50	23.8
			1	99	1	49	21.55	16.37	22.70	22.70	17.50	23.8
			50	0	25	0	21.21	18.87	23.21	21.80	19.50	23.8
			50	24	25	12	20.92	18.41	22.85	21.80	19.50	23.8
			50	50	25	25	20.84	18.39	22.80	21.80	19.50	23.8
			100	0	50	0	20.93	18.39	22.85	21.80	19.50	23.8

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	21.92	16.31	22.97	22.7	17.5	23.8
			1	25	1	49	21.67	16.11	22.74	22.7	17.5	23.8
			1	49	1	99	21.56	15.78	22.58	22.7	17.5	23.8
			25	0	50	0	21.00	18.71	23.01	21.8	19.5	23.8
			25	12	50	24	20.82	18.78	22.93	21.8	19.5	23.8
			25	25	50	50	20.78	18.89	22.95	21.8	19.5	23.8
23095	20175	QPSK	50	0	100	0	20.89	18.72	22.95	21.8	19.5	23.8
			1	0	1	0	22.13	16.35	23.15	22.7	17.5	23.8
			1	25	1	49	21.58	15.95	22.63	22.7	17.5	23.8
			1	49	1	99	21.61	15.55	22.57	22.7	17.5	23.8
			25	0	50	0	20.96	18.82	23.03	21.8	19.5	23.8
			25	12	50	24	20.89	18.67	22.93	21.8	19.5	23.8
23130	20300	QPSK	25	25	50	50	20.57	18.80	22.78	21.8	19.5	23.8
			50	0	100	0	20.83	18.54	22.84	21.8	19.5	23.8
			1	0	1	0	22.01	16.29	23.04	22.7	17.5	23.8
			1	25	1	49	21.78	15.98	22.79	22.7	17.5	23.8
			1	49	1	99	21.56	15.59	22.54	22.7	17.5	23.8
			25	0	50	0	20.92	18.72	22.97	21.8	19.5	23.8
			25	12	50	24	20.82	18.79	22.93	21.8	19.5	23.8
			25	25	50	50	20.66	18.86	22.86	21.8	19.5	23.8
			50	0	100	0	20.89	18.63	22.92	21.8	19.5	23.8

CA_4A-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)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset						
20050	23230	QPSK	1	0	1	0	21.96	16.59	23.07	22.7	17.5	23.8
			1	49	1	25	21.81	16.61	22.96	22.7	17.5	23.8
			1	99	1	49	21.65	16.74	22.87	22.7	17.5	23.8
			50	0	25	0	21.02	18.69	23.02	21.8	19.5	23.8
			50	24	25	12	20.99	18.77	23.03	21.8	19.5	23.8
			50	50	25	25	20.86	18.84	22.98	21.8	19.5	23.8
20175	23230	QPSK	100	0	50	0	20.89	18.82	22.99	21.8	19.5	23.8
			1	0	1	0	22.01	16.77	23.15	22.7	17.5	23.8
			1	49	1	25	21.98	16.70	23.11	22.7	17.5	23.8
			1	99	1	49	21.69	16.78	22.91	22.7	17.5	23.8
			50	0	25	0	20.81	19.04	23.02	21.8	19.5	23.8
			50	24	25	12	20.79	18.97	22.98	21.8	19.5	23.8
20300	23230	QPSK	50	50	25	25	20.87	18.83	22.98	21.8	19.5	23.8
			100	0	50	0	20.76	18.98	22.97	21.8	19.5	23.8
			1	0	1	0	21.83	16.56	22.96	22.7	17.5	23.8
			1	49	1	25	21.76	16.63	22.92	22.7	17.5	23.8
			1	99	1	49	21.72	16.79	22.93	22.7	17.5	23.8
			50	0	25	0	20.96	18.74	23.00	21.8	19.5	23.8
			50	24	25	12	20.92	18.86	23.02	21.8	19.5	23.8
			50	50	25	25	20.78	18.83	22.92	21.8	19.5	23.8
			100	0	50	0	20.69	18.89	22.89	21.8	19.5	23.8

CA 13A-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						
23230	20050	QPSK	1	0	1	0	21.96	16.31	23.01	22.7	17.5	23.8
			1	25	1	49	21.98	15.99	22.96	22.7	17.5	23.8
			1	49	1	99	21.93	15.82	22.88	22.7	17.5	23.8
			25	0	50	0	21.03	18.81	23.07	21.8	19.5	23.8
			25	12	50	24	21.12	18.88	23.15	21.8	19.5	23.8
			25	25	50	50	21.09	18.77	23.09	21.8	19.5	23.8
23230	20175	QPSK	50	0	100	0	20.93	18.81	23.01	21.8	19.5	23.8
			1	0	1	0	21.97	16.25	23.00	22.7	17.5	23.8
			1	25	1	49	22.05	15.97	23.01	22.7	17.5	23.8
			1	49	1	99	22.07	15.87	23.00	22.7	17.5	23.8
			25	0	50	0	20.97	18.88	23.06	21.8	19.5	23.8
			25	12	50	24	21.03	18.90	23.10	21.8	19.5	23.8
23230	20300	QPSK	25	25	50	50	21.04	18.63	23.01	21.8	19.5	23.8
			50	0	100	0	20.90	18.71	22.95	21.8	19.5	23.8
			1	0	1	0	21.89	16.11	22.91	22.7	17.5	23.8
			1	25	1	49	21.93	15.98	22.91	22.7	17.5	23.8
			1	49	1	99	21.97	15.91	22.93	22.7	17.5	23.8
			25	0	50	0	20.95	18.76	23.00	21.8	19.5	23.8
23230	20300	QPSK	25	12	50	24	20.89	18.75	22.96	21.8	19.5	23.8
			25	25	50	50	20.93	18.71	22.97	21.8	19.5	23.8
			50	0	100	0	20.99	18.72	23.01	21.8	19.5	23.8



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)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset						
23230	132072	QPSK	1	0	1	0	21.63	16.81	22.87	22.7	17.5	23.8
			1	25	1	49	21.76	16.62	22.92	22.7	17.5	23.8
			1	49	1	99	21.92	16.47	23.01	22.7	17.5	23.8
			25	0	50	0	21.16	16.53	23.05	21.8	19.5	23.8
			25	12	50	24	21.15	16.55	23.05	21.8	19.5	23.8
			25	25	50	50	21.21	18.37	23.03	21.8	19.5	23.8
			50	0	100	0	21.00	18.33	22.88	21.8	19.5	23.8
23230	132322	QPSK	1	0	1	0	21.72	16.72	22.91	22.7	17.5	23.8
			1	25	1	49	21.91	16.54	23.02	22.7	17.5	23.8
			1	49	1	99	21.89	16.34	22.96	22.7	17.5	23.8
			25	0	50	0	21.14	18.53	23.04	21.8	19.5	23.8
			25	12	50	24	21.09	18.72	23.08	21.8	19.5	23.8
			25	25	50	50	21.19	18.48	23.05	21.8	19.5	23.8
			50	0	100	0	21.13	18.45	23.00	21.8	19.5	23.8
23230	132572	QPSK	1	0	1	0	21.63	16.60	22.82	22.7	17.5	23.8
			1	25	1	49	21.84	16.28	22.91	22.7	17.5	23.8
			1	49	1	99	21.96	16.26	23.00	22.7	17.5	23.8
			25	0	50	0	21.20	18.43	23.04	21.8	19.5	23.8
			25	12	50	24	21.23	18.44	23.07	21.8	19.5	23.8
			25	25	50	50	21.11	16.56	23.03	21.8	19.5	23.8
			50	0	100	0	21.26	18.39	23.07	21.8	19.5	23.8

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	21.79	16.77	22.98	22.7	17.5	23.8
			1	49	1	25	21.62	16.76	22.85	22.7	17.5	23.8
			1	99	1	49	21.34	16.52	22.58	22.7	17.5	23.8
			50	0	25	0	20.63	19.05	22.92	21.8	19.5	23.8
			50	24	25	12	20.68	19.08	22.96	21.8	19.5	23.8
			50	50	25	25	20.59	18.99	22.87	21.8	19.5	23.8
132322	23095	QPSK	100	0	50	0	20.32	18.67	22.58	21.8	19.5	23.8
			1	0	1	0	21.72	16.82	22.94	22.7	17.5	23.8
			1	49	1	25	21.53	16.38	22.69	22.7	17.5	23.8
			1	99	1	49	21.23	16.43	22.47	22.7	17.5	23.8
			50	0	25	0	20.78	19.11	23.04	21.8	19.5	23.8
			50	24	25	12	20.57	18.98	22.86	21.8	19.5	23.8
132572	23130	QPSK	50	50	25	25	20.56	18.91	22.82	21.8	19.5	23.8
			100	0	50	0	20.16	18.36	22.36	21.8	19.5	23.8
			1	0	1	0	21.71	16.89	22.95	22.7	17.5	23.8
			1	49	1	25	21.67	16.54	22.83	22.7	17.5	23.8
			1	99	1	49	21.25	16.28	22.45	22.7	17.5	23.8
			50	0	25	0	20.69	19.04	22.95	21.8	19.5	23.8
132572	23130	QPSK	50	24	25	12	20.44	19.01	22.79	21.8	19.5	23.8
			50	50	25	25	20.62	18.93	22.87	21.8	19.5	23.8
			100	0	50	0	20.23	18.45	22.44	21.8	19.5	23.8

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 Time up Power (dBm)	SCC2 Time up Power (dBm)	Tune up Power (dBm)
			RB Size	RB offset	RB Size	RB offset						
132072	23230	QPSK	1	0	1	0	21.88	16.62	23.01	22.7	17.5	23.8
			1	49	1	25	21.89	16.84	23.07	22.7	17.5	23.8
			1	99	1	49	21.67	17.03	22.95	22.7	17.5	23.8
			50	0	25	0	20.72	18.77	22.86	21.8	19.5	23.8
			50	24	25	12	20.67	18.78	22.84	21.8	19.5	23.8
			50	50	25	25	20.56	18.81	22.78	21.8	19.5	23.8
			100	0	50	0	20.82	18.91	22.98	21.8	19.5	23.8
132322	23230	QPSK	1	0	1	0	21.95	16.71	23.09	22.7	17.5	23.8
			1	49	1	25	21.77	17.10	23.04	22.7	17.5	23.8
			1	99	1	49	21.58	17.22	22.94	22.7	17.5	23.8
			50	0	25	0	20.89	18.74	22.96	21.8	19.5	23.8
			50	24	25	12	20.71	18.82	22.88	21.8	19.5	23.8
			50	50	25	25	20.67	18.95	22.90	21.8	19.5	23.8
			100	0	50	0	20.78	18.75	22.89	21.8	19.5	23.8
132572	23230	QPSK	1	0	1	0	21.78	16.83	22.99	22.7	17.5	23.8
			1	49	1	25	21.89	16.85	23.07	22.7	17.5	23.8
			1	99	1	49	21.64	17.09	22.95	22.7	17.5	23.8
			50	0	25	0	20.67	18.93	22.90	21.8	19.5	23.8
			50	24	25	12	20.56	18.71	22.74	21.8	19.5	23.8
			50	50	25	25	20.59	18.84	22.81	21.8	19.5	23.8
			100	0	50	0	20.69	18.82	22.87	21.8	19.5	23.8



Full Power															
2CC															
Configure	CA Configuration (BCS)	PCC							SCC				Power		
		LTE Band	BW (MHz)	UL Freq (MHz)	UL Channel	Mod.	UL# RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq (MHz)	DL Channel	With CA Tx Power (dBm)	W/O CA Tx Power (dBm)	
Inter-Band	CA_5A-7A	5	10	829	20450	QPSK	1	0	7	20	2855	3100	22.29	22.36	
	CA_5A-48A	5	1	829	20450	QPSK	1	0	48	20	3825	50990	22.24	22.36	
	CA_7A-46A	7	20	2560	21350	QPSK	1	99	46	20	5540	50990	22.55	22.61	
	CA_25A-41A	25	20	1880	26340	QPSK	1	0	41	20	2593	40620	22.41	22.47	
	CA_25A-46A	25	20	1880	26340	QPSK	1	0	46	20	5540	50990	22.35	22.47	
	CA_26A-41A	26	15	841.5	26965	QPSK	1	0	41	20	2593	40620	22.30	22.33	
Inter-Band	Non-Contiguous	CA_5A-5A	5	10	829	20450	QPSK	1	0	5	5	891.5	2825	22.25	22.36
		CA_41A-41A	41	20	2593	40620	QPSK	1	99	41	5	2687.5	41565	22.63	22.69
		CA_5B	5	10	829	20450	QPSK	1	0	5	10	883.90	2549	22.28	22.36
	Contiguous	CA_7C	7	20	2560	21350	QPSK	1	0	7	20	2660.20	3152	22.54	22.61
		CA_38C	38	20	2580	37850	QPSK	1	0	38	20	2599.80	38048	22.56	22.59

3CC		3CC																	
Configure	CA Configuration (BCS)	PCC							SCC1				SCC2				Power		
		LTE Band	BW (MHz)	UL Freq (MHz)	UL Channel	Mod.	UL RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq (MHz)	DL Channel	With CA Tx Power (dBm)	W/O CA Tx Power (dBm)	
Inter-Band	CA_2A-4A-4A	2	20	1880	18900	QPSK	1	0	4	20	2132.5	2175	4	5	2152.5	2375	22.31	22.41	
	CA_2A-4A-5A	2	20	1880	18900	QPSK	1	0	4	20	2132.5	2175	5	10	881.5	2525	22.30	22.41	
	CA_2A-4A-7A	2	20	1880	18900	QPSK	1	0	4	20	2132.5	2175	7	20	2655	3100	22.32	22.41	
	CA_2A-4A-13A	2	20	1880	18900	QPSK	1	0	4	20	2132.5	2175	13	10	751	5230	22.39	22.41	
	CA_2A-4A-29A	2	20	1880	18900	QPSK	1	0	4	20	2132.5	2175	29	10	722.5	9715	22.31	22.41	
	CA_2A-5A-30A	2	20	1880	18900	QPSK	1	0	5	10	881.5	2525	30	10	2355	9820	22.33	22.41	
	CA_2A-7A-7A	2	20	1880	18900	QPSK	1	0	7	20	2655	3100	7	5	2687.5	3425	22.39	22.41	
	CA_2A-12A-30A	2	20	1880	18900	QPSK	1	0	12	10	737.5	5095	30	10	2355	9820	22.30	22.41	
	CA_2A-29A-30A	2	20	1880	18900	QPSK	1	0	29	10	722.5	9715	30	10	2355	9820	22.38	22.41	
	CA_2A-46A-46A	2	20	1880	18900	QPSK	1	0	46	20	5160	48890	46	20	5905	54340	22.18	22.41	
	CA_2A-46A-48A	2	20	1880	18900	QPSK	1	0	46	20	5160	48890	48	20	3625	55990	22.39	22.41	
	CA_2A-46A-66A	2	20	1880	18900	QPSK	1	0	46	20	5540	50960	66	20	2155	66886	22.30	22.41	
	CA_2A-48A-48A	2	20	1880	18900	QPSK	1	0	48	20	3625	55990	48	5	3697.5	56715	22.31	22.41	
	CA_2A-48A-66A	2	20	1880	18900	QPSK	1	0	48	20	3625	55990	66	20	2155	66886	22.33	22.41	
	CA_4A-4A-5A	4	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	5	10	881.5	2525	22.42	22.52	
	CA_4A-4A-7A	4	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	7	5	2687.5	3425	22.47	22.52	
	CA_4A-4A-12A	4	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	12	10	737.5	5095	22.32	22.52	
	CA_4A-4A-13A	4	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	13	10	751	5230	22.43	22.52	
	CA_4A-4A-71A	4	20	1732.5	20175	QPSK	1	0	4	5	2152.5	2375	71	20	637	68786	22.50	22.52	
	CA_4A-5A-30A	4	20	1732.5	20175	QPSK	1	0	5	10	881.5	2525	30	10	2355	9820	22.42	22.52	
	CA_4A-7A-7A	4	20	1732.5	20175	QPSK	1	0	7	20	2655	3100	7	5	2687.5	3425	22.30	22.52	
	CA_4A-7A-12A	4	20	1732.5	20175	QPSK	1	0	7	20	2655	3100	12	10	737.5	5095	22.38	22.52	
	CA_4A-12A-30A	4	20	1732.5	20175	QPSK	1	0	12	10	737.5	5095	30	10	2355	9820	22.33	22.52	
	CA_4A-29A-30A	4	20	1732.5	20175	QPSK	1	0	29	10	722.5	9715	30	10	2355	9820	22.36	22.52	
	CA_4A-46A-46A	4	20	1732.5	20175	QPSK	1	0	46	20	5160	48890	46	20	5905	54340	22.41	22.52	
	CA_5A-30A-66A	5	10	829	20450	QPSK	1	0	30	10	2355	9820	66	20	2155	66886	22.32	22.36	
	CA_5A-66A-66A	5	10	829	20450	QPSK	1	0	66	20	2155	66886	66	5	2197.5	67311	22.26	22.36	
	CA_12A-30A-66A	12	10	707.5	23095	QPSK	1	49	30	10	2355	9820	66	20	2155	66886	22.49	22.63	
	CA_12A-66A-66A	12	10	707.5	23095	QPSK	1	49	66	20	2155	66886	66	5	2197.5	67311	22.53	22.63	
	CA_13A-66A-66A	13	10	782	23230	QPSK	1	25	66	20	2155	66886	66	5	2197.5	67311	22.46	22.58	
	CA_25A-25A-26A	25	20	1880	26340	QPSK	1	0	25	5	1992.5	8665	26	5	876.5	8865	22.41	22.47	
	CA_46A-46A-66A	66	20	1745	132322	QPSK	1	0	48	20	3560	55340	46	20	5905	54340	22.46	22.55	
	CA_48A-48A-66A	66	20	1745	132322	QPSK	1	0	48	20	3560	55340	48	20	3690	56640	22.43	22.55	
	CA_66A-46A-46A	66	20	1745	132322	QPSK	1	0	46	20	5160	48890	46	20	5905	54340	22.45	22.55	
	CA_2A-48C	2	20	1880	18900	QPSK	1	0	48	20	3625	55990	48	20	3644.5	56188	22.30	22.41	
	CA_5A-66C	5	10	829	20450	QPSK	1	0	66	20M	2155	66886	66	20	2174.8	67084	22.35	22.36	
	CA_7A-46C	7	20	2560	21350	QPSK	1	99	46	20	5540.2	50692	46	20	5560	50890	22.53	22.61	
	CA_12A-66C	12	10	707.5	23095	QPSK	1	49	66	20M	2155	66886	66	20	2174.8	67084	22.59	22.63	
	CA_13A-66C	13	10	782	23230	QPSK	1	25	66	20M	2155	66886	66	20	2174.8	67084	22.50	22.58	
	CA_25A-41C	25	20	1880	26340	QPSK	1	0	41	20	2660.2	41292	41	20	2680	41490	22.40	22.47	
	CA_25A-46C	25	20	1880	26340	QPSK	1	0	46	20	5540.2	50692	46	20	5560	50890	22.41	22.47	
	CA_41A-41C	41	20	2549.5	40185	QPSK	1	49	41	5	2687.5	41565	41	20	2675.8	41448	22.59	22.69	
	CA_46A-48C	46	20	3660	56340	QPSK	1	49	48	20	3679.8	56538	48	5	3697.5	56715	22.81	22.82	
CA_66A-66C	66	20	1745	132322	QPSK	1	0	66	20	2185	67186	66	5	2196.7	67303	22.44	22.55		

4CC																						
Configure	CA Configuration (BCS)	PCC							SCC1				SCC2				SCC3				Power	
		LTE Band	BW (MHz)	UL Freq (MHz)	UL Channel	Mod.	UL RB	UL RB Offset	LTE Band	BW (MHz)	DL Freq (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq (MHz)	DL Channel	LTE Band	BW (MHz)	DL Freq (MHz)	DL Channel	With CA Tx Power (dBm)	W/O CA Tx Power (dBm)
Intra-Band	CA_2A-2A-4A-12A	2	20	1880	18900	QPSK	1	0	2	5	1987.5	1175	4	20	2132.5	2175	12	10	737.5	5095	22.36	22.41
	CA_2A-2A-4A-71A	2	20	1880	18900	QPSK	1	0	2	5	1987.5	1175	4	20	2132.5	2175	71	20	637	68786	22.22	22.41
	CA_2A-2A-5A-66A	2	20	1880	18900	QPSK	1	0	2	5	1987.5	1175	5	10	881.5	2525	66	20	2155	66886	22.36	22.41
	CA_2A-2A-12A-66A	2	20	1880	18900	QPSK	1	0	2	5	1987.5	1175	12	10	737.5	5095	66	20	2155	66886	22.40	22.41
	CA_2A-2A-13A-66A	2	20	1880	18900	QPSK	1	0	2	5	1987.5	1175	13	10	751	5230	66	20	2155	66886	22.22	22.41
	CA_2A-2A-66A-66A	2	20	1880	18900	QPSK	1	0	2	5	1987.5	1175	66	20	2155	66886	66	5	2187.5	67311	22.34	22.41
	CA_2A-2A-66A-71A	2	20	1880	18900	QPSK	1	0	2	5	1987.5	1175	66	20	2155	66886	71	20	637	68786	22.35	22.41
	CA_2A-5A-66A-66A	2	20	1880	18900	QPSK	1	0	5	10	881.5	2525	66	20	2155	66886	66	5	2187.5	67311	22.40	22.41
	CA_2A-12A-66A-66A	2	20	1880	18900	QPSK	1	0	12	10	737.5	5095	66	20	2155	66886	66	5	2187.5	67311	22.36	22.41
	CA_2A-13A-66A-66A	2	20	1880	18900	QPSK	1	0	13	10	751	5230	66	20	2155	66886	66	5	2187.5	67311	22.37	22.41
	CA_2A-46A-46A-66A	2	20	1880	18900	QPSK	1	0	46	20	5540	50860	46	20	5160	46890	66	20	2155	66886	22.38	22.41
	CA_2A-66A-66A-71A	2	20	1880	18900	QPSK	1	0	66	20	2155	66886	66	5	2187.5	67311	71	20	637	68786	22.41	22.41
	CA_2A-2A-46C	2	20	1880	18900	QPSK	1	0	2	5	1987.5	1175	46	20	5585.5	54142	46	20	5605.3	54340	22.38	22.41
	CA_2A-2A-66C	2	20	1880	18900	QPSK	1	0	2	5	1987.5	1175	66	20	2155	66886	66	20	2174.8	67084	22.34	22.41
	CA_2A-5A-66B	2	20	1880	18900	QPSK	1	0	5	10	881.5	2525	66	15	2155	66886	66	5	2164.3	66979	22.39	22.41
	CA_2A-5A-66C	2	20	1880	18900	QPSK	1	0	5	10	881.5	2525	66	20	2155	66886	66	20	2174.8	67084	22.36	22.41
	CA_2A-12A-66C	2	20	1880	18900	QPSK	1	0	12	10	737.5	5095	66	20	2155	66886	66	20	2174.8	67084	22.40	22.41
	CA_2A-13A-66B	2	20	1880	18900	QPSK	1	0	13	10	751	5230	66	15	2155	66886	66	5	2164.3	66979	22.38	22.41
	CA_2A-13A-66C	2	20	1880	18900	QPSK	1	0	13	10	751	5230	66	20	2155	66886	66	20	2174.8	67084	22.38	22.41
	CA_2A-46A-46C	2	20	1880	18900	QPSK	1	0	46	20	5160	46890	46	20	5540.2	50692	46	20	5560	50890	22.39	22.41
	CA_2A-46C-48A	2	20	1880	18900	QPSK	1	0	46	20	5540.2	50692	46	20	5560	50890	48	20	3625	55990	22.22	22.41
	CA_2A-46A-48C	2	20	1880	18900	QPSK	1	0	46	20	5160	46890	48	20	3625	55990	48	20	3644.5	56188	22.31	22.41
	CA_2A-46C-66A	2	20	1880	18900	QPSK	1	0	46	20	5540.2	50692	46	20	5560	50890	66	20	2155	66886	22.40	22.41
	CA_2A-66C-71A	2	20	1880	18900	QPSK	1	0	66	20	2155	66886	66	20	2174.8	67084	71	20	637	68786	22.36	22.41
CA_2C-66A-66A	2	20	1880	18900	QPSK	1	0	2	20	1979.8	1098	66	20	2155	66886	66	5	2187.5	67311	22.37	22.41	
CA_4A-46A-46C	4	20	1732.5	20175	QPSK	1	0	46	20	5160	46890	46	20	5540.2	50692	46	20	5560	50890	22.40	22.52	
CA_46A-46C-66A	66	20	1745	132322	QPSK	1	0	46	20	5537.5	50665	46	20	5160	46890	46	20	5179.8	47088	22.34	22.55	
CA_46A-46C-66A	66	20	1745	132322	QPSK	1	0	46	20	5537.5	50665	48	20	3660	56340	48	20	3679.8	56538	22.40	22.55	
CA_46C-48A-66A	66	20	1745	132322	QPSK	1	0	46	20	5537.5	50665	46	20	5557.3	50863	48	20	3660	56340	22.41	22.55	
CA_25A-41D	25	20	1880	26340	QPSK	1	0	41	20	2593	40826	41	20	2612.8	40818	41	20	2632.6	41016	22.36	22.47	
CA_25A-46D	25	20	1880	26340	QPSK	1	0	46	20	5537.5	50665	46	20	5557.3	50863	46	20	5577.1	51061	22.37	22.47	
CA_41A-41D	41	20	2549.5	40185	QPSK	1	49	41	20	2462.2	41004	41	20	2660.2	41292	41	20	2680	41490	22.63	22.69	
CA_41C-41C	41	20	2549.5	40185	QPSK	1	49	41	20	2569.3	40383	41	20	2660.2	41292	41	20	2680	41490	22.61	22.69	
CA_41E	41	20	2549.5	40185	QPSK	1	49	41	20	2612.8	40818	41	20	2632.6	41016	41	20	2652.6	41214	22.61	22.69	
Intra-Band	Contiguous																					

Full Power for ANT0

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				165800	167300	167800	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				834	836.5	839		
20	PI2 BPSK	1	1	22.46	22.45	22.34	23.3	0.0
20	PI2 BPSK	1	53	22.67	22.55	22.80		
20	PI2 BPSK	1	104	22.45	22.37	22.27		
20	PI2 BPSK	50	0	21.87	21.82	21.95	23.3	0.0
20	PI2 BPSK	50	28	22.39	22.36	22.33		
20	PI2 BPSK	50	56	21.86	21.84	21.76		
20	PI2 BPSK	100	0	21.92	21.58	21.44	22.8	0.5
20	QPSK	1	1	22.42	22.30	22.44	23.3	0.0
20	QPSK	1	53	22.50	22.44	22.43		
20	QPSK	1	104	22.35	22.37	22.35		
20	QPSK	50	0	21.33	21.35	21.38	23.3	0.0
20	QPSK	50	28	22.37	22.35	22.27		
20	QPSK	50	56	21.30	21.26	21.32		
20	QPSK	100	0	21.44	21.37	21.29	22.3	1.0
20	16QAM	1	53	21.59	21.27	21.54	22.3	1.0
20	64QAM	1	53	20.01	19.98	20.01	21.3	2.0
20	256QAM	1	53	18.12	18.12	17.98	19.8	4.5
Channel				168300	167300	168300	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				831.5	836.5	841.5		
15	PI2 BPSK	1	40	22.44	22.44	22.40	23.3	0.0
Channel				165800	167300	168800	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				829	836.5	844		
10	PI2 BPSK	1	26	22.49	22.43	22.35	23.3	0.0
Channel				165300	167300	168300	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				826.5	836.5	846.5		
5	PI2 BPSK	1	13	22.46	22.43	22.32	23.3	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				134600	136100	137600	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				673	680.5	688		
20	PI2 BPSK	1	1	22.28	22.13	22.08	23.3	0.0
20	PI2 BPSK	1	53	22.37	22.22	22.21		
20	PI2 BPSK	1	104	22.15	21.99	21.79		
20	PI2 BPSK	50	0	21.67	21.66	21.62	23.3	0.0
20	PI2 BPSK	50	28	22.24	22.08	22.07		
20	PI2 BPSK	50	56	21.67	21.43	21.36		
20	PI2 BPSK	100	0	21.62	21.60	21.43	22.8	0.5
20	QPSK	1	1	22.35	22.13	22.21	23.3	0.0
20	QPSK	1	53	22.20	22.18	22.04		
20	QPSK	1	104	22.18	22.03	21.85		
20	QPSK	50	0	21.13	21.15	21.03	23.3	0.0
20	QPSK	50	28	22.20	22.05	22.04		
20	QPSK	50	56	21.11	20.92	20.88		
20	QPSK	100	0	21.15	21.06	20.91	22.3	1.0
20	16QAM	1	53	21.05	20.97	20.86	22.3	1.0
20	64QAM	1	53	19.65	19.72	19.64	21.3	2.0
20	256QAM	1	53	17.84	17.86	17.85	18.8	4.5
Channel				134100	136100	138100	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				670.5	680.5	690.5		
15	PI2 BPSK	1	40	22.32	22.22	22.14	23.3	0.0
Channel				133600	136100	138600	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				668	680.5	693		
10	PI2 BPSK	1	26	22.25	22.15	22.16	23.3	0.0
Channel				133100	136100	139100	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				665.5	680.5	695.5		
5	PI2 BPSK	1	13	22.21	22.13	22.10	23.3	0.0



Full Power for ANT2

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	21.01	20.99	20.98	21.8	0.0	
20	PI2 BPSK	1	53	21.32	21.18	21.29			
20	PI2 BPSK	1	104	20.86	20.86	20.74			
20	PI2 BPSK	50	0	20.43	20.44	20.32	21.8	0.0	
20	PI2 BPSK	50	28	20.06	20.87	20.86			
20	PI2 BPSK	50	58	20.45	20.35	20.38			
20	PI2 BPSK	100	0	20.38	20.38	20.35	21.3	0.5	
20	QPSK	1	1	21.04	21.07	20.89	21.8	0.0	
20	QPSK	1	53	21.20	21.15	20.97			
20	QPSK	1	104	20.98	21.00	20.94			
20	QPSK	50	0	19.88	19.92	19.85	21.8	0.0	
20	QPSK	50	28	20.89	20.93	20.75			
20	QPSK	50	58	19.93	19.92	19.77			
20	QPSK	100	0	19.91	19.97	19.80	20.8	1.0	
20	16QAM	1	53	20.01	20.03	20.01	20.8	1.0	
20	64QAM	1	53	19.15	19.04	18.78	19.8	2.0	
20	256QAM	1	53	16.59	16.88	16.67	17.3	4.5	
Channel				371500	376000	380500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1857.5	1880	1902.5			
15	PI2 BPSK	1	40	20.98	20.97	20.90	21.8	0.0	
Channel				371000	376000	381000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1855	1880	1905			
10	PI2 BPSK	1	28	20.94	20.89	20.83	21.8	0.0	
Channel				370500	376000	381500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1852.5	1880	1907.5			
5	PI2 BPSK	1	13	20.97	20.89	20.86	21.8	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	376000	381000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1860	1880	1900			
20	PI2 BPSK	1	1	20.90	21.04	20.87	21.8	0.0	
20	PI2 BPSK	1	53	21.10	21.11	20.97			
20	PI2 BPSK	1	104	20.95	20.96	20.92			
20	PI2 BPSK	50	0	20.53	20.38	20.30	21.8	0.0	
20	PI2 BPSK	50	28	20.98	21.01	20.86			
20	PI2 BPSK	50	58	20.55	20.54	20.50			
20	PI2 BPSK	100	0	20.49	20.55	20.30	21.3	0.5	
20	QPSK	1	1	21.05	21.07	20.97	21.8	0.0	
20	QPSK	1	53	21.09	21.08	21.06			
20	QPSK	1	104	21.08	21.08	21.01			
20	QPSK	50	0	20.00	20.02	19.89	21.8	0.0	
20	QPSK	50	28	21.00	21.04	20.86			
20	QPSK	50	58	19.88	20.15	19.88			
20	QPSK	100	0	19.95	20.03	19.87	20.8	1.0	
20	16QAM	1	53	20.11	20.07	19.99	20.8	1.0	
20	64QAM	1	53	19.23	19.13	18.86	19.8	2.0	
20	256QAM	1	53	16.50	16.83	16.72	17.3	4.5	
Channel				371500	376000	381500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1857.5	1880	1907.5			
15	PI2 BPSK	1	40	21.02	20.98	20.83	21.8	0.0	
Channel				371000	376000	382000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1855	1880	1910			
10	PI2 BPSK	1	28	21.04	21.01	20.86	21.8	0.0	
Channel				370500	376000	382500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1852.5	1880	1912.5			
5	PI2 BPSK	1	13	20.99	20.99	20.81	21.8	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				343000	349000	354000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1720	1745	1770			
20	PI2 BPSK	1	1	21.00	20.80	20.85	21.8	0.0	
20	PI2 BPSK	1	53	21.06	20.81	20.89			
20	PI2 BPSK	1	104	20.89	20.80	20.52			
20	PI2 BPSK	50	0	20.55	20.36	20.27	21.8	0.0	
20	PI2 BPSK	50	28	20.96	20.84	20.72			
20	PI2 BPSK	50	58	20.43	20.32	20.17			
20	PI2 BPSK	100	0	20.51	20.33	20.22	21.3	0.5	
20	QPSK	1	1	21.00	20.99	20.83	21.8	0.0	
20	QPSK	1	53	21.03	20.93	20.86			
20	QPSK	1	104	20.99	20.91	20.82			
20	QPSK	50	0	19.95	19.83	19.72	21.8	0.0	
20	QPSK	50	28	20.96	20.79	20.69			
20	QPSK	50	58	19.87	19.76	19.67			
20	QPSK	100	0	19.87	19.84	19.67	20.8	1.0	
20	16QAM	1	53	19.95	20.33	20.21	20.8	1.0	
20	64QAM	1	53	19.18	18.97	18.71	19.8	2.0	
20	256QAM	1	53	16.29	16.78	16.42	17.3	4.5	
Channel				343500	349000	354500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1717.5	1745	1772.5			
15	PI2 BPSK	1	40	20.93	20.97	20.95	21.8	0.0	
Channel				343000	349000	355000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1715	1745	1775			
10	PI2 BPSK	1	28	20.99	20.88	20.82	21.8	0.0	
Channel				342500	349000	355500	Tune-up limit (dBm)	MPR	
Frequency (MHz)				1712.5	1745	1777.5			
5	PI2 BPSK	1	13	20.94	20.84	20.78	21.8	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				505202	518598	528000	21.0	0.0	
Frequency (MHz)				2548.01	2592.99	2640			
100	PI2 BPSK	1	1	19.75	19.80	19.72			
100	PI2 BPSK	1	137	19.84	19.70	19.57			
100	PI2 BPSK	1	271	19.49	19.54	19.43	21.0	0.0	
100	PI2 BPSK	135	0	19.56	19.64	19.55			
100	PI2 BPSK	135	69	19.64	19.68	19.59			
100	PI2 BPSK	135	138	19.80	19.60	19.56			
100	PI2 BPSK	270	0	19.80	19.65	19.58	21.0	0.0	
100	QPSK	1	1	19.63	19.74	19.65			
100	QPSK	1	137	19.52	19.70	19.55			
100	QPSK	1	271	19.41	19.52	19.56			
100	QPSK	135	0	19.44	19.49	19.46	21.0	0.0	
100	QPSK	135	69	19.50	19.53	19.57			
100	QPSK	135	138	19.41	19.47	19.49			
100	QPSK	270	0	19.42	19.50	19.41		21.0	
100	16QAM	1	1	19.56	19.74	19.69	21.0		0.0
100	64QAM	1	1	19.59	19.69	19.64	21.0		0.0
100	256QAM	1	1	18.26	18.13	18.31	19.5		1.5
Channel				508200	518598	528996	Tune-up limit (dB)	MPR	
Frequency (MHz)				2541	2592.99	2644.98	(dB)		
90	PI2 BPSK	1	1	19.72	19.75	19.69	21.0		0.0
Channel				507204	518598	529998	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2538.02	2592.99	2649.99	(dBm)		
80	PI2 BPSK	1	1	19.70	19.77	19.68	21.0		0.0
Channel				505200	518598	531996	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2546	2592.99	2658.98	(dBm)		
60	PI2 BPSK	1	1	19.62	19.68	19.59	21.0		0.0
Channel				504204	518598	532998	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2521.02	2592.99	2654.99	(dBm)		
50	PI2 BPSK	1	1	19.50	19.62	19.55	21.0		0.0
Channel				503202	518598	534000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2518.01	2592.99	2670	(dBm)		
40	PI2 BPSK	1	1	19.68	19.73	19.62	21.0		0.0
Channel				501204	518598	535998	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2506.02	2592.99	2679.99	(dBm)		
20	PI2 BPSK	1	1	19.65	19.69	19.63	21.0		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				505202	518598	528000	23.0	0.0	
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	21.71	21.74	21.58			
100	PI2 BPSK	1	137	21.36	21.67	21.45			
100	PI2 BPSK	1	271	21.32	21.42	21.40	23.0	0.0	
100	PI2 BPSK	135	0	21.57	21.61	21.53			
100	PI2 BPSK	135	69	21.59	21.66	21.55			
100	PI2 BPSK	135	138	21.52	21.62	20.47			
100	PI2 BPSK	270	0	21.57	21.65	21.53	23.0	0.0	
100	QPSK	1	1	21.70	21.72	21.41			
100	QPSK	1	137	21.51	21.61	21.41			
100	QPSK	1	271	21.37	21.54	21.35			
100	QPSK	135	0	21.45	21.51	21.35	23.0	0.0	
100	QPSK	135	69	21.40	21.51	21.31			
100	QPSK	135	138	21.30	21.39	21.30			
100	QPSK	270	0	21.36	21.46	21.29		23.0	
100	16QAM	1	1	21.57	21.62	21.61	23.0		0.0
100	64QAM	1	1	20.25	20.32	20.24	21.5		1.5
100	256QAM	1	1	18.38	18.28	18.32	19.5		3.5
Channel				508200	518598	528996	Tune-up limit (dB)	MPR	
Frequency (MHz)				2541	2592.99	2644.98	(dB)		
90	PI2 BPSK	1	1	21.68	21.72	21.67	23.0		0.0
Channel				507204	518598	529998	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2538.02	2592.99	2649.99	(dBm)		
80	PI2 BPSK	1	1	21.64	21.71	21.69	23.0		0.0
Channel				505200	518598	531996	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2546	2592.99	2658.98	(dBm)		
60	PI2 BPSK	1	1	21.67	21.69	21.68	23.0		0.0
Channel				504204	518598	532998	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2521.02	2592.99	2654.99	(dBm)		
50	PI2 BPSK	1	1	21.70	21.73	21.70	23.0		0.0
Channel				503202	518598	534000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2518.01	2592.99	2670	(dBm)		
40	PI2 BPSK	1	1	21.69	21.59	21.61	23.0		0.0
Channel				501204	518598	535998	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2506.02	2592.99	2679.99	(dBm)		
20	PI2 BPSK	1	1	21.65	21.65	21.63	23.0		0.0

Reduced power level 1 for Head - ANT0

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	PI/2 BPSK	1	1	21.43	21.38	21.41	22.3	0.0
20	PI/2 BPSK	1	53	21.60	21.54	21.49		
20	PI/2 BPSK	1	104	21.42	21.39	21.43		
20	PI/2 BPSK	50	0	21.31	21.34	21.30	22.3	0.0
20	PI/2 BPSK	50	28	21.56	21.53	21.45		
20	PI/2 BPSK	50	56	21.42	21.41	21.31		
20	PI/2 BPSK	100	0	21.54	21.50	21.42	22.3	0.0
20	QPSK	1	1	21.37	21.31	21.37	22.3	0.0
20	QPSK	1	53	21.46	21.29	21.32		
20	QPSK	1	104	21.28	21.27	21.23		
20	QPSK	50	0	21.34	21.14	21.11	22.3	0.0
20	QPSK	50	28	21.35	21.30	21.31		
20	QPSK	50	56	21.29	21.25	21.30		
20	QPSK	100	0	21.17	21.16	21.14	22.3	0.0
20	16QAM	1	53	21.36	21.32	21.33	22.3	0.0
20	64QAM	1	53	21.12	21.16	21.10	22.3	0.0
20	256QAM	1	53	19.05	19.03	18.98	19.8	2.5
Channel				166300	167300	168300	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				831.5	836.5	841.5		
15	PI/2 BPSK	1	40	21.37	21.35	21.32	22.3	0.0
Channel				165800	167300	168800	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				829	836.5	844		
10	PI/2 BPSK	1	26	21.36	21.35	21.31	22.3	0.0
Channel				165300	167300	169300	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				826.5	836.5	846.5		
5	PI/2 BPSK	1	13	21.34	21.30	21.28	22.3	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				134600	136100	137600	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				673	680.5	688		
20	PI/2 BPSK	1	1	20.86	20.80	20.78	22.0	0.0
20	PI/2 BPSK	1	53	20.98	20.83	20.81		
20	PI/2 BPSK	1	104	20.73	20.69	20.74		
20	PI/2 BPSK	50	0	20.85	20.71	20.73	22.0	0.0
20	PI/2 BPSK	50	28	20.95	20.82	20.80		
20	PI/2 BPSK	50	56	20.79	20.73	20.78		
20	PI/2 BPSK	100	0	20.93	20.80	20.77	22.0	0.0
20	QPSK	1	1	20.91	20.90	20.90	22.0	0.0
20	QPSK	1	53	20.87	20.84	20.81		
20	QPSK	1	104	20.63	20.65	20.59		
20	QPSK	50	0	20.86	20.83	20.86	22.0	0.0
20	QPSK	50	28	20.68	20.71	20.66		
20	QPSK	50	56	20.78	20.76	20.78		
20	QPSK	100	0	20.78	20.78	20.79	22.0	0.0
20	16QAM	1	53	20.73	20.71	20.68	22.0	0.0
20	64QAM	1	53	20.22	20.16	20.13	22.0	0.0
20	256QAM	1	53	18.15	18.11	18.08	19.5	2.5
Channel				134100	136100	138100	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				670.5	680.5	690.5		
15	PI/2 BPSK	1	40	20.71	20.69	20.68	22.0	0.0
Channel				133600	136100	138600	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				668	680.5	693		
10	PI/2 BPSK	1	26	20.73	20.69	20.64	22.0	0.0
Channel				133100	136100	139100	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				665.5	680.5	695.5		
5	PI/2 BPSK	1	13	20.72	20.68	20.66	22.0	0.0



Reduced power level 1 for Head - ANT2

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		MPR (dB)
Frequency (MHz)				1860	1880	1900		
20	PI2 BPSK	1	1	15.07	15.02	15.01	15.9	0.0
20	PI2 BPSK	1	53	15.32	15.29	15.31		
20	PI2 BPSK	1	104	14.96	14.94	14.92		
20	PI2 BPSK	50	0	15.21	15.23	15.19	15.9	0.0
20	PI2 BPSK	50	28	15.30	15.28	15.26		
20	PI2 BPSK	50	56	15.25	15.23	15.21		
20	PI2 BPSK	100	0	15.27	15.26	15.25	15.9	0.0
20	QPSK	1	1	15.12	15.08	15.05	15.9	
20	QPSK	1	53	15.16	15.14	15.06		
20	QPSK	1	104	15.08	15.11	15.06		
20	QPSK	50	0	15.08	15.10	15.04	15.9	
20	QPSK	50	28	15.12	15.06	15.08		
20	QPSK	50	56	15.06	15.08	15.09		
20	QPSK	100	0	15.11	15.13	15.10	15.9	0.0
20	16QAM	1	53	15.14	15.15	15.11	15.9	0.0
20	64QAM	1	53	15.23	15.23	15.20	15.9	0.0
20	256QAM	1	53	15.23	15.22	15.20	15.9	0.0
Channel				371500	376000	380500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1867.5	1880	1902.5		
15	PI2 BPSK	1	40	15.26	15.24	15.22	15.9	
Channel				371000	376000	381000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1865	1880	1905		
10	PI2 BPSK	1	26	15.27	15.26	15.26	15.9	0.0
Channel				370500	376000	381500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1862.5	1880	1907.5		
5	PI2 BPSK	1	13	15.30	15.28	15.25	15.9	0.0

N25								
BW [MHz]	Modulation	RB Size	RB Offset	Power Middle Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel				372000	376000	381000		
Frequency (MHz)				1860	1880	1905	Tune-up limit (dBm)	MPR (dB)
20	PI2 BPSK	1	1	14.98	15.00	14.95	15.9	0.0
20	PI2 BPSK	1	53	15.19	15.23	15.17		
20	PI2 BPSK	1	104	15.14	15.18	15.11		
20	PI2 BPSK	50	0	14.91	14.95	14.88	15.9	0.0
20	PI2 BPSK	50	28	15.16	15.19	15.14		
20	PI2 BPSK	50	56	15.00	15.02	14.98		
20	PI2 BPSK	100	0	15.13	15.14	15.11	15.9	0.0
20	QPSK	1	1	14.91	14.93	14.90	15.9	
20	QPSK	1	53	15.15	15.18	15.15		
20	QPSK	1	104	15.03	15.06	15.03		
20	QPSK	50	0	14.97	14.98	14.96	15.9	
20	QPSK	50	28	15.11	15.13	15.06		
20	QPSK	50	56	15.06	15.05	15.00		
20	QPSK	100	0	14.88	14.90	14.84	15.9	0.0
20	16QAM	1	53	15.14	15.18	15.13	15.9	0.0
20	64QAM	1	53	15.00	15.02	15.01	15.9	0.0
20	256QAM	1	53	15.06	15.10	15.04	15.9	0.0
Channel				371500	376000	381500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1867.5	1880	1907.5		
15	PI2 BPSK	1	40	15.03	15.05	15.01	15.9	
Channel				371000	376000	382000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1865	1880	1910		
10	PI2 BPSK	1	26	15.04	15.07	15.03	15.9	0.0
Channel				370500	376000	382500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1862.5	1880	1912.5		
5	PI2 BPSK	1	13	15.06	15.07	15.06	15.9	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	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1720	1745	1770		
20	PI2 BPSK	1	1	14.41	14.23	14.16	15.2	0.0
20	PI2 BPSK	1	53	14.68	14.65	14.49		
20	PI2 BPSK	1	104	14.32	14.13	14.35		
20	PI2 BPSK	50	0	14.60	14.43	14.15	15.2	0.0
20	PI2 BPSK	50	28	14.64	14.63	14.46		
20	PI2 BPSK	50	56	14.56	14.42	14.16		
20	PI2 BPSK	100	0	14.62	14.60	14.43	15.2	0.0
20	QPSK	1	1	14.40	14.36	14.33	15.2	0.0
20	QPSK	1	53	14.42	14.37	14.32		
20	QPSK	1	104	14.38	14.31	14.25		
20	QPSK	50	0	14.36	14.30	14.27	15.2	0.0
20	QPSK	50	28	14.38	14.32	14.29		
20	QPSK	50	56	14.34	14.28	14.25		
20	QPSK	100	0	14.36	14.30	14.23	15.2	0.0
20	16QAM	1	53	14.43	14.25	14.21	15.2	0.0
20	64QAM	1	53	14.47	14.38	14.14	15.2	0.0
20	256QAM	1	53	14.50	14.49	14.39	15.2	0.0
Channel				343500	349000	354500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1717.5	1745	1772.5		
15	PI2 BPSK	1	40	14.57	14.40	14.28	15.2	0.0
Channel				343000	349000	355000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1715	1745	1775		
10	PI2 BPSK	1	26	14.56	14.36	14.22	15.2	0.0
Channel				342500	349000	355500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1712.5	1745	1777.5		
5	PI2 BPSK	1	13	14.53	14.38	14.28	15.2	0.0



N41_FCC									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. (MHz)	Power Mults Ch. Freq. (MHz)	Power High Ch. Freq. (MHz)	Time-up time (dBm)	MFR (dB)	
Channel									
Frequency (MHz)									
100	PUSC-BPSK	1	1	15.75	15.75	15.74	15.4	0.0	
100	PUSC-BPSK	1	137	15.04	15.08	15.08	15.4	0.0	
100	PUSC-BPSK	1	217	15.04	15.05	15.05	15.4	0.0	
100	PUSC-BPSK	135	0	15.02	15.03	15.02	15.4	0.0	
100	PUSC-BPSK	135	0	15.13	15.13	15.13	15.4	0.0	
100	PUSC-BPSK	270	0	15.11	15.11	15.11	15.4	0.0	
100	QPSK	1	1	14.98	15.11	15.03	15.4	0.0	
100	QPSK	1	137	15.02	15.08	15.03	15.4	0.0	
100	QPSK	1	217	14.97	15.05	14.95	15.4	0.0	
100	QPSK	135	0	14.93	14.94	14.78	15.4	0.0	
100	QPSK	135	0	14.84	14.82	14.82	15.4	0.0	
100	QPSK	135	135	14.83	14.86	14.82	15.4	0.0	
100	QPSK	270	0	14.82	14.83	14.78	15.4	0.0	
100	16QAM	1	1	15.04	15.02	15.04	15.4	0.0	
100	16QAM	1	1	15.08	15.08	15.04	15.4	0.0	
100	256QAM	1	1	15.13	15.11	15.08	15.4	0.0	
Channel									
Frequency (MHz)									
50	PUSC-BPSK	1	1	14.98	15.05	14.95	15.4	0.0	
Channel									
Frequency (MHz)									
80	PUSC-BPSK	1	1	14.94	14.95	14.95	15.4	0.0	
Channel									
Frequency (MHz)									
60	PUSC-BPSK	1	1	14.93	14.95	14.93	15.4	0.0	
Channel									
Frequency (MHz)									
50	PUSC-BPSK	1	1	14.93	14.93	14.94	15.4	0.0	
Channel									
Frequency (MHz)									
40	PUSC-BPSK	1	1	14.93	14.93	14.93	15.4	0.0	
Channel									
Frequency (MHz)									
20	PUSC-BPSK	1	1	14.93	14.93	14.88	15.4	0.0	

N41(HPURE)_FCC											
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. Freq. (MHz)	Power Mults Ch. Freq. (MHz)	Power High Ch. Freq. (MHz)	Time-up time (dBm)	MFR (dB)			
Channel											
Frequency (MHz)											
100	PUSC-BPSK	1	1	15.75	15.75	15.75	15.4	18.4	0.0		
100	PUSC-BPSK	1	137	15.04	15.08	15.08	15.4				
100	PUSC-BPSK	1	217	15.04	15.05	15.05	15.4				
100	PUSC-BPSK	135	0	15.02	15.03	15.02	15.4				
100	PUSC-BPSK	135	0	15.13	15.13	15.13	15.4	18.4	0.0		
100	PUSC-BPSK	135	135	14.92	14.95	14.92	15.4				
100	QPSK	1	1	14.98	15.11	15.03	15.4				
100	QPSK	1	137	15.02	15.08	15.03	15.4				
100	QPSK	1	217	14.97	15.05	14.95	15.4	18.4	0.0		
100	QPSK	135	0	14.93	14.94	14.78	15.4				
100	QPSK	135	0	14.84	14.82	14.82	15.4				
100	QPSK	135	135	14.83	14.86	14.82	15.4				
100	QPSK	270	0	14.82	14.83	14.78	15.4	18.4	0.0		
100	84QAM	1	1	15.04	15.02	15.04	15.4				
100	84QAM	1	1	15.08	15.08	15.04	15.4				
100	256QAM	1	1	15.13	15.11	15.08	15.4				
Channel											
Frequency (MHz)											
50	PUSC-BPSK	1	1	14.98	15.05	14.95	15.4	18.4	0.0		
Channel											
Frequency (MHz)											
80	PUSC-BPSK	1	1	14.94	14.95	14.95	15.4				
Channel											
Frequency (MHz)											
60	PUSC-BPSK	1	1	14.93	14.95	14.93	15.4	18.4	0.0		
Channel											
Frequency (MHz)											
50	PUSC-BPSK	1	1	14.93	14.93	14.94	15.4				
Channel											
Frequency (MHz)											
40	PUSC-BPSK	1	1	14.93	14.93	14.93	15.4	18.4	0.0		
Channel											
Frequency (MHz)											
20	PUSC-BPSK	1	1	14.93	14.93	14.88	15.4				

Reduced power level 2/3/4 for Head - ANT0

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	PI/2 BPSK	1	1	18.40	18.34	18.28	19.2	0.0
20	PI/2 BPSK	1	53	18.44	18.40	18.38		
20	PI/2 BPSK	1	104	18.31	18.26	18.22	19.2	0.0
20	PI/2 BPSK	50	0	18.31	18.29	18.27		
20	PI/2 BPSK	50	28	18.38	18.36	18.35	19.2	0.0
20	PI/2 BPSK	50	56	18.22	18.23	18.17		
20	PI/2 BPSK	100	0	18.36	18.34	18.32	19.2	0.0
20	QPSK	1	1	18.34	18.32	18.32	19.2	0.0
20	QPSK	1	53	18.42	18.37	18.37		
20	QPSK	1	104	18.26	18.23	18.22	19.2	0.0
20	QPSK	50	0	18.35	18.32	18.38		
20	QPSK	50	28	18.39	18.33	18.36	19.2	0.0
20	QPSK	50	56	18.22	18.30	18.26		
20	QPSK	100	0	18.22	18.19	18.16	19.2	0.0
20	16QAM	1	53	18.14	18.10	18.12	19.2	0.0
20	64QAM	1	53	18.42	18.39	18.41	19.2	0.0
20	256QAM	1	53	18.40	18.43	18.42	19.2	0.0
Channel				166300	167300	168300	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				831.5	836.5	841.5		
15	PI/2 BPSK	1	40	18.33	18.32	18.28	19.2	0.0
Channel				165800	167300	168800	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				829	836.5	844		
10	PI/2 BPSK	1	26	18.33	18.32	18.29	19.2	0.0
Channel				165300	167300	169300	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				826.5	836.5	846.5		
5	PI/2 BPSK	1	13	18.31	18.31	18.30	19.2	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				134600	136100	137600	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				673	680.5	688		
20	PI/2 BPSK	1	1	17.80	17.70	17.59	18.7	0.0
20	PI/2 BPSK	1	53	17.83	17.72	17.66		
20	PI/2 BPSK	1	104	17.65	17.61	17.63	18.7	0.0
20	PI/2 BPSK	50	0	17.73	17.64	17.66		
20	PI/2 BPSK	50	28	17.80	17.69	17.64	18.7	0.0
20	PI/2 BPSK	50	56	17.64	17.58	17.63		
20	PI/2 BPSK	100	0	17.78	17.67	17.62	18.7	0.0
20	QPSK	1	1	17.80	17.78	17.73	18.7	0.0
20	QPSK	1	53	17.79	17.76	17.73		
20	QPSK	1	104	17.51	17.53	17.47	18.7	0.0
20	QPSK	50	0	17.75	17.72	17.75		
20	QPSK	50	28	17.61	17.64	17.59	18.7	0.0
20	QPSK	50	56	17.70	17.68	17.70		
20	QPSK	100	0	17.66	17.66	17.67	18.7	0.0
20	16QAM	1	53	17.68	17.65	17.66	18.7	0.0
20	64QAM	1	53	17.72	17.69	17.67	18.7	0.0
20	256QAM	1	53	17.66	17.63	17.61	18.7	0.0
Channel				134100	136100	138100	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				670.5	680.5	690.5		
15	PI/2 BPSK	1	40	17.71	17.68	17.66	18.7	0.0
Channel				133600	136100	138600	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				668	680.5	693		
10	PI/2 BPSK	1	26	17.69	17.66	17.63	18.7	0.0
Channel				133100	136100	139100	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				665.5	680.5	695.5		
5	PI/2 BPSK	1	13	17.66	17.64	17.62	18.7	0.0



Reduced power level 2/3/4 for Head - ANT2

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	15.07	15.02	15.01	15.9	0.0
20	PI2 BPSK	1	53	15.32	15.29	15.31		
20	PI2 BPSK	1	104	14.96	14.94	14.92		
20	PI2 BPSK	50	0	15.21	15.23	15.19		
20	PI2 BPSK	50	28	15.30	15.28	15.28	15.9	0.0
20	PI2 BPSK	50	56	15.25	15.23	15.21		
20	PI2 BPSK	100	0	15.27	15.26	15.25	15.9	0.0
20	QPSK	1	1	15.12	15.08	15.05	15.9	0.0
20	QPSK	1	53	15.16	15.14	15.06		
20	QPSK	1	104	15.08	15.11	15.06		
20	QPSK	50	0	15.08	15.10	15.04		
20	QPSK	50	28	15.12	15.06	15.08	15.9	0.0
20	QPSK	50	56	15.06	15.08	15.09		
20	QPSK	100	0	15.11	15.13	15.10	15.9	0.0
20	16QAM	1	53	15.14	15.15	15.11	15.9	0.0
20	64QAM	1	53	15.23	15.23	15.20	15.9	0.0
20	256QAM	1	53	15.23	15.22	15.20	15.9	0.0
Channel				371500	376000	380500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1867.5	1880	1902.5		
15	PI2 BPSK	1	40	15.26	15.24	15.22	15.9	0.0
Channel				371000	376000	381000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1855	1880	1905		
10	PI2 BPSK	1	26	15.27	15.26	15.26	15.9	0.0
Channel				370500	376000	381500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1862.5	1880	1907.5		
5	PI2 BPSK	1	13	15.30	15.29	15.25	15.9	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	376000	381000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1860	1880	1905		
20	PI2 BPSK	1	1	14.98	15.00	14.95	15.9	0.0
20	PI2 BPSK	1	53	15.19	15.23	15.17		
20	PI2 BPSK	1	104	15.14	15.18	15.11		
20	PI2 BPSK	50	0	14.91	14.95	14.88		
20	PI2 BPSK	50	28	15.16	15.18	15.14	15.9	0.0
20	PI2 BPSK	50	56	15.00	15.02	14.98		
20	PI2 BPSK	100	0	15.13	15.14	15.11	15.9	0.0
20	QPSK	1	1	14.91	14.93	14.89	15.9	0.0
20	QPSK	1	53	15.15	15.18	15.15		
20	QPSK	1	104	15.03	15.06	15.03		
20	QPSK	50	0	14.97	14.98	14.96		
20	QPSK	50	28	15.11	15.13	15.08	15.9	0.0
20	QPSK	50	56	15.08	15.05	15.00		
20	QPSK	100	0	14.88	14.90	14.84	15.9	0.0
20	16QAM	1	53	15.14	15.18	15.13	15.9	0.0
20	64QAM	1	53	15.00	15.02	15.01	15.9	0.0
20	256QAM	1	53	15.06	15.10	15.04	15.9	0.0
Channel				371500	376000	381500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1867.5	1880	1907.5		
15	PI2 BPSK	1	40	15.03	15.05	15.01	15.9	0.0
Channel				371000	376000	382000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1855	1880	1910		
10	PI2 BPSK	1	26	15.04	15.07	15.03	15.9	0.0
Channel				370500	376000	382500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1862.5	1880	1912.5		
5	PI2 BPSK	1	13	15.08	15.07	15.06	15.9	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	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1725	1745	1770		
20	PI2 BPSK	1	1	14.41	14.23	14.16	15.2	0.0
20	PI2 BPSK	1	53	14.68	14.65	14.49		
20	PI2 BPSK	1	104	14.32	14.13	14.36		
20	PI2 BPSK	50	0	14.60	14.43	14.15		
20	PI2 BPSK	50	28	14.84	14.63	14.46	15.2	0.0
20	PI2 BPSK	50	56	14.58	14.42	14.16		
20	PI2 BPSK	100	0	14.62	14.60	14.43	15.2	0.0
20	QPSK	1	1	14.40	14.36	14.33	15.2	0.0
20	QPSK	1	53	14.42	14.37	14.32		
20	QPSK	1	104	14.38	14.31	14.25		
20	QPSK	50	0	14.36	14.30	14.27		
20	QPSK	50	28	14.36	14.32	14.29	15.2	0.0
20	QPSK	50	56	14.34	14.28	14.25		
20	QPSK	100	0	14.36	14.30	14.23	15.2	0.0
20	16QAM	1	53	14.43	14.25	14.21	15.2	0.0
20	64QAM	1	53	14.47	14.38	14.14	15.2	0.0
20	256QAM	1	53	14.50	14.49	14.39	15.2	0.0
Channel				343500	349000	354500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1717.5	1745	1772.5		
15	PI2 BPSK	1	40	14.57	14.40	14.28	15.2	0.0
Channel				343000	349000	355000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1715	1745	1775		
10	PI2 BPSK	1	26	14.56	14.36	14.22	15.2	0.0
Channel				342500	349000	355500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				1712.5	1745	1777.5		
5	PI2 BPSK	1	13	14.53	14.35	14.23	15.2	0.0



N41_FCC									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. F [Freq]	Power Middle Ch. F [Freq]	Power High Ch. F [Freq]	Tune-up limit (dBm)	MPR (dB)	
Channel				506202	518598	528000	16.4	0.0	
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	15.16	15.20	15.14			
100	PI2 BPSK	1	137	15.04	15.03	15.08			
100	PI2 BPSK	1	271	15.04	15.05	15.04	16.4	0.0	
100	PI2 BPSK	135	0	15.00	15.03	15.02			
100	PI2 BPSK	135	69	15.13	15.16	15.12			
100	PI2 BPSK	135	138	14.92	14.95	14.91			
100	PI2 BPSK	270	0	15.11	15.13	15.10	16.4	0.0	
100	QPSK	1	1	14.98	15.11	15.03	16.4	0.0	
100	QPSK	1	137	15.02	15.08	15.01			
100	QPSK	1	271	14.91	15.06	14.90			
100	QPSK	135	0	14.80	14.84	14.78			
100	QPSK	135	69	14.84	14.82	14.82	16.4	0.0	
100	QPSK	135	138	14.83	14.86	14.82	16.4	0.0	
100	QPSK	270	0	14.80	14.83	14.78			
100	16QAM	1	1	15.04	15.02	15.04			
100	64QAM	1	1	15.06	15.08	15.04			
100	256QAM	1	1	15.10	15.11	15.08	16.4	0.0	
Channel				508200	518598	528996	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2541	2592.99	2644.98	(dBm)	(dB)	
90	PI2 BPSK	1	1	14.96	14.98	14.94	16.4	0.0	
Channel				507204	518598	529998	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2536.02	2592.99	2649.99	(dBm)	(dB)	
80	PI2 BPSK	1	1	14.94	14.96	14.95	16.4	0.0	
Channel				505200	518598	531996	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2526	2592.99	2659.98	(dBm)	(dB)	
60	PI2 BPSK	1	1	14.93	14.95	14.93	16.4	0.0	
Channel				504204	518598	532998	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2521.02	2592.99	2664.99	(dBm)	(dB)	
50	PI2 BPSK	1	1	14.89	14.90	14.84	16.4	0.0	
Channel				503202	518598	534000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2516.01	2592.99	2670	(dBm)	(dB)	
40	PI2 BPSK	1	1	14.89	14.93	14.86	16.4	0.0	
Channel				501204	518598	535998	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2506.02	2592.99	2679.99	(dBm)	(dB)	
20	PI2 BPSK	1	1	14.93	14.95	14.88	16.4	0.0	

N41(HPUE)_FCC									
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. F [Freq]	Power Middle Ch. F [Freq]	Power High Ch. F [Freq]	Tune-up limit (dBm)	MPR (dB)	
Channel				506202	518598	528000	16.4	0.0	
Frequency (MHz)				2546.01	2592.99	2640			
100	PI2 BPSK	1	1	15.16	15.20	15.14			
100	PI2 BPSK	1	137	15.04	15.03	15.08			
100	PI2 BPSK	1	271	15.04	15.05	15.04	16.4	0.0	
100	PI2 BPSK	135	0	15.00	15.03	15.02			
100	PI2 BPSK	135	69	15.13	15.16	15.12			
100	PI2 BPSK	135	138	14.92	14.95	14.91			
100	PI2 BPSK	270	0	15.11	15.13	15.10	16.4	0.0	
100	QPSK	1	1	14.98	15.11	15.03	16.4	0.0	
100	QPSK	1	137	15.02	15.08	15.01			
100	QPSK	1	271	14.91	15.06	14.90			
100	QPSK	135	0	14.80	14.84	14.78			
100	QPSK	135	69	14.84	14.82	14.82	16.4	0.0	
100	QPSK	135	138	14.83	14.86	14.82	16.4	0.0	
100	QPSK	270	0	14.80	14.83	14.78			
100	16QAM	1	1	15.04	15.02	15.04			
100	64QAM	1	1	15.06	15.08	15.04			
100	256QAM	1	1	15.10	15.11	15.08	12.9	3.5	
Channel				508200	518598	528996	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2541	2592.99	2644.98	(dBm)	(dB)	
90	PI2 BPSK	1	1	14.96	14.98	14.94	16.4	0.0	
Channel				507204	518598	529998	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2536.02	2592.99	2649.99	(dBm)	(dB)	
80	PI2 BPSK	1	1	14.94	14.96	14.95	16.4	0.0	
Channel				505200	518598	531996	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2526	2592.99	2659.98	(dBm)	(dB)	
60	PI2 BPSK	1	1	14.93	14.95	14.93	16.4	0.0	
Channel				504204	518598	532998	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2521.02	2592.99	2664.99	(dBm)	(dB)	
50	PI2 BPSK	1	1	14.89	14.90	14.84	16.4	0.0	
Channel				503202	518598	534000	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2516.01	2592.99	2670	(dBm)	(dB)	
40	PI2 BPSK	1	1	14.89	14.93	14.86	16.4	0.0	
Channel				501204	518598	535998	Tune-up limit (dBm)	MPR	
Frequency (MHz)				2506.02	2592.99	2679.99	(dBm)	(dB)	
20	PI2 BPSK	1	1	14.93	14.95	14.88	16.4	0.0	



Reduced power for Hotspot on - ANT2

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 1860	376000 1880	380000 1900	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)								
20	PI2 BPSK	1	1	17.00	16.90	16.87	17.8	0.0
20	PI2 BPSK	1	53	17.17	17.10	17.04		
20	PI2 BPSK	1	104	16.95	16.82	16.80		
20	PI2 BPSK	50	0	16.85	16.82	16.79		
20	PI2 BPSK	50	28	17.05	17.00	16.95	17.8	0.0
20	PI2 BPSK	50	56	16.82	16.80	16.75		
20	PI2 BPSK	100	0	16.96	16.95	16.92		
20	QPSK	1	1	17.11	16.96	16.82		
20	QPSK	1	53	17.09	16.78	16.59	17.8	0.0
20	QPSK	1	104	17.00	16.96	16.78		
20	QPSK	50	0	16.90	16.87	16.91		
20	QPSK	50	28	17.07	16.78	16.89		
20	QPSK	50	56	16.73	16.82	16.80	17.8	0.0
20	QPSK	100	0	16.91	17.07	16.91		
20	16QAM	1	53	17.12	16.97	17.00		
20	64QAM	1	53	16.97	16.80	16.94		
20	256QAM	1	53	17.05	16.86	16.93	17.8	0.0
Channel				371500	376000	380500		
Frequency (MHz)				1857.5	1880	1902.5	Tune-up limit (dBm)	MPR (dB)
15	PI2 BPSK	1	40	17.08	17.03	16.98	17.8	0.0
Channel				371000	376000	381000		
Frequency (MHz)				1865	1880	1905	Tune-up limit (dBm)	MPR (dB)
10	PI2 BPSK	1	26	17.05	16.98	16.94	17.8	0.0
Channel				370500	376000	381500		
Frequency (MHz)				1852.5	1880	1907.5	Tune-up limit (dBm)	MPR (dB)
5	PI2 BPSK	1	13	17.10	17.05	17.02	17.8	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 1860	376000 1880	381000 1900	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)								
20	PI2 BPSK	1	1	17.05	17.09	17.02	17.8	0.0
20	PI2 BPSK	1	53	17.18	17.20	17.14		
20	PI2 BPSK	1	104	16.98	17.01	16.95		
20	PI2 BPSK	50	0	17.03	17.09	16.98		
20	PI2 BPSK	50	28	17.12	17.15	17.11	17.8	0.0
20	PI2 BPSK	50	56	16.96	17.00	16.92		
20	PI2 BPSK	100	0	17.08	17.11	17.07		
20	QPSK	1	1	16.84	17.04	17.00		
20	QPSK	1	53	16.76	16.95	16.81	17.8	0.0
20	QPSK	1	104	16.76	16.94	16.84		
20	QPSK	50	0	16.86	16.97	16.71		
20	QPSK	50	28	17.07	17.10	16.97		
20	QPSK	50	56	16.92	16.74	16.79	17.8	0.0
20	QPSK	100	0	17.02	16.89	16.90		
20	16QAM	1	53	16.91	17.07	17.00		
20	64QAM	1	53	16.98	16.81	16.85		
20	256QAM	1	53	16.79	16.75	16.84	17.8	0.0
Channel				371500	376000	381500		
Frequency (MHz)				1857.5	1880	1907.5	Tune-up limit (dBm)	MPR (dB)
15	PI2 BPSK	1	40	16.82	16.79	16.76	17.8	0.0
Channel				371000	376000	382000		
Frequency (MHz)				1865	1880	1910	Tune-up limit (dBm)	MPR (dB)
10	PI2 BPSK	1	26	16.78	17.05	16.94	17.8	0.0
Channel				370500	376000	382500		
Frequency (MHz)				1852.5	1880	1912.5	Tune-up limit (dBm)	MPR (dB)
5	PI2 BPSK	1	13	16.85	16.87	16.79	17.8	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 1720	349000 1745	354000 1770	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)								
20	PI2 BPSK	1	1	16.98	16.91	16.88	19.8	0.0
20	PI2 BPSK	1	53	16.96	16.98	16.91		
20	PI2 BPSK	1	104	16.91	16.83	16.80		
20	PI2 BPSK	50	0	16.89	16.86	16.79		
20	PI2 BPSK	50	28	16.93	16.95	16.88	19.8	0.0
20	PI2 BPSK	50	56	16.92	16.89	16.85		
20	PI2 BPSK	100	0	16.96	16.93	16.85		
20	QPSK	1	1	16.72	16.76	16.60		
20	QPSK	1	53	16.55	16.08	16.55	19.8	0.0
20	QPSK	1	104	16.75	16.74	16.56		
20	QPSK	50	0	16.60	16.74	16.50		
20	QPSK	50	28	16.84	16.75	16.63		
20	QPSK	50	56	16.95	16.78	16.65	19.8	0.0
20	QPSK	100	0	16.75	16.69	16.65		
20	16QAM	1	53	16.74	16.65	16.60		
20	64QAM	1	53	16.91	16.61	16.70		
20	256QAM	1	53	16.71	16.86	16.67	19.8	0.0
Channel				343500	349000	354500		
Frequency (MHz)				1717.5	1745	1772.5	Tune-up limit (dBm)	MPR (dB)
15	PI2 BPSK	1	40	16.62	16.67	16.74	19.8	0.0
Channel				343000	349000	355000		
Frequency (MHz)				1716	1745	1774	Tune-up limit (dBm)	MPR (dB)
10	PI2 BPSK	1	26	16.83	16.78	16.57	19.8	0.0
Channel				342500	349000	355500		
Frequency (MHz)				1712.5	1745	1777.5	Tune-up limit (dBm)	MPR (dB)
5	PI2 BPSK	1	13	16.73	16.63	16.52	19.8	0.0

N41_FCC							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	
Channel				506202	518598	528000	
Frequency (MHz)				2546.01	2592.99	2640	
100	PI2 BPSK	1	1	17.58	17.60	17.55	18.5
100	PI2 BPSK	1	137	17.45	17.46	17.40	
100	PI2 BPSK	1	271	17.40	17.44	17.38	18.5
100	PI2 BPSK	135	0	17.43	17.46	17.35	
100	PI2 BPSK	135	89	17.55	17.57	17.53	18.5
100	PI2 BPSK	135	138	17.48	17.51	17.42	
100	PI2 BPSK	270	0	17.52	17.55	17.50	18.5
100	QPSK	1	1	17.52	17.53	17.45	18.5
100	QPSK	1	137	17.16	17.25	17.14	
100	QPSK	1	271	17.30	17.40	17.20	18.5
100	QPSK	135	0	17.15	17.34	17.26	
100	QPSK	135	89	17.43	17.45	17.33	18.5
100	QPSK	135	138	17.30	17.50	17.26	
100	QPSK	270	0	17.29	17.47	17.28	18.5
100	16QAM	1	1	17.49	17.48	17.28	18.5
100	64QAM	1	1	17.41	17.44	17.30	18.5
100	256QAM	1	1	17.50	17.46	17.24	18.5
Channel				508200	518598	528996	
Frequency (MHz)				2541	2592.99	2644.98	
90	PI2 BPSK	1	1	17.33	17.25	17.40	18.5
Channel				507204	518598	529998	
Frequency (MHz)				2536.02	2592.99	2649.99	
80	PI2 BPSK	1	1	17.28	17.44	17.28	18.5
Channel				505200	518598	531196	
Frequency (MHz)				2526	2592.99	2659.98	
60	PI2 BPSK	1	1	17.19	17.19	17.23	18.5
Channel				504204	518598	532998	
Frequency (MHz)				2512.02	2592.99	2664.99	
50	PI2 BPSK	1	1	17.29	17.49	17.38	18.5
Channel				503202	518598	534000	
Frequency (MHz)				2516.01	2592.99	2670	
40	PI2 BPSK	1	1	17.32	17.39	17.35	18.5
Channel				501204	518598	535998	
Frequency (MHz)				2506.02	2592.99	2679.99	
20	PI2 BPSK	1	1	17.31	17.30	17.33	18.5

N41(HPUE)_FCC							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	
Channel				506202	518598	528000	
Frequency (MHz)				2546.01	2592.99	2640	
100	PI2 BPSK	1	1	17.58	17.60	17.55	18.5
100	PI2 BPSK	1	137	17.45	17.46	17.40	
100	PI2 BPSK	1	271	17.40	17.44	17.38	18.5
100	PI2 BPSK	135	0	17.43	17.46	17.35	
100	PI2 BPSK	135	89	17.55	17.57	17.53	18.5
100	PI2 BPSK	135	138	17.48	17.51	17.42	
100	PI2 BPSK	270	0	17.52	17.55	17.50	18.5
100	QPSK	1	1	17.52	17.53	17.45	18.5
100	QPSK	1	137	17.16	17.25	17.14	
100	QPSK	1	271	17.30	17.40	17.20	18.5
100	QPSK	135	0	17.15	17.34	17.26	
100	QPSK	135	89	17.43	17.45	17.33	18.5
100	QPSK	135	138	17.30	17.50	17.26	
100	QPSK	270	0	17.29	17.47	17.28	18.5
100	16QAM	1	1	17.49	17.48	17.28	18.5
100	64QAM	1	1	17.41	17.44	17.30	18.5
100	256QAM	1	1	17.50	17.46	17.24	18.5
Channel				508200	518598	528996	
Frequency (MHz)				2541	2592.99	2644.98	
90	PI2 BPSK	1	1	17.33	17.25	17.40	18.5
Channel				507204	518598	529998	
Frequency (MHz)				2536.02	2592.99	2649.99	
80	PI2 BPSK	1	1	17.28	17.44	17.28	18.5
Channel				505200	518598	531196	
Frequency (MHz)				2526	2592.99	2659.98	
60	PI2 BPSK	1	1	17.19	17.19	17.23	18.5
Channel				504204	518598	532998	
Frequency (MHz)				2512.02	2592.99	2664.99	
50	PI2 BPSK	1	1	17.29	17.49	17.38	18.5
Channel				503202	518598	534000	
Frequency (MHz)				2516.01	2592.99	2670	
40	PI2 BPSK	1	1	17.32	17.39	17.35	18.5
Channel				501204	518598	535998	
Frequency (MHz)				2506.02	2592.99	2679.99	
20	PI2 BPSK	1	1	17.31	17.30	17.33	18.5

Full Power for ANT1

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	PI/2 BPSK	1	1	23.17	23.13	23.09	23.8	0.0
20	PI/2 BPSK	1	53	23.37	23.31	23.24		
20	PI/2 BPSK	1	104	23.15	23.11	23.03		
20	PI/2 BPSK	50	0	22.57	22.53	22.56		
20	PI/2 BPSK	50	28	23.16	23.07	23.02	23.8	0.0
20	PI/2 BPSK	50	56	22.56	22.54	22.55		
20	PI/2 BPSK	100	0	20.56	20.53	20.51		
20	QPSK	1	1	23.02	23.01	23.05		
20	QPSK	1	53	23.01	23.03	23.07	23.8	0.0
20	QPSK	1	104	22.97	22.98	22.98		
20	QPSK	50	0	22.07	22.08	22.08		
20	QPSK	50	28	23.10	23.03	23.02		
20	QPSK	50	56	22.02	22.04	22.02	23.8	0.0
20	QPSK	100	0	22.09	22.01	22.00		
20	16QAM	1	53	22.21	22.01	22.05		
20	64QAM	1	53	20.76	21.12	21.01		
20	256QAM	1	53	18.71	18.88	18.89	19.3	4.5
Channel				166300	167300	168300	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				831.5	836.5	841.5		
15	PI/2 BPSK	1	40	23.12	23.12	23.05	23.8	0.0
Channel				165800	167300	168800	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				829	836.5	844		
10	PI/2 BPSK	1	26	23.16	23.06	23.12	23.8	0.0
Channel				165300	167300	169300	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				826.5	836.5	846.5		
5	PI/2 BPSK	1	13	23.08	23.04	23.07	23.8	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				134600	136100	137600	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				673	680.5	688		
20	PI/2 BPSK	1	1	22.80	22.73	22.74	23.8	0.0
20	PI/2 BPSK	1	53	22.97	22.86	22.82		
20	PI/2 BPSK	1	104	22.73	22.62	22.53		
20	PI/2 BPSK	50	0	22.33	22.23	22.19		
20	PI/2 BPSK	50	28	22.73	22.69	22.65	23.8	0.0
20	PI/2 BPSK	50	56	22.33	22.13	22.03		
20	PI/2 BPSK	100	0	22.26	22.21	22.17		
20	QPSK	1	1	22.80	22.83	22.76		
20	QPSK	1	53	22.72	22.75	22.82	23.8	0.0
20	QPSK	1	104	22.61	22.83	22.44		
20	QPSK	50	0	21.67	21.71	21.67		
20	QPSK	50	28	22.58	22.67	22.62		
20	QPSK	50	56	21.55	21.57	21.53	23.8	0.0
20	QPSK	100	0	21.68	21.70	21.67		
20	16QAM	1	53	21.65	21.50	21.47		
20	64QAM	1	53	20.61	20.61	20.47		
20	256QAM	1	53	18.58	18.62	18.47	19.3	4.5
Channel				134100	136100	138100	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				670.5	680.5	690.5		
15	PI/2 BPSK	1	40	22.88	22.72	22.69	23.8	0.0
Channel				133600	136100	138600	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				668	680.5	693		
10	PI/2 BPSK	1	26	22.74	22.65	22.68	23.8	0.0
Channel				133100	136100	139100	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				665.5	680.5	695.5		
5	PI/2 BPSK	1	13	22.79	22.63	22.74	23.8	0.0



Full Power for ANT3

N2									
BW (MHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit	MPR	
Channel				372000	376000	380000	Tune-up limit	MPR	
Frequency (MHz)				1860	1860	1900			
20	PI2 BPSK	1	1	22.95	22.85	22.81	23.8	0.0	
20	PI2 BPSK	1	53	22.05	22.86	22.86			
20	PI2 BPSK	1	104	22.87	22.83	22.89			
20	PI2 BPSK	50	0	22.37	22.28	22.20			
20	PI2 BPSK	50	28	22.84	22.78	22.74	23.8	0.0	
20	PI2 BPSK	50	56	22.35	22.29	22.21			
20	PI2 BPSK	100	0	22.38	22.31	22.37	23.3	0.5	
20	QPSK	1	1	22.87	22.89	22.79	23.8	0.0	
20	QPSK	1	53	23.01	22.94	22.89			
20	QPSK	1	104	22.85	22.80	22.75			
20	QPSK	50	0	21.83	21.82	21.71			
20	QPSK	50	28	22.86	22.83	22.74	23.8	0.0	
20	QPSK	50	56	21.87	21.82	21.76			
20	QPSK	100	0	21.80	21.78	21.63	22.8	1.0	
20	16QAM	1	53	22.34	22.58	22.32	22.8	1.0	
20	64QAM	1	53	20.90	20.86	20.78	21.8	2.0	
20	256QAM	1	53	18.65	18.78	18.61	19.8	4.0	
Channel				371500	376000	380500	Tune-up limit	MPR	
Frequency (MHz)				1852.5	1860	1862.5			
15	PI2 BPSK	1	40	22.92	22.79	22.85	23.8	0.0	
Channel				371000	376000	381000	Tune-up limit	MPR	
Frequency (MHz)				1855	1860	1905			
10	PI2 BPSK	1	26	22.89	22.88	22.91	23.8	0.0	
Channel				371250	371000	381500	Tune-up limit	MPR	
Frequency (MHz)				1852.5	1860	1907.5			
5	PI2 BPSK	1	13	22.88	22.79	22.84	23.8	0.0	

N25									
BW [MHz]	Modulation	Channel	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
Channel					372000	378000	381000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)					1860	1865	1862		
20	PI2 BPSK	1	1	1	22.85	22.92	22.81	23.8	0.0
20	PI2 BPSK	1	53	22.88	22.98	22.86			
20	PI2 BPSK	1	104	22.89	22.90	22.89			
20	PI2 BPSK	50	0	22.38	22.38	22.20			
20	PI2 BPSK	50	28	22.83	22.87	22.74	23.8	0.0	
20	PI2 BPSK	50	56	22.35	22.38	22.21			
20	PI2 BPSK	100	0	22.33	22.35	22.32	23.3	0.5	
20	QPSK	1	1	1	22.01	22.89	22.78	23.8	0.0
20	QPSK	1	53	22.46	22.94	22.85			
20	QPSK	1	104	22.93	22.80	22.58			
20	QPSK	50	0	21.80	21.82	21.64			
20	QPSK	50	28	22.87	22.83	22.70	23.8	0.0	
20	QPSK	50	56	21.86	21.82	21.61			
20	QPSK	100	0	21.84	21.87	21.63	22.8	1.0	
20	16QAM	1	53	22.34	22.64	22.40	22.8	1.0	
20	64QAM	1	53	20.91	20.78	20.80	21.8	2.0	
20	256QAM	1	53	18.66	18.84	18.55	19.8	4.0	
Channel					371500	378000	381500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)					1857.5	1865	1867.5		
15	PI2 BPSK	1	40	22.93	22.86	22.77	23.8	0.0	
Channel					371000	378000	382000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)					1855	1860	1865		
10	PI2 BPSK	1	26	22.89	22.89	22.80	23.8	0.0	
Channel					371250	371000	382500	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)					1852.5	1860	1867.5		
5	PI2 BPSK	1	13	22.89	22.81	22.78	23.8	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				342000	349000	354000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1720	1725	1721			
20	PI2 BPSK	1	1	23.21	23.15	22.93	23.8	0.0	
20	PI2 BPSK	1	53	23.26	22.96	22.79			
20	PI2 BPSK	1	104	23.17	22.93	22.78			
20	PI2 BPSK	50	0	22.86	22.49	22.31			
20	PI2 BPSK	50	28	23.12	22.83	22.73	23.8	0.0	
20	PI2 BPSK	50	56	22.84	22.46	22.24			
20	PI2 BPSK	100	0	22.82	22.42	22.30	23.3	0.5	
20	QPSK	1	1	22.84	23.06	22.87	23.8	0.0	
20	QPSK	1	53	23.02	22.96	22.83			
20	QPSK	1	104	22.84	22.70	22.78			
20	QPSK	50	0	22.18	21.98	21.74			
20	QPSK	50	28	23.16	22.94	22.71	23.8	0.0	
20	QPSK	50	56	22.05	21.85	21.70			
20	QPSK	100	0	22.87	21.91	21.78	22.8	1.0	
20	16QAM	1	53	22.37	22.74	22.50	22.8	1.0	
20	64QAM	1	53	20.95	20.88	20.79	21.8	2.0	
20	256QAM	1	53	18.75	18.87	18.50	19.8	4.0	
Channel				343500	349000	354500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1717.5	1725	1722.5			
15	PI2 BPSK	1	40	23.19	23.14	22.95	23.8	0.0	
Channel				343000	349000	355000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1715	1745	1775			
10	PI2 BPSK	1	26	23.14	23.18	22.83	23.8	0.0	
Channel				342500	349000	355500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1712.5	1745	1777.5			
5	PI2 BPSK	1	13	23.10	23.05	22.76	23.8	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				505002	518598	528000	24.0	0.0	
Frequency (MHz)				2548.01	2592.99	2640			
100	PI2 BPSK	1	1	23.07	23.12	23.05	24.0	0.0	
100	PI2 BPSK	1	137	23.05	23.03	23.00			
100	PI2 BPSK	1	271	22.97	23.04	22.98			
100	PI2 BPSK	135	0	22.96	23.02	22.98			
100	PI2 BPSK	135	69	23.03	23.07	23.01	24.0	0.0	
100	PI2 BPSK	135	138	22.88	22.94	22.96			
100	PI2 BPSK	270	0	23.01	23.04	22.98			
100	QPSK	1	1	23.02	23.10	23.05			
100	QPSK	1	137	22.97	23.06	22.85	24.0	0.0	
100	QPSK	1	271	22.85	23.05	22.84			
100	QPSK	135	0	22.91	23.00	22.88			
100	QPSK	135	69	22.98	23.02	22.91			
100	QPSK	135	138	22.84	22.76	22.80	24.0	0.0	
100	QPSK	270	0	22.80	22.88	22.80			
100	16QAM	1	1	23.03	23.09	23.01			
100	64QAM	1	1	22.32	22.57	22.33			
100	256QAM	1	1	20.26	20.45	20.32	21.0	3.0	
Channel				508000	518598	528998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2541	2592.99	2644.98	24.0	0.0	
90	PI2 BPSK	1	1	23.05	23.10	23.03			
Channel				507204	518598	529598	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2538.02	2592.99	2649.99	24.0	0.0	
80	PI2 BPSK	1	1	23.04	23.05	23.04			
Channel				505200	518598	531998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2524	2592.99	2659.99	24.0	0.0	
60	PI2 BPSK	1	1	23.02	22.94	23.00			
Channel				504204	518598	532998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2521.02	2592.99	2664.99	24.0	0.0	
50	PI2 BPSK	1	1	22.99	22.91	22.94			
Channel				503202	518598	534000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2518.01	2592.99	2670	24.0	0.0	
40	PI2 BPSK	1	1	23.03	23.05	23.00			
Channel				501204	518598	535998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2504.02	2592.99	2678.99	24.0	0.0	
20	PI2 BPSK	1	1	23.01	23.03	22.94			

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	24.0	0.0	
Frequency (MHz)				2548.01	2592.99	2640			
100	PI2 BPSK	1	1	25.07	25.12	25.05	26.0	0.0	
100	PI2 BPSK	1	137	24.99	25.01	24.90			
100	PI2 BPSK	1	271	24.88	24.90	24.48			
100	PI2 BPSK	135	0	24.56	24.57	24.48			
100	PI2 BPSK	135	69	25.03	25.08	24.98	26.0	0.0	
100	PI2 BPSK	135	138	24.41	24.44	24.40			
100	PI2 BPSK	270	0	24.47	24.53	24.44			
100	QPSK	1	1	24.25	24.61	24.32			
100	QPSK	1	137	24.84	24.70	24.81	26.0	0.0	
100	QPSK	1	271	23.83	24.31	23.70			
100	QPSK	135	0	23.90	23.91	23.67			
100	QPSK	135	69	24.92	24.93	24.88			
100	QPSK	135	138	23.55	23.68	23.88	25.0	1.0	
100	QPSK	270	0	23.48	23.64	23.73			
100	16QAM	1	1	22.83	23.27	23.10			
100	64QAM	1	1	21.87	22.30	21.91			
100	256QAM	1	1	20.12	20.59	20.21	21.5	4.5	
Channel				508000	518598	528998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2541	2592.99	2644.98	26.0	0.0	
90	PI2 BPSK	1	1	25.08	25.07	25.02			
Channel				507204	518598	529598	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2538.02	2592.99	2649.99	26.0	0.0	
80	PI2 BPSK	1	1	25.10	25.04	25.03			
Channel				505200	518598	531998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2524	2592.99	2659.99	26.0	0.0	
60	PI2 BPSK	1	1	25.04	25.02	25.04			
Channel				504204	518598	532998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2521.02	2592.99	2664.99	26.0	0.0	
50	PI2 BPSK	1	1	25.03	25.01	24.99			
Channel				503202	518598	534000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2518.01	2592.99	2670	26.0	0.0	
40	PI2 BPSK	1	1	25.02	25.11	25.04			
Channel				501204	518598	535998	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				2504.02	2592.99	2678.99	26.0	0.0	
20	PI2 BPSK	1	1	25.01	25.01	25.02			



Reduced power for Hotspot on - ANT3

N2							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				372000	376000	380000	MPR (dB)
Frequency (MHz)				1865	1880	1900	
20	PI2 BPSK	1	1	20.95	20.86	20.82	21.8
20	PI2 BPSK	1	53	21.00	20.91	20.85	
20	PI2 BPSK	1	104	20.88	20.82	20.78	
20	PI2 BPSK	50	0	20.82	20.80	20.75	21.8
20	PI2 BPSK	50	28	20.97	20.88	20.83	
20	PI2 BPSK	50	56	20.85	20.82	20.79	
20	PI2 BPSK	100	0	20.94	20.95	20.80	21.8
20	QPSK	1	1	20.86	20.68	20.58	21.8
20	QPSK	1	53	20.91	20.74	20.74	
20	QPSK	1	104	20.66	20.67	20.75	
20	QPSK	50	0	20.58	20.50	20.68	21.8
20	QPSK	50	28	20.77	20.85	20.70	
20	QPSK	50	56	20.83	20.69	20.58	
20	QPSK	100	0	20.65	20.83	20.75	21.8
20	16QAM	1	53	20.82	20.89	20.85	21.8
20	64QAM	1	53	20.40	20.37	20.32	21.8
20	256QAM	1	53	20.90	18.85	20.80	21.8
Channel				371500	376000	380500	Tune-up limit (dB)
Frequency (MHz)				1857.5	1880	1902.5	
15	PI2 BPSK	1	40	20.90	20.74	20.62	21.8
Channel				371000	376000	381000	Tune-up limit (dB)
Frequency (MHz)				1865	1880	1905	
10	PI2 BPSK	1	26	20.95	20.68	20.72	21.8
Channel				370500	376000	381500	Tune-up limit (dB)
Frequency (MHz)				1852.5	1880	1907.5	
5	PI2 BPSK	1	13	20.89	20.80	20.71	21.8

N25							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				372000	376000	381000	MPR (dB)
Frequency (MHz)				1860	1880	1905	
20	PI2 BPSK	1	1	20.38	20.43	20.35	21.3
20	PI2 BPSK	1	53	20.41	20.46	20.40	
20	PI2 BPSK	1	104	20.35	20.37	20.33	
20	PI2 BPSK	50	0	20.35	20.38	20.31	21.3
20	PI2 BPSK	50	28	20.39	20.43	20.37	
20	PI2 BPSK	50	56	20.30	20.36	20.25	
20	PI2 BPSK	100	0	20.36	20.40	20.34	21.3
20	QPSK	1	1	20.38	20.17	20.18	21.3
20	QPSK	1	53	20.34	20.17	20.28	
20	QPSK	1	104	20.22	20.26	20.29	
20	QPSK	50	0	20.28	20.34	20.02	21.3
20	QPSK	50	28	20.10	20.31	20.12	
20	QPSK	50	56	20.09	20.19	19.95	
20	QPSK	100	0	20.35	20.18	20.20	21.3
20	16QAM	1	53	20.35	20.40	20.31	21.3
20	64QAM	1	53	20.33	20.42	20.28	21.3
20	256QAM	1	53	18.80	18.88	20.77	21.3
Channel				371500	376000	381500	Tune-up limit (dB)
Frequency (MHz)				1857.5	1880	1907.5	
15	PI2 BPSK	1	40	20.36	20.40	20.06	21.3
Channel				371000	376000	382000	Tune-up limit (dB)
Frequency (MHz)				1865	1880	1910	
10	PI2 BPSK	1	26	20.35	20.32	20.18	21.3
Channel				370500	376000	382500	Tune-up limit (dB)
Frequency (MHz)				1852.5	1880	1912.5	
5	PI2 BPSK	1	13	20.25	20.24	20.25	21.3

N66							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				344000	349000	354000	MPR (dB)
Frequency (MHz)				1720	1745	1770	
20	PI2 BPSK	1	1	20.15	21.11	20.95	21.8
20	PI2 BPSK	1	53	21.20	21.16	20.98	
20	PI2 BPSK	1	104	20.12	21.07	20.93	
20	PI2 BPSK	50	0	20.14	21.13	20.90	21.8
20	PI2 BPSK	50	28	21.18	21.15	20.95	
20	PI2 BPSK	50	56	20.05	21.01	20.89	
20	PI2 BPSK	100	0	21.15	21.13	20.92	21.8
20	QPSK	1	1	20.05	20.81	20.72	21.8
20	QPSK	1	53	21.10	21.05	20.85	
20	QPSK	1	104	20.08	20.85	20.87	
20	QPSK	50	0	19.94	20.85	20.82	21.8
20	QPSK	50	28	21.17	21.06	20.84	
20	QPSK	50	56	19.88	20.72	20.74	
20	QPSK	100	0	21.15	20.84	20.84	21.8
20	16QAM	1	53	21.10	21.00	20.95	21.8
20	64QAM	1	53	20.72	20.64	20.60	21.8
20	256QAM	1	53	18.65	18.58	18.53	21.8
Channel				343500	349000	354500	Tune-up limit (dB)
Frequency (MHz)				1717.5	1745	1772.5	
15	PI2 BPSK	1	40	20.12	20.88	20.78	21.3
Channel				343000	349000	355000	Tune-up limit (dB)
Frequency (MHz)				1715	1745	1775	
10	PI2 BPSK	1	26	20.08	20.83	20.68	21.8
Channel				342500	349000	355500	Tune-up limit (dB)
Frequency (MHz)				1712.5	1745	1777.5	
5	PI2 BPSK	1	13	21.05	21.07	20.73	21.8



N41_FCC									
BW (kHz)	Modulation	RB Size	RB Offset	Power Low Ch. 1 (mW)	Power Max. Ch. 1 (mW)	Power High Ch. 1 (mW)	Power Low Ch. 2 (mW)	Power Max. Ch. 2 (mW)	Power High Ch. 2 (mW)
Channel									
Frequency (MHz)				2548.01	2552.99	2557			
100	PI-2 BPSK	1	1	25.53	25.42	25.61			
100	PI-2 BPSK	1	137	25.25	25.50	25.43	21.4	0.0	
100	PI-2 BPSK	1	211	25.29	25.49	25.75			
100	PI-2 BPSK	135	0	25.48	25.51	25.51	21.4	0.0	
100	PI-2 BPSK	135	6	25.52	25.58	25.58			
100	PI-2 BPSK	135	134	25.58	25.58	25.58	21.4	0.0	
100	PI-2 BPSK	270	0	25.50	25.56	25.54	21.4	0.0	
100	QPSK	1	1	25.27	25.58	25.34			
100	QPSK	1	137	25.29	25.32	25.25	21.4	0.0	
100	QPSK	1	211	25.21	25.31	25.29			
100	QPSK	135	0	25.52	25.47	25.38			
100	QPSK	135	6	25.43	25.33	25.47	21.4	0.0	
100	QPSK	135	134	25.31	25.47	25.35			
100	QPSK	270	0	25.18	25.43	25.50	21.4	0.0	
100	BQAM	1	1	25.25	25.43	25.35	21.4	0.0	
100	BQAM	1	1	25.39	25.29	25.50	21.4	0.0	
100	BQAM	1	1	25.11	25.25	25.4	21.4	0.0	
Channel				518555	518558	518558	Time-up limit (min)	MPN (dB)	
Frequency (MHz)				2544	2547.99	2548.99			
90	PI-2 BPSK	1	1	25.41	25.42	25.47	21.4	0.0	
Channel				517254	518558	518558	Time-up limit (min)	MPN (dB)	
Frequency (MHz)				2518.01	2545.99	2545.99			
80	PI-2 BPSK	1	1	25.39	25.38	25.59	21.4	0.0	
Channel				518552	518558	518558	Time-up limit (min)	MPN (dB)	
Frequency (MHz)				2529	2542.99	2550.99			
60	PI-2 BPSK	1	1	25.32	25.49	25.33	21.4	0.0	
Channel				518510	518558	518558	Time-up limit (min)	MPN (dB)	
Frequency (MHz)				2511.02	2542.99	2544.99			
30	PI-2 BPSK	1	1	25.37	25.42	25.37	21.4	0.0	
Channel				518552	518558	518558	Time-up limit (min)	MPN (dB)	
Frequency (MHz)				2511.01	2542.99	2543			
45	PI-2 BPSK	1	1	25.35	25.58	25.45	21.4	0.0	
Channel				518554	518558	518558	Time-up limit (min)	MPN (dB)	
Frequency (MHz)				2516.01	2542.99	2545.99			
20	PI-2 BPSK	1	1	25.40	25.42	25.35	21.4	0.0	

N41(HPUe)_FCC									
BW (kHz)	Modulation	RB Size	RB Offset	Power Low Ch. 1 (mW)	Power Max. Ch. 1 (mW)	Power High Ch. 1 (mW)	Power Low Ch. 2 (mW)	Power Max. Ch. 2 (mW)	Power High Ch. 2 (mW)
Channel									
Frequency (MHz)				2548.01	2552.99	2557			
100	PI-2 BPSK	1	1	25.53	25.42	25.61			
100	PI-2 BPSK	1	137	25.25	25.50	25.43	21.4	0.0	
100	PI-2 BPSK	1	211	25.29	25.49	25.75			
100	PI-2 BPSK	135	0	25.48	25.51	25.51	21.4	0.0	
100	PI-2 BPSK	135	6	25.52	25.58	25.58			
100	PI-2 BPSK	135	134	25.58	25.58	25.58	21.4	0.0	
100	PI-2 BPSK	270	0	25.50	25.56	25.54	21.4	0.0	
100	QPSK	1	1	25.27	25.58	25.34			
100	QPSK	1	137	25.29	25.32	25.25	21.4	0.0	
100	QPSK	1	211	25.21	25.31	25.29			
100	QPSK	135	0	25.52	25.47	25.38			
100	QPSK	135	6	25.43	25.33	25.47	21.4	0.0	
100	QPSK	135	134	25.31	25.47	25.35			
100	QPSK	270	0	25.18	25.43	25.50	21.4	0.0	
100	BQAM	1	1	25.25	25.43	25.35	21.4	0.0	
100	BQAM	1	1	25.39	25.29	25.50	21.4	0.0	
100	BQAM	1	1	25.11	25.25	25.4	21.4	0.0	
Channel				518555	518558	518558	Time-up limit (min)	MPN (dB)	
Frequency (MHz)				2544	2547.99	2548.99			
90	PI-2 BPSK	1	1	25.41	25.42	25.47	21.4	0.0	
Channel				517254	518558	518558	Time-up limit (min)	MPN (dB)	
Frequency (MHz)				2518.01	2545.99	2545.99			
80	PI-2 BPSK	1	1	25.39	25.38	25.59	21.4	0.0	
Channel				518552	518558	518558	Time-up limit (min)	MPN (dB)	
Frequency (MHz)				2529	2542.99	2550.99			
60	PI-2 BPSK	1	1	25.32	25.49	25.33	21.4	0.0	
Channel				518510	518558	518558	Time-up limit (min)	MPN (dB)	
Frequency (MHz)				2511.02	2542.99	2544.99			
30	PI-2 BPSK	1	1	25.37	25.42	25.37	21.4	0.0	
Channel				518552	518558	518558	Time-up limit (min)	MPN (dB)	
Frequency (MHz)				2511.01	2542.99	2543			
45	PI-2 BPSK	1	1	25.35	25.58	25.45	21.4	0.0	
Channel				518554	518558	518558	Time-up limit (min)	MPN (dB)	
Frequency (MHz)				2516.01	2542.99	2545.99			
20	PI-2 BPSK	1	1	25.40	25.42	25.35	21.4	0.0	

Reduced power for Sensor on - ANT3

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				1800	1880	1900	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)									
20	PI/2 BPSK	1	1	22.05	21.98	21.93	22.9	0.0	
20	PI/2 BPSK	1	53	22.10	22.08	22.02			
20	PI/2 BPSK	1	104	22.02	21.93	21.88			
20	PI/2 BPSK	50	0	22.06	21.92	21.86			
20	PI/2 BPSK	50	28	22.08	22.05	21.99	22.9	0.0	
20	PI/2 BPSK	50	56	22.00	21.93	21.84			
20	PI/2 BPSK	100	0	22.05	22.03	21.96			
20	QPSK	1	1	21.94	21.74	21.88			
20	QPSK	1	53	22.08	22.09	21.80	22.9	0.0	
20	QPSK	1	104	21.81	21.92	21.82			
20	QPSK	50	0	22.08	21.78	21.84			
20	QPSK	50	28	22.05	22.06	21.82			
20	QPSK	50	56	21.79	21.76	21.78	22.9	0.0	
20	QPSK	100	0	21.96	22.03	21.90			
20	16QAM	1	53	22.05	22.00	21.94			
20	64QAM	1	53	20.71	20.60	21.53			
20	256QAM	1	53	19.02	18.95	21.90	22.9	0.0	
Channel				371500	376000	380500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1857.5	1880	1902.5			
15	PI/2 BPSK	1	40	22.02	21.93	21.73	22.9	0.0	
Channel				371000	376000	381000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1855	1880	1905			
10	PI/2 BPSK	1	26	21.92	21.78	21.77	22.9	0.0	
Channel				370500	376000	381500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1852.5	1880	1907.5			
5	PI/2 BPSK	1	13	22.01	21.99	21.87	22.9	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				1900	1980	1995	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)									
20	PI/2 BPSK	1	1	21.90	21.92	21.99	22.9	0.0	
20	PI/2 BPSK	1	53	22.00	22.05	22.02			
20	PI/2 BPSK	1	104	21.82	21.84	21.83			
20	PI/2 BPSK	50	0	21.80	21.91	21.83			
20	PI/2 BPSK	50	28	21.98	22.03	22.00	22.9	0.0	
20	PI/2 BPSK	50	56	21.83	21.94	21.86			
20	PI/2 BPSK	100	0	21.94	22.00	21.96			
20	QPSK	1	1	21.75	21.65	21.81			
20	QPSK	1	53	21.71	21.93	21.94	22.9	0.0	
20	QPSK	1	104	21.73	21.58	21.64			
20	QPSK	50	0	21.79	21.65	21.53			
20	QPSK	50	28	21.82	21.79	21.94			
20	QPSK	50	56	21.83	21.91	21.58	22.9	0.0	
20	QPSK	100	0	21.68	21.79	21.96			
20	16QAM	1	53	21.61	21.77	21.85			
20	64QAM	1	53	21.50	21.74	21.81			
20	256QAM	1	53	21.66	21.85	21.53	22.9	0.0	
Channel				371500	376000	381500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1857.5	1880	1907.5			
15	PI/2 BPSK	1	40	21.62	21.89	21.73	22.9	0.0	
Channel				371000	376000	382000	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1855	1880	1910			
10	PI/2 BPSK	1	26	21.66	21.61	21.79	22.9	0.0	
Channel				370500	376000	382500	Tune-up limit (dBm)	MPR (dB)	
Frequency (MHz)				1852.5	1880	1912.5			
5	PI/2 BPSK	1	13	21.51	21.75	21.64	22.9	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	20.8	0.0
Frequency (MHz)				2546.01	2592.99	2640		
100	PI/2 BPSK	1	1	19.76	19.88	19.81	20.8	0.0
100	PI/2 BPSK	1	137	19.65	19.83	19.80		
100	PI/2 BPSK	1	271	19.60	19.79	19.78	20.8	0.0
100	PI/2 BPSK	135	0	19.60	19.73	19.65		
100	PI/2 BPSK	135	69	19.73	19.85	19.78	20.8	0.0
100	PI/2 BPSK	135	133	19.61	19.76	19.58		
100	PI/2 BPSK	270	0	19.71	19.82	19.75	20.8	0.0
100	QPSK	1	1	19.76	19.73	19.60		
100	QPSK	1	137	19.41	19.67	19.70	20.8	0.0
100	QPSK	1	271	19.41	19.84	19.61		
100	QPSK	135	0	19.63	19.75	19.58	20.8	0.0
100	QPSK	135	69	19.78	19.63	19.63		
100	QPSK	135	138	19.65	19.67	19.52	20.8	0.0
100	QPSK	270	0	19.76	19.71	19.71		
100	16QAM	1	1	19.61	19.76	19.66	20.8	0.0
100	64QAM	1	1	19.74	19.71	19.74	20.8	0.0
100	256QAM	1	1	19.61	19.77	19.76	20.8	0.0
Channel				508200	518598	528996	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2541	2592.99	2644.98		
90	PI/2 BPSK	1	1	19.39	19.55	19.71	20.8	0.0
Channel				507204	518598	529998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2533.02	2592.99	2649.99		
80	PI/2 BPSK	1	1	19.35	19.57	19.77	20.8	0.0
Channel				505200	518598	531996	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2528	2592.99	2659.98		
60	PI/2 BPSK	1	1	19.38	19.55	19.55	20.8	0.0
Channel				504204	518598	532998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2521.02	2592.99	2664.99		
50	PI/2 BPSK	1	1	19.55	19.63	19.54	20.8	0.0
Channel				503202	518598	534000	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2516.01	2592.99	2670		
40	PI/2 BPSK	1	1	19.60	19.83	19.62	20.8	0.0
Channel				501204	518598	535998	Tune-up limit (dBm)	MPR (dB)
Frequency (MHz)				2506.02	2592.99	2679.99		
20	PI/2 BPSK	1	1	19.47	19.79	19.63	20.8	0.0

Bluetooth/ANT+ Full Power

Bluetooth 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	8.70	8.50	8.40	8.90	8.60	8.50	8.80	8.60	8.50	10.4
	CH 39	2441	9.60	9.40	9.30	9.80	9.60	9.50	9.80	9.60	9.50	11.3
	CH 78	2480	8.70	8.50	8.40	8.90	8.70	8.60	8.90	8.70	8.60	10.4

Bluetooth LE 4.0

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			GFSK	Tune-up Limit
LE	CH 00	2402	7.80	9.80
	CH 19	2440	8.80	10.80
	CH 39	2480	7.90	9.90

Bluetooth LE 5.0

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			2Mbps	Tune-up Limit
LE	CH 00	2402	8.00	10.00
	CH 19	2440	9.00	11.00
	CH 39	2480	8.10	10.10

ANT+

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			GFSK	Tune-up Limit
ANT+	CH 02	2402	-12.40	-10.00
	CH 41	2441	-11.90	-10.00
	CH 80	2480	-13.20	-10.00

Bluetooth Reduced Power

Bluetooth 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	4.50	4.30	4.30	4.40	4.30	4.30	8.3
	CH 39	2441	6.80	6.70	6.70	4.90	4.80	4.80	4.90	4.80	4.70	8.7
	CH 78	2480	5.40	5.30	5.30	3.50	3.40	3.40	3.50	3.40	3.40	7.3

Bluetooth LE 4.0

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			GFSK	Tune-up Limit
LE	CH 00	2402	4.50	6.50
	CH 19	2440	5.10	7.10
	CH 39	2480	3.60	5.60

Bluetooth LE 5.0

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			2Mbps	Tune-up Limit
LE	CH 00	2402	4.60	6.60
	CH 19	2440	5.20	7.20
	CH 39	2480	3.70	5.70

WLAN Full power

2.4GHz WLAN	Ant 1+2					
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	22.34	24.34	98.35
		6	2437	22.31	24.31	
		11	2462	22.17	24.17	
	802.11g 6Mbps	1	2412	20.63	22.63	99.31
		6	2437	20.42	22.42	
		11	2462	20.37	22.37	
	802.11n- HT20 MCS0	1	2412	20.23	22.23	100.00
		6	2437	20.16	22.16	
		11	2462	20.02	22.02	
	802.11n- HT40 MCS0	3	2422	19.68	21.68	100.00
		6	2437	19.66	21.66	
		9	2452	19.53	21.53	
	802.11ax- HE20 MCS0	1	2412	20.27	22.27	100.00
		6	2437	20.21	22.21	
		11	2462	20.12	22.12	
	802.11ax- HE40 MCS0	3	2422	20.34	22.34	100.00
		6	2437	20.36	22.36	
		9	2452	20.27	22.27	

5GHz WLAN	Ant 1+2					
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	20.72	22.72	98.63
		40	5200	21.02	23.02	
		44	5220	20.73	22.73	
		48	5240	20.64	22.64	
	802.11n- HT20 MCS0	36	5180	20.41	22.41	100.00
		40	5200	20.71	22.71	
		44	5220	20.44	22.44	
		48	5240	20.34	22.34	
	802.11n- HT40 MCS0	38	5190	20.87	22.87	100.00
		46	5230	20.89	22.89	
	802.11ac- VHT20 MCS0	36	5180	20.40	22.40	100.00
		40	5200	20.70	22.70	
		44	5220	20.42	22.42	
		48	5240	20.33	22.33	
	802.11ac- VHT40 MCS0	38	5190	20.85	22.85	100.00
		46	5230	20.86	22.86	
	802.11ac- VHT80 MCS0	42	5210	19.99	21.99	100.00
	802.11ax- HE20 MCS0	36	5180	20.44	22.44	100.00
		40	5200	20.42	22.42	
		44	5220	20.45	22.45	
		48	5240	20.40	22.40	
	802.11ax- HE40 MCS0	38	5190	19.53	21.53	100.00
		46	5230	20.54	22.54	
	802.11ax- HE80 MCS0	42	5210	18.77	20.77	100.00

5GHz WLAN	Ant 1+2					
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	20.74	22.74	98.63
		56	5280	21.03	23.03	
		60	5300	20.60	22.60	
		64	5320	20.54	22.54	
	802.11n- HT20 MCS0	52	5260	20.45	22.45	100.00
		56	5280	20.60	22.60	
		60	5300	20.30	22.30	
		64	5320	20.24	22.24	
	802.11n- HT40 MCS0	54	5270	20.90	22.90	100.00
		62	5310	19.74	21.74	
	802.11ac- VHT20 MCS0	52	5260	20.43	22.43	100.00
		56	5280	20.58	22.58	
		60	5300	20.12	22.12	
		64	5320	20.21	22.21	
	802.11ac- VHT40 MCS0	54	5270	20.87	22.87	100.00
		62	5310	19.67	21.67	
	802.11ac- VHT80 MCS0	58	5290	19.01	21.01	100.00
	802.11ax- HE20 MCS0	52	5260	20.46	22.46	100.00
		56	5280	20.37	22.37	
		60	5300	20.35	22.35	
		64	5320	20.30	22.30	
	802.11ax- HE40 MCS0	54	5270	20.55	22.55	100.00
		62	5310	20.38	22.38	
	802.11ax- HE80 MCS0	58	5290	19.80	21.80	100.00

5GHz WLAN	Ant 1+2					
5.5GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	100	5500	20.63	22.63	98.63
		116	5580	20.38	22.38	
		124	5620	20.60	22.60	
		132	5660	20.64	22.64	
		140	5700	20.35	22.35	
	802.11n-HT20 MCS0	144	5720	20.36	22.36	100.00
		100	5500	20.33	22.33	
		116	5580	20.09	22.09	
		124	5620	20.60	22.60	
		132	5660	20.63	22.63	
	802.11n-HT40 MCS0	140	5700	20.05	22.05	100.00
		144	5720	20.03	22.03	
		102	5510	20.98	22.98	
		110	5550	20.54	22.54	
		126	5630	20.97	22.97	
	802.11ac-VHT20 MCS0	134	5670	20.63	22.63	100.00
		142	5710	20.50	22.50	
		100	5500	20.30	22.30	
		116	5580	20.06	22.06	
		124	5620	20.58	22.58	
	802.11ac-VHT40 MCS0	132	5660	20.60	22.60	100.00
		140	5700	20.03	22.03	
		144	5720	20.01	22.01	
		102	5510	20.77	22.77	
		110	5550	20.53	22.53	
	802.11ac-VHT80 MCS0	126	5630	20.75	22.75	100.00
		134	5670	20.61	22.61	
		142	5710	20.48	22.48	
		106	5530	19.65	21.65	
		122	5610	19.79	21.79	
	802.11ax-HE20 MCS0	138	5690	19.59	21.59	100.00
		100	5500	20.38	22.38	
		116	5580	20.13	22.13	
		124	5620	20.10	22.10	
		132	5660	20.11	22.11	
	802.11ax-HE40 MCS0	140	5700	20.12	22.12	100.00
		144	5720	20.13	22.13	
		102	5510	20.42	22.42	
		110	5550	20.17	22.17	
		126	5630	20.16	22.16	
	802.11ax-HE80 MCS0	134	5670	20.18	22.18	100.00
		142	5710	20.18	22.18	
		106	5530	19.51	21.51	
		122	5610	19.66	21.66	
		138	5690	19.46	21.46	

5GHz WLAN	Ant 1+2					
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	149	5745	20.44	22.44	98.63
		157	5785	20.45	22.45	
		165	5825	20.36	22.36	
	802.11n-HT20 MCS0	149	5745	20.13	22.13	100.00
		157	5785	20.14	22.14	
		165	5825	20.06	22.06	
	802.11n-HT40 MCS0	151	5755	20.69	22.69	100.00
		159	5795	20.61	22.61	
		149	5745	20.12	22.12	
	802.11ac-VHT20 MCS0	157	5785	20.13	22.13	100.00
		165	5825	20.04	22.04	
		151	5755	20.67	22.67	
	802.11ac-VHT40 MCS0	159	5795	20.59	22.59	100.00
		155	5775	19.69	21.69	
		149	5745	20.12	22.12	
	802.11ac-VHT80 MCS0	157	5785	20.11	22.11	100.00
		165	5825	20.04	22.04	
		151	5755	20.24	22.24	
	802.11ax-HE20 MCS0	159	5795	20.17	22.17	100.00
		155	5775	19.46	21.46	
		149	5745	20.12	22.12	

Reduced Power Level 1 for Head

2.4GHz WLAN		Ant 1+2				
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11b 1Mbps	1	2412	17.34	19.34	98.35
		6	2437	17.31	19.31	
		11	2462	17.17	19.17	
	802.11g 6Mbps	1	2412	14.63	16.63	99.31
		6	2437	14.42	16.42	
		11	2462	14.37	16.37	
	802.11n-HT20 MCS0	1	2412	14.23	16.23	100.00
		6	2437	14.16	16.16	
		11	2462	14.02	16.02	
	802.11n-HT40 MCS0	3	2422	13.68	15.68	100.00
		6	2437	13.66	15.66	
		9	2452	13.53	15.53	
	802.11ax-HE20 MCS0	1	2412	14.27	16.27	100.00
		6	2437	14.21	16.21	
		11	2462	14.12	16.12	
	802.11ax-HE40 MCS0	3	2422	14.34	16.34	100.00
		6	2437	14.36	16.36	
		9	2452	14.27	16.27	

5GHz WLAN		Ant 1+2				
5.2GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	36	5180	15.72	17.72	98.63
		40	5200	16.02	18.02	
		44	5220	15.73	17.73	
		48	5240	15.64	17.64	
	802.11n-HT20 MCS0	36	5180	15.41	17.41	100.00
		40	5200	15.71	17.71	
		44	5220	15.44	17.44	
		48	5240	15.34	17.34	
	802.11n-HT40 MCS0	38	5190	15.87	17.87	100.00
		46	5230	15.89	17.89	
	802.11ac-VHT20 MCS0	36	5180	15.40	17.40	100.00
		40	5200	15.70	17.70	
		44	5220	15.42	17.42	
		48	5240	15.33	17.33	
	802.11ac-VHT40 MCS0	38	5190	15.85	17.85	100.00
		46	5230	15.86	17.86	
	802.11ac-VHT80 MCS0	42	5210	14.99	16.99	100.00
		36	5180	15.44	17.44	
	802.11ax-HE20 MCS0	40	5200	15.42	17.42	100.00
		44	5220	15.45	17.45	
		48	5240	15.40	17.40	
		38	5190	14.53	16.53	100.00
	802.11ax-HE40 MCS0	46	5230	15.54	17.54	
		42	5210	13.77	15.77	100.00

5GHz WLAN		Ant 1+2				
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	52	5260	15.74	17.74	98.63
		56	5280	16.03	18.03	
		60	5300	15.60	17.60	
		64	5320	15.54	17.54	
	802.11n-HT20 MCS0	52	5260	15.45	17.45	100.00
		56	5280	15.60	17.60	
		60	5300	15.30	17.30	
		64	5320	15.24	17.24	
	802.11n-HT40 MCS0	54	5270	15.90	17.90	100.00
		62	5310	14.74	16.74	
	802.11ac-VHT20 MCS0	52	5260	15.43	17.43	100.00
		56	5280	15.58	17.58	
		60	5300	15.26	17.26	
		64	5320	15.21	17.21	
	802.11ac-VHT40 MCS0	54	5270	15.87	17.87	100.00
		62	5310	14.67	16.67	
	802.11ac-VHT80 MCS0	58	5290	14.01	16.01	100.00
		52	5260	15.46	17.46	
		56	5280	15.37	17.37	
		60	5300	15.35	17.35	
	802.11ax-HE20 MCS0	64	5320	15.30	17.30	100.00
		54	5270	15.55	17.55	
		62	5310	15.38	17.38	
		58	5290	14.80	16.80	100.00

5GHz WLAN		Ant 1+2				
5.5GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	100	5500	13.63	15.63	98.63
		116	5580	13.38	15.38	
		124	5620	13.60	15.60	
		132	5660	13.64	15.64	
		140	5700	13.35	15.35	
	802.11n-HT20 MCS0	144	5720	13.36	15.36	100.00
		100	5500	13.33	15.33	
		116	5580	13.09	15.09	
		124	5620	13.60	15.60	
		132	5660	13.63	15.63	
	802.11n-HT40 MCS0	140	5700	13.05	15.05	100.00
		144	5720	13.03	15.03	
		102	5510	13.98	15.98	
		110	5550	13.54	15.54	
		126	5630	13.97	15.97	
	802.11ac-VHT20 MCS0	134	5670	13.63	15.63	100.00
		142	5710	13.50	15.50	
		100	5500	13.30	15.30	
		116	5580	13.06	15.06	
		124	5620	13.58	15.58	
	802.11ac-VHT40 MCS0	132	5660	13.60	15.60	100.00
		140	5700	13.03	15.03	
		144	5720	13.01	15.01	
		102	5510	13.77	15.77	
		110	5550	13.53	15.53	
	802.11ac-VHT80 MCS0	126	5630	13.75	15.75	100.00
		134	5670	13.61	15.61	
		142	5710	13.48	15.48	
		106	5530	12.65	14.65	
		122	5610	12.79	14.79	
	802.11ax-HE20 MCS0	138	5690	12.59	14.59	100.00
		100	5500	13.38	15.38	
		116	5580	13.13	15.13	
		124	5620	13.10	15.10	
		132	5660	13.11	15.11	
	802.11ax-HE40 MCS0	140	5700	13.12	15.12	100.00
		144	5720	13.13	15.13	
		102	5510	13.42	15.42	
		110	5550	13.17	15.17	
		126	5630	13.16	15.16	
	802.11ax-HE80 MCS0	134	5670	13.18	15.18	100.00
		142	5710	13.18	15.18	
		106	5530	12.51	14.51	
		122	5610	12.66	14.66	
		138	5690	12.46	14.46	

5GHz WLAN		Ant 1+2				
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	149	5745	14.44	16.44	98.63
		157	5785	14.45	16.45	
		165	5825	14.36	16.36	
	802.11n-HT20 MCS0	149	5745	14.13	16.13	100.00
		157	5785	14.14	16.14	
		165	5825	14.06	16.06	
	802.11n-HT40 MCS0	151	5755	14.69	16.69	100.00
		159	5795	14.61	16.61	
		149	5745	14.12	16.12	
	802.11ac-VHT20 MCS0	157	5785	14.13	16.13	100.00
		165	5825	14.04	16.04	
		151	5755	14.67	16.67	
	802.11ac-VHT40 MCS0	159	5795	14.59	16.59	100.00
		155	5775	13.69	15.69	
		149	5745	14.12	16.12	
	802.11ac-VHT80 MCS0	157	5785	14.11	16.11	100.00
		165	5825	14.04	16.04	
		151	5755	14.24	16.24	
	802.11ax-HE20 MCS0	159	5795	14.17	16.17	100.00
		155	5775	13.46	15.46	
		149	5745	13.46	15.46	

Reduced Power Level 2/3 for Head

2.4GHz WLAN		Ant 1+2				
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11b 1Mbps	1	2412	13.34	15.34	98.35
		6	2437	13.31	15.31	
		11	2462	13.17	15.17	
	802.11g 6Mbps	1	2412	11.63	13.63	99.31
		6	2437	11.42	13.42	
		11	2462	11.37	13.37	
	802.11n-HT20 MCS0	1	2412	11.23	13.23	100.00
		6	2437	11.16	13.16	
		11	2462	11.02	13.02	
	802.11n-HT40 MCS0	3	2422	10.68	12.68	100.00
		6	2437	10.66	12.66	
		9	2452	10.53	12.53	
	802.11ax-HE20 MCS0	1	2412	11.27	13.27	100.00
		6	2437	11.21	13.21	
		11	2462	11.12	13.12	
	802.11ax-HE40 MCS0	3	2422	11.34	13.34	100.00
		6	2437	11.36	13.36	
		9	2452	11.27	13.27	

5GHz WLAN		Ant 1+2				
5.2GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	36	5180	11.72	13.72	98.63
		40	5200	12.02	14.02	
		44	5220	11.73	13.73	
		48	5240	11.64	13.64	
	802.11n-HT20 MCS0	36	5180	11.41	13.41	100.00
		40	5200	11.71	13.71	
		44	5220	11.44	13.44	
	802.11n-HT40 MCS0	48	5240	11.34	13.34	100.00
		38	5190	11.87	13.87	
		46	5230	11.89	13.89	
	802.11ac-VHT20 MCS0	36	5180	11.40	13.40	100.00
		40	5200	11.70	13.70	
		44	5220	11.42	13.42	
		48	5240	11.33	13.33	
	802.11ac-VHT40 MCS0	38	5190	11.85	13.85	100.00
		46	5230	11.86	13.86	
	802.11ac-VHT80 MCS0	42	5210	10.99	12.99	100.00
	802.11ax-HE20 MCS0	36	5180	11.44	13.44	100.00
		40	5200	11.42	13.42	
		44	5220	11.45	13.45	
		48	5240	11.40	13.40	
	802.11ax-HE40 MCS0	38	5190	10.53	12.53	100.00
		46	5230	11.54	13.54	
	802.11ax-HE80 MCS0	42	5210	9.77	11.77	100.00

5GHz WLAN		Ant 1+2				
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	52	5260	11.74	13.74	98.63
		56	5280	12.03	14.03	
		60	5300	11.60	13.60	
		64	5320	11.54	13.54	
	802.11n-HT20 MCS0	52	5260	11.45	13.45	100.00
		56	5280	11.60	13.60	
		60	5300	11.30	13.30	
	802.11n-HT40 MCS0	64	5320	11.24	13.24	100.00
		54	5270	11.90	13.90	
		62	5310	10.74	12.74	
	802.11ac-VHT20 MCS0	52	5260	11.43	13.43	100.00
		56	5280	11.58	13.58	
		60	5300	11.12	13.12	
		64	5320	11.21	13.21	
	802.11ac-VHT40 MCS0	54	5270	11.87	13.87	100.00
		62	5310	10.67	12.67	
	802.11ac-VHT80 MCS0	58	5290	10.01	12.01	100.00
	802.11ax-HE20 MCS0	52	5260	11.46	13.46	100.00
		56	5280	11.37	13.37	
		60	5300	11.35	13.35	
		64	5320	11.30	13.30	
	802.11ax-HE40 MCS0	54	5270	11.55	13.55	100.00
		62	5310	11.38	13.38	
	802.11ax-HE80 MCS0	58	5290	10.80	12.80	100.00

5GHz WLAN		Ant 1+2				
5.5GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	100	5500	9.63	11.63	98.63
		116	5580	9.38	11.38	
		124	5620	9.60	11.60	
		132	5660	9.64	11.64	
		140	5700	9.35	11.35	
	802.11n-HT20 MCS0	100	5500	9.33	11.33	100.00
		116	5580	9.09	11.09	
		124	5620	9.60	11.60	
		132	5660	9.63	11.63	
		140	5700	9.05	11.05	
	802.11n-HT40 MCS0	102	5510	9.98	11.98	100.00
		110	5550	9.54	11.54	
		126	5630	9.97	11.97	
		134	5670	9.63	11.63	
		142	5710	9.50	11.50	
	802.11ac-VHT20 MCS0	100	5500	9.30	11.30	100.00
		116	5580	9.06	11.06	
		124	5620	9.58	11.58	
		132	5660	9.60	11.60	
		140	5700	9.03	11.03	
	802.11ac-VHT40 MCS0	102	5510	9.77	11.77	100.00
		110	5550	9.53	11.53	
		126	5630	9.75	11.75	
		134	5670	9.61	11.61	
		142	5710	9.48	11.48	
	802.11ac-VHT80 MCS0	106	5530	8.65	10.65	100.00
		122	5610	8.79	10.79	
		138	5690	8.59	10.59	
	802.11ax-HE20 MCS0	100	5500	9.38	11.38	100.00
		116	5580	9.13	11.13	
		124	5620	9.10	11.10	
		132	5660	9.11	11.11	
		140	5700	9.12	11.12	
	802.11ax-HE40 MCS0	102	5510	9.42	11.42	100.00
		110	5550	9.17	11.17	
		126	5630	9.16	11.16	
		134	5670	9.18	11.18	
		142	5710	9.18	11.18	
	802.11ax-HE80 MCS0	106	5530	8.51	10.51	100.00
		122	5610	8.66	10.66	
		138	5690	8.46	10.46	

5GHz WLAN		Ant 1+2				
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	149	5745	10.44	12.44	98.63
		157	5785	10.45	12.45	
		165	5825	10.36	12.36	
	802.11n-HT20 MCS0	149	5745	10.13	12.13	100.00
		157	5785	10.14	12.14	
		165	5825	10.06	12.06	
	802.11n-HT40 MCS0	151	5755	10.69	12.69	100.00
		159	5795	10.61	12.61	
		149	5745	10.12	12.12	
	802.11ac-VHT20 MCS0	157	5785	10.13	12.13	100.00
		165	5825	10.04	12.04	
		151	5755	10.67	12.67	
	802.11ac-VHT40 MCS0	159	5795	10.59	12.59	100.00
		155	5775	9.69	11.69	
	802.11ac-VHT80 MCS0	149	5745	10.12	12.12	100.00
		157	5785	10.11	12.11	
		165	5825	10.04	12.04	
	802.11ax-HE40 MCS0	151	5755	10.24	12.24	100.00
		159	5795	10.17	12.17	
	802.11ax-HE80 MCS0	155	5775	9.46	11.46	100.00

Reduced Power Level 4 for Head

2.4GHz WLAN		Ant 1+2				
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11b 1Mbps	1	2412	13.34	15.34	98.35
		6	2437	13.31	15.31	
		11	2462	13.17	15.17	
	802.11g 6Mbps	1	2412	11.63	13.63	99.31
		6	2437	11.42	13.42	
		11	2462	11.37	13.37	
	802.11n-HT20 MCS0	1	2412	11.23	13.23	100.00
		6	2437	11.16	13.16	
		11	2462	11.02	13.02	
	802.11n-HT40 MCS0	3	2422	10.68	12.68	100.00
		6	2437	10.66	12.66	
		9	2452	10.53	12.53	
	802.11ax-HE20 MCS0	1	2412	11.27	13.27	100.00
		6	2437	11.21	13.21	
		11	2462	11.12	13.12	
	802.11ax-HE40 MCS0	3	2422	11.34	13.34	100.00
		6	2437	11.36	13.36	
		9	2452	11.27	13.27	

5GHz WLAN		Ant 1+2				
5.2GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	36	5180	11.72	13.72	98.63
		40	5200	12.02	14.02	
		44	5220	11.73	13.73	
		48	5240	11.64	13.64	
	802.11n-HT20 MCS0	36	5180	11.41	13.41	100.00
		40	5200	11.71	13.71	
		44	5220	11.44	13.44	
		48	5240	11.34	13.34	
	802.11n-HT40 MCS0	38	5190	11.87	13.87	100.00
		46	5230	11.89	13.89	
	802.11ac-VHT20 MCS0	36	5180	11.40	13.40	100.00
		40	5200	11.70	13.70	
		44	5220	11.42	13.42	
		48	5240	11.33	13.33	
	802.11ac-VHT40 MCS0	38	5190	11.85	13.85	100.00
		46	5230	11.86	13.86	
	802.11ac-VHT80 MCS0	42	5210	10.99	12.99	100.00
	802.11ax-HE20 MCS0	36	5180	11.44	13.44	100.00
		40	5200	11.42	13.42	
		44	5220	11.45	13.45	
		48	5240	11.40	13.40	
	802.11ax-HE40 MCS0	38	5190	10.53	12.53	100.00
		46	5230	11.54	13.54	
	802.11ax-HE80 MCS0	42	5210	9.77	11.77	100.00

5GHz WLAN		Ant 1+2				
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	52	5260	11.74	13.74	98.63
		56	5280	12.03	14.03	
		60	5300	11.60	13.60	
		64	5320	11.54	13.54	
	802.11n-HT20 MCS0	52	5260	11.45	13.45	100.00
		56	5280	11.60	13.60	
		60	5300	11.30	13.30	
		64	5320	11.24	13.24	
	802.11n-HT40 MCS0	54	5270	11.90	13.90	100.00
		62	5310	10.74	12.74	
	802.11ac-VHT20 MCS0	52	5260	11.43	13.43	100.00
		56	5280	11.58	13.58	
		60	5300	11.12	13.12	
		64	5320	11.21	13.21	
	802.11ac-VHT40 MCS0	54	5270	11.87	13.87	100.00
		62	5310	10.67	12.67	
	802.11ac-VHT80 MCS0	58	5290	10.01	12.01	100.00
	802.11ax-HE20 MCS0	52	5260	11.46	13.46	100.00
		56	5280	11.37	13.37	
		60	5300	11.35	13.35	
		64	5320	11.30	13.30	
	802.11ax-HE40 MCS0	54	5270	11.55	13.55	100.00
		62	5310	11.38	13.38	
	802.11ax-HE80 MCS0	58	5290	10.80	12.80	100.00

5GHz WLAN	Ant 1+2					
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN	802.11a 6Mbps	100	5500	9.63	11.63	98.63
		116	5580	9.38	11.38	
		124	5620	9.60	11.60	
		132	5660	9.64	11.64	
		140	5700	9.35	11.35	
		144	5720	9.36	11.36	
	802.11n-HT20 MCS0	100	5500	9.33	11.33	100.00
		116	5580	9.09	11.09	
		124	5620	9.60	11.60	
		132	5660	9.63	11.63	
		140	5700	9.05	11.05	
		144	5720	9.03	11.03	
	802.11n-HT40 MCS0	102	5510	9.98	11.98	100.00
		110	5550	9.54	11.54	
		126	5630	9.97	11.97	
		134	5670	9.63	11.63	
		142	5710	9.50	11.50	
	802.11ac-VHT20 MCS0	100	5500	9.30	11.30	100.00
		116	5580	9.06	11.06	
		124	5620	9.58	11.58	
		132	5660	9.60	11.60	
		140	5700	9.03	11.03	
		144	5720	9.01	11.01	
	802.11ac-VHT40 MCS0	102	5510	9.77	11.77	100.00
		110	5550	9.53	11.53	
		126	5630	9.75	11.75	
		134	5670	9.61	11.61	
		142	5710	9.48	11.48	
	802.11ac-VHT80 MCS0	106	5530	8.65	10.65	100.00
		122	5610	8.79	10.79	
		138	5690	8.59	10.59	
		100	5500	9.38	11.38	
	802.11ax-HE20 MCS0	116	5580	9.13	11.13	100.00
		124	5620	9.10	11.10	
		132	5660	9.11	11.11	
		140	5700	9.12	11.12	
		144	5720	9.13	11.13	
	802.11ax-HE40 MCS0	102	5510	9.42	11.42	100.00
		110	5550	9.17	11.17	
		126	5630	9.16	11.16	
		134	5670	9.18	11.18	
		142	5710	9.18	11.18	
	802.11ax-HE80 MCS0	106	5530	8.51	10.51	100.00
		122	5610	8.66	10.66	
		138	5690	8.46	10.46	

5GHz WLAN	Ant 1+2					
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a 6Mbps	149	5745	10.44	12.44	98.63
		157	5785	10.45	12.45	
		165	5825	10.36	12.36	
	802.11n-HT20 MCS0	149	5745	10.13	12.13	100.00
		157	5785	10.14	12.14	
		165	5825	10.06	12.06	
	802.11n-HT40 MCS0	151	5755	10.69	12.69	100.00
		159	5795	10.61	12.61	
	802.11ac-VHT20 MCS0	149	5745	10.12	12.12	100.00
		157	5785	10.13	12.13	
		165	5825	10.04	12.04	
	802.11ac-VHT40 MCS0	151	5755	10.67	12.67	100.00
		159	5795	10.59	12.59	
	802.11ac-VHT80 MCS0	155	5775	9.69	11.69	100.00
	802.11ax-HE20 MCS0	149	5745	10.12	12.12	100.00
		157	5785	10.11	12.11	
		165	5825	10.04	12.04	
	802.11ax-HE40 MCS0	151	5755	10.24	12.24	100.00
		159	5795	10.17	12.17	
	802.11ax-HE80 MCS0	155	5775	9.46	11.46	100.00

Reduced Power Level 1 for Hotspot

2.4GHz WLAN		Ant 1+2				
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11b 1Mbps	1	2412	20.34	22.34	98.35
		6	2437	20.31	22.31	
		11	2462	20.17	22.17	
	802.11g 6Mbps	1	2412	17.63	19.63	99.31
		6	2437	17.42	19.42	
		11	2462	17.37	19.37	
	802.11n-HT20 MCS0	1	2412	17.23	19.23	100.00
		6	2437	17.16	19.16	
		11	2462	17.02	19.02	
	802.11n-HT40 MCS0	3	2422	16.68	18.68	100.00
		6	2437	16.66	18.66	
		9	2452	16.53	18.53	
	802.11ax-HE20 MCS0	1	2412	17.27	19.27	100.00
		6	2437	17.21	19.21	
		11	2462	17.12	19.12	
	802.11ax-HE40 MCS0	3	2422	17.34	19.34	100.00
		6	2437	17.36	19.36	
		9	2452	17.27	19.27	

5GHz WLAN		Ant 1+2				
5.2GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	36	5180	20.72	22.72	98.63
		40	5200	21.02	23.02	
		44	5220	20.73	22.73	
		48	5240	20.64	22.64	
	802.11n-HT20 MCS0	36	5180	20.41	22.41	100.00
		40	5200	20.71	22.71	
		44	5220	20.44	22.44	
		48	5240	20.34	22.34	
	802.11n-HT40 MCS0	38	5190	20.87	22.87	100.00
		46	5230	20.89	22.89	
	802.11ac-VHT20 MCS0	36	5180	20.40	22.40	100.00
		40	5200	20.70	22.70	
		44	5220	20.42	22.42	
		48	5240	20.33	22.33	
	802.11ac-VHT40 MCS0	38	5190	20.85	22.85	100.00
		46	5230	20.86	22.86	
	802.11ac-VHT80 MCS0	42	5210	19.99	21.99	100.00
		36	5180	20.44	22.44	
		40	5200	20.42	22.42	
		44	5220	20.45	22.45	
	802.11ax-HE20 MCS0	48	5240	20.40	22.40	100.00
		38	5190	19.53	21.53	
		46	5230	20.54	22.54	
		42	5210	18.77	20.77	
	802.11ax-HE80 MCS0	42	5210	18.77	20.77	100.00

5GHz WLAN		Ant 1+2				
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	149	5745	20.44	22.44	98.63
		157	5785	20.45	22.45	
		165	5825	20.36	22.36	
	802.11n-HT20 MCS0	149	5745	20.13	22.13	100.00
		157	5785	20.14	22.14	
		165	5825	20.06	22.06	
	802.11n-HT40 MCS0	151	5755	20.69	22.69	100.00
		159	5795	20.61	22.61	
		149	5745	20.12	22.12	
	802.11ac-VHT20 MCS0	149	5745	20.12	22.12	100.00
		157	5785	20.13	22.13	
		165	5825	20.04	22.04	
	802.11ac-VHT40 MCS0	151	5755	20.67	22.67	100.00
		159	5795	20.59	22.59	
	802.11ac-VHT80 MCS0	155	5775	19.69	21.69	100.00
		149	5745	20.12	22.12	
	802.11ax-HE20 MCS0	149	5745	20.11	22.11	100.00
		157	5785	20.11	22.11	
		165	5825	20.04	22.04	
	802.11ax-HE40 MCS0	151	5755	20.24	22.24	100.00
		159	5795	20.17	22.17	
	802.11ax-HE80 MCS0	155	5775	19.46	21.46	100.00

Reduced Power Level 2/3 for Hotspot

2.4GHz WLAN		Ant 1+2				
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11b 1Mbps	1	2412	18.34	20.34	98.35
		6	2437	18.31	20.31	
		11	2462	18.17	20.17	
	802.11g 6Mbps	1	2412	16.63	18.63	99.31
		6	2437	16.42	18.42	
		11	2462	16.37	18.37	
	802.11n- HT20 MCS0	1	2412	16.23	18.23	100.00
		6	2437	16.16	18.16	
		11	2462	16.02	18.02	
	802.11n- HT40 MCS0	3	2422	15.68	17.68	100.00
		6	2437	15.66	17.66	
		9	2452	15.53	17.53	
	802.11ax- HE20 MCS0	1	2412	16.27	18.27	100.00
		6	2437	16.21	18.21	
		11	2462	16.12	18.12	
	802.11ax- HE40 MCS0	3	2422	16.34	18.34	100.00
		6	2437	16.36	18.36	
		9	2452	16.27	18.27	

5GHz WLAN		Ant 1+2				
5.2GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	36	5180	18.72	20.72	98.63
		40	5200	19.02	21.02	
		44	5220	18.73	20.73	
		48	5240	18.64	20.64	
	802.11n- HT20 MCS0	36	5180	18.41	20.41	100.00
		40	5200	18.71	20.71	
		44	5220	18.44	20.44	
		48	5240	18.34	20.34	
	802.11n- HT40 MCS0	38	5190	18.87	20.87	100.00
		46	5230	18.89	20.89	
	802.11ac- VHT20 MCS0	36	5180	18.40	20.40	100.00
		40	5200	18.70	20.70	
		44	5220	18.42	20.42	
		48	5240	18.33	20.33	
	802.11ac- VHT40 MCS0	38	5190	18.85	20.85	100.00
		46	5230	18.86	20.86	
	802.11ac- VHT80 MCS0	42	5210	17.99	19.99	100.00
		36	5180	18.44	20.44	
	802.11ax- HE20 MCS0	40	5200	18.42	20.42	100.00
		44	5220	18.45	20.45	
		48	5240	18.40	20.40	
		38	5190	17.53	19.53	
	802.11ax- HE40 MCS0	46	5230	18.54	20.54	100.00
		42	5210	16.77	18.77	

5GHz WLAN		Ant 1+2				
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	149	5745	19.44	21.44	98.63
		157	5785	19.45	21.45	
		165	5825	19.36	21.36	
	802.11n- HT20 MCS0	149	5745	19.13	21.13	100.00
		157	5785	19.14	21.14	
		165	5825	19.06	21.06	
	802.11n- HT40 MCS0	151	5755	19.69	21.69	100.00
		159	5795	19.61	21.61	
	802.11ac- VHT20 MCS0	149	5745	19.12	21.12	100.00
		157	5785	19.13	21.13	
		165	5825	19.04	21.04	
	802.11ac- VHT40 MCS0	151	5755	19.67	21.67	100.00
		159	5795	19.59	21.59	
	802.11ac- VHT80 MCS0	155	5775	18.69	20.69	100.00
		149	5745	19.12	21.12	
	802.11ax- HE20 MCS0	157	5785	19.11	21.11	100.00
		165	5825	19.04	21.04	
	802.11ax- HE40 MCS0	151	5755	19.24	21.24	100.00
		159	5795	19.17	21.17	
	802.11ax- HE80 MCS0	155	5775	18.46	20.46	100.00

Reduced Power Level 4 for Hotspot

2.4GHz WLAN		Ant 1+2				
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11b 1Mbps	1	2412	15.34	17.34	98.35
		6	2437	15.31	17.31	
		11	2462	15.17	17.17	
	802.11g 6Mbps	1	2412	13.63	15.63	99.31
		6	2437	13.42	15.42	
		11	2462	13.37	15.37	
	802.11n-HT20 MCS0	1	2412	13.23	15.23	100.00
		6	2437	13.16	15.16	
		11	2462	13.02	15.02	
	802.11n-HT40 MCS0	3	2422	12.68	14.68	100.00
		6	2437	12.66	14.66	
		9	2452	12.53	14.53	
	802.11ax-HE20 MCS0	1	2412	13.27	15.27	100.00
		6	2437	13.21	15.21	
		11	2462	13.12	15.12	
	802.11ax-HE40 MCS0	3	2422	13.34	15.34	100.00
		6	2437	13.36	15.36	
		9	2452	13.27	15.27	

5GHz WLAN		Ant 1+2				
5.2GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	36	5180	15.72	17.72	98.63
		40	5200	16.02	18.02	
		44	5220	15.73	17.73	
		48	5240	15.64	17.64	
	802.11n-HT20 MCS0	36	5180	15.41	17.41	100.00
		40	5200	15.71	17.71	
		44	5220	15.44	17.44	
	802.11n-HT40 MCS0	48	5240	15.34	17.34	100.00
		38	5190	15.87	17.87	
		46	5230	15.89	17.89	
	802.11ac-VHT20 MCS0	36	5180	15.40	17.40	100.00
		40	5200	15.70	17.70	
		44	5220	15.42	17.42	
		48	5240	15.33	17.33	
	802.11ac-VHT40 MCS0	38	5190	15.85	17.85	100.00
		46	5230	15.86	17.86	
		42	5210	14.99	16.99	
	802.11ac-VHT80 MCS0	36	5180	15.44	17.44	100.00
		40	5200	15.42	17.42	
		44	5220	15.45	17.45	
	802.11ax-HE20 MCS0	48	5240	15.40	17.40	100.00
		38	5190	14.53	16.53	
		46	5230	15.54	17.54	
	802.11ax-HE40 MCS0	42	5210	13.77	15.77	100.00
		42	5210	13.77	15.77	

5GHz WLAN		Ant 1+2				
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	149	5745	16.44	18.44	98.63
		157	5785	16.45	18.45	
		165	5825	16.36	18.36	
	802.11n-HT20 MCS0	149	5745	16.13	18.13	100.00
		157	5785	16.14	18.14	
		165	5825	16.06	18.06	
	802.11n-HT40 MCS0	151	5755	16.69	18.69	100.00
		159	5795	16.61	18.61	
		149	5745	16.12	18.12	
	802.11ac-VHT20 MCS0	157	5785	16.13	18.13	100.00
		165	5825	16.04	18.04	
		151	5755	16.67	18.67	
	802.11ac-VHT40 MCS0	159	5795	16.59	18.59	100.00
		155	5775	15.69	17.69	
		149	5745	16.12	18.12	
	802.11ac-VHT80 MCS0	157	5785	16.11	18.11	100.00
		165	5825	16.04	18.04	
		151	5755	16.24	18.24	
	802.11ax-HE20 MCS0	159	5795	16.17	18.17	100.00
		155	5775	15.46	17.46	
		155	5775	15.46	17.46	

Reduced Power Level 1 for Body

2.4GHz WLAN		Ant 1+2				
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	22.34	24.34	98.35
		6	2437	22.31	24.31	
		11	2462	22.17	24.17	
	802.11g 6Mbps	1	2412	20.63	22.63	99.31
		6	2437	20.42	22.42	
		11	2462	20.37	22.37	
	802.11n-HT20 MCS0	1	2412	20.23	22.23	100.00
		6	2437	20.16	22.16	
		11	2462	20.02	22.02	
	802.11n-HT40 MCS0	3	2422	19.68	21.68	100.00
		6	2437	19.66	21.66	
		9	2452	19.53	21.53	
	802.11ax-HE20 MCS0	1	2412	20.27	22.27	100.00
		6	2437	20.21	22.21	
		11	2462	20.12	22.12	
	802.11ax-HE40 MCS0	3	2422	20.34	22.34	100.00
		6	2437	20.36	22.36	
		9	2452	20.27	22.27	

5GHz WLAN		Ant 1+2				
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	20.72	22.72	98.63
		40	5200	21.02	23.02	
		44	5220	20.73	22.73	
		48	5240	20.64	22.64	
	802.11n-HT20 MCS0	36	5180	20.41	22.41	100.00
		40	5200	20.71	22.71	
		44	5220	20.44	22.44	
		48	5240	20.34	22.34	
	802.11n-HT40 MCS0	38	5190	20.87	22.87	100.00
		46	5230	20.89	22.89	
	802.11ac-VHT20 MCS0	36	5180	20.40	22.40	100.00
		40	5200	20.70	22.70	
		44	5220	20.42	22.42	
		48	5240	20.33	22.33	
	802.11ac-VHT40 MCS0	38	5190	20.85	22.85	100.00
		46	5230	20.86	22.86	
	802.11ac-VHT80 MCS0	42	5210	19.99	21.99	100.00
		36	5180	20.44	22.44	
	802.11ax-HE20 MCS0	40	5200	20.42	22.42	100.00
		44	5220	20.45	22.45	
		48	5240	20.40	22.40	
		38	5190	19.53	21.53	
	802.11ax-HE40 MCS0	46	5230	20.54	22.54	100.00
		42	5210	18.77	20.77	

5GHz WLAN		Ant 1+2				
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	20.74	22.74	98.63
		56	5280	21.03	23.03	
		60	5300	20.60	22.60	
		64	5320	20.54	22.54	
	802.11n-HT20 MCS0	52	5260	20.45	22.45	100.00
		56	5280	20.60	22.60	
		60	5300	20.30	22.30	
		64	5320	20.24	22.24	
	802.11n-HT40 MCS0	54	5270	20.90	22.90	100.00
		62	5310	19.74	21.74	
	802.11ac-VHT20 MCS0	52	5260	20.43	22.43	100.00
		56	5280	20.58	22.58	
		60	5300	20.12	22.12	
		64	5320	20.21	22.21	
	802.11ac-VHT40 MCS0	54	5270	20.87	22.87	100.00
		62	5310	19.67	21.67	
	802.11ac-VHT80 MCS0	58	5290	19.01	21.01	100.00
		52	5260	20.46	22.46	
	802.11ax-HE20 MCS0	56	5280	20.37	22.37	100.00
		60	5300	20.35	22.35	
		64	5320	20.30	22.30	
		54	5270	20.55	22.55	
	802.11ax-HE40 MCS0	62	5310	20.38	22.38	100.00
		58	5290	19.80	21.80	

5GHz WLAN	Ant 1+2					
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN	802.11a 6Mbps	100	5500	20.63	22.63	98.63
		116	5580	20.38	22.38	
		124	5620	20.60	22.60	
		132	5660	20.64	22.64	
		140	5700	20.35	22.35	
		144	5720	20.36	22.36	
	802.11n-HT20 MCS0	100	5500	20.33	22.33	100.00
		116	5580	20.09	22.09	
		124	5620	20.60	22.60	
		132	5660	20.63	22.63	
		140	5700	20.05	22.05	
		144	5720	20.03	22.03	
	802.11n-HT40 MCS0	102	5510	20.98	22.98	100.00
		110	5550	20.54	22.54	
		126	5630	20.97	22.97	
		134	5670	20.63	22.63	
		142	5710	20.50	22.50	
	802.11ac-VHT20 MCS0	100	5500	20.30	22.30	100.00
		116	5580	20.06	22.06	
		124	5620	20.58	22.58	
		132	5660	20.60	22.60	
		140	5700	20.03	22.03	
		144	5720	20.01	22.01	
	802.11ac-VHT40 MCS0	102	5510	20.77	22.77	100.00
		110	5550	20.53	22.53	
		126	5630	20.75	22.75	
		134	5670	20.61	22.61	
		142	5710	20.48	22.48	
	802.11ac-VHT80 MCS0	106	5530	19.65	21.65	100.00
		122	5610	19.79	21.79	
		138	5690	19.59	21.59	
	802.11ax-HE20 MCS0	100	5500	20.38	22.38	100.00
		116	5580	20.13	22.13	
		124	5620	20.10	22.10	
		132	5660	20.11	22.11	
		140	5700	20.12	22.12	
		144	5720	20.13	22.13	
	802.11ax-HE40 MCS0	102	5510	20.42	22.42	100.00
		110	5550	20.17	22.17	
		126	5630	20.16	22.16	
		134	5670	20.18	22.18	
		142	5710	20.18	22.18	
	802.11ax-HE80 MCS0	106	5530	19.51	21.51	100.00
		122	5610	19.66	21.66	
		138	5690	19.46	21.46	

5GHz WLAN	Ant 1+2					
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a 6Mbps	149	5745	20.44	22.44	98.63
		157	5785	20.45	22.45	
		165	5825	20.36	22.36	
	802.11n-HT20 MCS0	149	5745	20.13	22.13	100.00
		157	5785	20.14	22.14	
		165	5825	20.06	22.06	
	802.11n-HT40 MCS0	151	5755	20.69	22.69	100.00
		159	5795	20.61	22.61	
	802.11ac-VHT20 MCS0	149	5745	20.12	22.12	100.00
		157	5785	20.13	22.13	
		165	5825	20.04	22.04	
	802.11ac-VHT40 MCS0	151	5755	20.67	22.67	100.00
		159	5795	20.59	22.59	
	802.11ac-VHT80 MCS0	155	5775	19.69	21.69	100.00
		149	5745	20.12	22.12	
		157	5785	20.11	22.11	
	802.11ax-HE20 MCS0	165	5825	20.04	22.04	100.00
		151	5755	20.24	22.24	
		159	5795	20.17	22.17	
	802.11ax-HE40 MCS0	155	5775	19.46	21.46	100.00
		151	5755	20.24	22.24	
		159	5795	20.17	22.17	
	802.11ax-HE80 MCS0	155	5775	19.46	21.46	100.00
		151	5755	20.24	22.24	
		159	5795	20.17	22.17	

Reduced Power Level 2/3 for Body

2.4GHz WLAN	Ant 1+2					
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	18.34	20.34	98.35
		6	2437	18.31	20.31	
		11	2462	18.17	20.17	
	802.11g 6Mbps	1	2412	16.63	18.63	99.31
		6	2437	16.42	18.42	
		11	2462	16.37	18.37	
	802.11n-HT20 MCS0	1	2412	16.23	18.23	100.00
		6	2437	16.16	18.16	
		11	2462	16.02	18.02	
	802.11n-HT40 MCS0	3	2422	15.68	17.68	100.00
		6	2437	15.66	17.66	
		9	2452	15.53	17.53	
	802.11ax-HE20 MCS0	1	2412	16.27	18.27	100.00
		6	2437	16.21	18.21	
		11	2462	16.12	18.12	
	802.11ax-HE40 MCS0	3	2422	16.34	18.34	100.00
		6	2437	16.36	18.36	
		9	2452	16.27	18.27	

5GHz WLAN	Ant 1+2					
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	16.72	18.72	98.63
		40	5200	17.02	19.02	
		44	5220	16.73	18.73	
		48	5240	16.64	18.64	
	802.11n-HT20 MCS0	36	5180	16.41	18.41	100.00
		40	5200	16.71	18.71	
		44	5220	16.44	18.44	
		48	5240	16.34	18.34	
	802.11n-HT40 MCS0	38	5190	16.87	18.87	100.00
		46	5230	16.89	18.89	
	802.11ac-VHT20 MCS0	36	5180	16.40	18.40	100.00
		40	5200	16.70	18.70	
		44	5220	16.42	18.42	
		48	5240	16.33	18.33	
	802.11ac-VHT40 MCS0	38	5190	16.85	18.85	100.00
		46	5230	16.86	18.86	
	802.11ac-VHT80 MCS0	42	5210	15.99	17.99	100.00
		36	5180	16.44	18.44	
	802.11ax-HE20 MCS0	40	5200	16.42	18.42	100.00
		44	5220	16.45	18.45	
		48	5240	16.40	18.40	
	802.11ax-HE40 MCS0	38	5190	15.53	17.53	100.00
		46	5230	16.54	18.54	
	802.11ax-HE60 MCS0	42	5210	14.77	16.77	100.00

5GHz WLAN	Ant 1+2					
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	16.74	18.74	98.63
		56	5280	17.03	19.03	
		60	5300	16.60	18.60	
		64	5320	16.54	18.54	
	802.11n-HT20 MCS0	52	5260	16.45	18.45	100.00
		56	5280	16.60	18.60	
		60	5300	16.30	18.30	
		64	5320	16.24	18.24	
	802.11n-HT40 MCS0	54	5270	16.90	18.90	100.00
		62	5310	15.74	17.74	
	802.11ac-VHT20 MCS0	52	5260	16.43	18.43	100.00
		56	5280	16.58	18.58	
		60	5300	16.12	18.12	
		64	5320	16.21	18.21	
	802.11ac-VHT40 MCS0	54	5270	16.87	18.87	100.00
		62	5310	15.67	17.67	
	802.11ac-VHT80 MCS0	58	5290	15.01	17.01	100.00
		52	5260	16.46	18.46	
	802.11ax-HE20 MCS0	56	5280	16.37	18.37	100.00
		60	5300	16.35	18.35	
		64	5320	16.30	18.30	
	802.11ax-HE40 MCS0	54	5270	16.55	18.55	100.00
		62	5310	16.38	18.38	
	802.11ax-HE60 MCS0	58	5290	15.80	17.80	100.00

5GHz WLAN		Ant 1+2				
5.5GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	100	5500	16.63	18.63	98.63
		116	5580	16.38	18.38	
		124	5620	16.60	18.60	
		132	5660	16.64	18.64	
		140	5700	16.35	18.35	
	802.11n-HT20 MCS0	100	5500	16.33	18.33	100.00
		116	5580	16.09	18.09	
		124	5620	16.60	18.60	
		132	5660	16.63	18.63	
		140	5700	16.05	18.05	
	802.11n-HT40 MCS0	102	5510	16.98	18.98	100.00
		110	5550	16.54	18.54	
		126	5630	16.97	18.97	
		134	5670	16.63	18.63	
		142	5710	16.50	18.50	
	802.11ac-VHT20 MCS0	100	5500	16.30	18.30	100.00
		116	5580	16.06	18.06	
		124	5620	16.58	18.58	
		132	5660	16.60	18.60	
		140	5700	16.03	18.03	
	802.11ac-VHT40 MCS0	102	5510	16.77	18.77	100.00
		110	5550	16.53	18.53	
		126	5630	16.75	18.75	
		134	5670	16.61	18.61	
		142	5710	16.48	18.48	
	802.11ac-VHT80 MCS0	106	5530	15.65	17.65	100.00
		122	5610	15.79	17.79	
		138	5690	15.59	17.59	
	802.11ax-HE20 MCS0	100	5500	16.38	18.38	100.00
		116	5580	16.13	18.13	
		124	5620	16.10	18.10	
		132	5660	16.11	18.11	
		140	5700	16.12	18.12	
	802.11ax-HE40 MCS0	102	5510	16.42	18.42	100.00
		110	5550	16.17	18.17	
		126	5630	16.16	18.16	
		134	5670	16.18	18.18	
		142	5710	16.18	18.18	
	802.11ax-HE80 MCS0	106	5530	15.51	17.51	100.00
		122	5610	15.66	17.66	
		138	5690	15.46	17.46	

5GHz WLAN		Ant 1+2				
5.8GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	149	5745	20.44	22.44	98.63
		157	5785	20.45	22.45	
		165	5825	20.36	22.36	
	802.11n-HT20 MCS0	149	5745	20.13	22.13	100.00
		157	5785	20.14	22.14	
		165	5825	20.06	22.06	
	802.11n-HT40 MCS0	151	5755	20.69	22.69	100.00
		159	5795	20.61	22.61	
	802.11ac-VHT20 MCS0	149	5745	20.12	22.12	100.00
		157	5785	20.13	22.13	
		165	5825	20.04	22.04	
	802.11ac-VHT40 MCS0	151	5755	20.67	22.67	100.00
		159	5795	20.59	22.59	
	802.11ac-VHT80 MCS0	155	5775	19.69	21.69	100.00
	802.11ax-HE20 MCS0	149	5745	20.12	22.12	100.00
		157	5785	20.11	22.11	
		165	5825	20.04	22.04	
	802.11ax-HE40 MCS0	151	5755	20.24	22.24	100.00
		159	5795	20.17	22.17	
	802.11ax-HE96 MCS0	155	5775	19.46	21.46	100.00

Reduced Power Level 4 for Body

2.4GHz WLAN		Ant 1+2				
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	15.34	17.34	98.35
		6	2437	15.31	17.31	
		11	2462	15.17	17.17	
	802.11g 6Mbps	1	2412	13.63	15.63	99.31
		6	2437	13.42	15.42	
		11	2462	13.37	15.37	
	802.11n-HT20 MCS0	1	2412	13.23	15.23	100.00
		6	2437	13.16	15.16	
		11	2462	13.02	15.02	
	802.11n-HT40 MCS0	3	2422	12.68	14.68	100.00
		6	2437	12.66	14.66	
		9	2452	12.53	14.53	
	802.11ax-HE20 MCS0	1	2412	13.27	15.27	100.00
		6	2437	13.21	15.21	
		11	2462	13.12	15.12	
	802.11ax-HE40 MCS0	3	2422	13.34	15.34	100.00
		6	2437	13.36	15.36	
		9	2452	13.27	15.27	

5GHz WLAN		Ant 1+2				
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	13.72	15.72	98.63
		40	5200	14.02	16.02	
		44	5220	13.73	15.73	
		48	5240	13.64	15.64	
	802.11n-HT20 MCS0	36	5180	13.41	15.41	100.00
		40	5200	13.71	15.71	
		44	5220	13.44	15.44	
		48	5240	13.34	15.34	
	802.11n-HT40 MCS0	38	5190	13.87	15.87	100.00
		46	5230	13.89	15.89	
	802.11ac-VHT20 MCS0	36	5180	13.40	15.40	100.00
		40	5200	13.70	15.70	
		44	5220	13.42	15.42	
		48	5240	13.33	15.33	
	802.11ac-VHT40 MCS0	38	5190	13.85	15.85	100.00
		46	5230	13.86	15.86	
	802.11ac-VHT80 MCS0	42	5210	12.99	14.99	100.00
		36	5180	13.44	15.44	
	802.11ax-HE20 MCS0	40	5200	13.42	15.42	100.00
		44	5220	13.45	15.45	
		48	5240	13.40	15.40	
		38	5190	12.53	14.53	
	802.11ax-HE40 MCS0	46	5230	13.54	15.54	100.00
		42	5210	11.77	13.77	

5GHz WLAN		Ant 1+2				
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	13.74	15.74	98.63
		56	5280	14.03	16.03	
		60	5300	13.60	15.60	
		64	5320	13.54	15.54	
	802.11n-HT20 MCS0	52	5260	13.45	15.45	100.00
		56	5280	13.60	15.60	
		60	5300	13.30	15.30	
		64	5320	13.24	15.24	
	802.11n-HT40 MCS0	54	5270	13.90	15.90	100.00
		62	5310	12.74	14.74	
	802.11ac-VHT20 MCS0	52	5260	13.43	15.43	100.00
		56	5280	13.58	15.58	
		60	5300	13.12	15.12	
		64	5320	13.21	15.21	
	802.11ac-VHT40 MCS0	54	5270	13.87	15.87	100.00
		62	5310	12.67	14.67	
	802.11ac-VHT80 MCS0	58	5290	12.01	14.01	100.00
		52	5260	13.46	15.46	
	802.11ax-HE20 MCS0	56	5280	13.37	15.37	100.00
		60	5300	13.35	15.35	
		64	5320	13.30	15.30	
		54	5270	13.55	15.55	
	802.11ax-HE40 MCS0	62	5310	13.38	15.38	100.00
		58	5290	12.80	14.80	

5GHz WLAN	Ant 1+2					
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN	802.11a 6Mbps	100	5500	13.63	15.63	98.63
		116	5580	13.38	15.38	
		124	5620	13.60	15.60	
		132	5660	13.64	15.64	
		140	5700	13.35	15.35	
		144	5720	13.36	15.36	
	802.11n-HT20 MCS0	100	5500	13.33	15.33	100.00
		116	5580	13.09	15.09	
		124	5620	13.60	15.60	
		132	5660	13.63	15.63	
		140	5700	13.05	15.05	
		144	5720	13.03	15.03	
	802.11n-HT40 MCS0	102	5510	13.98	15.98	100.00
		110	5550	13.54	15.54	
		126	5630	13.97	15.97	
		134	5670	13.63	15.63	
		142	5710	13.50	15.50	
	802.11ac-VHT20 MCS0	100	5500	13.30	15.30	100.00
		116	5580	13.06	15.06	
		124	5620	13.58	15.58	
		132	5660	13.60	15.60	
		140	5700	13.03	15.03	
		144	5720	13.01	15.01	
	802.11ac-VHT40 MCS0	102	5510	13.77	15.77	100.00
		110	5550	13.53	15.53	
		126	5630	13.75	15.75	
		134	5670	13.61	15.61	
		142	5710	13.48	15.48	
	802.11ac-VHT80 MCS0	106	5530	12.65	14.65	100.00
		122	5610	12.79	14.79	
		138	5690	12.59	14.59	
	802.11ax-HE20 MCS0	100	5500	13.38	15.38	100.00
		116	5580	13.13	15.13	
		124	5620	13.10	15.10	
		132	5660	13.11	15.11	
		140	5700	13.12	15.12	
		144	5720	13.13	15.13	
	802.11ax-HE40 MCS0	102	5510	13.42	15.42	100.00
		110	5550	13.17	15.17	
		126	5630	13.16	15.16	
		134	5670	13.18	15.18	
		142	5710	13.18	15.18	
	802.11ax-HE80 MCS0	106	5530	12.51	14.51	100.00
		122	5610	12.66	14.66	
		138	5690	12.46	14.46	

5GHz WLAN	Ant 1+2					
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a 6Mbps	149	5745	17.44	19.44	98.63
		157	5785	17.45	19.45	
		165	5825	17.36	19.36	
	802.11n-HT20 MCS0	149	5745	17.13	19.13	100.00
		157	5785	17.14	19.14	
		165	5825	17.06	19.06	
	802.11n-HT40 MCS0	151	5755	17.69	19.69	100.00
		159	5795	17.61	19.61	
		149	5745	17.12	19.12	100.00
	802.11ac-VHT20 MCS0	157	5785	17.13	19.13	
		165	5825	17.04	19.04	
	802.11ac-VHT40 MCS0	151	5755	17.67	19.67	100.00
		159	5795	17.59	19.59	
	802.11ac-VHT80 MCS0	155	5775	16.69	18.69	100.00
		149	5745	17.12	19.12	
		157	5785	17.11	19.11	100.00
	802.11ax-HE20 MCS0	165	5825	17.04	19.04	
	802.11ax-HE40 MCS0	151	5755	17.24	19.24	100.00
		159	5795	17.17	19.17	
		155	5775	16.46	18.46	100.00
	802.11ax-HE80 MCS0	149	5745	17.12	19.12	
		157	5785	17.11	19.11	
		165	5825	17.04	19.04	

Reduced Power Level 1 for Product Specific

2.4GHz WLAN	Ant 1+2					
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11b 1Mbps	1	2412	22.34	24.34	98.35
		6	2437	22.31	24.31	
		11	2462	22.17	24.17	
	802.11g 6Mbps	1	2412	20.63	22.63	99.31
		6	2437	20.42	22.42	
		11	2462	20.37	22.37	
	802.11n- HT20 MCS0	1	2412	20.23	22.23	100.00
		6	2437	20.16	22.16	
		11	2462	20.02	22.02	
	802.11n- HT40 MCS0	3	2422	19.68	21.68	100.00
		6	2437	19.66	21.66	
		9	2452	19.53	21.53	
	802.11ax- HE20 MCS0	1	2412	20.27	22.27	100.00
		6	2437	20.21	22.21	
		11	2462	20.12	22.12	
	802.11ax- HE40 MCS0	3	2422	20.34	22.34	100.00
		6	2437	20.36	22.36	
		9	2452	20.27	22.27	

5GHz WLAN	Ant 1+2					
5GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	36	5180	20.72	22.72	98.63
		40	5200	21.02	23.02	
		44	5220	20.73	22.73	
		48	5240	20.64	22.64	
	802.11n- HT20 MCS0	36	5180	20.41	22.41	100.00
		40	5200	20.71	22.71	
		44	5220	20.44	22.44	
	802.11n- HT40 MCS0	48	5240	20.34	22.34	100.00
		38	5190	20.87	22.87	
	802.11ac- VHT20 MCS0	46	5230	20.89	22.89	100.00
		36	5180	20.40	22.40	
		40	5200	20.70	22.70	
		44	5220	20.42	22.42	
	802.11ac- VHT40 MCS0	48	5240	20.33	22.33	100.00
		38	5190	20.85	22.85	
		46	5230	20.86	22.86	
	802.11ac- VHT80 MCS0	42	5210	19.99	21.99	100.00
	802.11ax- HE20 MCS0	36	5180	20.44	22.44	100.00
		40	5200	20.42	22.42	
		44	5220	20.45	22.45	
		48	5240	20.40	22.40	
	802.11ax- HE40 MCS0	38	5190	19.53	21.53	100.00
		46	5230	20.54	22.54	
	802.11ax- HE80 MCS0	42	5210	18.77	20.77	100.00

5GHz WLAN	Ant 1+2					
5GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	52	5260	20.74	22.74	98.63
		56	5280	21.03	23.03	
		60	5300	20.60	22.60	
		64	5320	20.54	22.54	
	802.11n- HT20 MCS0	52	5260	20.45	22.45	100.00
		56	5280	20.60	22.60	
		60	5300	20.30	22.30	
	802.11n- HT40 MCS0	64	5320	20.24	22.24	100.00
		54	5270	20.90	22.90	
	802.11ac- VHT20 MCS0	62	5310	19.74	21.74	100.00
		52	5260	20.43	22.43	
		56	5280	20.58	22.58	
		60	5300	20.12	22.12	
	802.11ac- VHT40 MCS0	64	5320	20.21	22.21	100.00
		54	5270	20.67	22.67	
		62	5310	19.67	21.67	
	802.11ac- VHT80 MCS0	58	5290	19.01	21.01	100.00
	802.11ax- HE20 MCS0	52	5260	20.46	22.46	100.00
		56	5280	20.37	22.37	
		60	5300	20.35	22.35	
		64	5320	20.30	22.30	
	802.11ax- HE40 MCS0	54	5270	20.55	22.55	100.00
		62	5310	20.38	22.38	
	802.11ax- HE80 MCS0	58	5290	19.80	21.80	100.00

5GHz WLAN	Ant 1+2					
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN	802.11a 6Mbps	100	5500	20.63	22.63	98.63
		116	5580	20.38	22.38	
		124	5620	20.60	22.60	
		132	5660	20.64	22.64	
		140	5700	20.35	22.35	
		144	5720	20.36	22.36	
	802.11n-HT20 MCS0	100	5500	20.33	22.33	100.00
		116	5580	20.09	22.09	
		124	5620	20.60	22.60	
		132	5660	20.63	22.63	
		140	5700	20.05	22.05	
		144	5720	20.03	22.03	
	802.11n-HT40 MCS0	102	5510	20.98	22.98	100.00
		110	5550	20.54	22.54	
		126	5630	20.97	22.97	
		134	5670	20.63	22.63	
		142	5710	20.50	22.50	
	802.11ac-VHT20 MCS0	100	5500	20.30	22.30	100.00
		116	5580	20.06	22.06	
		124	5620	20.58	22.58	
		132	5660	20.60	22.60	
		140	5700	20.03	22.03	
		144	5720	20.01	22.01	
	802.11ac-VHT40 MCS0	102	5510	20.77	22.77	100.00
		110	5550	20.53	22.53	
		126	5630	20.75	22.75	
		134	5670	20.61	22.61	
		142	5710	20.48	22.48	
	802.11ac-VHT80 MCS0	106	5530	19.65	21.65	100.00
		122	5610	19.79	21.79	
		138	5690	19.59	21.59	
		100	5500	20.38	22.38	
	802.11ax-HE20 MCS0	116	5580	20.13	22.13	100.00
		124	5620	20.10	22.10	
		132	5660	20.11	22.11	
		140	5700	20.12	22.12	
		144	5720	20.13	22.13	
	802.11ax-HE40 MCS0	102	5510	20.42	22.42	100.00
		110	5550	20.17	22.17	
		126	5630	20.16	22.16	
		134	5670	20.18	22.18	
		142	5710	20.18	22.18	
	802.11ax-HE80 MCS0	106	5530	19.51	21.51	100.00
		122	5610	19.66	21.66	
		138	5690	19.46	21.46	

Reduced Power Level 2/3 for Product Specific

2.4GHz WLAN		Ant 1+2				
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	18.34	20.34	98.35
		6	2437	18.31	20.31	
		11	2462	18.17	20.17	
	802.11g 6Mbps	1	2412	16.63	18.63	99.31
		6	2437	16.42	18.42	
		11	2462	16.37	18.37	
	802.11n-HT20 MCS0	1	2412	16.23	18.23	100.00
		6	2437	16.16	18.16	
		11	2462	16.02	18.02	
	802.11n-HT40 MCS0	3	2422	15.68	17.68	100.00
		6	2437	15.66	17.66	
		9	2452	15.53	17.53	
	802.11ax-HE20 MCS0	1	2412	16.27	18.27	100.00
		6	2437	16.21	18.21	
		11	2462	16.12	18.12	
	802.11ax-HE40 MCS0	3	2422	16.34	18.34	100.00
		6	2437	16.36	18.36	
		9	2452	16.27	18.27	

5GHz WLAN		Ant 1+2				
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps	36	5180	16.72	18.72	98.63
		40	5200	17.02	19.02	
		44	5220	16.73	18.73	
		48	5240	16.64	18.64	
	802.11n-HT20 MCS0	36	5180	16.41	18.41	100.00
		40	5200	16.71	18.71	
		44	5220	16.44	18.44	
	802.11n-HT40 MCS0	48	5240	16.34	18.34	100.00
		38	5190	16.87	18.87	
		46	5230	16.89	18.89	
	802.11ac-VHT20 MCS0	36	5180	16.40	18.40	100.00
		40	5200	16.70	18.70	
		44	5220	16.42	18.42	
	802.11ac-VHT40 MCS0	48	5240	16.33	18.33	100.00
		38	5190	16.85	18.85	
		46	5230	16.86	18.86	
	802.11ac-VHT80 MCS0	42	5210	15.99	17.99	100.00
		36	5180	16.44	18.44	
		40	5200	16.42	18.42	
	802.11ax-HE20 MCS0	44	5220	16.45	18.45	100.00
		48	5240	16.40	18.40	
		38	5190	15.53	17.53	
	802.11ax-HE40 MCS0	46	5230	16.54	18.54	100.00
		42	5210	14.77	16.77	

5GHz WLAN		Ant 1+2				
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.3GHz WLAN	802.11a 6Mbps	52	5260	16.74	18.74	98.63
		56	5280	17.03	19.03	
		60	5300	16.60	18.60	
		64	5320	16.54	18.54	
	802.11n-HT20 MCS0	52	5260	16.45	18.45	100.00
		56	5280	16.60	18.60	
		60	5300	16.30	18.30	
	802.11n-HT40 MCS0	64	5320	16.24	18.24	100.00
		54	5270	16.90	18.90	
		62	5310	15.74	17.74	
	802.11ac-VHT20 MCS0	52	5260	16.43	18.43	100.00
		56	5280	16.58	18.58	
		60	5300	16.12	18.12	
	802.11ac-VHT40 MCS0	64	5320	16.21	18.21	100.00
		54	5270	16.87	18.87	
		62	5310	15.67	17.67	
	802.11ac-VHT80 MCS0	58	5290	15.01	17.01	100.00
		52	5260	16.46	18.46	
		56	5280	16.37	18.37	
	802.11ax-HE20 MCS0	60	5300	16.35	18.35	100.00
		64	5320	16.30	18.30	
		54	5270	16.55	18.55	
	802.11ax-HE40 MCS0	62	5310	16.38	18.38	100.00
		58	5290	15.80	17.80	

5GHz WLAN	Ant 1+2					
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN	802.11a 6Mbps	100	5500	16.63	18.63	98.63
		116	5580	16.38	18.38	
		124	5620	16.60	18.60	
		132	5660	16.64	18.64	
		140	5700	16.35	18.35	
		144	5720	16.36	18.36	
	802.11n-HT20 MCS0	100	5500	16.33	18.33	100.00
		116	5580	16.09	18.09	
		124	5620	16.60	18.60	
		132	5660	16.63	18.63	
		140	5700	16.05	18.05	
		144	5720	16.03	18.03	
	802.11n-HT40 MCS0	102	5510	16.98	18.98	100.00
		110	5550	16.54	18.54	
		126	5630	16.97	18.97	
		134	5670	16.63	18.63	
		142	5710	16.50	18.50	
	802.11ac-VHT20 MCS0	100	5500	16.30	18.30	100.00
		116	5580	16.06	18.06	
		124	5620	16.58	18.58	
		132	5660	16.60	18.60	
		140	5700	16.03	18.03	
		144	5720	16.01	18.01	
	802.11ac-VHT40 MCS0	102	5510	16.77	18.77	100.00
		110	5550	16.53	18.53	
		126	5630	16.75	18.75	
		134	5670	16.61	18.61	
		142	5710	16.48	18.48	
	802.11ac-VHT80 MCS0	106	5530	15.65	17.65	100.00
		122	5610	15.79	17.79	
		138	5690	15.59	17.59	
	802.11ax-HE20 MCS0	100	5500	16.38	18.38	100.00
		116	5580	16.13	18.13	
		124	5620	16.10	18.10	
		132	5660	16.11	18.11	
		140	5700	16.12	18.12	
		144	5720	16.13	18.13	
	802.11ax-HE40 MCS0	102	5510	16.42	18.42	100.00
		110	5550	16.17	18.17	
		126	5630	16.16	18.16	
		134	5670	16.18	18.18	
		142	5710	16.18	18.18	
	802.11ax-HE80 MCS0	106	5530	15.51	17.51	100.00
		122	5610	15.66	17.66	
		138	5690	15.46	17.46	

Reduced Power Level 4 for Product Specific

2.4GHz WLAN		Ant 1+2				
2.4GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11b 1Mbps	1	2412	15.34	17.34	98.35
		6	2437	15.31	17.31	
		11	2462	15.17	17.17	
	802.11g 6Mbps	1	2412	13.63	15.63	99.31
		6	2437	13.42	15.42	
		11	2462	13.37	15.37	
	802.11n- HT20 MCS0	1	2412	13.23	15.23	100.00
		6	2437	13.16	15.16	
		11	2462	13.02	15.02	
	802.11n- HT40 MCS0	3	2422	12.68	14.68	100.00
		6	2437	12.66	14.66	
		9	2452	12.53	14.53	
	802.11ax- HE20 MCS0	1	2412	13.27	15.27	100.00
		6	2437	13.21	15.21	
		11	2462	13.12	15.12	
	802.11ax- HE40 MCS0	3	2422	13.34	15.34	100.00
		6	2437	13.36	15.36	
		9	2452	13.27	15.27	

5GHz WLAN		Ant 1+2				
5.2GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	36	5180	13.72	15.72	98.63
		40	5200	14.02	16.02	
		44	5220	13.73	15.73	
		48	5240	13.64	15.64	
	802.11n- HT20 MCS0	36	5180	13.41	15.41	100.00
		40	5200	13.71	15.71	
		44	5220	13.44	15.44	
	802.11n- HT40 MCS0	48	5240	13.34	15.34	100.00
		38	5190	13.87	15.87	
		46	5230	13.89	15.89	
	802.11ac- VHT20 MCS0	36	5180	13.40	15.40	100.00
		40	5200	13.70	15.70	
		44	5220	13.42	15.42	
	802.11ac- VHT40 MCS0	48	5240	13.33	15.33	100.00
		38	5190	13.85	15.85	
		46	5230	13.86	15.86	
	802.11ac- VHT80 MCS0	42	5210	12.99	14.99	100.00
		36	5180	13.44	15.44	
		40	5200	13.42	15.42	
	802.11ax- HE20 MCS0	44	5220	13.45	15.45	100.00
		48	5240	13.40	15.40	
		38	5190	12.53	14.53	
	802.11ax- HE40 MCS0	46	5230	13.54	15.54	100.00
		42	5210	11.77	13.77	

5GHz WLAN		Ant 1+2				
5.3GHz WLAN	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
	802.11a 6Mbps	52	5260	13.74	15.74	98.63
		56	5280	14.03	16.03	
		60	5300	13.60	15.60	
		64	5320	13.54	15.54	
	802.11n- HT20 MCS0	52	5260	13.45	15.45	100.00
		56	5280	13.60	15.60	
		60	5300	13.30	15.30	
	802.11n- HT40 MCS0	64	5320	13.24	15.24	100.00
		54	5270	13.90	15.90	
		62	5310	12.74	14.74	
	802.11ac- VHT20 MCS0	52	5260	13.43	15.43	100.00
		56	5280	13.58	15.58	
		60	5300	13.12	15.12	
	802.11ac- VHT40 MCS0	64	5320	13.21	15.21	100.00
		54	5270	13.87	15.87	
		62	5310	12.67	14.67	
	802.11ac- VHT80 MCS0	58	5290	12.01	14.01	100.00
		52	5260	13.46	15.46	
		56	5280	13.37	15.37	
	802.11ax- HE20 MCS0	60	5300	13.35	15.35	100.00
		64	5320	13.30	15.30	
		54	5270	13.55	15.55	
	802.11ax- HE40 MCS0	62	5310	13.38	15.38	100.00
		58	5290	12.80	14.80	

5GHz WLAN	Ant 1+2					
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.5GHz WLAN	802.11a 6Mbps	100	5500	13.63	15.63	98.63
		116	5580	13.38	15.38	
		124	5620	13.60	15.60	
		132	5660	13.64	15.64	
		140	5700	13.35	15.35	
		144	5720	13.36	15.36	
	802.11n-HT20 MCS0	100	5500	13.33	15.33	100.00
		116	5580	13.09	15.09	
		124	5620	13.60	15.60	
		132	5660	13.63	15.63	
		140	5700	13.05	15.05	
		144	5720	13.03	15.03	
	802.11n-HT40 MCS0	102	5510	13.98	15.98	100.00
		110	5550	13.54	15.54	
		126	5630	13.97	15.97	
		134	5670	13.63	15.63	
		142	5710	13.50	15.50	
	802.11ac-VHT20 MCS0	100	5500	13.30	15.30	100.00
		116	5580	13.06	15.06	
		124	5620	13.58	15.58	
		132	5660	13.60	15.60	
		140	5700	13.03	15.03	
		144	5720	13.01	15.01	
	802.11ac-VHT40 MCS0	102	5510	13.77	15.77	100.00
		110	5550	13.53	15.53	
		126	5630	13.75	15.75	
		134	5670	13.61	15.61	
		142	5710	13.48	15.48	
	802.11ac-VHT80 MCS0	106	5530	12.65	14.65	100.00
		122	5610	12.79	14.79	
		138	5690	12.59	14.59	
		100	5500	13.38	15.38	
	802.11ax-HE20 MCS0	116	5580	13.13	15.13	100.00
		124	5620	13.10	15.10	
		132	5660	13.11	15.11	
		140	5700	13.12	15.12	
		144	5720	13.13	15.13	
	802.11ax-HE40 MCS0	102	5510	13.42	15.42	100.00
		110	5550	13.17	15.17	
		126	5630	13.16	15.16	
		134	5670	13.18	15.18	
		142	5710	13.18	15.18	
	802.11ax-HE80 MCS0	106	5530	12.51	14.51	100.00
		122	5610	12.66	14.66	
		138	5690	12.46	14.46	



Appendix F. Supplemental Tuner Head & Body SAR Results

The results are shown as follows.

RF exposure position										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)																
WYNN_Anc1 Head	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RIS Size	RIS Offset	Test Position	Spacing	Measured by SAR (W/kg)	9	22	44	66	88	110	132	5	22	44	66	88	110	132	5	22	44	66	88	110	132										
	COMM00_LBT	QPSK(7/8)w	Head Orientation	128	824.2	N/A	N/A	Left Cheek	Open	0.702	0	0	0.008	0	0.041	0	0	0	0	0.188	0.268	0	0.2	0.108	0	0.058	0	0.146	0.096	0.087	0.123	0.08	0	0	0.098	0	0.061	0.047	0		
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RIS Size	RIS Offset	Test Position	Spacing	Measured by SAR (W/kg)	1	23	45	67	89	111	133	1	23	45	67	89	111	133	1	23	45	67	89	111	133										
	COMM000_BOL_LBT	RC3-DCSS	Head Orientation	1013	824.7	N/A	N/A	Left Cheek	Open	0.702	0	0.015	0	0	0.008	0	0	0.011	0.108	0.016	0	0	0.045	0.082	0	0	0.121	0.096	0.087	0	0	0.052	0	0.082	0	0.054	0	0			
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RIS Size	RIS Offset	Test Position	Spacing	Measured by SAR (W/kg)	2	24	46	68	90	112	134	2	24	46	68	90	112	134	2	24	46	68	90	112	134										
	COMM0000_BOL_LBT	RC3-DCSS	Head Orientation	980	825.5	N/A	N/A	Left Cheek	Open	0.672	0	0	0.047	0	0.060	0	0	0	0	0.215	0.241	0	0.168	0.085	0	0.055	0	0.105	0.081	0.123	0	0.052	0	0	0.086	0	0.072	0	0		
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RIS Size	RIS Offset	Test Position	Spacing	Measured by SAR (W/kg)	3	25	47	69	91	113	135	3	25	47	69	91	113	135	3	25	47	69	91	113	135										
	WCDMA_V_LBT	RMC 12 20bps	Head Orientation	4132	826.4	N/A	N/A	Left Cheek	Open	0.812	0	0	0.041	0	0.053	0	0	0.074	0.368	0.419	0.087	0.312	0.043	0.075	0.105	0.044	0.121	0.144	0.133	0	0.163	0.04	0	0.071	0.047	0.085	0	0			
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RIS Size	RIS Offset	Test Position	Spacing	Measured by SAR (W/kg)	4	26	48	70	92	114	136	4	26	48	70	92	114	136	4	26	48	70	92	114	136										
	LTE Band11_LBT	20M-QPSK	Head Orientation	13332	853	50	26	Left Cheek	Open	0.185	0.148	0	0	0.173	0.088	0	0.144	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.138	0.372	0	0.163	0.045	0.113	0.188			
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RIS Size	RIS Offset	Test Position	Spacing	Measured by SAR (W/kg)	5	27	49	71	93	115	137	5	27	49	71	93	115	137	5	27	49	71	93	115	137										
	LTE Band 12_LBT	10M-QPSK	Head Orientation	20055	707.5	25	25	Left Cheek	Open	0.876	0.084	0	0	0.077	0.058	0	0.06	0	0	0	0	0	0	0	0	0.053	0.165	0	0.059	0.057	0.158	0.058	0.488	0.13	0	0.068	0.24	0.046	0.013		
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RIS Size	RIS Offset	Test Position	Spacing	Measured by SAR (W/kg)	6	28	50	72	94	116	138	6	28	50	72	94	116	138	6	28	50	72	94	116	138										
	LTE Band 13_LBT	10M-QPSK	Head Orientation	22236	782	25	25	Left Cheek	Open	0.088	0	0	0	0.038	0.031	0	0	0.048	0.165	0	0.083	0.382	0.088	0.041	0.054	0.103	0	0.045	0.034	0.058	0.037	0.142	0	0	0.148	0.161	0	0.105			
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RIS Size	RIS Offset	Test Position	Spacing	Measured by SAR (W/kg)	7	29	51	73	95	117	139	7	29	51	73	95	117	139	7	29	51	73	95	117	139										
	LTE Band 5_LBT	10M-QPSK	Head Orientation	20255	835.5	1	0	Left Cheek	Open	0.673	0	0	0	0	0	0	0	0.132	0.287	0.088	0.107	0.322	0.09	0.113	0.121	0.041	0	0.135	0.107	0.04	0.089	0.052	0	0	0.053	0.085	0	0			
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RIS Size	RIS Offset	Test Position	Spacing	Measured by SAR (W/kg)	8	30	52	74	96	118	140	8	30	52	74	96	118	140	8	30	52	74	96	118	140										
	LTE Band 26_LBT	10M-QPSK	Head Orientation	26852	811.5	38	20	Left Cheek	Open	0.755	0	0	0	0	0	0	0	0.144	0.281	0.081	0.108	0	0.113	0.128	0.149	0.045	0	0.171	0.053	0	0.11	0.064	0	0	0.085	0	0.045	0.043			
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RIS Size	RIS Offset	Test Position	Spacing	Measured by SAR (W/kg)	9	31	53	75	97	119	141	9	31	53	75	97	119	141	9	31	53	75	97	119	141										
	SA NPT_Anc1	20M-PID BPSK	Head Orientation	136103	860.5	1	53	Left Cheek	Open	0.039	0.185	0	0	0.196	0.021	0	0.156	0	0	0	0	0	0	0	0	0	0	0	0.046	0	0.057	0	0.209	0.33	0.055	0.241	0	0.24	0.209		
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RIS Size	RIS Offset	Test Position	Spacing	Measured by SAR (W/kg)	10	32	54	76	98	120	142	10	32	54	76	98	120	142	10	32	54	76	98	120	142										
	NC_Anc1	20M-PID BPSK	Head Orientation	167393	835.5	1	53	Left Cheek	Open	0.059	0	0	0	0	0	0.047	0	0.231	0	0.151	0.243	0.043	0.177	0.183	0.169	0	0	0.17	0.049	0.081	0.108	0.072	0	0	0.073	0	0.085	0.044			
WYNN_Anc1 Body	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RIS Size	RIS Offset	Test Position	Spacing	Measured by SAR (W/kg)	11	33	55	77	99	121	143	11	33	55	77	99	121	143	11	33	55	77	99	121	143										
	COMM00_LBT	QPSK(7/8)w	Head Orientation	128	824.2	N/A	N/A	Left Side	Open	0.438	0	0	0	0	0	0	0	0.084	0	0.08	0.1	0	0.082	0.105	0.111	0	0	0.09	0	0.055	0.086	0.042	0	0	0.039	0	0.039	0			
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RIS Size	RIS Offset	Test Position	Spacing	Measured by SAR (W/kg)	12	34	56	78	100	122	144	12	34	56	78	100	122	144	12	34	56	78	100	122	144										
	COMM000_BOL_LBT	RC3-DCSS	Head Orientation	1013	824.7	N/A	N/A	Left Side	Open	0.577	0	0	0	0.036	0	0	0.032	0.13	0	0.085	0	0	0.056	0	0.162	0	0	0	0	0	0.083	0	0	0	0	0	0.052	0			
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RIS Size	RIS Offset	Test Position	Spacing	Measured by SAR (W/kg)	13	35	57	79	101	123	145	13	35	57	79	101	123	145	13	35	57	79	101	123	145										
	COMM0000_BOL_LBT	RC3-DCSS	Head Orientation	980	825.5	N/A	N/A	Left Side	Open	0.594	0.052	0	0	0	0	0	0.062	0	0	0	0	0.125	0	0.143	0.082	0	0	0	0.094	0	0	0.038	0.033	0	0	0	0	0			
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RIS Size	RIS Offset	Test Position	Spacing	Measured by SAR (W/kg)	14	36	58	80	102	124	146	14	36	58	80	102	124	146	14	36	58	80	102	124	146										
	WCDMA_V_LBT	RMC 12 20bps	Head Orientation	4132	826.4	N/A	N/A	Left Side	Open	0.480	0.042	0	0	0	0	0	0.074	0	0.28	0.174	0.17	0	0.066	0.287	0.082	0.23	0.073	0	0	0.086	0.157	0.084	0.103	0.055	0	0	0	0.108	0		
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RIS Size	RIS Offset	Test Position	Spacing	Measured by SAR (W/kg)	15	37	59	81	103	125	147	15	37	59	81	103	125	147	15	37	59	81	103	125	147										
	LTE Band11_LBT	20M-QPSK	Head Orientation	13332	853	50	26	Left Side	Open	0.59	0.185	0	0	0	0.078	0.048	0.058	0	0	0	0	0	0	0	0.083	0.071	0	0	0	0	0.117	0	0.068	0.158	0.112	0	0.116	0.077	0.08		
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RIS Size	RIS Offset	Test Position	Spacing	Measured by SAR (W/kg)	16	38	60	82	104	126	148	16	38	60	82	104	126	148	16	38	60	82	104	126	148										
	LTE Band 12_LBT	10M-QPSK	Head Orientation	20055	707.5	25	25	Left Side	Open	0.056	0	0	0	0	0.04	0.041	0	0	0	0	0	0	0	0	0	0.013	0.047	0.107	0.047	0.026	0	0	0.088	0.041	0.203	0.352	0.151	0.209			
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RIS Size	RIS Offset	Test Position	Spacing	Measured by SAR (W/kg)	17	39	61	83	105	127	149	17	39	61	83	105	127	149	17	39	61	83	105	127	149										
	LTE Band 13_LBT	10M-QPSK	Head Orientation	22236	782	1	25	Left Side	Open	0.407	0	0	0	0	0	0	0	0.457	0	0	0	0.107	0	0.103	0	0	0.053	0	0.041	0.088	0.12	0.307	0	0	0	0.055	0	0	0.055	0.072	0.071
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RIS Size	RIS Offset	Test Position	Spacing	Measured by SAR (W/kg)	18	40	62	84	106	128	150	18	40	62	84	106	128	150	18	40	62	84	106	128	150										
	LTE Band 5_LBT	10M-QPSK	Head Orientation	20255	835.5	1	0	Left Side	Open	0.436	0	0	0	0	0	0	0	0.052	0.127	0.164	0.07	0.077	0	0.08	0.05	0.131	0.102	0.07	0.078	0	0.065	0	0.042	0	0	0	0	0	0		
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RIS Size	RIS Offset	Test Position	Spacing	Measured by SAR (W/kg)	19	41	63	85	107	129	151	19	41	63	85	107	129	151	19	41	63	85	107	129	151										
	LTE Band 26_LBT	10M-QPSK	Head Orientation	26782	811.5	38	20	Left Side	Open	0.516	0	0	0	0	0	0	0	0.085	0.183	0.107	0.11	0.073	0	0.08	0	0.079	0	0.045	0.059	0	0.109	0	0	0	0	0	0	0.047			
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RIS Size	RIS Offset	Test Position	Spacing	Measured by SAR (W/kg)	20	42	64	86	108	130	152	20	42	64	86	108	130	152	20	42	64	86	108	130	152										
	SA NPT_Anc1	20M-PID BPSK	Full Power	161055	860.5	100	0	Left Side	Open	0.055	0	0.06	0	0	0.102	0.042	0.145	0	0	0	0	0	0	0	0	0.102	0	0.089	0.042	0	0	0.084	0.383	0	0.232	0.216					

Aperture 04							Aperture 05							Aperture 06							Aperture 07							Aperture 08							Aperture 09								
Average Value of Time Sweep (Hz)							Average Value of Time Sweep (Hz)							Average Value of Time Sweep (Hz)							Average Value of Time Sweep (Hz)							Average Value of Time Sweep (Hz)							Average Value of Time Sweep (Hz)								
0	22	44	66	88	110	132	0	22	44	66	88	110	132	0	22	44	66	88	110	132	0	22	44	66	88	110	132	0	22	44	66	88	110	132	0	22	44	66	88	110	132		
0	0	0.072	0	0.05	0	0	0	0	0.06	0	0.04	0	0	0	0.205	0.268	0	0.217	0.046	0	0	0	0.221	0.285	0	0.218	0.058	0	0.134	0.050	0.210	0.302	0.284	0.163	0	0.187	0.247	0.114	0.3	0.171			
1	23	45	67	89	111	133	1	23	45	67	89	111	133	1	23	45	67	89	111	133	1	23	45	67	89	111	133	1	23	45	67	89	111	133	1	23	45	67	89	111	133		
0	0	0.002	0	0.007	0	0	0	0.045	0.016	0	0.070	0	0	0	0.201	0.265	0	0.166	0.002	0	0	0	0.233	0.296	0	0.221	0.063	0	0.202	0.094	0.209	0.362	0.167	0.463	0.317	0.020	0	0.102	0.265	0.102	0	0.166	
2	24	46	68	90	112	134	2	24	46	68	90	112	134	2	24	46	68	90	112	134	2	24	46	68	90	112	134	2	24	46	68	90	112	134	2	24	46	68	90	112	134		
0	0	0.041	0	0.043	0	0	0	0.037	0	0	0.002	0	0	0	0.223	0.284	0	0.147	0.039	0	0	0	0.216	0.294	0	0.168	0	0	0.242	0	0.188	0.301	0.123	0.244	0.287	0.116	0.054	0.162	0.267	0.171	0.067	0.4	
3	25	47	69	91	113	135	3	25	47	69	91	113	135	3	25	47	69	91	113	135	3	25	47	69	91	113	135	3	25	47	69	91	113	135	3	25	47	69	91	113	135		
0	0	0.035	0	0.063	0	0	0	0	0.146	0.242	0	0.163	0.08	0	0	0.273	0.246	0	0.226	0.06	0	0	0.26	0.266	0.042	0.275	0.054	0	0.468	0.080	0.223	0.054	0.202	0	0.477	0.217	0.052	0.158	0.227	0.16	0	0.204	
4	26	48	70	92	114	136	4	26	48	70	92	114	136	4	26	48	70	92	114	136	4	26	48	70	92	114	136	4	26	48	70	92	114	136	4	26	48	70	92	114	136		
0.278	0.131	0	0.472	0.264	0	0.443	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5	27	49	71	93	115	137	5	27	49	71	93	115	137	5	27	49	71	93	115	137	5	27	49	71	93	115	137	5	27	49	71	93	115	137	5	27	49	71	93	115	137		
0.315	0.082	0	0.043	0.034	0	0.288	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.289	0	0	0.048	0	0	0.148	0.062	0				
6	28	50	72	94	116	138	6	28	50	72	94	116	138	6	28	50	72	94	116	138	6	28	50	72	94	116	138	6	28	50	72	94	116	138	6	28	50	72	94	116	138		
0.07	0	0	0.073	0.072	0	0.082	0	0	0	0	0.108	0.091	0	0.058	0.114	0	0	0.013	0.030	0	0	0	0.211	0.027	0.014	0	0	0	0.118	0.025	0	0	0.078	0.063	0	0	0	0	0.006	0.022			
7	29	51	73	95	117	139	7	29	51	73	95	117	139	7	29	51	73	95	117	139	7	29	51	73	95	117	139	7	29	51	73	95	117	139	7	29	51	73	95	117	139		
0	0	0	0	0	0.002	0	0	0	0.146	0	0	0.222	0.126	0	0.06	0.284	0.046	0.081	0.301	0.108	0.048	0.071	0.29	0.003	0.072	0.211	0.194	0.055	0.073	0.096	0	0.577	0.2	0.059	0.46	0.208	0.084	0	0.203	0.151	0.049	0.2	
8	30	52	74	96	118	140	8	30	52	74	96	118	140	8	30	52	74	96	118	140	8	30	52	74	96	118	140	8	30	52	74	96	118	140	8	30	52	74	96	118	140		
0	0	0	0.041	0	0	0	0	0.044	0.108	0	0.047	0	0.141	0	0.074	0.333	0.063	0.079	0	0.147	0.061	0.067	0.33	0.072	0.060	0	0.144	0.074	0.084	0.112	0	0.061	0.118	0.088	0.343	0.202	0.074	0	0.261	0.077	0.074	0.24	
9	31	53	75	97	119	141	9	31	53	75	97	119	141	9	31	53	75	97	119	141	9	31	53	75	97	119	141	9	31	53	75	97	119	141	9	31	53	75	97	119	141		
0.489	0.131	0	0.055	0.075	0.163	0.463	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
10	32	54	76	98	120	142	10	32	54	76	98	120	142	10	32	54	76	98	120	142	10	32	54	76	98	120	142	10	32	54	76	98	120	142	10	32	54	76	98	120	142		
0.045	0	0	0.046	0	0.003	0	0.061	0.072	0.042	0.084	0	0.186	0.043	0.101	0.05	0.103	0.108	0	0.184	0.073	0.12	0.045	0.115	0.124	0	0.163	0.086	0.086	0	0	0.061	0.219	0.125	0.028	0.208	0	0	0.333	0.134	0.111	0.030		
11	33	55	77	99	121	143	11	33	55	77	99	121	143	11	33	55	77	99	121	143	11	33	55	77	99	121	143	11	33	55	77	99	121	143	11	33	55	77	99	121	143		
0	0	0	0	0	0	0	0	0	0.046	0	0	0.081	0	0	0.044	0	0	0	0.081	0.046	0.041	0.042	0	0.042	0	0.063	0	0.264	0	0	0.203	0.087	0.045	0.232	0.168	0	0	0.109	0.057	0	0.087		
12	34	56	78	100	122	0	12	34	56	78	100	122	0	12	34	56	78	100	122	0	12	34	56	78	100	122	0	12	34	56	78	100	122	0	12	34	56	78	100	122	0		
0	0	0	0	0	0	0	0	0	0.146	0	0.104	0	0.086	0	0.088	0.110	0	0	0.160	0	0	0.039	0	0.005	0	0	0	0.191	0.086	0	0	0.117	0.088	0.141	0	0	0	0	0	0	0.078		
13	35	57	79	101	123	1	13	35	57	79	101	123	1	13	35	57	79	101	123	1	13	35	57	79	101	123	1	13	35	57	79	101	123	1	13	35	57	79	101	123	1		
0.084	0	0	0	0	0.002	0.046	0	0	0	0	0	0.116	0	0.102	0	0.060	0.162	0.067	0	0	0.134	0.037	0.065	0	0	0.040	0	0.167	0	0	0	0	0	0.103	0.164	0.064	0.160	0	0	0.051	0.043	0	0.164
14	36	58	80	102	124	2	14	36	58	80	102	124	2	14	36	58	80	102	124	2	14	36	58	80	102	124	2	14	36	58	80	102	124	2	14	36	58	80	102	124			
0.07	0.045	0	0	0	0.080	0	0.083	0.297	0	0.080	0	0.036	0	0.154	0.215	0.146	0	0	0.085	0.04	0.179	0.203	0.100	0.003	0.084	0.280	0.047	0.46	0.106	0.047	0	0.363	0.222	0.046	0.084	0.087	0	0	0.160	0.184	0.003		
15	37	59	81	103	125	3	15	37	59	81	103	125	3	15	37	59	81	103	125	3	15	37	59	81	103	125	3	15	37	59	81	103	125	3	15	37	59	81	103	125	3		
0.434	0.059	0	0	0.289	0.105	0.025	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
16	38	60	82	104	126	4	16	38	60	82	104	126	4	16	38	60	82	104	126	4	16	38	60	82	104	126	4	16	38	60	82	104	126	4	16	38	60	82	104	126	4		
0	0.047	0	0	0.074	0.084	0.072	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.022	0	0	0	0.084	0	0.104	0	0.046	0	0.125	0			
17	39	61	83	105	127	5	17	39	61	83	105	127	5	17	39	61	83	105	127	5	17	39	61	83	105	127	5	17	39	61	83	105	127	5	17	39	61	83	105	127	5		
0	0.04	0	0	0	0.035	0	0	0.071	0	0.004	0	0.008	0	0	0.107	0	0.036	0	0.080	0	0	0.115	0	0.096	0	0.097	0	0	0.188	0.139	0.060	0.066	0.262	0.060	0	0.139	0.07	0.063	0.109	0.219	0.176		
18	40	62	84	106	128	6	18	40	62	84	106	128	6	18	40	62	84	106	128	6	18	40	62	84	106	128	6	18	40	62	84	106	128	6	18	40	62	84	106	128	6		
0	0	0	0	0	0	0	0	0.243	0.106	0	0.084	0	0	0	0.081	0.128	0.081	0.082	0	0	0	0.072	0.107	0.084	0.076	0	0	0	0	0.087	0	0.084	0.263	0.058	0.211	0	0.0871	0	0	0.116	0	0.104	
19	41	63	85	107	129	7	19	41	63	85	107	129	7	1																													

Aperture 10								Aperture 11								Aperture 12								Aperture 13								Aperture 14								Aperture 15							
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	22	44	66	88	110	132	0	22	44	66	88	110	132	0	22	44	66	88	110	132	0	22	44	66	88	110	132	0	22	44	66	88	110	132	0	22	44	66	88	110	132						
0	0	0.116	0.112	0.072	0.076	0	0	0.03	0.105	0	0.171	0	0	0	0.06	0.21	0	0.181	0	0	0	0.113	0.236	0	0.191	0	0	0	0.065	0.236	0.1	0.14	0.32	0.082	0	0	0.102	0	0.132	0	0						
1	23	45	67	89	111	133	1	23	45	67	89	111	133	1	23	45	67	89	111	133	1	23	45	67	89	111	133	1	23	45	67	89	111	133	1	23	45	67	89	111	133						
0	0	0.086	0.086	0.007	0	0	0	0.094	0.101	0	0.109	0	0	0	0.064	0.102	0	0.172	0	0	0	0.103	0.107	0	0.202	0	0	0	0.057	0.202	0.105	0.102	0	0	0	0	0.104	0	0.136	0	0						
2	24	46	68	90	112	134	2	24	46	68	90	112	134	2	24	46	68	90	112	134	2	24	46	68	90	112	134	2	24	46	68	90	112	134	2	24	46	68	90	112	134						
0	0	0.104	0.085	0	0	0	0	0.043	0.144	0	0.141	0	0	0	0	0.104	0	0	0	0	0	0.121	0.136	0	0.179	0	0	0	0	0.211	0.168	0.068	0	0.079	0	0	0	0	0.112	0.046							
3	25	47	69	91	113	135	3	25	47	69	91	113	135	3	25	47	69	91	113	135	3	25	47	69	91	113	135	3	25	47	69	91	113	135	3	25	47	69	91	113	135						
0.083	0	0.002	0.03	0.104	0	0.085	0	0.081	0.10	0	0.172	0.076	0	0	0.081	0.172	0	0.163	0.076	0	0	0.165	0.054	0	0.222	0.074	0	0.186	0.107	0.3	0.217	0.24	0	0.168	0	0.056	0.116	0	0.138	0.085	0						
26	48	70	92	114	136	4	26	48	70	92	114	136	4	26	48	70	92	114	136	4	26	48	70	92	114	136	4	26	48	70	92	114	136	4	26	48	70	92	114	136							
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
5	27	49	71	93	115	137	5	27	49	71	93	115	137	5	27	49	71	93	115	137	5	27	49	71	93	115	137	5	27	49	71	93	115	137	5	27	49	71	93	115	137						
0.084	0.278	0	0.114	0.012	0.13	0.082	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
6	28	50	72	94	116	138	6	28	50	72	94	116	138	6	28	50	72	94	116	138	6	28	50	72	94	116	138	6	28	50	72	94	116	138	6	28	50	72	94	116	138						
0	0	0	0.145	0.14	0.042	0.273	0	0	0	0	0.084	0.053	0	0	0	0	0.075	0.06	0	0	0.04	0	0	0.113	0.086	0	0.085	0.32	0.04	0	0.37	0.155	0.067	0	0	0	0	0.06	0	0							
7	29	51	73	95	117	139	7	29	51	73	95	117	139	7	29	51	73	95	117	139	7	29	51	73	95	117	139	7	29	51	73	95	117	139	7	29	51	73	95	117	139						
0.089	0	0	0.009	0.09	0	0.084	0	0.088	0	0	0.161	0.159	0	0	0.089	0	0	0.163	0.12	0	0	0.178	0	0	0.223	0.119	0	0.359	0.163	0	0.365	0.253	0.088	0.311	0	0.082	0	0	0.116	0.168	0						
8	30	52	74	96	118	140	8	30	52	74	96	118	140	8	30	52	74	96	118	140	8	30	52	74	96	118	140	8	30	52	74	96	118	140	8	30	52	74	96	118	140						
0.119	0.34	0	0.12	0	0.083	0.079	0	0.106	0	0	0	0.148	0	0	0.079	0	0	0.132	0	0.041	0.184	0	0.046	0	0.132	0	0.36	0.181	0	0.368	0	0.041	0.354	0	0.063	0	0	0	0	0.132	0						
9	31	53	75	97	119	141	9	31	53	75	97	119	141	9	31	53	75	97	119	141	9	31	53	75	97	119	141	9	31	53	75	97	119	141	9	31	53	75	97	119	141						
0.054	0.058	0	0.085	0	0.148	0.053	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
10	32	54	76	98	120	142	10	32	54	76	98	120	142	10	32	54	76	98	120	142	10	32	54	76	98	120	142	10	32	54	76	98	120	142	10	32	54	76	98	120	142						
0.134	0	0	0.125	0	0.082	0.085	0.041	0.085	0	0.043	0	0.174	0	0.048	0.083	0	0.048	0	0.18	0	0.069	0.069	0.052	0.072	0	0.169	0.046	0.058	0	0.037	0.041	0.139	-0.15	0.034	0	0.077	0	0	0	0.135	0						
11	33	55	77	99	121	143	11	33	55	77	99	121	143	11	33	55	77	99	121	143	11	33	55	77	99	121	143	11	33	55	77	99	121	143	11	33	55	77	99	121	143						
0.047	0	0	0.049	0	0	0	0	0.04	0	0	0.032	0	0	0.042	0	0	0.06	0	0	0.048	0	0	0	0.087	0	0.187	0	0	0.168	0.045	0.072	0.236	0	0.045	0	0	0	0.074	0	0							
12	34	56	78	100	122	0	12	34	56	78	100	122	0	12	34	56	78	100	122	0	12	34	56	78	100	122	0	12	34	56	78	100	122	0	12	34	56	78	100	122	0						
0	0	0	0.042	0.039	0	0.083	0	0	0	0	0	0.087	0	0.087	0	0	0.059	0	0.043	0.039	0	0	0	0	0	0	0	0.174	0.089	0	0	0.061	0.058	0.212	0	0	0	0	0	0							
13	35	57	79	101	123	1	13	35	57	79	101	123	1	13	35	57	79	101	123	1	13	35	57	79	101	123	1	13	35	57	79	101	123	1	13	35	57	79	101	123	1						
0.088	0	0	0	0	0	0.046	0	0	0	0	0.082	0	0.163	0	0	0.084	0	0	0.132	0	0	0	0	0.084	0	0.131	0	0.088	0.081	0	0.132	0.167	0	0	0	0	0	0	0.043	0	0						
14	36	58	80	102	124	2	14	36	58	80	102	124	2	14	36	58	80	102	124	2	14	36	58	80	102	124	2	14	36	58	80	102	124	2	14	36	58	80	102	124	2						
0.181	0.09	0	0	0.046	0.102	0.084	0.093	0.2	0	0.038	0	0.168	0	0.036	0.036	0	0.076	0	0.169	0	0.089	0.073	0.086	0.071	0	0.204	0	0.462	0.139	0.065	0	0.046	0.046	0.211	0.041	0.179	0	0.089	0	0.149	0						
15	37	59	81	103	125	3	15	37	59	81	103	125	3	15	37	59	81	103	125	3	15	37	59	81	103	125	3	15	37	59	81	103	125	3	15	37	59	81	103	125	3						
0.116	0.12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
16	38	60	82	104	126	4	16	38	60	82	104	126	4	16	38	60	82	104	126	4	16	38	60	82	104	126	4	16	38	60	82	104	126	4	16	38	60	82	104	126	4						
0	0.069	0.086	0.086	0.084	0.082	0.089	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
17	39	61	83	105	127	5	17	39	61	83	105	127	5	17	39	61	83	105	127	5	17	39	61	83	105	127	5	17	39	61	83	105	127	5	17	39	61	83	105	127	5						
0	0.074	0	0	0.162	0.111	0.207	0	0.03	0	0	0.041	0	0	0.052	0	0.039	0	0.043	0	0	0.076	0	0.036	0	0.041	0	0.041	0.205	0.08	0.12	0.044	0.246	0.043	0	0	0	0	0	0	0							
18	40	62	84	106	128	6	18	40	62	84	106	128	6	18	40	62	84	106	128	6	18	40	62	84	106	128	6	18	40	62	84	106	128	6	18	40	62	84	106	128	6						
0	0.051	0	0	0	0	0.083	0	0.103	0	0.089	0	0	0	0.168	0	0.08	0	0	0	0.055	0.127	0.04	0.091	0	0	0	0	0.163	0.046	0.052	0.268	0	0	0	0.086	0	0.075	0	0	0							
19	41	63	85	107	129	7	19	41	63	85	107	129	7	19	41	63	85	107	129	7	19	41	63	85	107	129	7	19	41	63	85	107	129	7	19	41	63	85	107	129	7						
0	0.063	0	0	0.063	0	0.088	0	0.106	0	0.163	0	0	0	0.114	0	0.106	0	0	0	0.05	0.1																										

RF exposure position										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)							
WWAN_Ant 1 Head	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	0	22	44	66	88	110	132	0	22	44	66	88	110	132	0	22	44	66	88	110	132	0	22	44	66	88	110	132			
	GSM850_LAT	GPRS(3 Tx slots)	Full Power	251	846.6	N/A	N/A	Left Cheek	5mm	0.146	0.105	0.047	0	0	0	0	0	0	0	0	0	0	0	0	0.046	0.108	0	0.063	0	0	0	0.06	0	0	0	0	0	0			
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	1	23	45	67	89	111	133	1	23	45	67	89	111	133	1	23	45	67	89	111	133	1	23	45	67	89	111	133			
	CDMA2000 1X2_LAT	1X2-SSSS	Full Power	384	836.52	N/A	N/A	Left Cheek	5mm	0.174	0.104	0.064	0	0	0	0	0	0	0.103	0.086	0.138	0	0	0	0.062	0.128	0	0.093	0	0	0	0.079	0	0	0	0	0	0			
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	2	24	46	68	90	112	134	2	24	46	68	90	112	134	2	24	46	68	90	112	134	2	24	46	68	90	112	134			
	CDMA2000 1X10_LAT	1X10-SSSS	Full Power	684	823.1	N/A	N/A	Left Cheek	5mm	0.155	0.101	0.062	0	0	0	0	0	0	0	0.102	0.102	0.13	0	0	0	0.063	0.126	0	0.067	0	0	0	0.076	0	0	0	0	0	0		
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	3	25	47	69	91	113	135	3	25	47	69	91	113	135	3	25	47	69	91	113	135	3	25	47	69	91	113	135			
	WCDMA_V_LAT	RNC 12.25bps	Full Power	4233	846.6	N/A	N/A	Left Cheek	5mm	0.189	0.111	0.049	0	0	0	0	0	0.072	0.15	0.105	0.172	0	0	0	0.12	0.124	0.057	0.068	0	0	0	0.052	0	0	0	0	0	0			
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	4	26	48	70	92	114	136	4	26	48	70	92	114	136	4	26	48	70	92	114	136	4	26	48	70	92	114	136			
	LTE Band 71_LAT	20M-QPSK	Full Power	133322	883	1	0	Left Cheek	5mm	0.113	0	0	0.086	0	0	0	0	0.036	0	0	0	0	0	0	0.061	0	0.045	0	0	0	0	0	0	0.046	0.043	0	0	0	0		
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	5	27	49	71	93	115	137	5	27	49	71	93	115	137	5	27	49	71	93	115	137	5	27	49	71	93	115	137			
	LTE Band 12_LAT	10M-QPSK	Full Power	23085	797.5	1	49	Left Cheek	5mm	0.173	0	0	0.106	0.123	0	0	0	0	0	0	0	0	0	0	0	0	0.06	0	0	0	0	0	0	0.05	0.054	0	0	0	0		
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	6	28	50	72	94	116	138	6	28	50	72	94	116	138	6	28	50	72	94	116	138	6	28	50	72	94	116	138			
	LTE Band 13_LAT	10M-QPSK	Full Power	23230	792	1	25	Left Cheek	5mm	0.121	0.097	0.071	0.050	0	0	0	0	0.043	0	0.076	0	0	0	0	0.071	0	0.12	0	0	0	0.066	0.085	0	0	0	0	0	0			
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	7	29	51	73	95	117	139	7	29	51	73	95	117	139	7	29	51	73	95	117	139	7	29	51	73	95	117	139			
	LTE Band 5_LAT	10M-QPSK	Full Power	20525	836.5	1	0	Left Cheek	5mm	0.152	0.06	0.065	0	0	0	0	0	0.096	0.068	0.140	0	0	0	0	0.136	0.127	0.079	0	0	0	0	0	0	0	0	0	0	0			
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	8	30	52	74	96	118	140	8	30	52	74	96	118	140	8	30	52	74	96	118	140	8	30	52	74	96	118	140				
LTE Band 26_LAT	15M-QPSK	Full Power	26585	841.5	1	0	Left Cheek	5mm	0.202	0.098	0.083	0	0	0	0	0	0.136	0.088	0.175	0	0	0	0	0.137	0.149	0.07	0	0	0	0	0	0	0	0	0	0	0				
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	9	31	53	75	97	119	141	9	31	53	75	97	119	141	9	31	53	75	97	119	141	9	31	53	75	97	119	141				
NT1_Ant1	20M-P12 BPSK	Full Power	136100	680.5	50	26	Left Cheek	5mm	0.084	0	0	0.046	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.068	0	0	0	0				
Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	10	32	54	76	98	120	142	10	32	54	76	98	120	142	10	32	54	76	98	120	142	10	32	54	76	98	120	142				
N0_Ant1	20M-P12 BPSK	Full Power	167300	836.5	50	26	Left Cheek	5mm	0.129	0.071	0	0	0	0	0	0	0	0.068	0.047	0	0	0	0	0.066	0.083	0	0	0	0	0	0	0	0	0	0	0	0				
WWAN_Ant 1 Body	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	11	33	55	77	99	121	143	11	33	55	77	99	121	143	11	33	55	77	99	121	143	11	33	55	77	99	121	143			
	GSM850_LAT	GPRS(3 Tx slots)	Full Power	199	836.4	N/A	N/A	Back	10mm	0.392	0.046	0	0.047	0	0	0	0	0.059	0	0.032	0	0	0	0	0.054	0	0.046	0	0	0	0.042	0	0.044	0	0	0	0				
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	12	34	56	78	100	122	0	12	34	56	78	100	122	0	12	34	56	78	100	122	0	12	34	56	78	100	122	0			
	CDMA2000 1X2_LAT	RTTAP 153.60bps	Full Power	384	836.52	N/A	N/A	Back	10mm	0.368	0.284	0.114	0.094	0	0	0	0.346	0.2	0.312	0.164	0.095	0	0	0.078	0.324	0.166	0.126	0	0	0	0.148	0.162	0.072	0.074	0	0	0	0.31			
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	13	35	57	79	101	123	1	13	35	57	79	101	123	1	13	35	57	79	101	123	1	13	35	57	79	101	123	1			
	CDMA2000 1X10_LAT	RTTAP 153.60bps	Full Power	684	823.1	N/A	N/A	Back	10mm	0.436	0.297	0.132	0.147	0	0	0	0.36	0.223	0.384	0.303	0.098	0.047	0.051	0.265	0.222	0.383	0.305	0.047	0	0.045	0.165	0.201	0.089	0.113	0	0	0	0.423			
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	14	36	58	80	102	124	2	14	36	58	80	102	124	2	14	36	58	80	102	124	2	14	36	58	80	102	124	2			
	WCDMA_V_LAT	RNC 12.25bps	Full Power	4122	826.4	N/A	N/A	Back	10mm	0.464	0.321	0.044	0.166	0	0	0	0.432	0.298	0.165	0.373	0.090	0.072	0.065	0.136	0.362	0.073	0.272	0.059	0.046	0.045	0.264	0.215	0	0.123	0	0	0	0.363			
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	15	37	59	81	103	125	3	15	37	59	81	103	125	3	15	37	59	81	103	125	3	15	37	59	81	103	125	3			
	LTE Band 71_LAT	20M-QPSK	Full Power	133322	883	1	0	Back	10mm	0.403	0.134	0	0.07	0	0	0	0.392	0.339	0.074	0.269	0	0	0	0.261	0.216	0	0.126	0	0	0.268	0.11	0	0.056	0	0	0	0.265				
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	16	38	60	82	104	126	4	16	38	60	82	104	126	4	16	38	60	82	104	126	4	16	38	60	82	104	126	4			
	LTE Band 12_LAT	10M-QPSK	Full Power	23085	797.5	1	49	Back	10mm	0.473	0.374	0.215	0.412	0	0	0	0.234	0.101	0.116	0.075	0	0	0	0.064	0.185	0.331	0.117	0	0	0	0.089	0.398	0.087	0.34	0	0.112	0	0.168			
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	17	39	61	83	105	127	5	17	39	61	83	105	127	5	17	39	61	83	105	127	5	17	39	61	83	105	127	5			
	LTE Band 13_LAT	10M-QPSK	Full Power	23230	792	1	25	Back	10mm	0.427	0.241	0.125	0.189	0	0	0	0.358	0.261	0.338	0.227	0	0	0	0.125	0.36	0.252	0.389	0	0.101	0	0.219	0.161	0.06	0.11	0	0	0	0.37			
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	18	40	62	84	106	128	6	18	40	62	84	106	128	6	18	40	62	84	106	128	6	18	40	62	84	106	128				

Aperture 04							Aperture 05							Aperture 06							Aperture 07							Aperture 08							Aperture 09													
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)							Average Value of Time Sweep (W/kg)							Average Value of Time Sweep (W/kg)													
0	22	44	66	88	110	132	0	22	44	66	88	110	132	0	22	44	66	88	110	132	0	22	44	66	88	110	132	0	22	44	66	88	110	132	0	22	44	66	88	110	132							
0.002	0	0	0	0	0	0	0	0.044	0.091	0.068	0	0	0	0	0.104	0.058	0.037	0	0	0	0	0.1	0.058	0.037	0	0	0	0.064	0.058	0	0	0	0	0.068	0.044	0	0	0	0	0	0							
1	23	45	67	89	111	133	1	23	45	67	89	111	133	1	23	45	67	89	111	133	1	23	45	67	89	111	133	1	23	45	67	89	111	133	1	23	45	67	89	111	133							
0.074	0	0	0	0	0	0	0	0.087	0.121	0.098	0	0	0	0.05	0.123	0	0.114	0	0	0	0.05	0.123	0	0.115	0	0	0	0.081	0.092	0	0.053	0	0	0	0.086	0.077	0	0	0	0	0	0						
2	24	46	68	90	112	134	2	24	46	9	22	44	66	2	24	46	68	90	112	134	2	24	46	68	90	112	134	2	24	46	68	90	112	134	2	24	46	68	90	112	134							
0.079	0	0	0	0	0	0	0	0.085	0.134	0.087	0	0	0	0	0.123	0	0.133	0	0	0	0.05	0.126	0	0.132	0	0	0	0.08	0.096	0	0	0	0	0.085	0.078	0	0	0	0	0	0	0						
3	25	47	69	91	113	135	3	25	47	69	91	113	135	3	25	47	69	91	113	135	3	25	47	69	91	113	135	3	25	47	69	91	113	135	3	25	47	69	91	113	135							
0.047	0	0	0	0	0	0	0.046	0.101	0.136	0.12	0	0	0	0.097	0.138	0.089	0.094	0	0	0	0.097	0.136	0.089	0.095	0	0	0	0.125	0.073	0	0	0	0	0.113	0.058	0	0	0	0	0	0	0						
4	26	48	70	92	114	136	4	26	48	70	92	114	136	4	26	48	70	92	114	136	4	26	48	70	92	114	136	4	26	48	70	92	114	136	4	26	48	70	92	114	136							
0.002	0	0.039	0.042	0	0	0	0	0	0	0	0	0	0	0.046	0	0.067	0	0	0	0	0.039	0	0.076	0	0	0	0	0.064	0	0.076	0	0	0	0	0	0.073	0	0	0	0	0	0	0					
5	27	49	71	93	115	137	5	27	49	71	93	115	137	5	27	49	71	93	115	137	5	27	49	71	93	115	137	5	27	49	71	93	115	137	5	27	49	71	93	115	137							
0.044	0	0.048	0.049	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.081	0	0	0	0	0	0	0.086	0	0	0	0	0	0	0				
6	28	50	72	94	116	138	6	28	50	72	94	116	138	6	28	50	72	94	116	138	6	28	50	72	94	116	138	6	28	50	72	94	116	138	6	28	50	72	94	116	138							
0.062	0.063	0	0	0	0	0	0	0	0	0	0	0	0	0.055	0	0.105	0	0	0	0	0.054	0	0.108	0	0	0	0	0.084	0.046	0.062	0	0	0	0	0.087	0.052	0.076	0	0	0	0	0	0	0				
7	29	51	73	95	117	139	7	29	51	73	95	117	139	7	29	51	73	95	117	139	7	29	51	73	95	117	139	7	29	51	73	95	117	139	7	29	51	73	95	117	139							
0	0	0	0	0	0	0	0	0.083	0	0.112	0	0	0	0	0.12	0.098	0.111	0	0	0	0.118	0.087	0.112	0	0	0	0	0.114	0.123	0	0	0	0	0.095	0.105	0	0	0	0	0	0	0	0					
8	30	52	74	96	118	140	8	30	52	74	96	118	140	8	30	52	74	96	118	140	8	30	52	74	96	118	140	8	30	52	74	96	118	140	8	30	52	74	96	118	140							
0	0	0	0	0	0	0	0	0.089	0.052	0.12	0	0	0	0	0.142	0.122	0.116	0	0	0	0.145	0.121	0.118	0	0	0	0	0.087	0.117	0.044	0	0	0	0	0.07	0.087	0	0	0	0	0	0	0					
9	31	53	75	97	119	141	9	31	53	75	97	119	141	9	31	53	75	97	119	141	9	31	53	75	97	119	141	9	31	53	75	97	119	141	9	31	53	75	97	119	141							
0	0	0.085	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
10	32	54	76	98	120	142	10	32	54	76	98	120	142	10	32	54	76	98	120	142	10	32	54	76	98	120	142	10	32	54	76	98	120	142	10	32	54	76	98	120	142							
0	0	0	0	0	0	0	0	0.058	0.050	0	0	0	0	0	0.066	0.050	0	0	0	0	0.054	0.054	0	0	0	0	0	0.073	0.048	0	0	0	0	0.07	0	0	0	0	0	0	0	0	0					
11	33	55	77	99	121	143	11	33	55	77	99	121	143	11	33	55	77	99	121	143	11	33	55	77	99	121	143	11	33	55	77	99	121	143	11	33	55	77	99	121	143							
0.042	0	0.046	0	0	0	0	0.087	0	0.056	0	0	0	0	0.083	0	0.051	0	0	0	0	0.083	0	0.051	0	0	0	0	0.047	0	0.042	0	0	0	0.043	0	0.043	0	0	0	0	0.043	0	0	0	0			
12	34	56	78	100	122	0	12	34	56	78	100	122	0	12	34	56	78	100	122	0	12	34	56	78	100	122	0	12	34	56	78	100	122	0	12	34	56	78	100	122	0	12	34	56	78	100	122	0
0.173	0.057	0.075	0	0	0	0.374	0.125	0.264	0.224	0	0	0	0	0.052	0.265	0.187	0.14	0	0	0	0.112	0.27	0.187	0.14	0	0	0	0.11	0.31	0.108	0.104	0	0	0	0.235	0.285	0.084	0.096	0	0	0	0.375						
13	35	57	79	101	123	1	13	35	57	79	101	123	1	13	35	57	79	101	123	1	13	35	57	79	101	123	1	13	35	57	79	101	123	1	13	35	57	79	101	123	1	13	35	57	79	101	123	1
0.241	0.085	0.11	0	0	0	0.416	0.133	0.245	0.220	0	0	0	0	0.085	0.274	0.168	0.247	0.071	0.054	0.068	0.13	0.278	0.217	0.248	0.071	0.085	0.069	0.132	0.38	0.172	0.163	0	0	0	0.23	0.268	0.151	0.156	0	0	0	0.29						
14	36	58	80	102	124	2	14	36	58	80	102	124	2	14	36	58	80	102	124	2	14	36	58	80	102	124	2	14	36	58	80	102	124	2	14	36	58	80	102	124	2	14	36	58	80	102	124	2
0.205	0	0.119	0	0	0	0.401	0.177	0.298	0.295	0	0	0	0	0.088	0.372	0.097	0.313	0.09	0.078	0.075	0.189	0.371	0.087	0.313	0.082	0.083	0.082	0.187	0.362	0.053	0.252	0	0	0	0.346	0.328	0.049	0.183	0	0	0	0.391						
15	37	59	81	103	125	3	15	37	59	81	103	125	3	15	37	59	81	103	125	3	15	37	59	81	103	125	3	15	37	59	81	103	125	3	15	37	59	81	103	125	3	15	37	59	81	103	125	3
0.108	0	0.055	0	0	0	0.285	0.316	0	0.339	0	0	0	0	0.14	0.271	0	0.182	0	0	0	0.231	0.272	0	0.184	0	0	0	0.23	0.175	0	0.088	0	0	0	0.27	0.166	0	0.091	0	0	0	0.272						
16	38	60	82	104	126	4	16	38	60	82	104	126	4	16	38	60	82	104	126	4	16	38																										

Aperture 10							Aperture 11							Aperture 12							Aperture 13							Aperture 14							Aperture 15									
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)							Average Value of Time Sweep (W/kg)							Average Value of Time Sweep (W/kg)									
0	22	44	66	88	110	132	0	22	44	66	88	110	132	0	22	44	66	88	110	132	0	22	44	66	88	110	132	0	22	44	66	88	110	132	0	22	44	66	88	110	132			
0	0	0	0	0	0	0	0	0.082	0.112	0.072	0	0	0	0	0.081	0.111	0.088	0	0	0	0	0.049	0.086	0	0.025	0	0	0	0.083	0	0	0	0	0	0	0.082	0.081	0.071	0	0	0	0		
1	23	45	67	89	111	133	1	23	45	67	89	111	133	1	23	45	67	89	111	133	1	23	45	67	89	111	133	1	23	45	67	89	111	133	1	23	45	67	89	111	133			
0	0	0	0	0	0	0	0	0.083	0.086	0.121	0	0	0	0	0.088	0.08	0.122	0	0	0	0	0.087	0.101	0	0.086	0	0	0	0.086	0	0	0	0	0	0	0.108	0.051	0.122	0	0	0	0		
2	24	46	68	90	112	134	2	24	46	68	90	112	134	2	24	46	68	90	112	134	2	24	46	68	90	112	134	2	24	46	68	90	112	134	2	24	46	68	90	112	134			
0	0	0	0	0	0	0	0	0.081	0.115	0.094	0	0	0	0	0.084	0.096	0.101	0	0	0	0	0.087	0.103	0	0.075	0	0	0	0.088	0	0	0	0	0	0	0.101	0.082	0.123	0	0	0	0		
3	25	47	69	91	113	135	3	25	47	69	91	113	135	3	25	47	69	91	113	135	3	25	47	69	91	113	135	3	25	47	69	91	113	135	3	25	47	69	91	113	135			
0	0	0	0	0	0	0	0	0.087	0.125	0.117	0.153	0	0	0	0.081	0.128	0.111	0.153	0	0	0	0.113	0.085	0	0	0	0	0.071	0	0	0	0	0	0.076	0	0	0	0	0	0	0			
4	26	48	70	92	114	136	4	26	48	70	92	114	136	4	26	48	70	92	114	136	4	26	48	70	92	114	136	4	26	48	70	92	114	136	4	26	48	70	92	114	136			
0	0.043	0	0	0	0	0	0	0.043	0.046	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.059	0.066	0	0	0	0	0	0	0	0	0	0	0	
5	27	49	71	93	115	137	5	27	49	71	93	115	137	5	27	49	71	93	115	137	5	27	49	71	93	115	137	5	27	49	71	93	115	137	5	27	49	71	93	115	137			
0.051	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.053	0	0	0	0	0	0	0.084	0.075	0	0	0	0	0	0	0	0	0	0	0	0
6	28	50	72	94	116	138	6	28	50	72	94	116	138	6	28	50	72	94	116	138	6	28	50	72	94	116	138	6	28	50	72	94	116	138	6	28	50	72	94	116	138			
0	0.05	0	0	0	0	0	0	0	0.052	0	0	0	0	0	0	0.055	0	0	0	0	0	0.068	0	0.108	0	0	0	0	0.082	0.087	0	0	0	0	0	0	0.073	0	0	0	0	0	0	
7	29	51	73	95	117	139	7	29	51	73	95	117	139	7	29	51	73	95	117	139	7	29	51	73	95	117	139	7	29	51	73	95	117	139	7	29	51	73	95	117	139			
0	0	0	0	0	0	0	0	0.077	0.052	0.144	0	0	0	0	0.081	0.056	0.146	0	0	0	0	0.117	0.117	0.052	0	0	0	0	0.054	0.059	0	0	0	0	0.096	0.074	0.138	0	0	0	0	0		
8	30	52	74	96	118	140	8	30	52	74	96	118	140	8	30	52	74	96	118	140	8	30	52	74	96	118	140	8	30	52	74	96	118	140	8	30	52	74	96	118	140			
0	0	0	0	0	0	0	0	0.111	0.072	0.151	0	0	0	0	0.117	0.076	0.154	0	0	0	0	0.102	0.121	0.058	0	0	0	0	0	0.048	0	0	0	0	0.136	0.101	0.145	0	0	0	0	0		
9	31	53	75	97	119	141	9	31	53	75	97	119	141	9	31	53	75	97	119	141	9	31	53	75	97	119	141	9	31	53	75	97	119	141	9	31	53	75	97	119	141			
0	0.044	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10	32	54	76	98	120	142	10	32	54	76	98	120	142	10	32	54	76	98	120	142	10	32	54	76	98	120	142	10	32	54	76	98	120	142	10	32	54	76	98	120	142			
0	0	0	0	0	0	0	0	0.074	0.06	0	0	0	0	0	0.079	0.063	0	0	0	0	0	0.088	0.056	0	0	0	0	0	0.053	0	0	0	0	0	0.044	0.091	0	0	0	0	0	0	0	
11	33	55	77	99	121	143	11	33	55	77	99	121	143	11	33	55	77	99	121	143	11	33	55	77	99	121	143	11	33	55	77	99	121	143	11	33	55	77	99	121	143			
0	0	0	0.04	0	0	0	0	0.088	0	0.049	0	0	0	0	0.088	0	0.051	0	0	0	0	0.048	0	0.047	0	0	0	0	0.04	0	0.041	0	0	0	0	0.05	0	0.049	0	0	0	0	0	
12	34	56	78	100	122	0	12	34	56	78	100	122	0	12	34	56	78	100	122	0	12	34	56	78	100	122	0	12	34	56	78	100	122	0	12	34	56	78	100	122	0			
0.117	0.044	0.082	0	0	0	0	0.084	0.161	0.275	0.2	0.055	0	0	0	0.085	0.173	0.281	0.185	0.096	0	0	0.087	0.286	0.161	0.11	0	0	0	0.183	0.21	0.088	0.081	0	0	0	0.312	0.253	0.264	0.157	0	0	0	0.089	
13	35	57	79	101	123	1	13	35	57	79	101	123	1	13	35	57	79	101	123	1	13	35	57	79	101	123	1	13	35	57	79	101	123	1	13	35	57	79	101	123	1			
0.163	0	0	0	0	0	0	0.098	0.281	0.172	0.189	0	0	0	0	0.25	0.18	0.33	0.294	0	0	0	0.082	0.242	0.198	0.183	0	0	0	0.198	0.287	0.107	0.127	0	0	0	0.483	0.234	0.338	0.272	0.06	0	0	0.102	
14	36	58	80	102	124	2	14	36	58	80	102	124	2	14	36	58	80	102	124	2	14	36	58	80	102	124	2	14	36	58	80	102	124	2	14	36	58	80	102	124	2			
0.143	0	0.091	0	0	0	0	0.219	0.225	0.215	0.339	0.046	0	0	0	0.108	0.242	0.199	0.342	0.001	0.043	0.041	0.114	0.359	0.078	0.219	0	0	0	0.290	0.295	0	0.142	0	0	0	0.396	0.305	0.131	0.335	0.095	0.078	0.075	0.114	
15	37	59	81	103	125	3	15	37	59	81	103	125	3	15	37	59	81	103	125	3	15	37	59	81	103	125	3	15	37	59	81	103	125	3	15	37	59	81	103	125	3			
0.089	0	0.046	0	0	0	0	0.271	0.337	0	0.317	0	0	0	0	0.108	0.34	0.032	0.311	0	0	0	0.162	0.22	0.043	0.135	0	0	0	0.248	0.14	0	0.073	0	0	0	0.274	0.334	0	0.274	0	0	0	0.181	
16	38	60	82	104	126	4	16	38	60	82	104	126	4	16	38	60	82	104	126	4	16	38	60	82	104	126	4	16	38	60	82	104	126	4	16	38	60	82	104	126	4			
0.284	0.093	0.188	0	0	0	0	0.296	0.075	0.07	0.094	0	0	0	0	0.094	0.077	0.072	0.095	0	0	0	0.096	0.164	0.274																				

RF exposure position											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	24	48	72	96	120
	GSM1900_LAT	GPRS(3 Tx slots)	Full Power	661	1880	N/A	N/A	Right Cheek	0mm	0.107	0	0	0.044	0.043	0.044	0
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	1	25	49	73	97	121
	CDMA2000_BC1_LAT	RC3-SC05	Full Power	1175	1908.75	N/A	N/A	Right Cheek	0mm	0.176	0.043	0.1	0.062	0.097	0.107	0.088
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	2	26	50	74	98	122
	WCDMA_I1_LAT	RMC 12.2Kbps	Full Power	9538	1907.6	N/A	N/A	Right Cheek	0mm	0.245	0.065	0.129	0.094	0.13	0.065	0.118
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	3	27	51	75	99	123
	WCDMA_IV_LAT	RMC 12.2Kbps	Full Power	1513	1752.6	N/A	N/A	Left Cheek	0mm	0.381	0.145	0.215	0.239	0.141	0.213	0.193
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	4	28	52	76	100	124
	LTE Band 25_LAT	QPSK	Full Power	26590	1905	1	0	Left Cheek	0mm	0.209	0.133	0.202	0.195	0.199	0.171	0.208
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	5	29	53	77	101	125
	LTE Band 66_LAT	QPSK	Full Power	132072	1770	1	0	Left Cheek	0mm	0.262	0.163	0.144	0.2	0.198	0.204	0.186
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	6	30	54	78	102	126
	LTE Band 7_LAT	QPSK	Full Power	21100	2535	1	99	Right Cheek	0mm	0.314	0.143	0.111	0.118	0.166	0.134	0.144
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	7	31	55	79	103	127
	LTE Band 41_LAT	QPSK	Full Power	40185	2548.5	1	49	Right Cheek	0mm	0.183	0.088	0.076	0.071	0.103	0.082	0.091
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	8	32	56	80	104	128
	N2_Ant3	PV2 BPSK	Full Power	380000	1900	50	28	Left Cheek	0mm	0.180	0.115	0.179	0.129	0.148	0.077	0.178
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	9	33	57	81	105	129
	N25_Ant3	PV2 BPSK	Full Power	381000	1905	50	28	Left Cheek	0mm	0.195	0.191	0.186	0.192	0.117	0.189	0.145
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	10	34	58	82	106	130
	N66_Ant3	PV2 BPSK	Full Power	344000	1720	1	53	Left Cheek	0mm	0.193	0.125	0.112	0.181	0.134	0.19	0.189
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	11	35	59	83	107	131
	N41_Ant3	PV2 BPSK	Full Power	509002	2546.01	1	1	Right Cheek	0mm	0.262	0	0	0	0	0	0
WWAN_Ant 3 Body	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	12	36	60	84	108	132
	GSM1900_LAT	GPRS(3 Tx slots)	Hotspot on	661	1880	N/A	N/A	Bottom Side	10mm	0.394	0.345	0.366	0.362	0.351	0.19	0.379
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	13	37	61	85	109	133
	CDMA2000_BC1_LAT	RTAP 153.8Kbps	Hotspot on	1175	1908.75	N/A	N/A	Bottom Side	10mm	0.642	0.549	0.575	0.613	0.551	0.463	0.621
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	14	38	62	86	110	134
	WCDMA_I1_LAT	RMC 12.2Kbps	Hotspot on	9538	1907.6	N/A	N/A	Bottom Side	10mm	0.447	0.42	0.391	0.441	0.394	0.375	0.43
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	15	39	63	87	111	135
	WCDMA_IV_LAT	RMC 12.2Kbps	Hotspot on	1312	1712.4	N/A	N/A	Bottom Side	10mm	0.496	0.434	0.338	0.362	0.423	0.222	0.303
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	16	40	64	88	112	136
	LTE Band 25_LAT	20M-QPSK	Hotspot on	26590	1905	1	0	Bottom Side	10mm	0.471	0.453	0.278	0.439	0.292	0.423	0.429
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	17	41	65	89	113	137
	LTE Band 66_LAT	20M-QPSK	Hotspot on	132072	1720	1	0	Bottom Side	10mm	0.431	0.414	0.31	0.348	0.382	0.213	0.278
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	18	42	66	90	114	138
	LTE Band 7_LAT	20M-QPSK	Hotspot on	21350	2560	50	24	Back	10mm	0.416	0.365	0.371	0.412	0.345	0.38	0.359
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	19	43	67	91	115	139
	LTE Band 41_LAT	20M-QPSK	Hotspot on	41055	2636.5	50	50	Back	10mm	0.453	0.238	0.31	0.241	0.335	0.247	0.317
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	20	44	68	92	116	140
	N2_Ant3	PV2 BPSK	Hotspot on	380000	1900	50	28	Bottom Side	10mm	0.833	0.363	0.546	0.689	0.646	0.726	0.74
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	21	45	69	93	117	141
	N25_Ant3	PV2 BPSK	Hotspot on	381000	1905	1	53	Bottom Side	10mm	0.788	0.532	0.583	0.398	0.636	0.445	0.608
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	22	46	70	94	118	142
	N66_Ant3	PV2 BPSK	Hotspot on	344000	1720	50	28	Bottom Side	10mm	0.701	0.35	0.615	0.193	0.559	0.475	0.429
	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	23	47	71	95	119	143
	N41_Ant3	PV2 BPSK	Hotspot on	518598	2592.99	135	69	Back	10mm	0.465	0.244	0.2	0.153	0.199	0.243	0.18

RF exposure position											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	21	42	63	84	105	126
	LTE Band 30_LAT	QPSK	Full Power	27710	2310	1	0	Left Cheek	0mm	0.175	0.071	0.147	0.166	0.052	0.147	0.14	0.076
											1	22	43	64	85	106	127
											0.107	0.159	0.162	0.083	0.156	0.137	0.112
											2	23	44	65	86	107	128
											0.134	0.17	0.166	0.108	0.165	0.13	0.138
											3	24	45	66	87	108	129
											0.154	0.168	0.074	0.122	0.166	0.095	0.147
											4	25	46	67	88	109	130
											0.162	0.166	0.112	0.129	0.162	0.132	0.15
											5	26	47	68	89	110	131
											0.171	0.158	0.139	0.133	0.155	0.154	0.148
											6	27	48	69	90	111	132
											0.168	0.042	0.153	0.132	0.076	0.166	0.145
											7	28	49	70	91	112	133
											0.169	0.071	0.16	0.129	0.095	0.168	0.142
											8	29	50	71	92	113	134
											0.164	0.1	0.162	0.123	0.124	0.167	0.133
											9	30	51	72	93	114	135
											0.067	0.122	0.159	0.073	0.144	0.163	0.055
											10	31	52	73	94	115	136
											0.107	0.134	0.156	0.114	0.153	0.162	0.086
											11	32	53	74	95	116	137
											0.14	0.152	0.148	0.141	0.161	0.157	0.109
											12	33	54	75	96	117	138
											0.162	0.153	0.074	0.159	0.16	0.077	0.121
											13	34	55	76	97	118	139
											0.165	0.152	0.111	0.166	0.156	0.116	0.124
											14	35	56	77	98	119	140
											0.171	0.145	0.138	0.171	0.147	0.139	0.125
											15	36	57	78	99	120	141
											0.169	0.095	0.152	0.168	0.042	0.152	0.122
											16	37	58	79	100	121	142
											0.172	0.093	0.155	0.173	0.069	0.156	0.117
											17	38	59	80	101	122	143
											0.149	0.158	0.156	0.167	0.096	0.155	0.111
											18	39	60	81	102	123	
											0.059	0.172	0.153	0.06	0.114	0.151	
											19	40	61	82	103	124	
											0.065	0.161	0.151	0.096	0.125	0.146	
											20	41	62	83	104	125	
											0.126	0.168	0.142	0.127	0.138	0.135	

WWAN_Ant 3 Body	Band	Mode	Power Reduction	Channel	Frequency (MHz)	RB Size	RB Offset	Test Position	Spacing	Measured 1g SAR (W/kg)	0	21	42	63	84	105	126
	LTE Band 30_LAT	QPSK	Hotspot on	27710	2310	25	12	Back	10mm	0.20	0.041	0.204	0.273	0.011	0.214	0.219	0.057
											1	22	43	64	85	106	127
											0.128	0.226	0.261	0.093	0.207	0.217	0.154
											2	23	44	65	86	107	128
											0.131	0.258	0.24	0.151	0.26	0.196	0.21
											3	24	45	66	87	108	129
											0.138	0.259	0.036	0.184	0.262	0.077	0.239
											4	25	46	67	88	109	130
											0.262	0.251	0.128	0.197	0.251	0.168	0.242
											5	26	47	68	89	110	131
											0.276	0.241	0.19	0.204	0.244	0.224	0.235
											6	27	48	69	90	111	132
											0.271	0.025	0.227	0.201	0.021	0.252	0.225
											7	28	49	70	91	112	133
											0.28	0.054	0.24	0.186	0.109	0.265	0.217
											8	29	50	71	92	113	134
											0.273	0.118	0.245	0.163	0.168	0.278	0.192
											9	30	51	72	93	114	135
											0.036	0.173	0.243	0.048	0.208	0.265	0.014
											10	31	52	73	94	115	136
											0.13	0.191	0.233	0.037	0.234	0.264	0.1
											11	32	53	74	95	116	137
											0.142	0.224	0.214	0.183	0.261	0.247	0.161
											12	33	54	75	96	117	138
											0.208	0.222	0.04	0.23	0.235	0.057	0.191
											13	34	55	76	97	118	139
											0.226	0.21	0.132	0.244	0.252	0.146	0.204
											14	35	56	77	98	119	140
											0.258	0.199	0.195	0.267	0.233	0.208	0.168
											15	36	57	78	99	120	141
											0.261	0.063	0.231	0.279	0.023	0.239	0.186
											16	37	58	79	100	121	142
											0.257	0.15	0.237	0.268	0.065	0.244	0.174
											17	38	59	80	101	122	143
											0.241	0.216	0.242	0.267	0.126	0.245	0.148
											18	39	60	81	102	123	
											0.011	0.239	0.237	0.019	0.17	0.236	
											19	40	61	82	103	124	
											0.089	0.254	0.223	0.128	0.2	0.225	
											20	41	62	83	104	125	
											0.161	0.272	0.214	0.166	0.215	0.208	