



FCC RF Test Report

APPLICANT : Fibocom Wireless Inc.
EQUIPMENT : 5G Module
BRAND NAME : Fibocom
MODEL NAME : FG190W-NA, FG190-NA
FCC ID : ZMOFG190WNA
STANDARD : 47 CFR Part 27
CLASSIFICATION : PCS Licensed Transmitter (PCB)
TEST DATE(S) : Dec. 27, 2024

We, Sporton International Inc. (ShenZhen), would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.26-2015 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (ShenZhen), the test report shall not be reproduced except in full.

Jason Jia

Approved by: Jason Jia



Sporton International Inc. (ShenZhen)

1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055

People's Republic of China



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG472418-01	Rev. 01	Initial issue of report	Jan. 09, 2025



SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	Reporting Only	PASS	-
	§27.50(h)(2)	Equivalent Isotropic Radiated Power (5G NR n38)	EIRP < 2Watt		

Note: This is a variant report. The change note could be referred to the FG190W-NA, FG190-NA_Class II Permissive Change letter which is exhibit separately. According to the change, only the related test cases of Power and EIRP from original test report (Sporton Report Number FG472418L) were verified for the differences.

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacture who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty"

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.



1 General Description

1.1 Applicant

Fibocom Wireless Inc.

1101, Tower A, Building 6, Shenzhen International Innovation Valley, Dashi 1st Rd, Nanshan, Shenzhen, China

1.2 Manufacturer

Fibocom Wireless Inc.

1101, Tower A, Building 6, Shenzhen International Innovation Valley, Dashi 1st Rd, Nanshan, Shenzhen, China

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	5G Module
Brand Name	Fibocom
Model Name	FG190W-NA, FG190-NA
FCC ID	ZMOFG190WNA
IMEI Code	Conducted : 864410070003906
HW Version	V1.3
SW Version	99101.1000.00.01.08.29
EUT Stage	Production Unit

Remark: There are two types of EUT: Sample1(FG190W-NA) and Sample2(FG190-NA) . The difference between them is that Sample1 with RF interface while Sample2 without, all the others are the same. According to the difference, we only evaluated sample 1 to perform full test.

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	5G NR n38: 2570 MHz ~ 2620 MHz
Rx Frequency	5G NR n38: 2570 MHz ~ 2620 MHz
Bandwidth	n38: 10MHz / 15MHz / 20MHz / 25MHz / 30MHz / 40MHz
SCS	30kHz
Antenna Gain	<Ant. 1>: -1.21 dBi <Ant. 8>: -1.21 dBi
Type of Modulation	CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM

Remark:

1. The maximum EIRP is calculated from max output power and max antenna gain, only the maximum EIRP are shown in the report, 5G NR n38_UL MIMO mode for Ant.(1+8).
2. 5G NR n38 UL MIMO mode only supports CP-OFDM Modulation, the two antennas are correlated, the MIMO Antenna gain = $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2]$.

3. 5G NR n38 UL MIMO mode supports PC3.
4. 5G NR n41 overlaps the entire frequency range of 5G NR n38, and the conducted power for 5G NR n38 < 5G NR n41. Thus, only Conducted power was verified in this report.

1.5 Modification of EUT

No modifications are made to the EUT during all test items.

1.6 Maximum Conducted Power and Emission Designator

5G NR n38		QPSK	16QAM / 64QAM / 256QAM
BW (MHz)	Frequency Range (MHz)	Maximum Conducted power (W)	Maximum Conducted power (W)
10	2575.0 ~ 2615.0	0.2022	0.1830
15	2577.5 ~ 2612.5	0.2005	0.1849
20	2580.0 ~ 2610.0	0.1984	0.1788
25	2582.5 ~ 2607.5	0.2065	0.1854
30	2585.0 ~ 2605.0	0.2121	0.1932
40	2590.0 ~ 2600.0	0.2132	0.1887

Note: All modulations have been tested, only the worst test results of PSK & QAM are shown in the report.

1.7 Testing Location

Sporton International Inc. (ShenZhen) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

Test Firm	Sporton International Inc. (ShenZhen)		
Test Site Location	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055 People's Republic of China TEL: +86-755-86379589 FAX: +86-755-86379595		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	TH01-SZ	CN1256	421272



1.8 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ 47 CFR Part 27
- ♦ ANSI C63.26-2015
- ♦ FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP v01r01

Remark:

All test items were verified and recorded according to the standards and without any deviation during the test.

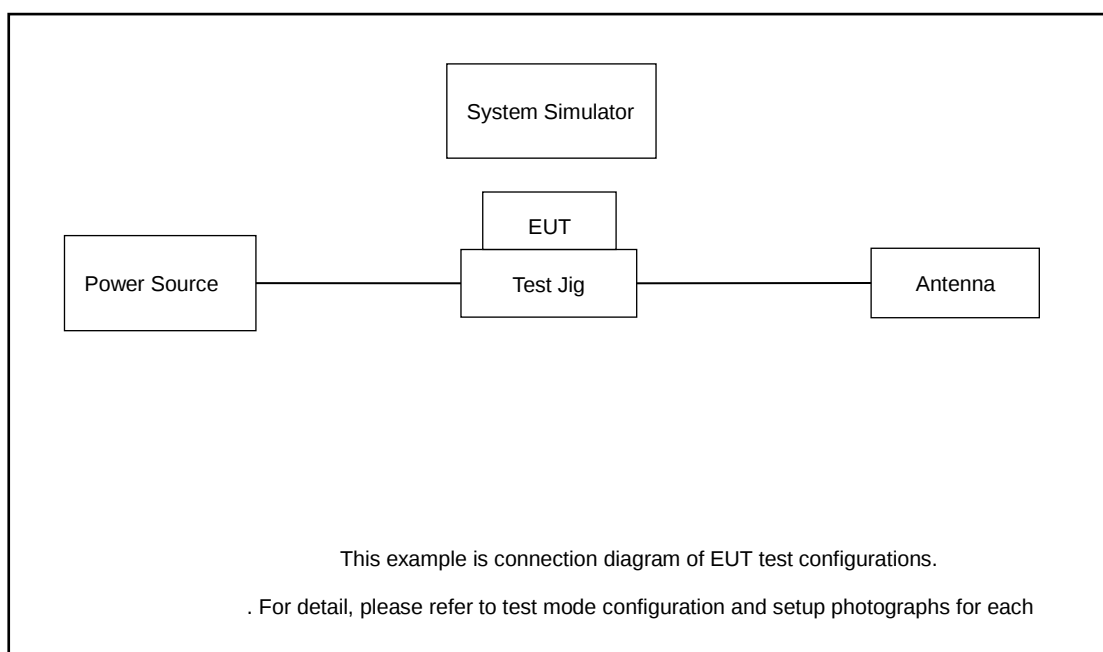
2 Test Configuration of Equipment Under Test

2.1 Test Mode

Antenna port conducted test items are performed according to KDB 971168 D01 Power Meas License Digital Systems v03r01 with maximum output power.

Test Items	5G NR	Bandwidth (MHz)														Modulation				RB #		Test Channel			
		5	10	15	20	25	30	35	40	50	60	70	80	90	100	PI/2 BPSK	QPSK	16QAM	64QAM	256QAM	1	Full	L	M	H
Max. Output Power	n38	-	v	v	v	v	v	-	v	-	-	-	-	-	-	-	v	v	v	v	v	v	v	v	v
E.I.R.P.	n38	-	v	v	v	v	v	-	v	-	-	-	-	-	-	-	v	v	v	v	v	v	v	v	v
Note	1. The mark “v” means that this configuration is chosen for testing 2. The mark “-” means that this bandwidth is not supported. 3. Frequency Stability : Normal Voltage = 3.8V ; Low Voltage =3.3V. ; High Voltage =4.4V																								

2.2 Connection Diagram of Test System



The EUT has been configuration operated in a manner tended to maximize its emission characteristics in a typical application.



2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	DC Power Supply	GW	GPS-3030D	N/A	N/A	Unshielded, 1.8 m
2.	LTE Base Station	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m
3.	NR Base Station	Anritsu	MT8000A	N/A	N/A	Unshielded, 1.8 m
4.	Adapter	N/A	N/A	N/A	N/A	N/A
5.	Test Jig	N/A	N/A	N/A	N/A	N/A
6.	Antenna	N/A	N/A	N/A	N/A	N/A

2.4 Frequency List of Low/Middle/High Channels

5G NR n38 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
40	Channel	518000	519000	520000
	Frequency	2590	2595	2600
30	Channel	517000	519000	521000
	Frequency	2585	2595	2605
25	Channel	516500	519000	521500
	Frequency	2582.5	2595	2607.5
20	Channel	516000	519000	522000
	Frequency	2580	2595	2610
15	Channel	515500	519000	522500
	Frequency	2577.5	2595	2612.5
10	Channel	515000	519000	523000
	Frequency	2575	2595	2615

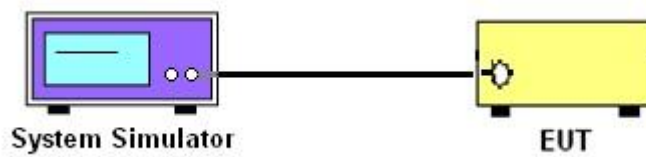
3 Conducted Test Items

3.1 Measuring Instruments

See list of measuring instruments of this test report.

3.2 Test Setup

3.2.1 Conducted Output Power



3.3 Test Result of Conducted Test

Please refer to Appendix A.

3.4 Conducted Output Power and EIRP

3.4.1 Description of the Conducted Output Power Measurement and EIRP Measurement

A system simulator was used to establish communication with the EUT. Its parameters were set to force the EUT transmitting at maximum output power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

The EIRP of mobile transmitters must not exceed 2 Watts for 5G NR n38.

According to KDB 412172 D01 Power Approach,

$EIRP = P_T + G_T - L_C$, $ERP = EIRP - 2.15$, where

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

L_C = signal attenuation in the connecting cable between the transmitter and antenna in dB

3.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.2
2. The transmitter output port was connected to the system simulator.
3. Set EUT at maximum power through the system simulator.
4. Select lowest, middle, and highest channels for each band and different modulation.
5. Measure and record the power level from the system simulator.



4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 09, 2024	Dec. 27, 2024	Apr. 08, 2025	Conducted (TH01-SZ)
Power Divider	TOJOIN	PS-2SM-04 265	60.06.020.007 7	0.4GHz~26.5GHz	Dec. 24, 2024	Dec. 27, 2024	Dec. 23, 2025	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 03, 2024	Dec. 27, 2024	Jul. 02, 2025	Conducted (TH01-SZ)

NCR: No Calibration Required



5 Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.26-2015. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Conducted Measurement

Test Item	Uncertainty
Conducted Power	± 1.34 dB

----- THE END -----



Appendix A. Test Results of Conducted Test

Test Engineer :	Khan Zhen	Temperature :	22~23°C
		Relative Humidity :	40~42%

NR Band	SCS	BandWidth	Arfcn	Freq(MHz)	Modulation	RB	ANT8 Power(dBm)	ANT1 Power(dBm)	Conducted Power(dBm)	EIRP(dBm)	EIRP(W)
38	30	10	515000	2575	CP-OFDM QPSK	12@6	19.55	20.1	22.84	24.64	0.2911
38	30	10	515000	2575	CP-OFDM QPSK	1@1	19.8	20.28	23.06	24.86	0.3062
38	30	10	515000	2575	CP-OFDM QPSK	1@22	19.68	20.07	22.89	24.69	0.2944
38	30	10	515000	2575	CP-OFDM 16 QAM	12@6	19.2	19.55	22.39	24.19	0.2624
38	30	10	515000	2575	CP-OFDM 16 QAM	1@1	19.12	19.97	22.58	24.38	0.2742
38	30	10	515000	2575	CP-OFDM 16 QAM	1@22	19.12	19.71	22.44	24.24	0.2655
38	30	10	519000	2595	CP-OFDM QPSK	12@6	19.58	20.05	22.83	24.63	0.2904
38	30	10	519000	2595	CP-OFDM QPSK	1@1	19.78	20.22	23.02	24.82	0.3034
38	30	10	519000	2595	CP-OFDM QPSK	1@22	19.71	20.1	22.92	24.72	0.2965
38	30	10	519000	2595	CP-OFDM 16 QAM	12@6	19.13	19.56	22.36	24.16	0.2606
38	30	10	519000	2595	CP-OFDM 16 QAM	1@1	19.19	20	22.62	24.42	0.2767
38	30	10	519000	2595	CP-OFDM 16 QAM	1@22	19.13	19.84	22.51	24.31	0.2698
38	30	10	523000	2615	CP-OFDM QPSK	12@6	19.53	20.05	22.81	24.61	0.2891
38	30	10	523000	2615	CP-OFDM QPSK	1@1	19.74	20.18	22.98	24.78	0.3006
38	30	10	523000	2615	CP-OFDM QPSK	1@22	19.57	20.05	22.83	24.63	0.2904
38	30	10	523000	2615	CP-OFDM 16 QAM	12@6	19.11	19.48	22.31	24.11	0.2576
38	30	10	523000	2615	CP-OFDM 16 QAM	1@1	19.13	19.84	22.51	24.31	0.2698
38	30	10	523000	2615	CP-OFDM 16 QAM	1@22	19.02	19.64	22.35	24.15	0.2600
38	30	15	515500	2577.5	CP-OFDM QPSK	19@9	19.45	20	22.74	24.54	0.2844
38	30	15	515500	2577.5	CP-OFDM QPSK	1@1	19.7	20.27	23.00	24.8	0.3020
38	30	15	515500	2577.5	CP-OFDM QPSK	1@36	19.57	20.1	22.85	24.65	0.2917
38	30	15	515500	2577.5	CP-OFDM 16 QAM	19@9	18.99	19.61	22.32	24.12	0.2582
38	30	15	515500	2577.5	CP-OFDM 16 QAM	1@1	19.24	20.04	22.67	24.47	0.2799
38	30	15	515500	2577.5	CP-OFDM 16 QAM	1@36	18.99	19.73	22.39	24.19	0.2624
38	30	15	519000	2595	CP-OFDM QPSK	19@9	19.53	19.96	22.76	24.56	0.2858
38	30	15	519000	2595	CP-OFDM QPSK	1@1	19.78	20.23	23.02	24.82	0.3034
38	30	15	519000	2595	CP-OFDM QPSK	1@36	19.64	19.88	22.77	24.57	0.2864
38	30	15	519000	2595	CP-OFDM 16 QAM	19@9	19.05	19.49	22.29	24.09	0.2564
38	30	15	519000	2595	CP-OFDM 16 QAM	1@1	19.22	19.83	22.55	24.35	0.2723
38	30	15	519000	2595	CP-OFDM 16 QAM	1@36	19.14	19.53	22.35	24.15	0.2600
38	30	15	522500	2612.5	CP-OFDM QPSK	19@9	19.44	19.94	22.71	24.51	0.2825
38	30	15	522500	2612.5	CP-OFDM QPSK	1@1	19.62	20.1	22.88	24.68	0.2938
38	30	15	522500	2612.5	CP-OFDM QPSK	1@36	19.41	19.86	22.65	24.45	0.2786
38	30	15	522500	2612.5	CP-OFDM 16 QAM	19@9	18.9	19.48	22.21	24.01	0.2518
38	30	15	522500	2612.5	CP-OFDM 16 QAM	1@1	19.18	19.81	22.52	24.32	0.2704
38	30	15	522500	2612.5	CP-OFDM 16 QAM	1@36	18.94	19.63	22.31	24.11	0.2576
38	30	20	516000	2580	CP-OFDM QPSK	25@12	19.49	20.06	22.79	24.59	0.2877
38	30	20	516000	2580	CP-OFDM QPSK	1@1	19.65	20.26	22.98	24.78	0.3006



38	30	20	516000	2580	CP-OFDM QPSK	1@49	19.46	19.99	22.74	24.54	0.2844
38	30	20	516000	2580	CP-OFDM 16 QAM	25@12	19.08	19.62	22.37	24.17	0.2612
38	30	20	516000	2580	CP-OFDM 16 QAM	1@1	19.1	19.89	22.52	24.32	0.2704
38	30	20	516000	2580	CP-OFDM 16 QAM	1@49	18.88	19.57	22.25	24.05	0.2541
38	30	20	519000	2595	CP-OFDM QPSK	25@12	19.54	20	22.79	24.59	0.2877
38	30	20	519000	2595	CP-OFDM QPSK	1@1	19.71	20.19	22.97	24.77	0.2999
38	30	20	519000	2595	CP-OFDM QPSK	1@49	19.45	19.86	22.67	24.47	0.2799
38	30	20	519000	2595	CP-OFDM 16 QAM	25@12	19.05	19.52	22.30	24.1	0.2570
38	30	20	519000	2595	CP-OFDM 16 QAM	1@1	19.11	19.83	22.50	24.3	0.2692
38	30	20	519000	2595	CP-OFDM 16 QAM	1@49	18.8	19.59	22.22	24.02	0.2523
38	30	20	522000	2610	CP-OFDM QPSK	25@12	19.51	19.89	22.71	24.51	0.2825
38	30	20	522000	2610	CP-OFDM QPSK	1@1	19.6	20.13	22.88	24.68	0.2938
38	30	20	522000	2610	CP-OFDM QPSK	1@49	19.4	19.86	22.65	24.45	0.2786
38	30	20	522000	2610	CP-OFDM 16 QAM	25@12	19.01	19.48	22.26	24.06	0.2547
38	30	20	522000	2610	CP-OFDM 16 QAM	1@1	19.11	19.76	22.46	24.26	0.2667
38	30	20	522000	2610	CP-OFDM 16 QAM	1@49	18.81	19.5	22.18	23.98	0.2500
38	30	25	516500	2582.5	CP-OFDM QPSK	33@16	19.68	20.09	22.90	24.7	0.2951
38	30	25	516500	2582.5	CP-OFDM QPSK	1@1	19.86	20.21	23.05	24.85	0.3055
38	30	25	516500	2582.5	CP-OFDM QPSK	1@63	19.45	19.82	22.65	24.45	0.2786
38	30	25	516500	2582.5	CP-OFDM 16 QAM	33@16	19.09	19.56	22.34	24.14	0.2594
38	30	25	516500	2582.5	CP-OFDM 16 QAM	1@1	19.2	20.02	22.64	24.44	0.2780
38	30	25	516500	2582.5	CP-OFDM 16 QAM	1@63	18.87	19.55	22.23	24.03	0.2529
38	30	25	519000	2595	CP-OFDM QPSK	33@16	19.61	20.1	22.87	24.67	0.2931
38	30	25	519000	2595	CP-OFDM QPSK	1@1	19.96	20.31	23.15	24.95	0.3126
38	30	25	519000	2595	CP-OFDM QPSK	1@63	19.53	19.97	22.77	24.57	0.2864
38	30	25	519000	2595	CP-OFDM 16 QAM	33@16	19.17	19.58	22.39	24.19	0.2624
38	30	25	519000	2595	CP-OFDM 16 QAM	1@1	19.23	20.05	22.67	24.47	0.2799
38	30	25	519000	2595	CP-OFDM 16 QAM	1@63	18.92	19.52	22.24	24.04	0.2535
38	30	25	521500	2607.5	CP-OFDM QPSK	33@16	19.67	20.07	22.88	24.68	0.2938
38	30	25	521500	2607.5	CP-OFDM QPSK	1@1	19.84	20.33	23.10	24.9	0.3090
38	30	25	521500	2607.5	CP-OFDM QPSK	1@63	19.54	20.02	22.80	24.6	0.2884
38	30	25	521500	2607.5	CP-OFDM 16 QAM	33@16	19.05	19.55	22.32	24.12	0.2582
38	30	25	521500	2607.5	CP-OFDM 16 QAM	1@1	19.42	19.91	22.68	24.48	0.2805
38	30	25	521500	2607.5	CP-OFDM 16 QAM	1@63	18.96	19.53	22.26	24.06	0.2547
38	30	30	517000	2585	CP-OFDM QPSK	39@19	19.74	20.05	22.91	24.71	0.2958
38	30	30	517000	2585	CP-OFDM QPSK	1@1	19.95	20.52	23.25	25.05	0.3199
38	30	30	517000	2585	CP-OFDM QPSK	1@76	19.63	20.04	22.85	24.65	0.2917
38	30	30	517000	2585	CP-OFDM 16 QAM	39@19	19.09	19.65	22.39	24.19	0.2624
38	30	30	517000	2585	CP-OFDM 16 QAM	1@1	19.42	20.24	22.86	24.66	0.2924
38	30	30	517000	2585	CP-OFDM 16 QAM	1@76	18.87	19.76	22.35	24.15	0.2600
38	30	30	519000	2595	CP-OFDM QPSK	39@19	19.56	20.02	22.81	24.61	0.2891
38	30	30	519000	2595	CP-OFDM QPSK	1@1	20.1	20.39	23.26	25.06	0.3206
38	30	30	519000	2595	CP-OFDM QPSK	1@76	19.61	19.94	22.79	24.59	0.2877
38	30	30	519000	2595	CP-OFDM 16 QAM	39@19	19.1	19.6	22.37	24.17	0.2612
38	30	30	519000	2595	CP-OFDM 16 QAM	1@1	19.27	20.15	22.74	24.54	0.2844



38	30	30	519000	2595	CP-OFDM 16 QAM	1@76	19	19.68	22.36	24.16	0.2606
38	30	30	521000	2605	CP-OFDM QPSK	39@19	19.66	20.01	22.85	24.65	0.2917
38	30	30	521000	2605	CP-OFDM QPSK	1@1	20.04	20.46	23.27	25.07	0.3214
38	30	30	521000	2605	CP-OFDM QPSK	1@76	19.51	20.05	22.80	24.6	0.2884
38	30	30	521000	2605	CP-OFDM 16 QAM	39@19	19.08	19.57	22.34	24.14	0.2594
38	30	30	521000	2605	CP-OFDM 16 QAM	1@1	19.41	20.09	22.77	24.57	0.2864
38	30	30	521000	2605	CP-OFDM 16 QAM	1@76	19.01	19.68	22.37	24.17	0.2612
38	30	40	518000	2590	CP-OFDM QPSK	53@26	19.59	20.02	22.82	24.62	0.2897
38	30	40	518000	2590	CP-OFDM QPSK	1@1	19.87	20.32	23.11	24.91	0.3097
38	30	40	518000	2590	CP-OFDM QPSK	1@104	19.38	19.74	22.57	24.37	0.2735
38	30	40	518000	2590	CP-OFDM 16 QAM	53@26	19.13	19.67	22.42	24.22	0.2642
38	30	40	518000	2590	CP-OFDM 16 QAM	1@1	19.42	20.05	22.76	24.56	0.2858
38	30	40	518000	2590	CP-OFDM 16 QAM	1@104	18.84	19.39	22.13	23.93	0.2472
38	30	40	518000	2590	CP-OFDM 64 QAM	53@26	17.63	18.08	20.87	22.67	0.1849
38	30	40	518000	2590	CP-OFDM 64 QAM	1@1	17.69	18.24	20.98	22.78	0.1897
38	30	40	518000	2590	CP-OFDM 64 QAM	1@104	16.96	17.7	20.36	22.16	0.1644
38	30	40	518000	2590	CP-OFDM 256 QAM	53@26	14.68	15	17.85	19.65	0.0923
38	30	40	518000	2590	CP-OFDM 256 QAM	1@1	14.97	15.33	18.16	19.96	0.0991
38	30	40	518000	2590	CP-OFDM 256 QAM	1@104	14.37	14.73	17.56	19.36	0.0863
38	30	40	519000	2595	CP-OFDM QPSK	53@26	19.72	19.94	22.84	24.64	0.2911
38	30	40	519000	2595	CP-OFDM QPSK	1@1	20.13	20.42	23.29	25.09	0.3228
38	30	40	519000	2595	CP-OFDM QPSK	1@104	19.4	19.79	22.61	24.41	0.2761
38	30	40	519000	2595	CP-OFDM 16 QAM	53@26	19.06	19.59	22.34	24.14	0.2594
38	30	40	519000	2595	CP-OFDM 16 QAM	1@1	19.39	20.06	22.75	24.55	0.2851
38	30	40	519000	2595	CP-OFDM 16 QAM	1@104	18.83	19.4	22.13	23.93	0.2472
38	30	40	519000	2595	CP-OFDM 64 QAM	53@26	17.57	18.14	20.87	22.67	0.1849
38	30	40	519000	2595	CP-OFDM 64 QAM	1@1	17.81	18.45	21.15	22.95	0.1972
38	30	40	519000	2595	CP-OFDM 64 QAM	1@104	17.1	17.79	20.47	22.27	0.1687
38	30	40	519000	2595	CP-OFDM 256 QAM	53@26	14.64	15.07	17.87	19.67	0.0927
38	30	40	519000	2595	CP-OFDM 256 QAM	1@1	14.97	15.41	18.21	20.01	0.1002
38	30	40	519000	2595	CP-OFDM 256 QAM	1@104	14.35	14.76	17.57	19.37	0.0865
38	30	40	520000	2600	CP-OFDM QPSK	53@26	19.59	19.95	22.78	24.58	0.2871
38	30	40	520000	2600	CP-OFDM QPSK	1@1	19.98	20.36	23.18	24.98	0.3148
38	30	40	520000	2600	CP-OFDM QPSK	1@104	19.31	19.72	22.53	24.33	0.2710
38	30	40	520000	2600	CP-OFDM 16 QAM	53@26	19.05	19.56	22.32	24.12	0.2582
38	30	40	520000	2600	CP-OFDM 16 QAM	1@1	19.34	20.04	22.71	24.51	0.2825
38	30	40	520000	2600	CP-OFDM 16 QAM	1@104	18.69	19.32	22.03	23.83	0.2415
38	30	40	520000	2600	CP-OFDM 64 QAM	53@26	17.57	18.15	20.88	22.68	0.1854
38	30	40	520000	2600	CP-OFDM 64 QAM	1@1	17.78	18.39	21.11	22.91	0.1954
38	30	40	520000	2600	CP-OFDM 64 QAM	1@104	17.11	17.69	20.42	22.22	0.1667
38	30	40	520000	2600	CP-OFDM 256 QAM	53@26	14.65	15.03	17.85	19.65	0.0923
38	30	40	520000	2600	CP-OFDM 256 QAM	1@1	14.91	15.36	18.15	19.95	0.0989
38	30	40	520000	2600	CP-OFDM 256 QAM	1@104	14.33	14.68	17.52	19.32	0.0855