

FCC SAR EVALUATION REPORT

**In accordance with the requirements of
FCC 47 CFR Part 2(2.1093) and
IEEE Std 1528-2013**

Product Name : Smart Phone

Brand Name : OUKITEL

Model Name : WP60

Family Model : WP60 S, WP60 Pro, WP60 Plus,
WP60 Ultra, WP60 TITAN, WP60 GT,
WP60 TI

Report No. : N25080200409E

FCC ID : 2ANMU-WP60

Prepared for

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TEST RESULT CERTIFICATION

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Product description

Product name Smart Phone
Brand Name OUKITEL
Model and/or type WP60
reference
Family Model WP60 S, WP60 Pro, WP60 Plus, WP60 Ultra, WP60 TITAN, WP60 GT,
WP60 TI
FCC 47 CFR Part 2(2.1093)

Standards IEEE Std 1528-2013
Published RF exposure KDB procedures

This device described above has been tested by Shenzhen NTEK. In accordance with the measurement methods and procedures specified in IEEE Std 1528-2013 and KDB 865664 D01. Testing has shown that this device is capable of compliance with localized specific absorption rate (SAR) specified in FCC 47 CFR Part 2(2.1093). The test results in this report apply only to the tested sample of the stated device/equipment. Other similar device/equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

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Test Sample Number S2508110182-1#

Date of Test

Date (s) of performance of tests .. Aug. 08, 2025~ Aug. 19, 2025

Date of Issue..... Oct. 28 2025

Test Result..... **Pass**

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 Revision History
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REV.	DESCRIPTION	ISSUED DATE	REMARK
Rev.1.0	Initial Test Report Release	Oct. 28 2025	Owen Xiao

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1. General Information

1.1. RF exposure limits

(A).Limits for Occupational/Controlled Exposure (W/kg)

Whole-Body	Partial-Body	Hands, Wrists, Feet and Ankles
0.4	8.0	20.0

(B).Limits for General Population/Uncontrolled Exposure (W/kg)

Whole-Body	Partial-Body	Hands, Wrists, Feet and Ankles
0.08	1.6	4.0

NOTE: **Whole-Body SAR** is averaged over the entire body, **partial-body SAR** is averaged over any 1 gram of tissue defined as a tissue volume in the shape of a cube. **SAR for hands, wrists, feet and ankles** is averaged over any 10 grams of tissue defined as a tissue volume in the shape of a cube.

Occupational/Controlled Environments:

Are defined as locations where there is exposure that may be incurred by people who are aware of the potential for exposure, (i.e. as a result of employment or occupation).

General Population/Uncontrolled Environments:

Are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure.

NOTE

HEAD AND TRUNK LIMIT

1.6 W/kg , EXTREMITY LIMIT 4.0 W/kg

APPLIED TO THIS EUT

1.2. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for WP60 are as follows.

RF Exposure Conditions		Equipment Class -Highest Reported SAR (W/kg)				Max. Reported SAR (W/kg)
		PCE	DTS	NII	DSS	
1-g Head		0.315	0.051	0.618	0.149	0.618
1-g Body-Worn (Separation distance of 10mm)		1.131	0.077	0.249	0.074	1.131
1-g Hotspot (Separation distance of 10mm)		1.131	0.077	0.400	0.074	
Max Simultaneous Tx	Head	0.933	0.366	0.933	0.464	0.933
	Body-Worn	1.380	1.208	1.380	1.205	1.380
	Hotspot	1.380	1.208	1.380	1.205	

Note: The Max Simultaneous Tx is calculated based on the same configuration and test position.

This device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6 W/kg) specified in FCC 47 CFR Part 2(2.1093), and had been tested in accordance with the measurement methods and procedures specified in IEEE Std 1528-2013 & KDB 865664 D01.

1.3. EUT Description

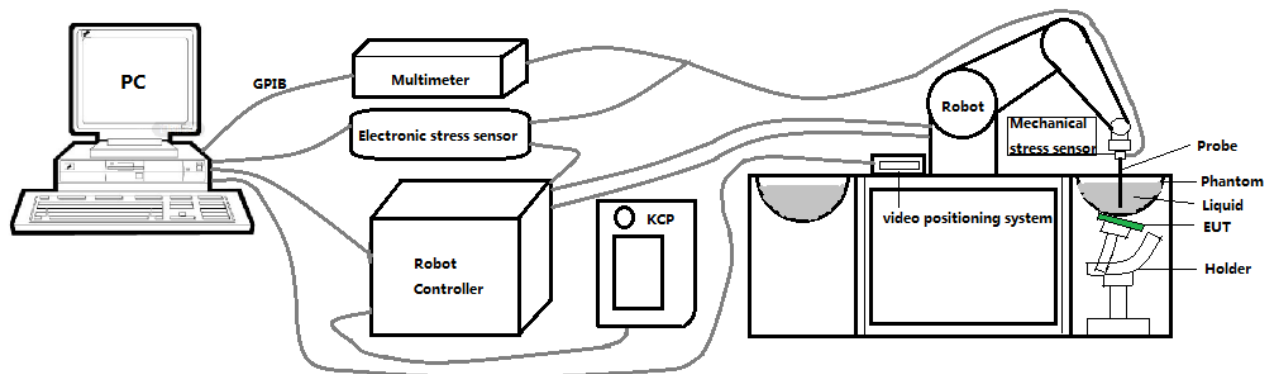
Device Information	
Product Name	Smart Phone
Brand Name	OUKITEL
Model Name	WP60
Family Model	WP60 S, WP60 Pro, WP60 Plus, WP60 Ultra, WP60 TITAN, WP60 GT, WP60 TI
Model Difference	All models are the same circuit and RF module, except for the color.
FCC ID	2ANMU-WP60
Device Phase	Identical Prototype
Exposure Category	General population / Uncontrolled environment
Antenna Type	PIFA Antenna
Battery Information	DC 3.87V, 10000mAh, 38.7Wh
Rating(s)	DC 3.87V from battery or DC 5V/9V/12V/15V/20V from adapter
HW Version	N/A
SW Version	V04
Device Operating Configurations	
Supporting Mode(s)	GSM850/1900,WCDMABand2/4/5,LTEBand2/4/5/7/12/17/25/26a/26b,NR n78, WLAN 2.4G/5G, Bluetooth, NFC
Test Modulation	GSM(GMSK),WCDMA(QPSK),LTE(QPSK/16QAM),NR(DFT-s-OFDM:PI/2BPSK/QPSK/16-QAM/64QAM/256QAMCP-OFDM:QPSK/16-QAM/64QAM/256QAM),

	WLAN(DSSS/OFDM), Bluetooth(GFSK, $\pi/4$ -DQPSK, 8DPSK),NFC(ASK)		
Device Class	B		
Operating Frequency Range(s)	Band	Tx (MHz)	Rx (MHz)
	GSM 850	824-849	869-894
	GSM 1900	1850-1910	1930-1990
	WCDMA Band 2	1850-1910	1930-1990
	WCDMA Band 4	1710-1755	2110-2155
	WCDMA Band 5	824-849	869-894
	LTE Band 2	1850-1910	1930-1990
	LTE Band 4	1710-1755	2110-2155
	LTE Band 5	824-849	869-894
	LTE Band 7	2500-2570	2620-2690
	LTE Band 12	699-716	729-746
	LTE Band 17	704-716	734-746
	LTE Band 25	1850-1915	1930-1995
	LTE Band 26a	814-824	859-869
	LTE Band 26b	824-849	869-894
	NR n78	3450-3550	
	WLAN 2.4G	2412-2462	
	WLAN 5.2G	5180-5240	
	WLAN 5.8G	5745-5825	
	Bluetooth	2402-2480	
	NFC	13.56	
Power Class	4, tested with power level 5(GSM 850)		
	1, tested with power level 0(GSM 1900)		
	3, tested with power control “all 1”(WCDMA Band 2)		
	3, tested with power control “all 1”(WCDMA Band 4)		
	3, tested with power control “all 1”(WCDMA Band 5)		
	3, tested with power control all Max.(LTE Band 2)		
	3, tested with power control all Max.(LTE Band 4)		
	3, tested with power control all Max.(LTE Band 5)		
	3, tested with power control all Max.(LTE Band 7)		
	3, tested with power control all Max.(LTE Band 12)		
	3, tested with power control all Max.(LTE Band 17)		
	3, tested with power control all Max.(LTE Band 25)		
	3, tested with power control all Max.(LTE Band 26)		
	3, tested with power control all Max.(NR n78)		

CNAS Lab. : The Certificate Registration Number is L5516
A2LA Lab. : The Certificate Registration Number is 4298.01
FCC Accredited : Test Firm Registration Number: 463705
Designation Number: CN1184
ISED Registration : Company Number: 9270A
CAB identifier: CN0074

2. SAR Measurement System

2.1. SATIMO SAR Measurement Set-up Diagram



These measurements were performed with the automated near-field scanning system OPENSAR from SATIMO. The system is based on a high precision robot (working range: 901 mm), which positions the probes with a positional repeatability of better than ± 0.03 mm. The SAR measurements were conducted with dosimetric probe (manufactured by SATIMO), designed in the classical triangular configuration and optimized for dosimetric evaluation.

The first step of the field measurement is the evaluation of the voltages induced on the probe by the device under test. Probe diode detectors are nonlinear. Below the diode compression point, the output voltage is proportional to the square of the applied E-field; above the diode compression point, it is linear to the applied E-field. The compression point depends on the diode, and a calibration procedure is necessary for each sensor of the probe.

The Keithley multimeter reads the voltage of each sensor and send these three values to the PC. The corresponding E field value is calculated using the probe calibration factors, which are stored in the working directory. This evaluation includes linearization of the diode characteristics. The field calculation is done separately for each sensor. Each component of the E field is displayed on the "Dipole Area Scan Interface" and the total E field is displayed on the "3D Interface"

2.2. Robot

The SATIMO SAR system uses the high precision robots from KUKA. For the 6-axis controller system, the robot controller version (KUKA) from KUKA is used. The KUKA robot series have many features that are important for our application:



- High precision (repeatability ± 0.03 mm)
- High reliability (industrial design)
- Jerk-free straight movements
- Low ELF interference (the closed metallic construction shields against motor control fields)

2.3. E-Field Probe

This E-field detection probe is composed of three orthogonal dipoles linked to special Schottky diodes with low detection thresholds. The probe allows the measurement of electric fields in liquids such as the one defined in the IEEE and CENELEC standards.

For the measurements the Specific Dosimetric E-Field Probe 4024-EPGO-448 with following specifications is used



- Dynamic range: 0.01-100 W/kg
- Tip Diameter : 2.5 mm
- Distance between probe tip and sensor center: 1 mm
- Distance between sensor center and the inner phantom surface: 2 mm (repeatability better than ± 1 mm).
- Probe linearity: ± 0.06 dB
- Axial isotropy: ± 0.01 dB
- Hemispherical Isotropy: ± 0.01 dB
- Calibration range: 650MHz to 5900MHz for head & body simulating liquid.
- Lower detection limit: 8mW/kg

Angle between probe axis (evaluation axis) and surface normal line: less than 30° .

2.3.1. E-Field Probe Calibration

Each probe needs to be calibrated according to a dosimetric assessment procedure with accuracy better than $\pm 10\%$. The spherical isotropy shall be evaluated and within ± 0.25 dB. The sensitivity parameters (Norm X, Norm Y, and Norm Z), the diode compression parameter (DCP) and the conversion factor (Conv F) of the probe are tested. The calibration data can be referred to appendix D of this report.

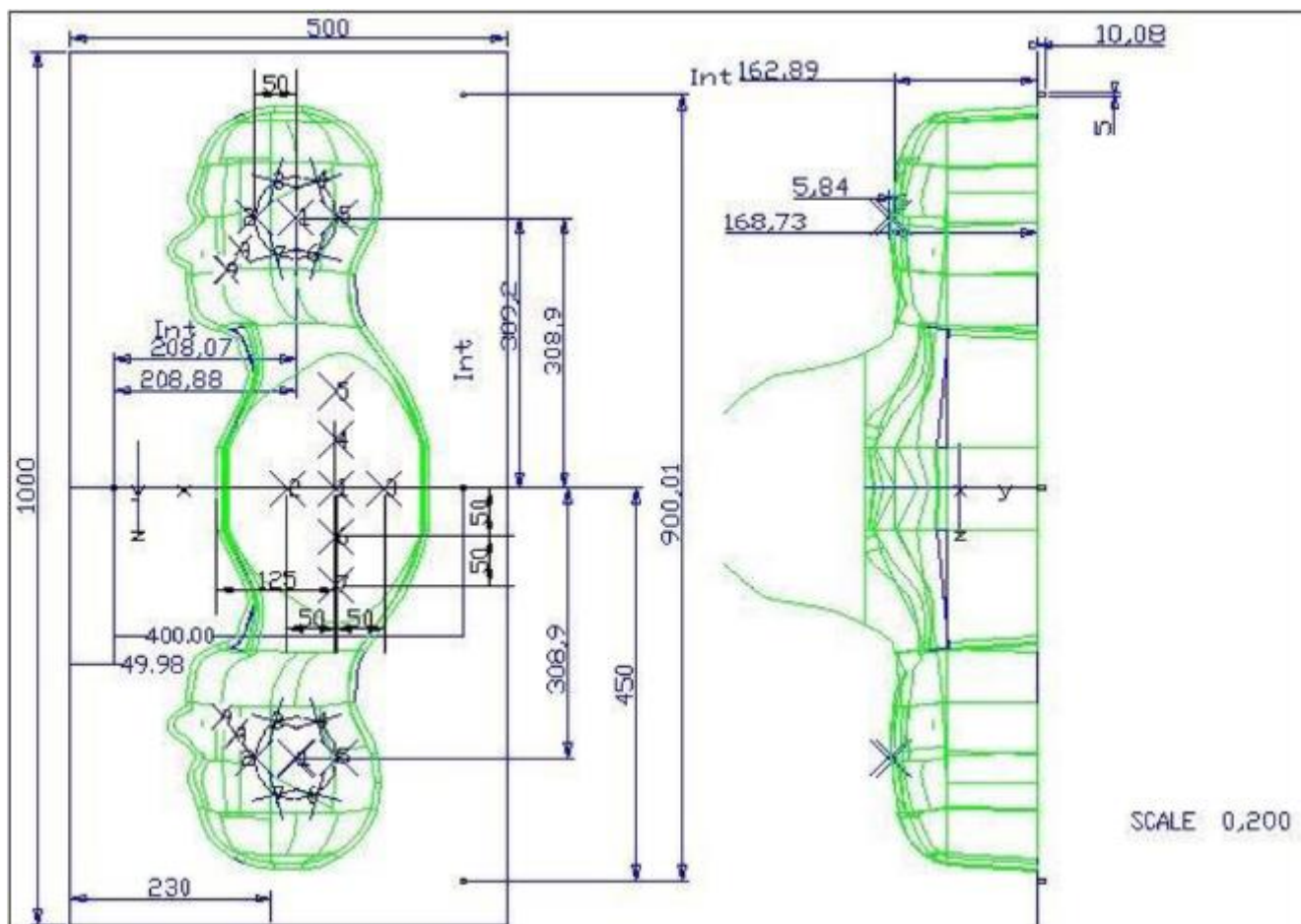
2.4. SAM phantoms

Photo of SAM phantom SN 16/15 SAM119



The SAM phantom is used to measure the SAR relative to people exposed to electro-magnetic field radiated by Mobile Phones.

Serial Number	Shell thickness	Filling volume	Dimensions	Positionner Material	Permittivity	Loss Tangent
SN 16/15 SAM119	2 mm ±0.2 mm	27 liters	Length:1000 mm Width:500 mm Height:200 mm	Gelcoat with fiberglass	3.4	0.02

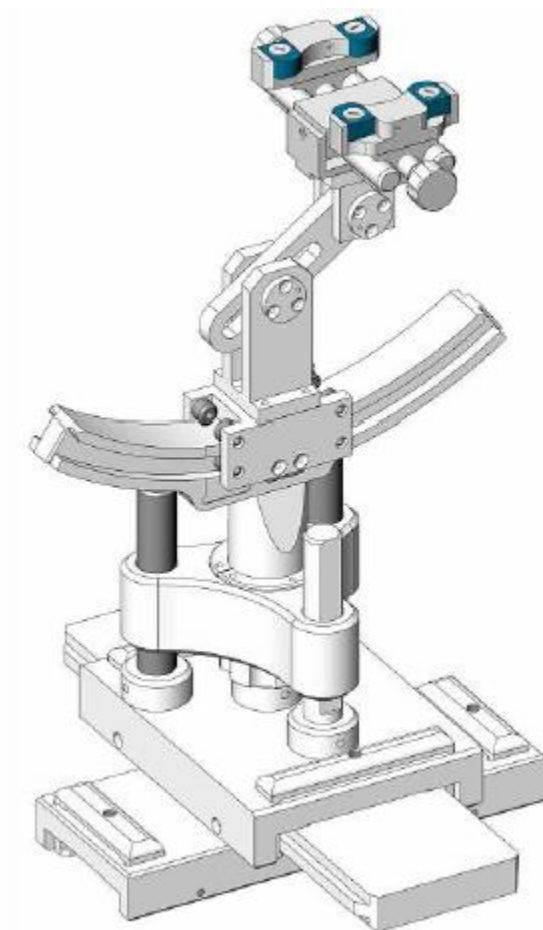


Serial Number	Left Head(mm)		Right Head(mm)		Flat Part(mm)	
SN 16/15 SAM119	2	2.02	2	2.08	1	2.09
	3	2.05	3	2.06	2	2.06
	4	2.07	4	2.07	3	2.08
	5	2.08	5	2.08	4	2.10
	6	2.05	6	2.07	5	2.10
	7	2.05	7	2.05	6	2.07
	8	2.07	8	2.06	7	2.07
	9	2.08	9	2.06	-	-

The test, based on ultrasonic system, allows measuring the thickness with an accuracy of 10 μm .

2.5. Device Holder

The positioning system allows obtaining cheek and tilting position with a very good accuracy. In compliance with CENELEC, the tilt angle uncertainty is lower than 1 degree.



Serial Number	Holder Material	Permittivity	Loss Tangent
SN 16/15 MSH100	Delrin	3.7	0.005

2.6. Test Equipment List

This table gives a complete overview of the SAR measurement equipment.

Devices used during the test described are marked ☒

	Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
					Last Cal.	Due Date
☒	MVG	E FIELD PROBE	SSE2	0725-EPGO-448	Apr. 15, 2025	Apr. 14, 2026
☒	MVG	750 MHz Dipole	SID750	SN 03/15 DIP 0G750-355	Feb. 21, 2024	Feb. 20, 2027
☒	MVG	835 MHz Dipole	SID835	SN 03/15 DIP 0G835-347	Feb. 21, 2024	Feb. 20, 2027
☐	MVG	900 MHz Dipole	SID900	SN 03/15 DIP 0G900-348	Feb. 21, 2024	Feb. 20, 2027
☒	MVG	1800 MHz Dipole	SID1800	SN 03/15 DIP 1G800-349	Feb. 21, 2024	Feb. 20, 2027
☒	MVG	1900 MHz Dipole	SID1900	SN 03/15 DIP 1G900-350	Feb. 21, 2024	Feb. 20, 2027
☐	MVG	2000 MHz Dipole	SID2000	SN 03/15 DIP 2G000-351	Feb. 21, 2024	Feb. 20, 2027
☒	MVG	2300 MHz Dipole	SID2300	SN 03/16 DIP 2G300-358	Feb. 22, 2024	Feb. 21, 2027
☒	MVG	2450 MHz Dipole	SID2450	SN 03/15 DIP 2G450-352	Feb. 21, 2024	Feb. 20, 2027
☒	MVG	2600 MHz Dipole	SID2600	SN 03/15 DIP 2G600-356	Feb. 21, 2024	Feb. 20, 2027
☒	MVG	3500 MHz Dipole	SID3500	SN 09/12 DIP 3G500-360	Oct. 15, 2022	Oct. 14, 2025
☐	MVG	5000 MHz Dipole	SWG5500	SN 13/14 WGA 33	Feb. 21, 2024	Feb. 20, 2027
☒	MVG	Liquid measurement Kit	SCLMP	SN 21/15 OCPG 72	NCR	NCR
☒	MVG	Power Amplifier	N/A	AMPLISAR_28/14_003	NCR	NCR
☒	KEITHLEY	Millivoltmeter	2000	4072790	May. 12 2025	May. 11 2026
☒	R&S	Universal radio communication tester	CMU200	105747	Apr. 17, 2025	Apr. 16, 2026

☒	R&S	Wideband radio communication tester	CMW500	103917	May. 12, 2025	May. 11, 2026
☒	Anritsu	4G LTE comprehensive tester	MT8821C	6262192315	Apr.16 2025	Apr.15 2026
☒	Anritsu	5G NR comprehensive tester	MT8000A	6262186364	Apr.16 2025	Apr.15 2026
☒	Keysight	Network Analyzer	E5071C	LPS-461	Jun. 3, 2025	Jun. 2, 2026
☒	Agilent	Calibration Kit	85033E	N/A	May. 31, 2024	May. 30, 2027
☒	Agilent	MXG Vector Signal Generator	N5182A	MY47070317	Apr. 17, 2025	Apr. 16, 2026
☒	Agilent	Power sensor	E9301A	LES-413-C	May. 6, 2025	May. 5, 2026
☒	Agilent	Power sensor	E9301A	US39212148	Apr. 17, 2025	Apr. 16, 2026
☒	MCLI/USA	Directional Coupler	CB11-20	0D2L51502	Apr. 26, 2024	Apr. 25, 2027
☒	N/A	Thermometer	N/A	LES-085	Mar. 27, 2023	Mar. 26, 2026
☒	MVG	SAM Phantom	SSM2	SN 16/15 SAM119	NCR	NCR
☒	MVG	Device Holder	SMPPD	SN 16/15 MSH100	NCR	NCR

Measurement Software

Manufacturer	Software Name	Software Version
SATIMO	OpenSAR	V5.3.15.11

3. SAR Measurement Procedures

The measurement procedures are as follows:

<Conducted power measurement>

- (a) For WWAN power measurement, use base station simulator to configure EUT WWAN transmission in conducted connection with RF cable, at maximum power in each supported wireless interface and frequency band.
- (b) Read the WWAN RF power level from the base station simulator.
- (c) For Wi-Fi/BT power measurement, use engineering software to configure EUT Wi-Fi/BT continuously transmission, at maximum RF power in each supported wireless interface and frequency band.
- (d) Connect EUT RF port through RF cable to the power meter, and measure Wi-Fi/BT output power.

<SAR measurement>

- (a) Use base station simulator to configure EUT WWAN transmission in radiated connection, and engineering software to configure EUT Wi-Fi/BT continuously transmission, at maximum RF power, in the highest power channel.
- (b) Place the EUT in the positions as Appendix A demonstrates.
- (c) Set scan area, grid size and other setting on the OPENSAR software.
- (d) Measure SAR results for the highest power channel on each testing position.
- (e) Find out the largest SAR result on these testing positions of each band.
- (f) Measure SAR results for other channels in worst SAR testing position if the reported SAR of highest power channel is larger than 0.8 W/kg.

According to the test standard, the recommended procedure for assessing the peak spatial-average SAR value consists of the following steps:

- (a) Power reference measurement
- (b) Area scan
- (c) Zoom scan
- (d) Power drift measurement

3.1. Power Reference

The Power Reference Measurement and Power Drift Measurements are for monitoring the power drift of the device under test in the batch process. The minimum distance of probe sensors to surface determines the closest measurement point to phantom surface. This distance cannot be smaller than the distance of sensor calibration points to probe tip as defined in the probe properties.

3.2. Area scan & Zoom scan

The area scan is a 2D scan to find the hot spot location on the DUT. The zoom scan is a 3D scan

above the hot spot to calculate the 1g and 10g SAR value.

Measurement of the SAR distribution with a grid of 8 to 16 mm * 8 to 16 mm and a constant distance to the inner surface of the phantom. Since the sensors cannot directly measure at the inner phantom surface, the values between the sensors and the inner phantom surface are extrapolated. With these values the area of the maximum SAR is calculated by an interpolation scheme. Around this point, a cube of 30 * 30 * 30 mm or 32 * 32 * 32 mm is assessed by measuring 5 or 8 * 5 or 8 * 4 or 5 mm. With these data, the peak spatial-average SAR value can be calculated.

From the scanned SAR distribution, identify the position of the maximum SAR value, in addition identify the positions of any local maxima with SAR values within 2 dB of the maximum value that will not be within the zoom scan of other peaks; additional peaks shall be measured only when the primary peak is within 2 dB of the SAR compliance limit (e.g., 1 W/kg for 1,6 W/kg 1 g limit, or 1,26 W/kg for 2 W/kg, 10 g limit).

Area scan & Zoom scan scan parameters extracted from FCC KDB 865664 D01 SAR measurement 100 MHz to 6 GHz.

			≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface			5 ± 1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5 \text{ mm}$
Maximum probe angle from probe axis to phantom surface normal at the measurement location			30° ± 1°	20° ± 1°
Maximum area scan spatial resolution: $\Delta x_{\text{Area}}, \Delta y_{\text{Area}}$			≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
			When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	
Maximum zoom scan spatial resolution: $\Delta x_{\text{Zoom}}, \Delta y_{\text{Zoom}}$			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{\text{Zoom}}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid	$\Delta z_{\text{Zoom}}(1)$: between 1 st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{\text{Zoom}}(n>1)$: between subsequent points	≤ 1.5 · $\Delta z_{\text{Zoom}}(n-1)$	
Minimum zoom scan volume	x, y, z		≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm

Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.

* When zoom scan is required and the *reported* SAR from the *area scan based 1-g SAR estimation* procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.

3.3. Description of interpolation/extrapolation scheme

The local SAR inside the phantom is measured using small dipole sensing elements inside a probe body. The probe tip must not be in contact with the phantom surface in order to minimise measurements errors, but the highest local SAR will occur at the surface of the phantom.

An extrapolation is using to determinate this highest local SAR values. The extrapolation is based on a fourth-order least-square polynomial fit of measured data. The local SAR value is then extrapolated from the liquid surface with a 1 mm step.

The measurements have to be performed over a limited time (due to the duration of the battery) so the step of measurement is high. It could vary between 5 and 8 mm. To obtain an accurate assessment of the maximum SAR averaged over 10 grams and 1 gram requires a very fine resolution in the three dimensional scanned data array.

3.4. Volumetric Scan

The volumetric scan consists to a full 3D scan over a specific area. This 3D scan is useful form multi Tx SAR measurement. Indeed, it is possible with OpenSAR to add, point by point, several volumetric scan to calculate the SAR value of the combined measurement as it is define in the standard IEEE1528 and IEC62209.

3.5. Power Drift

All SAR testing is under the EUT install full charged battery and transmit maximum output power. In OpenSAR measurement software, the power reference measurement and power drift measurement procedures are used for monitoring the power drift of EUT during SAR test. Both these procedures measure the field at a specified reference position before and after the SAR testing. The software will calculate the field difference in V/m. If the power drifts more than $\pm 5\%$, the SAR will be retested.

4. System Verification Procedure

4.1. Tissue Verification

The following tissue formulations are provided for reference only as some of the parameters have not been thoroughly verified. The composition of ingredients may be modified accordingly to achieve the desired target tissue parameters required for routine SAR evaluation.

Ingredients (% of weight)	Head Tissue									
Frequency Band (MHz)	750	835	900	1800	1900	2000	2450	2600	5200	5800
Water	34.40	34.40	34.40	55.36	55.36	57.87	57.87	57.87	65.53	65.53
NaCl	0.79	0.79	0.79	0.35	0.35	0.16	0.16	0.16	0.00	0.00
1,2-Propanediol	64.81	64.81	64.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Triton X-100	0.00	0.00	0.00	30.45	30.45	19.97	19.97	19.97	24.24	24.24
DGBE	0.00	0.00	0.00	13.84	13.84	22.00	22.00	22.00	10.23	10.23

For SAR measurement of the field distribution inside the phantom, the phantom must be filled with homogeneous tissue simulating liquid to a depth of at least 15 cm. For head SAR testing, the liquid depth from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm.

Photo of Liquid depth for Head Position	Photo of Liquid depth for Body Position
	

4.1.1. Tissue Dielectric Parameter Check Results

The simulating liquids should be checked at the beginning of a series of SAR measurements to determine if the dielectric parameters are within the tolerances of the specified target values. The measured conductivity and relative permittivity should be within $\pm 5\%$ of the target values.

Tissue Type	Measured Frequency (MHz)	Target Tissue		Measured Tissue		Delta(%)		Liquid Temp.	Test Date
		ϵ_r	σ (S/m)	ϵ_r	σ (S/m)	ϵ_r	σ (S/m)		
Head 750	750	41.90	0.89	40.72	0.89	-2.82	0.00	21.1 °C	Aug. 11, 2025
Head 835	835	41.50	0.92	42.06	0.92	1.35	0.00	21.4 °C	Aug. 09, 2025
Head 835	835	41.50	0.92	41.92	0.92	1.01	0.00	21.4 °C	Aug. 16, 2025
Head 1800	1800	40.00	1.40	38.79	1.38	-3.03	-1.43	21.3 °C	Aug. 08, 2025
Head 1900	1900	40.00	1.40	38.18	1.43	-4.55	2.14	21.3 °C	Aug. 10, 2025
Head 1900	1900	40.00	1.40	38.23	1.42	-4.43	1.43	21.2 °C	Aug. 17, 2025
Head 2450	2450	39.20	1.80	38.19	1.81	-2.58	0.56	21.3 °C	Aug. 12, 2025
Head 2600	2600	39.01	1.96	39.47	1.92	1.18	-2.04	21.6 °C	Aug. 18, 2025
Head 3500	3500	37.93	2.91	37.58	2.81	-0.92	-3.44	21.4 °C	Aug. 19, 2025
Head 5200	5200	36.00	4.66	37.02	4.49	2.83	-3.65	21.2 °C	Aug. 13, 2025
Head 5800	5800	35.30	5.27	35.62	5.08	0.91	-3.61	21.4 °C	Aug. 14, 2025

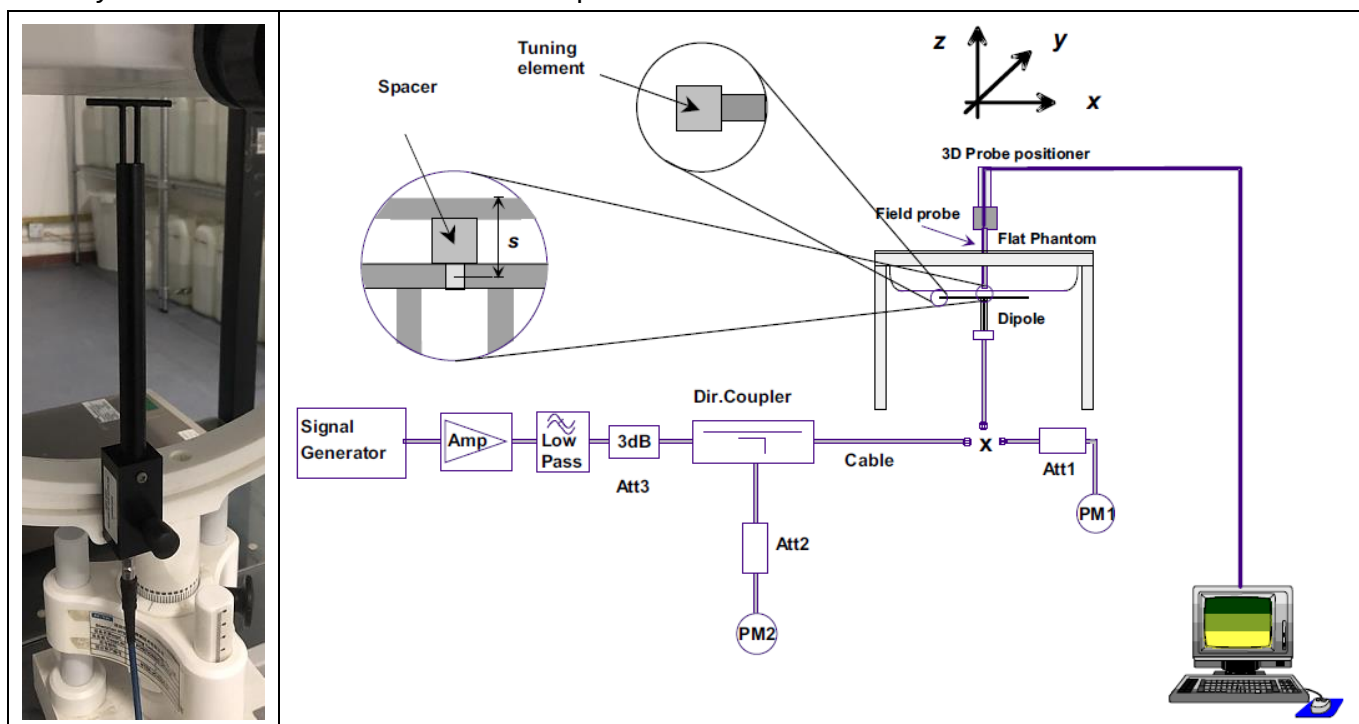
NOTE: 1. The dielectric parameters of the tissue-equivalent liquid should be measured under similar ambient conditions and within 2 °C of the conditions expected during the SAR evaluation to satisfy protocol requirements.

2. Tested by : Max Zhou , Jack Peng

4.2. System Verification Procedure

The system verification is performed for verifying the accuracy of the complete measurement system and performance of the software. The dipole is connected to the signal source consisting of signal generator and amplifier via a directional coupler, N-connector cable and adaption to SMA. To adjust this power a power meter is used. The power sensor is connected to the cable before the system verification to measure the power at this point and do adjustments at the signal generator. At the outputs of the directional coupler both return loss as well as forward power are controlled during the system verification to make sure that emitted power at the dipole is kept constant. This can also be checked by the power drift measurement after the test (result on plot).

The system verification is shown as below picture:



4.2.1. System Verification Results

Comparing to the original SAR value provided by SATIMO, the verification data should be within its specification of $\pm 10\%$. Below table shows the target SAR and measured SAR after normalized to 1W input power. The table below indicates the system performance verification can meet the variation criterion and the plots can be referred to Appendix B of this report.

System Verification	Target SAR (1W)		Measured SAR			Measured SAR		Delta (%)		Liquid Temp.	Test Date
						(Normalized to 1W)					
	1-g (W/Kg)	10-g (W/Kg)	Input Power (mW)	1-g (W/Kg)	10-g (W/Kg)	1-g (W/Kg)	10-g (W/Kg)	1-g (%)	10-g (%)		
750MHz	8.60	5.78	100.00	0.90	0.56	9.02	5.60	4.88	-3.11	21.1 °C	Aug. 11, 2025
835MHz	9.40	6.28	100.00	1.00	0.58	9.95	5.81	5.85	-7.48	21.4 °C	Aug. 09, 2025
835MHz	9.40	6.28	100.00	0.99	0.59	9.93	5.87	5.64	-6.53	21.4 °C	Aug. 16, 2025
1800MHz	37.06	20.01	100.00	3.82	1.93	38.19	19.27	3.05	-3.70	21.3 °C	Aug. 08, 2025
1900MHz	39.69	20.92	100.00	4.01	1.91	40.09	19.14	1.01	-8.51	21.2 °C	Aug. 10, 2025
1900MHz	39.69	20.92	100.00	4.08	1.95	40.75	19.45	2.67	-7.03	21.2 °C	Aug. 17, 2025
2450MHz	50.05	23.80	100.00	5.40	2.31	53.96	23.12	7.81	-2.86	21.3 °C	Aug. 12, 2025
2600MHz	54.16	24.85	100.00	5.43	2.32	54.30	23.22	0.26	-6.56	21.6 °C	Aug. 18, 2025
3500MHz	67.18	24.50	100.00	6.17	2.66	61.71	26.59	-8.14	8.53	21.4 °C	Aug. 19, 2025
5200MHz	162.59	56.21	10.00	1.60	0.59	159.90	59.00	-1.65	4.96	21.2 °C	Aug. 13, 2025
5800MHz	182.20	61.32	10.00	1.70	0.61	169.80	61.20	-6.81	-0.20	21.4 °C	Aug. 14, 2025

Tested by : Max Zhou , Jack Peng

5. SAR Measurement variability and uncertainty

5.1. SAR measurement variability

Per KDB865664 D01 SAR measurement 100 MHz to 6 GHz, SAR measurement variability must be assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. The additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

- 1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps 2) through 4) do not apply.
- 2) When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
- 3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).
- 4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20 .

5.2. SAR measurement uncertainty

Per KDB865664 D01 SAR Measurement 100 MHz to 6 GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg, the extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval. The equivalent ratio (1.5/1.6) is applied to extremity and occupational exposure conditions.

6. RF Exposure Positions

6.1. Ear and handset reference point

Figure 6.1.1 shows the front, back, and side views of the SAM phantom. The center-of-mouth reference point is labeled “M”, the left ear reference point (ERP) is marked “LE”, and the right ERP is marked “RE”.



Fig 6.1.1 Front, back, and side views of SAM phantom

6.2. Definition of the cheek position

1. Define two imaginary lines on the handset, the vertical centerline and the horizontal line. The vertical centerline passes through two points on the front side of the handset: the midpoint of the width w_t of the handset at the level of the acoustic output (point A in Figure 6.2.1 and Figure 6.2.2), and the midpoint of the width w_b of the bottom of the handset (point B). The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output (see Figure 6.2.1). The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical centerline is not necessarily parallel to the front face of the handset (see Figure 6.2.2), especially for clamshell handsets, handsets with flip covers, and other irregularly-shaped handsets.
2. Position the handset close to the surface of the phantom such that point A is on the (virtual) extension of the line passing through points RE and LE on the phantom (see Figure 6.2.3), such that the plane defined by the vertical centerline and the horizontal line of the handset is approximately parallel to the sagittal plane of the phantom.
3. Translate the handset towards the phantom along the line passing through RE and LE until handset point A touches the pinna at the ERP
4. While maintaining the handset in this plane, rotate it around the LE-RE line until the vertical centerline is in the plane normal to the plane containing B-M and N-F lines, i.e., the Reference Plane.
5. Rotate the handset around the vertical centerline until the handset (horizontal line) is parallel to the N-F line.

6. While maintaining the vertical centerline in the Reference Plane, keeping point A on the line passing through RE and LE, and maintaining the handset contact with the pinna, rotate the handset about the N-F line until any point on the handset is in contact with a phantom point below the pinna on the cheek. See Figure 6.2.3. The actual rotation angles should be documented in the test report.

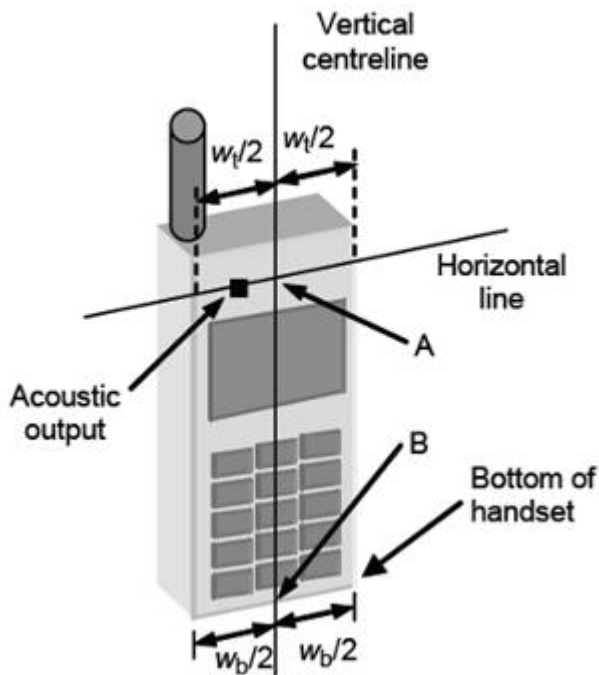


Fig 6.2.1 Handset vertical and horizontal reference lines—"fixed case"

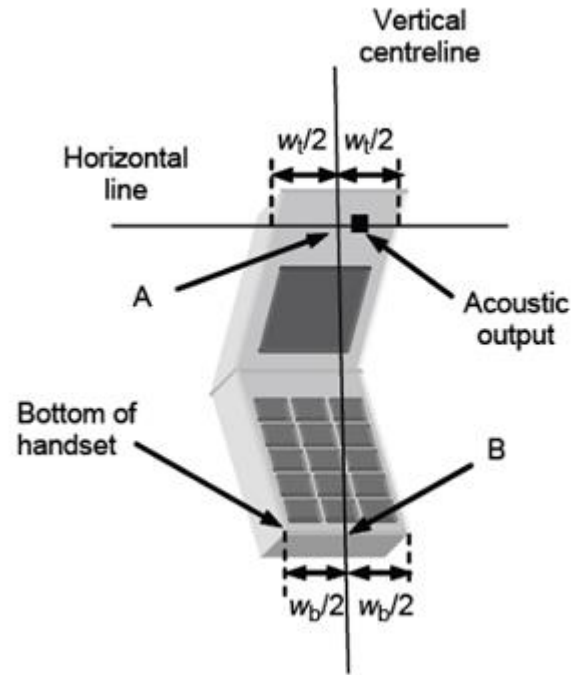


Fig 6.2.2 Handset vertical and horizontal reference lines—"clam-shell case"

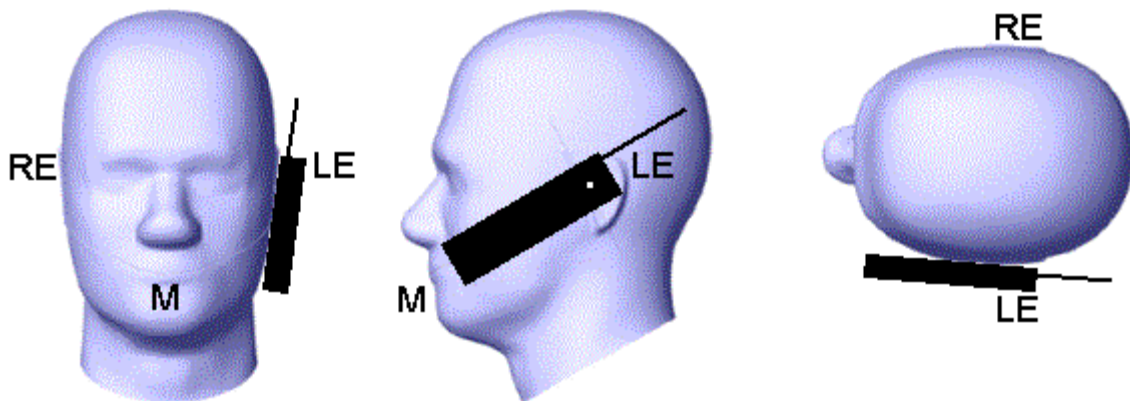


Fig 6.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

6.3. Definition of the tilt position

1. While maintaining the orientation of the handset, retract the handset parallel to the reference plane far enough away from the phantom to enable a rotation of the device by 15 degree.
2. Rotate the Handset around the horizontal line by 15 degree (see Figure 6.3.1).
3. While maintaining the orientation of the handset, move the handset towards the phantom on a line passing through RE and LE until any part of the handset touches the ear. The tilt position is obtained when the contact is on the pinna. If the contact is at any location other than the pinna, e.g., the antenna with the back of the phantom head, the angle of the handset shall be reduced. In this case, the tilt position is obtained if any part of the handset is in contact with the pinna as well as a second part of the handset is in contact with the phantom, e.g., the antenna with the back of the head.

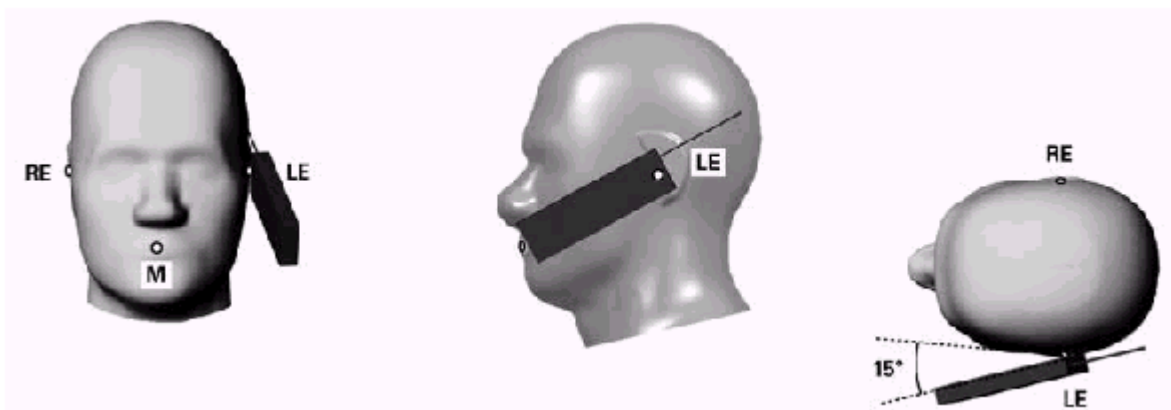


Figure 6.3.1 – Tilt position of the wireless device on the left side of SAM

6.4. Body Worn Accessory

1. Body-worn operating configurations are tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in a normal use configuration (see Figure 6.4.1). Per KDB 648474 D04, body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in FCC KDB 447498 D01 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode, when applicable. When the reported SAR for body-worn accessory, measured without a headset connected to the handset is $< 1.2 \text{ W/kg}$, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a headset attached to the handset.
2. Accessories for body-worn operation configurations are divided into two categories: those that do not contain metallic components and those that do contain metallic components and those that do contain metallic components. When multiple accessories that do not contain metallic components are supplied with the device, the device is tested with only the accessory that dictates the closest

spacing to the body. Then multiple accessories that contain metallic components are test with the device with each accessory. If multiple accessories share an identical metallic component (i.e. the same metallic belt-clip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.

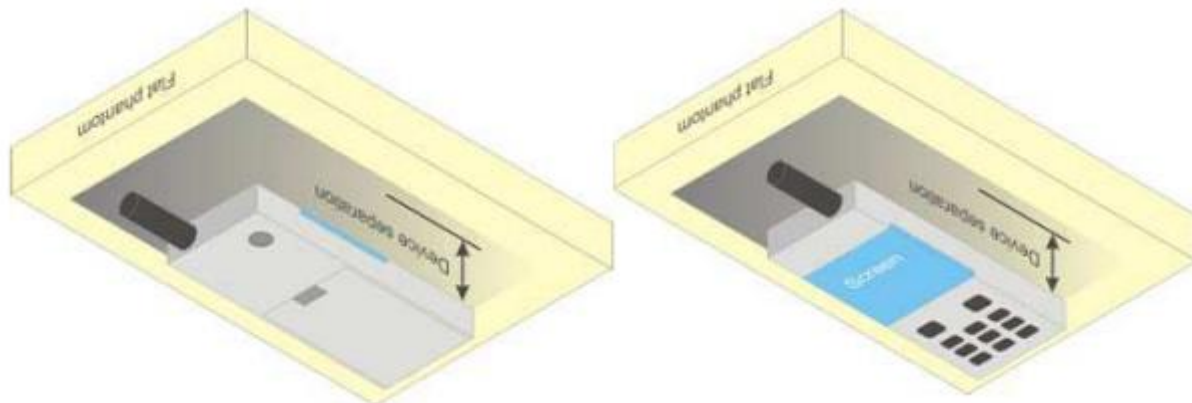


Figure 6.4.1 – Test positions for body-worn devices

6.5. Wireless Router Devices

Some battery-operated handsets have the capability to transmit and receive user through simultaneous transmission of WLAN simultaneously with a separate licensed transmitter. The FCC has provided guidance in FCC KDB Publication 941225 D06 where SAR test considerations for handsets ($L \times W \geq 9 \text{ cm} \times 5 \text{ cm}$) are based on a composite test separation distance of 10mm from the front, back and edges of the device containing transmitting antennas within 2.5cm of their edges, determined from general mixed use conditions for this type of devices. Since the hotspot SAR results may overlap with the body-worn accessory SAR requirements, the more conservative configurations can be considered, thus excluding some body-worn accessory SAR tests.

When the user enables the personal wireless router functions for the handset, actual operations include simultaneous transmission of both the WLAN transmitter and another licensed transmitter. Both transmitters often do not transmit at the same transmitting frequency and thus cannot be evaluated for SAR under actual use conditions due to the limitations of the SAR assessment probes. Therefore, SAR must be evaluated for each frequency transmission and mode separately and spatially summed with the WLAN transmitter according to FCC KDB Publication 447498 D01 publication procedures. The “Portable Hotspot” feature on the handset was NOT activated during SAR assessments, to ensure the SAR measurements were evaluated for a single transmission frequency RF signal at a time.

7. RF Output Power

7.1. GSM Conducted Power

Band GSM850	Burst-Averaged output Power (dBm)				Frame-Averaged output Power (dBm)			
Tx Channel	Tune-up (dBm)	128	189	251	Tune-up	128	189	251
Frequency (MHz)		824.2	836.4	848.8		824.2	836.4	848.8
GSM (GMSK)	32.50	32.41	32.35	32.20	23.47	23.38	23.32	23.17
GPRS(GMSK,1 Tx slot)	32.50	32.43	32.33	32.20	23.47	23.40	23.30	23.17
GPRS(GMSK,2 Tx slot)	31.50	31.34	31.22	31.08	25.48	25.32	25.20	25.06
GPRS(GMSK,3 Tx slot)	29.50	29.23	29.08	28.95	25.24	24.97	24.82	24.69
GPRS(GMSK,4 Tx slot)	28.00	27.87	27.75	27.56	24.99	24.86	24.74	24.55
EGPRS(8PSK,1 Tx slot)	26.00	25.74	25.52	26.00	16.97	16.71	16.49	16.97
EGPRS(8PSK,2 Tx slot)	24.50	24.41	24.43	24.27	18.48	18.39	18.41	18.25
EGPRS(8PSK,3 Tx slot)	22.00	21.84	21.60	21.95	17.74	17.58	17.34	17.69
EGPRS(8PSK,4 Tx slot)	21.00	20.72	20.21	20.34	17.99	17.71	17.20	17.33
Band GSM1900	Burst-Averaged output Power (dBm)				Frame-Averaged output Power (dBm)			
Tx Channel	Tune-up (dBm)	512	661	810	Tune-up	512	661	810
Frequency (MHz)		1850.2	1880	1909.8		1850.2	1880	1909.8
GSM (GMSK)	30.00	29.98	29.76	29.33	20.97	20.95	20.73	20.30
GPRS(GMSK,1 Tx slot)	30.00	29.91	29.66	29.27	20.97	20.88	20.63	20.24
GPRS(GMSK,2 Tx slot)	29.50	29.02	28.67	28.22	23.48	23.00	22.65	22.20
GPRS(GMSK,3 Tx slot)	27.00	26.92	26.59	26.11	22.74	22.66	22.33	21.85
GPRS(GMSK,4 Tx slot)	26.00	25.59	25.31	24.88	22.99	22.58	22.30	21.87
EGPRS(8PSK,1 Tx slot)	26.50	25.72	25.51	26.10	17.47	16.69	16.48	17.07
EGPRS(8PSK,2 Tx slot)	25.00	24.73	24.44	24.69	18.98	18.71	18.42	18.67
EGPRS(8PSK,3 Tx slot)	23.00	21.93	22.52	22.19	18.74	17.67	18.26	17.93
EGPRS(8PSK,4 Tx slot)	21.50	21.03	20.37	20.28	18.49	18.02	17.36	17.27

7.2. WCDMA Conducted Power

WCDMA Band 2	Burst-Averaged output Power (dBm)			
Tx Channel	Tune-up (dBm)	9262	9400	9538
Frequency (MHz)		1852.4	1880	1907.6
RMC12.2K	23.50	23.11	22.64	22.28
HSDPA Sub 1	22.50	22.02	21.00	21.26
HSDPA Sub 2	22.00	21.65	20.77	20.98

HSDPA Sub 3	21.50	21.19	20.43	20.54
HSDPA Sub 4	21.50	21.05	20.38	20.53
HSUPA Sub 1	22.00	21.59	20.91	21.05
HSUPA Sub 2	22.00	21.63	20.96	21.18
HSUPA Sub 3	21.50	21.25	20.51	21.06
HSUPA Sub 4	22.00	21.55	20.77	20.99
HSUPA Sub 5	21.50	21.10	20.71	21.10
WCDMA Band 4	Burst-Averaged output Power (dBm)			
Tx Channel	Tune-up (dBm)	1312	1413	1513
Frequency (MHz)		1712.4	1732.6	1752.6
RMC12.2K	24.50	23.82	24.00	23.86
HSDPA Sub 1	23.00	22.28	22.95	21.95
HSDPA Sub 2	23.00	21.89	22.58	21.80
HSDPA Sub 3	22.50	21.48	22.43	21.30
HSDPA Sub 4	22.50	21.28	22.24	21.13
HSUPA Sub 1	23.00	22.12	22.74	21.78
HSUPA Sub 2	23.00	22.14	22.81	21.86
HSUPA Sub 3	23.00	21.84	22.53	21.42
HSUPA Sub 4	23.00	22.06	22.70	21.93
HSUPA Sub 5	23.00	21.94	22.59	21.69
WCDMA Band 5	Burst-Averaged output Power (dBm)			
Tx Channel	Tune-up (dBm)	4132	4182	4233
Frequency (MHz)		826.4	836.4	846.6
RMC12.2K	22.50	21.84	22.21	22.26
HSDPA Sub 1	22.00	21.54	21.58	20.85
HSDPA Sub 2	21.50	21.14	21.30	20.55
HSDPA Sub 3	21.00	20.99	20.99	20.19
HSDPA Sub 4	21.00	20.44	20.94	20.19
HSUPA Sub 1	22.00	21.40	21.56	20.71
HSUPA Sub 2	22.00	21.40	21.58	20.88
HSUPA Sub 3	21.50	20.71	21.42	20.63
HSUPA Sub 4	22.00	21.37	21.57	20.86
HSUPA Sub 5	22.00	21.12	21.54	20.62

7.3. LTE Conducted Power

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		18607/1850.7	18900/1880	19193/1909.3
LTE Band 2	1.4MHz	QPSK	1	0	23.50	23.13	22.84	22.77
			1	2	23.50	23.16	22.82	22.83
			1	5	23.50	23.10	22.84	22.79
			3	0	24.00	23.67	23.32	23.29
			3	1	24.00	23.68	23.31	23.32
			3	2	24.00	23.63	23.32	23.31
			6	0	23.00	22.62	22.35	22.30
		16QAM	1	0	22.50	22.45	22.06	22.08
			1	2	22.50	22.38	22.07	22.08
			1	5	22.50	22.44	22.13	22.12
			3	0	23.00	22.64	22.31	22.24
			3	1	23.00	22.66	22.29	22.26
			3	2	23.00	22.67	22.27	22.34
			6	0	22.00	21.73	21.37	21.36
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		18615/1851.5	18900/1880	19185/1908.5
LTE Band 2	3MHz	QPSK	1	0	23.50	23.11	22.83	22.78
			1	7	23.50	23.08	22.83	22.81
			1	14	23.50	23.05	22.85	22.79
			8	0	23.00	22.60	22.34	22.27
			8	4	23.00	22.62	22.31	22.27
			8	7	23.00	22.60	22.29	22.31
			15	0	23.00	22.61	22.29	22.33
		16QAM	1	0	22.50	22.44	22.12	22.09
			1	7	22.50	22.40	22.15	22.13
			1	14	22.50	22.32	22.12	22.05
			8	0	22.00	21.69	21.38	21.36
			8	4	22.00	21.66	21.38	21.34
			8	7	22.00	21.70	21.33	21.37
			15	0	22.00	21.63	21.31	21.32
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		18625/1852.5	18900/1880	19175/1907.5
LTE	5MHz	QPSK	1	0	23.50	23.14	22.93	22.80

Band 2			1	12	23.50	23.10	22.87	22.84
			1	24	23.50	23.08	22.88	22.87
			12	0	23.00	22.61	22.36	22.21
			12	6	23.00	22.66	22.32	22.35
			12	11	23.00	22.60	22.33	22.39
			25	0	23.00	22.62	22.38	22.33
		16QAM	1	0	22.50	22.44	22.11	22.12
			1	12	22.50	22.36	22.17	22.13
			1	24	22.50	22.40	22.15	22.01
			12	0	22.00	21.60	21.34	21.26
			12	6	22.00	21.60	21.34	21.31
			12	11	22.00	21.56	21.30	21.36
			25	0	22.00	21.62	21.36	21.37
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		18650/1855	18900/1880	19150/1905
LTE Band 2	10MHz	QPSK	1	0	23.50	23.13	22.91	22.87
			1	24	23.50	23.15	22.88	22.87
			1	49	23.50	23.04	22.87	22.82
			25	0	23.00	22.53	22.34	22.28
			25	12	23.00	22.61	22.36	22.35
			25	24	23.00	22.57	22.36	22.50
			50	0	23.00	22.59	22.38	22.47
		16QAM	1	0	22.50	22.33	22.14	22.13
			1	24	22.50	22.33	22.20	22.18
			1	49	22.50	22.35	22.07	22.15
			25	0	22.00	21.58	21.32	21.27
			25	12	22.00	21.64	21.35	21.33
			25	24	22.00	21.54	21.39	21.50
			50	0	22.00	21.58	21.38	21.41
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		18675/1857.5	18900/1880	19125/1902.5
LTE Band 2	15MHz	QPSK	1	0	23.50	23.09	22.85	22.84
			1	37	23.50	23.07	22.87	22.84
			1	74	23.50	22.88	22.78	22.77
			36	0	23.00	22.55	22.37	22.39
			36	18	23.00	22.52	22.39	22.35
			36	37	23.00	22.50	22.31	22.45

		16QAM	75	0	23.00	22.54	22.38	22.45
			1	0	22.50	22.39	22.08	22.11
			1	37	22.50	22.41	22.19	22.06
			1	74	22.50	22.07	21.98	22.11
			36	0	22.00	21.59	21.26	21.35
			36	18	22.00	21.50	21.32	21.31
			36	37	22.00	21.40	21.35	21.44
			75	0	22.00	21.52	21.37	21.40
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		18700/1860	18900/1880	19100/1900
LTE Band 2	20MHz	QPSK	1	0	23.50	23.06	22.81	22.80
			1	49	23.50	23.05	22.88	22.85
			1	99	23.50	22.80	22.71	22.77
			50	0	23.50	22.62	22.32	22.57
			50	24	23.50	22.59	22.43	22.42
			50	49	23.50	22.33	22.34	22.61
			100	0	23.00	22.47	22.35	22.55
		16QAM	1	0	22.50	22.26	21.98	22.04
			1	49	22.50	22.33	22.09	22.09
			1	99	22.50	22.12	22.01	21.97
			50	0	22.00	21.57	21.29	21.51
			50	24	22.00	21.54	21.40	21.41
			50	49	22.00	21.30	21.34	21.53
			100	0	22.00	21.44	21.27	21.52

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		19957/1710.7	20175/1732.5	20393/1754.3
LTE Band 4	1.4MHz	QPSK	1	0	23.50	23.21	22.98	22.85
			1	2	23.50	23.25	22.98	22.86
			1	5	23.50	23.20	23.00	22.86
			3	0	23.00	22.79	22.52	22.40
			3	1	23.00	22.78	22.49	22.41
			3	2	23.00	22.75	22.48	22.38
			6	0	23.00	22.75	22.50	22.39
		16QAM	1	0	22.50	22.37	22.28	22.10
			1	2	22.50	22.38	22.22	22.14
			1	5	22.50	22.35	22.28	22.12
			3	0	23.00	22.78	22.56	22.43

			3	1	23.00	22.77	22.45	22.45
			3	2	23.00	22.79	22.53	22.36
			6	0	22.00	21.77	21.58	21.47
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		19965/1711.5	20175/1732.5	20385/1753.5
LTE Band 4	3MHz	QPSK	1	0	23.50	23.18	22.97	22.84
			1	7	23.50	23.14	22.98	22.87
			1	14	23.50	23.08	22.98	22.83
			8	0	23.00	22.70	22.52	22.39
			8	4	23.00	22.67	22.44	22.40
			8	7	23.00	22.67	22.45	22.37
			15	0	23.00	22.66	22.49	22.41
		16QAM	1	0	22.50	22.42	22.25	22.11
			1	7	22.50	22.38	22.20	22.17
			1	14	22.50	22.35	22.27	22.21
			8	0	22.00	21.75	21.58	21.46
			8	4	22.00	21.74	21.55	21.46
			8	7	22.00	21.73	21.53	21.44
			15	0	22.00	21.70	21.49	21.39
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		19975/1712.5	20175/1732.5	20375/1752.5
LTE Band 4	5MHz	QPSK	1	0	23.50	23.18	23.05	22.90
			1	12	23.50	23.17	23.01	22.89
			1	24	23.50	23.18	23.02	22.89
			12	0	23.00	22.71	22.57	22.44
			12	6	23.00	22.71	22.53	22.45
			12	11	23.00	22.71	22.54	22.39
			25	0	23.00	22.69	22.57	22.44
		16QAM	1	0	22.50	22.45	22.23	22.14
			1	12	22.50	22.42	22.35	22.20
			1	24	22.50	22.44	22.20	22.11
			12	0	22.00	21.67	21.54	21.42
			12	6	22.00	21.70	21.50	21.41
			12	11	22.00	21.66	21.50	21.35
			25	0	22.00	21.67	21.53	21.45
Band	Band	Modulation	RB Configuration		Tune-up	Channel/Frequency(MHz)		

	Width		RB Size	RB Offset	(dBm)	20000/1715	20175/1732.5	20350/1750
LTE Band 4	10MHz	QPSK	1	0	23.50	23.19	23.00	22.90
			1	24	23.50	23.20	23.07	22.93
			1	49	23.50	23.11	23.00	22.88
			25	0	23.00	22.66	22.49	22.44
			25	12	23.00	22.68	22.60	22.44
			25	24	23.00	22.72	22.54	22.41
			50	0	23.00	22.74	22.60	22.50
		16QAM	1	0	22.50	22.37	22.37	22.16
			1	24	22.50	22.44	22.36	22.12
			1	49	22.50	22.27	22.30	22.11
			25	0	22.00	21.68	21.56	21.43
			25	12	22.00	21.71	21.57	21.45
			25	24	22.00	21.69	21.58	21.43
			50	0	22.00	21.70	21.56	21.48
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20025/1717.5	20175/1732.5	20325/1747.5
LTE Band 4	15MHz	QPSK	1	0	23.50	23.14	23.01	22.85
			1	37	23.50	23.14	23.01	22.94
			1	74	23.50	23.02	22.96	22.85
			36	0	23.00	22.63	22.47	22.51
			36	18	23.00	22.70	22.49	22.39
			36	37	23.00	22.62	22.58	22.39
			75	0	23.00	22.66	22.52	22.50
		16QAM	1	0	22.50	22.47	22.20	22.19
			1	37	22.50	22.40	22.31	22.24
			1	74	22.50	22.34	22.20	22.22
			36	0	22.00	21.70	21.49	21.46
			36	18	22.00	21.65	21.51	21.39
			36	37	22.00	21.64	21.58	21.38
			75	0	22.00	21.64	21.48	21.44
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20050/1720	20175/1732.5	20300/1745
LTE Band 4	20MHz	QPSK	1	0	23.50	23.06	22.98	22.88
			1	49	23.50	23.11	23.06	22.95
			1	99	23.50	22.99	22.92	22.84

			50	0	23.00	22.65	22.47	22.47
			50	24	23.00	22.71	22.58	22.47
			50	49	23.00	22.74	22.61	22.48
			100	0	23.00	22.71	22.49	22.44
		16QAM	1	0	22.50	22.38	22.21	22.18
			1	49	22.50	22.28	22.26	22.21
			1	99	22.50	22.33	22.19	22.14
			50	0	22.00	21.62	21.44	21.43
			50	24	22.00	21.69	21.50	21.48
			50	49	22.00	21.68	21.58	21.46
			100	0	22.00	21.66	21.51	21.38

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20407/824.7	20525/836.5	20643/848.3
LTE Band 5	1.4MHz	QPSK	1	0	23.00	22.48	22.72	22.48
			1	2	23.00	22.48	22.71	22.51
			1	5	23.00	22.48	22.68	22.52
			3	0	23.00	22.99	22.24	22.01
			3	1	23.00	22.02	22.21	22.03
			3	2	23.00	22.00	22.20	22.02
			6	0	22.50	21.95	22.24	22.05
		16QAM	1	0	22.50	21.74	21.95	21.79
			1	2	22.50	21.86	22.06	21.77
			1	5	22.50	21.86	22.07	21.71
			3	0	22.50	21.97	22.30	22.02
			3	1	22.50	21.95	22.15	22.00
			3	2	22.50	21.97	22.25	22.03
			6	0	21.50	21.00	21.30	21.13
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20415/825.5	20525/836.5	20635/847.5
LTE Band 5	3MHz	QPSK	1	0	23.00	22.43	22.69	22.52
			1	7	23.00	22.47	22.70	22.51
			1	14	23.00	22.50	22.69	22.50
			8	0	22.50	21.92	22.20	22.04
			8	4	22.50	22.01	22.19	22.05
			8	7	22.50	21.98	22.20	21.98
			15	0	22.50	21.97	22.20	22.00
		16QAM	1	0	22.50	21.75	22.05	21.83

			1	7	22.50	21.71	22.07	21.86
			1	14	22.50	21.73	22.07	21.72
			8	0	21.50	21.02	21.26	21.08
			8	4	21.50	21.00	21.28	21.08
			8	7	21.50	21.07	21.31	21.04
			15	0	21.50	20.98	21.22	21.06
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20425/826.5	20525/836.5	20625/846.5
LTE Band 5	5MHz	QPSK	1	0	23.00	22.49	22.75	22.64
			1	12	23.00	22.53	22.72	22.56
			1	24	23.00	22.68	22.74	22.53
			12	0	22.50	22.00	22.29	22.08
			12	6	22.50	21.99	22.28	22.03
			12	11	22.50	22.00	22.18	22.00
			25	0	22.50	22.04	22.25	22.04
		16QAM	1	0	22.50	21.82	21.98	21.98
			1	12	22.50	21.79	22.08	21.84
			1	24	22.50	21.92	22.05	21.82
			12	0	21.50	20.97	21.27	21.13
			12	6	21.50	21.03	21.22	21.00
			12	11	21.50	21.04	21.20	21.01
			25	0	21.50	21.04	21.24	21.04
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20450/829	20525/836.5	20600/844
LTE Band 5	10MHz	QPSK	1	0	23.00	22.50	22.67	22.72
			1	24	23.00	22.69	22.73	22.61
			1	49	23.00	22.69	22.66	22.45
			25	0	22.50	22.07	22.31	22.23
			25	12	22.50	22.08	22.21	22.13
			25	24	22.50	22.08	22.16	21.99
			50	0	22.50	22.09	22.28	22.12
		16QAM	1	0	22.50	21.71	21.95	22.06
			1	24	22.50	21.87	22.11	21.88
			1	49	22.50	21.91	22.02	21.80
			25	0	21.50	21.00	21.32	21.22
			25	12	21.50	21.07	21.20	21.17
			25	24	21.50	21.04	21.19	20.97

			50	0	21.50	21.05	21.21	21.14
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20775/2502.5	21100/2535	21425/2567.5
LTE Band 7	5MHz	QPSK	1	0	23.50	23.19	23.05	23.23
			1	12	23.50	23.20	23.10	23.26
			1	24	23.50	23.18	23.13	23.27
			12	0	23.00	22.63	22.60	22.84
			12	6	23.00	22.63	22.58	22.83
			12	11	23.00	22.67	22.61	22.82
			25	0	23.00	22.63	22.58	22.81
		16QAM	1	0	23.00	22.32	22.35	22.43
			1	12	23.00	22.30	22.31	22.49
			1	24	23.00	22.27	22.41	22.52
			12	0	22.00	21.63	21.60	21.85
			12	6	22.00	21.65	21.58	21.80
			12	11	22.00	21.63	21.60	21.79
			25	0	22.00	21.67	21.65	21.88
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20800/2505	21100/2535	21400/2565
LTE Band 7	10MHz	QPSK	1	0	23.50	23.11	23.03	23.11
			1	24	23.50	23.07	23.10	23.23
			1	49	23.50	23.11	23.14	23.25
			25	0	23.00	22.57	22.59	22.74
			25	12	23.00	22.63	22.59	22.70
			25	24	23.00	22.64	22.66	22.82
			50	0	23.00	22.64	22.68	22.80
		16QAM	1	0	22.50	22.27	22.35	22.32
			1	24	22.50	22.23	22.28	22.36
			1	49	22.50	22.32	22.39	22.43
			25	0	22.00	21.61	21.61	21.78
			25	12	22.00	21.68	21.64	21.77
			25	24	22.00	21.72	21.67	21.86
			50	0	22.00	21.65	21.64	21.77
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20825/2507.5	21100/2535	21375/2562.5
LTE	15MHz	QPSK	1	0	23.50	23.05	23.01	23.00

Band 7			1	37	23.50	23.16	23.10	23.17
			1	74	23.50	23.01	23.12	23.19
			36	0	23.00	22.56	22.61	22.63
			36	18	23.00	22.59	22.68	22.71
			36	37	23.00	22.60	22.61	22.77
			75	0	23.00	22.66	22.61	22.74
		16QAM	1	0	22.50	22.37	22.23	22.17
			1	37	22.50	22.43	22.31	22.36
			1	74	22.50	22.25	22.32	22.47
			36	0	22.00	21.54	21.55	21.64
			36	18	22.00	21.65	21.66	21.70
			36	37	22.00	21.63	21.62	21.82
			75	0	22.00	21.60	21.62	21.68
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20850/2510	21100/2535	21350/2560
LTE Band 7	20MHz	QPSK	1	0	23.50	23.01	23.01	23.01
			1	49	23.50	23.14	23.15	23.10
			1	99	23.50	22.96	23.10	23.17
			50	0	23.00	22.52	22.59	22.71
			50	24	23.00	22.64	22.73	22.68
			50	49	23.00	22.60	22.73	22.75
			100	0	23.00	22.55	22.64	22.66
		16QAM	1	0	22.50	22.23	22.29	22.22
			1	49	22.50	22.44	22.37	22.38
			1	99	22.50	22.19	22.41	22.45
			50	0	22.00	21.51	21.61	21.61
			50	24	22.00	21.63	21.64	21.64
			50	49	22.00	21.58	21.74	21.73
			100	0	22.00	21.51	21.59	21.70

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		23017/699.7	23095/707.5	23173/715.3
LTE Band 12	1.4MHz	QPSK	1	0	22.00	21.60	21.51	21.67
			1	2	22.00	21.63	21.54	21.74
			1	5	22.00	21.57	21.54	21.76
			3	0	20.50	20.13	20.08	20.26
			3	1	20.50	20.16	20.02	20.30

			3	2	20.50	20.14	20.05	20.29
			6	0	21.50	21.13	21.05	21.25
		16QAM	1	0	21.50	20.83	20.92	21.06
			1	2	21.50	20.96	20.76	21.07
			1	5	21.50	20.97	20.92	21.16
			3	0	21.50	21.05	21.11	21.29
			3	1	21.50	21.04	20.98	21.23
			3	2	21.50	21.13	21.04	21.23
			6	0	20.50	20.27	20.20	20.38
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		23025/700.5	23095/707.5	23165/714.5
LTE Band 12	3MHz	QPSK	1	0	22.00	21.57	21.54	21.64
			1	7	22.00	21.56	21.50	21.69
			1	14	22.00	21.55	21.50	21.73
			8	0	21.50	21.10	21.02	21.19
			8	4	21.50	21.07	21.03	21.22
			8	7	21.50	21.06	21.01	21.19
			15	0	21.50	21.11	21.01	21.23
		16QAM	1	0	21.50	20.91	20.94	20.97
			1	7	21.50	21.00	20.86	21.05
			1	14	21.50	20.89	20.85	21.11
			8	0	20.50	20.20	20.10	20.31
			8	4	20.50	20.25	20.14	20.33
			8	7	20.50	20.18	20.17	20.31
			15	0	20.50	20.17	20.09	20.28
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		23035/701.5	23095/707.5	23155/713.5
LTE Band 12	5MHz	QPSK	1	0	22.00	21.60	21.54	21.61
			1	12	22.00	21.61	21.55	21.67
			1	24	22.00	21.53	21.60	21.77
			12	0	21.50	21.14	21.04	21.21
			12	6	21.50	21.08	21.04	21.17
			12	11	21.50	21.01	21.08	21.08
			25	0	21.50	21.11	21.07	21.18
		16QAM	1	0	21.00	20.90	20.86	21.00
			1	12	21.00	20.91	20.78	20.95
			1	24	21.00	20.87	20.87	20.99

			12	0	20.50	20.21	20.11	20.25
			12	6	20.50	20.15	20.04	20.20
			12	11	20.50	20.07	20.07	20.16
			25	0	20.50	20.14	20.16	20.23
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		23060/704	23095/707.5	23130/711
LTE Band 12	10MHz	QPSK	1	0	22.00	21.64	21.54	21.60
			1	24	22.00	21.55	21.55	21.59
			1	49	22.00	21.51	21.57	21.72
			25	0	21.50	21.07	21.13	20.99
			25	12	21.50	21.05	21.04	21.10
			25	24	21.50	21.06	21.06	21.02
		16QAM	50	0	21.50	21.11	21.12	21.02
			1	0	21.50	21.06	20.89	20.91
			1	24	21.50	20.78	20.92	20.87
			1	49	21.50	20.79	20.92	21.05
			25	0	20.50	20.15	20.19	20.08
			25	12	20.50	20.13	20.17	20.13
			25	24	20.50	20.13	20.15	20.08
			50	0	20.50	20.16	20.19	20.06

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		23755/706.5	23790/710	23825/713.5
LTE Band 17	5MHz	QPSK	1	0	22.00	21.70	21.70	21.82
			1	12	22.00	21.70	21.76	21.86
			1	24	22.00	21.73	21.79	21.94
			12	0	21.50	21.24	21.21	21.37
			12	6	21.50	21.18	21.25	21.33
			12	11	21.50	21.23	21.18	21.22
			25	0	21.50	21.26	21.21	21.34
		16QAM	1	0	21.50	21.05	20.95	21.04
			1	12	21.50	21.00	21.00	21.12
			1	24	21.50	21.08	21.12	21.30
			12	0	20.50	20.24	20.24	20.39
			12	6	20.50	20.21	20.23	20.36
			12	11	20.50	20.23	20.28	20.29
			25	0	20.50	20.30	20.26	20.38

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		23780/709	23790/710	23800/711
LTE Band 17	10MHz	QPSK	1	0	22.00	21.67	21.66	21.70
			1	24	22.00	21.76	21.76	21.80
			1	49	22.00	21.76	21.88	21.84
			25	0	21.50	21.16	21.11	21.15
			25	12	21.50	21.19	21.24	21.24
			25	24	21.50	21.20	21.16	21.15
			50	0	21.50	21.22	21.21	21.18
		16QAM	1	0	21.50	21.01	21.02	20.98
			1	24	21.50	21.16	21.03	21.13
			1	49	21.50	21.00	21.14	21.09
			25	0	20.50	20.24	20.21	20.20
			25	12	20.50	20.22	20.33	20.32
			25	24	20.50	20.24	20.23	20.21
			50	0	20.50	20.30	20.21	20.22

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26047/1850.7	26365/1882.5	26683/1914.3
LTE Band 25	1.4MHz	QPSK	1	0	23.50	23.09	22.82	22.79
			1	2	23.50	23.14	22.80	22.81
			1	5	23.50	23.09	22.82	22.79
			3	0	23.00	22.65	22.32	22.34
			3	1	23.00	22.64	22.27	22.34
			3	2	23.00	22.65	22.26	22.35
			6	0	23.00	22.61	22.28	22.34
		16QAM	1	0	22.50	22.42	22.09	22.09
			1	2	22.50	22.39	22.18	22.08
			1	5	22.50	22.41	22.02	22.12
			3	0	23.00	22.64	22.32	22.40
			3	1	23.00	22.63	22.34	22.42
			3	2	23.00	22.53	22.22	22.41
			6	0	22.00	21.65	21.38	21.40
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26055/1851.5	26365/1882.5	26675/1913.5
LTE	3MHz	QPSK	1	0	23.50	23.06	22.78	22.79

Band 25			1	7	23.50	23.08	22.79	22.80
			1	14	23.50	23.02	22.78	22.82
			8	0	23.00	22.59	22.30	22.37
			8	4	23.00	22.58	22.27	22.32
			8	7	23.00	22.54	22.23	22.31
			15	0	23.00	22.58	22.26	22.33
		16QAM	1	0	22.50	22.29	22.07	22.12
			1	7	22.50	22.30	22.02	22.01
			1	14	22.50	22.29	22.03	22.11
			8	0	22.00	21.67	21.39	21.40
			8	4	22.00	21.67	21.33	21.41
			8	7	22.00	21.65	21.31	21.33
			15	0	22.00	21.59	21.25	21.35
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26065/1852.5	26365/1882.5	26665/1912.5
LTE Band 25	5MHz	QPSK	1	0	23.50	23.14	22.85	22.84
			1	12	23.50	23.07	22.84	22.84
			1	24	23.50	23.05	22.81	22.88
			12	0	23.00	22.58	22.31	22.39
			12	6	23.00	22.59	22.29	22.34
			12	11	23.00	22.57	22.32	22.17
			25	0	23.00	22.61	22.35	22.33
		16QAM	1	0	22.50	22.48	22.19	22.04
			1	12	22.50	22.27	21.99	22.12
			1	24	22.50	22.34	22.10	22.00
			12	0	22.00	21.58	21.29	21.39
			12	6	22.00	21.55	21.26	21.31
			12	11	22.00	21.56	21.28	21.16
			25	0	22.00	21.60	21.29	21.32
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26090/1855	26365/1882.5	26640/1910
LTE Band 25	10MHz	QPSK	1	0	23.50	23.06	22.84	22.82
			1	24	23.50	23.05	22.84	22.81
			1	49	23.50	22.95	22.78	22.83
			25	0	23.00	22.53	22.28	22.15
			25	12	23.00	22.55	22.33	22.31
			25	24	23.00	22.53	22.32	22.15

			50	0	23.00	22.55	22.36	22.20
		16QAM	1	0	22.50	22.36	22.09	22.04
			1	24	22.50	22.35	22.16	22.15
			1	49	22.50	22.27	21.91	22.13
			25	0	22.00	21.56	21.23	21.18
			25	12	22.00	21.60	21.34	21.32
			25	24	22.00	21.52	21.37	21.17
			50	0	21.50	21.46	21.31	21.13
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26115/1857.5	26365/1882.5	26615/1907.5
LTE Band 25	15MHz	QPSK	1	0	23.50	23.04	22.74	22.72
			1	37	23.50	23.04	22.81	22.80
			1	74	23.50	22.84	22.72	22.76
			36	0	23.00	22.51	22.24	22.18
			36	18	23.00	22.44	22.33	22.28
			36	37	23.00	22.42	22.28	22.22
			75	0	22.50	22.45	22.31	22.23
		16QAM	1	0	22.50	22.29	22.08	22.01
			1	37	22.50	22.31	22.14	22.08
			1	74	22.50	22.07	22.05	21.94
			36	0	22.00	21.57	21.22	21.14
			36	18	22.00	21.50	21.30	21.30
			36	37	22.00	21.39	21.22	21.23
			75	0	21.50	21.46	21.25	21.20
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26140/1860	26365/1882.5	26590/1905
LTE Band 25	20MHz	QPSK	1	0	23.50	23.04	22.70	22.74
			1	49	23.50	22.99	22.84	22.82
			1	99	23.50	22.75	22.66	22.75
			50	0	23.00	22.55	22.27	22.33
			50	24	23.00	22.47	22.35	22.34
			50	49	23.00	22.34	22.25	22.36
			100	0	22.50	22.39	22.25	22.31
		16QAM	1	0	22.50	22.19	22.06	21.90
			1	49	22.50	22.15	22.09	22.13
			1	99	22.50	21.95	21.89	22.02
			50	0	22.00	21.52	21.22	21.30
			50	24	22.00	21.45	21.34	21.31

			50	49	22.00	21.28	21.25	21.33
			100	0	21.50	21.39	21.21	21.28

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26697/814.7	26740/819	26783/823.3
LTE Band 26a	1.4MHz	QPSK	1	0	22.50	22.35	22.33	22.37
			1	2	22.50	22.33	22.34	22.37
			1	5	22.50	22.31	22.32	22.43
			3	0	22.00	21.88	21.86	21.92
			3	1	22.00	21.86	21.89	21.90
			3	2	22.00	21.85	21.87	21.89
			6	0	22.00	21.85	21.87	21.90
		16QAM	1	0	22.00	21.65	21.56	21.71
			1	2	22.00	21.53	21.74	21.60
			1	5	22.00	21.57	21.54	21.71
			3	0	22.00	21.80	21.89	21.95
			3	1	22.00	21.84	21.90	21.90
			3	2	22.00	21.84	21.85	21.93
			6	0	21.00	20.90	20.93	20.95
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26705/818.5	26740/819	26775/822.5
LTE Band 26a	3MHz	QPSK	1	0	22.50	22.33	22.36	22.34
			1	7	22.50	22.28	22.32	22.38
			1	14	22.50	22.20	22.31	22.39
			8	0	22.00	21.76	21.84	21.86
			8	4	22.00	21.78	21.84	21.89
			8	7	22.00	21.74	21.79	21.86
			15	0	22.00	21.79	21.85	21.92
		16QAM	1	0	22.00	21.63	21.72	21.61
			1	7	22.00	21.57	21.57	21.67
			1	14	22.00	21.45	21.56	21.76
			8	0	21.00	20.85	20.92	20.90
			8	4	21.00	20.85	20.91	20.96
			8	7	21.00	20.87	20.88	20.97
			15	0	21.00	20.81	20.89	20.92
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26715/816.5	26740/819	26765/821.5

LTE Band 26a	5MHz	QPSK	1	0	22.50	22.40	22.38	22.39
			1	12	22.50	22.27	22.38	22.42
			1	24	22.50	22.29	22.40	22.44
			12	0	22.00	21.82	21.87	21.89
			12	6	22.00	21.81	21.91	21.90
			12	11	22.00	21.82	21.91	21.92
			25	0	22.00	21.82	21.88	21.93
		16QAM	1	0	22.00	21.69	21.58	21.70
			1	12	22.00	21.59	21.57	21.70
			1	24	22.00	21.51	21.75	21.60
			12	0	21.00	20.76	20.84	20.87
			12	6	21.00	20.82	20.86	20.86
			12	11	21.00	20.76	20.88	20.85
			25	0	21.00	20.80	20.92	20.96
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		/	26740/819	/
LTE Band 26a	10MHz	QPSK	1	0	22.50	/	22.48	/
			1	24	22.50	/	22.41	/
			1	49	22.50	/	22.41	/
			25	0	22.00	/	21.85	/
			25	12	22.00	/	21.88	/
			25	24	22.00	/	21.92	/
			50	0	22.00	/	21.90	/
		16QAM	1	0	22.00	/	21.80	/
			1	24	22.00	/	21.75	/
			1	49	22.00	/	21.78	/
			25	0	21.00	/	20.85	/
			25	12	21.00	/	20.94	/
			25	24	21.00	/	20.91	/
			50	0	21.00	/	20.89	/

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26797/824.7	26915/836.5	27033/848.3
LTE Band 26b	1.4MHz	QPSK	1	0	23.00	22.42	22.64	22.48
			1	2	23.00	22.45	22.68	22.49
			1	5	23.00	22.40	22.66	22.47
			3	0	22.00	21.97	21.21	21.04

			3	1	22.00	21.99	21.19	21.04
			3	2	22.00	21.95	21.18	21.03
			6	0	22.00	21.94	21.21	21.02
		16QAM	1	0	22.00	21.77	21.88	21.87
			1	2	22.00	21.68	21.99	21.81
			1	5	22.00	21.71	21.89	21.74
			3	0	22.50	21.96	22.19	22.00
			3	1	22.50	22.00	22.21	22.08
			3	2	22.50	21.93	22.12	22.03
			6	0	21.50	20.96	21.25	21.08
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26805/825.5	26915/836.5	27025/847.5
LTE Band 26b	3MHz	QPSK	1	0	23.00	22.42	22.66	22.56
			1	7	23.00	22.44	22.68	22.50
			1	14	23.00	22.45	22.66	22.50
			8	0	22.50	21.89	22.20	22.05
			8	4	22.50	21.93	22.14	22.03
			8	7	22.50	21.94	22.15	21.95
			15	0	22.50	21.93	22.17	22.04
		16QAM	1	0	22.00	21.64	21.96	21.88
			1	7	22.00	21.80	21.88	21.81
			1	14	22.00	21.75	21.89	21.70
			8	0	21.50	20.99	21.24	21.11
			8	4	21.50	20.97	21.23	21.07
			8	7	21.50	21.00	21.20	21.06
			15	0	21.50	20.97	21.20	21.05
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26815/826.5	26915/836.5	27015/846.5
LTE Band 26b	5MHz	QPSK	1	0	23.00	22.45	22.70	22.60
			1	12	23.00	22.48	22.70	22.51
			1	24	23.00	22.57	22.70	22.53
			12	0	22.50	21.97	22.30	22.11
			12	6	22.50	21.99	22.21	22.08
			12	11	22.50	22.04	22.18	21.97
			25	0	22.50	21.97	22.25	22.07
		16QAM	1	0	22.50	21.71	22.03	21.78
			1	12	22.50	21.83	21.93	21.76

			1	24	22.50	21.91	21.88	21.74
			12	0	21.50	20.96	21.25	21.10
			12	6	21.50	20.99	21.20	21.04
			12	11	21.50	20.99	21.20	20.97
			25	0	21.50	21.01	21.23	21.11
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26840/829	26915/836.5	26990/844
LTE Band 26b	10MHz	QPSK	1	0	23.00	22.45	22.67	22.67
			1	24	23.00	22.65	22.74	22.63
			1	49	23.00	22.63	22.64	22.46
			25	0	22.50	22.02	22.25	22.24
			25	12	22.50	22.08	22.23	22.10
			25	24	22.50	22.07	22.16	22.00
			50	0	22.50	22.09	22.26	22.17
		16QAM	1	0	22.50	21.77	21.97	22.03
			1	24	22.50	21.96	22.09	21.83
			1	49	22.50	21.88	21.83	21.84
			25	0	21.50	20.98	21.29	21.23
			25	12	21.50	21.10	21.25	21.14
			25	24	21.50	21.08	21.17	21.03
			50	0	21.50	21.04	21.19	21.16
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26865/831.5	26915/836.5	26965/841.5
LTE Band 26b	15MHz	QPSK	1	0	23.00	22.40	22.59	22.69
			1	37	23.00	22.66	22.70	22.64
			1	74	23.00	22.62	22.56	22.41
			36	0	22.50	21.98	22.19	22.23
			36	18	22.50	22.10	22.13	22.17
			36	37	22.50	22.14	22.12	22.05
			75	0	22.50	22.13	22.14	22.18
		16QAM	1	0	22.50	21.77	21.82	22.02
			1	37	22.50	21.91	21.96	22.03
			1	74	22.50	21.81	21.91	21.83
			36	0	21.50	21.04	21.20	21.17
			36	18	21.50	21.09	21.19	21.17
			36	37	21.50	21.14	21.18	21.06
			75	0	21.50	21.12	21.15	21.15

7.4. NR Output Power

Band	SCS (kHz)	Bandwidth (MHz)	UL Channel	RB Allocation	Modulation	Tune-up (dBm)	Power (dBm)
n78(3450-3550)	30	10	630334	22@0	DFT_BPSK	21.50	21.03
n78(3450-3550)	30	10	630334	12@6	DFT_BPSK	23.00	22.75
n78(3450-3550)	30	10	630334	1@1	DFT_BPSK	23.00	22.76
n78(3450-3550)	30	10	630334	1@22	DFT_BPSK	23.00	22.64
n78(3450-3550)	30	10	630334	22@0	DFT_QPSK	23.00	22.69
n78(3450-3550)	30	10	630334	12@6	DFT_QPSK	23.00	22.66
n78(3450-3550)	30	10	630334	1@1	DFT_QPSK	23.00	22.62
n78(3450-3550)	30	10	630334	1@22	DFT_QPSK	22.50	22.47
n78(3450-3550)	30	10	630334	22@0	DFT_16QAM	24.00	23.74
n78(3450-3550)	30	10	630334	12@6	DFT_16QAM	23.00	22.65
n78(3450-3550)	30	10	630334	1@1	DFT_16QAM	23.00	22.85
n78(3450-3550)	30	10	630334	1@22	DFT_16QAM	23.00	22.74
n78(3450-3550)	30	10	630334	22@0	DFT_64QAM	23.50	23.21
n78(3450-3550)	30	10	630334	12@6	DFT_64QAM	23.50	23.16
n78(3450-3550)	30	10	630334	1@1	DFT_64QAM	23.50	23.1
n78(3450-3550)	30	10	630334	1@22	DFT_64QAM	23.00	22.96
n78(3450-3550)	30	10	630334	22@0	DFT_226QAM	21.50	21.03
n78(3450-3550)	30	10	630334	12@6	DFT_226QAM	21.50	21.03
n78(3450-3550)	30	10	630334	1@1	DFT_226QAM	21.50	21.03
n78(3450-3550)	30	10	630334	1@22	DFT_226QAM	21.50	21.04
n78(3450-3550)	30	10	630334	22@0	CP_QPSK	21.50	21.03
n78(3450-3550)	30	10	630334	12@6	CP_QPSK	21.50	21.01
n78(3450-3550)	30	10	630334	1@1	CP_QPSK	21.50	21.05
n78(3450-3550)	30	10	630334	1@22	CP_QPSK	21.50	21.05
n78(3450-3550)	30	10	630334	22@0	CP_16QAM	23.00	22.68
n78(3450-3550)	30	10	630334	12@6	CP_16QAM	24.00	23.71
n78(3450-3550)	30	10	630334	1@1	CP_16QAM	24.00	23.74
n78(3450-3550)	30	10	630334	1@22	CP_16QAM	24.00	23.59

n78(3450-3550)	30	10	630334	22@0	CP_64QAM	22.50	22.19
n78(3450-3550)	30	10	630334	12@6	CP_64QAM	22.50	22.22
n78(3450-3550)	30	10	630334	1@1	CP_64QAM	22.50	22.43
n78(3450-3550)	30	10	630334	1@22	CP_64QAM	22.50	22.31
n78(3450-3550)	30	10	630334	22@0	CP_226QAM	19.50	19.19
n78(3450-3550)	30	10	630334	12@6	CP_226QAM	19.50	19.16
n78(3450-3550)	30	10	630334	1@1	CP_226QAM	19.50	19.23
n78(3450-3550)	30	10	630334	1@22	CP_226QAM	19.50	19.1
n78(3450-3550)	30	10	633334	22@0	DFT_BPSK	22.00	21.84
n78(3450-3550)	30	10	633334	12@6	DFT_BPSK	22.50	22.4
n78(3450-3550)	30	10	633334	1@1	DFT_BPSK	22.50	22.36
n78(3450-3550)	30	10	633334	1@22	DFT_BPSK	22.50	22.36
n78(3450-3550)	30	10	633334	22@0	DFT_QPSK	22.50	22.38
n78(3450-3550)	30	10	633334	12@6	DFT_QPSK	22.50	22.39
n78(3450-3550)	30	10	633334	1@1	DFT_QPSK	22.50	22.2
n78(3450-3550)	30	10	633334	1@22	DFT_QPSK	22.50	22.19
n78(3450-3550)	30	10	633334	22@0	DFT_16QAM	23.50	23.39
n78(3450-3550)	30	10	633334	12@6	DFT_16QAM	22.50	22.43
n78(3450-3550)	30	10	633334	1@1	DFT_16QAM	22.50	22.38
n78(3450-3550)	30	10	633334	1@22	DFT_16QAM	22.50	22.4
n78(3450-3550)	30	10	633334	22@0	DFT_64QAM	23.00	22.87
n78(3450-3550)	30	10	633334	12@6	DFT_64QAM	23.00	22.88
n78(3450-3550)	30	10	633334	1@1	DFT_64QAM	23.00	22.71
n78(3450-3550)	30	10	633334	1@22	DFT_64QAM	23.00	22.71
n78(3450-3550)	30	10	633334	22@0	DFT_226QAM	22.00	21.84
n78(3450-3550)	30	10	633334	12@6	DFT_226QAM	22.00	21.83
n78(3450-3550)	30	10	633334	1@1	DFT_226QAM	22.00	21.84
n78(3450-3550)	30	10	633334	1@22	DFT_226QAM	22.00	21.84
n78(3450-3550)	30	10	633334	22@0	CP_QPSK	22.00	21.83
n78(3450-3550)	30	10	633334	12@6	CP_QPSK	22.00	21.82

n78(3450-3550)	30	10	633334	1@1	CP_QPSK	22.00	21.84
n78(3450-3550)	30	10	633334	1@22	CP_QPSK	22.00	21.83
n78(3450-3550)	30	10	633334	22@0	CP_16QAM	22.50	22.4
n78(3450-3550)	30	10	633334	12@6	CP_16QAM	23.50	23.35
n78(3450-3550)	30	10	633334	1@1	CP_16QAM	23.50	23.32
n78(3450-3550)	30	10	633334	1@22	CP_16QAM	23.50	23.32
n78(3450-3550)	30	10	633334	22@0	CP_64QAM	22.00	21.95
n78(3450-3550)	30	10	633334	12@6	CP_64QAM	22.00	21.94
n78(3450-3550)	30	10	633334	1@1	CP_64QAM	22.50	22.13
n78(3450-3550)	30	10	633334	1@22	CP_64QAM	22.50	22.1
n78(3450-3550)	30	10	633334	22@0	CP_226QAM	19.00	18.89
n78(3450-3550)	30	10	633334	12@6	CP_226QAM	19.00	18.9
n78(3450-3550)	30	10	633334	1@1	CP_226QAM	19.00	18.84
n78(3450-3550)	30	10	633334	1@22	CP_226QAM	19.00	18.82
n78(3450-3550)	30	10	636332	22@0	DFT_BPSK	22.00	21.69
n78(3450-3550)	30	10	636332	12@6	DFT_BPSK	22.50	22.15
n78(3450-3550)	30	10	636332	1@1	DFT_BPSK	22.50	22.16
n78(3450-3550)	30	10	636332	1@22	DFT_BPSK	22.50	22.02
n78(3450-3550)	30	10	636332	22@0	DFT_QPSK	22.50	22.17
n78(3450-3550)	30	10	636332	12@6	DFT_QPSK	22.50	22.15
n78(3450-3550)	30	10	636332	1@1	DFT_QPSK	22.50	22.02
n78(3450-3550)	30	10	636332	1@22	DFT_QPSK	23.00	22.87
n78(3450-3550)	30	10	636332	22@0	DFT_16QAM	23.50	23.12
n78(3450-3550)	30	10	636332	12@6	DFT_16QAM	22.50	22.19
n78(3450-3550)	30	10	636332	1@1	DFT_16QAM	22.50	22.18
n78(3450-3550)	30	10	636332	1@22	DFT_16QAM	22.50	22.05
n78(3450-3550)	30	10	636332	22@0	DFT_64QAM	23.00	22.62
n78(3450-3550)	30	10	636332	12@6	DFT_64QAM	23.00	22.66
n78(3450-3550)	30	10	636332	1@1	DFT_64QAM	23.00	22.52
n78(3450-3550)	30	10	636332	1@22	DFT_64QAM	22.50	22.39

n78(3450-3550)	30	10	636332	22@0	DFT_226QAM	22.00	21.72
n78(3450-3550)	30	10	636332	12@6	DFT_226QAM	22.00	21.73
n78(3450-3550)	30	10	636332	1@1	DFT_226QAM	22.00	21.73
n78(3450-3550)	30	10	636332	1@22	DFT_226QAM	22.00	21.72
n78(3450-3550)	30	10	636332	22@0	CP_QPSK	22.00	21.73
n78(3450-3550)	30	10	636332	12@6	CP_QPSK	22.00	21.73
n78(3450-3550)	30	10	636332	1@1	CP_QPSK	22.00	21.73
n78(3450-3550)	30	10	636332	1@22	CP_QPSK	22.00	21.74
n78(3450-3550)	30	10	636332	22@0	CP_16QAM	22.50	22.17
n78(3450-3550)	30	10	636332	12@6	CP_16QAM	23.50	23.12
n78(3450-3550)	30	10	636332	1@1	CP_16QAM	23.50	23.13
n78(3450-3550)	30	10	636332	1@22	CP_16QAM	23.00	22.99
n78(3450-3550)	30	10	636332	22@0	CP_64QAM	22.00	21.68
n78(3450-3550)	30	10	636332	12@6	CP_64QAM	22.00	21.71
n78(3450-3550)	30	10	636332	1@1	CP_64QAM	22.00	21.93
n78(3450-3550)	30	10	636332	1@22	CP_64QAM	22.00	21.77
n78(3450-3550)	30	10	636332	22@0	CP_226QAM	19.00	18.66
n78(3450-3550)	30	10	636332	12@6	CP_226QAM	19.00	18.72
n78(3450-3550)	30	10	636332	1@1	CP_226QAM	19.00	18.62
n78(3450-3550)	30	10	636332	1@22	CP_226QAM	18.50	18.46
n78(3450-3550)	30	15	630500	36@0	DFT_BPSK	21.00	20.55
n78(3450-3550)	30	15	630500	18@9	DFT_BPSK	23.00	22.69
n78(3450-3550)	30	15	630500	1@1	DFT_BPSK	23.00	22.78
n78(3450-3550)	30	15	630500	1@36	DFT_BPSK	23.00	22.65
n78(3450-3550)	30	15	630500	36@0	DFT_QPSK	23.00	22.74
n78(3450-3550)	30	15	630500	18@9	DFT_QPSK	23.00	22.67
n78(3450-3550)	30	15	630500	1@1	DFT_QPSK	23.00	22.62
n78(3450-3550)	30	15	630500	1@36	DFT_QPSK	23.00	22.53
n78(3450-3550)	30	15	630500	36@0	DFT_16QAM	24.00	23.74
n78(3450-3550)	30	15	630500	18@9	DFT_16QAM	23.00	22.75

n78(3450-3550)	30	15	630500	1@1	DFT_16QAM	23.00	22.78
n78(3450-3550)	30	15	630500	1@36	DFT_16QAM	23.00	22.66
n78(3450-3550)	30	15	630500	36@0	DFT_64QAM	23.50	23.23
n78(3450-3550)	30	15	630500	18@9	DFT_64QAM	23.50	23.19
n78(3450-3550)	30	15	630500	1@1	DFT_64QAM	23.50	23.12
n78(3450-3550)	30	15	630500	1@36	DFT_64QAM	23.00	22.99
n78(3450-3550)	30	15	630500	36@0	DFT_226QAM	21.00	20.52
n78(3450-3550)	30	15	630500	18@9	DFT_226QAM	21.00	20.56
n78(3450-3550)	30	15	630500	1@1	DFT_226QAM	21.00	20.53
n78(3450-3550)	30	15	630500	1@36	DFT_226QAM	21.00	20.56
n78(3450-3550)	30	15	630500	38@0	CP_QPSK	21.00	20.53
n78(3450-3550)	30	15	630500	19@9	CP_QPSK	21.00	20.56
n78(3450-3550)	30	15	630500	1@1	CP_QPSK	21.00	20.55
n78(3450-3550)	30	15	630500	1@36	CP_QPSK	21.00	20.53
n78(3450-3550)	30	15	630500	38@0	CP_16QAM	21.00	20.55
n78(3450-3550)	30	15	630500	19@9	CP_16QAM	24.00	23.75
n78(3450-3550)	30	15	630500	1@1	CP_16QAM	24.00	23.72
n78(3450-3550)	30	15	630500	1@36	CP_16QAM	24.00	23.59
n78(3450-3550)	30	15	630500	38@0	CP_64QAM	22.50	22.22
n78(3450-3550)	30	15	630500	19@9	CP_64QAM	22.50	22.23
n78(3450-3550)	30	15	630500	1@1	CP_64QAM	22.50	22.45
n78(3450-3550)	30	15	630500	1@36	CP_64QAM	22.50	22.37
n78(3450-3550)	30	15	630500	38@0	CP_226QAM	19.50	19.23
n78(3450-3550)	30	15	630500	19@9	CP_226QAM	19.50	19.22
n78(3450-3550)	30	15	630500	1@1	CP_226QAM	19.50	19.26
n78(3450-3550)	30	15	630500	1@36	CP_226QAM	19.50	19.17
n78(3450-3550)	30	15	633334	36@0	DFT_BPSK	20.50	20.33
n78(3450-3550)	30	15	633334	18@9	DFT_BPSK	22.50	22.38
n78(3450-3550)	30	15	633334	1@1	DFT_BPSK	22.50	22.38
n78(3450-3550)	30	15	633334	1@36	DFT_BPSK	22.50	22.36

n78(3450-3550)	30	15	633334	36@0	DFT_QPSK	22.50	22.39
n78(3450-3550)	30	15	633334	18@9	DFT_QPSK	22.50	22.37
n78(3450-3550)	30	15	633334	1@1	DFT_QPSK	22.50	22.21
n78(3450-3550)	30	15	633334	1@36	DFT_QPSK	22.50	22.19
n78(3450-3550)	30	15	633334	36@0	DFT_16QAM	23.50	23.41
n78(3450-3550)	30	15	633334	18@9	DFT_16QAM	22.50	22.44
n78(3450-3550)	30	15	633334	1@1	DFT_16QAM	22.50	22.42
n78(3450-3550)	30	15	633334	1@36	DFT_16QAM	22.50	22.41
n78(3450-3550)	30	15	633334	36@0	DFT_64QAM	23.00	22.91
n78(3450-3550)	30	15	633334	18@9	DFT_64QAM	23.00	22.91
n78(3450-3550)	30	15	633334	1@1	DFT_64QAM	23.00	22.7
n78(3450-3550)	30	15	633334	1@36	DFT_64QAM	23.00	22.7
n78(3450-3550)	30	15	633334	36@0	DFT_226QAM	20.50	20.32
n78(3450-3550)	30	15	633334	18@9	DFT_226QAM	20.50	20.33
n78(3450-3550)	30	15	633334	1@1	DFT_226QAM	20.50	20.33
n78(3450-3550)	30	15	633334	1@36	DFT_226QAM	20.50	20.32
n78(3450-3550)	30	15	633334	38@0	CP_QPSK	20.50	20.32
n78(3450-3550)	30	15	633334	19@9	CP_QPSK	20.50	20.31
n78(3450-3550)	30	15	633334	1@1	CP_QPSK	20.50	20.33
n78(3450-3550)	30	15	633334	1@36	CP_QPSK	20.50	20.34
n78(3450-3550)	30	15	633334	38@0	CP_16QAM	20.50	20.34
n78(3450-3550)	30	15	633334	19@9	CP_16QAM	23.50	23.47
n78(3450-3550)	30	15	633334	1@1	CP_16QAM	23.50	23.3
n78(3450-3550)	30	15	633334	1@36	CP_16QAM	23.50	23.29
n78(3450-3550)	30	15	633334	38@0	CP_64QAM	22.00	21.9
n78(3450-3550)	30	15	633334	19@9	CP_64QAM	22.00	21.92
n78(3450-3550)	30	15	633334	1@1	CP_64QAM	22.50	22.01
n78(3450-3550)	30	15	633334	1@36	CP_64QAM	22.00	22
n78(3450-3550)	30	15	633334	38@0	CP_226QAM	19.00	18.88
n78(3450-3550)	30	15	633334	19@9	CP_226QAM	19.00	18.89

n78(3450-3550)	30	15	633334	1@1	CP_226QAM	19.00	18.85
n78(3450-3550)	30	15	633334	1@36	CP_226QAM	19.00	18.81
n78(3450-3550)	30	15	636166	36@0	DFT_BPSK	20.50	20.22
n78(3450-3550)	30	15	636166	18@9	DFT_BPSK	22.50	22.16
n78(3450-3550)	30	15	636166	1@1	DFT_BPSK	22.50	22.16
n78(3450-3550)	30	15	636166	1@36	DFT_BPSK	22.00	22
n78(3450-3550)	30	15	636166	36@0	DFT_QPSK	22.50	22.17
n78(3450-3550)	30	15	636166	18@9	DFT_QPSK	22.50	22.15
n78(3450-3550)	30	15	636166	1@1	DFT_QPSK	23.00	22.99
n78(3450-3550)	30	15	636166	1@36	DFT_QPSK	23.00	22.85
n78(3450-3550)	30	15	636166	36@0	DFT_16QAM	23.50	23.16
n78(3450-3550)	30	15	636166	18@9	DFT_16QAM	22.50	22.21
n78(3450-3550)	30	15	636166	1@1	DFT_16QAM	22.50	22.3
n78(3450-3550)	30	15	636166	1@36	DFT_16QAM	22.50	22.12
n78(3450-3550)	30	15	636166	36@0	DFT_64QAM	23.00	22.72
n78(3450-3550)	30	15	636166	18@9	DFT_64QAM	23.00	22.67
n78(3450-3550)	30	15	636166	1@1	DFT_64QAM	22.50	22.39
n78(3450-3550)	30	15	636166	1@36	DFT_64QAM	22.50	22.27
n78(3450-3550)	30	15	636166	36@0	DFT_226QAM	20.50	20.23
n78(3450-3550)	30	15	636166	18@9	DFT_226QAM	20.50	20.21
n78(3450-3550)	30	15	636166	1@1	DFT_226QAM	20.50	20.23
n78(3450-3550)	30	15	636166	1@36	DFT_226QAM	20.50	20.21
n78(3450-3550)	30	15	636166	38@0	CP_QPSK	20.50	20.22
n78(3450-3550)	30	15	636166	19@9	CP_QPSK	20.50	20.21
n78(3450-3550)	30	15	636166	1@1	CP_QPSK	20.50	20.23
n78(3450-3550)	30	15	636166	1@36	CP_QPSK	20.50	20.22
n78(3450-3550)	30	15	636166	38@0	CP_16QAM	20.50	20.22
n78(3450-3550)	30	15	636166	19@9	CP_16QAM	23.50	23.22
n78(3450-3550)	30	15	636166	1@1	CP_16QAM	23.50	23.22
n78(3450-3550)	30	15	636166	1@36	CP_16QAM	23.50	23.06

n78(3450-3550)	30	15	636166	38@0	CP_64QAM	22.00	21.67
n78(3450-3550)	30	15	636166	19@9	CP_64QAM	22.00	21.75
n78(3450-3550)	30	15	636166	1@1	CP_64QAM	22.00	21.75
n78(3450-3550)	30	15	636166	1@36	CP_64QAM	22.00	21.59
n78(3450-3550)	30	15	636166	38@0	CP_226QAM	19.00	18.69
n78(3450-3550)	30	15	636166	19@9	CP_226QAM	19.00	18.74
n78(3450-3550)	30	15	636166	1@1	CP_226QAM	19.00	18.68
n78(3450-3550)	30	15	636166	1@36	CP_226QAM	19.00	18.53
n78(3450-3550)	30	20	630668	50@0	DFT_BPSK	19.50	19.45
n78(3450-3550)	30	20	630668	22@12	DFT_BPSK	23.00	22.71
n78(3450-3550)	30	20	630668	1@1	DFT_BPSK	23.00	22.7
n78(3450-3550)	30	20	630668	1@49	DFT_BPSK	23.00	22.65
n78(3450-3550)	30	20	630668	50@0	DFT_QPSK	23.00	22.74
n78(3450-3550)	30	20	630668	22@12	DFT_QPSK	23.00	22.74
n78(3450-3550)	30	20	630668	1@1	DFT_QPSK	23.00	22.56
n78(3450-3550)	30	20	630668	1@49	DFT_QPSK	23.00	22.51
n78(3450-3550)	30	20	630668	50@0	DFT_16QAM	24.00	23.74
n78(3450-3550)	30	20	630668	22@12	DFT_16QAM	23.00	22.71
n78(3450-3550)	30	20	630668	1@1	DFT_16QAM	23.00	22.73
n78(3450-3550)	30	20	630668	1@49	DFT_16QAM	23.00	22.71
n78(3450-3550)	30	20	630668	50@0	DFT_64QAM	23.50	23.23
n78(3450-3550)	30	20	630668	22@12	DFT_64QAM	23.50	23.2
n78(3450-3550)	30	20	630668	1@1	DFT_64QAM	23.50	23.06
n78(3450-3550)	30	20	630668	1@49	DFT_64QAM	23.00	23
n78(3450-3550)	30	20	630668	50@0	DFT_226QAM	21.50	21.22
n78(3450-3550)	30	20	630668	22@12	DFT_226QAM	21.50	21.3
n78(3450-3550)	30	20	630668	1@1	DFT_226QAM	21.50	21.21
n78(3450-3550)	30	20	630668	1@49	DFT_226QAM	21.50	21.17
n78(3450-3550)	30	20	630668	51@0	CP_QPSK	23.00	22.73
n78(3450-3550)	30	20	630668	22@12	CP_QPSK	22.50	22.22

n78(3450-3550)	30	20	630668	1@1	CP_QPSK	22.50	22.18
n78(3450-3550)	30	20	630668	1@49	CP_QPSK	22.50	22.14
n78(3450-3550)	30	20	630668	51@0	CP_16QAM	23.00	22.7
n78(3450-3550)	30	20	630668	22@12	CP_16QAM	24.00	23.73
n78(3450-3550)	30	20	630668	1@1	CP_16QAM	24.00	23.64
n78(3450-3550)	30	20	630668	1@49	CP_16QAM	24.00	23.57
n78(3450-3550)	30	20	630668	51@0	CP_64QAM	22.50	22.19
n78(3450-3550)	30	20	630668	22@12	CP_64QAM	22.50	22.23
n78(3450-3550)	30	20	630668	1@1	CP_64QAM	22.50	22.4
n78(3450-3550)	30	20	630668	1@49	CP_64QAM	22.50	22.3
n78(3450-3550)	30	20	630668	51@0	CP_226QAM	19.50	19.21
n78(3450-3550)	30	20	630668	22@12	CP_226QAM	19.50	19.26
n78(3450-3550)	30	20	630668	1@1	CP_226QAM	19.50	19.21
n78(3450-3550)	30	20	630668	1@49	CP_226QAM	19.50	19.14
n78(3450-3550)	30	20	633334	50@0	DFT_BPSK	19.50	19.21
n78(3450-3550)	30	20	633334	22@12	DFT_BPSK	22.50	22.35
n78(3450-3550)	30	20	633334	1@1	DFT_BPSK	22.50	22.32
n78(3450-3550)	30	20	633334	1@49	DFT_BPSK	22.50	22.22
n78(3450-3550)	30	20	633334	50@0	DFT_QPSK	22.50	22.39
n78(3450-3550)	30	20	633334	22@12	DFT_QPSK	22.50	22.4
n78(3450-3550)	30	20	633334	1@1	DFT_QPSK	22.50	22.16
n78(3450-3550)	30	20	633334	1@49	DFT_QPSK	22.50	22.06
n78(3450-3550)	30	20	633334	50@0	DFT_16QAM	23.50	23.4
n78(3450-3550)	30	20	633334	22@12	DFT_16QAM	22.50	22.4
n78(3450-3550)	30	20	633334	1@1	DFT_16QAM	22.50	22.34
n78(3450-3550)	30	20	633334	1@49	DFT_16QAM	22.50	22.28
n78(3450-3550)	30	20	633334	50@0	DFT_64QAM	23.00	22.87
n78(3450-3550)	30	20	633334	22@12	DFT_64QAM	23.00	22.87
n78(3450-3550)	30	20	633334	1@1	DFT_64QAM	23.00	22.69
n78(3450-3550)	30	20	633334	1@49	DFT_64QAM	23.00	22.62

n78(3450-3550)	30	20	633334	50@0	DFT_226QAM	19.50	19.21
n78(3450-3550)	30	20	633334	22@12	DFT_226QAM	19.50	19.22
n78(3450-3550)	30	20	633334	1@1	DFT_226QAM	19.50	19.2
n78(3450-3550)	30	20	633334	1@49	DFT_226QAM	19.50	19.22
n78(3450-3550)	30	20	633334	51@0	CP_QPSK	22.50	22.42
n78(3450-3550)	30	20	633334	22@12	CP_QPSK	24.00	23.9
n78(3450-3550)	30	20	633334	1@1	CP_QPSK	24.00	23.83
n78(3450-3550)	30	20	633334	1@49	CP_QPSK	24.00	23.76
n78(3450-3550)	30	20	633334	51@0	CP_16QAM	22.50	22.38
n78(3450-3550)	30	20	633334	22@12	CP_16QAM	23.50	23.41
n78(3450-3550)	30	20	633334	1@1	CP_16QAM	23.50	23.26
n78(3450-3550)	30	20	633334	1@49	CP_16QAM	23.50	23.15
n78(3450-3550)	30	20	633334	51@0	CP_64QAM	22.00	21.86
n78(3450-3550)	30	20	633334	22@12	CP_64QAM	22.00	21.96
n78(3450-3550)	30	20	633334	1@1	CP_64QAM	22.00	21.99
n78(3450-3550)	30	20	633334	1@49	CP_64QAM	22.00	21.92
n78(3450-3550)	30	20	633334	51@0	CP_226QAM	19.00	18.87
n78(3450-3550)	30	20	633334	22@12	CP_226QAM	19.00	18.94
n78(3450-3550)	30	20	633334	1@1	CP_226QAM	19.00	18.82
n78(3450-3550)	30	20	633334	1@49	CP_226QAM	19.00	18.74
n78(3450-3550)	30	20	636000	50@0	DFT_BPSK	19.50	19.11
n78(3450-3550)	30	20	636000	22@12	DFT_BPSK	22.50	22.15
n78(3450-3550)	30	20	636000	1@1	DFT_BPSK	23.00	22.99
n78(3450-3550)	30	20	636000	1@49	DFT_BPSK	23.00	22.92
n78(3450-3550)	30	20	636000	50@0	DFT_QPSK	22.50	22.09
n78(3450-3550)	30	20	636000	22@12	DFT_QPSK	22.50	22.16
n78(3450-3550)	30	20	636000	1@1	DFT_QPSK	23.00	22.84
n78(3450-3550)	30	20	636000	1@49	DFT_QPSK	23.00	22.77
n78(3450-3550)	30	20	636000	50@0	DFT_16QAM	23.50	23.16
n78(3450-3550)	30	20	636000	22@12	DFT_16QAM	22.50	22.16

n78(3450-3550)	30	20	636000	1@1	DFT_16QAM	22.50	22.02
n78(3450-3550)	30	20	636000	1@49	DFT_16QAM	24.00	23.94
n78(3450-3550)	30	20	636000	50@0	DFT_64QAM	23.00	22.6
n78(3450-3550)	30	20	636000	22@12	DFT_64QAM	23.00	22.68
n78(3450-3550)	30	20	636000	1@1	DFT_64QAM	22.50	22.4
n78(3450-3550)	30	20	636000	1@49	DFT_64QAM	22.50	22.3
n78(3450-3550)	30	20	636000	50@0	DFT_226QAM	19.50	19.08
n78(3450-3550)	30	20	636000	22@12	DFT_226QAM	19.50	19.1
n78(3450-3550)	30	20	636000	1@1	DFT_226QAM	19.50	19.1
n78(3450-3550)	30	20	636000	1@49	DFT_226QAM	19.50	19.11
n78(3450-3550)	30	20	636000	51@0	CP_QPSK	19.50	19.09
n78(3450-3550)	30	20	636000	22@12	CP_QPSK	19.50	19.11
n78(3450-3550)	30	20	636000	1@1	CP_QPSK	19.50	19.11
n78(3450-3550)	30	20	636000	1@49	CP_QPSK	19.50	19.09
n78(3450-3550)	30	20	636000	51@0	CP_16QAM	22.50	22.11
n78(3450-3550)	30	20	636000	22@12	CP_16QAM	23.50	23.22
n78(3450-3550)	30	20	636000	1@1	CP_16QAM	23.00	22.93
n78(3450-3550)	30	20	636000	1@49	CP_16QAM	23.00	22.86
n78(3450-3550)	30	20	636000	51@0	CP_64QAM	22.00	21.62
n78(3450-3550)	30	20	636000	22@12	CP_64QAM	22.00	21.74
n78(3450-3550)	30	20	636000	1@1	CP_64QAM	22.00	21.66
n78(3450-3550)	30	20	636000	1@49	CP_64QAM	22.00	21.64
n78(3450-3550)	30	20	636000	51@0	CP_226QAM	19.00	18.61
n78(3450-3550)	30	20	636000	22@12	CP_226QAM	19.00	18.71
n78(3450-3550)	30	20	636000	1@1	CP_226QAM	18.50	18.48
n78(3450-3550)	30	20	636000	1@49	CP_226QAM	18.50	18.41
n78(3450-3550)	30	40	631334	100@0	DFT_BPSK	20.00	19.71
n78(3450-3550)	30	40	631334	50@22	DFT_BPSK	23.00	22.76
n78(3450-3550)	30	40	631334	1@1	DFT_BPSK	22.50	22.4
n78(3450-3550)	30	40	631334	1@104	DFT_BPSK	23.00	22.9

n78(3450-3550)	30	40	631334	100@0	DFT_QPSK	23.00	22.61
n78(3450-3550)	30	40	631334	50@22	DFT_QPSK	23.00	22.75
n78(3450-3550)	30	40	631334	1@1	DFT_QPSK	22.50	22.26
n78(3450-3550)	30	40	631334	1@104	DFT_QPSK	23.00	22.73
n78(3450-3550)	30	40	631334	100@0	DFT_16QAM	24.00	23.61
n78(3450-3550)	30	40	631334	50@22	DFT_16QAM	23.00	22.77
n78(3450-3550)	30	40	631334	1@1	DFT_16QAM	22.50	22.42
n78(3450-3550)	30	40	631334	1@104	DFT_16QAM	24.00	23.85
n78(3450-3550)	30	40	631334	100@0	DFT_64QAM	23.50	23.11
n78(3450-3550)	30	40	631334	50@22	DFT_64QAM	23.50	23.27
n78(3450-3550)	30	40	631334	1@1	DFT_64QAM	23.00	22.77
n78(3450-3550)	30	40	631334	1@104	DFT_64QAM	22.50	22.22
n78(3450-3550)	30	40	631334	100@0	DFT_226QAM	20.00	19.71
n78(3450-3550)	30	40	631334	50@22	DFT_226QAM	20.00	19.71
n78(3450-3550)	30	40	631334	1@1	DFT_226QAM	20.00	19.71
n78(3450-3550)	30	40	631334	1@104	DFT_226QAM	20.00	19.72
n78(3450-3550)	30	40	631334	106@0	CP_QPSK	20.00	19.72
n78(3450-3550)	30	40	631334	53@26	CP_QPSK	20.00	19.71
n78(3450-3550)	30	40	631334	1@1	CP_QPSK	20.00	19.72
n78(3450-3550)	30	40	631334	1@104	CP_QPSK	20.00	19.72
n78(3450-3550)	30	40	631334	106@0	CP_16QAM	23.00	22.59
n78(3450-3550)	30	40	631334	53@26	CP_16QAM	24.00	23.71
n78(3450-3550)	30	40	631334	1@1	CP_16QAM	23.50	23.26
n78(3450-3550)	30	40	631334	1@104	CP_16QAM	23.00	22.71
n78(3450-3550)	30	40	631334	106@0	CP_64QAM	22.50	22.07
n78(3450-3550)	30	40	631334	53@26	CP_64QAM	22.50	22.22
n78(3450-3550)	30	40	631334	1@1	CP_64QAM	22.50	22.06
n78(3450-3550)	30	40	631334	1@104	CP_64QAM	22.00	21.53
n78(3450-3550)	30	40	631334	106@0	CP_226QAM	19.50	19.11
n78(3450-3550)	30	40	631334	53@26	CP_226QAM	19.50	19.23

n78(3450-3550)	30	40	631334	1@1	CP_226QAM	19.00	18.89
n78(3450-3550)	30	40	631334	1@104	CP_226QAM	18.50	18.36
n78(3450-3550)	30	40	633334	100@0	DFT_BPSK	20.00	19.54
n78(3450-3550)	30	40	633334	50@22	DFT_BPSK	22.50	22.41
n78(3450-3550)	30	40	633334	1@1	DFT_BPSK	22.50	22.22
n78(3450-3550)	30	40	633334	1@104	DFT_BPSK	23.00	22.64
n78(3450-3550)	30	40	633334	100@0	DFT_QPSK	22.50	22.31
n78(3450-3550)	30	40	633334	50@22	DFT_QPSK	22.50	22.4
n78(3450-3550)	30	40	633334	1@1	DFT_QPSK	22.50	22.1
n78(3450-3550)	30	40	633334	1@104	DFT_QPSK	22.50	22.45
n78(3450-3550)	30	40	633334	100@0	DFT_16QAM	23.50	23.31
n78(3450-3550)	30	40	633334	50@22	DFT_16QAM	22.50	22.45
n78(3450-3550)	30	40	633334	1@1	DFT_16QAM	22.50	22.27
n78(3450-3550)	30	40	633334	1@104	DFT_16QAM	24.00	23.66
n78(3450-3550)	30	40	633334	100@0	DFT_64QAM	23.00	22.83
n78(3450-3550)	30	40	633334	50@22	DFT_64QAM	23.00	22.9
n78(3450-3550)	30	40	633334	1@1	DFT_64QAM	23.00	22.6
n78(3450-3550)	30	40	633334	1@104	DFT_64QAM	22.00	21.97
n78(3450-3550)	30	40	633334	100@0	DFT_226QAM	20.00	19.52
n78(3450-3550)	30	40	633334	50@22	DFT_226QAM	20.00	19.53
n78(3450-3550)	30	40	633334	1@1	DFT_226QAM	20.00	19.51
n78(3450-3550)	30	40	633334	1@104	DFT_226QAM	20.00	19.52
n78(3450-3550)	30	40	633334	106@0	CP_QPSK	20.00	19.53
n78(3450-3550)	30	40	633334	53@26	CP_QPSK	20.00	19.54
n78(3450-3550)	30	40	633334	1@1	CP_QPSK	20.00	19.52
n78(3450-3550)	30	40	633334	1@104	CP_QPSK	20.00	19.53
n78(3450-3550)	30	40	633334	106@0	CP_16QAM	22.50	22.3
n78(3450-3550)	30	40	633334	53@26	CP_16QAM	23.50	23.41
n78(3450-3550)	30	40	633334	1@1	CP_16QAM	23.50	23.1
n78(3450-3550)	30	40	633334	1@104	CP_16QAM	22.50	22.48

n78(3450-3550)	30	40	633334	106@0	CP_64QAM	22.00	21.79
n78(3450-3550)	30	40	633334	53@26	CP_64QAM	22.00	21.92
n78(3450-3550)	30	40	633334	1@1	CP_64QAM	22.00	21.91
n78(3450-3550)	30	40	633334	1@104	CP_64QAM	21.50	21.32
n78(3450-3550)	30	40	633334	106@0	CP_226QAM	19.00	18.82
n78(3450-3550)	30	40	633334	53@26	CP_226QAM	19.00	18.91
n78(3450-3550)	30	40	633334	1@1	CP_226QAM	19.00	18.81
n78(3450-3550)	30	40	633334	1@104	CP_226QAM	18.50	18.18
n78(3450-3550)	30	40	635332	100@0	DFT_BPSK	19.50	19.45
n78(3450-3550)	30	40	635332	50@22	DFT_BPSK	22.50	22.1
n78(3450-3550)	30	40	635332	1@1	DFT_BPSK	23.00	22.91
n78(3450-3550)	30	40	635332	1@104	DFT_BPSK	23.00	22.59
n78(3450-3550)	30	40	635332	100@0	DFT_QPSK	22.50	22.08
n78(3450-3550)	30	40	635332	50@22	DFT_QPSK	22.50	22.08
n78(3450-3550)	30	40	635332	1@1	DFT_QPSK	23.00	22.74
n78(3450-3550)	30	40	635332	1@104	DFT_QPSK	22.50	22.43
n78(3450-3550)	30	40	635332	100@0	DFT_16QAM	23.50	23.06
n78(3450-3550)	30	40	635332	50@22	DFT_16QAM	22.50	22.08
n78(3450-3550)	30	40	635332	1@1	DFT_16QAM	24.00	23.94
n78(3450-3550)	30	40	635332	1@104	DFT_16QAM	24.00	23.69
n78(3450-3550)	30	40	635332	100@0	DFT_64QAM	23.00	22.57
n78(3450-3550)	30	40	635332	50@22	DFT_64QAM	23.00	22.6
n78(3450-3550)	30	40	635332	1@1	DFT_64QAM	22.50	22.16
n78(3450-3550)	30	40	635332	1@104	DFT_64QAM	22.00	21.85
n78(3450-3550)	30	40	635332	100@0	DFT_226QAM	19.50	19.44
n78(3450-3550)	30	40	635332	50@22	DFT_226QAM	19.50	19.43
n78(3450-3550)	30	40	635332	1@1	DFT_226QAM	19.50	19.44
n78(3450-3550)	30	40	635332	1@104	DFT_226QAM	19.50	19.44
n78(3450-3550)	30	40	635332	106@0	CP_QPSK	19.50	19.45
n78(3450-3550)	30	40	635332	53@26	CP_QPSK	19.50	19.46

n78(3450-3550)	30	40	635332	1@1	CP_QPSK	19.50	19.44
n78(3450-3550)	30	40	635332	1@104	CP_QPSK	19.50	19.45
n78(3450-3550)	30	40	635332	106@0	CP_16QAM	22.50	22.06
n78(3450-3550)	30	40	635332	53@26	CP_16QAM	23.50	23.08
n78(3450-3550)	30	40	635332	1@1	CP_16QAM	23.00	22.92
n78(3450-3550)	30	40	635332	1@104	CP_16QAM	23.00	22.63
n78(3450-3550)	30	40	635332	106@0	CP_64QAM	22.00	21.54
n78(3450-3550)	30	40	635332	53@26	CP_64QAM	22.00	21.64
n78(3450-3550)	30	40	635332	1@1	CP_64QAM	21.50	21.5
n78(3450-3550)	30	40	635332	1@104	CP_64QAM	21.50	21.21
n78(3450-3550)	30	40	635332	106@0	CP_226QAM	19.00	18.6
n78(3450-3550)	30	40	635332	53@26	CP_226QAM	19.00	18.63
n78(3450-3550)	30	40	635332	1@1	CP_226QAM	18.50	18.4
n78(3450-3550)	30	40	635332	1@104	CP_226QAM	18.50	18.1
n78(3450-3550)	30	50	631668	128@0	DFT_BPSK	20.00	19.81
n78(3450-3550)	30	50	631668	64@32	DFT_BPSK	23.00	22.7
n78(3450-3550)	30	50	631668	1@1	DFT_BPSK	23.00	22.66
n78(3450-3550)	30	50	631668	1@131	DFT_BPSK	22.50	22.08
n78(3450-3550)	30	50	631668	128@0	DFT_QPSK	23.00	22.6
n78(3450-3550)	30	50	631668	64@32	DFT_QPSK	23.00	22.71
n78(3450-3550)	30	50	631668	1@1	DFT_QPSK	23.00	22.52
n78(3450-3550)	30	50	631668	1@131	DFT_QPSK	23.00	22.89
n78(3450-3550)	30	50	631668	128@0	DFT_16QAM	24.00	23.63
n78(3450-3550)	30	50	631668	64@32	DFT_16QAM	23.00	22.71
n78(3450-3550)	30	50	631668	1@1	DFT_16QAM	23.00	22.7
n78(3450-3550)	30	50	631668	1@131	DFT_16QAM	22.50	22.14
n78(3450-3550)	30	50	631668	128@0	DFT_64QAM	23.50	23.14
n78(3450-3550)	30	50	631668	64@32	DFT_64QAM	23.50	23.22
n78(3450-3550)	30	50	631668	1@1	DFT_64QAM	23.50	23.06
n78(3450-3550)	30	50	631668	1@131	DFT_64QAM	22.50	22.44

n78(3450-3550)	30	50	631668	128@0	DFT_226QAM	20.00	19.78
n78(3450-3550)	30	50	631668	64@32	DFT_226QAM	20.00	19.8
n78(3450-3550)	30	50	631668	1@1	DFT_226QAM	20.00	19.8
n78(3450-3550)	30	50	631668	1@131	DFT_226QAM	20.00	19.79
n78(3450-3550)	30	50	631668	133@0	CP_QPSK	20.00	19.8
n78(3450-3550)	30	50	631668	67@33	CP_QPSK	20.00	19.8
n78(3450-3550)	30	50	631668	1@1	CP_QPSK	20.00	19.81
n78(3450-3550)	30	50	631668	1@131	CP_QPSK	20.00	19.78
n78(3450-3550)	30	50	631668	133@0	CP_16QAM	20.00	19.8
n78(3450-3550)	30	50	631668	67@33	CP_16QAM	24.00	23.69
n78(3450-3550)	30	50	631668	1@1	CP_16QAM	24.00	23.6
n78(3450-3550)	30	50	631668	1@131	CP_16QAM	23.00	22.94
n78(3450-3550)	30	50	631668	133@0	CP_64QAM	22.50	22.08
n78(3450-3550)	30	50	631668	67@33	CP_64QAM	22.50	22.22
n78(3450-3550)	30	50	631668	1@1	CP_64QAM	22.50	22.35
n78(3450-3550)	30	50	631668	1@131	CP_64QAM	22.00	21.71
n78(3450-3550)	30	50	631668	133@0	CP_226QAM	19.50	19.07
n78(3450-3550)	30	50	631668	67@33	CP_226QAM	19.50	19.22
n78(3450-3550)	30	50	631668	1@1	CP_226QAM	19.50	19.11
n78(3450-3550)	30	50	631668	1@131	CP_226QAM	18.50	18.49
n78(3450-3550)	30	50	633334	128@0	DFT_BPSK	20.00	19.67
n78(3450-3550)	30	50	633334	64@32	DFT_BPSK	22.50	22.46
n78(3450-3550)	30	50	633334	1@1	DFT_BPSK	23.00	22.67
n78(3450-3550)	30	50	633334	1@131	DFT_BPSK	23.00	22.81
n78(3450-3550)	30	50	633334	128@0	DFT_QPSK	22.50	22.41
n78(3450-3550)	30	50	633334	64@32	DFT_QPSK	22.50	22.43
n78(3450-3550)	30	50	633334	1@1	DFT_QPSK	23.00	22.52
n78(3450-3550)	30	50	633334	1@131	DFT_QPSK	23.00	22.64
n78(3450-3550)	30	50	633334	128@0	DFT_16QAM	23.50	23.42
n78(3450-3550)	30	50	633334	64@32	DFT_16QAM	22.50	22.46

n78(3450-3550)	30	50	633334	1@1	DFT_16QAM	23.00	22.67
n78(3450-3550)	30	50	633334	1@131	DFT_16QAM	24.00	23.85
n78(3450-3550)	30	50	633334	128@0	DFT_64QAM	23.00	22.94
n78(3450-3550)	30	50	633334	64@32	DFT_64QAM	23.00	22.96
n78(3450-3550)	30	50	633334	1@1	DFT_64QAM	23.50	23.04
n78(3450-3550)	30	50	633334	1@131	DFT_64QAM	22.50	22.18
n78(3450-3550)	30	50	633334	128@0	DFT_226QAM	20.00	19.68
n78(3450-3550)	30	50	633334	64@32	DFT_226QAM	20.00	19.68
n78(3450-3550)	30	50	633334	1@1	DFT_226QAM	20.00	19.66
n78(3450-3550)	30	50	633334	1@131	DFT_226QAM	20.00	19.68
n78(3450-3550)	30	50	633334	133@0	CP_QPSK	22.50	22.41
n78(3450-3550)	30	50	633334	67@33	CP_QPSK	24.00	23.93
n78(3450-3550)	30	50	633334	1@1	CP_QPSK	22.50	22.19
n78(3450-3550)	30	50	633334	1@131	CP_QPSK	23.50	23.33
n78(3450-3550)	30	50	633334	133@0	CP_16QAM	22.50	22.41
n78(3450-3550)	30	50	633334	67@33	CP_16QAM	23.50	23.4
n78(3450-3550)	30	50	633334	1@1	CP_16QAM	24.00	23.56
n78(3450-3550)	30	50	633334	1@131	CP_16QAM	23.00	22.68
n78(3450-3550)	30	50	633334	133@0	CP_64QAM	22.00	21.91
n78(3450-3550)	30	50	633334	67@33	CP_64QAM	22.00	21.97
n78(3450-3550)	30	50	633334	1@1	CP_64QAM	22.50	22.42
n78(3450-3550)	30	50	633334	1@131	CP_64QAM	22.00	21.54
n78(3450-3550)	30	50	633334	133@0	CP_226QAM	19.00	18.89
n78(3450-3550)	30	50	633334	67@33	CP_226QAM	19.00	18.98
n78(3450-3550)	30	50	633334	1@1	CP_226QAM	19.50	19.15
n78(3450-3550)	30	50	633334	1@131	CP_226QAM	18.50	18.29
n78(3450-3550)	30	50	635000	128@0	DFT_BPSK	20.00	19.55
n78(3450-3550)	30	50	635000	64@32	DFT_BPSK	22.50	22.14
n78(3450-3550)	30	50	635000	1@1	DFT_BPSK	22.50	22.28
n78(3450-3550)	30	50	635000	1@131	DFT_BPSK	23.00	22.85

n78(3450-3550)	30	50	635000	128@0	DFT_QPSK	22.50	22.22
n78(3450-3550)	30	50	635000	64@32	DFT_QPSK	22.50	22.14
n78(3450-3550)	30	50	635000	1@1	DFT_QPSK	22.50	22.11
n78(3450-3550)	30	50	635000	1@131	DFT_QPSK	23.00	22.68
n78(3450-3550)	30	50	635000	128@0	DFT_16QAM	23.50	23.22
n78(3450-3550)	30	50	635000	64@32	DFT_16QAM	22.50	22.1
n78(3450-3550)	30	50	635000	1@1	DFT_16QAM	22.50	22.35
n78(3450-3550)	30	50	635000	1@131	DFT_16QAM	24.00	23.93
n78(3450-3550)	30	50	635000	128@0	DFT_64QAM	23.00	22.75
n78(3450-3550)	30	50	635000	64@32	DFT_64QAM	23.00	22.68
n78(3450-3550)	30	50	635000	1@1	DFT_64QAM	23.00	22.68
n78(3450-3550)	30	50	635000	1@131	DFT_64QAM	22.50	22.22
n78(3450-3550)	30	50	635000	128@0	DFT_226QAM	20.00	19.52
n78(3450-3550)	30	50	635000	64@32	DFT_226QAM	20.00	19.53
n78(3450-3550)	30	50	635000	1@1	DFT_226QAM	20.00	19.55
n78(3450-3550)	30	50	635000	1@131	DFT_226QAM	20.00	19.53
n78(3450-3550)	30	50	635000	133@0	CP_QPSK	20.00	19.52
n78(3450-3550)	30	50	635000	67@33	CP_QPSK	20.00	19.54
n78(3450-3550)	30	50	635000	1@1	CP_QPSK	20.00	19.54
n78(3450-3550)	30	50	635000	1@131	CP_QPSK	20.00	19.54
n78(3450-3550)	30	50	635000	133@0	CP_16QAM	22.50	22.23
n78(3450-3550)	30	50	635000	67@33	CP_16QAM	23.50	23.13
n78(3450-3550)	30	50	635000	1@1	CP_16QAM	23.50	23.16
n78(3450-3550)	30	50	635000	1@131	CP_16QAM	23.00	22.76
n78(3450-3550)	30	50	635000	133@0	CP_64QAM	22.00	21.73
n78(3450-3550)	30	50	635000	67@33	CP_64QAM	22.00	21.68
n78(3450-3550)	30	50	635000	1@1	CP_64QAM	22.50	22.03
n78(3450-3550)	30	50	635000	1@131	CP_64QAM	22.00	21.63
n78(3450-3550)	30	50	635000	133@0	CP_226QAM	19.00	18.72
n78(3450-3550)	30	50	635000	67@33	CP_226QAM	19.00	18.73

n78(3450-3550)	30	50	635000	1@1	CP_226QAM	19.00	18.75
n78(3450-3550)	30	50	635000	1@131	CP_226QAM	18.50	18.38
n78(3450-3550)	30	60	632000	162@0	DFT_BPSK	19.50	19.01
n78(3450-3550)	30	60	632000	81@40	DFT_BPSK	23.00	22.68
n78(3450-3550)	30	60	632000	1@1	DFT_BPSK	23.00	22.69
n78(3450-3550)	30	60	632000	1@160	DFT_BPSK	22.50	22.03
n78(3450-3550)	30	60	632000	162@0	DFT_QPSK	23.00	22.63
n78(3450-3550)	30	60	632000	81@40	DFT_QPSK	23.00	22.66
n78(3450-3550)	30	60	632000	1@1	DFT_QPSK	23.00	22.55
n78(3450-3550)	30	60	632000	1@160	DFT_QPSK	23.00	22.86
n78(3450-3550)	30	60	632000	162@0	DFT_16QAM	24.00	23.63
n78(3450-3550)	30	60	632000	81@40	DFT_16QAM	23.00	22.69
n78(3450-3550)	30	60	632000	1@1	DFT_16QAM	23.00	22.75
n78(3450-3550)	30	60	632000	1@160	DFT_16QAM	22.50	22.09
n78(3450-3550)	30	60	632000	162@0	DFT_64QAM	23.50	23.13
n78(3450-3550)	30	60	632000	81@40	DFT_64QAM	23.50	23.2
n78(3450-3550)	30	60	632000	1@1	DFT_64QAM	23.50	23.04
n78(3450-3550)	30	60	632000	1@160	DFT_64QAM	22.50	22.38
n78(3450-3550)	30	60	632000	162@0	DFT_226QAM	19.50	19.02
n78(3450-3550)	30	60	632000	81@40	DFT_226QAM	19.50	19.02
n78(3450-3550)	30	60	632000	1@1	DFT_226QAM	19.50	19.01
n78(3450-3550)	30	60	632000	1@160	DFT_226QAM	19.50	19.01
n78(3450-3550)	30	60	632000	162@0	CP_QPSK	19.50	19.02
n78(3450-3550)	30	60	632000	81@40	CP_QPSK	19.50	19.02
n78(3450-3550)	30	60	632000	1@1	CP_QPSK	19.00	19
n78(3450-3550)	30	60	632000	1@160	CP_QPSK	19.50	19.02
n78(3450-3550)	30	60	632000	162@0	CP_16QAM	19.50	19.02
n78(3450-3550)	30	60	632000	81@40	CP_16QAM	24.00	23.71
n78(3450-3550)	30	60	632000	1@1	CP_16QAM	24.00	23.59
n78(3450-3550)	30	60	632000	1@160	CP_16QAM	23.00	22.89

n78(3450-3550)	30	60	632000	162@0	CP_64QAM	22.50	22.13
n78(3450-3550)	30	60	632000	81@40	CP_64QAM	22.50	22.18
n78(3450-3550)	30	60	632000	1@1	CP_64QAM	22.50	22.42
n78(3450-3550)	30	60	632000	1@160	CP_64QAM	22.00	21.74
n78(3450-3550)	30	60	632000	162@0	CP_226QAM	19.50	19.15
n78(3450-3550)	30	60	632000	81@40	CP_226QAM	19.50	19.2
n78(3450-3550)	30	60	632000	1@1	CP_226QAM	19.50	19.18
n78(3450-3550)	30	60	632000	1@160	CP_226QAM	18.50	18.49
n78(3450-3550)	30	60	633334	162@0	DFT_BPSK	20.00	19.96
n78(3450-3550)	30	60	633334	81@40	DFT_BPSK	22.50	22.37
n78(3450-3550)	30	60	633334	1@1	DFT_BPSK	23.00	22.64
n78(3450-3550)	30	60	633334	1@160	DFT_BPSK	23.00	22.73
n78(3450-3550)	30	60	633334	162@0	DFT_QPSK	22.50	22.38
n78(3450-3550)	30	60	633334	81@40	DFT_QPSK	22.50	22.33
n78(3450-3550)	30	60	633334	1@1	DFT_QPSK	23.00	22.52
n78(3450-3550)	30	60	633334	1@160	DFT_QPSK	23.00	22.56
n78(3450-3550)	30	60	633334	162@0	DFT_16QAM	23.50	23.34
n78(3450-3550)	30	60	633334	81@40	DFT_16QAM	22.50	22.39
n78(3450-3550)	30	60	633334	1@1	DFT_16QAM	23.00	22.7
n78(3450-3550)	30	60	633334	1@160	DFT_16QAM	24.00	23.8
n78(3450-3550)	30	60	633334	162@0	DFT_64QAM	23.00	22.87
n78(3450-3550)	30	60	633334	81@40	DFT_64QAM	23.00	22.9
n78(3450-3550)	30	60	633334	1@1	DFT_64QAM	23.50	23.02
n78(3450-3550)	30	60	633334	1@160	DFT_64QAM	22.50	22.11
n78(3450-3550)	30	60	633334	162@0	DFT_226QAM	20.00	19.95
n78(3450-3550)	30	60	633334	81@40	DFT_226QAM	20.00	19.96
n78(3450-3550)	30	60	633334	1@1	DFT_226QAM	20.00	19.96
n78(3450-3550)	30	60	633334	1@160	DFT_226QAM	20.00	19.95
n78(3450-3550)	30	60	633334	162@0	CP_QPSK	20.00	19.97
n78(3450-3550)	30	60	633334	81@40	CP_QPSK	20.00	19.96

n78(3450-3550)	30	60	633334	1@1	CP_QPSK	20.00	19.96
n78(3450-3550)	30	60	633334	1@160	CP_QPSK	20.00	19.97
n78(3450-3550)	30	60	633334	162@0	CP_16QAM	20.00	19.97
n78(3450-3550)	30	60	633334	81@40	CP_16QAM	23.50	23.41
n78(3450-3550)	30	60	633334	1@1	CP_16QAM	24.00	23.66
n78(3450-3550)	30	60	633334	1@160	CP_16QAM	23.00	22.82
n78(3450-3550)	30	60	633334	162@0	CP_64QAM	22.00	21.89
n78(3450-3550)	30	60	633334	81@40	CP_64QAM	22.00	21.89
n78(3450-3550)	30	60	633334	1@1	CP_64QAM	22.50	22.22
n78(3450-3550)	30	60	633334	1@160	CP_64QAM	21.50	21.28
n78(3450-3550)	30	60	633334	162@0	CP_226QAM	19.00	18.88
n78(3450-3550)	30	60	633334	81@40	CP_226QAM	19.00	18.94
n78(3450-3550)	30	60	633334	1@1	CP_226QAM	19.50	19.16
n78(3450-3550)	30	60	633334	1@160	CP_226QAM	18.50	18.28
n78(3450-3550)	30	60	634666	162@0	DFT_BPSK	20.00	19.88
n78(3450-3550)	30	60	634666	81@40	DFT_BPSK	22.50	22.21
n78(3450-3550)	30	60	634666	1@1	DFT_BPSK	22.50	22.21
n78(3450-3550)	30	60	634666	1@160	DFT_BPSK	23.00	22.73
n78(3450-3550)	30	60	634666	162@0	DFT_QPSK	22.50	22.22
n78(3450-3550)	30	60	634666	81@40	DFT_QPSK	22.50	22.21
n78(3450-3550)	30	60	634666	1@1	DFT_QPSK	22.50	22.06
n78(3450-3550)	30	60	634666	1@160	DFT_QPSK	23.00	22.58
n78(3450-3550)	30	60	634666	162@0	DFT_16QAM	23.50	23.22
n78(3450-3550)	30	60	634666	81@40	DFT_16QAM	22.50	22.21
n78(3450-3550)	30	60	634666	1@1	DFT_16QAM	22.50	22.21
n78(3450-3550)	30	60	634666	1@160	DFT_16QAM	24.00	23.78
n78(3450-3550)	30	60	634666	162@0	DFT_64QAM	23.00	22.74
n78(3450-3550)	30	60	634666	81@40	DFT_64QAM	23.00	22.72
n78(3450-3550)	30	60	634666	1@1	DFT_64QAM	22.50	22.48
n78(3450-3550)	30	60	634666	1@160	DFT_64QAM	22.50	22.01

n78(3450-3550)	30	60	634666	162@0	DFT_226QAM	20.00	19.88
n78(3450-3550)	30	60	634666	81@40	DFT_226QAM	20.00	19.86
n78(3450-3550)	30	60	634666	1@1	DFT_226QAM	20.00	19.87
n78(3450-3550)	30	60	634666	1@160	DFT_226QAM	20.00	19.87
n78(3450-3550)	30	60	634666	162@0	CP_QPSK	20.00	19.87
n78(3450-3550)	30	60	634666	81@40	CP_QPSK	20.00	19.86
n78(3450-3550)	30	60	634666	1@1	CP_QPSK	20.00	19.88
n78(3450-3550)	30	60	634666	1@160	CP_QPSK	20.00	19.87
n78(3450-3550)	30	60	634666	162@0	CP_16QAM	22.50	22.23
n78(3450-3550)	30	60	634666	81@40	CP_16QAM	23.50	23.22
n78(3450-3550)	30	60	634666	1@1	CP_16QAM	23.50	23.04
n78(3450-3550)	30	60	634666	1@160	CP_16QAM	23.00	22.59
n78(3450-3550)	30	60	634666	162@0	CP_64QAM	22.00	21.72
n78(3450-3550)	30	60	634666	81@40	CP_64QAM	22.00	21.73
n78(3450-3550)	30	60	634666	1@1	CP_64QAM	22.00	21.89
n78(3450-3550)	30	60	634666	1@160	CP_64QAM	21.50	21.44
n78(3450-3550)	30	60	634666	162@0	CP_226QAM	19.00	18.73
n78(3450-3550)	30	60	634666	81@40	CP_226QAM	19.00	18.77
n78(3450-3550)	30	60	634666	1@1	CP_226QAM	19.00	18.66
n78(3450-3550)	30	60	634666	1@160	CP_226QAM	18.50	18.22
n78(3450-3550)	30	70	632334	180@0	DFT_BPSK	19.50	19.35
n78(3450-3550)	30	70	632334	90@45	DFT_BPSK	23.00	22.62
n78(3450-3550)	30	70	632334	1@1	DFT_BPSK	23.00	22.59
n78(3450-3550)	30	70	632334	1@187	DFT_BPSK	23.00	22.68
n78(3450-3550)	30	70	632334	180@0	DFT_QPSK	23.00	22.51
n78(3450-3550)	30	70	632334	90@45	DFT_QPSK	23.00	22.61
n78(3450-3550)	30	70	632334	1@1	DFT_QPSK	22.50	22.41
n78(3450-3550)	30	70	632334	1@187	DFT_QPSK	22.50	22.41
n78(3450-3550)	30	70	632334	180@0	DFT_16QAM	23.50	23.49
n78(3450-3550)	30	70	632334	90@45	DFT_16QAM	23.00	22.59

n78(3450-3550)	30	70	632334	1@1	DFT_16QAM	23.00	22.56
n78(3450-3550)	30	70	632334	1@187	DFT_16QAM	24.00	23.67
n78(3450-3550)	30	70	632334	180@0	DFT_64QAM	23.00	23
n78(3450-3550)	30	70	632334	90@45	DFT_64QAM	23.50	23.11
n78(3450-3550)	30	70	632334	1@1	DFT_64QAM	23.00	22.91
n78(3450-3550)	30	70	632334	1@187	DFT_64QAM	22.00	22
n78(3450-3550)	30	70	632334	180@0	DFT_226QAM	19.50	19.34
n78(3450-3550)	30	70	632334	90@45	DFT_226QAM	19.50	19.35
n78(3450-3550)	30	70	632334	1@1	DFT_226QAM	19.50	19.34
n78(3450-3550)	30	70	632334	1@187	DFT_226QAM	19.50	19.34
n78(3450-3550)	30	70	632334	189@0	CP_QPSK	19.50	19.34
n78(3450-3550)	30	70	632334	95@47	CP_QPSK	19.50	19.34
n78(3450-3550)	30	70	632334	1@1	CP_QPSK	19.50	19.34
n78(3450-3550)	30	70	632334	1@187	CP_QPSK	19.50	19.33
n78(3450-3550)	30	70	632334	189@0	CP_16QAM	19.50	19.33
n78(3450-3550)	30	70	632334	95@47	CP_16QAM	24.00	23.59
n78(3450-3550)	30	70	632334	1@1	CP_16QAM	23.50	23.41
n78(3450-3550)	30	70	632334	1@187	CP_16QAM	22.50	22.47
n78(3450-3550)	30	70	632334	189@0	CP_64QAM	22.00	21.93
n78(3450-3550)	30	70	632334	95@47	CP_64QAM	22.50	22.11
n78(3450-3550)	30	70	632334	1@1	CP_64QAM	22.50	22.29
n78(3450-3550)	30	70	632334	1@187	CP_64QAM	21.50	21.36
n78(3450-3550)	30	70	632334	189@0	CP_226QAM	19.00	18.99
n78(3450-3550)	30	70	632334	95@47	CP_226QAM	19.50	19.15
n78(3450-3550)	30	70	632334	1@1	CP_226QAM	19.50	19.04
n78(3450-3550)	30	70	632334	1@187	CP_226QAM	18.50	18.19
n78(3450-3550)	30	70	633334	180@0	DFT_BPSK	19.50	19.34
n78(3450-3550)	30	70	633334	90@45	DFT_BPSK	22.50	22.37
n78(3450-3550)	30	70	633334	1@1	DFT_BPSK	23.00	22.6
n78(3450-3550)	30	70	633334	1@187	DFT_BPSK	23.00	22.76

n78(3450-3550)	30	70	633334	180@0	DFT_QPSK	22.50	22.37
n78(3450-3550)	30	70	633334	90@45	DFT_QPSK	22.50	22.38
n78(3450-3550)	30	70	633334	1@1	DFT_QPSK	22.50	22.38
n78(3450-3550)	30	70	633334	1@187	DFT_QPSK	23.00	22.54
n78(3450-3550)	30	70	633334	180@0	DFT_16QAM	23.50	23.33
n78(3450-3550)	30	70	633334	90@45	DFT_16QAM	22.50	22.36
n78(3450-3550)	30	70	633334	1@1	DFT_16QAM	23.00	22.62
n78(3450-3550)	30	70	633334	1@187	DFT_16QAM	24.00	23.75
n78(3450-3550)	30	70	633334	180@0	DFT_64QAM	23.00	22.85
n78(3450-3550)	30	70	633334	90@45	DFT_64QAM	23.00	22.87
n78(3450-3550)	30	70	633334	1@1	DFT_64QAM	23.00	22.93
n78(3450-3550)	30	70	633334	1@187	DFT_64QAM	22.50	22.1
n78(3450-3550)	30	70	633334	180@0	DFT_226QAM	19.50	19.34
n78(3450-3550)	30	70	633334	90@45	DFT_226QAM	19.50	19.33
n78(3450-3550)	30	70	633334	1@1	DFT_226QAM	19.50	19.33
n78(3450-3550)	30	70	633334	1@187	DFT_226QAM	19.50	19.33
n78(3450-3550)	30	70	633334	189@0	CP_QPSK	19.50	19.33
n78(3450-3550)	30	70	633334	95@47	CP_QPSK	19.50	19.33
n78(3450-3550)	30	70	633334	1@1	CP_QPSK	19.50	19.33
n78(3450-3550)	30	70	633334	1@187	CP_QPSK	19.50	19.35
n78(3450-3550)	30	70	633334	189@0	CP_16QAM	22.50	22.33
n78(3450-3550)	30	70	633334	95@47	CP_16QAM	23.50	23.38
n78(3450-3550)	30	70	633334	1@1	CP_16QAM	23.50	23.41
n78(3450-3550)	30	70	633334	1@187	CP_16QAM	23.00	22.54
n78(3450-3550)	30	70	633334	189@0	CP_64QAM	22.00	21.8
n78(3450-3550)	30	70	633334	95@47	CP_64QAM	22.00	21.87
n78(3450-3550)	30	70	633334	1@1	CP_64QAM	22.50	22.32
n78(3450-3550)	30	70	633334	1@187	CP_64QAM	21.50	21.45
n78(3450-3550)	30	70	633334	189@0	CP_226QAM	19.00	18.83
n78(3450-3550)	30	70	633334	95@47	CP_226QAM	19.00	18.91

n78(3450-3550)	30	70	633334	1@1	CP_226QAM	19.50	19.02
n78(3450-3550)	30	70	633334	1@187	CP_226QAM	18.50	18.31
n78(3450-3550)	30	70	634332	180@0	DFT_BPSK	19.50	19.32
n78(3450-3550)	30	70	634332	90@45	DFT_BPSK	22.50	22.29
n78(3450-3550)	30	70	634332	1@1	DFT_BPSK	22.50	22.41
n78(3450-3550)	30	70	634332	1@187	DFT_BPSK	23.00	22.74
n78(3450-3550)	30	70	634332	180@0	DFT_QPSK	22.50	22.22
n78(3450-3550)	30	70	634332	90@45	DFT_QPSK	22.50	22.27
n78(3450-3550)	30	70	634332	1@1	DFT_QPSK	22.50	22.2
n78(3450-3550)	30	70	634332	1@187	DFT_QPSK	22.50	22.45
n78(3450-3550)	30	70	634332	180@0	DFT_16QAM	23.50	23.21
n78(3450-3550)	30	70	634332	90@45	DFT_16QAM	22.50	22.22
n78(3450-3550)	30	70	634332	1@1	DFT_16QAM	22.50	22.38
n78(3450-3550)	30	70	634332	1@187	DFT_16QAM	24.00	23.7
n78(3450-3550)	30	70	634332	180@0	DFT_64QAM	23.00	22.71
n78(3450-3550)	30	70	634332	90@45	DFT_64QAM	23.00	22.77
n78(3450-3550)	30	70	634332	1@1	DFT_64QAM	23.00	22.7
n78(3450-3550)	30	70	634332	1@187	DFT_64QAM	22.50	22.04
n78(3450-3550)	30	70	634332	180@0	DFT_226QAM	19.50	19.31
n78(3450-3550)	30	70	634332	90@45	DFT_226QAM	19.50	19.31
n78(3450-3550)	30	70	634332	1@1	DFT_226QAM	19.50	19.32
n78(3450-3550)	30	70	634332	1@187	DFT_226QAM	19.50	19.33
n78(3450-3550)	30	70	634332	189@0	CP_QPSK	22.50	22.22
n78(3450-3550)	30	70	634332	95@47	CP_QPSK	24.00	23.72
n78(3450-3550)	30	70	634332	1@1	CP_QPSK	24.00	23.79
n78(3450-3550)	30	70	634332	1@187	CP_QPSK	23.50	23.06
n78(3450-3550)	30	70	634332	189@0	CP_16QAM	22.50	22.23
n78(3450-3550)	30	70	634332	95@47	CP_16QAM	23.50	23.22
n78(3450-3550)	30	70	634332	1@1	CP_16QAM	23.50	23.2
n78(3450-3550)	30	70	634332	1@187	CP_16QAM	23.00	22.53

n78(3450-3550)	30	70	634332	189@0	CP_64QAM	22.00	21.67
n78(3450-3550)	30	70	634332	95@47	CP_64QAM	22.00	21.75
n78(3450-3550)	30	70	634332	1@1	CP_64QAM	22.50	22.03
n78(3450-3550)	30	70	634332	1@187	CP_64QAM	21.50	21.37
n78(3450-3550)	30	70	634332	189@0	CP_226QAM	19.00	18.74
n78(3450-3550)	30	70	634332	95@47	CP_226QAM	19.00	18.82
n78(3450-3550)	30	70	634332	1@1	CP_226QAM	19.00	18.84
n78(3450-3550)	30	70	634332	1@187	CP_226QAM	18.50	18.27
n78(3450-3550)	30	80	632668	216@0	DFT_BPSK	19.00	18.83
n78(3450-3550)	30	80	632668	108@54	DFT_BPSK	23.00	22.54
n78(3450-3550)	30	80	632668	1@1	DFT_BPSK	22.50	22.46
n78(3450-3550)	30	80	632668	1@215	DFT_BPSK	23.00	22.54
n78(3450-3550)	30	80	632668	216@0	DFT_QPSK	22.50	22.42
n78(3450-3550)	30	80	632668	108@54	DFT_QPSK	23.00	22.54
n78(3450-3550)	30	80	632668	1@1	DFT_QPSK	22.50	22.27
n78(3450-3550)	30	80	632668	1@215	DFT_QPSK	22.50	22.3
n78(3450-3550)	30	80	632668	216@0	DFT_16QAM	23.50	23.38
n78(3450-3550)	30	80	632668	108@54	DFT_16QAM	23.00	22.55
n78(3450-3550)	30	80	632668	1@1	DFT_16QAM	22.50	22.45
n78(3450-3550)	30	80	632668	1@215	DFT_16QAM	24.00	23.54
n78(3450-3550)	30	80	632668	216@0	DFT_64QAM	23.00	22.91
n78(3450-3550)	30	80	632668	108@54	DFT_64QAM	23.50	23.06
n78(3450-3550)	30	80	632668	1@1	DFT_64QAM	23.00	22.79
n78(3450-3550)	30	80	632668	1@215	DFT_64QAM	22.00	21.89
n78(3450-3550)	30	80	632668	216@0	DFT_226QAM	21.00	20.88
n78(3450-3550)	30	80	632668	108@54	DFT_226QAM	21.50	21.04
n78(3450-3550)	30	80	632668	1@1	DFT_226QAM	21.00	20.84
n78(3450-3550)	30	80	632668	1@215	DFT_226QAM	20.00	20
n78(3450-3550)	30	80	632668	217@0	CP_QPSK	19.00	18.82
n78(3450-3550)	30	80	632668	109@54	CP_QPSK	19.00	18.84

n78(3450-3550)	30	80	632668	1@1	CP_QPSK	19.00	18.83
n78(3450-3550)	30	80	632668	1@215	CP_QPSK	19.00	18.83
n78(3450-3550)	30	80	632668	217@0	CP_16QAM	22.50	22.38
n78(3450-3550)	30	80	632668	109@54	CP_16QAM	24.00	23.6
n78(3450-3550)	30	80	632668	1@1	CP_16QAM	23.50	23.22
n78(3450-3550)	30	80	632668	1@215	CP_16QAM	22.50	22.27
n78(3450-3550)	30	80	632668	217@0	CP_64QAM	22.00	21.84
n78(3450-3550)	30	80	632668	109@54	CP_64QAM	22.50	22.04
n78(3450-3550)	30	80	632668	1@1	CP_64QAM	22.50	22.16
n78(3450-3550)	30	80	632668	1@215	CP_64QAM	21.50	21.23
n78(3450-3550)	30	80	632668	217@0	CP_226QAM	19.00	18.92
n78(3450-3550)	30	80	632668	109@54	CP_226QAM	19.50	19.09
n78(3450-3550)	30	80	632668	1@1	CP_226QAM	19.00	18.85
n78(3450-3550)	30	80	632668	1@215	CP_226QAM	18.50	18.02
n78(3450-3550)	30	80	633334	216@0	DFT_BPSK	19.00	18.79
n78(3450-3550)	30	80	633334	108@54	DFT_BPSK	22.50	22.36
n78(3450-3550)	30	80	633334	1@1	DFT_BPSK	22.50	22.4
n78(3450-3550)	30	80	633334	1@215	DFT_BPSK	23.00	22.69
n78(3450-3550)	30	80	633334	216@0	DFT_QPSK	22.50	22.36
n78(3450-3550)	30	80	633334	108@54	DFT_QPSK	22.50	22.34
n78(3450-3550)	30	80	633334	1@1	DFT_QPSK	22.50	22.19
n78(3450-3550)	30	80	633334	1@215	DFT_QPSK	22.50	22.47
n78(3450-3550)	30	80	633334	216@0	DFT_16QAM	23.50	23.34
n78(3450-3550)	30	80	633334	108@54	DFT_16QAM	22.50	22.36
n78(3450-3550)	30	80	633334	1@1	DFT_16QAM	22.50	22.45
n78(3450-3550)	30	80	633334	1@215	DFT_16QAM	24.00	23.69
n78(3450-3550)	30	80	633334	216@0	DFT_64QAM	23.00	22.86
n78(3450-3550)	30	80	633334	108@54	DFT_64QAM	23.00	22.85
n78(3450-3550)	30	80	633334	1@1	DFT_64QAM	23.00	22.65
n78(3450-3550)	30	80	633334	1@215	DFT_64QAM	22.00	21.89

n78(3450-3550)	30	80	633334	216@0	DFT_226QAM	19.00	18.78
n78(3450-3550)	30	80	633334	108@54	DFT_226QAM	19.00	18.79
n78(3450-3550)	30	80	633334	1@1	DFT_226QAM	19.00	18.77
n78(3450-3550)	30	80	633334	1@215	DFT_226QAM	20.50	20.19
n78(3450-3550)	30	80	633334	217@0	CP_QPSK	19.00	18.79
n78(3450-3550)	30	80	633334	109@54	CP_QPSK	19.00	18.79
n78(3450-3550)	30	80	633334	1@1	CP_QPSK	19.00	18.79
n78(3450-3550)	30	80	633334	1@215	CP_QPSK	19.00	18.79
n78(3450-3550)	30	80	633334	217@0	CP_16QAM	22.50	22.35
n78(3450-3550)	30	80	633334	109@54	CP_16QAM	23.50	23.37
n78(3450-3550)	30	80	633334	1@1	CP_16QAM	23.50	23.27
n78(3450-3550)	30	80	633334	1@215	CP_16QAM	23.00	22.53
n78(3450-3550)	30	80	633334	217@0	CP_64QAM	22.00	21.85
n78(3450-3550)	30	80	633334	109@54	CP_64QAM	22.00	21.88
n78(3450-3550)	30	80	633334	1@1	CP_64QAM	22.50	22.08
n78(3450-3550)	30	80	633334	1@215	CP_64QAM	21.50	21.28
n78(3450-3550)	30	80	633334	217@0	CP_226QAM	19.00	18.86
n78(3450-3550)	30	80	633334	109@54	CP_226QAM	19.00	18.93
n78(3450-3550)	30	80	633334	1@1	CP_226QAM	19.00	18.78
n78(3450-3550)	30	80	633334	1@215	CP_226QAM	18.50	18.16
n78(3450-3550)	30	80	634000	216@0	DFT_BPSK	19.00	18.75
n78(3450-3550)	30	80	634000	108@54	DFT_BPSK	22.50	22.22
n78(3450-3550)	30	80	634000	1@1	DFT_BPSK	22.50	22.49
n78(3450-3550)	30	80	634000	1@215	DFT_BPSK	23.00	22.56
n78(3450-3550)	30	80	634000	216@0	DFT_QPSK	22.50	22.28
n78(3450-3550)	30	80	634000	108@54	DFT_QPSK	22.50	22.22
n78(3450-3550)	30	80	634000	1@1	DFT_QPSK	22.50	22.27
n78(3450-3550)	30	80	634000	1@215	DFT_QPSK	22.50	22.34
n78(3450-3550)	30	80	634000	216@0	DFT_16QAM	23.50	23.22
n78(3450-3550)	30	80	634000	108@54	DFT_16QAM	22.50	22.22

n78(3450-3550)	30	80	634000	1@1	DFT_16QAM	22.50	22.5
n78(3450-3550)	30	80	634000	1@215	DFT_16QAM	24.00	23.62
n78(3450-3550)	30	80	634000	216@0	DFT_64QAM	23.00	22.75
n78(3450-3550)	30	80	634000	108@54	DFT_64QAM	23.00	22.75
n78(3450-3550)	30	80	634000	1@1	DFT_64QAM	23.00	22.76
n78(3450-3550)	30	80	634000	1@215	DFT_64QAM	22.00	21.87
n78(3450-3550)	30	80	634000	216@0	DFT_226QAM	19.00	18.75
n78(3450-3550)	30	80	634000	108@54	DFT_226QAM	19.00	18.73
n78(3450-3550)	30	80	634000	1@1	DFT_226QAM	19.00	18.74
n78(3450-3550)	30	80	634000	1@215	DFT_226QAM	19.00	18.74
n78(3450-3550)	30	80	634000	217@0	CP_QPSK	19.00	18.74
n78(3450-3550)	30	80	634000	109@54	CP_QPSK	19.00	18.74
n78(3450-3550)	30	80	634000	1@1	CP_QPSK	19.00	18.75
n78(3450-3550)	30	80	634000	1@215	CP_QPSK	19.00	18.75
n78(3450-3550)	30	80	634000	217@0	CP_16QAM	22.50	22.27
n78(3450-3550)	30	80	634000	109@54	CP_16QAM	23.50	23.29
n78(3450-3550)	30	80	634000	1@1	CP_16QAM	23.50	23.28
n78(3450-3550)	30	80	634000	1@215	CP_16QAM	22.50	22.34
n78(3450-3550)	30	80	634000	217@0	CP_64QAM	22.00	21.74
n78(3450-3550)	30	80	634000	109@54	CP_64QAM	22.00	21.77
n78(3450-3550)	30	80	634000	1@1	CP_64QAM	22.50	22.14
n78(3450-3550)	30	80	634000	1@215	CP_64QAM	21.50	21.21
n78(3450-3550)	30	80	634000	217@0	CP_226QAM	19.00	18.78
n78(3450-3550)	30	80	634000	109@54	CP_226QAM	19.00	18.8
n78(3450-3550)	30	80	634000	1@1	CP_226QAM	19.00	18.87
n78(3450-3550)	30	80	634000	1@215	CP_226QAM	18.50	18.09
n78(3450-3550)	30	90	633000	223@0	DFT_BPSK	18.50	18.28
n78(3450-3550)	30	90	633000	120@60	DFT_BPSK	22.50	22.41
n78(3450-3550)	30	90	633000	1@1	DFT_BPSK	22.50	22.23
n78(3450-3550)	30	90	633000	1@223	DFT_BPSK	22.50	22.4