FCC RF Test Report

APPLICANT	: Fibocom Wireless Inc.
EQUIPMENT	: 5G Module
BRAND NAME	: Fibocom
MODEL NAME	: FM350-GL
FCC ID	: ZMOFM350GL
STANDARD	: 47 CFR Part 2, 22, 24, 27
CLASSIFICATION	: PCS Licensed Transmitter (PCB)
TEST DATE(S)	: Aug. 04, 2021 ~ Aug. 19, 2021

We, Sporton International (ShenZhen) Inc., 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 (ShenZhen) Inc., the test report shall not be reproduced except in full.

Reviewed by: Derreck Chen / Supervisor

Approved by: Eric Shih / Manager

ACCREDITED Cert #5145.01

Sporton International (ShenZhen) Inc.

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
FG051802-03	Rev. 01	Initial issue of report	Aug. 19, 2021
FG051802-03	Rev. 02	Update SW information in Page 5	Aug. 25, 2021

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	Reporting Only	PASS	-
4.4	§2.1053 §22.917(a)	Radiated Spurious Emission (5G NR n5)	< 43+10log$_{10}$(P[Watts])	PASS	Under limit 24.50 dB at 10104.360 MHz
	§2.1053 §27.53(m)(4)	Radiated Spurious Emission (5G NR n41)	< 55+10log$_{10}$(P[Watts])		

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

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	FM350-GL
FCC ID	ZMOFM350GL
EUT supports Radios application	WCDMA/LTE/5G NR/GNSS
IMEI Code	Radiation: 862146050150950
HW Version	V1.0.6
SW Version	81600.0000.00.19.16.41
EUT Stage	Identical Prototype

Remark: This is a variant report for FM350-GL. The difference is that enable NSA EN DC combination: DC_7A-n5A,DC_2A-n41A,DC_66A-n41A by software, others are the same. Based on the similarity between current and previous project, only the conducted power & RSE of related NR bands from the original test reports (Sporton Report Number FG051802H & FG051802I & FG051802J) were verified for the differences.

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	5G NR n5 : 824 MHz ~ 849 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz
Rx Frequency	5G NR n5 : 869 MHz ~ 894 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz
Bandwidth	**SCS: 15kHz:** n5: 5MHz / 10MHz / 15MHz / 20MHz n41: 10MHz / 15MHz / 30MHz / 40MHz **SCS: 30kHz:** n5: 5MHz / 10MHz / 15MHz / 20MHz n41: 10MHz / 15MHz / 30MHz / 40MHz / 50MHz / 80MHz
SCS	n5, n41: 15kHz/30kHz
NR Mode	NSA: n5/n41
Antenna Gain	5G NR n5: 3.0 dB 5G NR n41: 4.0 dBi
Power Class	3
Type of Modulation	CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM

1.5 Modification of EUT

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

1.6 Maximum Conducted Power

5G NR n5-SCS 15kHz (EN DC_7A-n5A)		PI/2 BPSK / QPSK	16QAM / 64QAM / 256QAM
BW (MHz)	**Frequency Range (MHz)**	**Conducted Power(W)**	**Conducted Power(W)**
20	834.0 ~ 839.0	0.2472	0.2032
5G NR n5-SCS 30kHz (EN DC_7A-n5A)		**PI/2 BPSK / QPSK**	**16QAM / 64QAM / 256QAM**
BW (MHz)	**Frequency Range (MHz)**	**Conducted Power(W)**	**Conducted Power(W)**
20	834.0 ~ 839.0	0.2466	0.2018

5G NR n41 -SCS 15kHz (EN DC_2A-n41A)		PI/2 BPSK / QPSK	16QAM / 64QAM / 256QAM
BW (MHz)	Frequency Range (MHz)	Conducted Power(W)	Conducted Power(W)
40	2516.01 ~ 2670.00	0.1982	0.1596
5G NR n41 -SCS 30kHz (EN DC_2A-n41A)		PI/2 BPSK / QPSK	16QAM / 64QAM / 256QAM
BW (MHz)	Frequency Range (MHz)	Conducted Power(W)	Conducted Power(W)
80	2536.02 ~ 2649.99	0.1644	0.1225

5G NR n41 -SCS 15kHz (EN DC_66A-n41A)		PI/2 BPSK / QPSK	16QAM / 64QAM / 256QAM
BW (MHz)	Frequency Range (MHz)	Conducted Power(W)	Conducted Power(W)
40	2516.01 ~ 2670.00	0.1991	0.1596
5G NR n41 -SCS 30kHz (EN DC_66A-n41A)		PI/2 BPSK / QPSK	16QAM / 64QAM / 256QAM
BW (MHz)	Frequency Range (MHz)	Conducted Power(W)	Conducted Power(W)
80	2536.02 ~ 2649.99	0.1656	0.1222

Note: Based on engineering evaluation, only the maximum bandwitdth test results are shown in the report.

1.7 Testing Location

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

Test Firm	Sporton International (Shenzhen) Inc.		
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

Test Firm	Sporton International (Shenzhen) Inc.		
Test Site Location	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City Guangdong Province China 518103 TEL: +86-755-33202398		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	03CH03-SZ	CN1256	421272

1.8 Test Software

Item	Site	Manufacturer	Name	Version
1.	03CH03-SZ	AUDIX	E3	6.2009-8-24

1.9 Applicable Standards

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

- 47 CFR Part 2, 22, 24, 27
- ANSI C63.26-2015
- FCC KDB 971168 D01 Power Meas License Digital Systems v03r01

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 item is performed according to KDB 971168 D01 Power Meas License Digital Systems v03r01 with maximum output power.

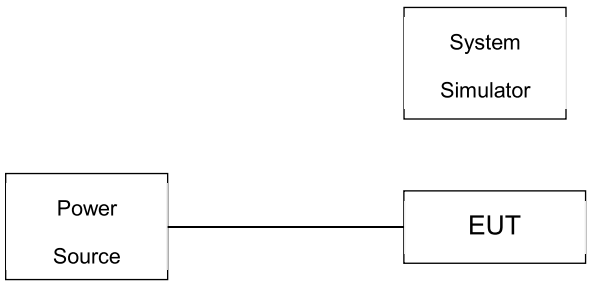
For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases were recorded in this report.

The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.

	X Plane	Y Plane	Z Plane
Orthogonal Planes of EUT			

Test Items	5G NR	Bandwidth (MHz)										Modulation					RB #		Test Channel		
		5	10	15	20	30	40	50	60	80	100	PI/2 BPSK	QPSK	16QAM	64QAM	256QAM	1	Full	L	M	H
Max. Output Power	n5				v	-	-	-	-	-	-	v	v	v	v	v	v	v	v	v	v
	n41	-			-		v		-	v	-	v	v	v	v	v	v	v	v	v	v
Radiated Spurious Emission	n5	Worst Case																	v	v	v
	n41	Worst Case																	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. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.																				

2.2 Connection Diagram of Test System



This example is connection diagram of EUT test configurations.

For detail, please refer to test mode configuration and setup photographs for each test item.

2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	LTE Base Station	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m
2.	NR Base Station	Anritsu	MT8000A	N/A	N/A	Unshielded, 1.8 m
3.	Test Jig	N/A	N/A	N/A	N/A	N/A

2.4 Frequency List of Low/Middle/High Channels

5G NR n5 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	166800	167300	167800
	Frequency	834	836.5	839
15	Channel	166300	167300	168300
	Frequency	831.5	836.5	841.5
10	Channel	165800	167300	168800
	Frequency	829	836.5	844
5	Channel	165300	167300	169300
	Frequency	826.5	836.5	846.5

5G NR n41 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
80	Channel	507204	518598	529998
	Frequency	2536.02	2592.99	2649.99
50	Channel	504204	518598	532998
	Frequency	2521.02	2592.99	2664.99
40	Channel	503202	518598	534000
	Frequency	2516.01	2592.99	2670
30	Channel	502200	518598	534996
	Frequency	2511	2592.99	2674.98
15	Channel	500700	518598	536496
	Frequency	2503.5	2592.99	2682.48
10	Channel	500202	518598	537000
	Frequency	2501.01	2592.99	2685

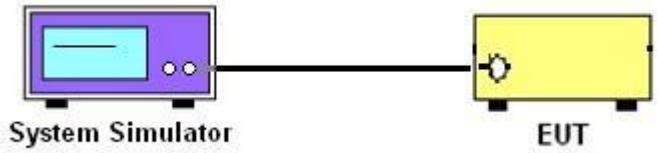
3 Conducted Test Items

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

3.4.1 Description of the Conducted Output Power 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.

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.

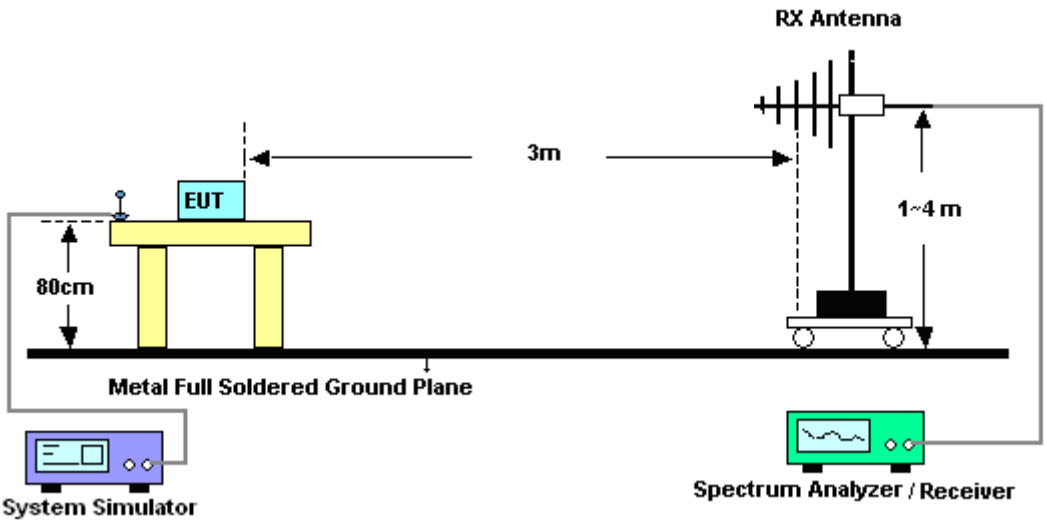
4 Radiated Test Items

4.1 Measuring Instruments

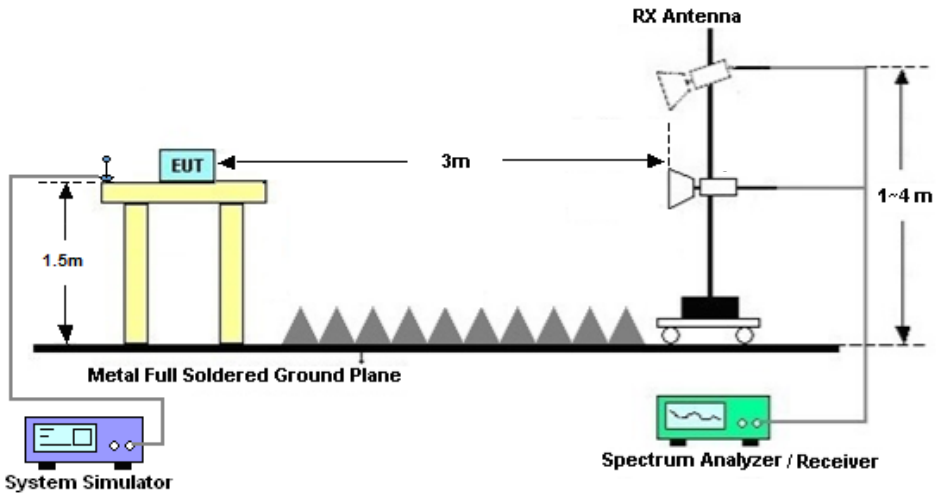
See list of measuring instruments of this test report.

4.2 Test Setup

4.2.1 For radiated test from 30MHz to 1GHz



4.2.2 For radiated test above 1GHz



4.3 Test Result of Radiated Test

Please refer to Appendix B.

4.4 Radiated Spurious Emission

4.4.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI C63.26. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

For LTE band 7 and 5G NR n41

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 55 + 10 log (P) dB.

The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

4.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.5
2. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
6. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
7. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
8. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
9. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
10. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
11. ERP (dBm) = EIRP - 2.15
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
    The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.
13. For 5G NR n41:
    The limit line is derived from 55 + 10log(P)dB below the transmitter power P(Watts)The limit line is derived from 55 + 10log(P)dB below the transmitter power P(Watts)

5 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. 08, 2021	Aug. 04, 2021~ Aug. 12, 2021	Apr. 07, 2022	Conducted (TH01-SZ)
DC Power Supply	TTI	PL330P	290070	Max 32V，3A	Oct. 15, 2020	Aug. 04, 2021~ Aug. 12, 2021	Oct. 14, 2021	Conducted (TH01-SZ)
EMI Test Receiver&SA	KEYSIGHT	N9038A	MY54450083	20Hz~8.4GHz	Apr. 07, 2021	Aug. 10, 2021~ Aug. 19, 2021	Apr. 06, 2022	Radiation (03CH03-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	Jun. 22, 2021	Aug. 10, 2021~ Aug. 19, 2021	Jun. 21, 2022	Radiation (03CH03-SZ)
EXA Spectrum Anaiyzer	KEYSIGHT	N9010A	MY55150246	10Hz~44GHz;	Apr. 07, 2021	Aug. 10, 2021~ Aug. 19, 2021	Apr. 06, 2022	Radiation (03CH03-SZ
Bilog Antenna	TeseQ	CBL6112D	35408	30MHz-2GHz	Jun. 22, 2021	Aug. 10, 2021~ Aug. 19, 2021	Jun. 21, 2022	Radiation (03CH03-SZ)
Double Ridge Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1355	1GHz~18GHz	Apr. 25, 2021	Aug. 10, 2021~ Aug. 19, 2021	Apr. 24, 2022	Radiation (03CH03-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 11, 2021	Aug. 10, 2021~ Aug. 19, 2021	Apr. 10, 2022	Radiation (03CH03-SZ)
Amplifier	Burgeon	BPA-530	102211	0.01Hz ~3000MHz	Oct. 16, 2020	Aug. 10, 2021~ Aug. 19, 2021	Oct. 15, 2021	Radiation (03CH03-SZ)
Amplifier	Agilent Technologies	83017A	MY39501302	500MHz~26.5GHz	Dec. 30 ,2020	Aug. 10, 2021~ Aug. 19, 2021	Dec. 29, 2021	Radiation (03CH03-SZ)
HF Amplifier	MITEQ	TTA1840-35 -HG	1871923	18GHz~40GHz	Jul. 20. 2021	Aug. 10, 2021~ Aug. 19, 2021	Jul. 19. 2022	Radiation (03CH03-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	NCR	Aug. 10, 2021~ Aug. 19, 2021	NCR	Radiation (03CH03-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Aug. 10, 2021~ Aug. 19, 2021	NCR	Radiation (03CH03-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Aug. 10, 2021~ Aug. 19, 2021	NCR	Radiation (03CH03-SZ)

NCR: No Calibration Required

6 Uncertainty of Evaluation

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 Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.0dB**

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.6dB**

Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.8dB**

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

Appendix A. Test Results of Conducted Test

Software Version: 21.02.070701

FR1 N5-SCS 15kHz

LTE Band: 7, LTE BW: 10M, LTE ARFCN: Mid

Transmitter Conducted Output Power, (G_T - L_C)=3.0dB

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)
5	15	20	166800	834.0	DFT-s-OFDM PI/2 BPSK	50@25	23.74
5	15	20	166800	834.0	DFT-s-OFDM PI/2 BPSK	1@1	23.8
5	15	20	166800	834.0	DFT-s-OFDM PI/2 BPSK	1@104	23.93
5	15	20	166800	834.0	DFT-s-OFDM QPSK	50@25	23.79
5	15	20	166800	834.0	DFT-s-OFDM QPSK	1@1	23.77
5	15	20	166800	834.0	DFT-s-OFDM QPSK	1@104	23.87
5	15	20	166800	834.0	DFT-s-OFDM 16 QAM	50@25	22.86
5	15	20	166800	834.0	DFT-s-OFDM 16 QAM	1@1	22.88
5	15	20	166800	834.0	DFT-s-OFDM 16 QAM	1@104	23
5	15	20	166800	834.0	DFT-s-OFDM 64 QAM	50@25	21.33
5	15	20	166800	834.0	DFT-s-OFDM 64 QAM	1@1	20.95
5	15	20	166800	834.0	DFT-s-OFDM 64 QAM	1@104	21.15
5	15	20	166800	834.0	DFT-s-OFDM 256 QAM	50@25	19.3
5	15	20	166800	834.0	DFT-s-OFDM 256 QAM	1@1	19.56
5	15	20	166800	834.0	DFT-s-OFDM 256 QAM	1@104	19.69
5	15	20	166800	834.0	CP-OFDM QPSK	53@26	22.3
5	15	20	166800	834.0	CP-OFDM QPSK	1@1	22.07
5	15	20	166800	834.0	CP-OFDM QPSK	1@104	22.23
5	15	20	167300	836.5	DFT-s-OFDM PI/2 BPSK	50@25	23.86
5	15	20	167300	836.5	DFT-s-OFDM PI/2 BPSK	1@1	23.8
5	15	20	167300	836.5	DFT-s-OFDM PI/2 BPSK	1@104	23.59

5	15	20	167300	836.5	DFT-s-OFDM QPSK	50@25	23.85
5	15	20	167300	836.5	DFT-s-OFDM QPSK	1@1	23.78
5	15	20	167300	836.5	DFT-s-OFDM QPSK	1@104	23.57
5	15	20	167300	836.5	DFT-s-OFDM 16 QAM	50@25	22.96
5	15	20	167300	836.5	DFT-s-OFDM 16 QAM	1@1	23.08
5	15	20	167300	836.5	DFT-s-OFDM 16 QAM	1@104	22.88
5	15	20	167300	836.5	DFT-s-OFDM 64 QAM	50@25	21.41
5	15	20	167300	836.5	DFT-s-OFDM 64 QAM	1@1	21.03
5	15	20	167300	836.5	DFT-s-OFDM 64 QAM	1@104	21.29
5	15	20	167300	836.5	DFT-s-OFDM 256 QAM	50@25	19.43
5	15	20	167300	836.5	DFT-s-OFDM 256 QAM	1@1	19.56
5	15	20	167300	836.5	DFT-s-OFDM 256 QAM	1@104	19.47
5	15	20	167300	836.5	CP-OFDM QPSK	53@26	22.34
5	15	20	167300	836.5	CP-OFDM QPSK	1@1	22.09
5	15	20	167300	836.5	CP-OFDM QPSK	1@104	22.22
5	15	20	167800	839.0	DFT-s-OFDM PI/2 BPSK	50@25	23.87
5	15	20	167800	839.0	DFT-s-OFDM PI/2 BPSK	1@1	23.78
5	15	20	167800	839.0	DFT-s-OFDM PI/2 BPSK	1@104	23.56
5	15	20	167800	839.0	DFT-s-OFDM QPSK	50@25	23.91
5	15	20	167800	839.0	DFT-s-OFDM QPSK	1@1	23.81
5	15	20	167800	839.0	DFT-s-OFDM QPSK	1@104	23.51
5	15	20	167800	839.0	DFT-s-OFDM 16 QAM	50@25	22.98
5	15	20	167800	839.0	DFT-s-OFDM 16 QAM	1@1	23.04
5	15	20	167800	839.0	DFT-s-OFDM 16 QAM	1@104	22.32
5	15	20	167800	839.0	DFT-s-OFDM 64 QAM	50@25	21.46
5	15	20	167800	839.0	DFT-s-OFDM 64 QAM	1@1	21.12
5	15	20	167800	839.0	DFT-s-OFDM 64 QAM	1@104	20.82

5	15	20	167800	839.0	DFT-s-OFDM 256 QAM	50@25	19.43
5	15	20	167800	839.0	DFT-s-OFDM 256 QAM	1@1	19.52
5	15	20	167800	839.0	DFT-s-OFDM 256 QAM	1@104	19.63
5	15	20	167800	839.0	CP-OFDM QPSK	53@26	22.4
5	15	20	167800	839.0	CP-OFDM QPSK	1@1	22.13
5	15	20	167800	839.0	CP-OFDM QPSK	1@104	22.21

Software Version: 21.02.070701

FR1 N5-SCS 30kHz

LTE Band: 7, LTE BW: 10M, LTE ARFCN: Mid

Transmitter Conducted Output Power, (G_T - L_C)=3.0dB

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)
5	30	20	166800	834.0	DFT-s-OFDM PI/2 BPSK	25@12	23.9
5	30	20	166800	834.0	DFT-s-OFDM PI/2 BPSK	1@1	23.65
5	30	20	166800	834.0	DFT-s-OFDM PI/2 BPSK	1@49	23.68
5	30	20	166800	834.0	DFT-s-OFDM QPSK	25@12	23.87
5	30	20	166800	834.0	DFT-s-OFDM QPSK	1@1	23.62
5	30	20	166800	834.0	DFT-s-OFDM QPSK	1@49	23.76
5	30	20	166800	834.0	DFT-s-OFDM 16 QAM	25@12	22.88
5	30	20	166800	834.0	DFT-s-OFDM 16 QAM	1@1	22.96
5	30	20	166800	834.0	DFT-s-OFDM 16 QAM	1@49	23
5	30	20	166800	834.0	DFT-s-OFDM 64 QAM	25@12	21.44
5	30	20	166800	834.0	DFT-s-OFDM 64 QAM	1@1	21.38
5	30	20	166800	834.0	DFT-s-OFDM 64 QAM	1@49	21.5
5	30	20	166800	834.0	DFT-s-OFDM 256 QAM	25@12	19.29
5	30	20	166800	834.0	DFT-s-OFDM 256 QAM	1@1	19.24
5	30	20	166800	834.0	DFT-s-OFDM 256 QAM	1@49	19.26
5	30	20	166800	834.0	CP-OFDM QPSK	25@121	20.85
5	30	20	166800	834.0	CP-OFDM QPSK	1@1	22.07
5	30	20	166800	834.0	CP-OFDM QPSK	1@49	22.09
5	30	20	167300	836.5	DFT-s-OFDM PI/2 BPSK	25@12	23.91
5	30	20	167300	836.5	DFT-s-OFDM PI/2 BPSK	1@1	23.66
5	30	20	167300	836.5	DFT-s-OFDM PI/2 BPSK	1@49	23.59

5	30	20	167300	836.5	DFT-s-OFDM QPSK	25@12	23.9
5	30	20	167300	836.5	DFT-s-OFDM QPSK	1@1	23.77
5	30	20	167300	836.5	DFT-s-OFDM QPSK	1@49	23.7
5	30	20	167300	836.5	DFT-s-OFDM 16 QAM	25@12	22.97
5	30	20	167300	836.5	DFT-s-OFDM 16 QAM	1@1	22.92
5	30	20	167300	836.5	DFT-s-OFDM 16 QAM	1@49	22.73
5	30	20	167300	836.5	DFT-s-OFDM 64 QAM	25@12	21.5
5	30	20	167300	836.5	DFT-s-OFDM 64 QAM	1@1	21.42
5	30	20	167300	836.5	DFT-s-OFDM 64 QAM	1@49	21.66
5	30	20	167300	836.5	DFT-s-OFDM 256 QAM	25@12	19.4
5	30	20	167300	836.5	DFT-s-OFDM 256 QAM	1@1	19.02
5	30	20	167300	836.5	DFT-s-OFDM 256 QAM	1@49	19.37
5	30	20	167300	836.5	CP-OFDM QPSK	25@121	22.72
5	30	20	167300	836.5	CP-OFDM QPSK	1@1	22.34
5	30	20	167300	836.5	CP-OFDM QPSK	1@49	22.24
5	30	20	167800	839.0	DFT-s-OFDM PI/2 BPSK	25@12	23.91
5	30	20	167800	839.0	DFT-s-OFDM PI/2 BPSK	1@1	23.75
5	30	20	167800	839.0	DFT-s-OFDM PI/2 BPSK	1@49	22.86
5	30	20	167800	839.0	DFT-s-OFDM QPSK	25@12	23.92
5	30	20	167800	839.0	DFT-s-OFDM QPSK	1@1	23.83
5	30	20	167800	839.0	DFT-s-OFDM QPSK	1@49	22.78
5	30	20	167800	839.0	DFT-s-OFDM 16 QAM	25@12	23.02
5	30	20	167800	839.0	DFT-s-OFDM 16 QAM	1@1	23.05
5	30	20	167800	839.0	DFT-s-OFDM 16 QAM	1@49	22.37
5	30	20	167800	839.0	DFT-s-OFDM 64 QAM	25@12	21.5
5	30	20	167800	839.0	DFT-s-OFDM 64 QAM	1@1	21.5
5	30	20	167800	839.0	DFT-s-OFDM 64 QAM	1@49	21.07

5	30	20	167800	839.0	DFT-s-OFDM 256 QAM	25@12	19.44
5	30	20	167800	839.0	DFT-s-OFDM 256 QAM	1@1	19.15
5	30	20	167800	839.0	DFT-s-OFDM 256 QAM	1@49	18.99
5	30	20	167800	839.0	CP-OFDM QPSK	25@121	22.85
5	30	20	167800	839.0	CP-OFDM QPSK	1@1	22.74
5	30	20	167800	839.0	CP-OFDM QPSK	1@49	21.13

Software Version: 21.02.080401

FR1 N41-SCS 15kHz

LTE Band: 2, LTE BW: 10M, LTE ARFCN: Mid

Transmitter Conducted Output Power, (G_T - L_C)=4.0dB

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)
41	15	40	503202	2516.01	DFT-s-OFDM PI/2 BPSK	108@54	22.9
41	15	40	503202	2516.01	DFT-s-OFDM PI/2 BPSK	1@1	22.2
41	15	40	503202	2516.01	DFT-s-OFDM PI/2 BPSK	1@214	22.38
41	15	40	503202	2516.01	DFT-s-OFDM QPSK	108@54	22.97
41	15	40	503202	2516.01	DFT-s-OFDM QPSK	1@1	22.23
41	15	40	503202	2516.01	DFT-s-OFDM QPSK	1@214	22.45
41	15	40	503202	2516.01	DFT-s-OFDM 16 QAM	108@54	22.03
41	15	40	503202	2516.01	DFT-s-OFDM 16 QAM	1@1	21.38
41	15	40	503202	2516.01	DFT-s-OFDM 16 QAM	1@214	21.21
41	15	40	503202	2516.01	DFT-s-OFDM 64 QAM	108@54	20.51
41	15	40	503202	2516.01	DFT-s-OFDM 64 QAM	1@1	19.91
41	15	40	503202	2516.01	DFT-s-OFDM 64 QAM	1@214	20.18
41	15	40	503202	2516.01	DFT-s-OFDM 256 QAM	108@54	18.49
41	15	40	503202	2516.01	DFT-s-OFDM 256 QAM	1@1	17.78
41	15	40	503202	2516.01	DFT-s-OFDM 256 QAM	1@214	17.97
41	15	40	503202	2516.01	CP-OFDM QPSK	108@54	21.44
41	15	40	503202	2516.01	CP-OFDM QPSK	1@1	21.18
41	15	40	503202	2516.01	CP-OFDM QPSK	1@214	21.17
41	15	40	518598	2592.99	DFT-s-OFDM PI/2 BPSK	108@54	22.79
41	15	40	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@1	22.13
41	15	40	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@214	22.43

41	15	40	518598	2592.99	DFT-s-OFDM QPSK	108@54	22.84
41	15	40	518598	2592.99	DFT-s-OFDM QPSK	1@1	22.26
41	15	40	518598	2592.99	DFT-s-OFDM QPSK	1@214	22.42
41	15	40	518598	2592.99	DFT-s-OFDM 16 QAM	108@54	21.98
41	15	40	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	20.97
41	15	40	518598	2592.99	DFT-s-OFDM 16 QAM	1@214	21.42
41	15	40	518598	2592.99	DFT-s-OFDM 64 QAM	108@54	20.37
41	15	40	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	19.87
41	15	40	518598	2592.99	DFT-s-OFDM 64 QAM	1@214	20.07
41	15	40	518598	2592.99	DFT-s-OFDM 256 QAM	108@54	18.36
41	15	40	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	17.68
41	15	40	518598	2592.99	DFT-s-OFDM 256 QAM	1@214	17.76
41	15	40	518598	2592.99	CP-OFDM QPSK	108@54	21.33
41	15	40	518598	2592.99	CP-OFDM QPSK	1@1	20.92
41	15	40	518598	2592.99	CP-OFDM QPSK	1@214	21.08
41	15	40	534000	2670.0	DFT-s-OFDM PI/2 BPSK	108@54	22.86
41	15	40	534000	2670.0	DFT-s-OFDM PI/2 BPSK	1@1	22.07
41	15	40	534000	2670.0	DFT-s-OFDM PI/2 BPSK	1@214	22.35
41	15	40	534000	2670.0	DFT-s-OFDM QPSK	108@54	22.83
41	15	40	534000	2670.0	DFT-s-OFDM QPSK	1@1	22.15
41	15	40	534000	2670.0	DFT-s-OFDM QPSK	1@214	22.46
41	15	40	534000	2670.0	DFT-s-OFDM 16 QAM	108@54	21.91
41	15	40	534000	2670.0	DFT-s-OFDM 16 QAM	1@1	21.2
41	15	40	534000	2670.0	DFT-s-OFDM 16 QAM	1@214	21.31
41	15	40	534000	2670.0	DFT-s-OFDM 64 QAM	108@54	20.44
41	15	40	534000	2670.0	DFT-s-OFDM 64 QAM	1@1	19.74
41	15	40	534000	2670.0	DFT-s-OFDM 64 QAM	1@214	19.76

41	15	40	534000	2670.0	DFT-s-OFDM 256 QAM	108@54	18.27
41	15	40	534000	2670.0	DFT-s-OFDM 256 QAM	1@1	17.59
41	15	40	534000	2670.0	DFT-s-OFDM 256 QAM	1@214	17.77
41	15	40	534000	2670.0	CP-OFDM QPSK	108@54	21.26
41	15	40	534000	2670.0	CP-OFDM QPSK	1@1	20.96
41	15	40	534000	2670.0	CP-OFDM QPSK	1@214	21.08

Software Version: 21.02.080401

FR1 N41-SCS 30kHz

LTE Band: 2, LTE BW: 10M, LTE ARFCN: Mid

Transmitter Conducted Output Power, (G_T - L_C)=4.0dB

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)
41	30	80	507204	2536.02	DFT-s-OFDM PI/2 BPSK	108@54	21.91
41	30	80	507204	2536.02	DFT-s-OFDM PI/2 BPSK	1@1	21.81
41	30	80	507204	2536.02	DFT-s-OFDM PI/2 BPSK	1@215	22.16
41	30	80	507204	2536.02	DFT-s-OFDM QPSK	108@54	21.89
41	30	80	507204	2536.02	DFT-s-OFDM QPSK	1@1	21.77
41	30	80	507204	2536.02	DFT-s-OFDM QPSK	1@215	22.13
41	30	80	507204	2536.02	DFT-s-OFDM 16 QAM	108@54	20.7
41	30	80	507204	2536.02	DFT-s-OFDM 16 QAM	1@1	20.79
41	30	80	507204	2536.02	DFT-s-OFDM 16 QAM	1@215	20.88
41	30	80	507204	2536.02	DFT-s-OFDM 64 QAM	108@54	19.26
41	30	80	507204	2536.02	DFT-s-OFDM 64 QAM	1@1	18.87
41	30	80	507204	2536.02	DFT-s-OFDM 64 QAM	1@215	19.02
41	30	80	507204	2536.02	DFT-s-OFDM 256 QAM	108@54	17.14
41	30	80	507204	2536.02	DFT-s-OFDM 256 QAM	1@1	16.75
41	30	80	507204	2536.02	DFT-s-OFDM 256 QAM	1@215	16.94
41	30	80	507204	2536.02	CP-OFDM QPSK	109@54	20.15
41	30	80	507204	2536.02	CP-OFDM QPSK	1@1	20.16
41	30	80	507204	2536.02	CP-OFDM QPSK	1@215	20.38
41	30	80	518598	2592.99	DFT-s-OFDM PI/2 BPSK	108@54	21.59
41	30	80	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@1	21.7
41	30	80	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@215	21.15

41	30	80	518598	2592.99	DFT-s-OFDM QPSK	108@54	21.54
41	30	80	518598	2592.99	DFT-s-OFDM QPSK	1@1	21.72
41	30	80	518598	2592.99	DFT-s-OFDM QPSK	1@215	21.09
41	30	80	518598	2592.99	DFT-s-OFDM 16 QAM	108@54	20.39
41	30	80	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	20.54
41	30	80	518598	2592.99	DFT-s-OFDM 16 QAM	1@215	20
41	30	80	518598	2592.99	DFT-s-OFDM 64 QAM	108@54	18.94
41	30	80	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	18.65
41	30	80	518598	2592.99	DFT-s-OFDM 64 QAM	1@215	18.26
41	30	80	518598	2592.99	DFT-s-OFDM 256 QAM	108@54	16.86
41	30	80	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	17.04
41	30	80	518598	2592.99	DFT-s-OFDM 256 QAM	1@215	16.48
41	30	80	518598	2592.99	CP-OFDM QPSK	109@54	19.95
41	30	80	518598	2592.99	CP-OFDM QPSK	1@1	20
41	30	80	518598	2592.99	CP-OFDM QPSK	1@215	19.44
41	30	80	529998	2649.99	DFT-s-OFDM PI/2 BPSK	108@54	21.27
41	30	80	529998	2649.99	DFT-s-OFDM PI/2 BPSK	1@1	21.58
41	30	80	529998	2649.99	DFT-s-OFDM PI/2 BPSK	1@215	21.47
41	30	80	529998	2649.99	DFT-s-OFDM QPSK	108@54	21.38
41	30	80	529998	2649.99	DFT-s-OFDM QPSK	1@1	21.56
41	30	80	529998	2649.99	DFT-s-OFDM QPSK	1@215	21.4
41	30	80	529998	2649.99	DFT-s-OFDM 16 QAM	108@54	19.94
41	30	80	529998	2649.99	DFT-s-OFDM 16 QAM	1@1	19.9
41	30	80	529998	2649.99	DFT-s-OFDM 16 QAM	1@215	20.11
41	30	80	529998	2649.99	DFT-s-OFDM 64 QAM	108@54	18.44
41	30	80	529998	2649.99	DFT-s-OFDM 64 QAM	1@1	18.16
41	30	80	529998	2649.99	DFT-s-OFDM 64 QAM	1@215	18.28

41	30	80	529998	2649.99	DFT-s-OFDM 256 QAM	108@54	16.44
41	30	80	529998	2649.99	DFT-s-OFDM 256 QAM	1@1	16.44
41	30	80	529998	2649.99	DFT-s-OFDM 256 QAM	1@215	16.66
41	30	80	529998	2649.99	CP-OFDM QPSK	109@54	19.45
41	30	80	529998	2649.99	CP-OFDM QPSK	1@1	19.37
41	30	80	529998	2649.99	CP-OFDM QPSK	1@215	19.48

Software Version: 21.02.080401

FR1 N41-SCS 15kHz

LTE Band: 66, LTE BW: 10M, LTE ARFCN: Mid

Transmitter Conducted Output Power, (G_T - L_C)=4.0dB

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)
41	15	40	503202	2516.01	DFT-s-OFDM PI/2 BPSK	108@54	22.92
41	15	40	503202	2516.01	DFT-s-OFDM PI/2 BPSK	1@1	22.16
41	15	40	503202	2516.01	DFT-s-OFDM PI/2 BPSK	1@214	22.42
41	15	40	503202	2516.01	DFT-s-OFDM QPSK	108@54	22.99
41	15	40	503202	2516.01	DFT-s-OFDM QPSK	1@1	22.27
41	15	40	503202	2516.01	DFT-s-OFDM QPSK	1@214	22.5
41	15	40	503202	2516.01	DFT-s-OFDM 16 QAM	108@54	22.03
41	15	40	503202	2516.01	DFT-s-OFDM 16 QAM	1@1	21.12
41	15	40	503202	2516.01	DFT-s-OFDM 16 QAM	1@214	21.5
41	15	40	503202	2516.01	DFT-s-OFDM 64 QAM	108@54	20.48
41	15	40	503202	2516.01	DFT-s-OFDM 64 QAM	1@1	19.93
41	15	40	503202	2516.01	DFT-s-OFDM 64 QAM	1@214	20.05
41	15	40	503202	2516.01	DFT-s-OFDM 256 QAM	108@54	18.47
41	15	40	503202	2516.01	DFT-s-OFDM 256 QAM	1@1	17.88
41	15	40	503202	2516.01	DFT-s-OFDM 256 QAM	1@214	17.99
41	15	40	503202	2516.01	CP-OFDM QPSK	108@54	21.48
41	15	40	503202	2516.01	CP-OFDM QPSK	1@1	21.2
41	15	40	503202	2516.01	CP-OFDM QPSK	1@214	21.2
41	15	40	518598	2592.99	DFT-s-OFDM PI/2 BPSK	108@54	22.99
41	15	40	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@1	22.2
41	15	40	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@214	22.46

41	15	40	518598	2592.99	DFT-s-OFDM QPSK	108@54	22.85
41	15	40	518598	2592.99	DFT-s-OFDM QPSK	1@1	22.26
41	15	40	518598	2592.99	DFT-s-OFDM QPSK	1@214	22.47
41	15	40	518598	2592.99	DFT-s-OFDM 16 QAM	108@54	21.92
41	15	40	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	21.22
41	15	40	518598	2592.99	DFT-s-OFDM 16 QAM	1@214	21.39
41	15	40	518598	2592.99	DFT-s-OFDM 64 QAM	108@54	20.36
41	15	40	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	19.79
41	15	40	518598	2592.99	DFT-s-OFDM 64 QAM	1@214	20.01
41	15	40	518598	2592.99	DFT-s-OFDM 256 QAM	108@54	18.36
41	15	40	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	17.8
41	15	40	518598	2592.99	DFT-s-OFDM 256 QAM	1@214	17.76
41	15	40	518598	2592.99	CP-OFDM QPSK	108@54	21.43
41	15	40	518598	2592.99	CP-OFDM QPSK	1@1	20.97
41	15	40	518598	2592.99	CP-OFDM QPSK	1@214	21.09
41	15	40	534000	2670.0	DFT-s-OFDM PI/2 BPSK	108@54	22.83
41	15	40	534000	2670.0	DFT-s-OFDM PI/2 BPSK	1@1	22.07
41	15	40	534000	2670.0	DFT-s-OFDM PI/2 BPSK	1@214	22.35
41	15	40	534000	2670.0	DFT-s-OFDM QPSK	108@54	22.84
41	15	40	534000	2670.0	DFT-s-OFDM QPSK	1@1	22.19
41	15	40	534000	2670.0	DFT-s-OFDM QPSK	1@214	22.46
41	15	40	534000	2670.0	DFT-s-OFDM 16 QAM	108@54	21.92
41	15	40	534000	2670.0	DFT-s-OFDM 16 QAM	1@1	21.19
41	15	40	534000	2670.0	DFT-s-OFDM 16 QAM	1@214	21.4
41	15	40	534000	2670.0	DFT-s-OFDM 64 QAM	108@54	20.3
41	15	40	534000	2670.0	DFT-s-OFDM 64 QAM	1@1	19.8
41	15	40	534000	2670.0	DFT-s-OFDM 64 QAM	1@214	20.1

41	15	40	534000	2670.0	DFT-s-OFDM 256 QAM	108@54	18.39
41	15	40	534000	2670.0	DFT-s-OFDM 256 QAM	1@1	17.6
41	15	40	534000	2670.0	DFT-s-OFDM 256 QAM	1@214	17.96
41	15	40	534000	2670.0	CP-OFDM QPSK	108@54	21.31
41	15	40	534000	2670.0	CP-OFDM QPSK	1@1	20.98
41	15	40	534000	2670.0	CP-OFDM QPSK	1@214	21.13

Software Version: 21.02.080401

FR1 N41-SCS 30kHz

LTE Band: 66, LTE BW: 10M, LTE ARFCN: Mid

Transmitter Conducted Output Power, (G_T - L_C)=4.0dB

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)
41	30	80	507204	2536.02	DFT-s-OFDM PI/2 BPSK	108@54	21.92
41	30	80	507204	2536.02	DFT-s-OFDM PI/2 BPSK	1@1	21.88
41	30	80	507204	2536.02	DFT-s-OFDM PI/2 BPSK	1@215	22.18
41	30	80	507204	2536.02	DFT-s-OFDM QPSK	108@54	22.01
41	30	80	507204	2536.02	DFT-s-OFDM QPSK	1@1	21.81
41	30	80	507204	2536.02	DFT-s-OFDM QPSK	1@215	22.19
41	30	80	507204	2536.02	DFT-s-OFDM 16 QAM	108@54	20.71
41	30	80	507204	2536.02	DFT-s-OFDM 16 QAM	1@1	20.85
41	30	80	507204	2536.02	DFT-s-OFDM 16 QAM	1@215	20.87
41	30	80	507204	2536.02	DFT-s-OFDM 64 QAM	108@54	19.31
41	30	80	507204	2536.02	DFT-s-OFDM 64 QAM	1@1	18.93
41	30	80	507204	2536.02	DFT-s-OFDM 64 QAM	1@215	19.04
41	30	80	507204	2536.02	DFT-s-OFDM 256 QAM	108@54	17.21
41	30	80	507204	2536.02	DFT-s-OFDM 256 QAM	1@1	16.95
41	30	80	507204	2536.02	DFT-s-OFDM 256 QAM	1@215	17.11
41	30	80	507204	2536.02	CP-OFDM QPSK	109@54	20.27
41	30	80	507204	2536.02	CP-OFDM QPSK	1@1	20.17
41	30	80	507204	2536.02	CP-OFDM QPSK	1@215	20.49
41	30	80	518598	2592.99	DFT-s-OFDM PI/2 BPSK	108@54	21.64
41	30	80	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@1	21.76
41	30	80	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@215	21.18

41	30	80	518598	2592.99	DFT-s-OFDM QPSK	108@54	21.66
41	30	80	518598	2592.99	DFT-s-OFDM QPSK	1@1	21.75
41	30	80	518598	2592.99	DFT-s-OFDM QPSK	1@215	21.19
41	30	80	518598	2592.99	DFT-s-OFDM 16 QAM	108@54	20.44
41	30	80	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	20.48
41	30	80	518598	2592.99	DFT-s-OFDM 16 QAM	1@215	20.09
41	30	80	518598	2592.99	DFT-s-OFDM 64 QAM	108@54	19.02
41	30	80	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	18.83
41	30	80	518598	2592.99	DFT-s-OFDM 64 QAM	1@215	18.48
41	30	80	518598	2592.99	DFT-s-OFDM 256 QAM	108@54	16.91
41	30	80	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	16.89
41	30	80	518598	2592.99	DFT-s-OFDM 256 QAM	1@215	16.49
41	30	80	518598	2592.99	CP-OFDM QPSK	109@54	20.01
41	30	80	518598	2592.99	CP-OFDM QPSK	1@1	20.05
41	30	80	518598	2592.99	CP-OFDM QPSK	1@215	19.43
41	30	80	529998	2649.99	DFT-s-OFDM PI/2 BPSK	108@54	21.35
41	30	80	529998	2649.99	DFT-s-OFDM PI/2 BPSK	1@1	21.63
41	30	80	529998	2649.99	DFT-s-OFDM PI/2 BPSK	1@215	21.51
41	30	80	529998	2649.99	DFT-s-OFDM QPSK	108@54	21.48
41	30	80	529998	2649.99	DFT-s-OFDM QPSK	1@1	21.64
41	30	80	529998	2649.99	DFT-s-OFDM QPSK	1@215	21.56
41	30	80	529998	2649.99	DFT-s-OFDM 16 QAM	108@54	19.99
41	30	80	529998	2649.99	DFT-s-OFDM 16 QAM	1@1	19.75
41	30	80	529998	2649.99	DFT-s-OFDM 16 QAM	1@215	20
41	30	80	529998	2649.99	DFT-s-OFDM 64 QAM	108@54	18.47
41	30	80	529998	2649.99	DFT-s-OFDM 64 QAM	1@1	18.2
41	30	80	529998	2649.99	DFT-s-OFDM 64 QAM	1@215	18.34

41	30	80	529998	2649.99	DFT-s-OFDM 256 QAM	108@54	16.5
41	30	80	529998	2649.99	DFT-s-OFDM 256 QAM	1@1	16.46
41	30	80	529998	2649.99	DFT-s-OFDM 256 QAM	1@215	16.8
41	30	80	529998	2649.99	CP-OFDM QPSK	109@54	19.51
41	30	80	529998	2649.99	CP-OFDM QPSK	1@1	19.35
41	30	80	529998	2649.99	CP-OFDM QPSK	1@215	19.56

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

EN-DC_7A_n5A / LTE 20MHz + NR 20MHz / QPSK DFT-s-OFDM									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
NR n5 Lowest	1650.00	-66.66	-25	-41.66	-78.22	-72.04	3.98	9.36	H
	2475.00	-64.55	-25	-39.55	-83.19	-70.25	4.85	10.55	H
	3300.00	-63.39	-25	-38.39	-84.17	-70.47	5.50	12.58	H
	1650.00	-66.61	-25	-41.61	-78.81	-71.99	3.98	9.36	V
	2475.00	-63.96	-25	-38.96	-82.92	-69.66	4.85	10.55	V
	3300.00	-63.15	-25	-38.15	-84.82	-70.23	5.50	12.58	V
LTE Band7 Lowest	5052.18	-55.07	-25	-30.07	-78.17	-60.63	7.14	12.70	H
	7578.27	-53.59	-25	-28.59	-79.67	-56.89	8.30	11.60	H
	10104.36	-50.73	-25	-25.73	-80.93	-52.25	10.48	12.00	H
	5052.18	-53.99	-25	-28.99	-78.42	-59.55	7.14	12.70	V
	7578.27	-53.73	-25	-28.73	-79.81	-57.03	8.30	11.60	V
	10104.36	-49.74	-25	-24.74	-80.92	-51.26	10.48	12.00	V
NR n5 Middle	1655.00	-66.34	-25	-41.34	-77.97	-71.74	4.00	9.40	H
	2482.50	-62.46	-25	-37.46	-81.10	-68.18	4.88	10.60	H
	3310.00	-64.31	-25	-39.31	-85.19	-71.39	5.52	12.60	H
	1655.00	-66.77	-25	-41.77	-79.07	-72.17	4.00	9.40	V
	2482.50	-63.17	-25	-38.17	-82.13	-68.89	4.88	10.60	V
	3310.00	-63.69	-25	-38.69	-85.27	-70.77	5.52	12.60	V
LTE Band7 Middle	5052.18	-55.45	-25	-30.45	-78.55	-61.01	7.14	12.70	H
	7578.27	-53.25	-25	-28.25	-79.33	-56.55	8.30	11.60	H
	10104.36	-50.31	-25	-25.31	-80.51	-51.83	10.48	12.00	H
	5052.18	-54.22	-25	-29.22	-78.65	-59.78	7.14	12.70	V
	7578.27	-53.43	-25	-28.43	-79.51	-56.73	8.30	11.60	V
	10104.36	-49.50	-25	-24.50	-80.68	-51.02	10.48	12.00	V
NR n5 Highest	1660.00	-66.08	-25	-41.08	-77.73	-71.40	4.10	9.42	H
	2490.00	-64.89	-25	-39.89	-83.66	-70.62	4.90	10.63	H
	3320.00	-63.86	-25	-38.86	-84.74	-70.93	5.55	12.62	H
	1660.00	-67.18	-25	-42.18	-79.5	-72.50	4.10	9.42	V
	2490.00	-64.90	-25	-39.90	-83.93	-70.63	4.90	10.63	V
	3320.00	-63.05	-25	-38.05	-84.63	-70.12	5.55	12.62	V
LTE Band7 Highest	5052.18	-55.75	-25	-30.75	-78.85	-61.31	7.14	12.70	H
	7578.27	-53.79	-25	-28.79	-79.87	-57.09	8.30	11.60	H
	10104.36	-50.92	-25	-25.92	-81.12	-52.44	10.48	12.00	H
	5052.18	-54.75	-25	-29.75	-79.18	-60.31	7.14	12.70	V
	7578.27	-53.98	-25	-28.98	-80.06	-57.28	8.30	11.60	V
	10104.36	-49.95	-25	-24.95	-81.13	-51.47	10.48	12.00	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

EN-DC_2A_n41A / LTE 20MHz + NR 80MHz / QPSK DFT-s-OFDM									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
NR n41 Lowest	4992.00	-57.31	-25	-32.31	-77.30	-62.87	7.12	12.68	H
	7489.53	-54.39	-25	-29.39	-79.10	-57.72	8.26	11.59	H
	9986.04	-49.96	-25	-24.96	-79.90	-51.49	10.45	11.98	H
	4992.00	-57.33	-25	-32.33	-77.37	-62.89	7.12	12.68	V
	7489.53	-54.67	-25	-29.67	-79.37	-58.00	8.26	11.59	V
	9986.04	-51.56	-25	-26.56	-79.83	-53.09	10.45	11.98	V
LTE Band2 Lowest	3742.18	-60.85	-25	-35.85	-77.54	-66.41	7.14	12.70	H
	5613.27	-58.84	-25	-33.84	-78.55	-62.14	8.30	11.60	H
	7484.36	-54.39	-25	-29.39	-79.13	-55.91	10.48	12.00	H
	3742.18	-60.84	-25	-35.84	-77.45	-66.40	7.14	12.70	V
	5613.27	-59.11	-25	-34.11	-79.01	-62.41	8.30	11.60	V
	7484.36	-54.40	-25	-29.40	-79.13	-55.92	10.48	12.00	V
NR n41 Middle	5176.98	-59.47	-25	-34.47	-78.91	-65.03	7.14	12.70	H
	7765.47	-54.03	-25	-29.03	-78.91	-57.33	8.30	11.60	H
	10353.96	-50.00	-25	-25.00	-79.93	-51.52	10.48	12.00	H
	5176.98	-59.31	-25	-34.31	-79.04	-64.87	7.14	12.70	V
	7765.47	-54.16	-25	-29.16	-78.88	-57.46	8.30	11.60	V
	10353.96	-50.90	-25	-25.90	-79.96	-52.42	10.48	12.00	V
LTE Band2 Middle	3742.18	-60.37	-25	-35.37	-77.06	-65.93	7.14	12.70	H
	5613.27	-58.70	-25	-33.70	-78.41	-62.00	8.30	11.60	H
	7484.36	-54.01	-25	-29.01	-78.75	-55.53	10.48	12.00	H
	3742.18	-60.75	-25	-35.75	-77.65	-66.31	7.14	12.70	V
	5613.27	-58.84	-25	-33.84	-78.74	-62.14	8.30	11.60	V
	7484.36	-54.11	-25	-29.11	-78.84	-55.63	10.48	12.00	V
NR n41 Highest	5361.00	-59.97	-25	-34.97	-79.10	-65.53	7.16	12.72	H
	8041.50	-52.53	-25	-27.53	-79.07	-55.83	8.33	11.63	H
	10722.00	-49.58	-25	-24.58	-79.95	-51.18	10.50	12.10	H
	5361.00	-60.46	-25	-35.46	-79.75	-66.02	7.16	12.72	V
	8041.50	-52.83	-25	-27.83	-79.08	-56.13	8.33	11.63	V
	10722.00	-49.86	-25	-24.86	-79.8	-51.46	10.50	12.10	V
LTE Band2 Highest	3742.18	-60.69	-25	-35.69	-77.38	-66.25	7.14	12.70	H
	5613.27	-58.71	-25	-33.71	-78.42	-62.01	8.30	11.60	H
	7484.36	-54.58	-25	-29.58	-79.32	-56.10	10.48	12.00	H
	3742.18	-60.42	-25	-35.42	-77.03	-65.98	7.14	12.70	V
	5613.27	-58.95	-25	-33.95	-78.85	-62.25	8.30	11.60	V
	7484.36	-54.30	-25	-29.30	-79.03	-55.82	10.48	12.00	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.