



Test Report No.: W7L-P22020005RF03



VARIANT FCC RF TEST REPORT

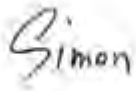

Applicant:	Continental Automotive Systems, Inc.
Address:	21440 W Lake Cook Rd., Deer Park, IL 60010, USA

Manufacturer or Supplier:	Continental Automotive Systems, Inc.
Address:	21440 W Lake Cook Rd., Deer Park, IL 60010, USA
Product:	FE5NA0020
Brand Name:	Continental
Model Name:	FE5NA0020
FCC ID:	LHJ-FE5NA0020
Date of tests:	Oct. 16, 2021 ~ Mar. 07, 2022

The tests have been carried out according to the requirements of the following standard:

- FCC Part 27, Subpart C, M ANSI/TIA/EIA-603-D
- FCC Part 2 ANSI/TIA/EIA-603-E ANSI C63.26-2015

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

Prepared by Simon Wang Engineer / Mobile Department	Approved by Luke Lu Manager / Mobile Department
	
Date: Mar. 07, 2022	Date: Mar. 07, 2022

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
W7L-P20210616-3RF06	Original release	Dec. 04, 2021
W7L-P22020005RF03	Based on W7L-P20210616-3RF06, EN-DC combination DC_71A_n66A are added by software. In addition, EN-DC N77 Class 2 power level is added. Fixed EN-DC N77 antenna path matching. Conducted data based on SA N66/ N77 has not changed.	Mar. 07, 2022

1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 27 & PART 2		
STANDARD SECTION	TEST TYPE AND LIMIT	RESULT
§2.1046	Conducted Output Power	Compliance
§27.50(h)(2) §27.50(j)(3)	Equivalent Isotropically Radiated Power	SEE NOTE
§2.1055 §27.54	Frequency Stability	SEE NOTE
§2.1049	Occupied Bandwidth	SEE NOTE
§2.1051 §27.53(h) §27.53(l)(2)	Band Edge Measurements	SEE NOTE
§2.1051 §27.53(h) §27.53(l)(2)	Conducted Spurious Emissions	SEE NOTE
§2.1053 §27.53(h) §27.53(l)(2)	Radiated Spurious Emissions	Compliance
§27.50(j)(4)	Peak-to-Average Ratio	SEE NOTE

NOTE: Please refer to the original organization report W7L-P20210616-3RF06.



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1.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

MEASUREMENT	UNCERTAINTY
Frequency Stability	±76.97Hz
Radiated emissions & Radiated Power (30MHz~1GMHz)	±4.98dB
Radiated emissions & Radiated Power (1GMHz ~6GMHz)	±4.70dB
Radiated emissions (6GMHz ~18GMHz)	±4.60dB
Radiated emissions (18GMHz ~40GMHz)	±4.12dB
Conducted emissions	±4.01dB
Occupied Channel Bandwidth	±43.58KHz
Conducted Output power	±2.06dB
Band Edge Measurements	±4.70dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.



1.2 TEST SITE AND INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
MXE EMI Receiver	KEYSIGHT	N9038A-544	MY54450026	Apr. 22,21	Apr. 21,22
EXA Signal Analyzer	KEYSIGHT	N9010A-544	MY54510355	Jun. 03,21	Jun. 02,22
Loop Antenna	Schwarzbeck	FMZB 1519B	1519B-051	Feb. 14,20	Feb. 13,23
Bilog Antenna	ETS-LINDGREN	3143B	00161965	Mar. 05,21	Mar. 04,22
Bilog Antenna	ETS-LINDGREN	3143B	00161965	Mar. 04,22	Mar. 03,23
Horn Antenna	ETS-LINDGREN	3117	00168692	Apr. 02,21	Apr. 01,22
Horn Antenna (18GHz-40GHz)	N/A	QWH-SL-18-40-K-SG/QMS-00361	15433	Aug. 25, 21	Aug. 24, 22
Radio Communication Analyzer	Anritsu(China) Co., Ltd	MT8000A	6262093255	Feb. 25,21	Feb. 24,22
Radio Communication Analyzer	Anritsu(China) Co., Ltd	MT8000A	6262093255	Feb. 24,22	Feb. 23,23
Signal Pre-Amplifier	EMSI	EMC 9135	980249	Jun. 02,21	Jun. 01,22
Signal Pre-Amplifier	EMSI	EMC 012645B	980257	Jun. 03,21	Jun. 02,22
Signal Pre-Amplifier	EMSI	EMC 184045B	980259	Apr. 22,21	Apr. 21,22
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	Euroshieldpn-CT0001143-1216	May. 19,20	May. 18,23
Test Software	E3	V 9.160323	N/A	N/A	N/A
Test Software	ADT	ADT_Radiated_V 7.6.15.9.2	N/A	N/A	N/A
10dB Attenuator	JFW/USA	50HF-010-SMA	1505	Jun. 03,21	Jun. 02,22
Power Meter	Anritsu	ML2495A	1506002	Feb. 26,21	Feb. 25,22
Power Meter	Anritsu	ML2495A	1506002	Feb. 25,22	Feb. 24,23
Power Sensor	Anritsu	MA2411B	1339352	Feb. 26,21	Feb. 25,22
Power Sensor	Anritsu	MA2411B	1339352	Feb. 25,22	Feb. 24,23
Temperature Chamber	ESPEC	SH-242	93000855	Jun. 02,21	Jun. 01,22
Power Divider	MCLI/USA	PS2-15	24880	N/A	N/A

- NOTE:**
1. The calibration interval of the above test instruments is 12 months or 36 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
 2. The test was performed in 3m Semi-anechoic Chamber and RF Oven Room.
 3. The horn antenna is used only for the measurement of emission frequency above 1GHz if tested.
 4. The FCC Site Registration No. is 525120; The Designation No. is CN1171.

2 GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

PRODUCT	FE5NA0020	
BRAND NAME	Continental	
MODEL NAME	FE5NA0020	
NOMINAL VOLTAGE	EUT 4.0V	
MODULATION TECHNOLOGY	5G NR	DFT-s-OFMA($\pi/2$ BPSK, QPSK, 16QAM, 64QAM, 256QAM); CP-OFMA(QPSK, 16QAM, 64QAM, 256QAM);
SUPPORT ENDC COMBINE	NR Band n66	71A_n66A
	NR Band n77C	2A_n77C
		5A_n77C
		7A_n77C
		13A_n77C
		41A_n77C
66A_n77C		
FREQUENCY RANGE	NR Band n66	1712.5MHz ~ 1777.5MHz
	NR Band n77C/n77C-HPUE	3710MHz ~ 3970MHz
EMISSION DESIGNATOR	NR Band n66 Channel Bandwidth: 5MHz	2BPSK: 4M47G7D
		QPSK: 4M48G7D
		16QAM: 4M46W7D
		64QAM: 4M47W7D
	NR Band n66 Channel Bandwidth: 10MHz	256QAM: 4M47W7D
		2BPSK: 8M91G7D
		QPSK: 8M93G7D
		16QAM: 8M95W7D
	NR Band n66 Channel Bandwidth: 15MHz	64QAM: 8M92W7D
		256QAM: 8M91W7D
		2BPSK: 13M4G7D
		QPSK: 13M4G7D
	NR Band n66 Channel Bandwidth: 15MHz	16QAM: 13M4W7D
		64QAM: 13M4W7D
		256QAM: 13M4W7D
		2BPSK: 17M9G7D
NR Band n66 Channel Bandwidth:	QPSK: 17M9G7D	



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EMISSION DESIGNATOR	20MHz	16QAM: 17M9W7D
		64QAM: 17M9W7D
		256QAM: 18M9W7D
	NR Band n66 Channel Bandwidth: 30MHz	2BPSK: 28M5G7D
		QPSK: 28M5G7D
		16QAM: 28M6W7D
		64QAM: 28M5W7D
		256QAM: 28M5W7D
	NR Band n66 Channel Bandwidth: 40MHz	2BPSK: 38M5G7D
		QPSK: 38M4G7D
		16QAM: 38M6W7D
		64QAM: 38M5W7D
		256QAM: 38M4W7D
	NR Band 77C-HPUE Channel Bandwidth: 20MHz	2BPSK: 17M9G7D
		QPSK: 17M9G7D
		16QAM: 17M9W7D
		64QAM: 17M9W7D
		256QAM: 17M8W7D
	NR Band 77C-HPUE Channel Bandwidth: 30MHz	2BPSK: 26M8G7D
		QPSK: 26M9G7D
		16QAM: 26M8W7D
		64QAM: 26M8W7D
		256QAM: 26M9W7D
	NR Band 77C-HPUE Channel Bandwidth: 40MHz	2BPSK: 35M7G7D
		QPSK: 35M7G7D
		16QAM: 35M8W7D
		64QAM: 35M7W7D
		256QAM: 37M8W7D
NR Band 77C-HPUE Channel Bandwidth: 50MHz	2BPSK: 45M7G7D	
	QPSK: 45M7G7D	
	16QAM: 45M7W7D	
	64QAM: 45M7W7D	
	256QAM: 45M8W7D	
NR Band 77C-HPUE Channel Bandwidth: 60MHz	2BPSK: 57M7G7D	
	QPSK: 57M7G7D	
	16QAM: 57M9W7D	
	64QAM: 57M9W7D	
	256QAM: 57M8W7D	
NR Band 77C-HPUE Channel Bandwidth: 70MHz	2BPSK: 57M8G7D	
	QPSK: 57M8G7D	
	16QAM: 57M9W7D	
	64QAM: 57M9W7D	
	256QAM: 57M8W7D	



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EMISSION DESIGNATOR	NR Band 77C-HPUE Channel Bandwidth: 80MHz	2BPSK: 77M4G7D
		QPSK: 77M1G7D
		16QAM: 77M4W7D
		64QAM: 77M4W7D
	NR Band 77C-HPUE Channel Bandwidth: 90MHz	256QAM: 77M4W7D
		2BPSK: 85M5G7D
		QPSK: 85M7G7D
		16QAM: 87M4W7D
	NR Band 77C-HPUE Channel Bandwidth: 100MHz	64QAM: 87M4W7D
		256QAM: 85M6W7D
		2BPSK: 97M4G7D
		QPSK: 96M2G7D
MAX. EIRP POWER	NR Band n66 Channel Bandwidth: 5MHz	16QAM: 97M5W7D
		64QAM: 97M5W7D
	NR Band n66 Channel Bandwidth: 10MHz	256QAM: 96M4W7D
		454.99mW
	NR Band n66 Channel Bandwidth: 15MHz	457.09mW
		453.94mW
	NR Band n66 Channel Bandwidth: 20MHz	457.09mW
		452.90mW
	NR Band n66 Channel Bandwidth: 30MHz	459.20mW
346.74mW		
NR Band 77C Channel Bandwidth: 20MHz	349.95mW	
	350.75mW	
NR Band 77C Channel Bandwidth: 30MHz		



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MAX. EIRP POWER	NR Band 77C Channel Bandwidth: 50MHz	347.54mW
	NR Band 77C Channel Bandwidth: 60MHz	349.95mW
	NR Band 77C Channel Bandwidth: 70MHz	347.54mW
	NR Band 77C Channel Bandwidth: 80MHz	347.54mW
	NR Band 77C Channel Bandwidth: 90MHz	346.74mW
	NR Band 77C Channel Bandwidth: 100MHz	352.37mW
	NR Band 77C-HPUE Channel Bandwidth: 20MHz	669.88mW
	NR Band 77C-HPUE Channel Bandwidth: 30MHz	676.08mW
	NR Band 77C-HPUE Channel Bandwidth: 40MHz	677.64mW
	NR Band 77C-HPUE Channel Bandwidth: 50MHz	671.43mW
	NR Band 77C-HPUE Channel Bandwidth: 60MHz	676.08mW
	NR Band 77C-HPUE Channel Bandwidth: 70MHz	671.43mW
	NR Band 77C-HPUE Channel Bandwidth: 80MHz	671.43mW
	NR Band 77C-HPUE Channel Bandwidth: 90MHz	669.88mW
	NR Band 77C-HPUE Channel Bandwidth: 100MHz	680.77mW
ANTENNA TYPE	Monopole Antenna with 3.09 dBi gain for NR Band n66 Monopole Antenna with 1.5 dBi gain for NR Band n77C/n77C-HPUE	
HW VERSION	P4.1	
SW VERSION	MODEMSA515M_03.18.00	



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I/O PORTS	Refer to user's manual
CABLE SUPPLIED	N/A
EXTREME TEMPERATURE	-40-85 °C
EXTREME VOLTAGE	EUT 3.8V - EUT 4.2V

NOTE:

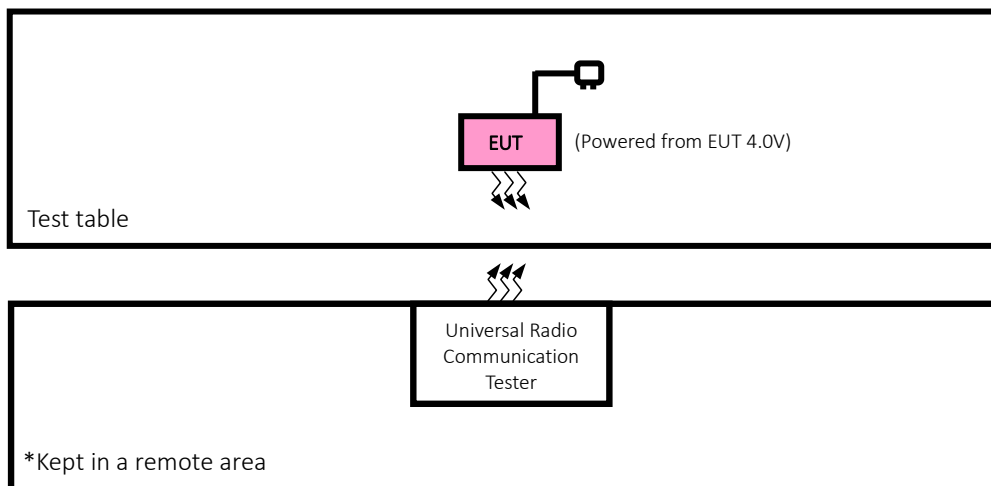
1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
2. The EUT incorporates a SISO function. Physically, the EUT provides one completed transmitter and one receiver.

MODULATION MODE	TX FUNCTION
5G NR	1TX/4RX

3. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.
4. Max ERP/EIRP is according to Max conducted power calculate for SA.
5. The N77C-HPUE induced N77C.

2.2 CONFIGURATION OF SYSTEM UNDER TEST

FOR RADIATION EMISSION TEST



2.3 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	DC source	LONG WEI	PS-6403D	010934269	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	DC Line: Unshielded, Detachable 1.8m

2.4 TEST ITEM AND TEST CONFIGURATION

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports. The worst case was found when positioned on Y-plane for EIRP and X-axis for radiated emission. Following channel(s) was (were) selected for the final test as listed below:

EUT CONFIGURE MODE	DESCRIPTION
A	EUT + DC source + 5G NR link

5G NR n66 MODE(DC_71A_n66A)

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CP-OFDM CHANNEL	AVAILABLE DFT-S-OFDM CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE(DFT-S-OFDM) (INCLUDE CP-OFDM)
A	EIRP	342500 to 355500	342500 to 355500	Low, Middle, High	5MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
		343000 to 355000	343000 to 355000	Low, Middle, High	10MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
		343500 to 354500	343500 to 354500	Low, Middle, High	15MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
		344000 to 354000	344000 to 354000	Low, Middle, High	20MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
		345000 to 353000	345000 to 353000	Low, Middle, High	30MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
		346000 to 352000	346000 to 352000	Low, Middle, High	40MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset



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A	Frequency stability	346000 to 352000	346000 to 352000	Low, Middle, High	40MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	Outer_ Full
A	OCCUPIED BANDWIDTH	342500 to 355500	342500 to 355500	Low, Middle, High	5MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	Outer_ Full
		343000 to 355000	343000 to 355000	Low, Middle, High	10MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	Outer_ Full
		343500 to 354500	343500 to 354500	Low, Middle, High	15MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	Outer_ Full
		344000 to 354000	344000 to 354000	Low, Middle, High	20MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	Outer_ Full
		345000 to 353000	345000 to 353000	Low, Middle, High	30MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	Outer_ Full
		346000 to 352000	346000 to 352000	Low, Middle, High	40MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	Outer_ Full
A	BAND EDGE	502008 to 535998	502008 to 535998	Low	5MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset Outer_ Full
				High	5MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 24RB Offset Outer_ Full
		503004 to 534996	503004 to 534996	Low	10MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset Outer_ Full
				High	10MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 51RB Offset Outer_ Full
		504006 to 534000	504006 to 534000	Low	15MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset Outer_ Full
				High	15MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 78RB Offset Outer_ Full
		505008 to 532998	505008 to 532998	Low	20MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset Outer_ Full
				High	20MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 105RB Offset Outer_ Full
		506004 to 531996	506004 to 531996	Low	30MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset Outer_ Full
				High	30MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 159RB Offset Outer_ Full
		508002 to 529998	508002 to 529998	Low	40MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset Outer_ Full
				High	40MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 215RB Offset Outer_ Full
A	CONDUCTED EMISSION	342500 to 355500	342500 to 355500	Low, Middle, High	5MHz	Pi/2BPSK, QPSK	1RB/ 0RB Offset



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		343000 to 355000	343000 to 355000	Low, Middle, High	10MHz	Pi/2BPSK,QPSK	1RB/ 0RB Offset
		343500 to 354500	343500 to 354500	Low, Middle, High	15MHz	Pi/2BPSK,QPSK	1RB/ 0RB Offset
		344000 to 354000	344000 to 354000	Low, Middle, High	20MHz	Pi/2BPSK,QPSK	1RB/ 0RB Offset
		345000 to 353000	345000 to 353000	Low, Middle, High	30MHz	Pi/2BPSK,QPSK	1RB/ 0RB Offset
		346000 to 352000	346000 to 352000	Low, Middle, High	40MHz	Pi/2BPSK,QPSK	1RB/ 0RB Offset
A	RADIATED EMISSION	342500 to 355500	342500 to 355500	Low, Middle, High	5MHz	Pi/2BPSK,QPSK	1RB/ 0RB Offset
		343000 to 355000	343000 to 355000	Low, Middle, High	10MHz	Pi/2BPSK,QPSK	1RB/ 0RB Offset
		343500 to 354500	343500 to 354500	Low, Middle, High	15MHz	Pi/2BPSK,QPSK	1RB/ 0RB Offset
		344000 to 354000	344000 to 354000	Low, Middle, High	20MHz	Pi/2BPSK,QPSK	1RB/ 0RB Offset
		345000 to 353000	345000 to 353000	Low, Middle, High	30MHz	Pi/2BPSK,QPSK	1RB/ 0RB Offset
		346000 to 352000	346000 to 352000	Low, Middle, High	40MHz	Pi/2BPSK,QPSK	1RB/ 0RB Offset

Note: 1.This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in Pi/2BPSK modulation.

5G NR n77C MODE(DC_2A_n77C, DC_5A_n77C, DC_7A_n77C, DC_13A_n77C, DC_41A_n77C, DC_66A_n77C)

EUT CONFIGURE MODE	TEST ITEM	AVAILAB LE CP-OFDM CHANNE L	AVAILABL E DFT-S-OFDM CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE(DFT-S-OFDM) (INCLUDE CP-OFDM)
A	EIRP	647334 to 664666	647334 to 664666	Low, Middle, High	20MHz	Pi/2BPSK,QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
		647668 to 664332	647668 to 664332	Low, Middle, High	30MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
		648000 to 664000	648000 to 664000	Low, Middle, High	40MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
		648334 to 663666	648334 to 663666	Low, Middle, High	50MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
		648668 to 663332	648668 to 663332	Low, Middle, High	60MHz	Pi/2BPSK,QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
		649000 to 663000	649000 to 663000	Low, Middle, High	70MHz	Pi/2BPSK,QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset



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		649334 to 662666	649334 to 662666	Low, Middle, High	80MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
		649668 to 662332	649668 to 662332	Low, Middle, High	90MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
		650000 to 662000	650000 to 662000	Low, Middle, High	100MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset

Note: 1.This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in Pi/2BPSK modulation.

5G NR n77C-HPUE MODE(DC_2A_n77C-HPUE, DC_5A_n77C-HPUE, DC_7A_n77C-HPUE, DC_13A_n77C-HPUE, DC_41A_n77C-HPUE, DC_66A_n77C-HPUE)

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CP-OFDM CHANNEL	AVAILABLE DFT-S-OFDM CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE(DFT-S-OFDM) (INCLUDE CP-OFDM)
A	EIRP	647334 to 664666	647334 to 664666	Low, Middle, High	20MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
		647668 to 664332	647668 to 664332	Low, Middle, High	30MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
		648000 to 664000	648000 to 664000	Low, Middle, High	40MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
		648334 to 663666	648334 to 663666	Low, Middle, High	50MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
		648668 to 663332	648668 to 663332	Low, Middle, High	60MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
		649000 to 663000	649000 to 663000	Low, Middle, High	70MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
		649334 to 662666	649334 to 662666	Low, Middle, High	80MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
		649668 to 662332	649668 to 662332	Low, Middle, High	90MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
		650000 to 662000	650000 to 662000	Low, Middle, High	100MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
A	Frequency stability	650000 to 662000	650000 to 662000	Low, Middle, High	100MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	Outer_ Full
A	OCCUPIED BANDWIDTH	647334 to 664666	647334 to 664666	Low, Middle, High	20MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	Outer_ Full
		647668 to 664332	647668 to 664332	Low, Middle, High	30MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	Outer_ Full
		648000 to 664000	648000 to 664000	Low, Middle, High	40MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	Outer_ Full
		648334 to 663666	648334 to 663666	Low, Middle, High	50MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	Outer_ Full
		648668 to 663332	648668 to 663332	Low, Middle, High	60MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	Outer_ Full



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		649000 to 663000	649000 to 663000	Low, Middle, High	70MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	Outer_ Full
		649334 to 662666	649334 to 662666	Low, Middle, High	80MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	Outer_ Full
		649668 to 662332	649668 to 662332	Low, Middle, High	90MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	Outer_ Full
		650000 to 662000	650000 to 662000	Low, Middle, High	100MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	Outer_ Full
A	BAND EDGE	647334 to 664666	647334 to 664666	Low	20MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
				High	20MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 50RB Offset
		647668 to 664332	647668 to 664332	Low	30MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
				High	30MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 77RB Offset
		648000 to 664000	648000 to 664000	Low	40MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
				High	40MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 105RB Offset
		648334 to 663666	648334 to 663666	Low	50MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
				High	50MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 132RB Offset
		648668 to 663332	648668 to 663332	Low	60MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
				High	60MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 161RB Offset
		649000 to 663000	649000 to 663000	Low	70MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 161RB Offset
				High	70MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 188RB Offset
		649334 to 662666	649334 to 662666	Low	80MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
				High	80MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 216RB Offset
		649668 to 662332	649668 to 662332	Low	90MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
				High	90MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 244RB Offset



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		650000 to 662000	650000 to 662000	Low	100MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	1RB/ 0RB Offset
				High	100MHz	Pi/2BPSK, QPSK, 16QAM, 64QAM, 256QAM	Outer_Full
							1RB/ 272RB Offset
							Outer_Full
A	CONDUCTED EMISSION	647334 to 664666	647334 to 664666	Low, Middle, High	20MHz	Pi/2BPSK,QPSK,	1RB/ 0RB Offset
		647668 to 664332	647668 to 664332	Low, Middle, High	30MHz	Pi/2BPSK,QPSK	1RB/ 0RB Offset
		648000 to 664000	648000 to 664000	Low, Middle, High	40MHz	Pi/2BPSK,QPSK,	1RB/ 0RB Offset
		648334 to 663666	648334 to 663666	Low, Middle, High	50MHz	Pi/2BPSK,QPSK	1RB/ 0RB Offset
		648668 to 663332	648668 to 663332	Low, Middle, High	60MHz	Pi/2BPSK,QPSK,	1RB/ 0RB Offset
		649000 to 663000	649000 to 663000	Low, Middle, High	80MHz	Pi/2BPSK,QPSK	1RB/ 0RB Offset
		649334 to 662666	649334 to 662666	Low, Middle, High	90MHz	Pi/2BPSK,QPSK,	1RB/ 0RB Offset
		649668 to 662332	649668 to 662332	Low, Middle, High	100MHz	Pi/2BPSK,QPSK	1RB/ 0RB Offset
A	RADIATED EMISSION	647334 to 664666	647334 to 664666	Low, Middle, High	20MHz	Pi/2BPSK,QPSK,	1RB/ 0RB Offset
		647668 to 664332	647668 to 664332	Low, Middle, High	30MHz	Pi/2BPSK,QPSK	1RB/ 0RB Offset
		648000 to 664000	648000 to 664000	Low, Middle, High	40MHz	Pi/2BPSK,QPSK,	1RB/ 0RB Offset
		648334 to 663666	648334 to 663666	Low, Middle, High	50MHz	Pi/2BPSK,QPSK	1RB/ 0RB Offset
		648668 to 663332	648668 to 663332	Low, Middle, High	60MHz	Pi/2BPSK,QPSK,	1RB/ 0RB Offset
		649000 to 663000	649000 to 663000	Low, Middle, High	70MHz	Pi/2BPSK,QPSK	1RB/ 0RB Offset
		649334 to 662666	649334 to 662666	Low, Middle, High	80MHz	Pi/2BPSK,QPSK,	1RB/ 0RB Offset
		649668 to 662332	649668 to 662332	Low, Middle, High	90MHz	Pi/2BPSK,QPSK	1RB/ 0RB Offset
		650000 to 662000	650000 to 662000	Low, Middle, High	100MHz	Pi/2BPSK,QPSK,	1RB/ 0RB Offset

Note: 1.This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in Pi/2BPSK modulation.



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TEST CONDITION:

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
ERP&EIRP	23deg. C, 70%RH	EUT 4.0V	Jace Hu
FREQUENCY STABILITY	23deg. C, 70%RH	EUT 4.0V	James Fu
OCCUPIED BANDWIDTH	23deg. C, 70%RH	EUT 4.0V	James Fu
BAND EDGE	23deg. C, 70%RH	EUT 4.0V	James Fu
CONDUCTED EMISSION	23deg. C, 70%RH	EUT 4.0V	James Fu
RADIATED EMISSION	23deg. C, 70%RH	EUT 4.0V	Jace Hu
PEAK TO AVERAGE RATIO	23deg. C, 70%RH	EUT 4.0V	James Fu



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2.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC 47 CFR Part 2

FCC 47 CFR Part 27

KDB 971168 D01 Power Meas License Digital Systems v03r01

ANSI/TIA/EIA-603-D

ANSI/TIA/EIA-603-E

ANSI C63.26-2015

NOTE: All test items have been performed and recorded as per the above standards.



3 TEST TYPES AND RESULTS

3.1 OUTPUT POWER MEASUREMENT

3.1.1 LIMITS OF OUTPUT POWER MEASUREMENT

Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP

According to the specific rule Part 27.50(j)(4), Mobile and portable stations are limited to 1 Watt EIRP. Mobile and portable stations operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.

3.1.2 TEST PROCEDURES

EIRP MEASUREMENT:

Per KDB 971168 D01 Power Meas License Digital Systems v03r01 or subclause 5.2.5.5 of ANSI C63.26-2015, the relevant equation for determining the ERP or EIRP from the conducted RF output power measured using the guidance provided above is:

$$\text{ERP or EIRP} = P_{\text{Meas}} + G_{\text{T}} - L_{\text{C}}$$

Where:

ERP or EIRP = effective radiated power or equivalent isotropically radiated power, respectively

(expressed in the same units as P_{Meas} , typically dBW or dBm);

P_{Meas} = measured transmitter output power or PSD, in dBm or dBW;

G_{T} = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

L_{C} = signal attenuation in the connecting cable between the transmitter and antenna, in dB.



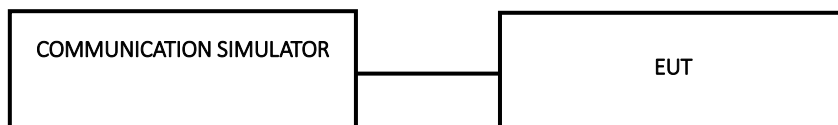
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CONDUCTED POWER MEASUREMENT:

- a. The EUT was set up for the maximum power with LTE link data modulation and link up with simulator.
- b. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

3.1.3 TEST SETUP

CONDUCTED POWER MEASUREMENT:



For the actual test configuration, please refer to the attached file (Test Setup Photo).

3.1.4 TEST RESULTS

AVERAGE CONDUCTED OUTPUT POWER (dBm)



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Test Report No.: W7L-P22020005RF03

5G ENDC:
N66-LTE71

BW	MCS Index	RB	RB Size	RB Offset	Low CH 342500	Mid CH 349000	High CH 355500	Max. Tune-up (dBm)
					Frequency 1712.5MHz	Frequency 1745MHz	Frequency 1777.5MHz	
5M	CP-OFDM QPSK	Outer	1	0	19.92	19.97	19.88	21
			1	24	19.87	20.10	20.07	21
			2	0	20.07	20.15	19.99	21
			2	23	20.22	20.17	19.98	21
			25	0	19.98	20.05	20.13	21
		Inner	1	1	22.16	22.20	22.26	24
			1	23	22.18	22.27	22.15	24
			13	6	22.14	22.24	22.29	24
		CP-OFDM 16QAM	Outer	1	0	19.64	19.78	19.64
	1			24	19.61	19.80	19.52	21
	2			0	19.51	19.68	19.44	21
	2			23	19.51	19.69	19.43	21
	25			0	19.55	19.65	19.37	21
	Inner		1	1	22.03	22.17	21.80	23
			1	23	21.86	21.90	21.81	23
			13	6	22.04	22.14	21.92	23
	CP-OFDM 64QAM		Outer	1	0	19.64	19.84	19.58
		1		24	19.74	19.68	19.75	21
		2		0	19.73	19.67	19.78	21
		2		23	19.57	19.77	19.83	21
		25		0	19.75	19.92	19.94	21
		Inner	1	1	20.28	20.33	20.07	21
			1	23	20.18	20.22	20.15	21
			13	6	20.05	20.19	20.08	21
		CP-OFDM 256QAM	Outer	1	0	17.23	17.18	17.08
	1			24	16.96	17.01	17.05	18
	2			0	17.07	17.12	17.20	18
	2			23	17.13	17.10	17.23	18
	25			0	17.19	17.14	17.08	18
	Inner		1	1	16.98	17.19	17.07	18
			1	23	17.07	16.98	17.08	18
			13	6	16.89	16.88	16.99	18

BW	MCS Index	RB	RB Size	RB Offset	Low CH 343000	Mid CH 349000	High CH 355000	Max. Tune-up (dBm)
					Frequency 1715MHz	Frequency 1745MHz	Frequency 1775MHz	
10M	CP-OFDM QPSK	Outer	1	0	19.65	19.93	19.41	21
			1	51	19.91	19.82	19.48	21
			2	0	19.49	19.71	19.46	21
			2	50	19.61	19.67	19.23	21
			52	0	19.61	19.72	19.49	21
		Inner	1	1	22.09	22.28	22.13	24
			1	50	22.10	22.42	22.18	24
			26	13	22.26	22.25	22.06	24
		CP-OFDM 16QAM	Outer	1	0	19.59	19.63	19.52
	1			51	19.79	19.73	19.67	21
	2			0	19.64	19.80	19.47	21
	2			50	19.42	19.60	19.56	21
	52			0	19.55	19.76	19.50	21
	Inner		1	1	22.03	22.09	22.02	23
			1	50	22.09	22.24	22.05	23
			26	13	22.16	22.22	21.94	23
	CP-OFDM 64QAM		Outer	1	0	19.67	19.62	19.52
		1		51	19.55	19.74	19.34	21
		2		0	19.62	19.69	19.57	21
		2		50	19.49	19.66	19.31	21
		52		0	19.43	19.62	19.44	21
		Inner	1	1	20.09	20.12	19.99	21
			1	50	20.05	20.37	19.88	21
			26	13	20.08	20.25	19.98	21
		CP-OFDM 256QAM	Outer	1	0	17.15	17.20	16.87
	1			51	17.09	17.24	16.98	18
	2			0	17.05	17.14	17.03	18
	2			50	16.82	17.24	16.88	18
	52			0	17.08	17.20	17.00	18
	Inner		1	1	16.96	17.21	16.87	18
			1	50	17.15	17.19	16.73	18
			26	13	17.05	17.19	16.89	18

BW	MCS Index	RB	RB Size	RB Offset	Low CH 343500	Mid CH 349000	High CH 354500	Max. Tune-up (dBm)
					Frequency 1717.5MHz	Frequency 1745MHz	Frequency 1772.5MHz	
15M	CP-OFDM QPSK	Outer	1	0	19.55	19.87	19.66	21
			1	78	19.54	19.74	19.60	21
			2	0	19.65	19.78	19.52	21
			2	77	19.70	19.68	19.48	21
			79	0	19.78	19.75	19.48	21
		Inner	1	1	22.19	22.07	22.92	24
			1	77	22.14	22.13	22.88	24
			39	19	22.20	22.13	22.14	24
		CP-OFDM 16QAM	Outer	1	0	19.77	19.75	19.72
	1			78	19.63	19.77	19.37	21
	2			0	19.71	19.84	19.64	21
	2			77	19.85	19.93	19.44	21
	79			0	19.86	19.70	19.51	21
	Inner		1	1	22.24	22.11	22.01	23
			1	77	22.19	22.17	21.96	23
			39	19	22.11	22.15	22.00	23
	CP-OFDM 64QAM		Outer	1	0	19.74	19.67	19.70
		1		78	19.76	19.63	19.74	21
		2		0	19.61	19.74	19.70	21
		2		77	19.73	19.53	19.65	21
		79		0	19.59	19.79	19.80	21
		Inner	1	1	20.03	20.21	20.05	21
			1	77	20.08	20.12	20.28	21
			39	19	20.21	20.20	20.13	21
		CP-OFDM 256QAM	Outer	1	0	17.12	17.05	17.08
	1			78	17.14	17.01	17.12	18
	2			0	16.99	17.12	17.08	18
	2			77	17.11	16.91	17.03	18
	79			0	16.97	17.17	17.18	18
	Inner		1	1	16.96	17.14	16.98	18
			1	77	17.01	17.05	17.21	18
			39	19	17.14	17.13	17.06	18

BW	MCS Index	RB	RB Size	RB Offset	Low CH 344000	Mid CH 349000	High CH 354000	Max. Tune-up (dBm)
					Frequency 1720MHz	Frequency 1745MHz	Frequency 1770MHz	
20M	CP-OFDM QPSK	Outer	1	0	20.01	20.06	19.97	21
			1	105	19.96	20.19	20.16	21
			2	0	20.16	20.24	20.08	21
			2	104	20.31	20.26	20.07	21
			106	0	20.07	20.14	20.22	21
		Inner	1	1	22.15	22.19	22.25	24
			1	104	22.17	22.26	22.14	24
			53	26	22.13	22.23	22.28	24
		CP-OFDM 16QAM	Outer	1	0	19.66	19.84	19.76
	1			105	19.74	19.64	19.88	21
	2			0	19.82	19.71	19.64	21
	2			104	19.57	19.63	19.73	21
	106			0	19.56	19.59	19.66	21
	Inner		1	1	22.17	22.29	22.45	23
			1	104	22.37	22.34	22.31	23
			53	26	22.24	22.16	22.41	23
	CP-OFDM 64QAM		Outer	1	0	19.53	19.73	19.47
		1		105	19.63	19.57	19.64	21
		2		0	19.62	19.56	19.67	21
		2		104	19.46	19.66	19.72	21
		106		0	19.64	19.81	19.83	21
		Inner	1	1	20.27	20.32	20.06	21
			1	104	20.17	20.21	20.14	21
			53	26	20.04	20.18	20.07	21
		CP-OFDM 256QAM	Outer	1	0	17.12	17.07	16.97
	1			105	16.85	16.90	16.94	18
	2			0	16.96	17.01	17.09	18
	2			104	17.02	16.99	17.12	18
	106			0	17.08	17.03	16.97	18
	Inner		1	1	17.27	17.48	17.36	18
			1	104	17.36	17.27	17.37	18
			53	26	17.18	17.17	17.28	18

BW	MCS Index	RB	RB Size	RB Offset	Low CH 345000	Mid CH 349000	High CH 353000	Max. Tune-up (dBm)
					Frequency 1725MHz	Frequency 1745MHz	Frequency 1765MHz	
30M	CP-OFDM QPSK	Outer	1	0	20.15	20.01	20.24	21
			1	159	20.36	20.22	20.11	21
			2	0	20.23	20.29	20.30	21
			2	158	20.41	20.33	20.14	21
			160	0	20.07	20.08	19.96	21
		Inner	1	1	22.58	22.47	22.77	24
			1	158	22.48	22.66	22.36	24
			80	40	22.46	22.68	22.41	24
		CP-OFDM 16QAM	Outer	1	0	20.27	19.95	20.45
	1			159	20.27	20.17	20.03	21
	2			0	20.19	20.27	20.37	21
	2			158	20.24	20.20	20.02	21
	160			0	20.26	20.31	20.20	21
	Inner		1	1	22.70	22.56	22.95	23
			1	158	22.83	22.67	22.54	23
			80	40	22.37	22.63	22.53	23
	CP-OFDM 64QAM		Outer	1	0	20.26	20.02	20.19
		1		159	20.32	20.18	20.15	21
		2		0	20.25	20.13	20.09	21
		2		158	20.48	20.22	20.10	21
		160		0	20.47	20.40	20.04	21
		Inner	1	1	20.57	20.41	20.58	21
			1	158	20.57	20.44	20.43	21
			80	40	20.39	20.51	20.28	21
		CP-OFDM 256QAM	Outer	1	0	17.37	17.05	17.56
	1			159	17.28	17.23	17.23	18
	2			0	17.20	17.17	17.12	18
	2			158	17.38	17.24	17.04	18
	160			0	16.99	17.01	16.94	18
	Inner		1	1	17.57	17.70	17.84	18
			1	158	17.81	17.70	17.66	18
			80	40	17.31	17.41	17.34	18

BW	MCS Index	RB	RB Size	RB Offset	Low CH 346000	Mid CH 349000	High CH 352000	Max. Tune-up (dBm)
					Frequency 1730MHz	Frequency 1745MHz	Frequency 1760MHz	
40M	CP-OFDM QPSK	Outer	1	0	20.06	20.19	19.97	21
			1	215	19.87	20.27	20.14	21
			2	0	20.23	20.17	20.17	21
			2	214	20.25	20.09	20.08	21
			216	0	20.08	20.31	20.22	21
		Inner	1	1	22.51	22.55	22.72	24
			1	214	22.67	22.59	22.75	24
			108	54	22.42	22.60	22.50	24
		CP-OFDM 16QAM	Outer	1	0	19.79	20.08	20.20
	1			215	20.01	19.96	20.25	21
	2			0	20.17	20.05	20.06	21
	2			214	20.19	20.02	20.08	21
	216			0	19.96	20.03	19.99	21
	Inner		1	1	22.52	22.36	22.63	23
			1	214	22.95	22.68	22.57	23
			108	54	22.52	22.46	22.39	23
	CP-OFDM 64QAM		Outer	1	0	19.80	19.96	20.09
		1		215	20.10	20.02	20.43	21
		2		0	20.03	20.08	20.16	21
		2		214	20.14	19.96	19.99	21
		216		0	20.14	19.91	19.98	21
		Inner	1	1	20.44	20.51	20.81	21
			1	214	20.77	20.52	20.72	21
			108	54	20.68	20.52	20.53	21
		CP-OFDM 256QAM	Outer	1	0	17.76	17.63	17.83
	1			215	17.57	17.73	17.69	18
	2			0	17.51	17.61	17.75	18
	2			214	17.83	17.51	17.85	18
	216			0	17.42	17.51	17.57	18
	Inner		1	1	16.94	17.02	17.25	18
			1	214	17.03	17.08	17.28	18
			108	54	16.90	16.99	16.93	18

BW	MCS Index	RB	RB Size	RB Offset	Low CH 342500	Mid CH 349000	High CH 355500	Max. Tune-up (dBm)
					Frequency 1712.5MHz	Frequency 1745MHz	Frequency 1777.5MHz	
5M	DFT-s-OFDM Pi/2 BPSK	Outer	1	0	22.58	22.71	22.63	24
			1	24	22.67	22.72	22.77	24
			2	0	22.45	22.66	22.56	24
			2	23	22.59	22.53	22.50	24
			25	0	22.30	22.70	22.34	24
		Inner	1	1	22.62	22.57	22.41	24
			1	23	22.43	22.51	22.37	24
			12	6	22.47	22.60	22.43	24
		DFT-s-OFDM QPSK	Outer	1	0	22.58	22.57	22.40
	1			24	22.52	22.53	22.41	24
	2			0	22.45	22.56	22.27	24
	2			23	22.44	22.59	22.24	24
	25			0	22.47	22.64	22.38	24
	Inner		1	1	22.47	22.44	22.26	24
			1	23	22.41	22.41	22.25	24
			12	6	22.35	22.44	22.31	24
	DFT-s-OFDM 16QAM		Outer	1	0	20.95	21.15	20.91
		1		24	21.18	21.11	20.77	22
		2		0	21.11	21.09	20.80	22
		2		23	21.01	21.02	20.81	22
		25		0	20.90	20.99	20.91	22
		Inner	1	1	21.79	21.92	21.72	23
			1	23	21.78	21.90	21.81	23
			12	6	21.82	21.97	21.78	23
		DFT-s-OFDM 64QAM	Outer	1	0	20.80	20.97	20.68
	1			24	20.81	20.90	20.63	22
	2			0	20.68	20.85	20.52	22
	2			23	20.94	20.80	21.01	22
	25			0	20.88	20.74	20.87	22
	Inner		1	1	20.90	21.00	21.07	22
			1	23	20.65	20.98	20.64	22
			12	6	20.60	20.89	20.76	22
	DFT-s-OFDM 256QAM		Outer	1	0	20.47	20.51	20.34
		1		24	20.46	20.56	20.32	22
		2		0	20.36	20.56	20.20	22
		2		23	20.30	20.57	20.24	22
25		0		20.17	20.43	20.38	22	
Inner		1	1	20.87	20.85	20.69	22	
		1	23	20.90	20.98	20.60	22	
		12	6	20.83	20.91	20.59	22	

BW	MCS Index	RB	RB Size	RB Offset	Low CH 343000	Mid CH 349000	High CH 355000	Max. Tune-up (dBm)
					Frequency 1715MHz	Frequency 1745MHz	Frequency 1775MHz	
10M	DFT-s-OFDM Pi/2 BPSK	Outer	1	0	22.59	22.57	22.46	24
			1	51	22.54	22.61	22.44	24
			2	0	22.71	22.68	22.56	24
			2	50	22.64	22.62	22.53	24
			50	0	22.60	22.56	22.49	24
		Inner	1	1	22.56	22.53	22.37	24
			1	50	22.46	22.57	22.40	24
			25	12	22.42	22.53	22.47	24
		DFT-s-OFDM QPSK	Outer	1	0	22.48	22.51	22.45
	1			51	22.50	22.61	22.33	24
	2			0	22.46	22.55	22.37	24
	2			50	22.41	22.54	22.25	24
	50			0	22.43	22.60	22.36	24
	Inner		1	1	22.44	22.48	22.36	24
			1	50	22.39	22.53	22.29	24
			25	12	22.43	22.55	22.38	24
	DFT-s-OFDM 16QAM		Outer	1	0	21.11	21.15	21.16
		1		51	20.97	21.25	20.94	22
		2		0	20.98	21.08	20.98	22
		2		50	21.00	21.13	21.07	22
		50		0	20.96	21.07	21.10	22
		Inner	1	1	21.93	21.97	21.80	23
			1	50	21.83	22.07	21.62	23
			25	12	21.77	21.93	21.79	23
		DFT-s-OFDM 64QAM	Outer	1	0	20.90	20.93	20.75
	1			51	20.71	20.92	20.65	22
	2			0	20.82	20.88	20.67	22
	2			50	20.92	21.01	20.63	22
	50			0	20.87	21.12	20.74	22
	Inner		1	1	20.56	20.89	20.44	22
			1	50	20.49	20.63	20.53	22
			25	12	20.57	20.70	20.63	22
	DFT-s-OFDM 256QAM		Outer	1	0	20.57	20.52	20.30
		1		51	20.69	20.42	20.28	22
		2		0	20.56	20.54	20.46	22
		2		50	20.61	20.53	20.34	22
50		0		20.57	20.49	20.44	22	
Inner		1	1	21.19	21.08	20.99	22	
		1	50	21.05	21.01	20.83	22	
		25	12	21.17	20.93	20.90	22	

BW	MCS Index	RB	RB Size	RB Offset	Low CH 343500	Mid CH 349000	High CH 354500	Max. Tune-up (dBm)
					Frequency 1717.5MHz	Frequency 1745MHz	Frequency 1772.5MHz	
15M	DFT-s-OFDM Pi/2 BPSK	Outer	1	0	22.72	22.67	22.53	24
			1	78	22.69	22.72	22.64	24
			2	0	22.61	22.60	22.57	24
			2	77	22.67	22.61	22.55	24
			75	0	22.54	22.67	22.62	24
		Inner	1	1	22.68	22.70	22.47	24
			1	77	22.63	22.69	22.52	24
			36	18	22.58	22.71	22.44	24
		DFT-s-OFDM QPSK	Outer	1	0	22.55	22.74	22.43
	1			78	22.53	22.66	22.33	24
	2			0	22.54	22.58	22.27	24
	2			77	22.48	22.51	22.32	24
	75			0	22.43	22.49	22.21	24
	Inner		1	1	22.56	22.56	22.30	24
			1	77	22.55	22.64	22.34	24
			36	18	22.56	22.49	22.44	24
	DFT-s-OFDM 16QAM		Outer	1	0	21.03	21.07	20.90
		1		78	21.00	21.05	20.82	22
		2		0	21.03	21.07	20.91	22
		2		77	21.03	21.02	20.83	22
		75		0	21.13	21.09	20.74	22
		Inner	1	1	21.94	21.95	21.95	23
			1	77	22.03	22.09	21.96	23
			36	18	22.02	22.03	21.99	23
		DFT-s-OFDM 64QAM	Outer	1	0	20.93	20.94	20.62
	1			78	20.83	20.72	20.60	22
	2			0	20.66	20.74	20.75	22
	2			77	20.90	20.91	20.87	22
	75			0	20.84	20.96	20.77	22
	Inner		1	1	21.11	21.01	20.94	22
			1	77	21.02	21.03	20.97	22
			36	18	20.91	21.10	20.98	22
	DFT-s-OFDM 256QAM		Outer	1	0	20.32	20.41	20.35
		1		78	20.46	20.47	20.42	22
		2		0	20.37	20.45	20.51	22
		2		77	20.46	20.37	20.56	22
75		0		20.46	20.46	20.38	22	
Inner		1	1	20.84	20.89	20.76	22	
		1	77	20.92	20.92	21.04	22	
		36	18	21.07	20.86	20.97	22	

BW	MCS Index	RB	RB Size	RB Offset	Low CH 344000	Mid CH 349000	High CH 354000	Max. Tune-up (dBm)
					Frequency 1720MHz	Frequency 1745MHz	Frequency 1770MHz	
20M	DFT-s-OFDM Pi/2 BPSK	Outer	1	0	22.85	22.75	22.73	24
			1	105	22.74	22.67	22.61	24
			2	0	22.78	22.66	22.74	24
			2	104	22.71	22.57	22.57	24
			100	0	22.67	22.49	22.63	24
		Inner	1	1	22.69	22.70	22.74	24
			1	104	22.61	22.68	22.66	24
			50	25	22.53	22.70	22.43	24
		DFT-s-OFDM QPSK	Outer	1	0	22.53	22.51	22.50
	1			105	22.57	22.52	22.47	24
	2			0	22.54	22.62	22.44	24
	2			104	22.53	22.47	22.30	24
	100			0	22.61	22.55	22.50	24
	Inner		1	1	22.48	22.47	22.52	24
			1	104	22.54	22.46	22.49	24
			50	25	22.61	22.48	22.42	24
	DFT-s-OFDM 16QAM		Outer	1	0	21.12	20.92	20.95
		1		105	21.07	21.11	20.80	22
		2		0	21.09	21.05	20.96	22
		2		104	21.14	21.02	20.85	22
		100		0	20.84	21.10	20.92	22
		Inner	1	1	22.09	22.03	22.02	23
			1	104	22.16	22.11	21.75	23
			50	25	22.21	22.19	21.82	23
		DFT-s-OFDM 64QAM	Outer	1	0	20.89	20.85	20.95
	1			105	20.87	20.96	20.59	22
	2			0	20.87	20.91	20.84	22
	2			104	20.80	20.85	20.66	22
	100			0	20.70	20.93	20.71	22
	Inner		1	1	20.99	21.08	20.94	22
			1	104	21.07	20.98	20.93	22
			50	25	20.98	20.89	21.07	22
	DFT-s-OFDM 256QAM		Outer	1	0	20.56	20.63	20.33
		1		105	20.53	20.49	20.31	22
		2		0	20.56	20.66	20.52	22
		2		104	20.41	20.65	20.38	22
100		0		20.30	20.51	20.33	22	
Inner		1	1	21.12	21.06	20.82	22	
		1	104	21.00	21.11	20.76	22	
		50	25	20.91	21.15	21.04	22	



Test Report No.: W7L-P22020005RF03

BW	MCS Index	RB	RB Size	RB Offset	Low CH 345000	Mid CH 349000	High CH 353000	Max. Tune-up (dBm)
					Frequency 1725MHz	Frequency 1745MHz	Frequency 1765MHz	
30M	DFT-s-OFDM Pi/2 BPSK	Outer	1	0	22.94	22.92	22.83	24
			1	159	23.05	23.12	23.11	24
			2	0	22.97	23.06	22.79	24
			2	158	22.84	23.04	22.88	24
			160	0	22.79	23.10	22.80	24
		Inner	1	1	23.01	23.05	22.94	24
			1	158	22.96	23.06	23.04	24
			80	40	23.10	23.19	23.11	24
		DFT-s-OFDM QPSK	Outer	1	0	23.00	22.77	23.04
	1			159	22.98	22.90	23.11	24
	2			0	23.15	22.94	22.94	24
	2			158	22.95	23.04	23.03	24
	160			0	22.90	23.04	23.08	24
	Inner		1	1	23.10	22.88	22.87	24
			1	158	23.17	23.04	23.16	24
			80	40	23.25	23.07	22.92	24
	DFT-s-OFDM 16QAM		Outer	1	0	21.50	21.38	21.56
		1		159	21.69	21.49	21.34	22
		2		0	21.43	21.51	21.52	22
		2		158	21.70	21.48	21.39	22
		160		0	21.61	21.49	21.23	22
		Inner	1	1	22.49	22.61	22.52	23
			1	158	22.67	22.43	22.38	23
			80	40	22.72	22.44	22.28	23
		DFT-s-OFDM 64QAM	Outer	1	0	20.77	20.78	20.87
	1			159	21.00	20.86	20.62	22
	2			0	20.78	20.79	20.67	22
	2			158	20.92	21.07	20.70	22
	160			0	20.90	21.01	20.64	22
	Inner		1	1	21.07	20.95	21.08	22
			1	158	21.19	21.12	20.89	22
			80	40	21.12	21.21	20.96	22
	DFT-s-OFDM 256QAM		Outer	1	0	20.49	20.44	20.48
		1		159	20.66	20.37	20.33	22
		2		0	20.62	20.57	20.50	22
		2		158	20.67	20.59	20.38	22
160		0		20.57	20.61	20.42	22	
Inner		1	1	20.95	21.01	21.10	22	
		1	158	21.22	21.01	20.84	22	
		80	40	21.18	21.07	20.87	22	



**BUREAU
VERITAS**

Test Report No.: W7L-P22020005RF03

BW	MCS Index	RB	RB Size	RB Offset	Low CH 346000	Mid CH 349000	High CH 352000	Max. Tune-up (dBm)
					Frequency 1730MHz	Frequency 1745MHz	Frequency 1760MHz	
40M	DFT-s-OFDM Pi/2 BPSK	Outer	1	0	22.84	22.85	22.91	24
			1	215	22.75	23.02	22.87	24
			2	0	22.91	22.87	23.06	24
			2	214	22.95	23.01	22.88	24
		216	0	22.72	23.04	22.91	24	
		Inner	1	1	22.86	22.91	22.97	24
			1	214	23.21	23.03	23.15	24
			108	54	23.06	23.08	23.12	24
	DFT-s-OFDM QPSK	Outer	1	0	22.87	22.79	23.19	24
			1	215	23.03	22.86	23.12	24
			2	0	23.05	22.90	23.17	24
			2	214	22.94	22.97	23.13	24
		216	0	22.99	22.89	23.03	24	
		Inner	1	1	23.10	22.84	23.01	24
			1	214	23.03	22.89	23.23	24
			108	54	23.09	22.79	23.12	24
	DFT-s-OFDM 16QAM	Outer	1	0	21.61	21.26	21.55	22
			1	215	21.66	21.40	21.53	22
			2	0	21.41	21.26	21.42	22
			2	214	21.56	21.48	21.45	22
		216	0	21.51	21.37	21.38	22	
		Inner	1	1	22.43	22.34	22.51	23
			1	214	22.58	22.40	22.29	23
			108	54	22.51	22.43	22.34	23
	DFT-s-OFDM 64QAM	Outer	1	0	20.67	20.68	20.89	22
			1	215	21.07	20.58	20.84	22
			2	0	20.77	20.72	21.86	22
			2	214	20.85	20.76	20.92	22
		216	0	20.82	20.83	21.02	22	
		Inner	1	1	20.92	20.85	21.23	22
			1	214	21.19	20.97	21.01	22
			108	54	21.24	21.05	20.94	22
	DFT-s-OFDM 256QAM	Outer	1	0	20.32	20.36	20.54	22
			1	215	20.60	20.34	20.59	22
			2	0	20.43	20.33	20.70	22
			2	214	20.52	20.40	20.47	22
216		0	20.61	20.53	20.36	22		
Inner		1	1	20.78	20.88	21.11	22	
		1	214	20.09	20.94	20.91	22	
		108	54	20.03	20.99	21.01	22	



BUREAU
VERITAS

Test Report No.: W7L-P22020005RF03

N77C-LTE7

BW	MCS Index	RB	RB Size	RB Offset	Low CH 647334	Mid CH 656000	High CH 664666	Max. Tune-up (dBm)
					Frequency 3710MHz	Frequency 3840MHz	Frequency 3970MHz	
20M	CP-OFDM QPSK	Outer	1	0	22.50	22.33	22.29	23
			1	50	21.89	21.71	21.60	23
			2	0	22.70	22.59	22.50	23
			2	49	21.94	21.75	21.69	23
			51	0	22.63	22.47	22.45	23
		Inner	1	1	23.80	23.65	23.51	24
			1	49	22.97	22.82	22.76	24
			25	12	23.15	23.02	22.91	24
		CP-OFDM 16QAM	Outer	1	0	22.78	22.58	22.57
	1			50	22.04	21.94	21.85	23
	2			0	22.66	22.46	22.45	23
	2			49	21.92	21.82	21.73	23
	51			0	22.67	22.50	22.46	23
	Inner		1	1	23.51	23.32	23.26	24
			1	49	22.74	22.58	22.56	24
			25	12	23.19	23.04	22.90	24
	CP-OFDM 64QAM		Outer	1	0	22.75	22.60	22.54
		1		50	22.15	21.98	21.94	23
		2		0	22.59	22.40	22.34	23
		2		49	21.80	21.64	21.62	23
		51		0	22.20	22.00	21.99	23
		Inner	1	1	22.74	22.64	22.55	23
			1	49	22.12	21.92	21.91	23
			25	12	22.16	22.06	21.97	23
		CP-OFDM 256QAM	Outer	1	0	19.51	19.34	19.30
	1			50	18.99	18.80	18.74	20
	2			0	19.48	19.32	19.30	20
	2			49	18.90	18.75	18.61	20
	51			0	19.18	19.01	18.89	20
	Inner		1	1	19.58	19.45	19.34	20
			1	49	18.94	18.81	18.70	20
			25	12	19.14	19.01	18.97	20

BW	MCS Index	RB	RB Size	RB Offset	Low CH 647668	Mid CH 656000	High CH 664332	Max. Tune-up (dBm)
					Frequency 3715MHz	Frequency 3840MHz	Frequency 3965MHz	
30M	CP-OFDM QPSK	Outer	1	0	22.47	22.37	22.25	23
			1	77	21.83	21.71	21.66	23
			2	0	22.72	22.57	22.49	23
			2	76	21.88	21.81	21.69	23
			78	0	22.65	22.50	22.46	23
		Inner	1	1	23.75	23.65	23.54	24
			1	76	22.97	22.85	22.80	24
			39	19	23.09	23.01	22.90	24
	CP-OFDM 16QAM	Outer	1	0	22.78	22.58	22.56	23
			1	77	22.04	21.92	21.82	23
			2	0	22.62	22.52	22.40	23
			2	76	21.95	21.78	21.77	23
			78	0	22.66	22.51	22.43	23
		Inner	1	1	23.47	23.31	23.29	24
			1	76	22.79	22.64	22.50	24
			39	19	23.15	22.98	22.92	24
	CP-OFDM 64QAM	Outer	1	0	22.81	22.62	22.58	23
			1	77	22.13	21.97	21.91	23
			2	0	22.59	22.39	22.37	23
			2	76	21.81	21.64	21.63	23
			78	0	22.14	22.04	21.95	23
		Inner	1	1	22.79	22.62	22.58	23
			1	76	22.12	21.93	21.87	23
			39	19	22.16	22.09	22.00	23
	CP-OFDM 256QAM	Outer	1	0	19.50	19.35	19.24	20
			1	77	18.93	18.86	18.77	20
			2	0	19.49	19.35	19.28	20
			2	76	18.89	18.69	18.68	20
			78	0	19.18	19.01	18.89	20
		Inner	1	1	19.58	19.45	19.34	20
			1	76	18.94	18.81	18.70	20
			39	19	19.14	19.01	18.97	20

BW	MCS Index	RB	RB Size	RB Offset	Low CH 648000	Mid CH 656000	High CH 664000	Max. Tune-up (dBm)
					Frequency 3720MHz	Frequency 3840MHz	Frequency 3960MHz	
40M	CP-OFDM QPSK	Outer	1	0	22.49	22.31	22.30	23
			1	105	21.87	21.70	21.64	23
			2	0	22.75	22.58	22.52	23
			2	104	21.91	21.81	21.68	23
			106	0	22.67	22.50	22.46	23
		Inner	1	1	23.74	23.65	23.51	24
			1	104	23.00	22.87	22.81	24
			53	26	23.16	22.97	22.92	24
	CP-OFDM 16QAM	Outer	1	0	22.75	22.64	22.54	23
			1	105	22.10	21.95	21.84	23
			2	0	22.60	22.53	22.44	23
			2	104	21.96	21.81	21.70	23
			106	0	22.64	22.54	22.45	23
		Inner	1	1	23.48	23.31	23.30	24
			1	104	22.77	22.62	22.52	24
			53	26	23.13	23.01	22.96	24
	CP-OFDM 64QAM	Outer	1	0	22.74	22.66	22.54	23
			1	105	22.16	21.96	21.95	23
			2	0	22.53	22.41	22.32	23
			2	104	21.85	21.68	21.62	23
			106	0	22.14	22.07	21.98	23
		Inner	1	1	22.80	22.62	22.52	23
			1	104	22.13	21.98	21.84	23
			53	26	22.19	22.02	21.98	23
	CP-OFDM 256QAM	Outer	1	0	19.53	19.38	19.24	20
			1	105	18.96	18.79	18.75	20
			2	0	19.52	19.37	19.26	20
			2	104	18.86	18.75	18.62	20
			106	0	19.12	19.00	18.95	20
		Inner	1	1	19.56	19.41	19.35	20
			1	104	18.89	18.77	18.72	20
			53	26	19.12	19.04	18.92	20

BW	MCS Index	RB	RB Size	RB Offset	Low CH 648334	Mid CH 656000	High CH 663666	Max. Tune-up (dBm)
					Frequency 3725MHz	Frequency 3840MHz	Frequency 3955MHz	
50M	CP-OFDM QPSK	Outer	1	0	22.48	22.32	22.26	23
			1	132	21.88	21.68	21.66	23
			2	0	22.71	22.54	22.53	23
			2	131	21.92	21.77	21.69	23
			133	0	22.61	22.54	22.42	23
		Inner	1	1	23.77	23.62	23.58	24
			1	131	22.98	22.88	22.77	24
			67	33	23.10	22.98	22.93	24
	CP-OFDM 16QAM	Outer	1	0	22.72	22.64	22.53	23
			1	132	22.10	21.90	21.88	23
			2	0	22.60	22.48	22.38	23
			2	131	21.94	21.84	21.72	23
			133	0	22.63	22.51	22.46	23
		Inner	1	1	23.51	23.34	23.27	24
			1	131	22.75	22.64	22.50	24
			67	33	23.18	23.01	22.94	24
	CP-OFDM 64QAM	Outer	1	0	22.74	22.66	22.54	23
			1	132	22.12	21.96	21.89	23
			2	0	22.59	22.41	22.31	23
			2	131	21.81	21.70	21.62	23
			133	0	22.20	22.03	21.92	23
		Inner	1	1	22.76	22.61	22.54	23
			1	131	22.12	21.95	21.85	23
			67	33	22.16	22.08	21.96	23
	CP-OFDM 256QAM	Outer	1	0	19.52	19.39	19.25	20
			1	132	18.93	18.82	18.71	20
			2	0	19.51	19.39	19.24	20
			2	131	18.86	18.70	18.64	20
			133	0	19.17	18.97	18.95	20
		Inner	1	1	19.57	19.40	19.39	20
			1	131	18.95	18.80	18.66	20
			67	33	19.13	18.98	18.92	20

BW	MCS Index	RB	RB Size	RB Offset	Low CH 648668	Mid CH 656000	High CH 663332	Max. Tune-up (dBm)
					Frequency 3730MHz	Frequency 3840MHz	Frequency 3950MHz	
60M	CP-OFDM QPSK	Outer	1	0	22.47	22.37	22.25	23
			1	161	21.83	21.71	21.66	23
			2	0	22.72	22.57	22.49	23
			2	160	21.88	21.81	21.69	23
			162	0	22.65	22.50	22.46	23
		Inner	1	1	23.75	23.65	23.54	24
			1	160	22.97	22.85	22.80	24
			81	40	23.09	23.01	22.90	24
	CP-OFDM 16QAM	Outer	1	0	22.78	22.58	22.56	23
			1	161	22.04	21.92	21.82	23
			2	0	22.62	22.52	22.40	23
			2	160	21.95	21.78	21.77	23
			162	0	22.66	22.51	22.43	23
		Inner	1	1	23.47	23.31	23.29	24
			1	160	22.79	22.64	22.50	24
			81	40	23.15	22.98	22.92	24
	CP-OFDM 64QAM	Outer	1	0	22.81	22.62	22.58	23
			1	161	22.13	21.97	21.91	23
			2	0	22.59	22.39	22.37	23
			2	160	21.81	21.64	21.63	23
			162	0	22.14	22.04	21.95	23
		Inner	1	1	22.79	22.62	22.58	23
			1	160	22.12	21.93	21.87	23
			81	40	22.16	22.09	22.00	23
	CP-OFDM 256QAM	Outer	1	0	19.50	19.35	19.24	20
			1	161	18.93	18.86	18.77	20
			2	0	19.49	19.35	19.28	20
			2	160	18.89	18.69	18.68	20
			162	0	19.18	19.01	18.89	20
		Inner	1	1	19.58	19.45	19.34	20
			1	160	18.94	18.81	18.70	20
			81	40	19.14	19.01	18.97	20

BW	MCS Index	RB	RB Size	RB Offset	Low CH 649000	Mid CH 656000	High CH 663000	Max. Tune-up (dBm)
					Frequency 3735MHz	Frequency 3840MHz	Frequency 3945MHz	
70M	CP-OFDM QPSK	Outer	1	0	22.50	22.33	22.29	23
			1	188	21.89	21.71	21.60	23
			2	0	22.70	22.59	22.50	23
			2	187	21.94	21.75	21.69	23
			189	0	22.63	22.47	22.45	23
		Inner	1	1	23.80	23.65	23.51	24
			1	187	22.97	22.82	22.76	24
			95	47	23.15	23.02	22.91	24
		CP-OFDM 16QAM	Outer	1	0	22.78	22.58	22.57
	1			188	22.04	21.94	21.85	23
	2			0	22.66	22.46	22.45	23
	2			187	21.92	21.82	21.73	23
	189			0	22.67	22.50	22.46	23
	Inner		1	1	23.51	23.32	23.26	24
			1	187	22.74	22.58	22.56	24
			95	47	23.19	23.04	22.90	24
	CP-OFDM 64QAM		Outer	1	0	22.75	22.60	22.54
		1		188	22.15	21.98	21.94	23
		2		0	22.59	22.40	22.34	23
		2		187	21.80	21.64	21.62	23
		189		0	22.20	22.07	21.96	23
		Inner	1	1	22.76	22.63	22.59	23
			1	187	22.13	21.98	21.87	23
			95	47	22.16	22.03	22.00	23
		CP-OFDM 256QAM	Outer	1	0	19.53	19.36	19.29
	1			188	18.98	18.86	18.73	20
	2			0	19.47	19.32	19.26	20
	2			187	18.88	18.71	18.67	20
	189			0	19.17	18.98	18.92	20
	Inner		1	1	19.56	19.40	19.38	20
			1	187	18.94	18.74	18.73	20
			95	47	19.12	19.02	18.93	20

BW	MCS Index	RB	RB Size	RB Offset	Low CH 649334	Mid CH 656000	High CH 662666	Max. Tune-up (dBm)
					Frequency 3740MHz	Frequency 3840MHz	Frequency 3940MHz	
80M	CP-OFDM QPSK	Outer	1	0	22.48	22.32	22.26	23
			1	216	21.88	21.68	21.66	23
			2	0	22.71	22.54	22.53	23
			2	215	21.92	21.77	21.69	23
		217	0	22.61	22.54	22.42	23	
		Inner	1	1	23.77	23.62	23.58	24
			1	215	22.98	22.88	22.77	24
			109	54	23.10	22.98	22.93	24
	CP-OFDM 16QAM	Outer	1	0	22.72	22.64	22.53	23
			1	216	22.10	21.90	21.88	23
			2	0	22.60	22.48	22.38	23
			2	215	21.94	21.84	21.72	23
		217	0	22.63	22.51	22.46	23	
		Inner	1	1	23.47	23.32	23.26	24
			1	215	22.73	22.61	22.56	24
			109	54	23.12	23.04	22.92	24
	CP-OFDM 64QAM	Outer	1	0	22.74	22.67	22.58	23
			1	216	22.14	21.99	21.88	23
			2	0	22.53	22.46	22.37	23
			2	215	21.82	21.67	21.56	23
		217	0	22.16	22.06	21.97	23	
		Inner	1	1	22.76	22.61	22.55	23
			1	215	22.07	21.95	21.90	23
			109	54	22.16	22.08	21.96	23
	CP-OFDM 256QAM	Outer	1	0	19.46	19.39	19.30	20
			1	216	18.97	18.82	18.71	20
			2	0	19.46	19.39	19.30	20
			2	215	18.86	18.72	18.65	20
		217	0	19.17	18.97	18.96	20	
		Inner	1	1	19.54	19.44	19.35	20
			1	215	18.93	18.76	18.72	20
			109	54	19.18	18.99	18.93	20

BW	MCS Index	RB	RB Size	RB Offset	Low CH 649668	Mid CH 656000	High CH 662332	Max. Tune-up (dBm)
					Frequency 3745MHz	Frequency 3840MHz	Frequency 3935MHz	
90M	CP-OFDM QPSK	Outer	1	0	22.52	22.35	22.23	23
			1	244	21.86	21.73	21.62	23
			2	0	22.74	22.61	22.50	23
			2	243	21.90	21.77	21.73	23
			245	0	22.68	22.53	22.42	23
		Inner	1	1	23.73	23.60	23.57	24
			1	243	23.03	22.86	22.79	24
	123		61	23.14	23.02	22.89	24	
	CP-OFDM 16QAM	Outer	1	0	22.76	22.61	22.56	23
			1	244	22.06	21.96	21.87	23
			2	0	22.66	22.46	22.45	23
			2	243	21.92	21.82	21.73	23
			245	0	22.67	22.50	22.46	23
		Inner	1	1	23.52	23.34	23.23	24
			1	243	22.74	22.63	22.54	24
	123		61	23.18	22.99	22.93	24	
	CP-OFDM 64QAM	Outer	1	0	22.76	22.60	22.58	23
			1	244	22.17	22.02	21.88	23
			2	0	22.54	22.39	22.33	23
			2	243	21.84	21.71	21.60	23
			245	0	22.20	22.00	21.99	23
		Inner	1	1	22.74	22.64	22.55	23
			1	243	22.12	21.92	21.91	23
	123		61	22.16	22.06	21.97	23	
	CP-OFDM 256QAM	Outer	1	0	19.51	19.34	19.30	20
			1	244	18.99	18.80	18.74	20
			2	0	19.48	19.32	19.30	20
			2	243	18.90	18.75	18.61	20
			245	0	19.12	18.97	18.91	20
		Inner	1	1	19.59	19.42	19.38	20
			1	243	18.94	18.75	18.69	20
	123		61	19.14	18.98	18.96	20	



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BW	MCS Index	RB	RB Size	RB Offset	Low CH 650000	Mid CH 656000	High CH 662000	Max. Tune-up (dBm)
					Frequency 3750MHz	Frequency 3840MHz	Frequency 3930MHz	
100M	CP-OFDM QPSK	Outer	1	0	22.53	22.39	22.31	23
			1	272	21.90	21.76	21.68	23
			2	0	22.76	22.62	22.54	23
			2	271	21.96	21.82	21.74	23
			273	0	22.69	22.55	22.47	23
		Inner	1	1	23.81	23.67	23.59	24
			1	271	23.04	22.90	22.82	24
	137		68	23.17	23.03	22.95	24	
	CP-OFDM 16QAM	Outer	1	0	22.80	22.66	22.58	23
			1	272	22.12	21.98	21.90	23
			2	0	22.68	22.54	22.46	23
			2	271	22.00	21.86	21.78	23
			273	0	22.70	22.56	22.48	23
		Inner	1	1	23.53	23.39	23.31	24
			1	271	22.80	22.66	22.58	24
	137		68	23.20	23.06	22.98	24	
	CP-OFDM 64QAM	Outer	1	0	22.82	22.68	22.60	23
			1	272	22.18	22.04	21.96	23
			2	0	22.61	22.47	22.39	23
			2	271	21.86	21.72	21.64	23
			273	0	22.22	22.08	22.00	23
		Inner	1	1	22.82	22.68	22.60	23
			1	271	22.14	22.00	21.92	23
	137		68	22.24	22.10	22.02	23	
	CP-OFDM 256QAM	Outer	1	0	19.54	19.40	19.32	20
			1	272	19.01	18.87	18.79	20
			2	0	19.54	19.40	19.32	20
			2	271	18.91	18.77	18.69	20
			273	0	19.19	19.05	18.97	20
		Inner	1	1	19.62	19.48	19.40	20
			1	271	18.96	18.82	18.74	20
	137		68	19.20	19.06	18.98	20	

BW	MCS Index	RB	RB Size	RB Offset	Low CH 647334	Mid CH 656000	High CH 664666	Max. Tune-up (dBm)
					Frequency 3710MHz	Frequency 3840MHz	Frequency 3970MHz	
20M	DFT-s-OFDM Pi/2 BPSK	Outer	1	0	22.66	22.41	22.33	23
			1	50	22.00	21.74	21.59	23
			2	0	22.74	22.55	22.42	23
			2	49	22.05	21.78	21.68	23
			50	0	23.19	22.95	22.89	24
		Inner	1	1	23.74	23.47	23.37	24
			1	49	23.06	22.82	22.76	24
			25	12	23.17	22.94	22.76	24
	DFT-s-OFDM QPSK	Outer	1	0	22.68	22.40	22.35	23
			1	50	21.96	21.78	21.65	23
			2	0	22.76	22.48	22.43	23
			2	49	22.01	21.83	21.70	23
			50	0	23.21	22.96	22.88	24
		Inner	1	1	23.72	23.49	23.31	24
			1	49	23.02	22.79	22.69	24
			25	12	23.16	22.95	22.80	24
	DFT-s-OFDM 16QAM	Outer	1	0	22.75	22.52	22.42	23
			1	50	22.08	21.83	21.75	23
			2	0	22.72	22.45	22.35	23
			2	49	22.06	21.82	21.76	23
			50	0	23.19	22.91	22.86	24
		Inner	2	49	23.46	23.28	23.15	24
			25	12	22.88	22.60	22.55	24
			50	0	23.13	22.95	22.82	24
	DFT-s-OFDM 64QAM	Outer	1	0	22.90	22.65	22.57	23
			1	50	22.27	22.00	21.90	23
			2	0	22.54	22.30	22.24	23
			2	49	21.99	21.76	21.58	23
			50	0	23.23	22.98	22.82	24
		Inner	1	1	23.37	23.16	23.01	24
			1	49	22.77	22.56	22.41	24
			25	12	23.18	22.97	22.89	24
	DFT-s-OFDM 256QAM	Outer	1	0	22.31	22.08	21.93	23
			1	50	21.58	21.37	21.30	23
			2	0	22.76	22.51	22.40	23
			2	49	22.09	21.89	21.72	23
50			0	23.16	22.93	22.84	24	
Inner		1	1	23.25	23.07	22.94	24	
		1	49	22.56	22.28	22.23	24	
		25	12	23.19	23.01	22.88	24	