Calibration Laboratory of

Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland





S Schweizerischer Kalibrierdienst
Service suisse d'étalonnage
Servizio svizzero di taratura
Swiss Calibration Service

Accreditation No.: SCS 0108

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

Glossary:

TSL tissue simulating liquid

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

Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- b) IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Additional Documentation:

e) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL: The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss: These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay: One-way delay between the SMA connector and the antenna feed point.
 No uncertainty required.
- SAR measured: SAR measured at the stated antenna input power.
- SAR normalized: SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

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

Measurement Conditions

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

DASY Version	DASY5 V52.10.4	
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm with Spacer	
Zoom Scan Resolution	dx, dy , $dz = 5 mm$	
Frequency	2600 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

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

SAR result with Head TSL

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

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

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL

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

General Antenna Parameters and Design

Electrical Delay (one direction)	1.149 ns

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

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

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

Additional EUT Data

Manufactured by	SPEAG

Certificate No: D2600V2-1061_Nov20 Page 4 of 6

DASY5 Validation Report for Head TSL

Date: 26.11.2020

Test Laboratory: SPEAG, Zurich, Switzerland

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

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

Medium parameters used: f = 2600 MHz; $\sigma = 2.03 \text{ S/m}$; $\varepsilon_r = 37.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

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

DASY52 Configuration:

• Probe: EX3DV4 - SN7405; ConvF(7.54, 7.54, 7.54) @ 2600 MHz; Calibrated: 29.06.2020

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

• Electronics: DAE4 Sn601; Calibrated: 02.11.2020

Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001

DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

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

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 119.2 V/m; Power Drift = -0.04 dB

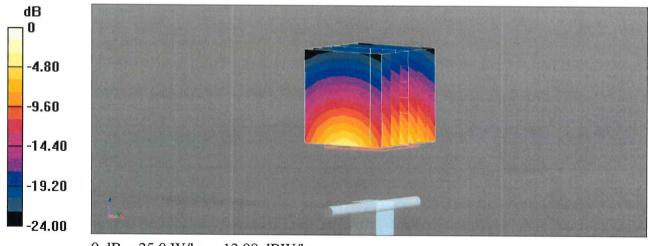
Peak SAR (extrapolated) = 30.9 W/kg

SAR(1 g) = 14.5 W/kg; SAR(10 g) = 6.37 W/kg

Smallest distance from peaks to all points 3 dB below = 8.9 mm

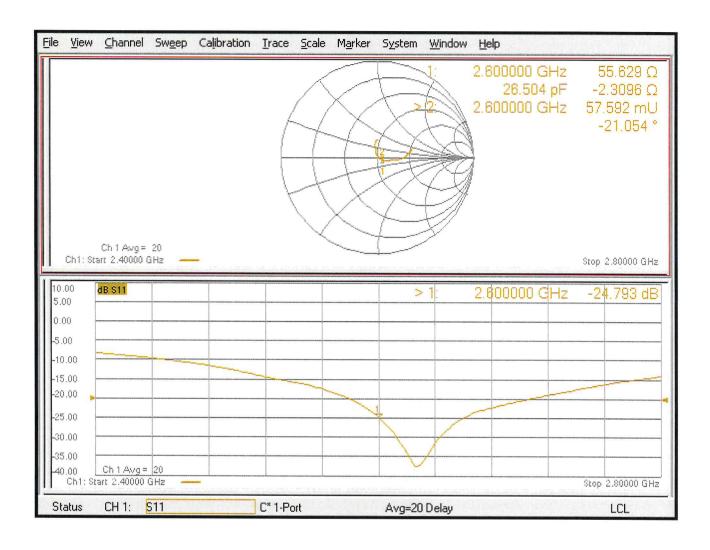
Ratio of SAR at M2 to SAR at M1 = 47%

Maximum value of SAR (measured) = 25.0 W/kg



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

Impedance Measurement Plot for Head TSL



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Client

Sporton

Accreditation No.: SCS 0108

S

Certificate No: DAE4-1303 Jul20

CALIBRATION CERTIFICATE

Object DAE4 - SD 000 D04 BO - SN: 1303

Calibration procedure(s) QA CAL-06.v30

Calibration procedure for the data acquisition electronics (DAE)

Calibration date:

July 07, 2020

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

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

Calibration Equipment used (M&TE critical for calibration)

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

Calibrated by:

Name

Function

Signature

Cambrated by

Approved by:

Eric Hainfeld

Sven Kühn

Laboratory Technician

Deputy Manager

Issued: July 7, 2020

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Certificate No: DAE4-1303_Jul20

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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.

Certificate No: DAE4-1303_Jul20 Page 2 of 5

DC Voltage Measurement

A/D - Converter Resolution nominal

High Range:

1LSB =

6.1µV,

full range = -100...+300 mV

Low Range: 1LSB = 61nV,

full range = -1.....+3mV

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

Calibration Factors	x	Y	Z
High Range	405.621 ± 0.02% (k=2)	405.288 ± 0.02% (k=2)	405.521 ± 0.02% (k=2)
Low Range		4.00177 ± 1.50% (k=2)	

Connector Angle

Connector Angle to be used in DASY system	36.0 ° ± 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	200028.13	-4.41	-0.00
Channel X + Input	20005.33	0.15	0.00
Channel X - Input	-20003,94	1.66	-0.01
Channel Y + Input	200034.95	3.01	0.00
Channel Y + Input	20004.62	-0.42	-0.00
Channel Y - Input	-20006.63	-0.88	0.00
Channel Z + Input	200029.72	-2.88	-0.00
Channel Z + Input	20001.10	-3.93	-0.02
Channel Z - Input	-20007.10	-1.35	0.01

Low Range	Reading (μV)	Difference (μV)	Error (%)
Channel X + Input	2000.83	-0.06	-0.00
Channel X + Input	201.48	0.52	0.26
Channel X - Input	-198.72	0.43	-0.22
Channel Y + Input	2000.87	0.12	0.01
Channel Y + Input	199.93	-0.88	-0.44
Channel Y - Input	-199.89	-0.62	0.31
Channel Z + Input	2000.93	0.20	0.01
Channel Z + Input	200.16	-0.59	-0.30
Channel Z - Input	-199.91	-0.57	0.28

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	-2.91	-4.53
	- 200	5.99	4.24
Channel Y	200	1.24	1.13
	- 200	-2.94	-3.20
Channel Z	200	-1.62	-1.40
	- 200	-0.52	-0.26

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	8	0.82	-4.08
Channel Y	200	7.63		2.53
Channel Z	200	10.14	5.17	<u>:</u>

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	16198	15926	
Channel Y	15904	15641	
Channel Z	16229	15177	

5. Input Offset Measurement

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

Input 10MO

	Average (μV)	min. Offset (μV)	max. Offset (μV)	Std. Deviation (µV)
Channel X	0.70	-0.97	2.67	0.58
Channel Y	-0.62	-1.86	0.89	0.42
Channel Z	-0.13	-1.67	0.85	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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Client

Sporton

Certificate No: ES3-3293_Sep20

CALIBRATION CERTIFICATE

Object

ES3DV3 - SN:3293

Calibration procedure(s)

QA CAL-01.v9, QA CAL-23.v5, QA CAL-25.v7 Calibration procedure for dosimetric E-field probes

Calibration date:

September 23, 2020

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

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP	SN: 104778	01-Apr-20 (No. 217-03100/03101)	Apr-21
Power sensor NRP-Z91	SN: 103244	01-Apr-20 (No. 217-03100)	Apr-21
Power sensor NRP-Z91	SN: 103245	01-Apr-20 (No. 217-03101)	Apr-21
Reference 20 dB Attenuator	SN: CC2552 (20x)	31-Mar-20 (No. 217-03106)	Apr-21
DAE4	SN: 660	27-Dec-19 (No. DAE4-660_Dec19)	Dec-20
Reference Probe ES3DV2	SN: 3013	31-Dec-19 (No. ES3-3013_Dec19)	Dec-20
Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-20)	In house check: Jun-22
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-20)	In house check: Jun-22
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-20)	In house check: Jun-22
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-20)	In house check: Jun-22
Network Analyzer E8358A	SN: US41080477	31-Mar-14 (in house check Oct-19)	In house check: Oct-20

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

Issued: September 29, 2020

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Glossary:

TSL NORMx,y,z tissue simulating liquid sensitivity in free space

ConvF DCP

sensitivity in TSL / NORMx,y,z diode compression point

CF A, B, C, D crest factor (1/duty_cycle) of the RF signal modulation dependent linearization parameters

Polarization φ

o rotation around probe axis

Polarization 9

9 rotation around an axis that is in the plane normal to probe axis (at measurement center),

i.e., 9 = 0 is normal to probe axis

Connector Angle

information used in DASY system to align probe sensor X to the robot coordinate system

Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- iEC 62209-1, ", "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from handheld 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
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

- NORMx,y,z: Assessed for E-field polarization 9 = 0 (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not affect the E²-field uncertainty inside TSL (see below ConvF).
- NORM(f)x,y,z = NORMx,y,z * frequency_response (see Frequency Response Chart). This linearization is
 implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included
 in the stated uncertainty of ConvF.
- DCPx,y,z: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- Ax,y,z; Bx,y,z; Cx,y,z; Dx,y,z; VRx,y,z: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for f ≤ 800 MHz) and inside waveguide using analytical field distributions based on power measurements for f > 800 MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx,y,z * ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMx (no uncertainty required).

Certificate No: ES3-3293_Sep20 Page 2 of 9

ES3DV3 - SN:3293

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3293

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm (µV/(V/m) ²) ^A	1.10	0.90	0.73	± 10.1 %
DCP (mV) ⁸	102.3	109.5	106.9	

Calibration Results for Modulation Response

UID	Communication System Name		A dB	B dB√μV	С	D dB	VR mV	Max dev.	Unc ^E (k=2)
0	CW	X	0.0	0.0	1.0	0.00	199.2	± 3.5 %	±4.7 %
		Y	0.0	0.0	1.0		179.4		
		Z	0.0	0.0	1.0		183.6		

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%.

^B Numerical linearization parameter: uncertainty not required.

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

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: ES3DV3 - SN:3293

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	-5.0
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	10 mm
Tip Diameter	4 mm
Probe Tip to Sensor X Calibration Point	2 mm
Probe Tip to Sensor Y Calibration Point	2 mm
Probe Tip to Sensor Z Calibration Point	2 mm
Recommended Measurement Distance from Surface	3 mm

Note: Measurement distance from surface can be increased to 3-4 mm for an Area Scan job.

DASY/EASY - Parameters of Probe: ES3DV3 - SN:3293

Calibration Parameter Determined in Head Tissue Simulating Media

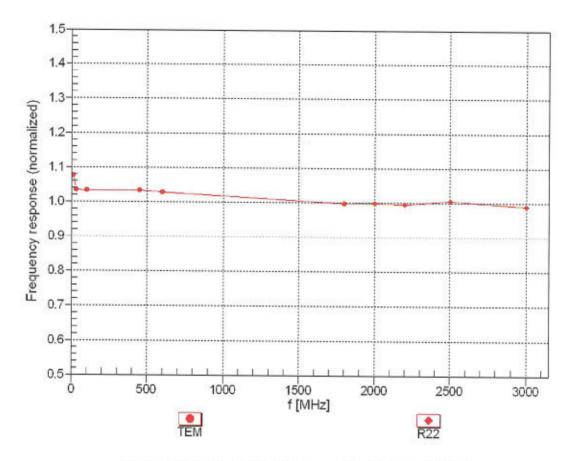
f (MHz) ^C	Relative Permittivity F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unc (k=2)
750	41.9	0.89	6.51	6.51	6.51	0.80	1.18	± 12.0 %
835	41.5	0.90	6.43	6.43	6.43	0.78	1.16	± 12.0 %
900	41.5	0.97	6.24	6.24	6.24	0.80	1.18	± 12.0 %
1750	40.1	1.37	5.37	5.37	5.37	0.63	1.28	± 12.0 %
1900	40.0	1.40	5.14	5.14	5.14	0.50	1.44	± 12.0 %
2000	40.0	1.40	5.11	5.11	5.11	0.72	1.25	± 12.0 %
2300	39.5	1.67	4.81	4.81	4.81	0.65	1.34	± 12.0 %
2450	39.2	1.80	4.51	4.51	4.51	0.57	1.50	± 12.0 %
2600	39.0	1.96	4.38	4.38	4.38	0.80	1.23	± 12.0 %

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.

At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to \pm 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ϵ and σ) is restricted to \pm 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

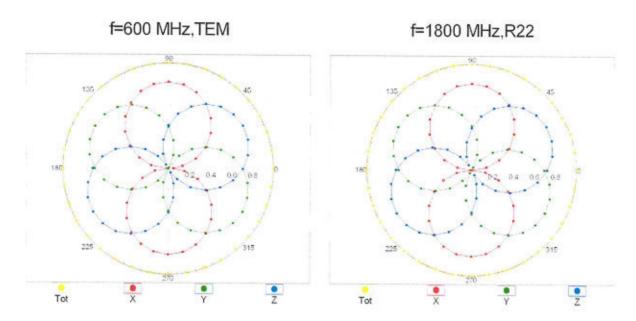
⁶ Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the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

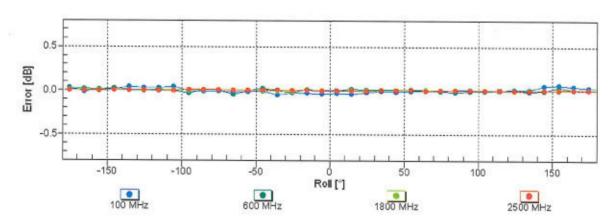
Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)



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

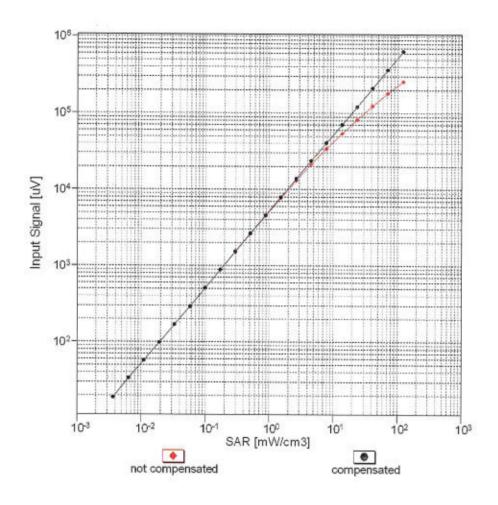
Receiving Pattern (ϕ), $\vartheta = 0^{\circ}$

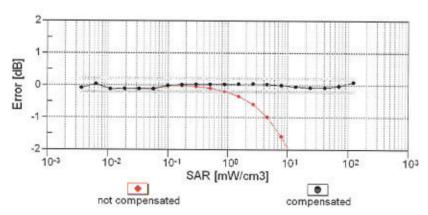




Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

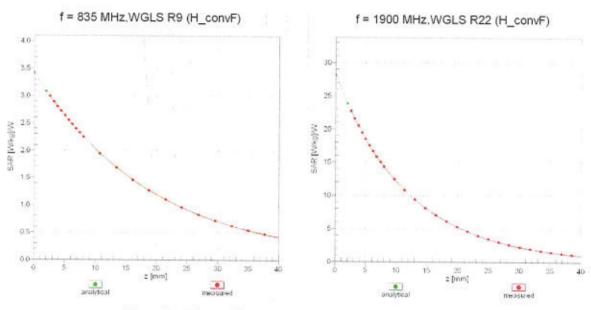
Dynamic Range f(SAR_{head}) (TEM cell , f_{eval}= 1900 MHz)



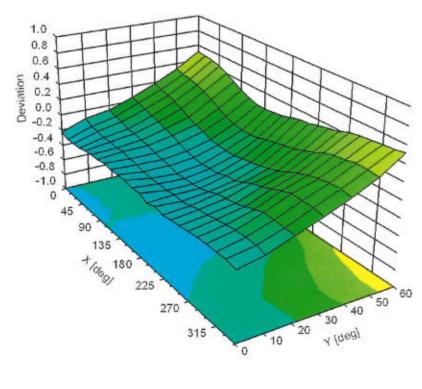


Uncertainty of Linearity Assessment: ± 0.6% (k=2)

Conversion Factor Assessment



Deviation from Isotropy in Liquid Error (φ, θ), f = 900 MHz



Appendix E. Conducted RF Output Power Table

Report No. : FA0N1201

The detailed power table are shown as follows.

Sporton International (Kunshan) Inc.



GSM850	Burst	Burst Average Power (dBm)			Frame	Average Pow	Tune-up	
TX Channel	128	189	251	Limit	128	189	251	Limit
Frequency (MHz)	824.2	836.4	848.8	(dBm)	824.2	836.4	848.8	(dBm)
GSM 1 Tx slot	32.83	32.82	32.76	33.50	23.83	23.82	23.76	24.50
GPRS 1 Tx slot	32.81	32.85	32.77	33.50	23.81	23.85	23.77	24.50
GPRS 2 Tx slots	32.02	32.05	31.97	32.50	26.02	26.05	25.97	26.50
GPRS 3 Tx slots	30.27	30.32	30.21	31.00	26.01	26.06	25.95	26.74
GPRS 4 Tx slots	29.35	29.36	29.26	30.00	26.35	26.36	26.26	27.00
EDGE 1 Tx slot	26.91	27.04	26.93	27.50	17.91	18.04	17.93	18.50
EDGE 2 Tx slots	25.51	25.68	25.49	26.50	19.51	19.68	19.49	20.50
EDGE 3 Tx slots	23.11	23.25	23.13	24.00	18.85	18.99	18.87	19.74
EDGE 4 Tx slots	22.05	22.09	22.01	22.50	19.05	19.09	19.01	19.50

	R	eceiver On /	Receiver Of	f / Extremity				
GSM1900	Burst	Average Powe	r (dBm)	Tune-up	Frame-Average Power (dBm)			Tune-up
TX Channel	512	661	810	Limit	512	661	810	Limit
Frequency (MHz)	1850.2	1880	1909.8	(dBm)	1850.2	1880	1909.8	(dBm)
GSM 1 Tx slot	30.07	30.09	30.09	30.50	21.07	21.09	21.09	21.50
GPRS 1 Tx slot	30.06	30.04	30.08	30.50	21.06	21.04	21.08	21.50
GPRS 2 Tx slots	29.26	29.23	29.32	29.50	23.26	23.23	23.32	23.50
GPRS 3 Tx slots	27.45	27.45	27.54	28.50	23.19	23.19	23.28	24.24
GPRS 4 Tx slots	26.29	26.43	26.42	27.50	23.29	23.43	23.42	24.50
EDGE 1 Tx slot	26.39	26.26	26.01	27.00	17.39	17.26	17.01	18.00
EDGE 2 Tx slots	25.44	25.28	25.04	26.00	19.44	19.28	19.04	20.00
EDGE 3 Tx slots	23.42	23.26	23.03	24.00	19.16	19.00	18.77	19.74
EDOE AT LIVE	00.07	00.00	04.05	00.00	40.07	40.00	40.05	00.00

		WCDMA V				WCDMA IV				WCDMA II		Band	
Tune-u Limit	4233	4182	4132	Tune-up Limit	1513	1413	1312	Tune-up Limit	9538	9400	9262	TX Channel	
(dBm)	4458	4407	4357	(dBm)	1738	1638	1537	(dBm)	9938	9800	9662	Rx Channel	
	846.6	836.4	826.4		1752.6	1732.6	1712.4		1907.6	1880	1852.4	equency (MHz)	Fre
24.50	23.25	23.26	23.27	24.50	23.36	23.40	23.33	24.50	23.77	23.80	23.83	AMR 12.2Kbps	IGPP Rel 99
24.50	23.27	23.30	23.29	24.50	23.41	23.42	23.35	24.50	23.78	23.85	23.84	RMC 12.2Kbps	IGPP Rel 99
23.50	22.37	22.36	22.46	23.50	22.77	22.73	22.79	23.50	22.58	22.72	22.72	HSDPA Subtest-1	3GPP Rel 6
23.50	22.24	22.30	22.43	23.50	22.65	22.61	22.87	23.50	22.45	22.58	22.71	HSDPA Subtest-2	3GPP Rel 6
23.00	21.77	21.82	21.91	23.00	22.15	22.14	22.21	23.00	21.95	22.07	22.22	HSDPA Subtest-3	3GPP Rel 6
23.00	21.72	21.77	21.89	23.00	22.18	22.11	22.14	23.00	21.97	22.07	22.13	HSDPA Subtest-4	3GPP Rel 6
23.50	22.35	22.33	22.41	23.50	22.72	22.71	22.76	23.50	22.53	22.70	22.69	DC-HSDPA Subtest-1	3GPP Rel 8
23.50	22.22	22.27	22.38	23.50	22.60	22.59	22.84	23.50	22.40	22.56	22.68	DC-HSDPA Subtest-2	3GPP Rel 8
23.00	21.75	21.79	21.86	23.00	22.10	22.12	22.18	23.00	21.90	22.05	22.19	DC-HSDPA Subtest-3	3GPP Rel 8
23.00	21.70	21.74	21.84	23.00	22.13	22.09	22.11	23.00	21.92	22.05	22.10	DC-HSDPA Subtest-4	3GPP Rel 8
23.50	22.40	22.43	22.44	23.50	22.49	22.46	22.65	23.50	22.53	22.68	22.71	HSUPA Subtest-1	3GPP Rel 6
21.50	20.37	20.38	20.48	21.50	20.47	20.43	20.34	21.50	20.59	20.64	20.67	HSUPA Subtest-2	3GPP Rel 6
22.50	21.44	21.49	21.47	22.50	21.20	21.41	21.33	22.50	21.57	21.63	21.72	HSUPA Subtest-3	3GPP Rel 6
21.50	19.96	19.96	19.99	21.50	20.55	20.43	20.34	21.50	20.08	20.10	20.17	HSUPA Subtest-4	3GPP Rel 6
23.50	22.28	22.37	22.48	23.50	22.20	22.40	22.30	23.50	22.48	22.62	22.58	HSUPA Subtest-5	3GPP Rel 6
21.00	20.15	20.17	20.04	21.00	20.12	20.20	20.21	21.00	20.07	20.10	20.12	HSPA+ (16QAM) Subtest-1	3GPP Rel 7



				(1900MH 4E Recei				
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit	MPR
	Cha Frequen	nnel cy (MHz)		18700 1860	18900 1880 23.40	19100 1900		
20 20	QPSK QPSK	1	0 49	23.03 23.33	23.28	23.21 23.30	24	0
20 20	QPSK QPSK	1 50	99	23.12 22.35	23.22	23.22 22.34		
20 20	QPSK QPSK	50 50	24 50	22.30 22.27	22.27	22.28 22.23	23	1
20 20	QPSK 16QAM	100	0	22.28 22.56	22.30	22.28		
20	16QAM 16QAM	1	49 99	22.57	22.51	22.48	23	1
20	16QAM 16QAM	50	0 24	21.34	21.33	21.31		
20	16QAM	50	50	21.27	21.16	21.20	22	2
20 20	16QAM 64QAM	100	0	21.28 21.40	21.24 21.39	21.25 21.34		
20 20	64QAM 64QAM	1	49 99	21.64 21.26	21.67 21.22	21.65 21.22	22	2
20 20	64QAM 64QAM	50 50	0 24	20.56 20.51	20.55 20.49	20.53 20.49	21	3
20 20	64QAM 64QAM	50 100	50 0	20.49	20.37	20.43 20.48	21	3
	Cha Frequen			18675	18900 1880	19125 1902.5	Tune-up limit	MPR (dB)
15 15	QPSK QPSK	1	0 37	1857.5 23.17 23.36	23.17	23.14	(dBm)	0
15	QPSK	- 1	74	23.09	23.02	23.07		
15 15	QPSK QPSK	36 36	0 20	22.32 22.28	22.29 22.27	22.27 22.27	23	1
15 15	QPSK QPSK	36 75	39 0	22.24 22.28	22.19 22.25	22.27 22.25		
15 15	16QAM 16QAM	1	0 37	22.39 22.60	22.37 22.59	22.36 22.53	23	1
15 15	16QAM 16QAM	1 36	74 0	22.34 21.31	22.28 21.25	22.23 21.23		
15 15	16QAM 16QAM	36 36	20 39	21.27	21.25	21.24	22	2
15 15	16QAM 64QAM	75 1	0	21.27	21.16	21.22		
15	64QAM 64QAM	- 1	37	21.74	21.66	21.71	22	2
15 15	64QAM	36	74 0	21.47	21.42	21.39		
15 15	64QAM 64QAM	36 36	20 39	20.50 20.44	20.46	20.46 20.42	21	3
15	64QAM Cha	75 nnel	0	20.51 18650	20.46 18900	20.44 19150	Tune-up	MPR
10	Frequen	cy (MHz)	0	1855	1880 23,14	1905 23.11	limit (dBm)	(dB)
10 10	QPSK QPSK QPSK	1	25 49	23.13 23.32 23.08	23.14 23.30 23.09	23.11 23.25 23.10	24	0
10	QPSK QPSK QPSK	25	0	23.08 22.18 22.21	23.09 22.20 22.25	23.10 22.23 22.18		
10 10	QPSK	25 25	12 25	22.12	22.21	22.16	23	1
10 10	QPSK 16QAM	50	0	22.34 22.35	22.29 22.57	22.29 22.27		
10 10	16QAM 16QAM	1	25 49	22.39 22.28	22.67 22.27	22.66 22.46	23	1
10 10	16QAM 16QAM	25 25	0 12	21.21 21.22	21.14 21.16	21.31 21.21		
10	16QAM 16QAM	25 50	25 0	21.28	21.24	21.14	22	2
10	64QAM	1	0	21.79	21.72	21.71	22	2
10 10	64QAM 64QAM	1	25 49	21.66 21.53	21.91 21.57	21.81 21.64	22	2
10 10	64QAM 64QAM	25 25	12	20.62	20.51 20.45	20.55 20.53	21	3
10	64QAM 64QAM	25 50	25 0	20.32	20.41	20.54		
	Cha Frequen			18625	18900	19175	Tune-up	MPR
				1852.5	1880		(dBm)	
	QPSK QPSK	1	0 12	23.14	23.10	23.09	(dBm)	(dB) 0
5 5	QPSK QPSK	1 1	12 24	23.14 23.39 23.12	23.10 23.35 23.06	23.09 23.39 23.07		
5 5 5	QPSK QPSK QPSK QPSK	1 1 1 12 12	12 24 0 7	23.14 23.39 23.12 22.26 22.30	23.10 23.35 23.06 22.21 22.26	23.09 23.39 23.07 22.23 22.29		
5 5 5 5 5	QPSK QPSK QPSK QPSK QPSK QPSK	1 1 1 12 12 12 12 25	12 24 0 7 13	23.14 23.39 23.12 22.26 22.30 22.21 22.25	23.10 23.35 23.06 22.21 22.26 22.16 22.20	23.09 23.39 23.07 22.23 22.29 22.20 22.28	24	0
5 5 5 5 5 5 5	QPSK QPSK QPSK QPSK QPSK QPSK 16QAM	1 1 1 12 12 12 12 25 1	12 24 0 7 13 0 0	23.14 23.39 23.12 22.26 22.30 22.21 22.25 22.35 22.70	23.10 23.35 23.06 22.21 22.26 22.16 22.20 22.33 22.57	23.09 23.39 23.07 22.23 22.29 22.20 22.28 22.28 22.53	24	0
5 5 5 5 5 5 5 5	QPSK QPSK QPSK QPSK QPSK QPSK QPSK 16QAM 16QAM 16QAM	1 1 1 12 12 12 12 25 1 1 1	12 24 0 7 13 0 0 12 24	23.14 23.39 23.12 22.26 22.30 22.21 22.25 22.35 22.70 22.38 21.23	23.10 23.35 23.06 22.21 22.26 22.16 22.20 22.33 22.57 22.30 21.19	23.09 23.39 23.07 22.23 22.29 22.20 22.28 22.28 22.53 22.22 21.17	24	1
5 5 5 5 5 5 5 5 5 5	QPSK QPSK QPSK QPSK QPSK QPSK QPSK 18QAM 18QAM 18QAM 18QAM 18QAM	1 1 1 12 12 12 12 25 1 1 1 1 12 12	12 24 0 7 13 0 0 12 24 0 7	23.14 23.39 23.12 22.26 22.30 22.21 22.25 22.35 22.70 22.38 21.23 21.31 21.19	23.10 23.35 23.06 22.21 22.26 22.16 22.20 22.33 22.57 22.30 21.19 21.25 21.14	23.09 23.39 23.07 22.23 22.29 22.20 22.28 22.28 22.28 22.53 22.22 21.17 21.25 21.16	24	1
5 5 5 5 5 5 5 5 5 5 5	OPSK OPSK OPSK OPSK OPSK OPSK OPSK OPSK	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	12 24 0 7 13 0 0 12 24 0 7 13 0	23.14 23.39 23.12 22.26 22.30 22.21 22.25 22.35 22.70 22.38 21.23 21.31 21.19 21.25 21.48	23.10 23.35 23.06 22.21 22.26 22.16 22.20 22.33 22.57 22.30 21.19 21.25 21.14 21.21 21.49	23.09 23.39 23.07 22.23 22.29 22.20 22.28 22.53 22.22 21.17 21.26 21.16 21.20 21.41	24 23 23 22	1 1 2
5 5 5 5 5 5 5 5 5 5 5	QPSK QPSK QPSK QPSK QPSK QPSK 18QAM 18QAM 18QAM 18QAM 18QAM	1 1 1 12 12 12 25 1 1 1 12 12 12 12 12 12 12 12 12 12 12	12 24 0 7 13 0 0 12 24 0 7 7 13 0 0	23.14 23.39 23.12 22.26 22.30 22.21 22.25 22.35 22.70 22.38 21.23 21.31 21.19 21.25	23.10 23.35 23.06 22.21 22.26 22.16 22.20 22.33 22.57 22.30 21.19 21.25 21.14 21.21	23.09 23.39 23.07 22.23 22.29 22.28 22.28 22.53 22.22 21.17 21.25 21.16 21.20	23 23	1
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	QPSK QPSK QPSK QPSK QPSK QPSK 16QAM 16QAM 16QAM 16QAM 16QAM 16QAM 64QAM 64QAM 64QAM	1 1 1 1 12 12 25 1 1 1 1 12 25 1 1 1 1 1	12 24 0 7 13 0 0 12 24 0 7 13 0 0 12 24 0 7	23.14 23.39 23.12 22.26 22.20 22.21 22.25 22.35 22.36 22.70 22.38 21.23 21.19 21.19 21.25 21.48 21.76 21.51 20.43	23.10 23.35 23.05 22.21 22.26 22.16 22.20 22.33 22.57 22.30 21.19 21.25 21.14 21.21 21.49 21.69 21.45 21.45	23.09 23.39 23.07 22.23 22.29 22.20 22.28 22.25 22.53 22.22 21.17 21.25 21.16 21.20 21.41 21.65 21.36 20.38	24 23 23 22 22	1 1 2 2
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	QPSK QPSK QPSK QPSK QPSK QPSK QPSK GPSK GPSK GPSK GPSK GPSK GPSK GPSK G	1 1 1 12 12 12 12 12 1 1 1 1 1 1 1 2 25 25 1 1 1 1	12 24 0 7 13 0 0 12 24 0 7 13 0 0 0 12 24 0 7 13 0 7 13 0 7 7 13 0 0 7 7 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	23.14 23.39 23.12 22.26 22.20 22.21 22.25 22.35 22.70 22.38 21.31 21.19 21.25 21.49 21.76 21.76 21.51 20.43 20.52 20.41	23.10 23.35 23.05 22.21 22.26 22.16 22.20 22.33 22.57 22.30 21.19 21.25 21.14 21.21 21.69 21.69 21.45 20.46 20.35	23.09 23.39 23.07 22.23 22.29 22.20 22.28 22.53 22.22 21.17 21.25 21.16 21.20 21.41 21.65 21.36 20.38 20.38	24 23 23 22	1 1 2
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	QPSK QPSK QPSK QPSK QPSK QPSK 16QAM 16QAM 16QAM 16QAM 16QAM 64QAM 64QAM 64QAM 64QAM 64QAM 64QAM 64QAM	1 1 1 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	12 24 0 7 13 0 0 12 24 0 7 13 0 0 0 12 24 0 7	23.14 23.39 22.28 22.20 22.20 22.21 22.25 22.35 22.70 23.31 21.31 21.31 21.92 21.25 21.48 21.76 21.76 21.51 20.43 20.52 20.44 10.04 10	23.10 23.35 23.35 22.21 22.26 22.12 22.20 22.33 22.57 22.30 21.19 21.25 21.14 21.21 21.49 21.69 21.45 20.42 20.42 20.42 20.42 20.43 18900	23.09 23.39 23.07 22.23 22.29 22.28 22.28 22.25 21.17 21.25 21.16 21.20 21.41 21.65 21.36 20.38 20.46 20.39 20.44	24 23 23 22 22 21 tune-up limit	0 1 1 2 2 2 3 MPR
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	QPSK QPSK QPSK QPSK QPSK QPSK 16QAM 16QAM 16QAM 16QAM 16QAM 64QAM 64QAM 64QAM 64QAM 64QAM 64QAM 64QAM 64QAM	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	12 24 0 7 13 0 0 12 24 0 7 7 13 0 0 0 12 24 0 7	23.14 23.39 23.12 22.26 22.30 22.21 22.25 22.35 22.37 21.31 21.19 21.25 21.48 21.76 21.76 21.51 20.43 20.52 20.43 20.52 20.48 18815 18515 23.14	23.10 23.35 23.06 22.21 22.26 22.10 22.20 22.33 22.57 22.30 21.14 21.21 21.49 21.69 21.45 20.42 20.46 20.46 20.43 18900 1890 1890	23.09 23.39 23.07 22.23 22.29 22.28 22.28 22.28 22.53 22.22 21.17 21.25 21.16 21.20 21.41 21.85 20.38 20.46 20.39 20.44 19185 1908.5	24 23 23 22 22 21 tune-up limit (dBm)	0 1 1 2 2 3 MPR (dB)
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	QPSK QPSK QPSK QPSK QPSK QPSK 16QAM 16QAM 16QAM 16QAM 16QAM 64QAM	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	12 24 0 7 7 13 0 0 12 24 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	23.14 23.39 23.12 22.26 22.30 22.21 22.25 22.36 22.30 21.31 21.19 21.25 21.48 21.76 21.76 21.76 20.43 20.52 20.41 20.48 19815 20.41 20.48 19815 23.14 23.14 23.14 23.14 23.14 23.20	23.10 23.35 23.06 22.21 22.26 22.21 22.20 22.30 22.17 22.20 21.19 21.25 21.14 21.21 21.49 21.69 21.45 20.42 20.43 10900 1880 23.18 23.21 23.13	23.09 23.39 23.07 22.23 22.29 22.28 22.28 22.25 22.25 21.17 21.25 21.16 21.20 21.41 21.65 20.38 20.46 20.39 20.44 19185 20.49 20.44 19185 23.14 23.14 23.14 23.14 23.14 23.15	24 23 23 22 22 21 tune-up limit	0 1 1 2 2 2 3 MPR
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	QPSK	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	12 24 0 7 7 13 0 0 12 24 0 7 13 0 0 0 12 24 0 7 13 0 0 0 7 7	23.14 23.39 23.12 22.26 22.30 22.21 22.25 22.70 22.38 21.23 21.31 21.19 21.25 21.48 21.76 20.43 20.43 20.41 20.48 18615 1851.5 23.14 23.20 22.13	23.10 23.35 23.06 22.21 22.26 22.20 22.30 22.57 22.30 21.19 21.25 21.14 21.21 21.49 21.49 21.45 20.42 20.43 18900 18900 18900 23.18 23.21 23.13 22.20 22.18	23.09 23.307 22.23 22.29 22.20 22.28 22.25 22.25 22.16 21.16 21.20 21.41 21.65 20.38 20.46 20.39 20.44 19185 23.14 23.14 23.14 23.14 23.14 23.14 23.14 23.16 23.12 23.14 23.16	24 23 23 22 22 21 Tune-up limit (dBm) 24	0 1 1 2 2 2 3 MPR (dB) 0
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	OPSK OPSK OPSK OPSK OPSK OPSK OPSK OPSK	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	12 24 0 7 13 0 0 12 24 0 7 13 0 0 0 12 24 0 7 13 0 0 0 0 13 0 0 0 0 0 0 0 0 0 0 0 0 0	23.14 23.39 23.12 22.26 22.27 22.27 22.27 22.27 22.27 21.19 21.25 21.48 21.76 21.76 20.43 20.52 20.41 20.48 19815 1851.5 23.14 23.20 22.13 23.20 22.13 22.21	23.10 23.36 23.36 22.21 22.26 22.16 22.23 22.27 22.37 22.57 21.14 21.21 21.49 21.69 21.45 20.42 20.46 20.45 20.43 1890 1890 23.18 23.21 23.13 22.20 22.18 22.18	23.09 23.307 22.23 22.29 22.20 22.20 22.22 22.117 21.20 21.41 21.85 20.38 20.46 20.39 20.44 19165 1908.5 23.14 23.16 23.12 22.12 22.22 22.22 22.21 21.20 21.20 21.21 21.20 21.20 21.21 21.20 21.21 21.20 21.21 21.20 21.21 21.20 21.21 21.20 21.21 21.20 21.21 21.20 21.21 21.20 21.21 21.20 21.21 21.20 21.21	24 23 23 22 22 21 tune-up limit (dBm)	0 1 1 2 2 3 MPR (dB)
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	OPSK OPSK OPSK OPSK OPSK OPSK OPSK OPSK	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	12 24 0 7 7 13 0 0 0 12 24 0 7 7 13 0 0 0 0 7 7 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	23.14 23.39 23.12 22.28 22.20 22.21 22.25 22.70 22.35 21.31 21.19 21.25 21.48 21.76 21.51 20.43 20.52 20.41 20.48 18015 18515 18515 23.14 23.14 23.14 23.20 22.13 22.21	23.10 23.36 23.21 23.36 22.21 22.26 22.16 22.20 22.33 21.19 21.25 21.14 21.21 21.45 20.46 20.35 20.43 18900 1890 1890 1890 23.18 23.21 23.13 22.20 22.18	23.09 23.39 23.07 22.23 22.29 22.20 22.28 22.53 22.53 22.52 21.17 21.25 21.16 21.20 21.41 21.65 21.36 20.38 20.46 20.39 20.44 19185 1908.5 23.14 23.16 23.16 23.16 23.17 22.17 22.17 22.19	24 23 23 22 22 21 Tune-up limit (dBm) 24	0 1 1 2 2 3 3 MPR (dB) 0 1 1
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	OPSK OPSN OPSN OPSN OPSN OPSN OPSN OPSN OPSN	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	124 0 7 7 13 3 0 0 122 4 0 0 7 7 13 0 0 0 122 4 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 14 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	23.14 23.39 23.12 22.26 22.30 22.31 22.30 22.31 22.31 22.30 22.31 22.32 22.32 22.32 22.32 22.33 21.22 21.31 21.92 21.51 20.43 18935 21.51 20.48 18935 23.14	23.10 23.20 22.21 23.38 22.21 22.18 22.18 22.18 22.30 21.31 22.30 21.31 22.30 21.31 22.30 21.31 22.30 21.41 21.42 21.42 21.43 21.43 21.43 21.44 21.49 21.45 20.42 21.48 20.43 21.21 21.49 21.48 20.42 21.49	23.09 23.39 23.37 22.33 22.29 22.20 22.20 22.20 22.21 21.77 21.16 20.36 20.39 20.44 19185 20.34 20.34 20.34 20.34 20.34 20.34 20.35 20.34 20.35	24 23 23 22 22 21 1 tune up limit (dlim) 24 23	0 1 1 2 2 2 3 MPR (dB) 0
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	OPSIX	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	124 0 7 7 13 3 0 0 122 4 0 0 7 7 13 3 0 0 0 122 4 0 0 7 7 13 3 0 0 0 12 24 0 0 7 7 13 3 0 0 0 12 24 0 0 7 7 13 0 0 0 8 14 0 0 0 8 14 0 0 0 8 14 0 0 0 8 14 0 0 0 8 14 0 0 0 8 14 0 0 0 8 14 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	23.14 22.26 23.39 23.12 22.26 22.30 22.21 22.30 22.23 22.25 22.35 21.22 22.30 22.38 21.22 21.31 21.19 21.51 21.40 20.42 20.43 20.42 20.43	23.10 23.20 22.21 23.38 23.08 22.21 22.21 22.21 22.30 22.18 22.30 21.19 22.30 21.19 22.30 21.19 22.30 21.19 22.30 21.19 22.30 21.19 22.30 23.18 23.20 23.18 23.20 23.18 23.20 23.18 23.20 23.18 23.20 23.18 23.20 23.18 23.20	23.09 22.27 22.28 22.28 22.29 22.20	24 23 23 22 22 21 1 tune up limit (dlim) 24 23	0 1 1 2 2 3 3 MPR (dB) 0 1 1
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	OPSIK	1 1 1 1 1 1 2 25 1 1 1 1 1 2 25 1 1 1 1	124 0 7 7 13 0 0 122 4 0 0 7 7 13 13 0 0 0 12 24 0 0 7 7 13 13 0 0 0 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15	23.14 23.29 24.12 22.20 22.20 22.21	23:10 23:35 23:08 24:08 22:21 22:28 22:21 22:28 22:21 22:28 22:37 22:30 22:31 22:38 22:39 22:30	23.09 22.07 22.29 22.29 22.20	23 23 22 22 21 1une-up-limit (dbm) 24 23	0 1 1 2 2 3 3 MPR (dB) 0 1 1
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	GPSK GPSK GPSK GPSK GPSK GPSK GPSK GPSK	1 1 1 1 1 1 2 2 5 1 1 1 1 1 2 2 5 1 1 1 1	124 0 7 7 13 0 0 0 12 24 10 0 0 0 12 24 10 0 0 0 12 24 10 0 0 0 12 24 10 0 0 12 24 10 0 0 12 24 10 0 0 0 12 24 10 0 0 0 12 24 10 0 0 0 0 12 24 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	23.14 23.39 22.29 22.20	23.10 23.23 23.38 23.08 24.08 22.11 22.28 22.12 22.28 22.13 22.29 22.30	23.09 23.07	23 23 22 22 21 1une-up-limit (dbm) 24 23	0 1 1 2 2 3 3 MPR (dB) 0 1 1
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	GPSK GPSK GPSK GPSK GPSK GPSK GPSK GPSK	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	124 0 7 7 13 0 0 0 12 24 1 0 0 0 0 12 24 1 0 0 0 0 12 2 1 0 0 0 0 12 2 1 0 0 0 0	23.14 23.29 22.49 22.59 22.29 22.29 22.20	22:10 22:35 23:05 23:06 23:07 24:07 25:26	23.09 23.07	23 23 22 22 21 1une-up ind (dlbn) 24 23 23 23	0 1 1 2 2 3 3 MPR (dB) 0 1 1 1 2 2
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	OPSIX	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	124 0 7 7 130 0 0 122 24 0 7 7 130 0 0 122 24 0 7 7 130 0 0 122 24 0 7 7 130 0 0 0 0 142 152 153 154 154 154 154 154 154 154 154 154 154	23.14 22.19 22.19 22.19 22.19 22.19 22.19 22.19 22.19 22.19 22.29 22.29 22.20	22.10 22.35 23.05 23.06 23.07 24.07 25.26 25.27 25.26 25.27 25.26 25.27	22.09 22.29 22.29 22.29 22.20	23 23 22 22 21 1une-up ind (dlbn) 24 23 23 23	0 1 1 2 2 3 3 MPR (dB) 0 1 1 1 2 2
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	OPSIX	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	124 0 7 130 0 0 0 12 24 24 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 8 14 0 0 8 14 0 0 0 8 8 14 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	23.14 22.19 22.19 22.19 22.19 22.19 22.19 22.10	23.10 23.05 23.05 23.05 23.06 23.07	23.09 23.07 23.07 23.07 23.07 23.07 22.29 22.29 22.20	24 23 22 22 21 100-equilibrium (dtlm) 24 23 22 22 21 21 100-equilibrium (dtlm)	0 1 1 2 2 3 3 MPR (dB) 0 1 1 2 2 3 3
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	OPSK (OPSK) (OPS	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	122 24 0 7 7 13 0 0 0 12 24 0 7 7 13 10 0 12 24 0 0 7 13 10 0 0 0 12 24 0 0 7 7 13 15 10 0 0 0 12 24 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	23.14 22.19 22.19 22.19 22.10 23.14	22.10 22.35 23.06 23.08 22.01 22.26 22.27 22.20 22.20 22.20 22.20 22.21 22.20 22.20 22.21 22.20	22.09 23.07	24 23 23 22 21 21 21 24 23 24 25 22 22 21	0 1 1 2 2 3 3 MPR (dB) 0 1 1 1 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	OPSK (OPSK) OPSK	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	122 24 0 7 7 13 3 0 0 0 12 24 0 7 7 13 13 0 0 0 14 7 7 0 0 8 8 14 14 0 0 0 8 14 14 7 7 0 0 0 8 14 14 7 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	22.14 2.29 2.29 2.20 2.20 2.20 2.20 2.20 2.20	22.10 22.35 22.06 22.07 22.08 22.21 22.20	22.09 22.29 22.29 22.29 22.20	24 23 23 22 22 21 100=009 iimi (offlm) 24 23 23 22 21 110ne-009 iimi (offlm)	0 1 1 2 2 3 3 MPR (dB) MPR (dB)
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	OPSK (OPSK)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	122 24 0 0 7 7 13 13 0 0 0 12 24 0 0 7 7 13 13 0 0 0 14 14 17 7 0 0 0 8 8 14 17 7 7 0 0 0 8 8 14 17 7 7 0 0 0 8 8 14 17 7 7 0 0 0 18 14 17 7 7 0 0 0 18 18 18 18 18 18 18 18 18 18 18 18 18	22.14 23.99 23.19 23.19 23.19 23.19 23.19 23.20 23.30	22.10 22.35 22.00 22.00 22.00 22.01 22.21 22.21 22.20	23.09 22.07 22.07 22.08 22.29 22.20	24 23 22 22 21 100-equilibrium (dtlm) 24 23 22 22 21 21 100-equilibrium (dtlm)	0 1 1 2 2 3 MPR (dB) 0 1 1 2 2 3 3 MPR NPR NPR NPR NPR NPR NPR NPR NPR NPR N
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	OPSIX. OPPIX. OP	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	122 0 0 7 7 133 0 0 0 122 123 134 135 135 135 135 135 135 135 135 135 135	22.14 (2.2.9)	22.10 22.35 22.05 22.00	23.09 23.07	24 23 22 21 1une-up lend (clim) 24 24 24 24	0 1 1 2 2 3 3 MPR (dB) 0
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	OPSIX	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	122 24 0 7 7 133 0 0 0 0 0 0 122 24 0 0 0 0 122 24 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	22.14 2.29 2.20 2.20 2.20 2.20 2.20 2.20 2.20	22.10 22.35	23.09 (2.23) (2.	24 23 23 22 22 21 100=009 iimi (offlm) 24 23 23 22 21 110ne-009 iimi (offlm)	0 1 1 2 2 3 3 MPR (dB) MPR (dB)
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	OPSIX	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	122 24 0 7 7 133 0 0 124 0 0 7 7 13 13 13 10 10 10 10 10 10 10 10 10 10 10 10 10	22.14 2.29 2.20 2.20 2.20 2.20 2.20 2.20 2.20	22.10 22.35 22.06 22.07 22.27 22.28 22.21 22.20	23.09 (2.23) (2.	24 23 23 22 21 1Um-sup-limit (dbm) 24 23 24 24 24 25 24 24 24 25 25 26 27 27 27 27 27 27 27 27 27 27 27 27 27	0 1 1 2 2 3 3 MPR (dB) 0 1 1 2 2 3 3 MPR (dB) 0 0 1 1
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	OPSIX	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	122 24 0 7 7 133 0 0 0 122 123 13 0 0 0 7 13 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	22.14 2.29 2.27 2.20 2.21 2.21 2.21 2.21 2.21 2.21 2.21	22.10 22.35 22.06 22.07 22.27 22.28 22.21 22.28 22.21 22.20	23.09 22.07 23.09 22.07 22.07 22.08 22.09 22.09 22.00	24 23 22 21 1une-up lend (clim) 24 24 24 24	0 1 1 2 2 3 3 MPR (dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	OPSIX	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	224 0 7 7 133 0 0 0 122 1 12 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1	22.14 22.19 22.29	22.10 23.35 23.06 23.06 23.07	23.09 2.23 2.23 2.23 2.23 2.23 2.23 2.23 2.2	24 23 23 22 21 1 turne-up instit (dillin) 24 22 22 22 21 21 1 turne-up instit (dillin) 24 24 23 22 22 21 24 24 24 25 25 25 26 27 27 27 27 28 29 29 29 29 29 29 29 29 29 29 29 29 29	0 1 1 2 2 3 3 MPR (dB) 0 1 1 2 2 3 3 MPR (dB) 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	OPSIX	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	122 0 7 7 133 0 0 0 122 123 24 0 7 7 133 0 0 0 0 122 133 0 0 0 122 144 0 7 7 1 13 0 0 1 122 144 0 1 122 145 0 1 122 146 0 1 122 147 0 1 122 147 0 1 122 148 0 1 12	22.14 22.27 22.29 22.21	22.10 22.35 23.05 23.06 23.06 23.07 24.07 25.26 25.27 25.26 25.27	23.09 (2.23) (2.	24 23 23 22 21 1Um-sup-limit (dbm) 24 23 24 24 24 25 24 24 24 25 25 26 27 27 27 27 27 27 27 27 27 27 27 27 27	0 1 1 2 2 3 3 MPR (dB) 0 1 1 2 2 3 3 MPR (dB) 0 0 1 1
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	OPSIX OPSIX	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	24 0 7 7 3 3 3 5 5 0 0 0 3 3 5 5 0 0 0 3 3 5 5 5 0 0 0 3 3 5 5 5 0 0 0 0	22.14 22.27 22.27 22.28 22.29 22.21	22.10 22.35 23.05 23.06 23.07 24.07 25.26 25.27 25.26 25.27	23.09 23.09 23.07	24 23 23 22 21 1 turne-up instit (dillin) 24 22 22 22 21 21 1 turne-up instit (dillin) 24 24 23 22 22 21 24 24 24 25 25 25 26 27 27 27 27 28 29 29 29 29 29 29 29 29 29 29 29 29 29	0 1 1 2 2 3 3 MAPIR (dB) 0 1 1 1 1 1
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	OPSIX	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	122 0 0 7 7 13 0 0 0 12 2 0 0 7 7 13 3 0 0 7 7 13 3 0 0 7 7 13 3 0 0 0 0 14 4 7 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0	22.14 23.29 24.12 25.27	22.10 22.35 22.06 22.07 22.27 22.28 22.21 22.28 22.29 22.20	23.09 23.09 22.29 22.20 22.20 23.14 23.16	24 23 22 21 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 1 1 2 2 3 3 MPR (dB) 0 1 1 2 2 3 3 MPR (dB) 1 1 2 2 3 3 MPR (dB) 1 1 1 2 2 3 3 MPR (dB) 0 0 1 1 1 1 1 2 2 3 3 MPR (dB) 0 1 1 1 1 1 2 2 3 3 MPR (dB) 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

		Part 27L (Band only on c	I 4 (AWS I hannel re	quired) Re		1	
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
20	Cha Frequen QPSK	nnel cy (MHz) 1	0	20050 1720 23.11	20175 1732.5	20300 1745 23.09	(dBm)	(45)
20 20 20	QPSK QPSK	1	49 99	23.10	23.12 22.96 23.10	23.11	24	0
20 20 20	QPSK QPSK	50 50	0 24	21.93 22.17	22.08 22.18	22.22 22.22		
20 20 20	QPSK QPSK	50 100	50	22.19	22.04	22.13 22.16	23	1
20	16QAM 16QAM	1	0 49	22.13	22.42	21.94	23	1
20	16QAM 16QAM	1 50	99	21.99	21.92	22.04		
20	16QAM 16QAM	50	24	20.91	21.16	21.26	22	2
20 20	16QAM 64QAM	100	0	20.80	21.04	21.23		
20	64QAM 64QAM	1	49 99	21.13	21.25	20.91	22	2
20 20	64QAM 64QAM	50 50	0 24	20.38	20.25	20.49	21	3
20 20	64QAM 64QAM	50 100	50 0	20.24	20.20	20.33 20.49	21	3
	Cha Frequen	nnel cy (MHz)		20025 1717.5	20175 1732.5	20325 1747.5	Tune-up limit (dBm)	MPR (dB)
15 15	QPSK QPSK	1	0 37	23.11	23.11	23.06 23.04	24	0
15 15	QPSK QPSK	1 36	74 0	23.05 22.21	23.08 22.25	23.04 22.30		
15 15	QPSK QPSK	36 36	20 39	22.21 22.20	22.17 22.17	22.34 22.26	23	1
15 15	QPSK 16QAM	75 1	0	22.15 22.33	22.17 22.31	22.29 22.31		
15 15	16QAM 16QAM	1	37 74	22.33 22.22	22.34 22.15	22.22 22.21	23	1
15 15	16QAM 16QAM	36 36	0 20	21.22 21.11	21.31 21.23	21.28 21.20		
15 15	16QAM 16QAM	36 75	39 0	21.18 21.23	21.11	21.24 21.35	22	2
15 15	64QAM 64QAM	1 1	0 37	21.20 21.56	21.27 21.51	21.44 21.45	22	2
15 15	64QAM 64QAM	1 36	74 0	21.08 20.45	21.07 20.48	21.41 20.59		
15 15	64QAM 64QAM	36 36	20 39	20.46 20.41	20.47 20.38	20.52 20.54	21	3
15	64QAM Cha	75 nnel	0	20.43	20.44 20175	20.56 20350	Tune-up	MPR
10	Frequen QPSK	cy (MHz)	0	1715 23.08	1732.5 23.04	1750 23.10	limit (dBm)	(dB)
10	QPSK QPSK	1	25 49	23.11	23.05	23.07	24	0
10 10	QPSK QPSK	25 25	0	22.23	22.21	22.27	23	
10	QPSK QPSK	25 50	25 0	22.13 22.08	22.09 22.25	22.19	23	1
10 10	16QAM 16QAM	1	0 25	22.30 22.40	22.35 22.41	22.32 22.38	23	1
10 10	16QAM 16QAM	1 25	49 0	22.28 21.32	22.22 21.33	22.29 21.30		
10 10	16QAM 16QAM	25 25	12 25	21.15 21.08	21.33 21.20	21.33 21.21	22	2
10	16QAM 64QAM	50	0	21.23	21.24	21.20		
10	64QAM 64QAM	1	25 49	21.52 21.37	21.51	21.56	22	2
10	64QAM 64QAM	25 25	0	20.41	20.45	20.39		
10	64QAM 64QAM	25 50	25	20.35	20.32	20.40	21	3
	Cha	nnel		19975 1712.5	20175 1732.5	20375 1752.5	Tune-up limit (dBm)	MPR (dB)
5	QPSK QPSK	1	0	23.04	22.97	23.08	(dBm)	0
5	QPSK QPSK	1 12	24	22.85	22.88 22.12	23.06	-	
5	QPSK QPSK	12	7	22.18 22.09	22.11 22.08	22.19	23	1
5	QPSK 16QAM	25	0	22.21	22.09	22.21		
5	16QAM 16QAM	1	12 24	22.18	22.38	22.38	23	1
5	16QAM 16QAM	12	0 7	21.11	21.14	21.22		
5	16QAM 16QAM	12	13	20.97	21.07	21.15 21.26	22	2
5	64QAM 64QAM	1	0	21.42	21.35	21.28	22	2
5	64QAM 64QAM	1 12	24	21.21	21.25 20.26	21.29		
5	64QAM 64QAM	12	7	20.39	20.33	20.33	21	3
5	64QAM Cha	25	0	20.28	20.44	20.27	Tune-up	
	Frequen	cy (MHz)		19985 1711.5 22.95	20175 1732.5	20385 1753.5	limit (dBm)	MPR (dB)
3 3	QPSK QPSK QPSK	1 1	0 8 14	22.95 22.80 23.00	23.00 22.91 23.04	23.08	24	0
3	QPSK QPSK QPSK	8 8	0 4	22.13	23.04 22.11 22.05	23.07 22.22 22.12		
3	QPSK QPSK QPSK	8 8 15	7 0	22.11 22.03 22.00	22.05 22.04 22.05	22.12 22.06 22.23	23	1
3	16QAM 16QAM	1 1	0 8	22.00 22.12 22.03	22.13 22.14	22.34 22.33	23	1
3	16QAM 16QAM 16QAM	1 8	14	22.03 22.11 21.21	22.14 22.17 21.16	22.33 22.23 21.30		
3 3	16QAM 16QAM 16QAM	8 8	4 7	21.21 21.17 21.13	21.16 21.14 21.08	21.30 21.19 21.23	22	2
3	16QAM 16QAM 64QAM	15 1	0	21.13 21.09 21.52	21.00 21.30	21.07		
3	64QAM 64QAM	1	8 14	21.24 21.15	21.35 21.35	21.35 21.36	22	2
3	64QAM 64QAM	8	0 4	20.46	20.52	20.50		
3	64QAM 64QAM	8	7	20.33	20.41	20.33	21	3
	Cha	nnel		19957 1710.7	20175 1732.5	20393 1754.3	Tune-up limit (dBm)	MPR (dB)
1.4	QPSK QPSK	cy (MHz) 1	0	23.04	22.96 23.01	23.09	(dBm)	()
1.4	QPSK QPSK QPSK	1 1 3	5 0	22.99 23.05 23.05	23.01 22.99 23.02	23.05 23.06 23.01	24	0
1.4	QPSK	3	- 1	23.03	23.04	23.02		
1.4	QPSK QPSK	6	0	23.06	22.93 21.98	23.08	23	1
1.4	16QAM 16QAM	1	3	22.13	22.07	22.24		
1.4	16QAM 16QAM	3	0	22.08 22.07	22.10 21.97	22.33 22.28	23	1
1.4	16QAM 16QAM	3	3	22.17 22.03	21.87 21.91	22.02 22.20		
1.4	16QAM 64QAM	1	0	21.33	21.03	21.41	22	2
1.4			3	21.45	21.27	21.55		
1.4 1.4 1.4	64QAM 64QAM	1	5	21.32	21.18	21.44	22	2
1.4		1 3 3	5 0 1 3	21.32 21.45 21.42 21.41	21.18 21.29 21.25 21.21	21.44 21.62 21.48 21.49	22	2

	R	Par eceiver O	t 22H(only	5 (Celluar y on chan	nel requir	red) ı / Extremi	itv	
BW [MHz]	Modulation			Power Low Ch. / Freq. 20450	Power Middle	Power		
BW [MHz]				Ch. / Freq.	Middle Ch. / Freq. 20525	High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)
	Cha Frequen	nnel		20450	20525 836.5	20600 844	(dBm)	(dB)
10	QPSK	1 1	0	23.09	23.23	23.10		
10	QPSK	- 1	25	23.21	23.18	23.22	24	0
10	QPSK	1	49	23.11	23.10	23.08		
10 10	QPSK QPSK	25 25	0 12	22.23 22.19	22.26 22.17	22.25 22.18		
10	QPSK	25	25	22.20	22.15	22.14	23	1
10	QPSK	50		22.25	22.27	22.20		
10 10	16QAM 16QAM	- 1	0 25	22.34	22.48	22.34	23	1
10	16QAM	1	25 49	22.43 22.33	22.42	22.46 22.33	23	
10	16QAM	25	0	21.24	21.27	21.28		
10	16QAM	25	12	21.19	21.18	21.22	22	2
10 10	16QAM 16QAM	25 50	25 0	21.21	21.18	21.17		
10	64QAM	1	0	21.24	21.21	21.21		
10	64QAM	1	25	21.45	21.44	21.46	22	2
10	64QAM	1 05	49	21.36	21.37	21.36		
10 10	64QAM 64QAM	25 25	0 12	20.38	20.41	20.40		
10	64QAM	25	25	20.33	20.30	20.27	21	3
10	64QAM	50	0	20.38	20.35	20.33		
	Cha	nnel		20425	20525	20625	Tune-up limit (dBm)	MPR (dB)
5	Frequen	cy (MHz)	0	826.5 22.97	836.5 23.00	846.5 23.00	(dBm)	(dB)
5	QPSK	1	12	22.97	23.00	23.00	24	0
5	QPSK	- 1	24	23.00	22.98	22.97		
5	QPSK	12	0	22.14	22.12	22.14		
5	QPSK	12	7	22.13	22.14	22.14	23	1
5	QPSK	25	0	22.12	22.00	22.13		
5	16QAM	- 1	0	22.23	22.18	22.23		
5	16QAM 16QAM	1	12	22.41	22.39	22.47	23	1
5 5	16QAM	12	24 0	22.19 21.07	22.22 21.10	22.16 21.16		
5	16QAM	12	7	21.14	21.14	21.16	22	2
5	16QAM	12	13	21.08	21.06	21.09	22	2
5	16QAM 64QAM	25 1	0	21.13	21.11	21.14		
5	64QAM	1	12	21.43	21.49	21.52	22	2
5	64QAM	- 1	24	21.26	21.27	21.24		
5	64QAM	12	0	20.19	20.24	20.26		
5	64QAM 64QAM	12	7	20.27	20.24	20.27	21	3
5	64QAM	25	0	20.22	20.26	20.29		
	Cha	nnel		20415	20525	20635	Tune-up	MPR
	Frequen			825.5	836.5	847.5	limit (dBm)	(dB)
3	QPSK QPSK	1	8	23.03	23.02	23.06	24	0
3	QPSK	1	14	23.03	23.03	22.99	24	
3	QPSK	8	0	22.09	22.05	22.07		
3	QPSK	8	4	22.11	22.07	22.08	23	1
3	QPSK QPSK	8 15	7	22.07	22.02	22.04		
3	16QAM	1	0	22.28	22.26	22.30		
3	16QAM	1	8	22.24	22.22	22.24	23	1
3	16QAM 16QAM	1	14	22.24 21.13	22.24	22.20 21.16		
3	16QAM	8	0	21.13	21.12	21.16		
3	16QAM	8	7	21.13	21.10	21.12	22	2
3	16QAM	15	0	21.07	21.06	21.09		
3	64QAM 64QAM	1	8	21.28 21.31	21.31 21.28	21.36 21.32	22	2
3	64QAM	1	14	21.31	21.28	21.32		•
3	64QAM	8	0	20.20	20.20	20.23		
3	64QAM 64QAM	8	4 7	20.21	20.23	20.25	21	3
3	64QAM	15	0	20.20	20.19	20.20		
	Cha	nnel		20407	20525	20643	Tune-up	MPR (dB)
	Frequen	cy (MHz)		824.7		848.3	limit (dBm)	(dB)
1.4	QPSK	1		22.91	23.00	22.92		
1.4	QPSK QPSK	1	3 5	23.09	22.98	23.03		
1.4	QPSK	3	0	23.11	23.02	23.04	24	0
1.4	QPSK	3		23.01	23.03	22.97		
1.4	QPSK	3	3	22.94 22.06	22.99	23.00 22.02	- 00	
1.4	QPSK 16QAM	6	0	22.06	21.95 22.05	22.02	23	1
1.4	16QAM	1	3	22.22	22.17	22.27		
1.4	16QAM	- 1	5	22.13	22.08	22.01	23	1
1.4	16QAM	3	0	22.02	22.02	22.05	2.0	
1.4	16QAM 16QAM	3	1 3	22.06 21.98	22.01	22.03 21.94		
1.4	16QAM	6	0	21.06	21.21	21.09	22	2
1.4	64QAM	1	0	21.19	21.21	21.12		
1.4	64QAM 64QAM	1	3 5	21.23 21.19	21.21	21.18 21.07		
1.4	64QAM	3	0	21.19	21.16	21.22	22	2
1.4	64QAM	3	1	21.23	21.17	21.23		
1.4	64QAM	3	3	21.28	21.24	21.20		
1.4	64QAM			20.21	20.25	20.14	21	3



			Band 7	(2600MH 27 Receiv	z Band) er On			
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch / Freg	Power High Ch. / Freq.	Tune-up	MPR
	Cha	nnel			21100		limit (dBm)	MPR (dB)
	Frequen			2510	2535	2560		
20 20	QPSK QPSK	1	0 49	23.55 23.41	23.58 23.48	23.11	24	0
20	QPSK	1	99	23.41	23.40	23.02	24	0
20	QPSK	50	0	22.31	22.54	22.50		
20 20	QPSK QPSK	50 50	24 50	22.41	22.49	22.53	23	1
20	OPSK	100	0	22.47 22.38	22.52	22.52		
20	16QAM	1	0	22.65	22.86	22.43		
20	16QAM		49	22.65	22.74	22.73	23	1
20	16QAM		99	22.37	22.46	22.45		
20	16QAM 16QAM	50 50	24	21.30 21.40	21.42	21.47		
20	16QAM	50	50	21.40	21.47	21.02	22	2
20	16QAM	100	0	21.37	21.45	21.44		
20	64QAM		0	21.31	21.31	21.37		
20 20	64QAM 64QAM	1	49 99	21.67	21.75	21.78	22	2
20	64QAM	50	99	20.41	20.52	20.58		
20	64QAM	50	24	20.53	20.52	20.63		
20	64QAM	50	50	20.57	20.60	20.58	21	3
20	64QAM	100	0	20.50	20.56	20.58		
	Cha	nnel		20825	21100	21375	lune-up	MPR (dB)
15	Frequen QPSK	cy (MHz)	0	2507.5 23.20	2535 23.24	2562.5 23.28	(dBm)	(dB)
15	QPSK	1	37	23.20	23.24	23.28	24	0
15	QPSK	1	74	23.27	23.34	23.38		_
15	QPSK	36	0	22.38	22.46	22.51		
15	QPSK	36	20	22.41	22.51	22.52	23	1
15 15	QPSK QPSK	36 75	39 0	22.46 22.42	22.52 22.49	22.56 22.53		
15	16QAM	1	0	22.42	22.49	22.49		
15	16QAM	1	37	22.71	22.83	22.77	23	1
15	16QAM	1	74	22.52	22.59	22.55		
15 15	16QAM 16QAM	36 36	0	21.31	21.43	21.48		
15	16QAM	36	20 39	21.37	21.44	21.47	22	2
15	16QAM	75	0	21.39	21.46	21.48		
15	64QAM	1	0	21.45	21.53	21.56		
15	64QAM	- 1	37	21.75	21.87	21.83	22	2
15	64QAM 64QAM	1	74	21.54	21.63	21.62		
15 15	64QAM	36 36	0 20	20.44	20.54	20.59		
15	64QAM	36	39	20.55	20.60	20.63	21	3
15	64QAM	75	0	20.52	20.57	20.62		
	Cha			20800	21100	21400	Tune-up limit	MPR
	Frequen QPSK			2505	2535	2565	(dBm)	(dB)
10 10	QPSK	1	0 25	23.27	23.33	23.38	24	0
10	QPSK	1	49	23.31	23.39	23.43	2.7	
10	QPSK	25	0	22.40	22.48	22.51		
10	QPSK	25	12	22.42	22.50	22.51	23	1
10 10	QPSK QPSK	25	25 0	22.46 22.43	22.52 22.51	22.56 22.53		
10	16QAM	1	0	22.51	22.58	22.60		
10	16QAM	1	25	22.63	22.75	22.68	23	1
10	16QAM		49	22.55	22.65	22.59		
10	16QAM 16QAM	25	0	21.36	21.47	21.50		
10 10	16QAM 16QAM	25 25	12 25	21.40 21.45	21.45	21.48	22	2
10	16QAM	50	0	21.42	21.50	21.49		
10	64QAM		0	21.51	21.59	21.62		
10	64QAM	1	25	21.64	21.76	21.74	22	2
10 10	64QAM 64QAM	1 25	49 0	21.57 20.52	21.67 20.59	21.61 20.60		
10	64QAM	25 25	12	20.52	20.59	20.60		
10	64QAM	25	25	20.58	20.63	20.64	21	3
10	64QAM	50	0	20.53	20.60	20.59		
	Cha Frequen			20775 2502.5	21100 2535	21425 2567.5	limit	MPR (dB)
5	OPSK	cy (MHz)	0	2502.5	2535	2567.5	(dBm)	(48)
5	QPSK	1	12	23.18	23.20	23.28	24	0
5	QPSK	- 1	24	23.16	23.24	23.37		
5	QPSK	12	0	22.35	22.46	22.55		
5	QPSK QPSK	12 12	7	22.46	22.55	22.65	23	1
5	QPSK	12 25	13	22.38	22.53	22.64		
5	16QAM	1	0	22.55	22.73	22.79		
5	16QAM		12	22.76	22.85	22.80	23	1
5	16QAM	1	24	22.65	22.82	22.65		
5	16QAM 16QAM	12 12	7	21.47	21.43	21.53		
5	16QAM 16QAM	12	13	21.55 21.47	21.57	21.61	22	2
5	16QAM	25	0	21.39	21.44	21.57		
5	64QAM		0	21.48	21.47	21.45		
5	64QAM 64QAM	1	12	21.54	21.70	21.94	22	2
5	64QAM 64QAM	1 12	24 0	21.56 20.55	21.57 20.59	21.55		
	64C/MM							
5	64QAM			20.56	20.66	20.74		
	64QAM 64QAM	12 12	7 13	20.56 20.56	20.66 20.61	20.74	21	3
	64QAM 64QAM 64QAM			20.56 20.56 20.53	20.66 20.61 20.65	20.74 20.53 20.66	21	3

			Band	66 Receiv	rer On			
W [MHz]	Modulation Cha Frequen	RB Size	RB Offset	Power Low Ch. / Freq. 132072 1720	Power Middle Ch. / Freq. 132322 1745	Power High Ch. / Freq. 132572 1770	Tune-up limit (dBm)	MPR (dB)
20 20	QPSK QPSK	1	0 49	23.10 23.10	23.14 22.95	22.98 22.92	24	0
20 20 20	QPSK QPSK QPSK	50 50	99 0 24	22.74 22.12 22.09	22.94 22.21 21.99	22.87 22.03 21.95		
20	QPSK QPSK	50	50	22.07	21.97	21.82	23	1
20 20	16QAM 16QAM	1	0 49	22.22 22.33	22.39 22.26	22.23 22.11	23	1
20 20 20	16QAM 16QAM	50 50	99 0 24	21.98 21.14 21.14	21.90 21.09 21.04	22.21 21.04 20.98		
20 20	16QAM 16QAM	50 100	50 0	21.09 21.12	21.00 21.04	20.86	22	2
20 20 20	64QAM 64QAM 64QAM	1 1	0 49 99	21.12	21.05	21.00	22	2
20 20 20	64QAM 64QAM	50 50	0 24	21.16 20.37 20.36	21.02 20.33 20.26	21.00 20.27 20.20		
20 20	64QAM 64QAM	50 100	50 0	20.33 20.38	20.23 20.31	20.08 20.15	21	3
15	Cha Frequen QPSK	nnel cy (MHz)	0	132047 1717.5 22.72	132322 1745 22.85	132597 1772.5 22.98	Tune-up limit (dBm)	MPR (dB)
15 15	QPSK QPSK	1 1	37 74	22.98	23.05	23.10	24	0
15 15	QPSK QPSK	36 36	20	21.90 21.87	22.01 22.03	22.15 22.12	23	1
15 15	QPSK QPSK 16QAM	75 1	0	21.86 21.86 21.90	21.97 22.00 22.09	22.02 22.09 22.13		
15 15	16QAM 16QAM	1 1	37 74	22.14 22.01	22.33 22.09	22.30 21.94	23	1
15 15 15	16QAM 16QAM 16QAM	36 36 36	0 20 39	20.90 20.89 20.87	21.03 21.05 20.97	21.14 21.10 20.98	22	2
15 15	16QAM 64QAM	75 1	0	20.88	21.03 21.26	21.09 21.35		
15 15	64QAM 64QAM	1 1	37 74	21.33 21.12	21.52 21.23	21.43 21.11	22	2
15 15	64QAM 64QAM	36 36 36	0 20 39	20.12 20.12 20.11	20.29 20.27 20.21	20.39 20.34 20.22	21	3
15	64QAM Cha	75 nnel	0	20.12	20.28	20.34	Tune-up	MPR
10	Frequen QPSK	cy (MHz) 1	0	1715 22.77	1745 22.75	1775 22.83	limit (dBm)	(dB)
10 10 10	QPSK QPSK	1 1 25	25 49 0	22.83 22.72 21.84	22.81 22.71 21.82	22.81 22.71 21.91	24	0
10	QPSK QPSK	25 25	12 25	21.85	21.82	21.84	23	1
10 10	QPSK 16QAM	50	0	21.82 21.91	21.82 21.99	21.88 21.99		
10 10 10	16QAM 16QAM 16QAM	1 1 26	25 49 0	22.01 21.96 20.78	22.06 21.97 20.84	22.02 21.79 20.91	23	1
10 10	16QAM 16QAM	25 25	12 25	20.79 20.75	20.84 20.81	20.83	22	2
10 10 10	16QAM 64QAM 64QAM	50	0 0 25	20.81 20.92 21.09	20.87 21.12 21.22	20.86 21.15 21.20	22	2
10 10	64QAM 64QAM	1 1 25	49 0	21.09 20.97 19.93	21.12 21.12 20.10	21.20 20.98 20.15	22	2
10 10	64QAM 64QAM	25 25	12 25	19.96 19.91	20.09 20.07	20.08 20.06	21	3
10	64QAM Cha Frequen		0	19.94 131997 1712.5	20.10 132322 1745	20.03 132647 1777.5	Tune-up Iimit (dBm)	MPR (dB)
5	QPSK QPSK	1 1	0 12	22.65 22.79	22.81 23.04	22.93 22.56	24	0
5	QPSK QPSK	1 12 12	24 0 7	22.87 21.59 21.63	22.82 21.93 22.00	22.91 22.08 22.09		
5	QPSK QPSK	12 25	13	21.59 21.59	21.92 21.94	21.98	23	1
5	16QAM 16QAM 16QAM	1	12	21.89	22.03 22.32 22.07	22.11 22.38 22.02	23	1
5	16QAM 16QAM	1 12 12	24 0 7	21.90 20.82 21.06	20.93 21.05	21.08 21.10		
5	16QAM 16QAM	12 25	13	20.97 21.34	20.94 20.98	20.99 21.09	22	2
5 5	64QAM 64QAM 64QAM	1 1	0 12 24	21.57 21.57 21.59	21.21 21.48 21.19	21.31 21.57 21.23	22	2
5	64QAM 64QAM	12	0 7	20.03	20.16	20.33		
5 5	64QAM 64QAM	12 25	13	20.02	20.16	20.25	21 Tupeup	3
1	Cha Frequen QPSK	cy (MHz)	0	131987 1711.5 22.89	132322 1745 23.01	132657 1778.5 23.01	limit (dBm)	MPR (dB)
3	QPSK QPSK	1	8 14	22.89 22.82 22.86	23.01 22.98 22.99	23.01 23.13 23.07	24	0
3						23.07		
3	QPSK QPSK	8	4	21.89 21.92	22.02 22.05	22.14 22.11	23	1
3 3 3	QPSK QPSK QPSK 16QAM	8 8 8 15			22.02 22.05 22.06 22.06	22.14 22.11 22.08 22.09	23	1
3 3 3 3	QPSK QPSK QPSK 16QAM 16QAM	8 8 15 1 1	4 7 0 0 8 14	21.92 21.89 21.91 22.03 22.01 22.00	22.02 22.05 22.06 22.06 22.19 22.16 22.22	22.14 22.11 22.06 22.09 22.16 22.13 22.07	23	1
3 3 3	QPSK QPSK QPSK 16QAM 16QAM	8 8 15 1	4 7 0 0 8	21.92 21.89 21.91 22.03 22.01	22.02 22.05 22.06 22.06 22.19 22.16	22.14 22.11 22.06 22.09 22.16 22.13		
3 3 3 3 3 3 3 3	QPSK QPSK QPSK 16QAM 16QAM 16QAM 16QAM 16QAM 16QAM 16QAM 16QAM	8 8 15 1 1 1 8 8 8 8	4 7 0 0 8 14 0 4 7	21.92 21.89 21.91 22.03 22.01 22.00 20.98 21.01 21.00 20.97 21.22	22.02 22.05 22.06 22.06 22.19 22.16 22.22 21.13 21.14 21.05 21.10 21.36	22.14 22.11 22.06 22.09 22.16 22.13 22.07 21.13 21.13 21.09 21.07 21.37	23	1 2
3 3 3 3 3 3 3 3 3 3 3	QPSK QPSK QPSK 16QAM 64QAM	8 8 15 1 1 1 8 8 8 15 1 1	4 7 0 0 8 14 0 4 7 0 0 8	21.92 21.89 21.91 22.03 22.01 22.00 20.98 21.01 21.00 20.97 21.22 21.21 21.22	22.02 22.05 22.06 22.06 22.19 22.16 22.22 21.13 21.14 21.05 21.10 21.36 21.33 21.37	22.14 22.11 22.08 22.09 22.16 22.13 22.07 21.13 21.13 21.09 21.07 21.37 21.32 21.30	23	1
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	OPSK OPSK OPSK OPSK 160AM 160AM 160AM 160AM 160AM 160AM 640AM 640AM 640AM 640AM	8 8 8 15 1 1 1 1 8 8 8 8 8 8 8 8 8	4 7 0 0 8 14 0 4 7 0 0 8 14 0 0 4 7 0 0 0 8 14 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	21.92 21.89 21.91 22.03 22.01 22.00 20.98 21.01 21.00 20.97 21.22 21.21 21.22 20.21	22.02 22.05 22.06 22.06 22.19 22.19 22.16 22.22 21.13 21.14 21.05 21.36 21.33 21.37 20.32 20.34 20.33	22.14 22.11 22.06 22.09 22.18 22.13 22.07 21.13 21.13 21.07 21.37 21.32 21.30 20.34	23	1 2
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	OPSK OPSK OPSK OPSK 160AM 160AM 160AM 160AM 160AM 160AM 640AM 640AM 640AM 640AM 640AM 640AM	8 8 8 15 1 1 1 1 8 8 8 15 1 1 1 1 8 8 8 8	4 7 0 0 8 14 0 4 7 0 0 8 14 14 0 0 4	21.92 21.89 21.91 22.03 22.01 22.00 20.98 21.01 21.00 20.97 21.22 21.21 21.22 20.21 20.24 20.21 20.19 131979	22.02 22.05 22.06 22.06 22.19 22.16 22.22 21.13 21.14 21.05 21.10 21.33 21.37 20.32 20.34 20.33 20.29	22.14 22.11 22.08 22.09 22.16 22.13 22.07 21.13 21.09 21.37 21.37 21.32 21.30 20.34 20.37 20.34 20	23 22 22 21	1 2 2 3 MPR
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	OPSK OPSK OPSK OPSK 160AM 160AM 160AM 160AM 160AM 160AM 640AM	8 8 15 1 1 1 1 8 8 15 1 1 1 1 1 8 8 15 1 1 1 1	4 7 0 8 14 0 4 7 0 8 14 0 0 8 14 0 0 0 8	21.92 21.89 21.91 22.03 22.01 22.09 20.98 21.01 21.00 20.97 21.22 21.21 21.22 20.21 20.24 20.21 20.19 131970 7707 22.18	22.02 22.05 22.06 22.06 22.19 22.15 22.12 21.13 21.14 21.05 21.36 21.33 21.37 20.32 20.34 20.33 20.29 152222 1745 22.00	22.14 22.11 22.09 22.08 22.07 21.13 22.07 21.13 21.07 21.37 21.32 21.30 20.34	23 22 22 21	1 2 2 3
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	OPSK OPSK OPSK 16QAM 16QAM 16QAM 16QAM 16QAM 16QAM 16QAM 16QAM 16QAM 64QAM 64QAM 64QAM 64QAM 64QAM 64QAM 64QAM Chas Frequen OPSK OPSK	8 8 15 1 1 1 1 8 8 8 15 1 1 1 1 8 8 8 8	4 7 0 0 8 14 0 4 7 0 0 8 14 0 4 7 0 0 8	21.92 21.89 21.91 22.03 22.01 22.00 20.98 21.01 21.00 20.97 21.22 21.21 20.21	22.02 22.05 22.06 22.06 22.19 22.19 22.12 21.13 21.14 21.05 21.10 21.36 21.33 21.37 20.32 20.34 20.33 20.29 133322 1745 22.00 22.12 22.13	22.14 22.11 22.08 22.09 22.13 22.07 21.13 21.09 21.07 21.37 21.32 21.30 20.34 20.37 20.34 20.37 20.34 20.37 20.34 20.37 20.34 20.37 20.34 20.37 20.34 20.37 20.34 20.37 20.34 20.37 20.34 20.37 20.34 20.37 20.34 20.37 20.34 20.37 20.34 20.37 20.34 20.37 20.34 20.37 20.34 20.35 20.36 20	23 22 22 21	1 2 2 3 MPR
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	OPSK OPSK OPSK 16QAM 16QAM 16QAM 16QAM 16QAM 16QAM 16QAM 16QAM 64QAM 6AQAM 6AQ	8 8 8 15 1 1 1 1 8 8 8 15 1 1 1 1 8 8 8 10 1 1 1 1 1 8 8 8 1 1 1 1	4 7 0 0 0 8 14 0 4 7 0 0 8 14 0 0 0 8 14 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	21.92 21.89 21.91 22.03 22.01 22.00 20.98 21.01 21.00 20.97 21.22 21.21 21.22 20.21 20.24 20.21 20.29 20.21	22.02 22.05 22.06 22.06 22.19 22.12 22.12 21.14 21.05 21.36 21.33 21.37 20.32 20.34 20.33 20.29 152222 1745 22.00 22.13 22.00 22.13 22.00 22.13 22.00 22.13	22.14 22.11 22.06 22.09 22.13 22.07 21.13 21.09 21.07 21.37 21.32 21.30 20.34 20.34 20.37 20.34 20.37 21.32 21.30 22.36 22.36 22.36	22 22 21 Tune-up limit (#Bm) 24	1 2 2 3 MPR (dB) 0
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	OPSK OPSK OPSK 160AM 160	8 8 8 15 1 1 1 1 1 8 8 8 15 15 1 1 1 1 1	4 7 7 0 0 8 14 0 0 4 4 7 7 0 0 0 3 3 5 5 0 0 1	21,92 21,89 21,91 22,03 22,01 22,00 20,98 21,01 21,00 20,97 21,22 21,21 21,22 20,21 20,24 20,21 20,24 20,21	22.02 22.05 22.06 22.06 22.16 22.12 22.13 21.14 21.05 21.36 21.37 20.32 20.32 20.33 20.29 1745 22.00 22.13 22.13 22.13 22.13 23.13 24.13 25.13 26.13 27.13 2	22.14 22.11 22.06 22.09 22.18 22.13 22.17 21.13 21.13 21.07 21.30 21.30 21.30 20.34 20.37 20.34 20	22 22 21 Tune-up limt (dBm)	2 2 3 MPR (dB)
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	OPSK OPSK OPSK OPSK 160AM 160AM 160AM 160AM 160AM 160AM 640AM 160AM	8 8 8 15 1 1 1 1 8 8 8 8 15 1 1 1 1 1 8 8 8 8	4 7 7 0 8 14 7 7 0 8 8 14 7 7 0 0 3 3 5 0 1 1 3 3 0 0	21.92 21.89 21.91 22.03 22.01 22.00 22.00 22.00 22.00 21.01 21.00 20.97 21.22 21.21 21.22 20.21 20.24 20.21 20.24 20.21 20.24 20.25 20.26 20.26 20.27 20.27 20.27 20.27 20.28 20.29 20	22 02 2206 22 06 22 06 22 06 22 19 22 16 22 29 21 13 21 10 21 10 21 20 20 21 20 21 20 20 20 20 20 20 20 20 20 20 20 20 20	22.14 22.11 22.06 22.06 22.09 22.16 22.13 22.07 21.13 21.09 21.07 21.37 21.32 21.30 20.34 20.34 20.34 20.34 20.34 20.35 22.25 22.36 22.24 21.27 21.50 21.27 21.30	22 22 21 Tune-up limit (#Bm) 24	1 2 2 3 MPR (dB) 0
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	OPSIC	8 8 15 1 1 1 1 1 8 8 8 1 15 1 1 1 1 1 8 8 1 15 1 1 1 1	4 7 7 0 0 8 8 14 7 7 0 0 8 8 14 7 7 0 0 0 3 3 5 5 0 0 1 1 3 3 5 0 0 0 1 1 3 3 5 0 0 0 1 1 3 3 5 0 0 0 1 1 3 3 5 0 0 0 1 1 3 3 5 0 0 0 1 1 3 3 5 0 0 0 1 1 3 3 5 0 0 0 1 1 3 3 5 0 0 0 1 1 3 3 5 0 0 0 1 1 3 3 5 0 0 0 1 1 3 3 5 0 0 0 1 1 3 3 5 0 0 0 1 1 3 3 5 0 0 0 1 1 3 3 5 0 0 0 1 1 3 3 5 0 0 0 0 1 1 3 3 5 0 0 0 0 1 1 3 3 5 0 0 0 0 1 1 3 3 5 0 0 0 0 1 1 3 3 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2192 2189 22191 2200 2200 2101 2100 2200 2101 2100	2202 2205 2206 2206 2206 2206 2206 2206	22:14 22:09 22:09 22:09 22:09 22:16 22:13 21:09 21:07 21:09 21:07 21:09 21:07 21:09 21:07 21:09 21:07 21:09 21:07 21:09 21:07 21:09 21:07 21:09 21:07 21:09 21:07 21:09 21:07 21:09 21:07	23 22 22 21 tune-up (init (dBm) 24 23 23	1 2 2 3 MPR (dB) 0 1 1
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	OPSIC	8 8 8 15 1 1 1 1 8 8 8 15 1 1 1 1 8 8 8 1 1 1 1	4 7 7 0 8 14 0 0 4 4 7 7 0 0 8 14 0 0 4 14 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2192 2291 2209 2121 2209 2121 2122 2122	2202 2205 2206 2206 2206 2206 2206 2206	22:14 22:08 22:09 22:09 22:09 22:09 22:19 22:13 22:13 21:13 21:09 21:13 21:09 21:07 21:09 21:07 21:09	22 22 21 tune-up limit (elbm) 24 23	1 2 2 3 MPR (dB) 0
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	OPSIC	8 8 8 15 1 1 1 1 8 8 1 15 1 1 1 1 8 8 1 15 1 1 1 1	4 7 7 0 0 8 14 0 0 4 7 7 0 0 0 8 14 0 0 14 7 7 0 0 15 0 15 0 1 1 3 3 5 5 0 0 0 0 0 3 3 5 5 0 0 0 0 0 3 5 5 0 0 0 0	2192 2203 2200 2200 2100 2100 2100 2100 210	2202 2205 2206 2219 2206 2219 2207 2208 2219 2208 2219 2219 2219 2219 2219 2219 2219 221	22.14 22.09 22.19 22.09 22.10 22.10 22.10 22.10 22.11 22.09 22.13 22.13 22.13 21.13	23 22 22 21 tune-up (init (dBm) 24 23 23	1 2 2 3 MPR (dB) 0 1 1
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	OPSIK	8 8 8 15 1 1 1 1 8 8 8 15 1 1 1 1 1 1 1	4 1 7 0 0 8 8 14 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2192 2209 2201 2200 2100 2100 2100 2100	2202 2205 2206 2206 2206 2206 2206 2206	22:14 22:09 22:09 22:19 22:09 22:19 22:09 22:19 22:07 21:13 21:07	23 22 21 21 21 1une-up limit (dbm) 24 23 23	1 2 2 3 MPR (dB) 0 1 1 1 1 2 2



					Hots	oot On			
	Band		WCDMA II		Tune-up		WCDMA IV		Tune-up
	TX Channel		9400		Limit				Limit
	Rx Channel	9662	9800	9938	(dBm)				
Fre	quency (MHz)								(dBm)
3GPP Rel 99	AMR 12.2Kbps	18.16	18.09	18.20	19.00	16.02	16.17	16.05	17.00
3GPP Rel 99	RMC 12.2Kbps	18.17	18.23	18.22	19.00	16.21	16.22	16.17	17.00
3GPP Rel 6	HSDPA Subtest-1	17.43	17.34	17.36	18.00	15.25	15.28	15.29	16.00
3GPP Rel 6	HSDPA Subtest-2	17.34	17.20	17.25	18.00	15.20	15.31	15.17	16.00
3GPP Rel 6	HSDPA Subtest-3	16.85	16.73	16.76	17.50	14.68	14.77	14.68	15.50
3GPP Rel 6	HSDPA Subtest-4	16.77	16.71	16.73	17.50	14.67	14.68	14.66	15.50
3GPP Rel 8	DC-HSDPA Subtest-1	17.22	17.34	17.12	18.00	15.20	15.28	15.10	16.00
3GPP Rel 8	DC-HSDPA Subtest-2	17.21	17.21	17.20	18.00	15.20	15.20	15.17	16.00
3GPP Rel 8	DC-HSDPA Subtest-3	16.88	16.73	16.60	17.50	14.61	14.49	14.43	15.50
3GPP Rel 8	DC-HSDPA Subtest-4	16.71	16.71	16.63	17.50	14.67	14.68	14.50	15.50
3GPP Rel 6	HSUPA Subtest-1	17.47	17.34	17.38	18.00	15.56	15.57	15.66	16.00
3GPP Rel 6	HSUPA Subtest-2	15.82	15.75	15.79	16.00	13.55	13.47	13.51	14.00
3GPP Rel 6	HSUPA Subtest-3	16.58	16.47	16.57	17.00	14.53	14.64	14.60	15.00
3GPP Rel 6	HSUPA Subtest-4	15.89	15.80	15.88	16.00	13.05	13.05	13.08	14.00
3GPP Rel 6	HSUPA Subtest-5	17.30	17.30	17.30	18.00	15.50	15.50	15.50	16.00
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	15.10	15.01	15.02	15.50	13.20	13.20	13.00	13.50



				(1900MH: 24E Hotsp				
BW [MHz]	Modulation		RB Offset	Power Low	Power Middle	Power High	Tune-up	MPR
	Cha Frequen			Ch. / Freq. 18700 1860	Ch. / Freq. 18900 1880	Ch. / Freq. 19100 1900	limit (dBm)	
20 20	QPSK QPSK	1	0 49	19.64 19.45	19.79 19.61	19.53 19.54	20.5	0
20 20	QPSK QPSK	1 50	99	19.42 18.49	19.42 18.79	19.43 18.75		
20 20	QPSK QPSK	50 50	24 50	18.39 18.38	18.72 18.69	18.74 18.61	19.5	1
20 20	QPSK 16QAM	100	0	18.48 18.35	18.71 18.26	18.65 18.41		
20 20	16QAM 16QAM	1	49 99	18.39 18.34	18.66 18.41	18.75 18.29	19.5	1
20 20	16QAM 16QAM	50 50	0 24	17.59 17.47	17.79 17.75	17.89 17.85	18.5	2
20 20	16QAM 16QAM	50 100	50 0	17.48 17.46	17.73 17.62	17.81 17.85	10.0	-
20 20	64QAM 64QAM	1	0 49	17.47 17.66	17.50 17.86	17.81 17.84	18.5	2
20 20	64QAM 64QAM	1 50	99 0	17.48 16.47	17.65 16.66	17.48 16.92		
20 20	64QAM 64QAM	50 50	24 50	16.45 16.47	16.75 16.68	16.76 16.65	17.5	3
20	64QAM Cha	100 nnel	0	16.45 18675	16.69 18900	16.80 19125	Tune-up limit	MPR
15	Frequen QPSK	cy (MHz)	0	1857.5 19.22	1880 19.45	1902.5 19.67	(dBm)	(dB)
15 15	QPSK QPSK	1 1	37 74	19.45 19.20	19.45 19.63	19.56 19.46	20.5	0
15 15	QPSK QPSK	36 36	0 20	18.44 18.40	18.65 18.73	18.77 18.80	19.5	1
15 15	QPSK QPSK	36 75	39 0	18.32 18.44	18.63 18.59	18.69 18.73	10.0	·
15 15	16QAM 16QAM	1	0 37	18.47 18.47	18.64 18.72	18.71 18.93	19.5	1
15 15	16QAM 16QAM	1 36	74 0	18.44 17.39	18.58 17.63	18.46 17.83		
15 15	16QAM 16QAM	36 36	20 39	17.45 17.45	17.73 17.70	17.70 17.75	18.5	2
15 15	16QAM 64QAM	75 1	0	17.38 17.75	17.73 17.74	17.80 17.87		
15 15	64QAM 64QAM	1	37 74	17.81 17.84	18.01 17.75	18.14 17.79	18.5	2
15 15	64QAM 64QAM	36 36	0 20	16.45 16.47	16.60 16.65	16.83 16.73	17.5	3
15 15	64QAM 64QAM	36 75	39 0	16.39 16.39	16.63 16.74	16.65 16.71		-
	Cha Frequen			18650 1855	18900 1880	19150 1905	Tune-up limit (dBm)	MPR (dB)
10 10	QPSK QPSK	1	0 25	19.48 19.60	19.62 19.76	19.62 19.73	20.5	0
10 10	QPSK QPSK	1 25	49 0	19.43 18.35	19.65 18.60	19.67 18.73		
10 10	QPSK QPSK	25 25	12 25	18.47 18.40	18.62 18.67	18.81 18.72	19.5	1
10 10	QPSK 16QAM	50 1	0	18.44 18.36	18.73 18.77	18.71 18.74		
10 10	16QAM 16QAM	1	25 49	18.58 18.37	18.69 18.57	18.81 18.81	19.5	1
10 10	16QAM 16QAM	25 25	0 12	17.40 17.49	17.75 17.73	17.89 17.79	18.5	2
10 10	16QAM 16QAM	25 50	25 0	17.42 17.40	17.69 17.70	17.76 17.69	10.5	2
10 10	64QAM 64QAM	1	0 25	17.59 17.59	17.84 17.98	17.93 18.00	18.5	2
				17.59	17.00			
10 10	64QAM 64QAM	1 25	49 0	17.54 16.40	17.83 16.75	17.90 16.74		
10 10 10	64QAM 64QAM 64QAM	1 25 25 25 25	49 0 12 25	17.54 16.40 16.51 16.43	17.83 16.75 16.66 16.59	17.90 16.74 16.89 16.84	17.5	3
10 10	64QAM 64QAM 64QAM	1 25 25 25 25 50 nnel	49 0 12	17.54 16.40 16.51	17.83 16.75 16.66 16.59 16.70 18900	17.90 16.74 16.89	17.5 Tune-up	
10 10 10	64QAM 64QAM 64QAM 64QAM Cha	1 25 25 25 25 50 nnel	49 0 12 25	17.54 16.40 16.51 16.43 16.36 18625	17.83 16.75 16.66 16.59 16.70	17.90 16.74 16.89 16.84 16.77	17.5 Tune-up	3 MPR
10 10 10 10	64QAM 64QAM 64QAM 64QAM Cha Frequen QPSK	1 25 25 25 50 nnel cy (MHz)	49 0 12 25 0	17.54 16.40 16.51 16.43 16.36 18625 1852.5 19.20	17.83 16.75 16.66 16.59 16.70 18900 1880 19.52 19.57 19.51	17.90 16.74 16.89 16.84 16.77 19175 1907.5 19.60 19.53 19.66 18.65	17.5 Tune-up limit (dBm)	3 MPR (dB)
10 10 10 10 5 5	64QAM 64QAM 64QAM Cha Frequen QPSK QPSK QPSK	1 25 25 25 50 nnel cy (MHz) 1 1 1	49 0 12 25 0	17.54 16.40 16.51 16.43 16.36 18625 1852.5 19.20 19.48 19.37	17.83 16.75 16.66 16.59 16.70 18900 1880 19.52 19.57	17.90 16.74 16.89 16.84 16.77 19175 1907.5 19.60 19.53	17.5 Tune-up limit (dBm)	3 MPR (dB)
10 10 10 10 5 5 5 5 5	64QAM 64QAM 64QAM 64QAM Cha Frequen QPSK QPSK QPSK QPSK QPSK	1 25 25 25 50 nnel cy (MHz) 1 1 1 12 12	49 0 12 25 0 0 12 24 0 7	17.54 16.40 16.51 16.43 16.36 18625 1852.5 19.20 19.48 19.37 18.35 18.44	17.83 16.75 16.66 16.59 16.70 18900 1880 19.52 19.57 19.51 18.60	17.90 16.74 16.89 16.84 16.77 19175 1907.5 19.60 19.53 19.66 18.65	Tune-up limit (dBm)	3 MPR (dB)
10 10 10 10 10 5 5 5 5 5 5 5	64QAM 64QAM 64QAM 64QAM Cha Frequen QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	1 25 25 25 50 nnnel cy (MHz) 1 1 1 1 1 2 12 12 25	49 0 12 25 0 0 12 24 0 7 13	17.54 16.40 16.51 16.43 16.36 18625 1852.5 19.20 19.48 19.37 18.35 18.44 18.28	17.83 16.75 16.66 16.59 16.70 18900 1880 19.52 19.57 19.51 18.60 18.70 18.57 18.69	17.90 16.74 16.89 16.84 16.77 19175 1907.5 19.60 19.53 19.66 18.65 18.73 18.64 18.71	Tune-up limit (dBm)	3 MPR (dB)
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	64QAM 64QAM 64QAM Cha Frequen QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	1 25 25 25 50 nnel cy (MHz) 1 1 1 1 1 2 12 12 12 11 1 1 1 1 1 1 1	49 0 12 25 0 0 12 24 0 7 13 0 0 0 12 24 0 7	17.54 16.40 16.51 16.43 16.36 18525 18525 18525 19.20 19.48 19.37 18.35 18.44 18.28 18.35 18.45 18.45 18.45 18.43	17.83 16.75 16.65 16.59 16.70 18900 1880 19.52 19.57 19.51 18.60 18.70 18.71 18.83 18.68 17.76 17.74	17.90 16.74 16.84 16.87 19175 1907.5 19.60 18.65 18.73 18.64 18.71 18.73 18.78 18.71 17.76	17.5 Tune-up limit (dBm) 20.5 19.5	3 MPR (dB) 0
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5	64QAM 64QAM 64QAM 64QAM Char Prequen QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	1 25 25 25 50 nnel Cy (MHz) 1 1 1 1 2 12 12 25 1 1 1 1 1 1 1 1 1 1	49 0 12 25 0 0 12 24 0 7 13 0 0 0 12 24	17.54 16.40 16.51 16.43 16.36 18525 1852.5 19.20 19.48 19.37 18.35 18.44 18.28 18.35 18.45 18.43 18.38	17.83 16.75 16.66 16.59 16.70 18800 18.80 19.57 19.57 19.51 18.60 18.70 18.77 18.69 18.71 18.83 18.68	17.90 16.74 16.84 16.87 19175 1907.5 19.60 18.65 18.73 18.74 18.73 18.73 18.74 18.71 18.73	17.5 Tune-up limit (dBm) 20.5	3 MPR (dB) 0
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	640AM 640AM 640AM Cha Cha Cha Cha Cha Cha Cha Cha Cha Cha	1 25 25 50 innel cry (MHz) 1 1 1 1 1 1 1 2 25 1 1 1 1 1 1 1 1 1 1	49 0 12 25 0 0 12 24 0 7 13 0 0 12 24 0 7	17.54 16.40 16.51 16.43 16.36 18625 18525 18525 18525 1824 19.37 18.35 18.44 18.28 18.35 18.45 18.43 18.38 17.48	17.83 16.75 16.66 16.59 16.70 1880 19.52 19.57 19.51 18.60 18.70 18.70 18.71 18.69 18.71 18.88 17.76 17.76	17.90 16.74 16.84 16.87 19175 1907.5 19.66 19.53 19.66 18.65 18.73 18.64 18.71 18.73 18.74 17.76	17.5 Tune-up limit (dBm) 20.5 19.5	3 MPR (dB) 0
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	64QAM 64QAM 64QAM Char Frequen QPSK QPSK QPSK QPSK QPSK QPSK QPSK 16QAM	1 25 50 nnel 5	49 0 12 25 0 0 12 24 0 7 13 0 0 12 24 0 7 13 0 0 12 24 0 0 12 24 0 0 12 24 0 0 12 24 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	17.54 16.40 16.51 16.51 16.43 16.36 18525 1852.5 19.20 19.48 19.37 18.35 18.45 18.35 18.45 18.43 18.38 17.46 17.46 17.46 17.57 17.69 17.69	17.83 16.76 16.66 16.59 16.70 1880 19.52 19.51 18.60 18.75 18.69 18.71 18.69 18.71 18.83 18.68 17.74 17.70 17.83 17.74 17.70 17.83 17.92 17.72 16.66	17.90 16.74 16.89 16.84 16.77 19175 1907.5 19.60 19.53 19.66 18.65 18.71 18.71 18.71 18.71 17.76 17.76 17.76 17.73 17.91 17.74 16.73	17.5 Tune-up limit (dBm) 20.5 19.5 19.5	3 MPR (dB) 0 1 1 2
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	640AM	1 25 25 25 50 mnel cy (MHz) 1 1 1 1 2 12 12 12 12 12 12 12 12 12 12	49 0 12 25 0 12 24 0 7 13 0 0 12 24 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	17.54 16.40 16.51 16.51 16.36 16.35 18.32.5 19.20 19.48 19.37 18.35 18.44 18.28 18.35 18.45 18.45 17.48 17.48 17.48 17.49 17.57 17.69 17.58 16.48 16.37	17.83 16.75 16.66 16.59 16.70 18900 1880 19.52 19.57 19.51 18.60 18.70 18.70 18.71 18.69 18.71 18.68 17.76 17.70 17.70 17.73 17.92 17.72 16.66 16.69	17.90 16.74 16.89 16.84 16.87 19175 1907.5 19.60 19.53 19.66 18.73 18.64 18.71 18.73 18.71 17.76 17.76 17.73 17.74 17.73 17.74 17.73 17.74 16.73 16.84	17.5 Tune-up limit (dBm) 20.5 19.5 19.5	3 MPR (dB) 0 1 1 2
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	64QAM 64QAM 64QAM 64QAM 64QAM Chair OPSK OPSK OPSK OPSK OPSK OPSK 16QAM 16QAM 16QAM 16QAM 64QAM 64QAM 64QAM 64QAM 64QAM 64QAM 64QAM 64QAM 64QAM	1 25 25 25 25 50 mnel cy (MHz) 1 1 1 1 2 12 12 25 1 1 1 1 12 12 12 12 12 12 12 12 12 12 1	49 0 12 25 0 12 24 0 7 13 0 0 12 24 0 7 13 0 0 12 24 0 7 7 13 0 0 12 24 0 0 12 24 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	17.54 16.40 16.51 16.51 16.36 16.36 16.36 16.32 18.22 19.20 19.48 19.37 18.35 18.44 18.35 18.45 18.45 18.45 17.48 17.46 17.43 17.57 17.59 17.58 16.37 16.37	17.83 16.75 16.66 16.59 16.70 18900 1880 19.52 19.57 19.51 18.60 18.70 18.70 18.71 18.69 18.71 18.68 17.74 17.70 17.73 17.92 16.66 16.65 16.65 16.65	17.90 16.74 16.89 16.84 16.87 19175 1907.5 19.60 19.53 19.66 18.73 18.64 18.71 18.73 18.74 18.71 17.76 17.76 17.76 17.73 17.73 17.74 16.73 16.84 16.72 16.72 16.72 16.73	17.5 Tune-up limit (dBm) 20.5 19.5 19.5 18.5 17.5 Tune-up Tune-up	3 MPR (dB) 0 1 1 1 2 2 3 3 MPR
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	64QAM 64QAM 64QAM 64QAM 64QAM Chair Prequen 0PSK 0PSK 0PSK 0PSK 0PSK 0PSK 0PSK 16QAM 16QAM 16QAM 16QAM 16QAM 64QAM 64QAM 64QAM 64QAM 64QAM 64QAM 64QAM 64QAM	1 25 25 25 25 50 mnel cy (MHz) 1 1 1 1 2 12 12 25 1 1 1 1 12 12 12 12 12 12 12 12 12 12 1	49 0 12 25 0 12 24 0 7 13 0 0 12 24 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	17.54 16.40 16.51 16.43 16.36 18025 19.20 19.48 19.37 18.35 18.44 18.28 18.45 18.43 17.48 17.48 17.46 17.43 17.57 17.58 16.37 16.37 16.37 16.37 16.37 16.37 16.37 16.37 16.37 16.35	17.83 16.75 16.66 16.59 16.90 18.900 18.900 18.900 18.900 18.901 18.70 19.51	17 90 16.74 16.89 16.84 16.84 16.87 1997.5 18.77 19175 1927.5 1927.5 1927.5 1927.5 1927.5 1928.5 192	17.5 Tune-up limit rd9m1 20.5 19.5 19.5 18.5 18.5 17.5 Tune-up limit rd9m1 limit rd9m1	3 MPR (dB) 0 1 1 2 2 3 3 MPR (dB)
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	64QAM 16QAM 16QAM 16QAM 16QAM 16QAM 64QAM	1 25 25 25 25 50 mnel cy (MHz) 1 1 1 1 2 12 12 25 1 1 1 1 12 12 12 12 12 12 12 12 12 12 1	49 0 12 25 0 0 12 24 0 7 13 0 0 12 24 0 7 13 0 0 12 24 0 7 13 0 0 12 12 13 0 0 13 0 0 13 0 0 0 0 0 0 0 0 0 0 0 0 0	17.54 16.40 16.51 16.51 16.43 16.36 18525 18525 19.20 19.48 19.37 18.35 18.44 18.28 18.35 18.45 18.43 17.48 17.48 17.49 17.59	17. 83 16.76 16.66 16.59 16.70 18900 18900 18901 19.52 19.57 19.51 18.60 18.77 18.83 18.69 18.77 18.83 17.76 17.74 17.70 17.80 17.73 17.92 17.72 17.66 16.66 16.69 16.69 16.69 18.69	17.90 16.79 16.89 16.84 16.77 19175 1907.5 19.60 19.53 19.66 18.65 18.73 18.64 18.71 18.78 18.78 17.76 17.76 17.76 17.73	17.5 Tune-up limit (dBm) 20.5 19.5 19.5 18.5 18.5 17.5 Tune-up limit	3 MPR (db) 0 1 1 1 2 2 2 3 3 MPR
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	640AM 640AM 640AM 640AM Chair Prequen 0PSK 0PSK 0PSK 0PSK 0PSK 0PSK 160AM 160AM 160AM 160AM 160AM 160AM 160AM 640AM 640AM 640AM 640AM 640AM 640AM	1 25 25 25 25 25 26 27 26 27 27 27 27 27 27 27 27 27 27 27 27 27	0 0 12 25 0 0 12 24 0 0 7 7 13 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 0 7 7 13 0 0 0 12 24 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	177.54 16.40 16.51 16.43 189.25 189.25 19.20 19.48 18.25 19.20 19.48 18.25 17.48 17.49 17.49 17.49 16.48 16.37 17.59 16.48 16.37 16.59 16.49 16.37	17.83 16.75 16.66 16.59 16.89 18800 18800 18801 18801 18801 18801 18801 18801 18801 18801 18801 18801 17.70 18.67 17.70 18.68 17.70 18.68 17.70 18.68 17.70 18.68 17.70 18.68 18.89 17.70 18.69 18.89 18.89 18.89 18.89	17 90 16.74 16.89 16.84 16.84 16.87 19.87 19.87 19.87 19.87 19.87 19.87 19.87 19.87 19.87 19.87 19.88 18.87 19.88 18.87 19.87 19.88 18.71 17.78 18.73 18.84 18.71 17.76 17.77 16.73 16.87 19.87	17.5 Tune-up linst ddbm1 20.5 19.5 19.5 18.5 17.5 Tune-up linst (dbm1) 20.5 20.5	3 MPR (dB) 0 1 1 2 2 MPR (dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
10 10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5	GGCAM GGAM GGAM Cha GGAM Cha	1 25 25 25 25 25 25 25 25 25 25 25 25 25	49 0 0 12 25 0 0 12 24 0 7 7 13 0 0 12 24 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 15 0 0 0 15 0 0 0 0 0 0 0 0 0 0 0	17.54 16.40 16.51 16.35 18.22 18.22 18.23 18.24 18.25 18.24 18.25	17.83 16.66 16.70 18.67 18.60 18.70 18.60 18.70 18.60 18.70 18.60 18.70 18.60 18.70 18.60 18.70 18.60 18.70 18.60 18.70 17.70 17.80 17.80	17 90 16 24 16 28 26 26 26 26 26 26 26 26 26 26 26 26 26	17.5 Tune-up limit rd9m1 20.5 19.5 19.5 18.5 18.5 17.5 Tune-up limit rd9m1 limit rd9m1	3 MPR (dB) 0 1 1 2 2 3 3 MPR (dB)
10 10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5	GGCAM GGCAM GGCAM GGCAM GGCAM Cha GGCAM Cha Cha Cha CPSK GPSK GPSK GPSK GPSK GPSK GPSK GPSK G	1 25 25 25 25 25 25 25 25 25 25 25 25 25	499 0 112 25 0 0 12 24 0 0 7 13 0 12 24 0 7 13 0 0 12 24 0 7 13 0 0 14 7 0 0 0 17 18 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	17.54 16.40 16.51 16.42 16.52 16.25 16.26	17.83 16.66 16.90 19.90 19.90 18.87 19.90 19.90 19.90 18.87 19.90	17 90 16 24 16 28 26 16 24 16 28 26 16 24 16 28 26 16 24 16 26 26 26 26 26 26 26 26 26 26 26 26 26	17.5 Tune-up linst ddbm1 20.5 19.5 19.5 18.5 17.5 Tune-up linst (dbm1) 20.5 20.5	3 MPR (dB) 0 1 1 2 2 MPR (dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	GGCAM GPSK GPSK GPSK GPSK GPSK GPSK GPSK GPSK	1 25 25 25 25 26 26 27 27 28 27 28 27 28 27 28 27 28 27 28 27 28 27 28 28 28 28 28 28 28 28 28 28 28 28 28	49 0 112 25 0 0 112 24 13 0 0 0 12 24 24 10 0 0 0 12 24 24 10 0 0 0 0 12 24 24 10 0 0 0 0 12 24 24 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	17.54 16.40 16.51 16.32 16.32 16.32 16.32 16.32 16.32 16.32 16.32 16.32 16.32 16.32 16.32 16.32 16.32 16.32 16.32 16.32 16.32 16.32 17.45	17.83 (18.66) (18.76) (18.67) (18.66) (18.76) (18.67) (18.76)	17.90 16.24 16.89 16.87 16.87 16.87 16.87 16.87 16.87 16.87 19.87 19.87 19.88 19.88 19.88 18.87 17.78 18.77 17.77 17.77 17.77 17.78 18.78 18.88 18.88 18.88 18.88 18.88	17.5 Tune-up lint 20.5 19.5 19.5 18.5 18.5 17.5 Tune-up lint 17.5 18.5 17.5 18.5	3 MPR (dB) 0 1 1 2 2 3 MPR (dB) 0 1 1
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	660AM	1 25 25 25 26 27 27 27 27 27 27 27 27 27 27 27 27 27	49 0 12 25 0 0 12 24 24 13 0 0 0 12 24 24 14 15 15 15 15 16 16 16 16 16 16 16 16 16 16 16 16 16	17.54 16.40 16.51 16.33 16.33 16.36 16.36 16.36 16.36 16.37 19.37 19.37 18.48 18.35 17.49 17.49 17.49 17.49 17.49 17.49 17.49 17.49 17.59 16.37	17.83 (19.50)	17.90 16.89 16.87 16.87 16.87 16.87 16.87 16.87 16.87 16.87 19.87 19.87 19.88 19.88 19.88 18.87 17.78 18.77 18.78 18.88	17.5 Tune-up lint 20.5 19.5 19.5 18.5 18.5 17.5 Tune-up lint 17.5 18.5 17.5 18.5	3 MPR (dB) 0 1 1 2 2 3 MPR (dB) 0 1 1
100 100 100 100 100 100 100 100 100 100	660AM	1	49 0 12 25 0 0 12 24 0 7 7 13 0 0 0 12 24 0 0 7 7 13 13 0 0 0 12 24 0 0 7 7 13 13 0 0 0 14 7 7 0 0 0 8 8 14 7 7 0 0 0 8 8 14 0 0 0 0 8 8 14 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1754 16.49 16.51 16.40 16.51 16.40 16.51 16.40 16.51 16.43 16.50 1	1783 16.65 16.75 16.65 16.75 16.65 16.75 16.65 16.75 16.65 16.75 16.67 16.75 16.67 16.75 1	17590 16.24 16.25 16.24 16.27 16.28 16.24 16.27 16.24 16.27 16.27 16.27 16.27 16.27 16.27 16.27 16.27 16.27 17.26 18.27 17.27 16.27 17.27 16.27	17.5 Tune-up limit (IIIII) 20.5 19.5 19.5 18.5 17.5 18.5 17.5 18.5 19.5 19.5 19.5 19.5	3 MPR (db) 0 1 1 2 2 3 MPR (db) 1 1 1 2 2
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	660AM FROM FROM FROM FROM FROM FROM FROM FRO	1 1 25 25 1 1 1 1 1 1 8 8 8 1 1 1 1 1 1 8 8 8 1 1 1 1 1 1 1 8 8 8 1	499 0 122 0 0 122 0 0 122 4 0 7 13 0 0 12 24 0 7 13 0 0 12 24 0 7 13 0 0 0 12 24 0 7 13 0 0 0 12 14 15 16 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	175-54 16-40 16-51 16-40 16-51 16-40 16-51 16-40 16-51 16-40 16-51 16-40	17831 16.69 16.57 16.69 16.57 16.69 16.67 16.69 16.77 16.69 16.78 16.79	17590 16.874 16.874 16.874 16.874 16.874 16.774 16.774 19.775 17.784 18.771 19.875 18.773 19.875 18.774 19.875 19.	17.5 Tune-up limit (dthm) 20.5 19.5 19.5 18.5 18.5 17.5 Tune-up limit (dthm) 20.5 19.5 19.5 19.5	3 MPR (dB) 0 1 1 2 2 3 MPR (dB) 0 1 1 1 1
10 10 10 10 10 10 10 10 10 10 10 10 5 5 5 5	660AM	1	499 0 112 25 0 0 112 25 0 0 112 24 0 0 7 13 0 0 12 24 0 7 13 0 0 12 24 0 7 13 0 0 0 14 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	175-54 16.30 16.31 16.30 16.31 16.32 16.32 16.32 16.32 16.32 16.32 16.33 16.35 16.45 17.46 17.45 17.46 17.46 17.46 17.46 17.46 17.47 17.57 17.50 17.50 18.37 18.37 18.38	178.31 (16.65) (16.75)	17590 16.84 16.87 17.76 18.87 18.71 17.76 18.77 19.67	17.5 Tune-up lint (fifth) 20.5 19.5 19.5 18.5 18.5 17.5 10.6 19.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10	3 MPR (dB) 0 1 1 2 2 3 3 MPR (dB) 0 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	660AM 660AM 660AM 160AM	1 1 25 25 25 26 27 27 27 27 27 27 27 27 27 27 27 27 27	499 0 112 25 0 122 125 0 127 131 0 0 12 24 0 7 133 0 0 12 24 0 7 13 0 0 0 12 24 0 7 13 0 0 0 14 0 0 0 15 16 0 0 0 17 17 18 0 0 0 0 18 18 0 0 0 0 0 0 0 0 0 0 0	175-6 16-40 16-51 16-40 16-51 16-40 16-50 16-40 16-50 16-40 16-50 16-40 16-50 16-40 16-50 16-40 16-50	178.31 (16.05) (16.75) (16.05) (16.75) (16.05) (16.75) (16.75) (16.75) (16.75) (16.75) (16.75) (16.75) (16.75) (16.05) (16.75) (16.05) (16.75) (16.05) (16.75) (16.05) (16.75) (16.05)	17590 16.874 16.89 16.874 16.875 16.874 16.875 16.874 16.875 16.8	17.5 Tune-up lint (filth) 20.5 19.5 19.5 18.5 18.5 17.5 10.0 19.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10	3 MPR (db) 0 1 1 2 2 3 MPR (db) 1 1 1 2 2
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	GGCAM GROWN	1 1 2 2 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	90 12 25 00 17 13 00 0 12 24 0 7 7 13 0 0 0 12 24 0 7 7 13 0 0 0 12 24 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 0 0 12 24 0 0 0 0 12 24 0 0 0 0 0 12 24 0 0 0 0 0 12 24 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	175-54 16-40 16-51 16-40 16-51 16-40 16-51 16-40 16-51 16-40 16-51 16-62 16-62 16-62 16-62 16-62 16-62 16-62 16-62 16-62 16-62 16-63 16-63	17831 16.69 18.60	17590 16.874 16.874 16.874 16.874 16.874 16.774 16.775 1907.5 18.775 18.771 1918.7 17.784 18.784 18.785 18.	17.5 Tune-up limit (fifth) 20.5 19.5 19.5 19.5 18.5 18.5 17.5 19.5 19.5 19.5 19.5 19.5 19.5 19.5 19	3 MPR (dB) 0 1 1 2 2 3 3 MPR (dB) 0 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
100 100 100 100 100 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	GGCAM GROWN	1 1 2 2 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	90 12 25 00 17 13 00 0 12 24 0 7 7 13 0 0 0 12 24 0 7 7 13 0 0 0 12 24 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 0 0 12 24 0 0 0 0 12 24 0 0 0 0 0 12 24 0 0 0 0 0 12 24 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	175-16-40 16-51 16-40 16-51 16-40 16-51 16-40 16-51 16-40 16-51 16-40 16-51 16-40 16-51	17831 16.69 16.57 17.74 17.74 17.74 16.69 16.65 16.57 16.69 16.57 17.74 17.75 16.69 16.57 17.74 17.75 16.69 16.57 17.75	17.90 16.84 16.87 16.87 16.87 16.87 16.87 16.87 16.87 16.87 16.87 19.87 19.87 18.87 18.87 18.77 18.77 18.77 18.77 19.87 18.78 18.89	17.5 Tune-up limit (dbm) 20.5 19.5 19.5 18.5 17.5 18.5 17.5 18.5 19.5 19.5 19.5 19.5 19.5 19.5 19.5 19	3 MPR (db) 0 1 1 2 2 3 3 MPR 2 3 3 MPR 2 2 3 3 MPR 2 2 3 3 MPR 2 3
100 100 100 100 100 100 100 100 100 100	GGCAM GROWN GROW GROWN G	1 1 2 2 5 5 1 1 1 1 1 2 2 5 1 1 1 1 1 1	499 0 112 25 0 122 13 0 14 0 7 13 0 0 12 24 0 7 7 13 0 0 0 12 24 0 7 7 13 0 0 0 14 0 0 0 15 16 0 0 0 17 17 0 0 0 0 0 0 0 0 0 0 0 0 0 0	175-16-49 16-40 16-51 16-49 16-51 16-49 16-51 16-49 16-51 16-52 16	17831 16.69 16.79 16.69 16.70 16.69 16.70 16.69 16.70	17.90 16.84 16.87 16.87 16.87 16.87 16.87 16.87 16.87 16.87 16.87 19.87 19.87 18.73 17.78 18.78 18.78 18.78 18.78 18.78 18.78 18.78 18.78 18.78 18.88 18.88 18.88 18.89	17.5 Tune-up limit (fifth) 20.5 19.5 19.5 19.5 18.5 18.5 17.5 19.5 19.5 19.5 19.5 19.5 19.5 19.5 19	3 MPR (db) 0 1 1 2 2 3 3 MPR 2 3 3 MPR 2 2 3 3 MPR 2 2 3 3 MPR 2 3
100 100 100 100 100 100 100 100 100 100	GGCAM GRAND	1 1 2 2 5 5 1 1 1 1 1 2 2 5 1 1 1 1 1 2 2 5 1 1 1 1	499 0 112 25 0 112 27 0 113 0 0 12 24 0 7 13 0 0 12 24 0 7 13 0 0 12 24 0 7 13 0 0 0 14 0 0 15 0 0 0 16 0 17 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	175-16-16-16-16-16-16-16-16-16-16-16-16-16-	17831 16.69 16.79 16.69 16.70 16.69 16.70 16.69 16.70	17.90 16.84 16.87 16.87 16.87 16.87 16.87 16.87 16.87 16.87 16.87 1907.5 195.7 18.73 17.78 18.78 18.78 18.88 18.88 18.88 18.88 18.89	17.5 Tune-up limit (dtbm) 20.5 19.5 19.5 18.5 17.5 18.5 17.5 18.5 19.5 19.5 19.5 19.5 19.5 19.5 19.5 19	3 MPR (dB) 0 1 1 2 2 3 MPR (dB) 1 1 2 2 3 MPR (dB) 1 1 1 2 2 3 3 MPR (dB) M
100 100 100 100 100 100 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	660AM 660A	1 1 2 2 5 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1	499 0 112 25 0 0 112 26 0 0 112 26 0 0 113 0 0 0 12 26 0 0 7 13 0 0 0 12 26 0 0 7 13 0 0 0 0 12 27 13 0 0 0 0 0 14 0 0 0 0 0 15 0 0 0 0 16 0 0 0 0 17 0 0 0 0 0 18 0 0 0 0 0 19 0 0 0 0 0 0 10 0 0 0 0 0 0 10 0 0 0 0 0	175-16-16-16-16-16-16-16-16-16-16-16-16-16-	17531 1669 1657 1669 1667 1669 1677 1669 16800 16800 16800 16801 16801 17801 18801	17.90 16.84 16.87 16.87 16.87 16.87 16.87 16.87 16.87 19.77 19.80 18.80	17.5 Tune-up limit (dtbm) 20.5 19.5 19.5 18.5 17.5 18.5 17.5 18.5 19.5 19.5 19.5 19.5 19.5 19.5 19.5 19	3 MPR (dB) 0 1 1 2 2 3 MPR (dB) 1 1 2 2 3 MPR (dB) 1 1 1 2 2 3 3 MPR (dB) M
100 100 100 100 100 100 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	660AM 610AM	1 1 2 2 5 5 1 1 1 1 1 2 2 5 1 1 1 1 1 1	49 0 1 12 25 0 0 1 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 0 12 24 0 0 7 7 13 0 0 0 0 12 24 0 0 7 7 13 0 0 0 0 12 24 0 0 7 7 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	175-54 16-40 16-51 16-40 16-51 16-40 16-51 16-40 16-51 16-40 16-51 16-60	17831 16861 16876 16866 16870 16870 16870 16870 16870 16870 16870 16870 16870 17870	17:90 16:84 16:87 16:88 16:87 1907.5 1907.5 18:73 18:7	17.5 Tune-up limit (dbm) 20.5 19.5 19.5 18.5 18.5 17.5 18.5 18.5 18.5 18.5 19.5 19.5 19.5 19.5 19.5 19.5 19.5 19	3 MPR (dB) 0 1 1 2 2 3 MPR (dB) 0 1 1 1 2 3 MPR (dB) 0 1 1 1 1 2
100 100 100 100 100 100 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	660AM 610AM	1 1 2 2 5 5 1 1 1 1 1 2 2 5 1 1 1 1 1 1	49 0 1 12 25 0 0 1 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 0 12 24 0 0 7 7 13 0 0 0 0 12 2 14 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	175-54 16-40 16-51 16-40 16-51 16-40 16-51 16-40 16-51 16-40 16-51 16-62 16-62 16-62 16-62 16-62 16-62 16-62 16-62 16-62 16-62 16-62 16-62 16-63 16-64	17831 16861 16876 16862 16876 16876 16876 16876 16876 16876 16876 17877 17876 17876 17877 17876 17877 18887 17887	17:90 16:84 16:87 16:88 16:87 16:87 16:87 16:87 16:87 19:77 19:88 18:71 18:71 18:71 18:78	17.5 Tune-up lint (dbm) 20.5 19.5 19.5 18.5 18.5 17.5 10.15 18.5 18.5 17.5 18.5 17.5 18.5 17.5 18.5 17.5 18.5 18.5	3 MPR (db) 0 1 1 2 2 3 MPR (db) 1 1 2 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	660AM 610AM	1 1 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	499 0 112 25 0 0 112 25 0 0 112 24 0 0 7 13 0 0 12 24 0 7 13 0 0 12 24 0 0 7 13 0 0 0 14 0 0 15 16 0 0 17 17 18 0 0 0 0 18 18 18 18 18 18 18 18 18 18 18 18 18	175-54 16-40 16-51 16-40 16-51 16-40 16-51 16-40 16-51 16-40 16-51 16-50 16-51	17831 16861 18800 18801 18.65	17:90 16:84 16:87 16:87 16:87 16:87 16:87 16:87 16:87 19:77 19:88 18:71 18:71 18:71 18:78	17.5 Tune-up limit (dbm) 20.5 19.5 19.5 18.5 17.5 18.5 17.5 19.5 19.5 19.5 19.5 19.5 19.5 19.5 19.5 19.5 19.5 19.5 19.5 19.5	3 MPR (dB) 0 1 1 2 2 3 3 MPR (dB) 0 0 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	660AM 610AM	1 1 2 2 5 5 1 1 1 1 1 2 2 5 1 1 1 1 1 1	499 0 112 25 0 0 112 25 0 0 112 24 0 0 7 13 0 0 12 24 0 7 13 0 0 0 12 24 0 0 7 13 0 0 0 14 0 0 15 16 0 0 17 17 18 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	175-54 16-40 16-51 16-40 16-51 16-40 16-51 16-40 16-51 16-40 16-51 16-60	17831 16861 18861 18861 18861 18861 18861 18861 18861 18861 18861 18861 18661	17:90 16:84 16:87 16:87 16:87 16:87 16:87 16:87 16:87 16:87 19:77 19:87 17:87 18:77 19:88 18:89	17.5 Tune-up limit (dbm) 20.5 19.5 19.5 18.5 18.5 17.5 18.5 18.5 18.5 18.5 19.5 19.5 19.5 19.5 19.5 19.5 19.5 19	3 MPR (db) 0 1 1 2 2 3 MPR (db) 1 1 2 3 MPR (db) 0 1 1 1 1 2 1 1 1 1 2 1 1 1 1 1 1 1 1 1
10 10 10 10 10 10 10 10 10 10 10 10 10 1	660AM FROAM	1 1 25 25 25 11 1 1 1 1 1 2 25 1 1 1 1 1	499 0 112 25 0 0 112 24 0 0 7 7 13 0 0 12 24 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 0 14 0 0 0 0 0 0 0 0 0 0 0 0 0 0	175-6 16-40 16-51 16-40 16-51 16-40 16-51 16-40 16-51 16-40 16-51 16-40 16-51	175.81 16.69 16.70 16.69 16.70 16.90 16.70 16.90 16.70 16.90	17590 16.24 16.25 16.24 16.25 16.24 16.25 16.24 16.25	17.5 Tune-up limit (dbm) 20.5 19.5 19.5 18.5 17.5 18.5 17.5 19.5 19.5 19.5 19.5 19.5 19.5 19.5 19.5 19.5 19.5 19.5 19.5 19.5	3 MPR (dB) 0 1 1 2 2 3 MPR (dB) 0 1 1 2 3 MPR (dB) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

		Part 27L	Band only on c	4 (AWS E		otspot On		
SW [MHz		RB Size	RB Offset	Power Low	Power Middle Ch. / Freg.	Power High	Tune-up	MPR
	Cha Frequen			Ch. / Freq. 20050 1720	20175 1732.5	Ch. / Freq. 20300 1745	limit (dBm)	(dB)
20	QPSK QPSK	1 1	0	16.74 16.96	16.99	16.65 16.98	17.5	0
20	QPSK QPSK	1 50	99	16.49 15.90	16.55	16.62	17.5	U
20	QPSK QPSK	50 50	24	15.80 15.76	15.75	15.80 15.73	16.5	1
20	QPSK 16QAM	100	0	15.91	15.96 15.75	15.87		
20	16QAM 16QAM	1	49 99	16.13	16.15 15.69	16.15	16.5	1
20	16QAM 16QAM	50	0 24	15.01	14.89	15.09		
20	16QAM 16QAM	50 100	50	14.77	14.81	14.82	15.5	2
20	64QAM 64QAM	1	0	14.84	14.77	14.83	15.5	2
20 20	64QAM 64QAM	1 50	99	14.70	14.71	14.77		
20 20	64QAM 64QAM	50 50	24 50	13.86	13.78	13.93	14.5	3
20	64QAM Cha	100	0	13.86	13.76 20175	13.96	Tune-up	MPR
15	Frequen		0	1717.5 16.82	1732.5 16.78	1747.5 16.75	limit (dBm)	(dB)
15 15	QPSK QPSK	1	37 74	16.74	16.92 16.58	16.75 16.59	17.5	0
15 15	QPSK QPSK	36 36	0 20	15.79	15.71	15.81		
15	QPSK QPSK	36 75	39	15.71 15.72	15.73 15.69	15.82	16.5	1
15	16QAM	1	0	16.35	16.24	16.33	16.5	1
15 15	16QAM 16QAM	1 36	74	16.21	15.95 14.88	16.16 14.88		
15 15	16QAM 16QAM	36 36	20	14.80 14.79	14.77 14.76	14.89 14.96	15.5	2
15 15	16QAM 64QAM	75 1	0	14.84 15.32	14.76 15.19	14.86 15.33		
15 15	64QAM 64QAM	1	37 74	15.18 15.16	15.40 14.95	15.18 14.93	15.5	2
15 15	64QAM 64QAM	36 36	0 20	13.94 13.93	13.82 13.81	13.98 13.99	14.5	3
15 15	64QAM 64QAM	36 75	39 0	13.71 13.86	13.81 13.72	13.90 13.92		
	Cha Frequen			20000 1715	20175 1732.5	20350 1750	Tune-up limit (dBm)	MPR (dB)
10 10	QPSK QPSK	1	0 25	16.88 16.97	16.88 16.84	16.82 16.95	17.5	0
10 10	QPSK QPSK	1 25	49 0	16.76 15.83	16.72 15.83	16.84 15.86		
10 10	QPSK QPSK	25 25	12 25	15.84 15.76	15.85 15.81	15.92 15.80	16.5	1
10 10	QPSK 16QAM	50 1	0	15.78 16.31	15.78 16.35	15.82 16.45		
10 10	16QAM 16QAM	1	25 49	16.38 16.20	16.05 16.33	16.41 16.37	16.5	1
10 10	16QAM 16QAM	25 25	0 12	14.96 14.89	14.86 14.85	14.97 14.93		
10 10	16QAM 16QAM	25 50	25 0	14.80 14.97	14.81 14.80	14.84 14.94	15.5	2
10 10	64QAM 64QAM	1	0	15.28	15.21	15.27		
			25	15.30	15.32	15.44	15.5	2
10	64QAM 64QAM	1 25	25 49 0	15.30 15.20 14.04	15.32 15.12 13.94	15.44 15.04 14.13	15.5	2
	64QAM	1	49	15.20	15.12	15.04	15.5	3
10 10	64QAM 64QAM 64QAM	1 25 25 25 25 50	49 0 12	15.20 14.04 13.86	15.12 13.94 13.87	15.04 14.13 13.99	14.5 Tune-up	
10 10 10	64QAM 64QAM 64QAM 64QAM 64QAM	1 25 25 25 25 50 nnel	49 0 12 25	15.20 14.04 13.86 13.88 13.92	15.12 13.94 13.87 13.92 13.95	15.04 14.13 13.99 13.95 13.94	14.5	3
10 10 10 10	64QAM 64QAM 64QAM 64QAM 64QAM Cha	1 25 25 25 25 50 nnel cy (MHz)	49 0 12 25 0	15.20 14.04 13.86 13.88 13.92 19975 1712.5	15.12 13.94 13.87 13.92 13.95 20175 1732.5	15.04 14.13 13.99 13.95 13.94 20375 1752.5	14.5 Tune-up limit	3 MPR
10 10 10 10 5 5	64QAM 64QAM 64QAM 64QAM Cha Frequen QPSK QPSK QPSK QPSK QPSK	1 25 25 25 50 nnel cy (MHz) 1	49 0 12 25 0 0 12 24 0 7	15.20 14.04 13.86 13.88 13.92 19975 1712.5 16.79 16.89	15.12 13.94 13.87 13.92 13.95 20175 1732.5 16.76 16.73	15.04 14.13 13.99 13.95 13.94 20375 1752.5 16.81 16.78	Tune-up limit (dBm)	MPR (dB)
10 10 10 10 5 5 5 5	64QAM 64QAM 64QAM 64QAM Cha Frequen QPSK QPSK QPSK QPSK QPSK QPSK QPSK	1 25 25 25 50 nnel cy (MHz) 1 1 1 1 2	49 0 12 25 0 0 12 24 0 7 13	15.20 14.04 13.86 13.88 13.92 19975 1712.5 16.79 16.89 16.71 15.88	15.12 13.94 13.87 13.92 13.95 20175 1732.5 16.76 16.73 16.66 15.69	15.04 14.13 13.99 13.95 13.94 20375 1752.5 16.81 16.78 16.86 15.87	14.5 Tune-up limit (dBm)	3 MPR (dB)
10 10 10 10 10 5 5 5 5 5 5 5 5 5	64QAM 64QAM 64QAM 64QAM Cha Frequen QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	1 25 25 25 25 50 nneel cry (MHz) 1 1 12 12 12 25 1 1 1	49 0 12 25 0 0 12 24 0 7 13 0	15.20 14.04 13.86 13.88 13.92 19975 1712.5 16.79 16.89 16.71 15.88 15.80 15.85 16.30 16.23	15.12 13.94 13.87 13.92 13.95 20175 1732.5 16.76 16.73 16.66 15.69 15.85	15.04 14.13 13.99 13.95 13.95 1752.5 16.81 16.78 16.88 15.87 15.92 15.87 15.88 16.38	Tune-up limit (dBm)	MPR (dB)
10 10 10 10 10 5 5 5 5 5 5 5 5	64QAM 64QAM 64QAM 64QAM 64QAM Cha Frequen QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	1 25 25 25 25 25 25 25 25 25 25 25 25 25	0 12 25 0 12 24 0 7 7 13 0 0 0	15.20 14.04 13.86 13.88 13.92 19975 1712.5 16.79 16.89 16.71 15.88 15.80 15.85 16.30	15.12 13.94 13.87 13.92 13.95 20175 1732.5 16.76 16.73 16.66 15.69 15.85 15.71 15.80 16.27	15.04 14.13 13.99 13.95 13.94 20375 1752.5 16.81 16.78 16.86 15.87 15.92 15.87 15.88 16.33	14.5 Tune-up limit (dBm) 17.5	3 MPR (dB) 0
10 10 10 10 10 5 5 5 5 5 5 5 5 5	64QAM 64QAM 64QAM 64QAM Cha Frequen QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	1 25 25 25 25 50 nneel cry (MHz) 1 1 12 12 12 25 1 1 1	49 0 12 25 0 0 12 24 0 7 13 0 0 12 24 24 24 24 24 24 24 24 24 24 24 24 24	15.20 14.04 13.86 13.88 13.92 19975 1712.5 16.79 16.89 16.71 15.88 15.80 15.85 16.23 16.17 14.96	15.12 13.94 13.87 13.95 20175 1732.5 16.76 16.76 15.69 15.85 15.71 15.80 16.27 16.38	15.04 14.13 13.99 13.95 13.94 20375 1752.5 16.81 16.78 16.86 15.87 15.87 15.88 16.33 16.40 16.33 15.01 14.94	14.5 Tune-up limit (dBm) 17.5	3 MPR (dB) 0
10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5 5	640AM 640AM 640AM 640AM 640AM Cha Frequen OPSK OPSK OPSK OPSK OPSK OPSK OPSK OPSK	1 25 25 25 50 annel ey (MHz) 1 1 1 1 1 2 12 12 12 12 12 12 12 12 12	0 12 25 0 0 12 24 0 7 7 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	15.20 14.04 13.86 13.83 13.92 19975 1712.5 16.79 16.89 16.71 15.88 15.80 15.85 15.80 15.80 14.91 14.96 14.79 14.97	15.12 13.94 13.87 13.92 13.95 20175 16.76 16.73 16.66 15.69 15.85 15.71 16.27 16.38 16.24 14.88 14.86 14.86 14.81	15.04 14.13 13.99 13.95 13.94 20375 16.81 16.78 16.86 15.87 15.87 15.87 15.87 15.87 15.87 14.94 14.91 14.91 14.91	14.5 Tune-up limit (dBm) 17.5 16.5 16.5	3 MPR (dB) 0 1 1 2
10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5 5	64QAM 64QAM 64QAM 64QAM 64QAM 64QAM 64QAM 0PSK 0PSK 0PSK 0PSK 0PSK 0PSK 0PSK 16QAM 16QAM 16QAM 16QAM 16QAM 64QAM 64QAM	1 25 25 50 nnel ey (MHz) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	49 0 12 25 0 0 12 24 0 7 13 0 0 12 24 0 7 13	15.20 14.04 13.86 13.88 13.92 19975 1712.5 16.79 16.89 16.71 15.88 15.80 15.85 16.30 16.23 16.21 14.91 14.96 14.79	15.12 13.94 13.87 13.92 13.95 20175 16.76 16.73 16.76 15.69 15.85 15.71 16.27 16.38 16.27 16.38 14.88 14.88 14.88 14.88	15.04 14.13 13.99 13.95 13.94 20375 16.81 16.78 15.87 15.92 15.87 15.87 15.88 16.33 16.40 16.33 16.40 14.94 14.91	14.5 Tune-up limit (dBm) 17.5 16.5	3 MPR (dB) 0
10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5 5	640AM 640AM 640AM 640AM 640AM 640AM Cha Frequen 0PSK 0PSK 0PSK 0PSK 0PSK 0PSK 160AM 160AM 160AM 160AM 160AM 160AM 160AM	1 25 25 25 25 30 annel 2 25 4 1 1 1 2 12 12 12 12 12 12 12 11 1 1 1	49 0 12 25 0 0 12 24 0 7 13 0 0 0 12 24 0 7 13 0 0 12 24 0 0 12 25	15.20 14.04 13.86 13.88 13.92 19975 1712.5 16.79 16.71 15.88 15.80 15.85 15.80 15.85 16.30 16.23 16.17 14.91 14.96 14.79 14.87 15.36 15.31 15.36 15.31	15.12 13.94 13.87 13.95 20175 1732.5 16.76 16.73 16.66 15.69 15.80 16.27 16.38 16.24 14.88 14.88 14.88 14.88 14.83 15.14	15.04 14.13 13.99 13.95 13.94 20375 16.81 16.78 16.86 15.87 15.92 15.87 15.88 16.33 16.40 16.33 15.01 14.94 14.91 14.83	14.5 Tune-up limit (rdBm) 17.5 16.5 16.5 15.5	3 MPR (dB) 0 1 1 2 2
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM	1 255 25 50 innet cy (MHz) 1 1 1 1 1 1 2 1 2 1 2 1 2 2 5 1 1 1 1 1	49 0 12 25 0 12 24 0 7 13 0 0 12 24 0 7 7 13 0 0 12 24 0 0 12 24 0 0 12 24 0 0 12 24 0 0 0 12 24 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	15.20 14.04 13.86 13.88 13.92 19975 1712.5 16.79 16.71 15.88 15.80 15.80 15.80 16.30 16.23 16.30 16.23 14.96 14.76 14.91 14.96 14.75 15.36 15.30 15.31 15.31 15.31 15.31 15.31 15.31 15.31 15.31 15.31 15.31 15.31 16.31	15.12 13.94 13.87 13.92 13.95 20175 1732.5 16.76 16.73 16.89 15.89 15.80 16.24 14.88 14.88 14.88 14.83 15.14 15.45 15.14 15.49 15.89 15.81 14.83 15.14 15.49	15.04 14.13 13.99 13.95 13.94 20375 1752.5 16.81 16.78 15.87 15.87 15.88 16.33 16.40 16.33 16.40 14.94 14.93 15.25 15.87 15.88 15.87 15.88 15.87 15.88 16.33 16.40 16.33 15.01 14.94 14.93 15.25 15.87 15.88 15.87 15.88 15.87 15.88 15.87 15.88 15.87 15.88 15.87 15.88 15.87 15.88 15.87 15.88 16.33 16.40 16.33 15.25 16.30 16.31	14.5 Tune-up limit (dBm) 17.5 16.5 16.5 15.5 14.5	3 MPR (dB) 0 1 1 2
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	640AM 640A	1 25 25 25 50 50 50 50 50 50 50 50 50 50 50 50 50	49 0 12 25 0 12 24 0 7 13 0 0 12 24 24 24 24 24 25 26 27 27 28 29 20 20 20 20 20 20 20 20 20 20	15.20 14.04 13.86 13.86 13.86 13.86 15.81 15.88 15.88 15.80 16.23 16.17 14.91 15.36 15.36 15.36 15.36 15.36 15.36 15.37 14.91 15.36 15.36 15.37 14.91 15.36 15.37 15.38	15.12 13.97 13.92 13.95 20175 1732-5 16.76 16.73 16.66 15.69 15.87 16.28	15.04 14.13 13.99 13.95 13.95 13.95 1752.5 16.81 16.78 16.86 15.87 15.87 15.87 15.88 16.33 16.40 16.33 15.01 14.94 14.94 14.93 15.25 15.38 15.20 13.85 15.20 13.85 13.89	14.5 Tune-up limit (rdBm) 17.5 16.5 16.5 15.5	3 MPR (dB) 0 1 1 2 2
10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5 5	540AM 540AM 640AM 640A	1 25 25 25 25 25 26 27 27 27 27 27 27 27 27 27 27 27 27 27	0 12 25 0 0 12 24 0 0 7 13 0 0 12 24 0 0 7 13 0 0 0 12 24 0 0 7 13 0 0 0 12 24 0 0 7 13 0 0 0 12 24 0 0 7 13 0 0 0 12 24 0 0 7 13 0 0 0 12 24 0 0 7 13 0 0 0 12 24 0 0 7 13 0 0 0 12 24 0 0 7 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	15.20 14.04 13.86 13.86 13.86 13.86 15.80 16.23 15.51 16.30 15.38	15.12 13.87 13.87 13.87 13.95 20175 16.76 16.78 15.85 15.71 15.80 15.81 14.88 14.88 14.88 14.83 16.83	1504 14.13 13.99 13.95 13.95 13.95 16.81 16.81 16.81 16.81 16.81 16.82 15.87 15.87 15.88 15.87 15.88 15.87 15.88 15.87 15.88 15.87 15.88 15.92 15.87 15.92 15.87 15.92 15.87 15.92 15.87 15.93 1	14.5 Tune-up limit (dBm) 17.5 16.5 16.5 15.5 15.5 14.5	3 MPR (dB) 0 1 1 1 2 2 3 MPR
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	640,0M	1 25 25 25 25 50 annel cy (MHz) 1 1 1 1 2 1 2 1 2 1 1 1 1 1 1 2 1 2 1	0 12 25 0 0 0 12 24 0 0 0 12 24 0 0 0 0 12 24 0 0 0 0 12 24 0 0 0 0 12 24 0 0 0 0 0 12 24 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	15.20 14.04 13.86 13.86 13.88 15.80 15.85 15.80 15.85 15.80 15.85 15.80 15.85 15.80 15.85 15.80 15.85 15.80 15.85 15.80 15.85 15.80 15.85 15.80 15.85 15.80 15.85 15.80 15.85 15.85 15.85 15.80 15.85 15.85 16.30	15.12 13.87 13.87 13.87 13.95 20175 16.78 16.73 16.88 15.89 15.89 16.27 16.38 16.23 16.38 16.23 16.38 16.23 16.38 16.23 16.38 16.23 16.38	1504 1399 1395 1395 1395 1394 1007 1681 1682 1688 1587 1587 1587 1587 1587 1587 1587 15	14.5 Tune-up limit r/dtml 17.5 16.5 16.5 15.5 15.5 14.5 14.6	3 MPR (dB) 0 1 1 2 2 3 3 MPR (dB)
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	BEDDM BEDDM	1 25 25 25 25 25 25 25 25 25 25 25 25 25	0 12 25 0 0 12 24 0 7 7 13 0 0 12 24 0 7 7 13 0 0 0 12 24 0 7 7 13 0 0 0 12 24 0 7 7 13 0 0 0 12 24 0 7 7 13 0 0 0 12 24 0 7 7 13 0 0 0 12 24 0 7 7 13 0 0 0 12 24 0 7 7 13 13 0 0 0 14 7 7 15 15 15 15 15 15 15 15 15 15 15 15 15	15.20 13.86 13.88 13.88 13.88 13.88 13.88 15.88	15:12 13:87 13:87 13:87 13:95 20175 16:76 16:73 16:86 15:87 16:88 16:27 16:88 16:27 16:38 16:28 16:38 16:28 16:38	1504 1343 1399 1385 1399 1395 1394 1007 1681 1682 1688 1688 1688 1688 1688 1633 1681 1632 1681 1632 1681 1632 1632 1632 1632 1632 1632 1632 163	14.5 Tune-up limit r/dtml 17.5 16.5 16.5 15.5 15.5 14.5 14.6	3 MPR (dB) 0 1 1 2 2 3 3 MPR (dB)
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	BEDDAM BEDDAM Cham Cham Cham Cham Cham Cham Cham Cham	1 25 25 25 25 25 25 25 25 25 25 25 25 25	0 12 25 0 0 12 24 0 7 7 13 0 0 12 24 0 7 7 13 0 0 0 14 7 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	15.20 13.86 13.88 13.88 13.88 13.88 13.88 15.89 1997; 16.79 16.79 16.79 16.79 16.79 16.79 16.79 16.79 16.79 16.79 16.79 16.79 16.79 16.79 16.79 16.23 15.85 15.80 16.23 16.23 16.23 16.23 16.23 16.23 16.23 16.29 16.29 16.29 16.29 16.29 16.29 15.50 16.29 16.20	15.12 13.94 13.87 13.94 13.87 13.94 13.87 13.92 13.95 13.95 13.95 13.95 13.95 13.95 13.95 13.95 13.95 14.87 15.96 15.85 15.71 15.80 15.81 13.99 13.88 13.95 15.14 13.95 15.19 13.95 15.19 13.88 13.96 15.19 13.97 13.88 13.97 13.87	1504 1413 1399 1394 1007 1792 1681 1686 1688 1587 1587 1587 1587 1587 1587 1587 15	14.5 Tune-up lint (ofbm) 17.5 16.5 16.5 15.5 15.5 15.5 14.5 14.5 14.5 16.5 17.5	3 MPR (dB) 0 1 1 2 2 3 MPR (dB) 0 1 1
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	BEDDAM BEDDAM Cham Cham Cham Cham Cham Cham Cham Cham	1 25 25 25 26 27 27 27 27 27 27 27 27 27 27 27 27 27	69 0 122 5 0 0 122 6 0 0 12 24 0 0 7 13 0 0 12 24 0 7 13 0 0 0 12 24 0 7 13 0 0 0 14 0 0 0 0 14 0 0 0 0 0 0 0 0 0 0	15.20 14.04 13.86 13.87 14.04 13.86 13.87 14.04 13.86 13.87 14.04 13.86 13.87 14.07 15.07 16.07	15.12 13.94 13.87 13.94 13.87 13.94 13.87 13.92 13.95 13.95 13.95 13.95 13.95 13.95 13.95 13.95 13.95 13.95 14.87 15.95 15.87 14.88 13.99 13.95 15.19 13.87 13.95	1504 1413 1399 2007 1792 1681 1792 1681 1686 1686 1688 1688 1688 1688 168	14.5 Tune-up limit (dbm) 17.5 16.5 16.5 15.5 14.5 Tune-up limit (dbm) 17.5 17.5	3 MPR (dB) 0 1 1 2 2 3 MPR (dB) 0
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	BEDDAM BEDDAM GREAT BEDDAM Cham Cham Cham Cham Cham Cham Cham Cham	1 1 25 25 25 26 27 27 27 27 27 27 27 27 27 27 27 27 27	69 0 0 0 125 0 0 0 125 0 0 0 125 0 0 0 125 0 0 0 125 0 0 0 125 0 0 0 0 125 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	15.20 14.04 13.86 13.87 14.04 13.86 13.86 13.87 14.04 14.04 14.06 13.86	15.12 13.87 13.87 13.92 13.92 13.92 13.92 13.92 14.92 15.92 16.73 15.93 15.90 15.90 15.90 15.90 15.90 15.90 15.90 15.90 15.90 15.90 15.90 15.90 15.90 15.90 15.90 16.73 16.73 16.73 16.84 16.85 16.84 16.85 16.84 16.85 16	1504 11491 11399 11394 1294 1294 11722 11722 11722 11722 1188 1188 1188	14.5 Tune-up lint (ofbm) 17.5 16.5 16.5 15.5 15.5 15.5 14.5 14.5 14.5 16.5 17.5	3 MPR (dB) 0 1 1 2 2 3 MPR (dB) 0 1 1
10 10 10 10 10 10 10 5 5 5 5 5 5 5 5 5 5	BEDDAM BE	1 1 25 25 25 26 26 27 27 27 27 27 27 27 27 27 27 27 27 27	69 0 0 0 125 0 0 0 125 0 0 0 125 0 0 0 125 0 0 0 125 0 0 0 125 0 0 0 125 0 0 0 125 0 0 0 125 0 0 0 125 0 0 0 0 125 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	15.20 14.04 13.80 13.81 13.82 13.82 13.82 14.82 15.82 16.87 16.87 16.87 16.88 15.88 16.89 16.89 16.89 16.89 16.89 16.89 16.89 16.89 16.89 16.89	15.12 13.94 13.87 13.92 13.92 13.92 13.92 10.15 17.25 16.26 16.26 15.00	1504 11413 11395 11395 11395 11395 11395 11395 11597 11628 1	14.5 Tune-up limit (dtlm) 17.5 16.5 16.5 15.5 14.5 14.5 14.5 16.5 16.5 16.5 16.5	3 MPR (dB) 0 1 1 2 2 3 3 MPR (dB) 0 1 1 1 1 1 1 1 1
10 10 10 10 10 10 10 10 10 5 5 5 5 5 5 5	BEDDAM BEDDAM BEDDAM Cha BEDDAM B	1 1 25 25 25 26 26 27 27 27 27 27 27 27 27 27 27 27 27 27	69 0 0 125 0 0 125 0 0 126 0 127 13 0 0 12 124 0 7 7 13 0 0 0 12 124 0 7 7 13 0 0 0 12 124 0 124	15.20 14.04 13.86 13.87 13.87 13.87 13.87 14.07 15.20 16.20 16.21 15.80 15.80 16.30	15.12 13.94 13.87 13.92 13.92 13.92 13.92 10.15 17.2.5 16.26 16.26 15.00	1504 11413 11399 11394 11395 11395 11395 117225 117225 11628	14.5 Tune-up limit (dtlm) 17.5 16.5 16.5 15.5 14.5 14.5 14.5 16.5 16.5 16.5 16.5	3 MPR (dB) 0 1 1 2 2 3 3 MPR (dB) 0 1 1 1 1 1 1 1 1
10 10 10 10 10 10 10 10 10 10 5 5 5 5 5	BEDDAM BEDDAM Chamber BEDDAM Chamber BEDDAM Chamber BEDDAM Chamber GPBK GPBK GPBK GPBK FREQAM FREDAM FREDAM FREDAM FREDAM Chamber FREDAM FREDAM FREDAM Chamber FREDAM FRED	1 1 2 25 25 1 1 1 1 1 1 2 25 1 1 1 1 1 1	69 0 0 125 0 0 127 13 0 0 12 124 0 7 7 13 0 0 0 12 124 0 7 7 13 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	15.20 13.80 13.80 13.92 13.92 13.92 17.12.5 16.27 16.27 16.27 16.28 15.80 15.80 15.80 15.80 15.80 16.30 16.30 16.30 16.31	15.12 13.92 13.97 13.97 13.92 13.92 13.92 13.92 10.15 17.2.5 16.73 15.71 15.71 15.71 15.71 15.71 15.82 15.82 15.82 15.84	1504 11491 11992 11992 11994 1	14.5 Tune-up limit (dbm) 17.5 16.5 16.5 15.5 15.5 14.5 16.5 16.5 16.5 16.5 16.5	3 MPR (dB) 0 1 1 2 3 MPR (dB) 0 1 1 2 3 MPR (dB) 1 1 2
10 10 10 10 10 10 10 10 10 10 5 5 5 5 5	BEDDAM BEDDAM Chamber Services GPBK GPBK FREE GPBK GPBK FREE GPBK GPBK FREE GPBK GPBK GPBK GPBK GPBK GPBK GPBK GPBK	1 1 25 25 25 11 1 1 1 1 1 1 1 1 1 1 1 1	69 0 1 12 25 0 0 1 12 26 0 7 13 0 0 12 26 0 7 13 0 0 0 12 26 0 0 7 13 0 0 0 12 26 0 0 7 13 0 0 0 12 26 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	15.20 13.86 13.87 14.97 14.87 15.38 16.89 16.89 16.89 16.35	15.12 13.92 13.97 13.97 13.92 13.92 13.92 13.92 10.15 17.2.5 16.77 16.73 16.73 16.73 16.74 15.89 1	1504 11413 11395 11394 11395 11394 11395 11395 11587 1	14.5 Tune-up limit (dbm) 17.5 16.5 16.5 15.5 15.5 14.5 16.5 16.5 16.5 16.5 16.5	3 MPR (dB) 0 1 1 2 3 MPR (dB) 0 1 1 2 3 MPR (dB) 1 1 2
10 10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5	BEDDAM BEDDAM Chambers BEDDAM Chambers BEDDAM Chambers BEDDAM Chambers BEDDAM B	1 1 25 25 25 11 1 1 1 1 1 1 1 1 1 1 1 1	69 0 12 25 0 0 12 24 0 7 13 0 0 12 24 0 7 7 13 13 0 0 0 12 24 0 0 7 7 13 13 0 0 0 14 14 17 0 0 0 6 14 14 0 0 0 6 14 14 0 0 0 0 6 14 14 0 0 0 0 6 14 14 0 0 0 0 6 14 14 0 0 0 0 6 14 14 0 0 0 0 6 14 14 0 0 0 0 6 14 14 0 0 0 0 6 14 14 0 0 0 0 6 14 14 0 0 0 0 6 14 14 0 0 0 0 6 14 14 0 0 0 0 6 14 14 0 0 0 0 6 14 14 0 0 0 0 6 14 14 0 0 0 0 6 14 14 0 0 0 0 6 14 14 0 0 0 0 6 14 14 0 0 0 0 6 14 14 0 0 0 0 6 14 14 0 0 0 0 0 6 14 14 0 0 0 0 0 6 14 14 0 0 0 0 0 6 14 14 0 0 0 0 0 6 14 14 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	15.20 13.80 13.80 13.92 13.92 13.92 15.20 15.20 15.20 15.20 15.80 16.30	15.12 13.92 13.97 13.97 13.92 13.92 13.92 13.92 10.15 17.2.5 16.2.6 15.00	1504 11491 11399 11394 11395 11395 11395 117225 11628	14.5 Tune-up limit (dSlm) 17.5 16.5 16.5 15.5 15.5 16.5 16.5 16.5 16	3 MPR (dB) 0 1 1 2 2 3 MPR (dB) 1 1 2 2 3 MPR (dB) 1 1 1 2 2 3 3 MPR (dB) 1 1 1 2 2 3 3 MPR (dB) 1 1 1 2 2 3 3 MPR (dB) 1 1 1 1 2 2 3 3 MPR (dB) 1 1 1 1 2 2 3 3 MPR (dB) 1 1 1 1 2 2 3 3 MPR (dB) 1 1 1 1 1 1 2 2 3 3 MPR (dB) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
100 100 100 100 100 100 100 100 100 100	BEDDAM BEDDAM GPBK GPBK FROMM GPBK GPBK GPBK GPBK GPBK GPBK GPBK GPBK	1 1 2 25 25 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 0 0 125 0 0 0 126 0 0 0 127 13 0 0 12 124 0 0 7 7 13 0 0 0 12 124 0 0 7 7 13 0 0 0 12 124 0 0 7 7 13 0 0 0 12 124 0 0 7 7 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	15.20 13.80 13.92 13.92 13.92 15.20 15.20 16.70 16.80 15.80 16.30	15.12 13.94 13.87 13.92 13.92 13.92 13.92 10.15 16.26 16.26 16.26 16.26 15.00 16.27 16.28 15.00 16.27 16.28 15.00 16.21 15.00 16.21 15.00 16.21	1504 11491 11399 11395 11395 11395 11395 11395 11628 1	14.5 Tune-up limit (dbm) 17.5 16.5 16.5 15.5 15.5 14.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16	3 MPR (dB) 0 1 1 2 2 3 3 MPR 1 1 1 2 2 3 3
10 10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5	BEDDAM BEDDAM GPBK GPBK FROMM	1 1 2 25 25 1 1 1 1 1 1 1 1 1 1 1 1 1 1	69 0 0 0 125 0 0 0 127 13 0 0 12 124 0 7 7 13 0 0 0 12 124 0 7 7 13 0 0 0 12 124 0 0 7 7 13 0 0 0 12 124 0 0 7 7 13 0 0 0 12 124 0 0 7 7 13 0 0 0 12 124 0 0 1	15.20 13.80 13.92 13.92 13.92 15.20 15.20 16.27 16.87 15.88 15.80 16.30	15.12 13.94 13.87 13.92 13.92 13.92 13.92 10.15 17.2.5 16.2.6 16.2.6 15.0.0 15.	1504 11399 1399 1394 1395 1394 1628 1628 1628 1628 1628 1628 1628 1628	14.5 Tune-up limit (dthm) 17.5 16.5 16.5 15.5 15.5 14.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16	3 MPR (dB) 0 1 1 2 2 MPR (dB) 0 1 1 2 3 MPR (dB) 0 1 1 1 2 3 MPR (dB)
10 10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5	BEDDAM BEDDAM Cham BEDDAM Cham BEDDAM Cham BEDDAM Cham BEDDAM BED	1 1 2 25 25 1 1 1 1 1 1 2 25 1 1 1 1 1 1	69 0 0 125 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	15.20 14.04 13.86 13.97 14.04 13.87 13.88 13.92 13.92 14.92 15.88 15.80 16.30	15.12 13.94 13.87 13.92 13.92 13.92 13.92 10.15 17.2.5 16.2.6 16.2.6 15.0.0 15.	1504 11413 11399 11394 11395 11395 11395 11395 11628 1	14.5 Tune-up limit (55m) 17.5 16.5 16.5 15.5 15.5 14.5 17.5 16.5 16.5 17.5 16.5 17.5 16.5 17.5 16.5 17.5 16.5 17.5 16.5 17.5 17.5 17.5 17.5 18.5 18.5 19.5 19.5 19.5 19.5 19.5 19.5 19.5 19	3 MPR (dB) 0 1 1 2 2 3 MPR (dB) 1 1 2 2 3 MPR (dB) 1 1 1 2 2 3 3 MPR (dB) 1 1 1 2 2 3 3 MPR (dB) 1 1 1 2 2 3 3 MPR (dB) 1 1 1 1 2 2 3 3 MPR (dB) 1 1 1 1 2 2 3 3 MPR (dB) 1 1 1 1 2 2 3 3 MPR (dB) 1 1 1 1 1 1 2 2 3 3 MPR (dB) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
100 100 100 100 100 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	BEDDAM BEDDAM Cham Cham Cham Cham Cham Cham Cham Cham	1 1 25 25 25 26 26 27 27 27 27 27 27 27 27 27 27 27 27 27	69 0 12 25 0 0 12 24 0 7 7 13 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 0 12 24 0 0 0 0 12 24 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	15.20 13.84 13.84 15.85 16.30 15.86 16.30 15.36 16.37 15.37	15.12 13.94 13.87 13.94 13.87 13.94 13.87 13.95	1504 1399 1394 1394 1394 1394 1686 1587 1688 1688 1688 1688 1688 1688 1688 16	14.5 Tune-up limit (dthm) 17.5 16.5 16.5 15.5 15.5 14.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16	3 MPR (dB) 0 1 1 2 2 MPR (dB) 0 1 1 2 3 MPR (dB) 0 1 1 1 2 3 MPR (dB)
100 100 100 100 100 100 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	BEDDAM BEDDAM Chambers BEDDAM Chambers BEDDAM Chambers BEDDAM Chambers BEDDAM B	1 1 2 25 25 1 1 1 1 1 2 2 25 1 1 1 1 1 2 2 25 1 1 1 1	64 64 64 64 64 64 64 64 64 64 64 64 64 6	15.20 13.80 13.92 13.92 13.92 13.92 15.20 15.20 16.21 15.80 15.80 15.80 15.80 16.21 15.80 16.21	15.12 13.94 13.87 13.92 13.92 13.92 13.92 10.15 17.02 16.27 16.26 16.26 15.00	1504 11491 11395 11394 11395 11395 11395 11395 11587 1	14.5 Tune-up limit (dbm) 17.5 16.5 16.5 15.5 15.5 14.5 16.5 15.5 16.5 17.5 16.5 17.5 17.5 17.5 17.5	3 MPR (dB) 0 1 1 2 2 3 MPR (dB) 1 1 2 3 MPR (dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
100 100 100 100 100 100 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	BEDDAM BEDDAM Cham BEDDAM Cham Cham Cham Cham Cham Cham Cham Cham	1 1 2 25 25 1 1 1 1 1 2 25 1 1 1 1 1 2 25 1 1 1 1	0 0 122 0 0 0 123 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	15.20 14.04 13.86 13.92 13.92 13.92 17.12.5 16.79 16.87 16.89 16.80 16.3	15.12 13.94 13.87 13.92 13.95 13.94 13.87 13.92 13.95 13.92 13.95 13.92 13.95 13.92 13.95 13.92 13.95 14.95 15.95 15.71 15.95 15.71 15.70 15.75 15.95 15.71 15.75 15.95 15.71 15.75 15.95 15.75 15.75 15.95 15.75 15.95 15.75 15.95 15.75 15.95 15.75 15.95 15.75 15.95	1504 11413 11399 11394 1204 1204 1204 1204 11395 11524 11628	14.5 Tune-up limit (dbm) 17.5 16.5 16.5 15.5 15.5 14.5 16.5 15.5 16.5 17.5 16.5 17.5 17.5 17.5 17.5	3 MPR (dB) 0 1 1 2 2 3 MPR (dB) 1 1 2 3 MPR (dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
100 100 100 100 100 100 100 100 100 100	BEDDAM BEDDAM Cham BEDDAM Cham BEDDAM Cham BEDDAM Cham BEDDAM Cham BEDDAM BEDDA	1 1 2 25 25 25 25 25 25 25 25 25 25 25 25 2	0 0 122 24 0 7 13 0 0 12 24 0 7 13 0 0 12 24 0 7 13 0 0 0 14 0 14 0 14 0 14 0 14 0 15 0 15	15.20 14.04 13.86 13.92 14.04 13.87 13.88 13.92 14.92 15.76 16.79 16.79 16.83 16.89	15.12 13.94 13.87 13.92 13.95 13.94 13.87 13.92 13.95 13.92 13.95 13.92 13.95 13.92 13.95 13.92 13.95 14.95 15.95	1504 11413 11395 11394 11395 11395 11395 11597 11621 1621 1621 1621 1621 1621 1621 1621 1621 1621 1621 1621 1621 1	14.5 Tune-up limit (dflm) 17.5 16.5 16.5 15.5 15.5 14.5 16.5 16.5 16.5 17.5 16.5 17.5 16.5 17.5 16.5 17.5 16.5 16.5 17.5 16.5	3 MPR (dB) 0 1 1 2 2 3 MPR (dB) 0 1 1 2 3 MPR (dB) 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
100 100 100 100 100 100 100 100 100 100	BEDDAM BEDDAM GRADE BEDDAM Cham Cham Cham Cham Cham Cham Cham Cham	1 1 2 25 25 25 25 25 25 25 25 25 25 25 25 2	0 0 122 24 0 7 13 0 0 12 24 0 7 13 0 0 12 24 0 7 13 0 0 0 14 14 14 14 14 14 14 14 14 14 14 14 14	15.20 13.84 13.84 13.84 13.84 13.84 13.84 13.84 13.84 13.85 16.85	15.12 13.94 13.87 13.92 13.92 13.92 13.92 13.92 10.15 17.2.5 16.73 15.80 15.80 15.80 15.81 15.82 15.82 15.82 15.82 15.82 15.82 15.82 15.82 15.82 15.82 15.82 15.84 15.82 15.84 15.82 15.82 15.82 15.82 15.82 15.82 15.82 15.82 15.82 15.82 15.82 15.82 15.82 15.82 15.82 15.82 15.84 15.82 15.84	1504 11413 11395 11394 11395 11395 11395 11597 11628 10648 10648 10648 10648 10648 10648 10648 10648 10648 10648 1	14.5 Tune-up limit (dbm) 17.5 16.5 16.5 15.5 15.5 15.5 16.5 16.5 17.5 16.5 17.5 16.5 17.5 17.5 17.5 17.5 17.5 17.5 17.5 17	3 MPR (dB) 0 1 1 2 2 3 MPR (dB) 0 1 1 2 3 MPR (dB) 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
100 100 100 100 100 100 100 100 100 100	BEDDAM BEDDAM Cham BEDDAM BEDA	1 1 2 25 25 25 25 25 25 25 25 25 25 25 25 2	0 0 122 0 0 0 123 0 0 0 124 0 0 0 125 0 0 0 126 0 0 0 127 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	15.20 13.84 13.84 13.84 13.84 13.85 15.36 16.37 16.38 16.39	15.12 13.92 13.97 13.92 13.92 13.92 13.92 13.92 10.95 17.2.2.5 16.73 16.73 16.73 16.73 16.74 16.84 14.89 14.89 14.89 15.86 16.84 16.84 16.84 16.84 16.84 16.84 16.84 16.84 16.84 16.84 16.84 16.84 16.84 16.84 16.84 16.84 16.85 16.84 16.85	1504 1399 1394 2094 2094 2094 2094 2094 2094 2094 20	14.5 Tune-up limit (dbm) 17.5 16.5 16.5 15.5 15.5 16.5 16.5 16.5 16	3 MPR (dB) 0 1 1 2 2 3 3 MPR (dB) 0 1 1 1 2 2 3 3 MPR (dB) 1 1 1 2 2 3 3 MPR (dB) 0 0 1 1 1 1 1 1 2 2 3 3 MPR (dB) 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
10 10 10 10 10 10 10 10 10 10 10 10 10 1	BEDDAM	1 1 25 25 25 11 1 1 1 1 2 25 1 1 1 1 1 1	69 0 12 25 0 0 12 24 0 7 7 13 0 0 12 24 0 7 7 13 0 0 0 12 24 0 7 7 13 0 0 0 12 24 0 7 7 13 0 0 0 12 24 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 0 12 24 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	15.20 13.86 13.92 13.92 15.20 16.71 15.20 16.20 16.71 15.20 16.20	15.12 13.94 13.97	1504 1431 1399 1394 1459 1459 1459 1459 1459 1459 1459 14	14.5 Tune-up limit (dflm) 17.5 16.5 16.5 15.5 15.5 14.5 16.5 16.5 16.5 17.5 16.5 17.5 16.5 17.5 16.5 17.5 16.5 16.5 17.5 16.5	3 MPR (dB) 0 1 1 2 2 3 MPR (dB) 0 1 1 2 3 MPR (dB) 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

			Band 7	(2600MH 27 Hotspe	z Band) ot On			
BW [MHz]	Modulation	RB Size	RB Offset	Power Low	Power Middle	Power High	Ŧ	
DVV [MI12]		ND 3ize	NB Oliset	Ch. / Freq.	Ch. / Freq.	Ch. / Freq.	Tune-up limit	MPR (dB)
	Cha	nnel cy (MHz)		20850 2510	21100	21350 2560	(dBm)	(UD)
20	Frequen	cy (MHZ)	0	19.32	2535 19.50	19 41		
20	QPSK	1	49	19.40	19.42	19.41	20	0
20	QPSK	1	99	19.04	19.03	19.06		
20	QPSK	50	0	18.18	18.40	18.32		
20 20	QPSK QPSK	50 50	24 50	18.35	18.23	18.26	19	1
20	QPSK	100	0	18.26	18.32	18.30		
20	16QAM	1	0	18.61	18.46	18.40		
20	16QAM	1	49	18.87	18.69	18.73	19	1
20	16QAM	1	99	18.58	18.51	18.50		
20	16QAM 16QAM	50 50	0 24	17.24	17.21	17.30		
20 20	16QAM	50	50	17.37	17.31	17.32	18	2
20	16QAM	100	0	17.36	17.42	17.38		
20	64QAM	1	0	17.47	17.17	17.09		
20	64QAM	1	49	17.58	17.56	17.44	18	2
20 20	64QAM 64QAM	1 50	99	17.57 16.25	17.19 16.20	17.11 16.27		
20	64QAM	50	24	16.36	16.28	16.32		
20	64QAM	50	50	16.49	16.31	16.41	17	3
20	64QAM	100	0	16.34	16.29	16.29		
		nnel		20825	21100	21375	Tune-up limit	MPR
	Frequen			2507.5	2535	2562.5	(dBm)	(dB)
15 15	QPSK QPSK	1	0 37	19.27	19.08	19.05 19.36	20	0
15 15	QPSK	1	37 74	19.43	19.44	19.36	20	J
15	QPSK	36	0	18.19	18.18	18.17		
15	QPSK	36	20	18.37	18.25	18.20	19	1
15	QPSK	36	39	18.30	18.33	18.31		
15 15	QPSK 16QAM	75 1	0	18.33 18.66	18.31 18.52	18.19 18.56		
15	16QAM	1	37	18.95	18.90	18.84	19	1
15	16QAM	1	74	18.68	18.72	18.60		
15	16QAM	36	0	17.32	17.26	17.26		
15	16QAM	36	20	17.42	17.35	17.28	18	2
15 15	16QAM 16QAM	36 75	39 0	17.38	17.26 17.22	17.33		
15	64QAM	1	0	17.64	17.24	17.19		
15	64QAM	1	37	17.69	17.52	17.47	18	2
15	64QAM	1	74	17.44	17.30	17.38		
15	64QAM	36	0	16.30	16.25	16.28		
15 15	64QAM 64QAM	36 36	20 39	16.41	16.32 16.32	16.36 16.37	17	3
15	64QAM	75	39	16.42	16.32	16.37		
	Cha			20800	21100	21400	Tune-up	MPR
	Frequen			2505	2535	2565	limit (dBm)	
10	QPSK	1	0	19.27	19.29	19.24		
10	QPSK	1	25	19.35	19.35	19.23	20	0
10 10	QPSK QPSK	1 25	49 0	19.34	19.27 18.18	19.18 18.13		
10	QPSK	25	12	18.34	18.27	18.23		
10	QPSK	25	25	18.30	18.27	18.22	19	1
10	QPSK	50	0	18.36	18.25	18.27		
10 10	16QAM 16QAM	1	0	18.79	18.70	18.66	19	1
10	16QAM 16QAM	1	25 49	18.78	18.84 18.65	18.83 18.69	19	
10	16QAM	25	0	17.32	17.27	17.13		
10	16QAM	25	12	17.36	17.31	17.31	18	2
10	16QAM	25	25	17.44	17.26	17.23	10	2
10 10	16QAM 64QAM	50 1	0	17.33 17.46	17.32	17.24		
						17.41		
	64QAM	1	25		17.39 17.45	17.41 17.28	18	2
10 10	64QAM 64QAM	1	49	17.55 17.44	17.39 17.45 17.36	17.41 17.28 17.41	18	2
10 10 10	64QAM 64QAM 64QAM	1 25	49 0	17.55 17.44 16.24	17.45 17.36 16.32	17.28 17.41 16.18	18	2
10 10 10 10	64QAM 64QAM 64QAM 64QAM	1 25 25	49 0 12	17.55 17.44 16.24 16.42	17.45 17.36 16.32 16.26	17.28 17.41 16.18 16.33	18	2
10 10 10 10 10	64QAM 64QAM 64QAM 64QAM 64QAM	1 25 25 25	49 0 12 25	17.55 17.44 16.24 16.42 16.46	17.45 17.36 16.32 16.26 16.38	17.28 17.41 16.18 16.33 16.29		
10 10 10 10	64QAM 64QAM 64QAM 64QAM	1 25 25	49 0 12	17.55 17.44 16.24 16.42	17.45 17.36 16.32 16.26	17.28 17.41 16.18 16.33	17 Tune-up	3
10 10 10 10 10	64QAM 64QAM 64QAM 64QAM 64QAM 64QAM Cha	1 25 25 25 25 50	49 0 12 25	17.55 17.44 16.24 16.42 16.46 16.43	17.45 17.36 16.32 16.26 16.38 16.33 21100	17.28 17.41 16.18 16.33 16.29 16.26	17	
10 10 10 10 10 10	64QAM 64QAM 64QAM 64QAM 64QAM Cha Frequen QPSK	1 25 25 25	49 0 12 25 0	17.55 17.44 16.24 16.42 16.46 16.43 20775 2502.5 19.26	17.45 17.36 16.32 16.26 16.38 16.33	17.28 17.41 16.18 16.33 16.29 16.26 21425 2567.5	Tune-up limit (dBm)	3 MPR (dB)
10 10 10 10 10 10 5 5	64QAM 64QAM 64QAM 64QAM 64QAM Cha Frequen QPSK QPSK	1 25 25 25 25 50	49 0 12 25 0	17.55 17.44 16.24 16.42 16.46 16.43 20775 2502.5 19.26 19.45	17.45 17.36 16.32 16.26 16.38 16.33 21100 2535 19.14 19.20	17.28 17.41 16.18 16.33 16.29 16.26 21425 2567.5 19.19	17 Tune-up limit	3
10 10 10 10 10 10 10 5 5	64QAM 64QAM 64QAM 64QAM 64QAM Cha Frequen QPSK QPSK	1 25 25 25 50 nnel cy (MHz) 1 1	49 0 12 25 0 0	17.55 17.44 16.24 16.42 16.46 16.43 20775 2502.5 19.26 19.45 19.17	17.45 17.36 16.32 16.26 16.38 16.33 21100 2535 19.14 19.20	17.28 17.41 16.18 16.33 16.29 16.26 21425 2567.5 19.19 19.47 19.22	Tune-up limit (dBm)	3 MPR (dB)
10 10 10 10 10 10 5 5	64QAM 64QAM 64QAM 64QAM 64QAM Cha Frequen QPSK QPSK	1 25 25 25 25 50	49 0 12 25 0	17.55 17.44 16.24 16.42 16.46 16.43 20775 2502.5 19.26 19.45 19.17	17.45 17.36 16.32 16.26 16.38 16.33 21100 2535 19.14 19.20	17.28 17.41 16.18 16.33 16.29 16.26 21425 2567.5 19.19 19.47 19.22 18.18	Tune-up limit (dBm)	MPR (dB)
10 10 10 10 10 10 10 5 5 5	64QAM 64QAM 64QAM 64QAM 64QAM Cha Frequen QPSK QPSK QPSK QPSK	1 25 25 25 50 nnel cy (MHz) 1 1 1	49 0 12 25 0 0	17.55 17.44 16.24 16.42 16.43 20775 2502.5 19.26 19.45 19.17 18.21	17.45 17.36 16.32 16.26 16.38 16.33 21100 2535 19.14 19.20 19.20 18.12	17.28 17.41 16.18 16.33 16.29 16.26 21425 2567.5 19.19 19.47 19.22 18.18 18.16	Tune-up limit (dBm)	3 MPR (dB)
10 10 10 10 10 10 10 5 5 5 5 5 5	64QAM 64QAM 64QAM 64QAM 64QAM Cha Frequen QPSK QPSK QPSK QPSK QPSK QPSK QPSK	1 25 25 25 50 nnel cy (MHz) 1 1 1 1 1 2 12 12 25	0 12 25 0 0 12 24 0 7 13 0 0	17.55 17.44 16.24 16.42 16.46 16.43 20775 2502.5 19.26 19.45 19.17 18.21 18.21 18.22	17.45 17.36 16.32 16.26 16.38 16.33 21100 2535 19.14 19.20 19.20 18.12 18.15	17.28 17.41 16.18 16.33 16.29 16.26 21425 2567.5 19.19 19.47 19.22 18.18 18.16 18.17	Tune-up limit (dBm)	MPR (dB)
10 10 10 10 10 10 10 5 5 5 5 5 5 5	640AM 640AM 640AM 640AM 640AM 640AM Cha Frequen 0PSK 0PSK 0PSK 0PSK 0PSK 0PSK 0PSK	1 25 25 25 25 25 25 25 25 25 25 25 25 25	49 0 12 25 0 12 24 0 7 13 0	17.55 17.44 16.24 16.42 16.46 16.43 20775 2502.5 19.26 19.45 19.17 18.21 18.21 18.22 18.28	17.45 17.36 16.32 16.26 16.38 16.33 21100 2535 19.14 19.20 19.20 18.12 18.26 18.15 18.16	17.28 17.41 16.18 16.33 16.29 16.26 21425 2567.5 19.19 19.47 19.22 18.18 18.16 18.17	17 Tune-up limit (dBm) 20	3 MPR (dB) 0
10 10 10 10 10 10 10 5 5 5 5 5 5 5	64QAM 64QAM 64QAM 64QAM 64QAM Cha Frequen QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	1 25 25 25 25 50 nnel cy (MHz) 1 1 1 1 1 1 1 1 1 1 2 1 2 1 2 2 5 1 1 1	49 0 12 25 0 0 12 24 0 7 13 0	17.55 17.44 16.24 16.42 16.46 16.43 20775 2502.5 19.25 19.17 18.21 18.31 18.22 18.28 18.69	17.45 17.36 16.32 16.26 16.38 16.33 21100 2535 19.14 19.20 19.20 18.12 18.26 18.11 18.15 18.60 18.88	17.28 17.41 16.18 16.33 16.29 16.26 21425 2567.5 19.19 19.27 18.18 18.16 18.17 18.13 18.65 18.92	Tune-up limit (dBm)	MPR (dB)
10 10 10 10 10 10 10 5 5 5 5 5 5 5 5 5	640AM 640AM 640AM 640AM 640AM Cha Frequen OPSK OPSK OPSK OPSK OPSK OPSK OPSK OPSK	1 25 25 25 50 nnel cy (MHz) 1 1 1 1 2 12 25 1 1 1 1	49 0 12 25 0 0 12 24 0 7 13 0 0	17.55 17.44 16.24 16.42 16.46 16.43 20775 2502.5 19.26 19.45 19.17 18.21 18.21 18.22 18.28 18.69 18.85 18.63	17.45 17.36 16.32 16.33 16.33 21100 2535 19.14 19.20 19.20 18.12 18.26 18.11 18.15 18.60 18.88 18.67	17.28 17.41 16.18 16.33 16.29 16.26 21425 19.19 19.47 19.22 18.18 18.16 18.17 18.13 18.65 18.92 18.65	17 Tune-up limit (dBm) 20	3 MPR (dB) 0
10 10 10 10 10 10 10 5 5 5 5 5 5 5	64QAM 64QAM 64QAM 64QAM 64QAM Cha Frequen QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	1 25 25 25 25 50 nnel cy (MHz) 1 1 1 1 1 1 1 1 1 1 2 1 2 1 2 2 5 1 1 1	49 0 12 25 0 0 12 24 0 7 13 0	17.55 17.44 16.24 16.42 16.46 16.43 20775 2502.5 19.26 19.45 19.17 18.21 18.21 18.22 18.28 18.69 18.85 18.63	17.45 17.36 16.32 16.26 16.38 16.33 21100 2535 19.14 19.20 19.20 18.12 18.26 18.11 18.15 18.60 18.88	17.28 17.41 16.18 16.33 16.29 16.26 21425 2567.5 19.19 19.27 18.18 18.16 18.17 18.13 18.65 18.92	17 Tune-up limit (dBm) 20 19	3 MPR (dB) 0 1
10 10 10 10 10 10 10 5 5 5 5 5 5 5 5 5 5	640AM 640AM 640AM 640AM 640AM 640AM Cha Frequen OPSK OPSK OPSK OPSK OPSK OPSK OPSK 160AM 160AM 160AM 160AM	1 25 25 50 mnel cy (MHz) 1 1 1 1 1 1 1 2 12 25 1 1 1 1 1 1 1 1 1	49 0 12 25 0 12 24 0 7 13 0 0 0 12 24 0 7	17.55 17.44 16.24 16.42 16.46 16.43 20775 2502.5 19.26 19.45 19.17 18.21 18.21 18.28 18.69 18.65 18.63 17.24 17.28	17.45 17.36 16.32 16.26 16.38 16.38 16.33 21100 2535 19.14 19.20 19.20 18.12 18.26 18.11 18.60 18.80 18.80 18.80 17.16	17.28 17.41 16.18 16.33 16.29 16.26 21425 2567.5 19.19 19.22 18.18 18.16 18.17 18.65 18.92 18.61 17.14 17.23	17 Tune-up limit (dBm) 20	3 MPR (dB) 0
10 10 10 10 10 10 10 5 5 5 5 5 5 5 5 5 5	640AM	1 25 25 25 50 mel 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	49 0 12 25 0 12 24 0 7 13 0 0 12 24 0 7	17.55 17.44 16.24 16.42 16.46 16.43 20775 2502.5 19.26 19.45 19.17 18.21 18.31 18.22 18.69 18.85 17.24 17.28 17.21	17.45 17.36 16.32 16.26 16.38 16.33 21100 2535 19.14 19.20 18.12 18.26 18.11 18.15 18.60 18.88 18.67 17.16 17.29 17.16 17.24	17.28 17.41 16.18 16.33 16.29 16.26 21425 2567.5 19.19 19.47 19.22 18.18 18.16 18.17 18.3 18.65 18.92 18.61 17.14 17.23 17.11	17 Tune-up limit (dBm) 20 19	3 MPR (dB) 0 1
10 10 10 10 10 10 10 5 5 5 5 5 5 5 5 5 5	64QAM 64QAM 64QAM 64QAM 64QAM 64QAM Cha Frequen QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	1 25 25 25 50 mnel cy (MHz) 1 1 1 1 2 12 12 12 12 12 12 12 12 12 12	49 0 12 25 0 12 24 0 7 13 0 0 12 24 0 7 13 0 0	17.55 17.44 16.24 16.42 16.46 16.43 20775 2502.5 19.26 19.45 19.17 18.21 18.31 18.22 18.28 18.63 17.24 17.24 17.21	17.45 17.36 16.32 16.38 16.38 16.33 21100 2535 19.14 19.20 18.12 18.26 18.11 18.15 18.67 17.16 17.29 17.16 17.24	17.28 17.41 16.18 16.33 16.29 16.26 21425 2507.5 19.19 19.47 19.22 18.18 18.16 18.17 18.13 18.65 18.92 18.61 17.14 17.23 17.11 17.19	17 Tune-up limit (dBm) 20 19 19	3 MPR (dB) 0 1 1 2
10 10 10 10 10 10 10 5 5 5 5 5 5 5 5 5 5	640AM 640AM 640AM 640AM 640AM 640AM 640AM Cha Frequen 0PSK 0PSK 0PSK 0PSK 0PSK 160AM 160AM 160AM 160AM 160AM	1 25 25 25 25 27 27 25 25 25 25 25 25 25 25 25 25 25 25 25	49 0 12 25 0 0 12 24 0 7 13 0 0 0 12 24 0 7 13 0 0 12 24 0 7 13 0 0 12 24 0 0 12 24 0 0 12 24 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	17.55 17.44 16.24 16.42 16.46 16.43 20775 2502.5 19.26 19.45 19.17 18.21 18.31 18.22 18.69 18.85 18.69 18.85 17.24 17.24 17.21 17.42	17.45 17.36 16.32 16.26 16.38 16.33 21100 2535 19.14 19.20 19.20 18.12 18.26 18.11 18.60 18.88 18.67 17.16 17.29 17.16 17.24 17.34	17.28 17.41 16.18 16.33 16.29 16.26 21425 2567.5 19.19 19.47 19.22 18.18 18.16 18.17 18.13 18.65 18.92 18.61 17.14 17.23 17.11 17.19 17.31	17 Tune-up limit (dBm) 20 19	3 MPR (dB) 0 1
10 10 10 10 10 10 10 5 5 5 5 5 5 5 5 5 5	640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 160AM 160AM 160AM 160AM 160AM 160AM 160AM 160AM 160AM 160AM 160AM 160AM 160AM	1 25 25 25 50 nnel cy (MHz) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 12 24 0 7 13 0 0 12 24 0 0 12 24 0 0 7 13 0 0 12 24 0 0 7 13 0 0 0 12 24 0 0 7 13 0 0 0 12 24 0 0 0 0 12 24 0 0 0 0 12 24 0 0 0 0 12 24 0 0 0 0 12 24 0 0 0 0 12 24 0 0 0 0 12 24 0 0 0 0 0 12 24 0 0 0 0 0 0 0 12 24 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	17.55 17.44 16.24 16.42 16.46 16.43 20775 2502.5 19.45 19.17 18.21 18.31 18.22 18.28 18.69 18.85 17.24 17.28 17.24 17.24 17.42 17.42 17.42	17.45 17.36 16.32 16.32 16.33 21100 2535 19.20 19.20 19.20 18.26 18.11 18.60 18.88 18.88 17.16 17.29 17.16 17.24 17.33 17.32	17.28 17.41 16.18 16.33 16.29 16.26 21425 2557.5 19.19 19.47 19.22 18.18 18.16 18.17 18.13 18.65 18.92 18.65 17.14 17.23 17.11 17.19 17.31	17 Tune-up limit (dBm) 20 19 19	3 MPR (dB) 0 1 1 2
10 10 10 10 10 10 10 5 5 5 5 5 5 5 5 5 5	640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 160AM 160AM 160AM 160AM 160AM 160AM 160AM 160AM 160AM 640AM 640AM	1 255 25 25 25 25 25 25 25 25 25 25 25 25	49 0 12 25 0 0 12 24 0 7 13 0 0 0 12 24 0 7 13 0 0 12 24 0 7 13 0 0 12 24 0 0 12 24 0 0 12 24 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	17.55 17.44 16.24 16.42 16.46 16.43 20775 2502.5 19.26 19.45 19.17 18.21 18.31 18.22 18.69 18.85 18.69 18.85 17.24 17.24 17.21 17.42	17.45 17.36 16.32 16.26 16.38 16.33 21100 2535 19.14 19.20 19.20 18.12 18.26 18.11 18.60 18.88 18.67 17.16 17.29 17.16 17.24 17.34	17.28 17.41 16.18 16.33 16.29 16.26 21425 2567.5 19.19 19.47 19.22 18.18 18.16 18.17 18.13 18.65 18.92 18.61 17.14 17.23 17.11 17.19 17.31	17 Tune-up imit (dBm) 20 19 19 18	3 MPR (dB) 0 1 1 2 2
10 10 10 10 10 10 10 5 5 5 5 5 5 5 5 5 5	640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 9PSK 0PSK 0PSK 0PSK 0PSK 160AM 160AM 160AM 160AM 160AM 160AM 160AM 640AM 640AM	1 255 25 50 nnrel 50 nnrel 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	49 0 12 25 0 12 24 0 7 13 0 0 12 24 0 7 13 0 0 12 24 0 0 7	17.55 17.44 16.24 16.42 16.43 20775 2502.5 19.26 19.45 19.17 18.31 18.22 18.69 18.63 17.24 17.24 17.24 17.24 17.42 17.40 17.41 17.42 17.80 17.34 16.25	17.45 17.36 16.32 16.26 16.38 16.33 21100 2535 19.14 19.20 19.20 18.12 18.26 18.15 18.60 18.86 18.67 17.16 17.24 17.33 17.64 17.32 16.15	17.28 17.41 16.18 16.33 16.29 16.26 21425 2567.5 19.19 19.47 19.22 18.18 18.16 18.17 18.13 18.65 18.92 18.61 17.14 17.23 17.11 17.19 17.31 17.80 17.80	17 Tune-up limit (dBm) 20 19 19	3 MPR (dB) 0 1 1 2



				66 Hotsp Power	Power	Power		
W [MHz]	Cha	RB Size	RB Offset	Low Ch. / Freq. 132072	Middle Ch. / Freq. 132322	High Ch. / Freq. 132572	Tune-up limit (dBm)	MPR (dB)
20		cy (MHz) 1	0 49	1720 16.51	1745 16.97 16.87	1770 16.71 16.90	17.5	0
20 20 20	QPSK QPSK	1 50	99	16.75 16.53 15.88	16.56	16.64 16.00	17.5	0
20 20	QPSK QPSK	50 50	24 50	15.87 15.84	15.80 15.83	16.00 15.98	16.5	1
20 20 20	QPSK 16QAM 16QAM	100	0 0 49	15.82 16.20 16.47	15.90 16.21 16.49	15.90 16.34 16.44	16.5	1
20 20	16QAM 16QAM	1 50	99	16.06 14.94	16.17	16.22 15.04	10.5	
20 20	16QAM 16QAM	50 50	24 50	14.91 14.77	14.88 14.78	15.02 14.89	15.5	2
20 20 20	16QAM 64QAM 64QAM	100	0 0 49	14.88 14.82 14.99	14.97 14.86 15.10	15.03 15.00 15.24	15.5	2
20	64QAM 64QAM	1 50	99	14.77	14.81	14.80	15.5	2
20 20	64QAM 64QAM	50 50	24 50	13.87 13.85	13.94 13.90	14.06 14.01	14.5	3
20	64QAM Cha		0	13.89 132047	13.92 132322	14.01	Tune-up limit	MPR
15 15	QPSK QPSK	cy (MHz) 1	0 37	1717.5 16.58 16.73	1745 16.76 16.94	1772.5 16.81 16.89	(dBm)	(dB)
15	QPSK QPSK	1 36	74 0	16.57	16.65	16.72		
15 15	QPSK QPSK	36 36	20 39	15.80 15.84	15.94 15.92	16.08 15.88	16.5	1
15 15	QPSK 16QAM	75 1	0	15.76 16.25 16.20	15.88 16.07 16.49	16.05 16.23	16.5	1
15 15	16QAM 16QAM	1 1 36	37 74 0	16.20 16.31 14.73	16.49 16.08 14.90	15.99 15.11	10.5	'
15	16QAM 16QAM	36 36	20	14.87	14.85	14.99	15.5	2
15 15	16QAM 64QAM	75 1	0	14.90 14.65	15.00 14.64	15.14 14.77		
15 15	64QAM 64QAM	1	37 74	14.97 14.50	14.97 14.95	15.00 14.65	15.5	2
15 15	64QAM 64QAM	36 36 36	0 20 39	13.81 13.81 13.71	13.87 13.99 13.88	14.01 14.10	14.5	3
15	64QAM Cha	75	0	13.86	13.97	14.11	Tune-up	MPR
10	QPSK	cy (MHz)	0	1715 16.58	1745 16.70	1775 16.85	limit (dBm)	(dB)
10 10	QPSK QPSK	1	25 49	16.79 16.52	16.72 16.67	16.81 16.78	17.5	0
10 10	QPSK QPSK QPSK	25 25 25	0 12 25	15.86 15.86	15.91 15.87 15.81	16.02 16.00 15.90	16.5	1
10	QPSK 16QAM	50	0	15.87	15.92	16.01		
10 10	16QAM 16QAM	1	25 49	16.16 16.01	16.20 16.13	16.27 16.14	16.5	1
10 10	16QAM 16QAM	25 25	12	14.85 14.91	15.00 14.95	15.18 15.10	15.5	2
10 10 10	16QAM 16QAM 64QAM	25 50	25 0 0	14.82 14.89 14.60	14.94 15.01 14.74	14.98 15.14 14.85		
10	64QAM	1	25	14.67	14.84	15.00	15.5	2
	64OAM	- 1	49				15.5	
10 10 10	64QAM 64QAM 64QAM	1 25 25	49 0 12	14.61 13.84 13.88	15.09 13.98 13.92	14.75 14.16		
10	64QAM 64QAM 64QAM 64QAM	25 25 25 25 50	0	14.61 13.84 13.88 13.87 13.92	15.09 13.98 13.92 13.94 13.95	14.75 14.16 14.01 13.93 14.06	14.5	3
10 10 10 10	64QAM 64QAM 64QAM 64QAM Cha	25 25 25 25 50 innel cy (MHz)	0 12 25 0	14.61 13.84 13.88 13.87 13.92 131997 1712.5	15.09 13.98 13.92 13.94 13.95 132322 1745	14.75 14.16 14.01 13.93 14.06 132647 1777.5		
10 10 10	64QAM 64QAM 64QAM 64QAM Cha	25 25 25 25 50 innel	0 12 25	14.61 13.84 13.88 13.87 13.92 131997	15.09 13.98 13.92 13.94 13.95 132322	14.75 14.16 14.01 13.93 14.06 132647	14.5 Tune-up limit	3 MPR
10 10 10 10 10	64QAM 64QAM 64QAM 64QAM Cha Frequen QPSK QPSK	25 25 25 25 50 innel cy (MHz) 1	0 12 25 0	14.61 13.84 13.88 13.87 13.92 131997 1712.5 16.53 16.93	15.09 13.98 13.92 13.94 13.95 132322 1745 16.66 16.77 16.56 15.86	14.75 14.16 14.01 13.93 14.06 132647 1777.5 16.73 16.92 16.68 15.94	Tune-up limit (dBm)	3 MPR (dB)
10 10 10 10 5 5 5 5 5 5 5	64QAM 64QAM 64QAM 64QAM Cha Frequen QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	25 25 25 50 innel cy (MHz) 1 1 1	0 12 25 0 0 12 24 0 7 13	14.61 13.84 13.87 13.92 131997 1712.5 16.53 16.93 16.47 15.66 15.79 15.63	15.09 13.98 13.92 13.94 13.95 132322 1745 16.66 16.77 16.56 15.86 15.85 15.77	14.75 14.16 14.01 13.93 14.06 132647 1777.5 16.73 16.92 16.68 15.94 15.79 15.84	14.5 Tune-up limit (dBm)	3 MPR (dB)
10 10 10 10 10 5 5 5 5 5 5 5 5	64QAM 64QAM 64QAM 64QAM Cha Frequen QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	25 25 25 25 50 mnel cy (MHz) 1 1 1 12 12 12 12 12 12 12 11	0 12 25 0 12 24 0 7 13 0 0	14.61 13.84 13.88 13.87 13.92 131997 1712.5 16.53 16.93 16.47 15.66 15.79 15.65 15.89 16.19	15.09 13.98 13.92 13.94 13.95 132322 1745 16.66 16.77 16.56 15.86 15.85 15.77 15.80 15.90	14.75 14.16 14.01 13.93 14.06 132647 1777.5 16.73 16.92 16.68 15.94 15.79 15.84 15.92 16.02	Tune-up limit (dBm)	3 MPR (dB)
10 10 10 10 5 5 5 5 5 5 5 5 5 5 5	64QAM 64QAM 64QAM 64QAM Cha Prequen QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	25 25 25 25 50 unnel cy (MHz) 1 1 1 1 1 2 12 25 1 1 1 1	0 12 25 0 12 24 0 7 13 0	14.61 13.84 13.88 13.87 13.92 131997 1712.5 16.53 16.47 15.66 15.79 15.63 15.65 15.89 16.19 16.04	15.09 13.98 13.92 13.94 13.95 132322 1745 16.67 16.56 15.86 15.85 15.90 16.13 15.90 16.13	14.75 14.16 14.01 13.93 14.06 132647 1777.5 16.72 16.68 15.94 15.79 15.84 15.92 16.02 16.33 15.99 14.84	14.5 Tune-up limit (dBm) 17.5	3 MPR (dB) 0 1
10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5 5	64QAM 64QAM 64QAM 64QAM Cha Frequen QPSK QPSK QPSK QPSK QPSK QPSK QPSK 16QAM 16QAM 16QAM 16QAM 16QAM	25 25 25 50 so mnel cy (MHz) 1 1 1 1 1 1 2 12 12 25 1 1 1 1 1 1 2 2 5 1 1 1 1	0 12 25 0 12 24 0 7 13 0 0 12 24 0 0 7	14.61 13.84 13.88 13.87 13.92 131997 1712.5 16.53 16.47 15.66 15.79 15.65 15.89 16.19 16.04 14.75 14.67 14.67	15.09 13.98 13.92 13.94 13.95 13.232 1745 16.66 16.77 16.56 15.85 15.85 15.70 16.13 15.90 16.13 15.91 14.88 14.90 14.79 14.93	14.75 14.16 14.01 13.93 14.06 132647 1777.5 16.73 16.92 16.59 15.79 15.84 15.92 16.02 16.33 15.99 14.84 15.05 14.87	14.5 Tune-up limit (dBm) 17.5	3 MPR (dB) 0
10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5 5	640AM 640AM 640AM Cha Cha Cha Cha Cha Cha Cha Cha Cha Cha	25 25 25 25 50 snnel cy (MHz) 1 1 1 1 2 12 25 1 1 1 1 1 2 25 1 1 1 1	0 12 25 0 12 24 0 7 7 13 0 0 12 24 0 7 7 13 0	14.61 13.84 13.87 13.92 131997 1712.5 16.53 16.93 16.47 15.66 15.79 15.65 15.89 16.19 16.04 14.75 14.67 14.67	15.09 13.98 13.92 13.94 13.95 13.2322 1745 16.66 16.77 16.56 15.86 15.86 15.87 15.90 16.13 15.91 14.88 14.90 14.79 14.93	14.75 14.16 14.01 13.93 14.06 13.2647 1777.5 16.73 16.92 16.68 15.94 15.79 15.84 15.92 16.02 16.02 16.33 15.99 14.84 15.05 14.87 14.97 14.79 15.06	14.5 Tune-up limit (dBm) 17.5	3 MPR (dB) 0 1
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM	25 25 25 50 soy (MHz) 1 1 1 1 1 1 2 12 2 5 1 1 1 1 1 1 2 2 5 1 1 1 1	0 12 25 0 12 24 0 7 13 0 0 12 24 0 7 7 13 0 0 12 24 0 0 7	14.61 13.84 13.87 13.92 13.997 1712.5 16.53 16.93 16.47 15.66 15.79 16.04 14.75 14.67 14.67 14.67 14.67 14.64 14.91 14.62	15.09 13.98 13.92 13.94 13.95 13.93 14.75 16.66 15.86 15.86 15.86 15.80 15.91 16.13 15.91 14.79 14.79 14.79 14.79 14.79 14.76 15.02 14.76 15.02	14.75 14.16 14.01 13.93 14.06 13.2647 1777.5 16.73 16.92 16.68 15.79 15.84 15.79 15.84 15.92 16.02 16.33 15.99 14.84 15.05 14.87 14.97 14.97 14.97 15.06 14.83 13.98	14.5 Tune-up limit (dBm) 17.5 16.5	3 MPR (dB) 0 1 1 1 2
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 160AM 160AM 160AM 160AM 160AM 160AM 160AM 160AM 160AM 160AM 160AM 160AM 160AM 160AM 640AM 640AM	25 25 25 50 annel cy (MHz) 1 1 1 1 12 12 25 1 1 1 1 1 2 2 5 1 1 1 1	0 12 25 0 12 24 0 7 13 0 0 12 24 0 7 7 13 0 0 12 24 0 7 7 13 0	14.61 13.84 13.88 13.87 13.92 13192 1712.5 16.53 16.93 16.47 15.66 15.79 15.65 15.89 16.10 14.75 14.67 14.67 14.67 14.67	15.09 13.98 13.92 13.94 13.95 16.66 16.77 16.56 15.86 15.85 15.77 16.66 15.85 15.70 14.88 14.90 14.79 14.79 14.76 15.02 14.76 15.02 14.76 13.91 13.84	14.75 14.16 14.01 13.93 14.06 18.0247 1777.5 16.68 15.79 15.84 15.79 15.82 16.02 16.33 15.99 14.84 15.05 14.87 14.87 14.87 14.79 15.06 14.83 13.89 13.89	14.5 Tune-up limit (dBm) 17.5 16.5	3 MPR (dB) 0 1 1 1 2
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM	25 25 25 50 innel cy (MHz) 1 1 1 12 12 12 25 1 1 1 1 1 2 2 25 1 1 1 1	0 12 25 0 0 12 24 0 7 13 0 0 12 24 0 7 7 13 0 0 12 24 0 0 7 12 24 0 0 0 12 24 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14.61 13.84 13.88 13.87 13.92 131997 1772.5 16.53 16.93 16.53 15.66 15.79 15.65 15.89 16.04 14.75 14.67 14.67 14.67 14.67 14.67 14.67 14.67 14.64 14.91 14.62 13.78 13.85 13.85 13.85 13.85 13.85 13.86 13.85 13.86 13.8	15.09 13.98 13.92 13.94 13.95 13.92 17.45 16.66 16.77 16.56 15.85 15.80 15.90 16.13 15.91 14.90 14.79 14.76 15.80 15.90 14.76 15.80 15.90 14.76 15.80	14.75 14.16 14.01 13.93 14.06 132647 1777.5 16.92 16.68 15.94 15.79 15.84 15.92 16.02 16.02 16.33 15.99 14.87 14.87 14.87 14.87 14.87 14.83 13.89 13.89 13.82 13.82 13.82	14.5 Tune-up limit (dBm) 17.5 16.5 16.5 15.5 15.5 14.5	3 MPR (dB) 0 1 1 2 2 3 MPR
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM	25 25 25 50 innel cy (MHz) 1 1 1 1 12 12 25 1 1 1 1 1 2 2 5 1 1 1 1	0 12 25 0 12 24 0 7 13 0 0 12 24 0 7 7 13 0 0 12 24 0 7 7 13 0	14.61 13.84 13.87 13.97 13.92 13.997 1712.5 16.53 16.47 15.63 15.65 15.89 16.19 16.04 14.75 14.67 14.67 14.67 14.67 14.76 14.61 14.91 14.62 13.78 13.85 13.78	15.09 13.98 13.92 13.94 13.97 13.97 13.97 13.95 13.95 13.95 13.95 13.95 13.95 13.95 13.95 13.95 13.95 13.95 13.95 13.95 13.95 13.95 13.95 13.95 13.95 13.95 14.88 14.90 15.90	14.75 14.16 14.11 13.93 14.06 132647 1777.5 16.92 16.63 15.94 15.79 15.84 15.92 16.33 15.99 14.84 15.05 14.87 14.97 14.79 13.83 13.91 13.82	14.5 Tune-up limit (dBm) 17.5 16.5 16.5 15.5 14.5	3 MPPR (dB) 0 1 1 2 2 2 3
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	GGCAM GGOAM GGOAM GGOAM GGOAM Cha GGOAM Cha GGOAM Cha GGOAM Cha GGOAM GG	25 25 25 25 25 25 25 25 25 25 25 25 25 2	0 12 25 0 12 24 0 7 7 13 0 0 24 0 7 7 13 0 0 7 7 13 0 0 7 7 13 0 0 7 7 13 0 0 7 7 1 1 2 2 4 0 0 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	14.61 13.84 13.87 13.88 13.87 1712.5 13.89 13.89 14.89 15.89	15.09 13.92 13.92 13.94 13.92 13.95 13.92 13.95	14475 14481 14481 14481 15383 152647 11406 152647 11672 16872 16882 1594 1594 1594 1487 1487 1487 1487 1487 1487 1487 148	14.5 Tune-up limit (dBm) 17.5 16.5 16.5 15.5 14.5 Tune-up limit (dBm)	3 MPRR 2 3 MPRR (dB) MPRR (dB)
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	GGCAM GGCAM GGCAM GGCAM GGCAM Cha GGCAM	25 25 25 25 25 25 26 27 25 25 25 25 25 25 25 25 25 25 25 25 25	0 12 25 0 0 12 24 0 7 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14 61 13 84 13 85 13 87 13 87 13 88 13 87	15.00 13.82 13.82 13.92 13.95 13.95 13.95 13.95 13.95 15.97 16.56 15.85 15.85 15.85 15.85 15.87 15.85	14.75 14.01 13.83 14.01 13.83 14.01 13.83 13.84 14.06 13.84 15.79 15.84 15.79 15.84 15.79 15.86 15.83 15.99 15.86 15.87 15.86 15.87 15.86 15.87 15.86 15.87 15.86 16.86	14.5 Tune-up limit (dBm) 17.5 16.5 16.5 15.5 14.5 Tune-up limit (dBm)	3 MPRR 2 3 MPRR (dB) MPRR (dB)
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	GGCAM GGCAM GGCAM GGCAM GGCAM Cha GGCAM Cha GGCAM Cha GGCAM Cha	25 25 25 25 25 25 26 26 27 27 27 27 27 27 27 27 27 27 27 27 27	0 12 25 0 0 12 24 0 0 7 7 13 0 0 0 0 0 8 14 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14.61 13.88 13.87 13.88 13.87 13.88 13.87 13.88 13.87 13.92 13.997 13.92 13.997 15.63 15.79 15.63 15.79 15.63 15.79 15.63 13.97 13.88 15.79 15.63 13.88 15.79 15.63 15.79 15.63 13.88 15.79 15.65 15.79 15.67 15.6	15.00 13.98 13.92 13.98	1475 1416 1416 1416 1416 1416 1416 1416 141	14.5 Tune-up lent (rdbm) 17.5 16.5 16.5 15.5 15.5 15.5 14.5 17.5 16.5	3 MPR (dB) 0 1 1 2 2 3 MPR (dB) 0 1 1
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	660AM 660A	25 25 25 26 27 27 27 27 27 27 27 27 27 27 27 27 27	0 12 25 0 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 15 0 0 0 15 0 16 0 16 0 16 0 16 0 16 0	14.61 13.84 13.87	15.09 13.98 14.78 15.90 14.79 13.88 13.78 13.88 13.78 13.88 13.78 15.89 15.80	14.75 14.51 14.51 14.51 14.51 14.51 14.51 14.51 14.51 14.52 14.52 14.52 14.52 16.53	14.5 Tune-up limit (dbm) 17.5 16.5 16.5 15.5 15.5 14.5 Tune-up limit (dbm) 17.5	3 MPR (dB) 0 1 1 2 2 3 MPR (dB) 0
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	GGCAM	25 25 25 26 26 27 27 27 27 27 27 27 27 27 27 27 27 27	12 25 25 10 10 12 24 24 0 7 13 10 10 12 24 0 7 13 10 10 10 10 10 10 10 10 10 10 10 10 10	14.61 13.84 13.87	15.09 13.92 13.92 13.93 13.94 13.95 13.94 13.95 13.94 13.95 13.94 13.95 13.94 13.95 13.94 13.95 13.94 13.95 13.94 13.95 13.94 13.95	14.75 14.16 14.01 14.01 14.01 14.01 14.01 14.01 14.02 14.02 16.03 16.02 16.03 16.02 16.03	14.5 Tune-up lent (rdbm) 17.5 16.5 16.5 15.5 15.5 15.5 14.5 17.5 16.5	3 MPR (dB) 0 1 1 2 2 3 MPR (dB) 0 1 1
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	GGCAM	256 257 258 259 259 259 259 250 250 250 250 250 250 250 250 250 250	0 12 25 0 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 7 7 15 0 0 0 16 14 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14.61 13.84 13.87	15.09 13.99	14.75 14.16 14.01 14.01 14.01 14.01 14.01 14.01 14.02 14.02 14.02 14.02 16.02 16.02 16.02 16.02 16.02 16.02 16.02 16.02 16.02 16.02 16.02 16.03	14.5 Tune-up limit (dbm) 17.5 16.5 16.5 15.5 15.5 14.5 16.5 16.5 16.5 16.5	3 MPR (dB) 0 1 1 2 2 3 MPR (dB) 0 1 1 1 1 2 2 1 1 1 1 1 2 2 1 1 1 1 2 2 1 1 1 1 1 2 2 1
10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5 5	GGCAM GCCAM	25 25 25 25 25 25 25 25 25 25 25 25 25 2	12 25 0 0 0 1 1 2 2 4 0 0 7 1 3 0 0 1 2 2 4 0 0 7 1 3 0 0 1 2 2 4 0 0 7 1 3 0 0 0 1 4 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14.61 13.84 13.87	15.09 13.99	14.75 14.16 14.01 14.01 14.01 14.01 14.01 14.01 14.01 14.02 14.02 14.02 14.02 14.02 14.02 15.02 15.02 15.02 15.02 15.02 15.02 15.02 15.02 15.02 15.03	14.5 Tune-up limit (dbm) 17.5 16.5 16.5 15.5 15.5 14.5 17.5 16.5 16.5 16.5 16.5	3 MPR (dB) 0 1 1 2 2 3 MPR (dB) 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	GGCAM GRANN	25 25 25 25 26 26 27 26 27 27 27 27 27 27 27 27 27 27 27 27 27	0 12 25 0 0 12 24 0 7 7 13 0 0 0 12 24 0 7 7 13 0 0 0 0 0 6 6 6 6 6 6 6 6 6 6 6 6 6 6	14.61 13.84 13.87 13.87 13.97 17.12.5 16.93 16.9	15.09 13.92 13.92 13.93 13.94 13.95 13.94 13.95 13.94 13.95 13.94 13.95 15.90 16.77 16.77 16.77 16.77 16.77 15.77	14.75 14.71	14.5 Tune-up limit (dbm) 17.5 16.5 16.5 15.5 15.5 14.5 16.5 16.5 16.5 16.5	3 MPR (dB) 0 1 1 2 2 3 MPR (dB) 0 1 1 1 1 2 2 1 1 1 1 1 2 2 1 1 1 1 2 2 1 1 1 1 1 2 2 1
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	GGCAM GCAM GCAM GCAM GCAM GCAM GCAM GCAM	25 25 25 25 25 25 25 25 25 25 25 25 25 2	12 25 25 26 26 27 27 28 28 29 20 20 21 20 20 20 20 20 20 20 20 20 20 20 20 20	14.61 13.84 13.87 14.67 14.67 13.78 13.87 13.87 13.87 13.87 13.87 13.87 14.67 14.67 13.78 13.87 13.87 13.87 13.87 13.87 13.87 13.87 13.87 13.87 14.67 14.67 14.67 13.87 13.87 13.87 13.87 13.87 13.87 13.87 13.87 13.87 14.67	15.09 13.99 13.99 13.99 13.99 13.99 13.99 14.99 15.90 16.77 15.90 15.80 15.80 15.81	14.75 14.16	14.5 Tune-up-limit (differ) 17.5 16.5 16.5 15.5 15.5 14.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16	3 MPR(dB) 0 1 1 2 2 3 MPR(dB) 0 1 1 2 MPR dB) 0 1 1 1 2 3 MPR dB)
10 10 10 10 10 10 10 10 10 10 10 10 10 1	GGCAM GCAM GCAM GCAM GCAM GCAM GCAM GCAM	255 255 255 255 250 250 250 250 250 250	0 12 25 0 0 12 24 0 1 13 0 0 12 24 0 1 13 0 0 12 24 0 1 13 0 1 12 24 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	14.61 13.84 13.87 13.87 13.87 13.87 13.87 13.87 13.87 13.87 13.87 14.87 15.80	15:09 13:92 13:92 13:93 13:94 13:95 13:94 13:95 13:94 13:95 13:94 13:95 15:97 16:77 16:77 15:77	14.75 14.61 16.61	14.5 Tune-up-lent (Sim) 17.5 16.5 16.5 15.5 16.5 15.5 16.5 16.5 16	3 MPR (dB) 0 1 1 2 2 3 3 MPR (dB) 1 1 2 2 3 3
10 10 10 10 10 10 10 10 10 10 10 10 10 1	GGCAM GCAM GCAM GCAM GCAM GCAM GCAM GCAM	255 255 255 255 250 250 250 250 250 250	0 12 25 0 0 12 24 0 0 7 7 13 0 0 12 24 0 0 7 7 15 0 0 0 0 8 18 14 17 7 0 0 0 8 18 14 17 7 0 0 0 8 18 14 17 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14.61 13.84 13.87 13.87 13.87 13.87 13.87 13.87 13.87 13.87 13.87 14.87 15.80 16.80 16.80 16.80 16.80	15:09 13:92 13:92 13:93 13:94 13:95 13:94 13:95 13:94 13:95 13:94 13:95 13:94 13:95 15:97 15:77	14.75 14.61 16.61	14.5 Tune-up-limit (55m) 17.5 16.5 16.5 15.5 15.5 14.5 16.5 16.5 17.5 16.5 17.5 16.5 17.5 17.5 17.5 17.5 17.5 17.5 17.5 17	3 MFPR (dB) 0 1 1 2 2 3 3 MFPR (dB) 2 2 3 MFPR (dB) 1 1 2 2 3 3 MFPR (dB) 1 1 2 2 3 3 MFPR (dB) 1 3
10 10 10 10 10 5 5 5 5 5 5 5 5 5 5 5 5 5	GGCAM GCAM GCAM GCAM GCAM GCAM GCAM GCAM	256 257 258 259 259 259 259 259 259 259 259 259 259	12 25 25 26 27 28 24 24 27 27 28 29 20 20 21 20 20 20 20 20 20 20 20 20 20 20 20 20	14.61 13.84 13.85 15.84 15.86	15:09 13:92 13:92 13:93 13:94 13:95 13:94 13:95 13:94 13:95 13:94 13:95 13:94 13:95 13:94 13:95 15:97 15:72	14.75 14.61 16.62 16.68 16.68 16.68	14.5 Tune-up limit (diffm) 17.5 16.5 16.5 15.5 15.5 14.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16	3 MFPR (dB) 0 1 1 2 3 MFPR (dB) 0 1 1 2 MFPR (dB) 0 1 1 2 3 MFPR (dB)
10 10 10 10 10 10 10 10 10 10 10 10 10 1	660AM 660A	25 25 25 25 25 25 25 25 25 25 25 25 25 2	0 12 25 0 0 1 1 2 2 4 0 0 7 7 1 1 3 0 0 1 2 2 4 0 0 7 7 1 1 3 0 0 1 2 2 4 0 0 7 7 1 1 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14.61 13.84 13.87	15.09 13.99	14.75 14.16 14.11	14.5 Tune-up limit (diffm) 17.5 16.5 16.5 15.5 15.5 14.5 16.5 16.5 16.5 16.5 16.5 16.5 16.5 16	3 MFPR (dB) 0 1 1 2 3 MFPR (dB) 0 1 1 2 MFPR (dB) 0 1 1 2 3 MFPR (dB)
10 10 10 10 10 10 10 10 10 10 10 10 10 1	66CAM FROM HECAM H	25 25 25 25 25 25 25 25	12 25 26 27 27 27 27 27 27 27 27 27 27 27 27 27	14.61 13.84 13.87	1509 1399 1399 1399 1399 1399 1399 1399 13	14.75 14.16 14.11	14.5 Tune-up lint (dbm) 17.5 16.5 16.5 15.5 15.5 14.5 16.5 16.5 16.5 17.5 16.5 17.5 17.5 17.5 17.5 17.5	3 MFPR (dB) 0 1 1 1 2 2 3 3 MFPR (dB) 0 0 1 1 1 1 2 2 3 3 MFPR (dB) 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
10 10 10 10 10 10 10 10 10 10 10 10 10 1	660AM 660A	25 25 25 25 25 25 25 25	12	14.61 13.84 13.87	1509 1399 1399 1399 1399 1399 1399 1399 13	14.75 14.16 14.11	14.5 Tune-up-limit (65bm) 17.5 16.5 16.5 15.5 15.5 14.5 16.5 16.5 17.5 16.5 17.5 16.5 17.5 16.5 17.5 17.5 16.5 17.5 17.5 17.5 17.5 17.5 18.5	3 MFPR (dB) 0 1 1 2 2 3 3 MFPR (dB) 0 0 1 1 2 2 3 3 MFPR (dB) 0 0 0 1 1 2 2 3 3 MFPR (dB) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
10 10 10 10 10 10 10 10 10 10 10 10 10 1	66CAM	25 25 25 25 25 25 25 25	12 24 24 27 17 18 20 24 27 17 18 20 24 27 17 18 20 24 27 17 18 20 24 27 17 18 20 27	14.61 13.84 13.87	1509 1399 1399 1399 1399 1399 1399 1399 13	14.75 14.16 14.11	14.5 Tune-up-limit (65bm) 17.5 16.5 16.5 15.5 15.5 14.5 16.5 16.5 17.5 16.5 17.5 16.5 17.5 16.5 17.5 17.5 16.5 17.5 17.5 17.5 17.5 17.5 18.5	3 MFPR (dB) 0 1 1 1 2 2 3 3 MFPR (dB) 0 0 1 1 1 1 2 2 3 3 MFPR (dB) 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
10 10 10 10 10 10 10 10 10 10 10 10 10 1	66CAM 61CAM	25	12 25 25 0 12 24 24 0 7 13 10 12 24 0 7 7 13 10 12 24 0 7 7 13 10 10 10 10 10 10 10 10 10 10 10 10 10	14.61 13.84 13.87 13.87 13.87 13.87 13.87 13.87 13.87 13.87 13.87 14.87 15.89 16.89	15:09 13:92 13:93 13:94 13:95 13:94 13:95 17:45 14:95 15:97 15:72 15:75 15:76	14.75 14.61 14.61 14.61 14.61 14.61 14.61 14.61 14.61 14.61 14.61 14.61 14.61 14.61 14.61 14.61 14.61 14.61 16.61 16.61 16.61 16.61 16.61 16.68 16.62 16.62 16.62 16.62 16.63	14.5 Tune-up limit (dbm) 17.5 16.5 16.5 15.5 14.5 16.5 16.5 16.5 17.5 16.5 16.5 17.5 16.5 17.5 16.5 17.5 16.5 17.5 16.5 17.5 17.5 17.5 18.5 18.5 18.5 19.5 19.5 19.5 19.5 19.5 19.5 19.5 19	3 MFPR (dB) 0 1 1 2 2 3 3 MFPR (dB) 0 0 1 1 1 2 2 3 3 MFPR (dB) 0 1 1 1 2 2 3 3 MFPR (dB) 0 0 1 1 1 1 1 2 2 3 3 MFPR (dB) 0 0 1 1 1 1 1 2 2 3 3 MFPR (dB) 0 0 1 1 1 1 1 2 2 3 3 MFPR (dB) 0 0 1 1 1 1 1 1 2 2 3 3 MFPR (dB) 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
10 10 10 10 10 10 10 10 10 10 10 10 10 1	66CAM	25 25 25 25 25 25 25 25	10	14.61 13.84 13.87	1509 1399 1399 1399 1399 1399 1399 1399 13	14.75 14.16 14.11	14.5 Tune-up-limit (diffin) 17.5 16.5 16.5 15.5 15.5 14.5 16.5 16.5 17.5 16.5 17.5 16.5 17.5 16.5 17.5 16.5 17.5 16.5 17.5 16.5 17.5 16.5 17.5 16.5	3 MFPR (dB) 0 1 1 2 2 3 3 MFPR (dB) 0 0 1 1 1 2 1 1 1 2 1 1 1 1 1 1 1 1 1 1



		Receiver Off / Extremity							
Band		WCDMA II			_	WCDMA IV			-
	TX Channel	9262	9400	9538	Tune-up Limit	1312	1413	1513	Tune-up Limit
	Rx Channel	9662	9800	9938	(dBm)	1537	1638	1738	(dBm)
Fre	equency (MHz)	1852.4	1880	1907.6	(GDIII)	1712.4	1732.6	1752.6	(GEATT)
3GPP Rel 99	AMR 12.2Kbps	21.14	21.13	21.09	22.00	17.61	17.52	17.66	18.50
3GPP Rel 99	RMC 12.2Kbps	21.12	21.15	21.10	22.00	17.67	17.78	17.73	18.50
3GPP Rel 6	HSDPA Subtest-1	20.49	20.43	20.47	21.00	16.69	16.79	16.80	17.50
3GPP Rel 6	HSDPA Subtest-2	20.27	20.26	20.39	21.00	16.63	16.65	16.70	17.50
3GPP Rel 6	HSDPA Subtest-3	19.89	19.83	19.96	20.50	16.13	16.23	16.17	17.00
3GPP Rel 6	HSDPA Subtest-4	19.93	19.88	19.94	20.50	16.10	16.11	16.15	17.00
3GPP Rel 8	DC-HSDPA Subtest-1	20.44	20.39	20.42	21.00	16.61	16.74	16.74	17.50
3GPP Rel 8	DC-HSDPA Subtest-2	20.20	20.20	20.36	21.00	16.57	16.62	16.62	17.50
3GPP Rel 8	DC-HSDPA Subtest-3	19.86	19.81	19.91	20.50	16.10	16.20	16.10	17.00
3GPP Rel 8	DC-HSDPA Subtest-4	19.90	19.78	19.87	20.50	16.02	16.07	16.11	17.00
3GPP Rel 6	HSUPA Subtest-1	20.51	20.43	20.55	21.00	16.64	16.62	16.76	17.50
3GPP Rel 6	HSUPA Subtest-2	18.40	18.36	18.46	19.00	15.01	15.03	15.02	15.50
3GPP Rel 6	HSUPA Subtest-3	19.47	19.46	19.48	20.00	15.62	15.76	15.76	16.50
3GPP Rel 6	HSUPA Subtest-4	17.99	17.95	18.02	19.00	15.00	15.02	15.03	15.50
3GPP Rel 6	HSUPA Subtest-5	20.40	20.30	20.40	21.00	16.60	16.70	16.70	17.50
3GPP Rel 7	HSPA+ (16QAM) Subtest-1	18.13	18.20	18.11	18.50	14.60	14.61	14.66	15.00



		P	Band 2 art 24E Re	(1900MH ceiver Of		ity		
BW [MHz]	Modulation Cha		RB Offset	Power Low Ch. / Freq. 18700	Power Middle Ch. / Freq. 18900	Power High Ch. / Freq. 19100	Tune-up limit (dBm)	MPR (dB)
20 20	Prequent QPSK QPSK	2y (MHz) 1 1	0 49	1860 22.20 22.19	1880 22.32 22.27	1900 22.24 22.31	23	0
20 20 20	QPSK QPSK QPSK	1 50 50	99 0 24	21.83 21.19 21.14	22.01 21.34 21.25	21.90 21.21 21.20		
20 20	QPSK QPSK	50 100	50 0	20.99 21.10	21.20 21.18	21.33 21.11	22	1
20 20 20	16QAM 16QAM 16QAM	1 1	0 49 99	20.88 21.30 20.90	21.02 21.37 21.16	21.15 21.30 21.02	22	1
20 20 20	16QAM 16QAM 16QAM	50 50 50	0 24 50	20.09 20.13 20.02	20.21 20.28 20.23	20.41 20.41 20.28	21	2
20 20	16QAM 64QAM	100 1	0	20.09 20.36	20.14 20.39	20.23 20.63		
20 20 20	64QAM 64QAM	1 1 50	49 99 0	20.68 20.25 19.54	20.63 20.48 19.60	20.71 20.43 19.72	21	2
20 20	64QAM 64QAM	50	24 50	19.53 19.37	19.65 19.63	19.71 19.55 19.80	20	3
20	64QAM Cha Frequent		0	19.41 18675 1857.5	18900 1880	19.80 19125 1902.5	Tune-up limit (dBm)	MPR (dB)
15 15 15	QPSK QPSK QPSK	1 1 1	0 37 74	21.87 22.10 21.84	21.97 22.23 21.99	22.29 22.19 22.03	23	0
15 15	QPSK QPSK	36 36	0 20	21.08 21.14	21.13 21.29	21.37 21.31	22	1
15 15 15	QPSK QPSK 16QAM	36 75	39 0 0	21.04 21.04 20.98	21.21 21.19 21.22	21.29 21.34 21.35		
15 15	16QAM 16QAM	1	37 74	21.38 21.05	21.37 21.17	21.35 21.26	22	1
15 15 15	16QAM 16QAM 16QAM	36 36 36	0 20 39	20.13 20.14 20.06	20.28 20.26 20.21	20.34 20.18 20.27	21	2
15 15 15	16QAM 64QAM 64QAM	75 1 1	0 0 37	19.95 20.47 20.52	20.15 20.67 20.87	20.30 20.69 20.65	21	2
15 15	64QAM 64QAM	1 36	74 0	20.43 19.47	20.61 19.62	20.70 19.77		
15 15 15	64QAM 64QAM 64QAM	36 36 75	20 39 0	19.45 19.33 19.44	19.62 19.52 19.53	19.59 19.61 19.67	20	3
	Cha Frequen	cy (MHz)		18650 1855	18900 1880	19150 1905	Tune-up limit (dBm)	MPR (dB)
10 10	QPSK QPSK QPSK	1 1	0 25 49	21.99 22.08 21.89	22.07 22.16 21.98	22.17 22.26 22.14	23	0
10	QPSK QPSK QPSK	25 25 25	12	20.92 21.03 20.94	21.17 21.13 21.22	21.24 21.25 21.13	22	1
10 10 10	QPSK 16QAM	50 1	25 0 0	20.94 20.99 21.06	21.22 21.13 21.24	21.13 21.27 21.30		
10 10 10	16QAM 16QAM 16QAM	1 1 25	25 49 0	21.20 21.08 20.01	21.33 21.12 20.24	21.32 21.28 20.29	22	1
10 10	16QAM 16QAM	25 25	12 25	20.06 20.06	20.23 20.14	20.27 20.20	21	2
10 10 10	16QAM 64QAM	50 1	0 0 25	19.94 20.54 20.57	20.16 20.68 20.68	20.27 20.72 20.80	21	2
10 10	64QAM 64QAM 64QAM	1 25	49 0 12	20.44 19.49	20.87 19.66	20.66 19.65		
10 10 10	64QAM 64QAM	25 25 50	12 25 0	19.55 19.44 19.44	19.63 19.64 19.53	19.77 19.62 19.62	20	3
5	Cha Frequent QPSK		0	18625 1852.5 21.73	18900 1880 22.01	19175 1907.5 21.99	Tune-up limit (dBm)	MPR (dB)
5 5	QPSK QPSK	1	12 24	21.87 21.80	22.22 21.99	22.18 22.03	23	0
5 5	QPSK QPSK	12 12	0 7 13	20.89 20.99 20.96	21.07 21.16 21.12	21.12 21.22 21.15	22	1
5 5 5	QPSK 16QAM 16QAM	25 1 1	0 0 12	20.91 20.85 21.02	21.13 21.07 21.29	21.17 21.05 21.33	22	1
5	16QAM 16QAM	1 12	24	20.89 19.94	21.06 20.07	21.04 20.18	22	
5 5 5	16QAM 16QAM 16QAM	12 12 25	7 13 0	19.97 19.88 19.95	20.14 20.10 20.17	20.28 20.03 20.24	21	2
5	64QAM 64QAM	1	0	20.36 20.68 20.37	20.59 20.81 20.58	20.55 20.80 20.57	21	2
5 5 5	64QAM 64QAM 64QAM	1 12 12	24 0 7	19.31 19.30	19.49 19.49	19.54 19.54	20	3
5 5	64QAM 64QAM Cha	12 25	13 0	19.31 19.30 18615	19.44 19.51 18900	19.44 19.50 19185	Tune-up	MPR
3	Frequent QPSK	cy (MHz) 1	0	1851.5 21.86	1880 22.02	1908.5 22.07	limit (dBm)	(dB)
3 3 3	QPSK QPSK QPSK	1 1 8	8 14 0	21.91 21.82 20.87	22.07 22.14 21.04	22.18 22.04 21.22	23	0
3	QPSK QPSK	8	4	21.01 20.94	21.18 21.12	21.20 21.30	22	1
3 3 3	QPSK 16QAM 16QAM	15 1 1	0 0 8	20.81 20.95 20.98	21.12 21.02 21.10	21.25 21.12 21.18	22	1
	16QAM	1 8	14	20.91	21.17	21.23		
3 3 3	16QAM 16QAM			19.88	20.14	20.16		
3 3 3 3	16QAM 16QAM 16QAM	8 8 15	4 7 0	19.98 19.97 19.80	20.29 20.16 20.10	20.27 20.26 20.08	21	2
3 3 3	16QAM 16QAM	8	4	19.98 19.97	20.29 20.16	20.27 20.26	21	2
3 3 3 3 3 3 3 3	16QAM 16QAM 16QAM 64QAM 64QAM 64QAM 64QAM	8 8 15 1 1 1 8 8	4 7 0 0 8 14 0	19.98 19.97 19.80 20.41 20.45 20.47 19.38 19.43	20.29 20.16 20.10 20.57 20.64 20.63 19.46	20.27 20.26 20.08 20.64 20.73 20.67 19.62 19.61		
3 3 3 3 3 3 3 3	16QAM 16QAM 16QAM 64QAM 64QAM 64QAM 64QAM 64QAM 64QAM	8 8 15 1 1 1 1 8 8 8 8	4 7 0 0 8 14	19.98 19.97 19.80 20.41 20.45 20.47 19.38 19.43 19.36 19.27 18607	20.29 20.16 20.10 20.57 20.64 20.63 19.46 19.68 19.50 19.48	20.27 20.26 20.08 20.64 20.73 20.67 19.62 19.61 19.66 19.54	21 20	2 3 MPR
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	16QAM 16QAM 16QAM 64QAM 64QAM 64QAM 64QAM 64QAM 64QAM Cha Frequency	8 8 8 15 1 1 1 8 8 8 8 15 15 1 1 5 1 1 1 1	4 7 0 0 8 14 0 4 7	19.98 19.97 19.80 20.41 20.45 20.47 19.38 19.43 19.36 19.27 18607 1850.7 21.84	20.29 20.16 20.10 20.57 20.64 20.63 19.46 19.50 19.48 18900 1880 21.93	20.27 20.26 20.08 20.64 20.73 20.67 19.62 19.61 19.66 19.54 19193 1909.3 21.98	21	2
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 4 1.4 1.4 1.4	16QAM 16QAM 16QAM 64QAM 64QAM 64QAM 64QAM Cha Frequent QPSK QPSK QPSK	8 8 8 15 1 1 1 1 8 8 8 8 15 15 15 10 10 10 10 10 10 10 10 10 10 10 10 10	4 7 0 8 14 0 4 7 0	19.98 19.97 19.80 20.41 20.45 20.47 20.47 19.38 19.43 19.36 19.27 18607 1850.7 21.84 21.89 21.89	20.29 20.16 20.10 20.50 20.64 20.63 19.46 19.68 19.58 19.50 19.48 18900 1880 21.93 22.10 21.92	20.27 20.26 20.08 20.67 20.67 19.62 19.61 19.66 19.54 19193 1909.3 21.98 22.18 21.99	21 20 Tune-up limit	2 3 MPR
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	16QAM 16QAM 16QAM 64QAM 64QAM 64QAM 64QAM 64QAM 64QAM Cha Frequent QPSK QPSK	8 8 8 15 1 1 1 1 1 8 8 8 8 15 15 15 15 15 15 15 15 15 15 15 15 15	4 7 0 8 14 0 4 7 0	19.98 19.97 19.80 20.41 20.45 20.47 19.38 19.43 19.36 19.27 18507 18507 21.84 21.88 21.89 21.85 21.85	20.29 20.16 20.10 20.57 20.64 20.63 19.46 19.50 19.48 18900 1890 21.93 22.10 21.92 22.06 21.97 22.06	20.27 20.26 20.08 20.64 20.73 20.67 19.62 19.61 19.54 19.93 1909.3 21.98 22.18 21.99 22.10 22.12 22.22	21 20 Tune-up limit (dBm) 23	3 MPR (dB)
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 4 1.4 1.4 1.4 1.4 1.4 1.4 1.4	16QAM 16QAM 16QAM 64QAM 64QAM 64QAM 64QAM 64QAM 64QAM Cha Frequent OPSK OPSK OPSK OPSK OPSK OPSK OPSK	8 8 8 15 1 1 1 1 1 8 8 8 15 15 2 (MHz) 1 1 1 1 1 1 3 3 3 6 6 1 1 1 1	4 7 0 0 8 14 7 0 3 5 0 0 1 3 5 0 0 3 3 5 0 0 1 0 0 0 0 0 0 0 0 1 0 0 0 0 1 0	19.98 19.97 19.80 20.41 20.45 20.47 19.38 19.43 19.36 19.27 1860.7 21.84 21.88 21.89 21.85 21.84 21.91 21.03 20.90 20.97	20.29 20.16 20.10 20.57 20.64 20.63 19.46 19.50 19.48 18900 1880 21.93 22.10 21.92 22.06 21.92 22.09 21.24 21.10	20.27 20.26 20.08 20.64 20.73 20.67 19.66 19.66 19.93 19.93 21.98 22.18 21.99 22.10 22.12 22.12 22.25 21.25	20 Tune-up limit (dBm)	2 3 MPR (dB)
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 4 1.4 1.4 1.4 1.4 1.4 1.4 1.4	16QAM 16QAM 16QAM 64QAM 64QAM 64QAM 64QAM 64QAM 64QAM 94QAM 94QAM QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	8 8 8 15 1 1 1 1 1 8 8 8 8 15 15 nnel 5 (MHz) 1 1 1 1 1 3 3 3 3 6 6 1 1	4 7 0 0 8 14 7 0 4 7 0 0 3 5 0 0 1 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0	19.98 19.97 19.80 20.41 20.45 20.47 19.36 19.27 18607 21.84 21.88 21.89 21.85 21.84 21.93 21.93 21.93 21.93 21.93	20.29 20.16 20.10 20.57 20.64 20.63 19.46 19.68 19.50 19.48 18900 1880 21.93 22.10 21.92 22.06 21.97 22.09 21.10	20.27 20.26 20.08 20.64 20.73 20.67 19.61 19.66 19.54 19193 21.98 22.18 21.99 22.10 22.10 22.12 22.20 21.25 21.05	21 20 Tune-up limit (dBm) 23	3 MPR (dB)
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	160AM 160AM 160AM 640AM 640AM 640AM 640AM 640AM 640AM 640AM 760AM 640AM	8 8 8 15 1 1 1 1 8 8 8 8 15 15 1 1 1 1 1	4 7 0 0 8 14 0 4 7 0 3 5 0 1 1 3 0 0 1 1 3 0 0 1 1 1 0 0 0 1 1 1 1	19.98 19.97 19.80 20.41 20.45 20.47 19.38 19.36 19.27 1850.7 21.84 21.89 21.89 21.89 21.85 21.85 21.85 20.90 20.97 20.85 20.93 20.93	20.29 20.16 20.10 20.10 20.57 20.64 20.63 19.46 19.65 19.50 19.48 1890 21.93 22.10 21.92 22.06 21.92 22.06 21.92 21.13 21.10 21.11 21.11 21.11 21.11 20.94	20.27 20.28 20.08 20.08 20.64 20.73 20.67 19.62 19.61 19.66 19.54 19193 21.98 22.19 22.19 22.10 22.12 22.20 21.25 21.18 21.09 21.18 21.09 21.18 21.09	20 Tune-up limit (dBm) 23	2 3 MPR (dB) 0
3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1	160AM 160AM 160AM 640AM	8 8 8 15 1 1 1 1 8 8 8 8 8 15 15 1 1 1 1	4 7 0 0 8 14 0 4 7 7 0 0 0 3 3 5 5 0 0 1 3 3 5 0 0 1 1 3 3 0 0 0 1 1 1 3 0 0 0 0	19.98 19.97 19.80 20.41 20.45 20.47 19.38 19.43 19.43 19.27 18507 18507 21.84 21.88 21.89 21.85 21.84 21.93 20.90 20.97 20.85 20.83 20.93	20.29 20.16 20.10 20.10 20.57 20.64 20.63 19.46 19.68 19.50 19.48 18900 21.93 22.10 21.92 22.06 21.97 22.06 21.97 22.06 21.10 21.10 21.11 21.10 21.11 21.10 21.11	20.27 20.26 20.08 20.64 20.64 20.67 19.62 19.61 19.66 19.54 19.93 1909.3 21.98 22.18 21.99 22.10 22.12 22.20 21.15 21.18 21.05 21.18 21.05 21.18 21.05 21.18	21 20 Tune-up limit (dBm) 23 22 22	2 3 MPR (dB) 0

	Part 2	7L (only o	Band on channe	d 4 (AWS E	Band)	r Off / Ext	remity	
BW [MHz]	Modulation	RB Size	RB Offset	Power Low	Power Middle	Power High	Tune-up	
. ,	Cha	nnel		Ch. / Freq. 20050	Ch. / Freq. 20175	Ch. / Freq. 20300	limit (dBm)	MPR (dB)
20 20	QPSK QPSK	cy (MHz) 1 1	0 49	1720 18.36 18.29	1732.5 18.54 18.33	1745 18.30 18.31	19	0
20	QPSK QPSK	1 50	99	18.21 17.30	18.26	18.15 17.35		
20 20	QPSK QPSK	50 50	24 50	17.37 17.22	17.22 17.26	17.36 17.28	18	1
20	QPSK 16QAM	100	0	17.29	17.63	17.30		
20 20 20	16QAM 16QAM	1 1 50	49 99 0	17.88 17.47 16.41	17.94 17.58 16.29	17.93 17.59 16.43	18	1
20	16QAM 16QAM	50	24 50	16.36 16.26	16.29	16.29	17	2
20 20	16QAM 64QAM	100	0	16.29 16.27	16.16 16.11	16.32 16.11		
20	64QAM 64QAM	1	49 99	16.41 16.15	16.42 16.10	16.59 16.14	17	2
20 20 20	64QAM 64QAM	50 50 50	0 24 50	15.39 15.15 15.28	15.29 15.34 15.20	15.42 15.34 15.27	16	3
20	64QAM Cha	100	0	15.33 20025	15.19 20175	15.37 20325	Tune-up	MPR
15	Frequent		0	1717.5 18.30	1732.5 18.12	1747.5 18.29	limit (dBm)	(dB)
15 15	QPSK QPSK	1	37 74	18.47 18.19	18.50 18.21	18.51 18.19	19	0
15 15	QPSK QPSK	36 36	0 20	17.25 17.37	17.32 17.30	17.35 17.40	18	1
15 15 15	QPSK QPSK 16QAM	36 75	39 0 0	17.30 17.25 17.52	17.28 17.25 17.52	17.28 17.39 17.53		
15 15	16QAM 16QAM	1	37 74	17.92 17.92	17.78	17.95	18	1
15 15	16QAM 16QAM	36 36	0 20	16.30 16.20	16.24 16.37	16.40 16.41	17	2
15 15	16QAM 16QAM	36 75	39 0	16.28 16.30	16.25 16.30	16.44 16.33	.,	-
15 15	64QAM 64QAM	1 1	0 37	16.09 16.37	15.99 16.39	16.12 16.40	17	2
15 15 15	64QAM 64QAM	1 36 36	74 0 20	15.94 15.24 15.37	16.04 15.32 15.37	15.96 15.42 15.41		
15 15	64QAM 64QAM	36 75	39 0	15.16 15.35	15.33 15.32	15.26 15.43	16	3
	Cha Frequen	nnel		20000 1715	20175 1732.5	20350 1750	Tune-up limit (dBm)	MPR (dB)
10 10	QPSK QPSK	1	0 25	18.41 18.34	18.26 18.41	18.28 18.44	19	0
10	QPSK QPSK	1 25 25	49 0	18.29	18.21	18.36 17.35		
10 10 10	QPSK QPSK QPSK	25 25 50	12 25 0	17.33 17.22 17.36	17.37 17.18 17.27	17.38 17.37 17.49	18	1
10	16QAM 16QAM	1	0 25	17.96 17.97	17.97	17.87 17.93	18	1
10 10	16QAM 16QAM	1 25	49 0	17.91 16.35	17.86 16.35	17.89 16.50		
10	16QAM 16QAM	25 25	12 25	16.39 16.29	16.33 16.34	16.49 16.48	17	2
10 10 10	16QAM 64QAM 64QAM	50 1	0 0 25	16.38 16.91 16.91	16.42 16.84 16.93	16.49 16.91 16.95	17	2
10	64QAM 64QAM	1 25	49 0	16.75 15.41	16.78 15.32	16.77 15.44		-
10 10	64QAM 64QAM	25 25	12 25	15.41 15.28	15.40 15.27	15.56 15.36	16	3
10	64QAM Cha		0	15.36 19975	15.26 20175	15.53 20375	Tune-up limit	MPR
5	QPSK QPSK	cy (MHz) 1 1	0 12	1712.5	1732.5 18.13	1752.5 18.29 18.50	(dBm) 19	(dB)
5	QPSK QPSK	1 12	12 24 0	18.37 18.26 17.40	18.48 18.12 17.29	18.50 18.20 17.40	19	U
5	QPSK QPSK	12	7	17.30 17.20	17.32 17.26	17.43	18	1
5 5	QPSK 16QAM	25 1	0	17.34 17.91	17.21 17.84	17.30 17.82		
5	16QAM 16QAM	1	12 24	17.93 17.70 16.30	17.91 17.83 16.32	17.95 17.90 16.49	18	1
5 5 5	16QAM 16QAM	12 12 12	7 13	16.40 16.19	16.32 16.35 16.31	16.49 16.43 16.38	17	2
5	16QAM 64QAM	25 1	0	16.22	16.36	16.34 16.79		
5 5	64QAM 64QAM	1	12 24	16.87 16.77	16.93 16.73	16.63 16.48	17	2
5	64QAM 64QAM	12	7	15.12 15.28	15.23 15.35	15.38 15.42 15.18	16	3
5	64QAM 64QAM Cha	12 25 nnel	13 0	15.16 15.25 19965	15.11 15.27 20175	15.18 15.36 20385	Tune-up	MPR
3	Frequen		0	1711.5	1732.5	1753.5 18.42	limit (dBm)	(dB)
3	QPSK QPSK	1	8	18.29	18.22	18.29	19	0
3	QPSK QPSK	8	0 4	17.33 17.35	17.36 17.30	17.45 17.35	18	1
3 3 3	QPSK QPSK 16QAM	8 15 1	7 0	17.42 17.30 17.91	17.38 17.24 17.97	17.37 17.38 17.94		
3	16QAM 16QAM	1 1	8 14	17.91 17.90 17.88	17.97 17.84 17.90	17.94 17.99 17.87	18	1
3	16QAM 16QAM	8	0	16.49 16.41	16.44 16.43	16.57 16.52	17	2
3	16QAM 16QAM	8 15	7	16.42 16.52	16.43 16.32	16.52 16.41	.,	2
3 3 3	64QAM 64QAM	1 1	0 8 14	16.58 16.43 16.39	16.46 16.43	16.49 16.41 16.41	17	2
3	64QAM 64QAM	8 8	0 4	15.35 15.34	15.35 15.44	15.47 15.54		
3	64QAM 64QAM	8 15	7	15.31 15.30	15.34 15.28	15.29 15.36	16	3
	Cha Frequen	cy (MHz)		19957 1710.7	20175 1732.5	20393 1754.3	Tune-up limit (dBm)	MPR (dB)
1.4	QPSK QPSK	1	3	18.35 18.36	18.25 18.35	18.38		
1.4 1.4 1.4	QPSK QPSK QPSK	3 3	5 0 1	18.24 18.45 18.52	18.29 18.37 18.42	18.39 18.34 18.53	19	0
1.4	QPSK QPSK	3	3	18.37 17.29	18.27 17.26	18.40 17.44	18	1
1.4	16QAM 16QAM	1	0 3	17.94 17.97	17.92 17.90	17.89 17.94		
1.4 1.4 1.4	16QAM 16QAM 16QAM	3 3	5 0 1	17.89 17.44 17.61	17.89 17.38 17.55	17.89 17.57 17.59	18	1
1.4 1.4 1.4	16QAM 16QAM	3 3 6	1 3 0	17.61 17.51 16.65	17.55 17.40 16.58	17.59 17.50 16.53	17	2
1.4	64QAM 64QAM	1	3	16.39 16.45	16.44 16.47	16.39 16.55		
1.4	64QAM 64QAM	3	5	16.44 16.48	16.37	16.46 16.41	17	2
1.4 1.4 1.4	64QAM 64QAM 64QAM	3 3 6	1 3 0	16.50 16.35 15.45	16.50 16.35	16.57 16.39 15.50	16	3
1.4	MADIFO	- 6	- 0	15.45	15.39	10.00	10	3

		P	Band 7	(2600MH:	z Band) / Extremit			
BW [MHz]	Modulation	RB Size	RB Offset	Power Low	Power Middle	Power High	Tune-un	
(Ob-			Ch. / Freq. 20850	Ch. / Freq. 21100	Ch. / Freq. 21350	Tune-up limit	MPR (dB)
	Frequen	oy (MHz)		20850	2535	21350	(dBm)	
20	QPSK	1	0	19.32	19.50	19.41		
20	QPSK	1	49	19.40	19.42	19.41	20	0
20 20	QPSK QPSK	1 50	99	19.04 18.18	19.03 18.40	19.06 18.32		
20	QPSK	50	24	18.35	18.23	18.26		
20	QPSK	50	50	18.34	18.31	18.33	19	1
20	QPSK 16QAM	100	0	18.26	18.32	18.30		
20	16QAM 16QAM	1 1	49	18.61 18.87	18.46 18.69	18.40 18.73	19	1
20	16QAM	1	99	18.58	18.51	18.50		
20	16QAM	50	0	17.24	17.21	17.30		
20 20	16QAM 16QAM	50 50	24 50	17.37 17.33	17.31 17.41	17.32 17.31	18	2
20	16QAM	100	0	17.36	17.42	17.38		
20	64QAM	1	0	17.47	17.17	17.09		
20	64QAM	- 1	49	17.58	17.56	17.44	18	2
20 20	64QAM 64QAM	1 50	99 0	17.57 16.25	17.19 16.20	17.11 16.27		
20	64QAM	50	24	16.36	16.28	16.32		
20	64QAM	50	50	16.49	16.31	16.41	17	3
20	64QAM	100	0	16.34 20825	16.29 21100	16.29 21375	Tune-up	
	Cha Frequen	nnei cv (MHz)		20825 2507.5	21100 2535	21375 2562.5	limit (dBm)	MPR (dB)
15	QPSK	ty (MH2)	0	19.27	19.08	19.15	(dBm)	(33)
15	QPSK	1	37	19.47	19.47	19.36	20	0
15	QPSK	1	74	19.29	19.19	19.19		
15	QPSK QPSK	36 36	0 20	18.19	18.18 18.25	18.17 18.20		
15 15	QPSK QPSK	36 36	20 39	18.37	18.25	18.20	19	1
15	QPSK	75	29	18.33	18.31	18.19		
15	16QAM	1	0	18.66	18.52	18.56		
15	16QAM	1	37	18.95	18.92	18.84	19	1
15 15	16QAM 16QAM	1 36	74 0	18.68 17.32	18.72 17.26	18.60 17.26		
15	16QAM	36	20	17.42	17.25	17.28		
15	16QAM	36	39	17.38	17.26	17.33	18	2
15	16QAM	75	0	17.34	17.22	17.31		
15	64QAM 64QAM	1 1	0	17.64 17.73	17.24 17.52	17.28 17.47	18	2
15 15	64QAM 64QAM	1	37 74	17.73	17.52 17.30	17.47	18	2
15	64QAM	36	0	16.30	17.30	17.38		
15	64QAM	36	20	16.41	16.32	16.36	17	3
15	64QAM	36	39	16.42	16.32	16.37	- 17	3
15	64QAM Cha	75 nnel	0	16.41 20800	16.26 21100	16.27 21400	Tune-up	MOD
		cy (MHz)		2505	2535	2565	limit (dBm)	MPR (dB)
10	QPSK	- 1	0	19.27	19.29	19.24		
10	QPSK	1	25	19.35	19.35	19.23	20	0
10 10	QPSK	1 25	49 0	19.34 18.27	19.27 18.18	19.18 18.13		
10	QPSK	25	12	18.34	18.27	18.23		
10	QPSK	25	25	18.30	18.27	18.22	19	1
10	QPSK	50	0	18.36	18.25	18.27		
10 10	16QAM 16QAM	1	0 25	18.79 18.78	18.70 18.84	18.66 18.83	19	1
10	16QAM	1	25 49	18.78	18.65	18.69	19	
10	16QAM	25	0	17.32	17.27	17.13		
10	16QAM	25	12	17.36	17.31	17.31	18	2
10	16QAM	25	25	17.44	17.26	17.23		_
10 10	16QAM 64QAM	50 1	0	17.33	17.32	17.24		
10	64QAM	1	25	17.46	17.45	17.41	18	2
10	64QAM	1	49	17.44	17.36	17.41		
10	64QAM	25	0	16.24	16.32	16.18		
10 10	64QAM 64QAM	25 25	12 25	16.42	16.26 16.38	16.33 16.29	17	3
10	64QAM	50	0	16.43	16.33	16.29		
	Cha	nnel		20775	21100	21425	Tune-up	MPR
	Frequen	cy (MHz)		2502.5	2535	2567.5	(dBm)	(dB)
5 5	QPSK QPSK	1	0 12	19.26 19.49	19.14 19.20	19.19 19.48	20	0
5	QPSK QPSK	1	12 24	19.49	19.20	19.48	20	U
5	QPSK	12	0	18.21	18.12	18.18		
5	QPSK	12	7	18.31	18.26	18.16	19	1
5 5	QPSK QPSK	12 25	13 0	18.22	18.11	18.17		
5 5	QPSK 16QAM	25 1	0	18.28 18.69	18.15 18.60	18.13 18.65		
5	16QAM	1	12	18.85	18.88	18.92	19	1
5	16QAM	1	24	18.63	18.67	18.61		
5	16QAM	12	0	17.24	17.16	17.14		
	16QAM	12	7	17.28	17.29	17.23	18	2
	16QAM 16QAM	12 25	13 0	17.21 17.21	17.16 17.24	17.11 17.19		
, 6	TOCHUM	1	0	17.42	17.24	17.19		
5	64QAM					17.78	18	2
5 5 5	64QAM 64QAM	1	12	17.80	17.64		10	-
5 5 5	64QAM 64QAM	1	24	17.34	17.38	17.34	10	
5 5 5 5	64QAM 64QAM 64QAM	1 1 12	24 0	17.34 16.25	17.38 16.15	17.34 16.26		
5 5 5	64QAM 64QAM	1	24	17.34	17.38	17.34	17	3



W [MHz]	Modulation		RB Offset	Power Low	Power Middle	Power High	Tune-up	
	Cha	nnel		Ch. / Freq. 132072	Ch. / Freq. 132322 1745	Ch. / Freq. 132572	limit (dBm)	MPI (dB
20 20	Prequent QPSK QPSK	2y (MHZ) 1 1	0 49	1720 18.54 18.80	18.83 18.78	1770 18.45 18.80	19	0
20	QPSK QPSK	1 50	99	18.37	18.44	18.39		Ů
20	QPSK QPSK	50	24 50	17.51 17.52	17.62 17.66	17.73 17.75	18	1
20 20	QPSK 16QAM	100 1	0	17.64 17.99	17.74 17.91	17.69 17.92		
20 20	16QAM 16QAM	1	49 99	17.89 17.49	17.94 17.94	17.97 17.97	18	1
20 20	16QAM 16QAM	50 50	0 24	16.75 16.66	16.77 16.62	16.96 16.89	17	2
20 20	16QAM 16QAM	50 100	50 0	16.59 16.64	16.65 16.73	16.63 16.83	2	2
20 20	64QAM 64QAM	1	0 49	16.84 16.84	16.99 16.96	16.93 16.97	17	2
20 20	64QAM 64QAM	1 50	99 0	16.79 15.65	16.88 15.63	16.95 15.76		
20	64QAM 64QAM	50 50	24 50	15.57	15.60 15.67	15.86 15.69	16	3
20	64QAM Cha		0	15.66 132047	15.73 132322	15.77 132597	Tune-up limit	MPI
15	QPSK		0	1717.5	1745 18.60	1772.5	(dBm)	(dB
15 15	QPSK QPSK QPSK	1 1 36	37 74 0	18.62 18.34 17.50	18.51 18.55 17.66	18.82 18.50	19	U
15 15	QPSK QPSK	36 36	20	17.52 17.65	17.68	17.75	18	1
15	QPSK 16QAM	75	0	17.52 17.36	17.78 17.37	17.68		
15	16QAM 16QAM	1	37 74	17.57	17.48	17.69	18	1
15	16QAM 16QAM	36 36	0 20	16.62 16.64	16.72	16.86		
15 15	16QAM 16QAM	36 75	39	16.52 16.69	16.65	16.80	17	2
15 15	64QAM 64QAM	1 1	0	16.20 16.40	16.30 16.57	16.50 16.57	17	2
15 15	64QAM 64QAM	1 36	74 0	16.20 15.63	16.30 15.71	16.25 15.83		
15 15	64QAM 64QAM	36 36	20 39	15.59 15.58	15.87 15.71	15.83 15.64	16	3
15	64QAM Cha		0	15.69 132022	15.76 132322	15.84 132622	Tune-up limit	MPI
10	Frequent QPSK		0	1715 18.56	1745 18.51	1775 18.65	(dBm)	(dB
10 10	QPSK QPSK	1	25 49	18.61 18.47	18.58 18.47	18.75 18.50	19	0
10 10	QPSK QPSK	25 25	0 12	17.57 17.57	17.76 17.58	17.85 17.69	18	1
10 10	QPSK QPSK	25 50	25 0	17.63 17.66	17.72 17.64	17.68 17.78		·
10 10	16QAM 16QAM	1	0 25	17.53 17.51	17.38 17.45	17.45 17.39	18	1
10 10	16QAM 16QAM	1 25	49 0	17.57 16.62	17.29 16.71	17.27 16.93		
10	16QAM 16QAM	25 25	12 25	16.57 16.60	16.67 16.74	16.71 16.68	17	2
10	16QAM 64QAM	50 1	0	16.74 16.56	16.83 16.47	16.75 16.80		
10	64QAM 64QAM	1	25 49	16.58 16.47	16.64 16.53	16.76 16.50	17	2
10 10	64QAM 64QAM	25 25	12	15.57	15.67 15.63	15.84	16	3
10	64QAM	25 50	25 0	15.67	15.67	15.63		
				15.52	15.77	15.72	Tune-up	MD
	Cha Frequenc	nnel cy (MHz)		131997 1712.5	132322 1745	132647 1777.5	Tune-up limit (dBm)	
5 5	Cha Frequent QPSK QPSK	nnel cy (MHz) 1	0 12	131997	132322 1745 18.40 18.76	132647		
5 5 5 5	Cha Frequent QPSK	nnel cy (MHz) 1	0	131997 1712.5 18.29 18.75 18.30 17.47	132322 1745 18.40 18.76 18.39 17.56	132647 1777.5 18.46 18.76 18.41 17.73	limit (dBm)	(dB
5 5 5	Cha Frequent QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	nnel cy (MHz) 1 1 1	0 12 24	131997 1712.5 18.29 18.75 18.30	132322 1745 18.40 18.76 18.39 17.56 17.62 17.61 17.54	132647 1777.5 18.46 18.76 18.41	limit (dBm)	(dB
5 5 5 5 5 5	Cha Frequence QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	nnel cy (MHz) 1 1 1 1 1 12 12 12	0 12 24 0 7	131997 1712.5 18.29 18.75 18.30 17.47 17.51 17.64 17.48 17.62	132322 1745 18.40 18.76 18.39 17.56 17.62	132647 1777.5 18.46 18.76 18.41 17.73 17.65 17.73 17.65 17.78	limit (dBm)	
5 5 5 5 5 5 5	Cha Frequent QPSK QPSK QPSK QPSK QPSK QPSK QPSK QPSK	nnel cy (MHz) 1 1 1 1 12 12 12 12 12 11	0 12 24 0 7 13 0	131997 1712.5 18.29 18.75 18.30 17.47 17.51 17.64 17.48	132322 1745 18.40 18.76 18.39 17.56 17.62 17.61 17.54	132647 1777.5 18.46 18.76 18.41 17.73 17.65 17.73	limit (dBm) 19	0 1
5 5 5 5 5 5 5 5 5	Cha Frequence OPSK OPSK OPSK OPSK OPSK OPSK OPSK OPSK	nnel cy (MHz) 1 1 1 1 12 12 12 12 11 1 1 1 1 1 1 1 1	0 12 24 0 7 13 0 0	131997 1712.5 18.29 18.75 18.30 17.47 17.51 17.64 17.48 17.62 17.50 17.65	132322 1745 18.40 18.76 18.39 17.56 17.62 17.61 17.54 17.74 17.49	132647 1777.5 18.46 18.76 18.41 17.73 17.65 17.78 17.43 17.72 16.72 16.72	limit (dBm) 19	0 1
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Cha Frequent OPSK OPSK OPSK OPSK OPSK OPSK OPSK IBOAM IBOAM IBOAM IBOAM IBOAM	nnel ey (MHz) 1 1 1 1 12 12 12 11 12 12 1	0 12 24 0 7 13 0 0 12 24 0 7	131997 1712.5 18.29 18.75 18.30 17.47 17.51 17.64 17.62 17.50 17.65 16.44 16.51 16.64 16.52	132322 1745 18.40 18.76 18.39 17.56 17.62 17.61 17.74 17.74 17.74 17.73 16.56 16.79	132647 1777.5 18.46 18.76 18.41 17.73 17.65 17.73 17.65 17.78 17.43 17.43 17.72 16.74	19 18 18 17	0 1 1 2
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Cha Frequence OPSK OPSK OPSK OPSK OPSK OPSK OPSK OPSK	nnel cy (MHz) 1 1 1 12 12 12 12 12 12 11 1	0 12 24 0 7 13 0 0 12 24 0 7 13 0 0	131997 1712.5 18.29 18.75 18.30 17.47 17.51 17.64 17.62 17.50 17.65 16.41 16.51 16.56 16.64 16.52 16.90 16.56	132322 1745 18.40 18.76 18.39 17.56 17.62 17.61 17.74 17.74 17.73 16.56 16.79 16.68 16.74 16.60	132647 1777.5 18.46 18.76 18.41 17.73 17.65 17.78 17.73 17.43 17.72 16.74 16.72 16.60 16.60 16.90 16.90	Ilmit (dBm) 19 18	0 1 1
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Cha Frequence OPSK OPSK OPSK OPSK OPSK OPSK OPSK OPSK	nnel Ey (MHz) 1 1 1 1 12 12 25 1 1 1 12 25 1 1 12 12	0 12 24 0 7 13 0 0 12 24 0 7 13 0 0 12 24 0 7	131997 1712.5 18.29 18.75 18.30 17.47 17.51 17.64 17.62 17.62 17.65 16.44 16.51 16.56 16.64 16.52 16.90 16.58 15.38	182322 1745 18.40 18.76 18.39 17.56 17.62 17.61 17.74 17.73 16.56 16.74 16.68 16.74 16.60 16.74 16.51 15.51	132647 1777.5 18.46 18.76 18.41 17.73 17.65 17.73 17.65 17.78 17.43 17.72 16.74 16.72 16.70 16.68 16.60 16.99 16.62	19 18 18 17	0 1 1 2 2 2
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Chair Frequence Chair Frequence Chair Chai	nnel by (MHz) 1 1 1 1 12 12 25 1 1 1 12 12	0 12 24 0 7 13 0 0 12 24 0 7 13 0 0	131997 1712.5 18.75 18.30 17.47 17.51 17.64 17.65 17.65 16.56 16.56 16.56 16.56 16.56 16.52 16.50 15.52	132322 1745 18.40 18.76 18.39 17.56 17.62 17.61 17.74 17.74 17.73 16.56 16.79 16.60 16.74 16.60	132647 1777.5 18.46 18.76 18.41 17.73 17.65 17.78 17.78 17.72 16.74 16.72 16.68 16.60 16.69 16.69 16.62	19 18 18 17 17	0 1 1 2
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Cha Frequence OPSK OPSK OPSK OPSK OPSK OPSK OPSK 160AM 160AM 160AM 160AM 640AM 640AM 640AM 640AM 640AM	nnel cy (MHz) 1 1 1 12 12 12 25 1 1 1 12 12	0 12 24 0 7 13 0 0 12 24 0 7 7 13 0 0 12 24 0 7 13 0 0 7	131997 1712.5 18.29 18.75 18.30 17.47 17.51 17.64 17.62 17.50 17.65 16.44 16.51 16.56 16.64 16.52 16.90 16.56 15.38 15.47 15.49 15.62	182322 1745 18.40 18.76 18.39 17.56 17.62 17.61 17.74 17.74 17.73 16.56 16.79 16.60 16.74 16.60 16.74 15.50 15.75 15.50 15.75 15.48 15.64 132322 1745	132647 1777.5 18.46 18.76 18.41 17.73 17.65 17.73 17.65 17.78 17.73 17.65 17.74 16.72 16.70 16.60 16.60 16.60 16.60 16.60 16.60 16.67 16.67 16.67 16.67	19 18 18 17	(dE 0 1 1 1 2 2 2 3 3 MPPI
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Cha Prequence OPSK OPSK OPSK OPSK OPSK OPSK OPSK OPSK	nnel ey (MHz) 1 1 1 1 1 12 12 25 1 1 1 12 12	0 12 24 24 0 7 13 0 0 12 24 0 7 13 0 0 7 13 0 7 13 0 7 13 0 7 13 0 0 7 7 13 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0	131997 1712.5 18.29 18.75 18.30 17.47 17.51 17.64 17.62 17.50 16.44 16.51 16.56 16.64 16.52 16.90 16.56 15.38 15.47 15.49 15.62 131987 1711.5	18:20 22 1745 18:40 18:76 18:39 17:56 17:56 17:56 17:54 17:74 17:73 16:56 16:79 16:68 16:74 16:51 15:50 15:75 15:48 15:64 13:23:22 1745 18:52 18:52	132647 1777.5 18.46 18.76 18.41 17.73 17.65 17.73 17.65 17.73 17.65 17.73 17.65 17.74 16.72 16.70 16.60 16.60 16.60 16.60 15.67 15.57 15.57 15.57 15.57 15.57 15.57 15.62	19 18 18 17 17 16 Tune-up limit	(dE 0 1 1 1 2 2 2 3 3 MPPI
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Chairmann Chairm	nnel ey (MHz) 1 1 1 1 1 1 1 1 2 2 2 5 1 1 1 1 2 2 5 1 1 1 2 2 5 1 1 1 2 2 5 1 1 1 1	0 12 24 0 7 13 0 0 12 24 0 7 13 0 0 12 24 0 7 13 0 0 0 7	131997 1712.5 18.29 18.75 18.75 17.47 17.51 17.64 17.65 17.65 16.51 16.51 16.52 16.64 16.52 16.56 15.38 15.47 15.62 18.62 18.69 18.62 18.6	18:3022 17:45 18:40 18:76 18:39 17:56 17:62 17:61 17:54 17:74 17:74 17:74 17:79 16:56 16:79 16:68 16:79 16:60 16:79 16:50 15:50	132647 1777.5 18.46 18.76 18.41 17.73 17.65 17.73 17.65 17.73 17.65 17.73 17.65 17.73 17.72 16.70 16.62 16.60 16.60 16.62 15.67 15.57 15.73 17.78 15.73 17.73 17.73 17.73 18.70 18.7	19 18 18 18 17 17 16 Trune-up limit (dBm)	1 1 2 2 3 MPP(dB
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Chair Frequence OPSK OPSK OPSK OPSK OPSK OPSK OPSK OPSK	nnel (y (M+z) (1) (1) (1) (1) (1) (1) (1) (1	0 12 24 0 7 13 0 0 12 24 0 7 7 13 0 0 0 7 7 13 13 0 0 7 7 7 13 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	131997 1712.5 18.29 18.75 18.29 18.75 18.29 17.47 17.51 17.64 17.48 18.30 17.47 17.51 17.50 17.50 17.50 18.54 18.51 18.50 18.54 18.50 18.5	18:3922 1745 18:40 18:76 18:39 17:56 17:56 17:56 17:74 17:74 17:74 17:74 16:56 16:74 16:60 16:74 16:50 15:75 15:50 15:48 15:48 15:48 15:48 15:48 15:48 15:48 15:48 15:48 15:59 18:59	132647 1777.5 18.46 18.76 18.41 17.73 17.65 17.73 17.65 17.78 17.43 17.72 16.74 16.74 16.70 16.60 16.69 16.60 15.67 15.67 15.67 15.62 15.67 17.78 17.78 18.52 18.51 18.52 18.51 18.52 18.51 17.57 17.58	19 18 18 18 17 17 16 Trune-up limit (dBm)	1 1 2 2 3 MPP(dB
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Chiharan China Chi	nnel	0 12 24 0 7 13 0 0 12 24 0 7 7 13 3 0 0 12 24 0 7 7 7 13 0 0 0 12 24 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	131997 17712.5 18.79 18.79 18.79 18.79 18.79 17.47 17.50 17.64 17.48 17.49 17.50 17.70 17.50 17.70 17.	153222 17.53 18.40 18.76 18.76 17.52 17.51 17.52 17.74 17.74 16.50 16.74 16.74 16.74 16.80 16.74 16.80 17.75 15.86 15.75 15.86 15.75 15.86 15.75 15.86 15.75 17.75	132647 18.46 18.76 18.46 18.76 18.41 11.73	Init	(dB) 0 1 1 2 2 2 3 3 M/P/IC (dB) 0 0 1 1
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Chickette Control of the Control of the Control of Cont	onnel y (Mitz) 1 1 1 12 12 12 12 12 12 11 12 13 14 15 16 17 18 8 8 8 8 8 8 8 15 11 11 1	0 12 24 0 7 7 13 0 0 0 12 24 0 7 7 13 0 0 0 8 14 0 0 8 8 14 0 0 8 8 14 14 0 0 8 8 14 14 0 0 8 8 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15	131997 1733 1850 1747 1737 1737 1733 1850 1747 1753 1850 1747 1753 1850 1747 1755 1850 1850 1850 1850 1850 1850 1850 18	193222 1745 18.40 18.76 18.76 18.76 18.76 18.76 18.76 18.76 18.78 17.562 17.562 17.62 17.62 17.62 17.62 17.62 17.62 17.63 18.76 18.7	132647 18.48 18.78 18.48 18.78 18.41 17.73 17.75 17.75 17.75 17.78 17.78 17.78 18.72 18.72 18.72 18.72 18.72 18.72 18.72 18.72 18.72 18.72 18.72 18.72 18.73 18.73 18.73 18.73 18.73 18.73 18.73 18.75 18.75 17.75 17.75 17.75 17.75 17.75 17.75 17.75 17.75 17.75 17.75 17.75 17.75 17.75	19 18 18 17 17 16 Trune-up limit (dBm) 19 19 19 19	(dB 0 1 1 1 2 2 2 3 3 MPP(dB 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Chiharan Chi	nnel (y (MHz) (Hz) (Hz) (Hz) (Hz) (Hz) (Hz) (Hz) (0 12 24 0 7 13 0 0 0 12 24 0 0 7 7 13 0 0 0 12 24 0 0 7 7 7 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	181997 1712.5 18.29 18.79 18.29 18.79 18.29 18.79 17.25 18.29 17.24 17.25 18.20 17.24 17.24 17.24 17.24 17.24 17.24 17.24 17.25 17.25 18.20 17.25 18.20 18.25 18.20 18.25 18.20 17.27 17.25 18.20 17.27 17.25 18.20 17.27 18.25 18.2	193222 1745 18.40 18.76 18.76 18.76 18.76 18.76 18.76 18.76 18.78 17.55 17.55 18.76 18.77 17.52 17.54 17.74 17.73 18.76	132647 18.46 18.76 18.77 18.46 18.78 18.41 17.73 17.75 17.76 17.76 17.76 17.76 16.74 17.76 16.74 17.76 16.77 16.87 17.78 18.71 17.80 18.80 18.90 18.80 18.91 17.81 17.82 17.83 18.51 17.83 18.51 17.81 17.83 18.51 17.81 17.83	Init	(dB) 0 1 1 2 2 2 3 3 M/P/(dB) 0 0 1 1
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Chilabor Chi	nnel (y (M+z) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	0 12 24 0 7 13 10 0 0 12 24 0 7 7 13 0 0 0 0 12 24 0 0 7 7 7 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	181997 1712.5 18.29 18.79 18.29 18.79 18.29 18.79 18.30 17.47 17.48 17.62 17.62 18.30 17.64 18.50 18.5	1932/25 18.40 18.40 18.76 18.39 17.62 17.62 17.62 17.64 17.64 17.74 16.68 16.79 16.89 16.80 16.70 16.81 16.70 16.81 16.70 16.81 16.70 16.81 16.70 16.81 16.70 16.81 16.70 16.81 16.70 16.81 17.74 17.7	193647 18.46 18.77 18.46 18.41 18.71 18.78 18.41 17.73 17.85 17.73 17.85 17.73 17.85 17.73 17.85 17.73 17.85 17.73 17.85 18.63 18.63 18.63 18.63 18.63 17.73 17.65 18.63 18.63 17.51 17.52 17.78 17.51 17.51 17.58	Int Int	(dB
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Chilabora Chilab	nned	0 12 24 0 0 7 13 0 0 0 7 13 0 0 0 7 7 13 13 0 0 0 7 7 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	131997 1712.5 18.29 18.20 18.20 18.20 18.20 18.20 18.20 18.20 18.20 18.20 18.20 18.20 18.20 18.20 17.47 17.51 17.47 17.51 17.47 17.51 17.48 17.48 18.51 18.20 17.50 18.2	1932/25 1745 18.40 18.76 18.37 18.37 18.37 18.37 17.58 17.62 17.59 17.59 17.59 18.59	1906/17 18-46 18-7 18-7 18-7 18-7 18-7 18-7 18-7 18-7	Int Int	(dB
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Chitaly Chital	nned	0 12 24 0 0 7 13 0 0 0 7 13 13 0 0 0 7 7 13 13 0 0 0 7 7 13 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	131997 1712.5 18.29 18.20 18.20 18.20 18.20 18.20 18.20 18.20 18.20 18.20 18.20 18.20 18.20 18.20 18.20 17.47 17.51 17.51 17.52 17.50 18.20 17.50 18.2	152522 17.65 16.25 17.65 16.25 17.65 16.25 17.65 16.25 17.65 16.25 17.65 17.74 17.74 17.74 17.74 17.74 17.74 16.56 17.75 16.56 17.75 17.74	15047 1775 1840 1877 1877 1877 1877 1877 1877 1877 187	Indicate Indicate	(dB 0 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2
5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Chila	nnel	0 12 24 0 7 13 0 0 12 24 0 7 7 13 13 0 0 0 12 24 0 7 7 13 13 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	131997 1712.5 18.20 18.20 18.20 18.20 18.20 18.20 18.20 18.20 18.3	152522 1745 18.40 18.76 18.76 18.76 18.76 18.76 18.76 18.76 18.76 18.76 18.76 18.76 18.76 18.76 18.76 18.76 18.76 17.56 17.56 17.56 18.76	150617 18.40 18.41 18.42 18.41 18.41 17.73 17.65 17.65 17.73 17.65 16.72 16.72 16.73 16.74 17.73 17.75 16.74 17.75 16.76 16.70 16.76 16.76 16.76 16.76 16.77 17.78 17.78 18.78 18.62 18.63 18.63 18.63 17.51 17.78 18.63 18.63 17.51 17.65 18.63 17.51 17.65 18.63 17.51 17.65 18.63 17.51 17.65 18.63 17.51 17.65 18.63 17.51 18.63 17.51 18.63 17.51 18.63 17.51 18.63 17.51 18.63 18.63 17.51 18.63 18.63 18.63 17.51 18.63	Indicate Indicate	(dB 0 1 1 1 2 2 3 3 MPP(dB 0 1 1 1 1 1 2 2 3 3 4 1 1 1 1 1 1 2 2 3 3 4 1 1 1 1 1 2 2 3 3 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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Full Power Mode

2.4GHz WLAN		Ant 1							
	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %			
		1	2412	15.29	16.00				
	802.11b 1Mbps	6	2437	17.03	18.00	100.00			
2.4GHz WLAN		11	2462	15.66	16.00				
2.4GHZ WEAN	802.11g 6Mbps	1	2412	14.25	16.00				
		6	2437	15.08	16.00				
		11	2462	12.12	14.00				
		1	2412	13.47	14.00	100.00			
	802.11n-HT20 MCS0	6	2437	14.75	16.00				
		11	2462	11.82	12.00				

BT EDR

DI LDI						
Mode	Channel	Frequency	A	verage power (dBm)		
Wode	Charmer	(MHz)	1Mbps	2Mbps	3Mbps	
	CH 00	2402	6.26	4.17	4.14	
BR / EDR	CH 39	2441	7.14	5.60	5.48	
	CH 78	2480	6.71	4.84	4.87	
T	une-up Limit		8.5	6.5	6.5	

BILE			
Mode	Channel	Frequency	Average power (dBm)
Wode	Citatilei	(MHz)	GFSK
	CH 00	2402	-5.33
LE	CH 19	2440	-4.11
	CH 39	2480	-4.24
Т	une-up Limit		-4