FCC Test Report

(Part 22, Part 27, Part 90 – NSA Mode: n41A + LTE Band 26)

Report No.:	RF200514C16A-4
FCC ID:	T8GSAN9000
Test Model:	SA-N9000 OEM D1
Received Date:	May 14, 2020
Test Date:	Nov. 10 ~ Dec. 15, 2020
Issued Date:	Dec. 22, 2020
Applicant:	Harman Connected Car Division
Address:	Parking 3, 85748 Garching Germany
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Lin Kou Laboratories
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
Test Location:	No.19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, Taiwan
FCC Registration / Designation Number:	788550 / TW0003

Testing Laboratory
2021

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Release Control Record

Issue No.	Description	Date Issued
RF200514C16A-4	Original release	Dec. 22, 2020

1 Certificate of Conformity

Product:	Module
Brand:	Harman
Test Model:	SA-N9000 OEM D1
Sample Status:	Standard Sample
Applicant:	Harman Connected Car Division
Test Date:	Nov. 10 ~ Dec. 15, 2020
Standards:	FCC Part 22, Subpart H FCC Part 27, Subpart M FCC Part 90, Subpart S

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

Prepared by : Celine Chou , **Date:** Dec. 22, 2020

Celine Chou / Senior Specialist

Approved by : Bruce Chen , **Date:** Dec. 22, 2020

Bruce Chen / Senior Project Engineer

2 Summary of Test Results

For LTE Band 26

Applied Standard: FCC Part 22 & Part 2			
FCC Clause	Test Item	Result	Remarks
2.1046 22.913 (a)	Effective radiated power	Pass	Meet the requirement of limit.
2.1047	Modulation Characteristics	Pass	Meet the requirement
22.913 (d)	Peak To Average Ratio	Pass	Meet the requirement of limit.
2.1055 22.355	Frequency Stability	Pass	Meet the requirement of limit.
2.1049	Occupied Bandwidth	Pass	Meet the requirement of limit.
22.917	Band Edge Measurements	Pass	Meet the requirement of limit.
2.1051 22.917	Conducted Spurious Emissions	Pass	Meet the requirement of limit.
2.1053 22.917	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -33.80dB at 1673.00MHz.

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

For n41

Applied Standard: FCC Part 27 & Part 2			
FCC Clause	Test Item	Result	Remarks
2.1046 27.50 (h)(2)	Equivalent Isotropically Radiated Power	Pass	Meet the requirement of limit.
----	Modulation Characteristics	Pass	Meet the requirement of limit.
----	Peak To Average Ratio	Pass	Meet the requirement of limit.
2.1055 27.54	Frequency Stability Stay with the authorized bands of operation	Pass	Meet the requirement of limit.
2.1049	Occupied Bandwidth	Pass	Meet the requirement of limit.
2.1051 27.53 (m)(4)(6)	Band Edge Measurements	Pass	Meet the requirement of limit.
2.1051 27.53 (m)(4)(6)	Conducted Spurious Emissions	Pass	Meet the requirement of limit.
2.1053 27.53 (m)(4)(6)	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -22.90dB at 53.28MHz.

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

For LTE Band 26

Applied Standard: FCC Part 90 & Part 2			
FCC Clause	Test Item	Result	Remarks
2.1046 90.635(b)	Effective Radiated Power	Pass	Meet the requirement of limit.
2.1047	Modulation Characteristics	Pass	Meet the requirement.
2.1055 90.213	Frequency Stability	Pass	Meet the requirement of limit.
2.1049	Occupied Bandwidth	Pass	Meet the requirement of limit.
2.1051 90.691(a)	Emission Masks	Pass	Meet the requirement of limit.
2.1051 90.691	Conducted Spurious Emissions	Pass	Meet the requirement of limit.
2.1053 90.691	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -35.10dB at 1638.00MHz.

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2.1 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	Frequency	Expanded Uncertainty (k=2) (±)
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	3.04 dB
	30MHz ~ 200MHz	3.63 dB
	200MHz ~1000MHz	3.64 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	2.29 dB
	18GHz ~ 40GHz	2.29 dB

2.2 Test Site and Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESCI	100424	Dec. 31, 2019	Dec. 30, 2020
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100040	Oct. 03, 2019	Oct. 02, 2020
			Sep. 16, 2020	Sep. 15, 2021
Signal Analyzer Keysight	N9010A	MY56070348	Sep. 09, 2019	Sep. 08, 2020
			Sep. 16, 2020	Sep. 15, 2021
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Nov. 11, 2019	Nov. 10, 2020
			Nov. 03, 2020	Nov. 02, 2021
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-1170	Nov. 24, 2019	Nov. 23, 2020
			Nov. 22, 2020	Nov. 21, 2021
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Nov. 24, 2019	Nov. 23, 2020
			Nov. 22, 2020	Nov. 21, 2021
Horn Antenna ETS	3117	00034128	Nov. 24, 2019	Nov. 23, 2020
			Nov. 22, 2020	Nov. 21, 2021
MXG Vector signal generator Agilent	N5182B	MY53050162	Jan. 14, 2020	Jan. 13, 2021
Spectrum Analyzer KEYSIGHT	N9030B	MY57140953	Jul. 02, 2020	Jul. 01, 2021
5G Wireless Test Platforms Keysight	E7515B	MY58300759	Apr. 18, 2020	Apr. 17, 2021
Loop Antenna TESEQ	HLA 6121	45745	Jul. 06, 2020	Jul. 05, 2021
Preamplifier Agilent (Below 1GHz)	8447D	2944A10631	Jun. 08, 2020	Jun. 07, 2021
Preamplifier KEYSIGHT (Above 1GHz)	83017A	MY53270295	Jun. 08, 2020	Jun. 07, 2021
RF Coaxial Cable WOKEN With 5dB PAD	8D-FB	Cable-CH4-01	Aug. 20, 2019	Aug. 19, 2020
			Aug. 16, 2020	Aug. 15, 2021
RF Coaxial Cable EMCI	EMC102-KM-KM-3000	150929	Aug. 20, 2019	Aug. 19, 2020
			Aug. 16, 2020	Aug. 15, 2021
RF Coaxial Cable EMCI	EMC102-KM-KM-600	150928	Aug. 20, 2019	Aug. 19, 2020
			Aug. 16, 2020	Aug. 15, 2021
RF signal cable HUBER+SUHNER	SUCOFLEX 104	MY 13380+295012/04	Jun. 08, 2020	Jun. 07, 2021
RF signal cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH4-03 (250724)	Jun. 08, 2020	Jun. 07, 2021
Software BV ADT	ADT_Radiated_V7.6.15.9.5	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	010303	NA	NA
Antenna Tower Controller BV ADT	AT100	AT93021703	NA	NA
Turn Table BV ADT	TT100	TT93021703	NA	NA
Turn Table Controller BV ADT	SC100	SC93021703	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Pre-amplifier (18GHz-40GHz) EMC	EMC184045B	980175	Sep. 09, 2019	Sep. 08, 2020
			Sep. 04, 2020	Sep. 03, 2021
Standard Temperature And Humidity Chamber TERCHY	MHU-225AU	920842	May 27, 2020	May 26, 2021
JFW 20dB attenuation	50HF-020-SMA	NA	NA	NA
True RMS Clamp Meter Fluke	325	31130711WS	Jun. 06, 2020	Jun. 05, 2021
DC power supply	U8002A	MY56330015	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Chamber 4.

3 General Information

3.1 General Description of EUT

Product	Module
Brand	Harman
Test Model	SA-N9000 OEM D1
Sample Status	Standard Sample
Power Supply rating	4.2Vdc

n41

Modulation Type	$\pi/2$ BPSK, QPSK, 16QAM, 64QAM, 256QAM					
Waveform Type	CP-OFDM, DFT-s-OFDM					
Operating Frequency	n41 (Channel Bandwidth: 10MHz)	2501.01 ~ 2685.00MHz				
	n41 (Channel Bandwidth: 15MHz)	2503.50 ~ 2682.48MHz				
	n41 (Channel Bandwidth: 20MHz)	2506.02 ~ 2679.99MHz				
	n41 (Channel Bandwidth: 40MHz)	2516.01 ~ 2670.00MHz				
	n41 (Channel Bandwidth: 50MHz)	2521.02 ~ 2664.99MHz				
	n41 (Channel Bandwidth: 60MHz)	2526.00 ~ 2659.98MHz				
	n41 (Channel Bandwidth: 80MHz)	2536.02 ~ 2649.99MHz				
	n41 (Channel Bandwidth: 90MHz)	2541.00 ~ 2644.98MHz				
	n41 (Channel Bandwidth: 100MHz)	2546.01 ~ 2640.00MHz				
Max. EIRP Power		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
	n41 (Channel Bandwidth: 10MHz)	397.192mW (25.99dBm)	199.067mW (22.99dBm)	184.077mW (22.65dBm)	168.655mW (22.27dBm)	93.111mW (19.69dBm)
	n41 (Channel Bandwidth: 15MHz)	398.107mW (26.00dBm)	198.609mW (22.98dBm)	185.780mW (22.69dBm)	169.434mW (22.29dBm)	93.325mW (19.70dBm)
	n41 (Channel Bandwidth: 20MHz)	398.107mW (26.00dBm)	199.526mW (23.00dBm)	186.209mW (22.70dBm)	169.044mW (22.28dBm)	93.111mW (19.69dBm)
	n41 (Channel Bandwidth: 40MHz)	398.107mW (26.00dBm)	198.609mW (22.98dBm)	184.927mW (22.67dBm)	169.434mW (22.29dBm)	92.470mW (19.66dBm)
	n41 (Channel Bandwidth: 50MHz)	398.107mW (26.00dBm)	199.067mW (22.99dBm)	199.067mW (22.99dBm)	177.419mW (22.49dBm)	89.125mW (19.50dBm)
	n41 (Channel Bandwidth: 60MHz)	397.192mW (25.99dBm)	199.067mW (22.99dBm)	185.780mW (22.69dBm)	169.824mW (22.30dBm)	93.325mW (19.70dBm)
	n41 (Channel Bandwidth: 80MHz)	398.107mW (26.00dBm)	199.526mW (23.00dBm)	185.780mW (22.69dBm)	168.267mW (22.26dBm)	93.111mW (19.69dBm)
	n41 (Channel Bandwidth: 90MHz)	396.278mW (25.98dBm)	198.609mW (22.98dBm)	186.209mW (22.70dBm)	169.434mW (22.29dBm)	93.325mW (19.70dBm)
	n41 (Channel Bandwidth: 100MHz)	398.107mW (26.00dBm)	199.067mW (22.99dBm)	185.353mW (22.68dBm)	169.824mW (22.30dBm)	92.897mW (19.68dBm)
Emission Designator		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
	n41 (Channel Bandwidth: 10MHz)	8M57G7D	8M58G7D	8M57D7W	8M54D7W	8M54D7W
	n41 (Channel Bandwidth: 15MHz)	12M8G7D	12M9G7D	12M8D7W	12M8D7W	12M8D7W
	n41 (Channel Bandwidth: 20MHz)	17M9G7D	17M9G7D	17M8D7W	17M8D7W	17M8D7W
	n41 (Channel Bandwidth: 40MHz)	35M7G7D	35M7G7D	35M7D7W	35M7D7W	35M7D7W
	n41 (Channel Bandwidth: 50MHz)	45M6G7D	45M7G7D	45M6D7W	45M6D7W	45M6D7W
	n41 (Channel Bandwidth: 60MHz)	57M7G7D	57M7G7D	57M7D7W	57M7D7W	57M7D7W
	n41 (Channel Bandwidth: 80MHz)	77M0G7D	77M0G7D	77M0D7W	77M1D7W	77M0D7W
	n41 (Channel Bandwidth: 90MHz)	85M5G7D	85M5G7D	85M5D7W	85M5D7W	85M5D7W
	n41 (Channel Bandwidth: 100MHz)	96M1G7D	96M2G7D	96M2D7W	96M2D7W	96M2D7W

LTE Band

Modulation Type	QPSK, 16QAM, 64QAM, 256QAM					
Operating Frequency	Part 22	LTE Band 26 (Channel Bandwidth: 1.4MHz)	824.7 ~ 848.3MHz			
		LTE Band 26 (Channel Bandwidth: 3MHz)	825.5 ~ 847.5MHz			
		LTE Band 26 (Channel Bandwidth: 5MHz)	826.5 ~ 846.5MHz			
		LTE Band 26 (Channel Bandwidth: 10MHz)	829.0 ~ 844.0MHz			
		LTE Band 26 (Channel Bandwidth: 15MHz)	831.5 ~ 841.5MHz			
	Part 90	LTE Band 26 (Channel Bandwidth: 1.4MHz)	814.7 ~ 823.3MHz			
		LTE Band 26 (Channel Bandwidth: 3MHz)	815.5 ~ 822.5MHz			
		LTE Band 26 (Channel Bandwidth: 5MHz)	816.5 ~ 821.5MHz			
		LTE Band 26 (Channel Bandwidth: 10MHz)	819.0MHz			
Max. ERP Power			QPSK	16QAM	64QAM	256QAM
	Part 22	LTE Band 26 (Channel Bandwidth: 1.4MHz)	179.473mW (22.54dBm)	138.357mW (21.41dBm)	111.686mW (20.48dBm)	71.779mW (18.56dBm)
		LTE Band 26 (Channel Bandwidth: 3MHz)	177.419mW (22.49dBm)	142.233mW (21.53dBm)	112.460mW (20.51dBm)	70.632mW (18.49dBm)
		LTE Band 26 (Channel Bandwidth: 5MHz)	178.238mW (22.51dBm)	141.906mW (21.52dBm)	112.202mW (20.50dBm)	71.450mW (18.54dBm)
		LTE Band 26 (Channel Bandwidth: 10MHz)	179.061mW (22.53dBm)	141.906mW (21.52dBm)	113.240mW (20.54dBm)	71.450mW (18.54dBm)
		LTE Band 26 (Channel Bandwidth: 15MHz)	179.887mW (22.55dBm)	143.219mW (21.56dBm)	113.763mW (20.56dBm)	70.307mW (18.47dBm)
	Part 90	LTE Band 26 (Channel Bandwidth: 1.4MHz)	178.238mW (22.51dBm)	139.959mW (21.46dBm)	113.501mW (20.55dBm)	69.663mW (18.43dBm)
		LTE Band 26 (Channel Bandwidth: 3MHz)	178.649mW (22.52dBm)	142.561mW (21.54dBm)	110.662mW (20.44dBm)	71.450mW (18.54dBm)
		LTE Band 26 (Channel Bandwidth: 5MHz)	178.649mW (22.52dBm)	141.254mW (21.50dBm)	113.501mW (20.55dBm)	71.285mW (18.53dBm)
		LTE Band 26 (Channel Bandwidth: 10MHz)	171.791mW (22.35dBm)	136.458mW (21.35dBm)	106.414mW (20.27dBm)	66.988mW (18.26dBm)
Emission Designator	Part 22		QPSK	16QAM	64QAM	256QAM
		LTE Band 26 (Channel Bandwidth: 1.4MHz)	1M09G7D	1M09G7D	1M09D7W	1M09D7W
		LTE Band 26 (Channel Bandwidth: 3MHz)	2M68G7D	2M68G7D	2M68D7W	2M69D7W
		LTE Band 26 (Channel Bandwidth: 5MHz)	4M49G7D	4M50G7D	4M49D7W	4M50D7W
		LTE Band 26 (Channel Bandwidth: 10MHz)	8M98G7D	8M98G7D	8M98D7W	8M98D7W
		LTE Band 26 (Channel Bandwidth: 15MHz)	13M4G7D	13M4G7D	13M4D7W	13M4D7W
	Part 90	LTE Band 26 (Channel Bandwidth: 1.4MHz)	1M09G7D	1M09G7D	1M09D7W	1M09D7W
		LTE Band 26 (Channel Bandwidth: 3MHz)	2M68G7D	2M69G7D	2M68D7W	2M69D7W
		LTE Band 26 (Channel Bandwidth: 5MHz)	4M50G7D	4M50G7D	4M50D7W	4M49D7W
		LTE Band 26 (Channel Bandwidth: 10MHz)	8M97G7D	8M97G7D	8M97D7W	8M97D7W
Antenna Type	Refer to note					
Antenna Connector	Refer to note					
Accessory Device	NA					
Cable Supplied	NA					

Note:

1. The antenna information is listed as below.

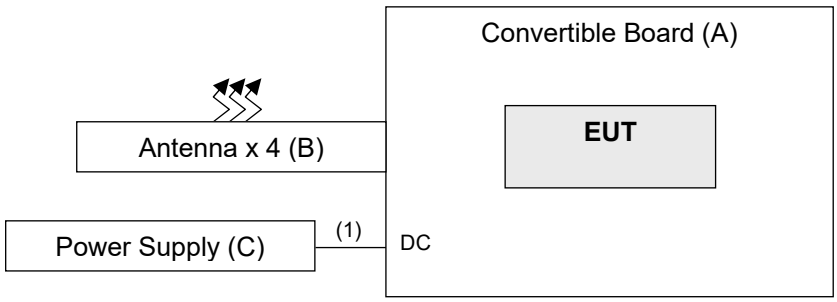
Operating frequency band	Antenna	Gain (dBi)	Connector Type
Band 2	5G/4G Terminal Mount Monopole Antenna	2.92	SMA
Band 5		1.01	
Band 7		2.20	
Band 12		-1.17	
Band 25		2.97	
Band 38		2.18	
Band 41		2.20	
Band 66		3.44	
Band 71		1.72	
Band 77		2.61	

* The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

2. The EUT supports the following ENDC configuration.

	FCC 5G FR1			ENDC
	Band	SCS	Bandwidth (MHz)	
5GNR	n5	15kHz	5/10/15/20	Band 2/66
	n41	30kHz	10/15/20/40/50/60/80/90/100	Band 26
	n66	15kHz	5/10/15/20/40	Band 5/12
	n71	15kHz	5/10/15/20	Band 2/66

3.2 Configuration of System under Test



3.2.1 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.

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Convertible Board	NA	NA	NA	NA	Provided by client
B.	Antenna x 4	TAOGLAS	TG.55.8113	NA	NA	Provided by client
C.	DC Power supply	TECPEL	GPS-3030DD	GEO855739	NA	-

Note: All power cords of the above support units are non-shielded (1.8m).

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	DC cable	1	1	N	0	-

3.3 Test Mode Applicability and Tested Channel Detail

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 X-plane. Following channel(s) was (were) selected for the final test as listed below.

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EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	EIRP	500202 to 537000	500202 (2501.01MHz), 518598 (2592.99MHz), 537000 (2685.00MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 12 RB Offset 1 RB / 23 RB Offset 12 RB / 0 RB Offset 12 RB / 6 RB Offset 12 RB / 12 RB Offset 24 RB / 0 RB Offset
		500700 to 536496	500700 (2503.50MHz), 518598 (2592.99MHz), 536496 (2682.48MHz)	15MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 19 RB Offset 1 RB / 37 RB Offset 19 RB / 0 RB Offset 19 RB / 9 RB Offset 19 RB / 20 RB Offset 38 RB / 0 RB Offset
		501204 to 535998	501204 (2506.02MHz), 518598 (2592.99MHz), 535998 (2679.99MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 25 RB Offset 1 RB / 50 RB Offset 25 RB / 0 RB Offset 25 RB / 12 RB Offset 25 RB / 25 RB Offset 51 RB / 0 RB Offset
		503202 to 534000	503202 (2516.01MHz), 518598 (2592.99MHz), 534000 (2670.00MHz)	40MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 53 RB Offset 1 RB / 105 RB Offset 53 RB / 0 RB Offset 53 RB / 26 RB Offset 53 RB / 53 RB Offset 106 RB / 0 RB Offset
		504204 to 532998	504204 (2521.02MHz), 518598 (2592.99MHz), 532998 (2664.99MHz)	50MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 66 RB Offset 1 RB / 132 RB Offset 66 RB / 0 RB Offset 66 RB / 33 RB Offset 66 RB / 66 RB Offset 133 RB / 0 RB Offset
		505200 to 531996	505200 (2526.00MHz), 518598 (2592.99MHz), 531996 (2659.98MHz)	60MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 81 RB Offset 1 RB / 161 RB Offset 81 RB / 0 RB Offset 81 RB / 40 RB Offset 81 RB / 81 RB Offset 162 RB / 0 RB Offset
		507204 to 529998	507204 (2536.02MHz), 518598 (2592.99MHz), 529998 (2649.99MHz)	80MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 108 RB Offset 1 RB / 216 RB Offset 108 RB / 0 RB Offset 108 RB / 54 RB Offset 108 RB / 108 RB Offset 217 RB / 0 RB Offset
		508200 to 528996	508200 (2541.00MHz), 518598 (2592.99MHz), 528996 (2644.98MHz)	90MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 122 RB Offset 1 RB / 244 RB Offset 122 RB / 0 RB Offset 122 RB / 61 RB Offset 122 RB / 122 RB Offset 245 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	EIRP	509202 to 528000	509202 (2546.01MHz), 518598 (2592.99MHz), 528000 (2640.00MHz)	100MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 136 RB Offset 1 RB / 272 RB Offset 136 RB / 0 RB Offset 136 RB / 68 RB Offset 136 RB / 136 RB Offset 273 RB / 0 RB Offset
-	Modulation Characteristics	509202 to 528000	518598 (2592.99MHz)	100MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	273 RB / 0 RB Offset
-	Frequency Stability	500202 to 537000	500202 (2501.01MHz), 537000 (2685.00MHz)	10MHz	$\pi/2$ BPSK	24 RB / 0 RB Offset
		500700 to 536496	500700 (2503.50MHz), 536496 (2682.48MHz)	15MHz	$\pi/2$ BPSK	38 RB / 0 RB Offset
		501204 to 535998	501204 (2506.02MHz), 535998 (2679.99MHz)	20MHz	$\pi/2$ BPSK	51 RB / 0 RB Offset
		503202 to 534000	503202 (2516.01MHz), 534000 (2670.00MHz)	40MHz	$\pi/2$ BPSK	106 RB / 0 RB Offset
		504204 to 532998	504204 (2521.02MHz), 532998 (2664.99MHz)	50MHz	$\pi/2$ BPSK	133 RB / 0 RB Offset
		505200 to 531996	505200 (2526.00MHz), 531996 (2659.98MHz)	60MHz	$\pi/2$ BPSK	162 RB / 0 RB Offset
		507204 to 529998	507204 (2536.02MHz), 529998 (2649.99MHz)	80MHz	$\pi/2$ BPSK	217 RB / 0 RB Offset
		508200 to 528996	508200 (2541.00MHz), 528996 (2644.98MHz)	90MHz	$\pi/2$ BPSK	245 RB / 0 RB Offset
		509202 to 528000	509202 (2546.01MHz), 528000 (2640.00MHz)	100MHz	$\pi/2$ BPSK	273 RB / 0 RB Offset
-	Emission Bandwidth	500202 to 537000	500202 (2501.01MHz), 518598 (2592.99MHz), 537000 (2685.00MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	24 RB / 0 RB Offset
		500700 to 536496	500700 (2503.50MHz), 518598 (2592.99MHz), 536496 (2682.48MHz)	15MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	38 RB / 0 RB Offset
		501204 to 535998	501204 (2506.02MHz), 518598 (2592.99MHz), 535998 (2679.99MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	51 RB / 0 RB Offset
		503202 to 534000	503202 (2516.01MHz), 518598 (2592.99MHz), 534000 (2670.00MHz)	40MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	106 RB / 0 RB Offset
		504204 to 532998	504204 (2521.02MHz), 518598 (2592.99MHz), 532998 (2664.99MHz)	50MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	133 RB / 0 RB Offset
		505200 to 531996	505200 (2526.00MHz), 518598 (2592.99MHz), 531996 (2659.98MHz)	60MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	162 RB / 0 RB Offset
		507204 to 529998	507204 (2536.02MHz), 518598 (2592.99MHz), 529998 (2649.99MHz)	80MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	217 RB / 0 RB Offset
		508200 to 528996	508200 (2541.00MHz), 518598 (2592.99MHz), 528996 (2644.98MHz)	90MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	245 RB / 0 RB Offset
		509202 to 528000	509202 (2546.01MHz), 518598 (2592.99MHz), 528000 (2640.00MHz)	100MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	273 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Emission Mask	500202 to 537000	500202 (2501.01MHz), 518598 (2592.99MHz), 537000 (2685.00MHz)	10MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset 1 RB / 23 RB Offset 24 RB / 0 RB Offset
		500700 to 536496	500700 (2503.50MHz), 518598 (2592.99MHz), 536496 (2682.48MHz)	15MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset 1 RB / 37 RB Offset 38 RB / 0 RB Offset
		501204 to 535998	501204 (2506.02MHz), 518598 (2592.99MHz), 535998 (2679.99MHz)	20MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset 1 RB / 50 RB Offset 51 RB / 0 RB Offset
		503202 to 534000	503202 (2516.01MHz), 518598 (2592.99MHz), 534000 (2670.00MHz)	40MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset 1 RB / 105 RB Offset 106 RB / 0 RB Offset
		504204 to 532998	504204 (2521.02MHz), 518598 (2592.99MHz), 532998 (2664.99MHz)	50MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset 1 RB / 132 RB Offset 133 RB / 0 RB Offset
		505200 to 531996	505200 (2526.00MHz), 518598 (2592.99MHz), 531996 (2659.98MHz)	60MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset 1 RB / 161 RB Offset 162 RB / 0 RB Offset
		507204 to 529998	507204 (2536.02MHz), 518598 (2592.99MHz), 529998 (2649.99MHz)	80MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset 1 RB / 216 RB Offset 217 RB / 0 RB Offset
		508200 to 528996	508200 (2541.00MHz), 518598 (2592.99MHz), 528996 (2644.98MHz)	90MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset 1 RB / 244 RB Offset 245 RB / 0 RB Offset
		509202 to 528000	509202 (2546.01MHz), 518598 (2592.99MHz), 528000 (2640.00MHz)	100MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset 1 RB / 272 RB Offset 273 RB / 0 RB Offset
-	Peak to Average Ratio	500202 to 537000	500202 (2501.01MHz), 518598 (2592.99MHz), 537000 (2685.00MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		500700 to 536496	500700 (2503.50MHz), 518598 (2592.99MHz), 536496 (2682.48MHz)	15MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		501204 to 535998	501204 (2506.02MHz), 518598 (2592.99MHz), 535998 (2679.99MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		503202 to 534000	503202 (2516.01MHz), 518598 (2592.99MHz), 534000 (2670.00MHz)	40MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		504204 to 532998	504204 (2521.02MHz), 518598 (2592.99MHz), 532998 (2664.99MHz)	50MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		505200 to 531996	505200 (2526.00MHz), 518598 (2592.99MHz), 531996 (2659.98MHz)	60MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		507204 to 529998	507204 (2536.02MHz), 518598 (2592.99MHz), 529998 (2649.99MHz)	80MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		508200 to 528996	508200 (2541.00MHz), 518598 (2592.99MHz), 528996 (2644.98MHz)	90MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		509202 to 528000	509202 (2546.01MHz), 518598 (2592.99MHz), 528000 (2640.00MHz)	100MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Conducted Emission	500202 to 537000	500202 (2501.01MHz), 518598 (2592.99MHz), 537000 (2685.00MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		500700 to 536496	500700 (2503.50MHz), 518598 (2592.99MHz), 536496 (2682.48MHz)	15MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		501204 to 535998	501204 (2506.02MHz), 518598 (2592.99MHz), 535998 (2679.99MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		503202 to 534000	503202 (2516.01MHz), 518598 (2592.99MHz), 534000 (2670.00MHz)	40MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		504204 to 532998	504204 (2521.02MHz), 518598 (2592.99MHz), 532998 (2664.99MHz)	50MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		505200 to 531996	505200 (2526.00MHz), 518598 (2592.99MHz), 531996 (2659.98MHz)	60MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		507204 to 529998	507204 (2536.02MHz), 518598 (2592.99MHz), 529998 (2649.99MHz)	80MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		508200 to 528996	508200 (2541.00MHz), 518598 (2592.99MHz), 528996 (2644.98MHz)	90MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		509202 to 528000	509202 (2546.01MHz), 518598 (2592.99MHz), 528000 (2640.00MHz)	100MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
-	Radiated Emission Below 1GHz	509202 to 528000	518598 (2592.99MHz)	100MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission Above 1GHz	500202 to 537000	500202 (2501.01MHz), 518598 (2592.99MHz), 537000 (2685.00MHz)	10MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset
		500700 to 536496	500700 (2503.50MHz), 518598 (2592.99MHz), 536496 (2682.48MHz)	15MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset
		501204 to 535998	501204 (2506.02MHz), 518598 (2592.99MHz), 535998 (2679.99MHz)	20MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset
		503202 to 534000	503202 (2516.01MHz), 518598 (2592.99MHz), 534000 (2670.00MHz)	40MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset
		504204 to 532998	504204 (2521.02MHz), 518598 (2592.99MHz), 532998 (2664.99MHz)	50MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset
		505200 to 531996	505200 (2526.00MHz), 518598 (2592.99MHz), 531996 (2659.98MHz)	60MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset
		507204 to 529998	507204 (2536.02MHz), 518598 (2592.99MHz), 529998 (2649.99MHz)	80MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset
		508200 to 528996	508200 (2541.00MHz), 518598 (2592.99MHz), 528996 (2644.98MHz)	90MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset
		509202 to 528000	509202 (2546.01MHz), 518598 (2592.99MHz), 528000 (2640.00MHz)	100MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset

Note: The conducted output power for $\pi/2$ BPSK, QPSK, 16QAM, 64QAM and 256QAM, measured value of $\pi/2$ BPSK is higher than QPSK, 16QAM, 64QAM and 256QAM mode. Therefore, only EIRP, Modulation characteristics, occupied bandwidth and Peak to average ratio items had been tested under $\pi/2$ BPSK, QPSK, 16QAM, 64QAM and 256QAM modes, the other test items were performed under $\pi/2$ BPSK mode only.

LTE Band 26 (Part 22)

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	ERP	26797 to 27033	26797 (824.7MHz), 26915 (836.5MHz), 27033 (848.3MHz)	1.4MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 2 RB Offset 1 RB / 5 RB Offset 3 RB / 0 RB Offset 3 RB / 1 RB Offset 3 RB / 3 RB Offset 6 RB / 0 RB Offset
		26805 to 27025	26805 (825.5MHz), 26915 (836.5MHz), 27025 (847.5MHz)	3MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 7 RB Offset 1 RB / 14 RB Offset 8 RB / 0 RB Offset 8 RB / 3 RB Offset 8 RB / 7 RB Offset 15 RB / 0 RB Offset
		26815 to 27015	26815 (826.5MHz), 26915 (836.5MHz), 27015 (846.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 12 RB Offset 1 RB / 24 RB Offset 12 RB / 0 RB Offset 12 RB / 6 RB Offset 12 RB / 13 RB Offset 25 RB / 0 RB Offset
		26840 to 26990	26840 (829MHz), 26915 (836.5MHz), 26990 (844MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 24 RB Offset 1 RB / 49 RB Offset 25 RB / 0 RB Offset 25 RB / 12 RB Offset 25 RB / 25 RB Offset 50 RB / 0 RB Offset
		26865 to 26965	26865 (831.5MHz), 26915 (836.5MHz), 26965 (841.5MHz)	15MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 37 RB Offset 1 RB / 74 RB Offset 36 RB / 0 RB Offset 36 RB / 19 RB Offset 36 RB / 39 RB Offset 75 RB / 0 RB Offset
-	Frequency Stability	26797 to 27033	26797 (824.7MHz), 27033 (848.3MHz)	1.4MHz	QPSK	6 RB / 0 RB Offset
		26805 to 27025	26805 (825.5MHz), 27025 (847.5MHz)	3MHz	QPSK	15 RB / 0 RB Offset
		26815 to 27015	26815 (826.5MHz), 27015 (846.5MHz)	5MHz	QPSK	25 RB / 0 RB Offset
		26840 to 26990	26840 (829MHz), 26990 (844MHz)	10MHz	QPSK	50 RB / 0 RB Offset
		26865 to 26965	26865 (831.5MHz), 26965 (841.5MHz)	15MHz	QPSK	75 RB / 0 RB Offset
-	Occupied Bandwidth	26797 to 27033	26797 (824.7MHz), 26915 (836.5MHz), 27033 (848.3MHz)	1.4MHz	QPSK / 16QAM / 64QAM / 256QAM	6 RB / 0 RB Offset
		26805 to 27025	26805 (825.5MHz), 26915 (836.5MHz), 27025 (847.5MHz)	3MHz	QPSK / 16QAM / 64QAM / 256QAM	15 RB / 0 RB Offset
		26815 to 27015	26815 (826.5MHz), 26915 (836.5MHz), 27015 (846.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	25 RB / 0 RB Offset
		26840 to 26990	26840 (829MHz), 26915 (836.5MHz), 26990 (844MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	50 RB / 0 RB Offset
		26865 to 26965	26865 (831.5MHz), 26915 (836.5MHz), 26965 (841.5MHz)	15MHz	QPSK / 16QAM / 64QAM / 256QAM	75 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Band Edge	26797 to 27033	26797 (824.7MHz), 27033 (848.3MHz)	1.4MHz	QPSK	1 RB / 0 RB Offset 1 RB / 5 RB Offset 6 RB / 0 RB Offset
		26805 to 27025	26805 (825.5MHz), 27025 (847.5MHz)	3MHz	QPSK	1 RB / 0 RB Offset 1 RB / 14 RB Offset 15 RB / 0 RB Offset
		26815 to 27015	26815 (826.5MHz), 27015 (846.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset 1 RB / 24 RB Offset 25 RB / 0 RB Offset
		26840 to 26990	26840 (829MHz), 26990 (844MHz)	10MHz	QPSK	1 RB / 0 RB Offset 1 RB / 49 RB Offset 50 RB / 0 RB Offset
		26865 to 26965	26865 (831.5MHz), 26965 (841.5MHz)	15MHz	QPSK	1 RB / 0 RB Offset 1 RB / 74 RB Offset 75 RB / 0 RB Offset
-	Peak to Average Ratio	26797 to 27033	26797 (824.7MHz), 26915 (836.5MHz), 27033 (848.3MHz)	1.4MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		26805 to 27025	26805 (825.5MHz), 26915 (836.5MHz), 27025 (847.5MHz)	3MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		26815 to 27015	26815 (826.5MHz), 26915 (836.5MHz), 27015 (846.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		26840 to 26990	26840 (829MHz), 26915 (836.5MHz), 26990 (844MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
		26865 to 26965	26865 (831.5MHz), 26915 (836.5MHz), 26965 (841.5MHz)	15MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset
-	Conducted Emission	26797 to 27033	26797 (824.7MHz), 26915 (836.5MHz), 27033 (848.3MHz)	1.4MHz	QPSK	1 RB / 0 RB Offset
		26805 to 27025	26805 (825.5MHz), 26915 (836.5MHz), 27025 (847.5MHz)	3MHz	QPSK	1 RB / 0 RB Offset
		26815 to 27015	26815 (826.5MHz), 26915 (836.5MHz), 27015 (846.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
		26840 to 26990	26840 (829MHz), 26915 (836.5MHz), 26990 (844MHz)	10MHz	QPSK	1 RB / 0 RB Offset
		26865 to 26965	26865 (831.5MHz), 26915 (836.5MHz), 26965 (841.5MHz)	15MHz	QPSK	1 RB / 0 RB Offset
-	Radiated Emission Below 1GHz	26865 to 26965	26865 (831.5MHz)	15MHz	QPSK	1 RB / 0 RB Offset
-	Radiated Emission Above 1GHz	26797 to 27033	26797 (824.7MHz), 26915 (836.5MHz), 27033 (848.3MHz)	1.4MHz	QPSK	1 RB / 0 RB Offset
		26815 to 27015	26815 (826.5MHz), 26915 (836.5MHz), 27015 (846.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
		26865 to 26965	26865 (831.5MHz), 26915 (836.5MHz), 26965 (841.5MHz)	15MHz	QPSK	1 RB / 0 RB Offset

Note: The conducted output power for QPSK, 16QAM, 64QAM and 256QAM, measured value of QPSK is higher than 16QAM, 64QAM and 256QAM mode. Therefore, only ERP, occupied bandwidth and Peak to average ratio items had been tested under QPSK, 16QAM, 64QAM and 256QAM modes, the other test items were performed under QPSK mode only.

LTE Band 26 (Part 90)

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	ERP	26697 to 26783	26697 (814.7MHz), 26740 (819.0MHz), 26783 (823.3MHz)	1.4MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 2 RB Offset 1 RB / 5 RB Offset 3 RB / 0 RB Offset 3 RB / 1 RB Offset 3 RB / 3 RB Offset 6 RB / 0 RB Offset
		26705 to 26775	26705 (815.5MHz), 26740 (819.0MHz), 26775 (822.5MHz)	3MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 7 RB Offset 1 RB / 14 RB Offset 8 RB / 0 RB Offset 8 RB / 3 RB Offset 8 RB / 7 RB Offset 15 RB / 0 RB Offset
		26715 to 26765	26715 (816.5MHz), 26740 (819.0MHz), 26765 (821.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 12 RB Offset 1 RB / 24 RB Offset 12 RB / 0 RB Offset 12 RB / 6 RB Offset 12 RB / 13 RB Offset 25 RB / 0 RB Offset
		26740	26740 (819.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 24 RB Offset 1 RB / 49 RB Offset 25 RB / 0 RB Offset 25 RB / 12 RB Offset 25 RB / 25 RB Offset 50 RB / 0 RB Offset
-	Frequency Stability	26697 to 26783	26697 (814.7MHz), 26783 (823.3MHz)	1.4MHz	QPSK	6 RB / 0 RB Offset
		26705 to 26775	26705 (815.5MHz), 26775 (822.5MHz)	3MHz	QPSK	15 RB / 0 RB Offset
		26715 to 26765	26715 (816.5MHz), 26765 (821.5MHz)	5MHz	QPSK	25 RB / 0 RB Offset
		26740	26740 (819.0MHz)	10MHz	QPSK	50 RB / 0 RB Offset
-	Occupied Bandwidth	26697 to 26783	26697 (814.7MHz), 26740 (819.0MHz), 26783 (823.3MHz)	1.4MHz	QPSK / 16QAM / 64QAM / 256QAM	6 RB / 0 RB Offset
		26705 to 26775	26705 (815.5MHz), 26740 (819.0MHz), 26775 (822.5MHz)	3MHz	QPSK / 16QAM / 64QAM / 256QAM	15 RB / 0 RB Offset
		26715 to 26765	26715 (816.5MHz), 26740 (819.0MHz), 26765 (821.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	25 RB / 0 RB Offset
		26740	26740 (819.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	50 RB / 0 RB Offset
-	Emission Masks	26697 to 26783	26697 (814.7MHz), 26740 (819.0MHz), 26783 (823.3MHz)	1.4MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 6 RB / 0 RB Offset
		26705 to 26775	26705 (815.5MHz), 26740 (819.0MHz), 26775 (822.5MHz)	3MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 15 RB / 0 RB Offset
		26715 to 26765	26715 (816.5MHz), 26740 (819.0MHz), 26765 (821.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 25 RB / 0 RB Offset
		26740	26740 (819.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 50 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Conducted Emission	26697 to 26783	26697 (814.7MHz), 26740 (819.0MHz), 26783 (823.3MHz)	1.4MHz	QPSK	1 RB / 0 RB Offset
		26705 to 26775	26705 (815.5MHz), 26740 (819.0MHz), 26775 (822.5MHz)	3MHz	QPSK	1 RB / 0 RB Offset
		26715 to 26765	26715 (816.5MHz), 26740 (819.0MHz), 26765 (821.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
		26740	26740 (819.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset
-	Radiated Emission Above 1GHz	26697 to 26783	26697 (814.7MHz), 26740 (819.0MHz), 26783 (823.3MHz)	1.4MHz	QPSK	1 RB / 0 RB Offset
		26715 to 26765	26715 (816.5MHz), 26740 (819.0MHz), 26765 (821.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
		26740	26740 (819.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset

Note: The conducted output power for QPSK, 16QAM, 64QAM and 256QAM, measured value of QPSK is higher than 16QAM, 64QAM and 256QAM mode. Therefore, only ERP, occupied bandwidth and Peak to average ratio items had been tested under QPSK, 16QAM, 64QAM and 256QAM modes, the other test items were performed under QPSK mode only.

Test Condition:

Test Item	Environmental Conditions	Input Power (System)	Tested By
ERP / EIRP	25deg. C, 70%RH	4.2Vdc	James Yang
Modulation characteristics	25deg. C, 70%RH	4.2Vdc	James Yang
Frequency Stability	24deg. C, 64%RH	4.2Vdc	James Yang
Occupied Bandwidth	24deg. C, 64%RH	4.2Vdc	James Yang
Band Edge	24deg. C, 64%RH	4.2Vdc	James Yang
Peak To Average Ratio	24deg. C, 64%RH	4.2Vdc	James Yang
Conducted Emission	24deg. C, 64%RH	4.2Vdc	James Yang
Radiated Emission	22deg. C, 66%RH	120Vac, 60Hz	Jones Chang

3.4 EUT Operating Conditions

The EUT makes a call to the communication simulator. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency

3.5 General Description of Applied Standards and References

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

Test Standard:

FCC 47 CFR Part 2

FCC 47 CFR Part 22

FCC 47 CFR Part 27

FCC 47 CFR Part 90

ANSI/TIA/EIA-603-D-2010

ANSI/TIA/EIA-603-E 2016

ANSI 63.26-2015

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

References Test Guidance:

KDB 971168 D01 Power Meas License Digital Systems v03r01

KDB 971168 D02 Misc Rev Approv License Devices v02r01

All test items have been performed as a reference to the above KDB test guidance.

4 Test Types and Results

4.1 Output Power Measurement

4.1.1 Limits of Output Power Measurement

For n41:
Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

For LTE Band 26 (Part 22):
Mobile / Portable station are limited to 7 watts e.r.p.

For LTE Band 26 (Part 90):
Control stations and mobile stations transmitting in the 758-768 MHz band and the 788-798 MHz band are limited to 30 watts ERP. Portable stations (hand-held devices) transmitting in the 758-768 MHz band and the 788-798 MHz band are limited to 3 watts ERP.

4.1.2 Test Procedures

Conducted Power Measurement:

1. Connect the DUT transmitter output to the spectrum analyzer via coaxial cable while ensuring proper impedance matching.
2. Set span to at least 1.5 times the OBW.
3. Set RBW = 1-5% of the OBW, not to exceed 1 MHz.
4. Set VBW ≥ 3 × RBW.
5. Set number of points in sweep ≥ 2 × span / RBW.
6. Sweep time = auto-couple.
7. Detector = RMS (power averaging).
8. If the EUT can be configured to transmit continuously (i.e., burst duty cycle ≥ 98%), then set the trigger to free run.
9. If the EUT cannot be configured to transmit continuously (i.e., burst duty cycle < 98 %), then use a sweep trigger with the level set to enable triggering only on full power bursts and configure the EUT to transmit at full power for the entire duration of each sweep. Ensure that the sweep time is less than or equal to the transmission burst duration.
10. Trace average at least 100 traces in power averaging (i.e., RMS) mode.
11. Compute the power by integrating the spectrum across the OBW of the signal using the instrument's band power measurement function, with the band limits set equal to the OBW band edges. If the instrument does not have a band power function, then sum the spectrum levels (in linear power units) at intervals equal to the RBW extending across the entire OBW of the spectrum.

Maximum EIRP / ERP

The relevant equation for determining the maximum ERP or EIRP from the measured RF output power is given in Equation as follows:

$EIRP = P_{Meas} + G_T$

$ERP = P_{Meas} + G_T - 2.15$

where

ERP or EIRP effective radiated power or equivalent isotropically radiated power, respectively (expressed in the same units as P_{Meas}, e.g., dBm or dBW)

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)

4.1.3 Test Setup

Conducted Power Measurement:

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

4.1.4 Test Results

Conducted Output Power (dBm)

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		509202	518598	528000
		Frequency (MHz)		2546.01	2592.99	2640
100M	pi/2 BPSK	1	0	23.77	23.61	23.79
		1	136	23.46	23.50	23.42
		1	272	23.10	23.20	23.03
		136	0	23.80	23.69	23.62
		136	68	23.70	23.75	23.80
		136	136	23.57	23.60	23.49
		273	0	23.63	23.66	23.67
	QPSK	1	0	20.72	20.79	20.74
		1	136	20.49	20.55	20.50
		1	272	20.16	20.16	20.00
		136	0	20.67	20.77	20.69
		136	68	20.69	20.74	20.64
		136	136	20.50	20.53	20.56
		273	0	20.63	20.56	20.66
	16QAM	1	0	20.43	20.33	20.31
		1	136	20.14	20.12	20.21
		1	272	19.78	19.70	19.89
		136	0	20.44	20.38	20.48
		136	68	20.30	20.44	20.39
		136	136	20.28	20.30	20.13
		273	0	20.40	20.31	20.37
	64QAM	1	0	19.94	20.05	19.90
		1	136	19.76	19.75	19.72
		1	272	19.40	19.48	19.32
		136	0	20.08	20.10	20.00
		136	68	20.01	20.07	20.01
		136	136	19.82	19.76	19.78
		273	0	19.99	19.84	19.89
	256QAM	1	0	17.48	17.35	17.34
		1	136	17.12	17.11	17.24
		1	272	16.83	16.81	16.85
		136	0	17.38	17.31	17.39
		136	68	17.32	17.34	17.32
		136	136	17.18	17.28	17.15
		273	0	17.37	17.31	17.35

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		508200	518598	528996
		Frequency (MHz)		2541	2592.99	2644.98
90M	pi/2 BPSK	1	0	23.78	23.66	23.62
		1	122	23.57	23.59	23.53
		1	244	23.07	23.10	23.07
		122	0	23.74	23.66	23.74
		122	61	23.77	23.77	23.66
		122	122	23.46	23.54	23.47
		245	0	23.65	23.58	23.58
	QPSK	1	0	20.72	20.66	20.69
		1	122	20.41	20.40	20.53
		1	244	20.19	20.08	20.04
		122	0	20.60	20.78	20.76
		122	61	20.68	20.68	20.65
		122	122	20.53	20.41	20.56
		245	0	20.57	20.58	20.68
	16QAM	1	0	20.35	20.44	20.48
		1	122	20.20	20.21	20.28
		1	244	19.75	19.89	19.89
		122	0	20.47	20.43	20.38
		122	61	20.34	20.50	20.32
		122	122	20.18	20.21	20.23
		245	0	20.25	20.20	20.21
	64QAM	1	0	20.09	19.94	20.06
		1	122	19.88	19.74	19.85
		1	244	19.45	19.50	19.39
		122	0	20.05	20.07	19.99
		122	61	19.96	20.03	19.92
		122	122	19.81	19.78	19.73
		245	0	19.97	19.81	19.82
	256QAM	1	0	17.41	17.50	17.39
		1	122	17.25	17.19	17.14
		1	244	16.84	16.89	16.73
		122	0	17.35	17.31	17.34
		122	61	17.48	17.43	17.46
		122	122	17.22	17.17	17.25
		245	0	17.36	17.27	17.40

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		507204	518598	529998
		Frequency (MHz)		2536.02	2592.99	2649.99
80M	pi/2 BPSK	1	0	23.72	23.61	23.72
		1	108	23.57	23.55	23.51
		1	216	23.08	23.11	23.16
		108	0	23.72	23.80	23.72
		108	54	23.80	23.63	23.67
		108	108	23.56	23.48	23.59
		217	0	23.62	23.53	23.68
	QPSK	1	0	20.73	20.80	20.64
		1	108	20.59	20.49	20.60
		1	216	20.13	20.01	20.11
		108	0	20.65	20.60	20.69
		108	54	20.71	20.80	20.73
		108	108	20.56	20.43	20.41
		217	0	20.50	20.60	20.56
	16QAM	1	0	20.42	20.42	20.32
		1	108	20.21	20.28	20.24
		1	216	19.83	19.88	19.88
		108	0	20.40	20.37	20.35
		108	54	20.49	20.46	20.34
		108	108	20.30	20.21	20.19
		217	0	20.22	20.38	20.34
	64QAM	1	0	19.93	20.06	20.01
		1	108	19.85	19.76	19.90
		1	216	19.48	19.47	19.50
		108	0	19.95	20.03	20.05
		108	54	19.91	20.02	20.06
		108	108	19.72	19.88	19.83
		217	0	19.83	19.80	19.92
	256QAM	1	0	17.49	17.44	17.45
		1	108	17.11	17.21	17.23
		1	216	16.84	16.88	16.88
		108	0	17.47	17.45	17.48
		108	54	17.35	17.41	17.39
		108	108	17.17	17.24	17.14
		217	0	17.35	17.38	17.22

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		505200	518598	531996
		Frequency (MHz)		2526	2592.99	2659.98
60M	pi/2 BPSK	1	0	23.78	23.63	23.78
		1	81	23.45	23.59	23.50
		1	161	23.11	23.02	23.01
		81	0	23.68	23.79	23.66
		81	40	23.67	23.60	23.68
		81	81	23.56	23.50	23.49
		162	0	23.52	23.63	23.62
	QPSK	1	0	20.69	20.79	20.67
		1	81	20.59	20.49	20.42
		1	161	20.03	20.01	20.15
		81	0	20.63	20.60	20.79
		81	40	20.78	20.62	20.62
		81	81	20.53	20.44	20.42
		162	0	20.63	20.58	20.65
	16QAM	1	0	20.43	20.45	20.49
		1	81	20.14	20.12	20.23
		1	161	19.83	19.75	19.87
		81	0	20.32	20.34	20.47
		81	40	20.43	20.45	20.44
		81	81	20.20	20.13	20.24
		162	0	20.22	20.40	20.24
	64QAM	1	0	20.02	19.90	19.94
		1	81	19.71	19.79	19.89
		1	161	19.42	19.35	19.47
		81	0	19.94	19.95	19.94
		81	40	20.00	20.10	19.90
		81	81	19.73	19.70	19.70
		162	0	19.80	19.94	19.86
	256QAM	1	0	17.48	17.50	17.31
		1	81	17.25	17.15	17.24
		1	161	16.76	16.80	16.85
		81	0	17.38	17.44	17.31
		81	40	17.43	17.37	17.34
		81	81	17.22	17.30	17.10
		162	0	17.34	17.39	17.25

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		504204	518598	532998
		Frequency (MHz)		2521.02	2592.99	2664.99
50M	pi/2 BPSK	1	0	23.68	23.60	23.71
		1	66	23.59	23.48	23.40
		1	132	23.20	23.08	23.14
		66	0	23.79	23.62	23.63
		66	33	23.60	23.71	23.60
		66	66	23.46	23.59	23.54
		133	0	23.51	23.61	23.55
	QPSK	1	0	20.75	20.80	20.64
		1	66	20.42	20.41	20.45
		1	132	20.12	20.12	20.20
		66	0	20.62	20.75	20.75
		66	33	20.61	20.73	20.68
		66	66	20.52	20.59	20.47
		133	0	20.67	20.63	20.58
	16QAM	1	0	20.30	20.35	20.45
		1	66	20.11	20.26	20.13
		1	132	19.70	19.90	19.80
		66	0	20.46	20.47	20.46
		66	33	20.45	20.33	20.31
		66	66	20.18	20.11	20.23
		133	0	20.37	20.24	20.35
	64QAM	1	0	19.93	20.00	20.05
		1	66	19.89	19.76	19.73
		1	132	19.47	19.44	19.30
		66	0	20.05	19.94	20.01
		66	33	19.99	20.06	20.04
		66	66	19.86	19.71	19.72
		133	0	19.88	19.84	19.88
	256QAM	1	0	17.36	17.41	17.41
		1	66	17.16	17.12	17.10
		1	132	16.71	16.82	16.74
		66	0	17.37	17.44	17.32
		66	33	17.46	17.42	17.32
		66	66	17.10	17.15	17.13
		133	0	17.31	17.37	17.38

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		503202	518598	534000
		Frequency (MHz)		2516.01	2592.99	2670
40M	pi/2 BPSK	1	0	23.74	23.71	23.76
		1	53	23.44	23.43	23.41
		1	105	23.13	23.19	23.12
		53	0	23.64	23.60	23.79
		53	26	23.63	23.80	23.60
		53	53	23.47	23.43	23.42
		106	0	23.65	23.53	23.63
	QPSK	1	0	20.60	20.69	20.77
		1	53	20.55	20.54	20.60
		1	105	20.04	20.06	20.16
		53	0	20.77	20.76	20.78
		53	26	20.74	20.65	20.78
		53	53	20.43	20.41	20.48
		106	0	20.63	20.55	20.51
	16QAM	1	0	20.38	20.39	20.42
		1	53	20.16	20.22	20.21
		1	105	19.84	19.78	19.74
		53	0	20.32	20.47	20.40
		53	26	20.42	20.39	20.37
		53	53	20.13	20.29	20.25
		106	0	20.22	20.31	20.27
	64QAM	1	0	20.09	19.90	19.90
		1	53	19.78	19.79	19.89
		1	105	19.45	19.47	19.44
		53	0	20.05	20.04	19.95
		53	26	19.94	19.90	20.04
		53	53	19.78	19.84	19.81
		106	0	19.98	19.82	19.86
	256QAM	1	0	17.46	17.33	17.37
		1	53	17.12	17.15	17.28
		1	105	16.70	16.70	16.90
		53	0	17.30	17.42	17.43
		53	26	17.33	17.44	17.42
		53	53	17.27	17.16	17.11
		106	0	17.36	17.25	17.33

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		501204	518598	535998
		Frequency (MHz)		2506.02	2592.99	2679.99
20M	pi/2 BPSK	1	0	23.80	23.80	23.67
		1	25	23.43	23.46	23.52
		1	50	23.00	23.03	23.04
		25	0	23.70	23.70	23.76
		25	12	23.67	23.78	23.64
		25	25	23.44	23.44	23.46
		51	0	23.70	23.54	23.62
	QPSK	1	0	20.80	20.74	20.60
		1	25	20.54	20.44	20.55
		1	50	20.10	20.03	20.12
		25	0	20.61	20.73	20.65
		25	12	20.70	20.72	20.67
		25	25	20.44	20.60	20.48
		51	0	20.54	20.67	20.65
	16QAM	1	0	20.50	20.34	20.50
		1	25	20.24	20.22	20.12
		1	50	19.72	19.73	19.72
		25	0	20.43	20.36	20.33
		25	12	20.30	20.41	20.45
		25	25	20.30	20.16	20.29
		51	0	20.26	20.24	20.34
	64QAM	1	0	19.93	19.96	20.03
		1	25	19.72	19.87	19.87
		1	50	19.30	19.41	19.44
		25	0	19.92	19.95	19.91
		25	12	20.08	20.08	19.99
		25	25	19.72	19.78	19.81
		51	0	19.86	20.00	19.99
	256QAM	1	0	17.35	17.31	17.48
		1	25	17.16	17.26	17.29
		1	50	16.82	16.84	16.74
		25	0	17.49	17.32	17.44
		25	12	17.43	17.35	17.38
		25	25	17.25	17.19	17.27
		51	0	17.22	17.38	17.26

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		500700	518598	536496
		Frequency (MHz)		2503.5	2592.99	2682.48
15M	pi/2 BPSK	1	0	23.74	23.80	23.68
		1	19	23.51	23.57	23.53
		1	37	23.13	23.19	23.04
		19	0	23.62	23.60	23.67
		19	9	23.75	23.78	23.75
		19	20	23.56	23.44	23.57
		38	0	23.51	23.54	23.52
	QPSK	1	0	20.60	20.78	20.61
		1	19	20.48	20.48	20.44
		1	37	20.17	20.14	20.09
		19	0	20.71	20.68	20.63
		19	9	20.65	20.65	20.62
		19	20	20.45	20.50	20.42
		38	0	20.56	20.68	20.51
	16QAM	1	0	20.41	20.41	20.46
		1	19	20.21	20.26	20.20
		1	37	19.71	19.74	19.84
		19	0	20.46	20.31	20.49
		19	9	20.35	20.37	20.49
		19	20	20.26	20.29	20.10
		38	0	20.37	20.36	20.38
	64QAM	1	0	19.99	20.09	20.08
		1	19	19.85	19.76	19.80
		1	37	19.32	19.31	19.45
		19	0	20.05	20.03	19.93
		19	9	20.06	20.07	20.01
		19	20	19.85	19.76	19.74
		38	0	19.88	19.93	19.95
	256QAM	1	0	17.44	17.45	17.47
		1	19	17.10	17.29	17.11
		1	37	16.77	16.75	16.76
		19	0	17.35	17.34	17.47
		19	9	17.50	17.48	17.42
		19	20	17.24	17.20	17.29
		38	0	17.36	17.27	17.25

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		500202	518598	537000
		Frequency (MHz)		2501.01	2592.99	2685
10M	pi/2 BPSK	1	0	23.64	23.74	23.79
		1	12	23.50	23.60	23.43
		1	23	23.19	23.08	23.02
		12	0	23.74	23.64	23.71
		12	6	23.79	23.78	23.73
		12	12	23.47	23.52	23.47
		24	0	23.55	23.59	23.55
	QPSK	1	0	20.62	20.69	20.79
		1	12	20.46	20.40	20.42
		1	23	20.09	20.15	20.13
		12	0	20.61	20.65	20.65
		12	6	20.63	20.61	20.61
		12	12	20.59	20.50	20.40
		24	0	20.60	20.61	20.61
	16QAM	1	0	20.45	20.44	20.36
		1	12	20.13	20.22	20.12
		1	23	19.90	19.78	19.81
		12	0	20.31	20.42	20.36
		12	6	20.38	20.41	20.32
		12	12	20.24	20.16	20.20
		24	0	20.34	20.27	20.30
	64QAM	1	0	20.07	19.91	20.07
		1	12	19.72	19.87	19.81
		1	23	19.33	19.35	19.42
		12	0	20.04	20.06	20.04
		12	6	19.96	19.90	20.03
		12	12	19.76	19.73	19.86
		24	0	19.84	19.88	20.00
	256QAM	1	0	17.43	17.41	17.31
		1	12	17.30	17.21	17.23
		1	23	16.83	16.87	16.87
		12	0	17.45	17.49	17.41
		12	6	17.36	17.41	17.43
		12	12	17.20	17.23	17.21
		24	0	17.34	17.21	17.31

LTE Band 26 (Part 22)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26865	26915	26965
		Frequency (MHz)		831.5	836.5	841.5
15M	QPSK	1	0	23.27	23.36	23.69
		1	37	23.11	23.32	23.54
		1	74	23.20	23.35	23.50
		36	0	22.13	23.33	22.65
		36	19	22.30	23.28	22.54
		36	39	22.18	23.33	22.60
		75	0	22.15	23.23	22.47
	16QAM	1	0	22.17	22.47	22.70
		1	37	22.10	22.31	22.70
		1	74	22.14	22.48	22.51
		36	0	21.27	22.39	21.69
		36	19	21.21	22.23	21.53
		36	39	21.17	22.21	21.56
		75	0	21.27	22.26	21.56
	64QAM	1	0	21.11	21.48	21.57
		1	37	21.14	21.35	21.51
		1	74	21.10	21.34	21.70
		36	0	20.11	21.26	20.65
		36	19	20.24	21.36	20.58
		36	39	20.18	21.24	20.64
		75	0	20.24	21.26	20.57
	256QAM	1	0	19.27	19.50	19.61
		1	37	19.20	19.33	19.51
		1	74	19.18	19.37	19.55
		36	0	18.19	19.30	18.66
		36	19	18.29	19.31	18.64
		36	39	18.23	19.21	18.54
		75	0	18.23	19.26	18.44

LTE Band 26 (Part 22)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26840	26915	26990
		Frequency (MHz)		829	836.5	844
10M	QPSK	1	0	23.20	23.46	23.51
		1	24	23.30	23.41	23.65
		1	49	23.27	23.42	23.67
		25	0	22.20	23.26	22.68
		25	12	22.29	23.34	22.68
		25	25	22.21	23.24	22.52
		50	0	22.20	23.32	22.54
	16QAM	1	0	22.25	22.33	22.51
		1	24	22.29	22.43	22.66
		1	49	22.23	22.50	22.65
		25	0	21.30	22.29	21.65
		25	12	21.16	22.25	21.54
		25	25	21.22	22.35	21.54
		50	0	21.15	22.39	21.50
	64QAM	1	0	21.27	21.36	21.57
		1	24	21.20	21.33	21.61
		1	49	21.29	21.31	21.68
		25	0	20.20	21.32	20.63
		25	12	20.13	21.22	20.68
		25	25	20.15	21.37	20.56
		50	0	20.11	21.21	20.56
	256QAM	1	0	19.26	19.31	19.68
		1	24	19.22	19.40	19.58
		1	49	19.27	19.45	19.58
		25	0	18.15	19.25	18.66
		25	12	18.16	19.31	18.62
		25	25	18.30	19.35	18.67
		50	0	18.21	19.20	18.49

LTE Band 26 (Part 22)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26815	26915	27015
		Frequency (MHz)		826.5	836.5	846.5
5M	QPSK	1	0	23.18	23.35	23.53
		1	12	23.26	23.38	23.65
		1	24	23.11	23.39	23.50
		12	0	22.15	23.26	22.68
		12	6	22.25	23.25	22.60
		12	13	22.18	23.33	22.69
		25	0	22.12	23.35	22.55
	16QAM	1	0	22.28	22.31	22.60
		1	12	22.27	22.47	22.66
		1	24	22.17	22.34	22.66
		12	0	21.26	22.38	21.52
		12	6	21.23	22.40	21.57
		12	13	21.25	22.38	21.67
		25	0	21.28	22.29	21.58
	64QAM	1	0	21.12	21.30	21.61
		1	12	21.30	21.47	21.63
		1	24	21.11	21.41	21.64
		12	0	20.27	21.29	20.62
		12	6	20.14	21.29	20.50
		12	13	20.25	21.23	20.65
		25	0	20.19	21.23	20.54
	256QAM	1	0	19.18	19.35	19.60
		1	12	19.20	19.31	19.52
		1	24	19.28	19.45	19.68
		12	0	18.11	19.26	18.51
		12	6	18.17	19.40	18.60
		12	13	18.27	19.37	18.57
		25	0	18.25	19.32	18.50

LTE Band 26 (Part 22)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26805	26915	27025
		Frequency (MHz)		825.5	836.5	847.5
3M	QPSK	1	0	23.11	23.31	23.63
		1	7	23.13	23.32	23.53
		1	14	23.17	23.46	23.50
		8	0	22.19	22.30	22.55
		8	3	22.13	22.28	22.53
		8	7	22.20	22.29	22.54
		15	0	22.07	22.11	22.62
	16QAM	1	0	22.28	22.24	22.67
		1	7	22.14	22.37	22.62
		1	14	22.24	22.35	22.45
		8	0	21.12	21.19	21.62
		8	3	21.13	21.28	21.64
		8	7	21.00	21.27	21.54
		15	0	21.17	21.23	21.63
	64QAM	1	0	21.20	21.30	21.65
		1	7	21.20	21.33	21.58
		1	14	21.15	21.39	21.59
		8	0	20.25	20.28	20.65
		8	3	20.16	20.11	20.63
		8	7	20.20	20.26	20.48
		15	0	20.12	20.28	20.56
	256QAM	1	0	19.29	19.37	19.63
		1	7	19.07	19.32	19.57
		1	14	19.27	19.39	19.52
		8	0	18.24	18.13	18.62
		8	3	18.28	18.16	18.64
		8	7	18.09	18.16	18.50
		15	0	18.02	18.11	18.50

LTE Band 26 (Part 22)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26797	26915	27033
		Frequency (MHz)		824.7	836.5	848.3
1.4M	QPSK	1	0	23.18	23.25	23.50
		1	2	23.18	23.37	23.68
		1	5	23.30	23.32	23.42
		3	0	22.19	22.16	22.50
		3	1	22.27	22.23	22.60
		3	3	22.17	22.25	22.55
		6	0	22.10	22.19	22.65
	16QAM	1	0	22.16	22.25	22.55
		1	2	22.08	22.35	22.55
		1	5	22.30	22.39	22.46
		3	0	21.12	21.14	21.58
		3	1	21.11	21.26	21.57
		3	3	21.14	21.19	21.50
		6	0	21.15	21.18	21.54
	64QAM	1	0	21.24	21.40	21.55
		1	2	21.17	21.36	21.62
		1	5	21.18	21.30	21.59
		3	0	20.20	20.15	20.70
		3	1	20.22	20.25	20.51
		3	3	20.15	20.23	20.41
		6	0	20.11	20.27	20.51
	256QAM	1	0	19.20	19.36	19.70
		1	2	19.17	19.30	19.66
		1	5	19.15	19.43	19.54
		3	0	18.11	18.21	18.63
		3	1	18.23	18.17	18.70
		3	3	18.04	18.26	18.53
		6	0	18.03	18.15	18.57

LTE Band 26 (Part 90)				
BW	MCS Index	RB Size	RB Offset	Mid
		Channel		26740
		Frequency (MHz)		819
10M	QPSK	1	0	23.42
		1	24	23.33
		1	49	23.49
		25	0	23.34
		25	12	23.40
		25	25	23.26
		50	0	23.23
	16QAM	1	0	22.32
		1	24	22.49
		1	49	22.43
		25	0	22.23
		25	12	22.36
		25	25	22.36
		50	0	22.33
	64QAM	1	0	21.34
		1	24	21.37
		1	49	21.41
		25	0	21.31
		25	12	21.39
		25	25	21.32
		50	0	21.31
	256QAM	1	0	19.37
		1	24	19.35
		1	49	19.40
		25	0	19.26
		25	12	19.35
		25	25	19.25
		50	0	19.23

LTE Band 26 (Part 90)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26715	26740	26765
		Frequency (MHz)		816.5	819	821.5
5M	QPSK	1	0	23.27	23.32	23.66
		1	12	23.10	23.37	23.64
		1	24	23.28	23.44	23.52
		12	0	22.25	23.36	22.67
		12	6	22.17	23.29	22.65
		12	13	22.24	23.24	22.55
		25	0	22.11	23.39	22.51
	16QAM	1	0	22.17	22.40	22.64
		1	12	22.18	22.30	22.62
		1	24	22.11	22.50	22.54
		12	0	21.22	22.20	21.56
		12	6	21.28	22.26	21.70
		12	13	21.30	22.22	21.68
		25	0	21.22	22.26	21.42
	64QAM	1	0	21.20	21.32	21.56
		1	12	21.26	21.34	21.69
		1	24	21.22	21.31	21.57
		12	0	20.27	21.21	20.51
		12	6	20.22	21.29	20.56
		12	13	20.11	21.20	20.59
		25	0	20.24	21.38	20.47
	256QAM	1	0	19.13	19.50	19.67
		1	12	19.27	19.39	19.67
		1	24	19.11	19.31	19.56
		12	0	18.27	19.32	18.67
		12	6	18.20	19.33	18.53
		12	13	18.12	19.24	18.70
		25	0	18.25	19.39	18.50

LTE Band 26 (Part 90)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26705	26740	26775
		Frequency (MHz)		815.5	819	822.5
3M	QPSK	1	0	23.27	23.24	23.57
		1	7	23.18	23.23	23.66
		1	14	23.25	23.48	23.52
		8	0	22.14	22.11	22.55
		8	3	22.10	22.13	22.64
		8	7	22.17	22.10	22.44
		15	0	22.02	22.15	22.66
	16QAM	1	0	22.29	22.33	22.68
		1	7	22.19	22.33	22.65
		1	14	22.28	22.40	22.51
		8	0	21.15	21.16	21.55
		8	3	21.26	21.27	21.53
		8	7	21.09	21.30	21.49
		15	0	21.13	21.19	21.52
	64QAM	1	0	21.22	21.20	21.54
		1	7	21.04	21.20	21.58
		1	14	21.13	21.40	21.45
		8	0	20.29	20.18	20.63
		8	3	20.13	20.12	20.52
		8	7	20.03	20.29	20.54
		15	0	20.06	20.21	20.64
	256QAM	1	0	19.10	19.36	19.68
		1	7	19.11	19.34	19.60
		1	14	19.13	19.30	19.51
		8	0	18.26	18.16	18.60
		8	3	18.27	18.23	18.56
		8	7	18.18	18.23	18.45
		15	0	18.15	18.18	18.54

LTE Band 26 (Part 90)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26697	26740	26783
		Frequency (MHz)		814.7	819	823.3
1.4M	QPSK	1	0	23.12	23.35	23.65
		1	2	23.11	23.20	23.52
		1	5	23.24	23.35	23.45
		3	0	22.21	22.21	22.64
		3	1	22.28	22.15	22.50
		3	3	22.17	22.21	22.45
		6	0	22.07	22.24	22.58
	16QAM	1	0	22.20	22.27	22.60
		1	2	22.00	22.27	22.59
		1	5	22.29	22.31	22.54
		3	0	21.13	21.12	21.65
		3	1	21.16	21.25	21.55
		3	3	21.09	21.25	21.40
		6	0	21.07	21.13	21.55
	64QAM	1	0	21.27	21.38	21.61
		1	2	21.03	21.25	21.69
		1	5	21.17	21.44	21.48
		3	0	20.24	20.27	20.69
		3	1	20.21	20.17	20.59
		3	3	20.11	20.19	20.54
		6	0	20.20	20.24	20.66
	256QAM	1	0	19.25	19.36	19.57
		1	2	19.18	19.38	19.53
		1	5	19.29	19.34	19.50
		3	0	18.22	18.15	18.69
		3	1	18.12	18.19	18.62
		3	3	18.18	18.16	18.58
		6	0	18.13	18.23	18.51

EIRP Power (dBm)

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		509202	518598	528000
		Frequency (MHz)		2546.01	2592.99	2640
100M	pi/2 BPSK	1	0	25.97	25.81	25.99
		1	136	25.66	25.70	25.62
		1	272	25.30	25.40	25.23
		136	0	26.00	25.89	25.82
		136	68	25.90	25.95	26.00
		136	136	25.77	25.80	25.69
		273	0	25.83	25.86	25.87
	QPSK	1	0	22.92	22.99	22.94
		1	136	22.69	22.75	22.70
		1	272	22.36	22.36	22.20
		136	0	22.87	22.97	22.89
		136	68	22.89	22.94	22.84
		136	136	22.70	22.73	22.76
		273	0	22.83	22.76	22.86
	16QAM	1	0	22.63	22.53	22.51
		1	136	22.34	22.32	22.41
		1	272	21.98	21.90	22.09
		136	0	22.64	22.58	22.68
		136	68	22.50	22.64	22.59
		136	136	22.48	22.50	22.33
		273	0	22.60	22.51	22.57
	64QAM	1	0	22.14	22.25	22.10
		1	136	21.96	21.95	21.92
		1	272	21.60	21.68	21.52
		136	0	22.28	22.30	22.20
		136	68	22.21	22.27	22.21
		136	136	22.02	21.96	21.98
		273	0	22.19	22.04	22.09
	256QAM	1	0	19.68	19.55	19.54
		1	136	19.32	19.31	19.44
		1	272	19.03	19.01	19.05
		136	0	19.58	19.51	19.59
		136	68	19.52	19.54	19.52
		136	136	19.38	19.48	19.35
		273	0	19.57	19.51	19.55

*EIRP = Conducted + antenna gain

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		508200	518598	528996
		Frequency (MHz)		2541	2592.99	2644.98
90M	pi/2 BPSK	1	0	25.98	25.86	25.82
		1	122	25.77	25.79	25.73
		1	244	25.27	25.30	25.27
		122	0	25.94	25.86	25.94
		122	61	25.97	25.97	25.86
		122	122	25.66	25.74	25.67
		245	0	25.85	25.78	25.78
	QPSK	1	0	22.92	22.86	22.89
		1	122	22.61	22.60	22.73
		1	244	22.39	22.28	22.24
		122	0	22.80	22.98	22.96
		122	61	22.88	22.88	22.85
		122	122	22.73	22.61	22.76
		245	0	22.77	22.78	22.88
	16QAM	1	0	22.55	22.64	22.68
		1	122	22.40	22.41	22.48
		1	244	21.95	22.09	22.09
		122	0	22.67	22.63	22.58
		122	61	22.54	22.70	22.52
		122	122	22.38	22.41	22.43
		245	0	22.45	22.40	22.41
	64QAM	1	0	22.29	22.14	22.26
		1	122	22.08	21.94	22.05
		1	244	21.65	21.70	21.59
		122	0	22.25	22.27	22.19
		122	61	22.16	22.23	22.12
		122	122	22.01	21.98	21.93
		245	0	22.17	22.01	22.02
	256QAM	1	0	19.61	19.70	19.59
		1	122	19.45	19.39	19.34
		1	244	19.04	19.09	18.93
		122	0	19.55	19.51	19.54
		122	61	19.68	19.63	19.66
		122	122	19.42	19.37	19.45
		245	0	19.56	19.47	19.60

*EIRP = Conducted + antenna gain

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		507204	518598	529998
		Frequency (MHz)		2536.02	2592.99	2649.99
80M	pi/2 BPSK	1	0	25.92	25.81	25.92
		1	108	25.77	25.75	25.71
		1	216	25.28	25.31	25.36
		108	0	25.92	26.00	25.92
		108	54	26.00	25.83	25.87
		108	108	25.76	25.68	25.79
		217	0	25.82	25.73	25.88
	QPSK	1	0	22.93	23.00	22.84
		1	108	22.79	22.69	22.80
		1	216	22.33	22.21	22.31
		108	0	22.85	22.80	22.89
		108	54	22.91	23.00	22.93
		108	108	22.76	22.63	22.61
		217	0	22.70	22.80	22.76
	16QAM	1	0	22.62	22.62	22.52
		1	108	22.41	22.48	22.44
		1	216	22.03	22.08	22.08
		108	0	22.60	22.57	22.55
		108	54	22.69	22.66	22.54
		108	108	22.50	22.41	22.39
		217	0	22.42	22.58	22.54
	64QAM	1	0	22.13	22.26	22.21
		1	108	22.05	21.96	22.10
		1	216	21.68	21.67	21.70
		108	0	22.15	22.23	22.25
		108	54	22.11	22.22	22.26
		108	108	21.92	22.08	22.03
		217	0	22.03	22.00	22.12
	256QAM	1	0	19.69	19.64	19.65
		1	108	19.31	19.41	19.43
		1	216	19.04	19.08	19.08
		108	0	19.67	19.65	19.68
		108	54	19.55	19.61	19.59
		108	108	19.37	19.44	19.34
		217	0	19.55	19.58	19.42

*EIRP = Conducted + antenna gain

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		505200	518598	531996
		Frequency (MHz)		2526	2592.99	2659.98
60M	pi/2 BPSK	1	0	25.98	25.83	25.98
		1	81	25.65	25.79	25.70
		1	161	25.31	25.22	25.21
		81	0	25.88	25.99	25.86
		81	40	25.87	25.80	25.88
		81	81	25.76	25.70	25.69
		162	0	25.72	25.83	25.82
	QPSK	1	0	22.89	22.99	22.87
		1	81	22.79	22.69	22.62
		1	161	22.23	22.21	22.35
		81	0	22.83	22.80	22.99
		81	40	22.98	22.82	22.82
		81	81	22.73	22.64	22.62
		162	0	22.83	22.78	22.85
	16QAM	1	0	22.63	22.65	22.69
		1	81	22.34	22.32	22.43
		1	161	22.03	21.95	22.07
		81	0	22.52	22.54	22.67
		81	40	22.63	22.65	22.64
		81	81	22.40	22.33	22.44
		162	0	22.42	22.60	22.44
	64QAM	1	0	22.22	22.10	22.14
		1	81	21.91	21.99	22.09
		1	161	21.62	21.55	21.67
		81	0	22.14	22.15	22.14
		81	40	22.20	22.30	22.10
		81	81	21.93	21.90	21.90
		162	0	22.00	22.14	22.06
	256QAM	1	0	19.68	19.70	19.51
		1	81	19.45	19.35	19.44
		1	161	18.96	19.00	19.05
		81	0	19.58	19.64	19.51
		81	40	19.63	19.57	19.54
		81	81	19.42	19.50	19.30
		162	0	19.54	19.59	19.45

*EIRP = Conducted + antenna gain

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		504204	518598	532998
		Frequency (MHz)		2521.02	2592.99	2664.99
50M	pi/2 BPSK	1	0	25.90	25.86	25.95
		1	66	25.73	25.79	25.71
		1	132	25.30	25.22	25.39
		66	0	25.80	26.00	25.94
		66	33	25.81	25.93	25.97
		66	66	25.65	25.79	25.68
		133	0	25.70	25.84	25.74
	QPSK	1	0	22.85	22.99	22.85
		1	66	22.83	22.78	22.78
		1	132	22.38	22.27	22.31
		66	0	22.99	22.89	22.87
		66	33	22.83	22.89	22.81
		66	66	22.74	22.67	22.75
		133	0	22.74	22.72	22.77
	16QAM	1	0	22.80	22.85	22.93
		1	66	22.78	22.81	22.70
		1	132	22.34	22.36	22.40
		66	0	22.99	22.95	22.91
		66	33	22.86	22.83	22.96
		66	66	22.63	22.74	22.74
		133	0	22.82	22.79	22.86
	64QAM	1	0	22.47	22.43	22.45
		1	66	22.32	22.22	22.35
		1	132	21.88	21.78	21.78
		66	0	22.49	22.32	22.47
		66	33	22.47	22.48	22.38
		66	66	22.18	22.18	22.11
		133	0	22.25	22.21	22.36
	256QAM	1	0	19.50	19.35	19.32
		1	66	19.24	19.20	19.20
		1	132	18.78	18.71	18.81
		66	0	19.47	19.45	19.42
		66	33	19.37	19.31	19.46
		66	66	19.19	19.15	19.22
		133	0	19.33	19.35	19.27

*EIRP = Conducted + antenna gain

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		503202	518598	534000
		Frequency (MHz)		2516.01	2592.99	2670
40M	pi/2 BPSK	1	0	25.94	25.91	25.96
		1	53	25.64	25.63	25.61
		1	105	25.33	25.39	25.32
		53	0	25.84	25.80	25.99
		53	26	25.83	26.00	25.80
		53	53	25.67	25.63	25.62
		106	0	25.85	25.73	25.83
	QPSK	1	0	22.80	22.89	22.97
		1	53	22.75	22.74	22.80
		1	105	22.24	22.26	22.36
		53	0	22.97	22.96	22.98
		53	26	22.94	22.85	22.98
		53	53	22.63	22.61	22.68
		106	0	22.83	22.75	22.71
	16QAM	1	0	22.58	22.59	22.62
		1	53	22.36	22.42	22.41
		1	105	22.04	21.98	21.94
		53	0	22.52	22.67	22.60
		53	26	22.62	22.59	22.57
		53	53	22.33	22.49	22.45
		106	0	22.42	22.51	22.47
	64QAM	1	0	22.29	22.10	22.10
		1	53	21.98	21.99	22.09
		1	105	21.65	21.67	21.64
		53	0	22.25	22.24	22.15
		53	26	22.14	22.10	22.24
		53	53	21.98	22.04	22.01
		106	0	22.18	22.02	22.06
	256QAM	1	0	19.66	19.53	19.57
		1	53	19.32	19.35	19.48
		1	105	18.90	18.90	19.10
		53	0	19.50	19.62	19.63
		53	26	19.53	19.64	19.62
		53	53	19.47	19.36	19.31
		106	0	19.56	19.45	19.53

*EIRP = Conducted + antenna gain

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		501204	518598	535998
		Frequency (MHz)		2506.02	2592.99	2679.99
20M	pi/2 BPSK	1	0	26.00	26.00	25.87
		1	25	25.63	25.66	25.72
		1	50	25.20	25.23	25.24
		25	0	25.90	25.90	25.96
		25	12	25.87	25.98	25.84
		25	25	25.64	25.64	25.66
		51	0	25.90	25.74	25.82
	QPSK	1	0	23.00	22.94	22.80
		1	25	22.74	22.64	22.75
		1	50	22.30	22.23	22.32
		25	0	22.81	22.93	22.85
		25	12	22.90	22.92	22.87
		25	25	22.64	22.80	22.68
		51	0	22.74	22.87	22.85
	16QAM	1	0	22.70	22.54	22.70
		1	25	22.44	22.42	22.32
		1	50	21.92	21.93	21.92
		25	0	22.63	22.56	22.53
		25	12	22.50	22.61	22.65
		25	25	22.50	22.36	22.49
		51	0	22.46	22.44	22.54
	64QAM	1	0	22.13	22.16	22.23
		1	25	21.92	22.07	22.07
		1	50	21.50	21.61	21.64
		25	0	22.12	22.15	22.11
		25	12	22.28	22.28	22.19
		25	25	21.92	21.98	22.01
		51	0	22.06	22.20	22.19
	256QAM	1	0	19.55	19.51	19.68
		1	25	19.36	19.46	19.49
		1	50	19.02	19.04	18.94
		25	0	19.69	19.52	19.64
		25	12	19.63	19.55	19.58
		25	25	19.45	19.39	19.47
		51	0	19.42	19.58	19.46

*EIRP = Conducted + antenna gain

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		500700	518598	536496
		Frequency (MHz)		2503.5	2592.99	2682.48
15M	pi/2 BPSK	1	0	25.94	26.00	25.88
		1	19	25.71	25.77	25.73
		1	37	25.33	25.39	25.24
		19	0	25.82	25.80	25.87
		19	9	25.95	25.98	25.95
		19	20	25.76	25.64	25.77
		38	0	25.71	25.74	25.72
	QPSK	1	0	22.80	22.98	22.81
		1	19	22.68	22.68	22.64
		1	37	22.37	22.34	22.29
		19	0	22.91	22.88	22.83
		19	9	22.85	22.85	22.82
		19	20	22.65	22.70	22.62
		38	0	22.76	22.88	22.71
	16QAM	1	0	22.61	22.61	22.66
		1	19	22.41	22.46	22.40
		1	37	21.91	21.94	22.04
		19	0	22.66	22.51	22.69
		19	9	22.55	22.57	22.69
		19	20	22.46	22.49	22.30
		38	0	22.57	22.56	22.58
	64QAM	1	0	22.19	22.29	22.28
		1	19	22.05	21.96	22.00
		1	37	21.52	21.51	21.65
		19	0	22.25	22.23	22.13
		19	9	22.26	22.27	22.21
		19	20	22.05	21.96	21.94
		38	0	22.08	22.13	22.15
	256QAM	1	0	19.64	19.65	19.67
		1	19	19.30	19.49	19.31
		1	37	18.97	18.95	18.96
		19	0	19.55	19.54	19.67
		19	9	19.70	19.68	19.62
		19	20	19.44	19.40	19.49
		38	0	19.56	19.47	19.45

*EIRP = Conducted + antenna gain

FCC NR Band 41 (SCS 30kHz)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		500202	518598	537000
		Frequency (MHz)		2501.01	2592.99	2685
10M	pi/2 BPSK	1	0	25.84	25.94	25.99
		1	12	25.70	25.80	25.63
		1	23	25.39	25.28	25.22
		12	0	25.94	25.84	25.91
		12	6	25.99	25.98	25.93
		12	12	25.67	25.72	25.67
		24	0	25.75	25.79	25.75
	QPSK	1	0	22.82	22.89	22.99
		1	12	22.66	22.60	22.62
		1	23	22.29	22.35	22.33
		12	0	22.81	22.85	22.85
		12	6	22.83	22.81	22.81
		12	12	22.79	22.70	22.60
		24	0	22.80	22.81	22.81
	16QAM	1	0	22.65	22.64	22.56
		1	12	22.33	22.42	22.32
		1	23	22.10	21.98	22.01
		12	0	22.51	22.62	22.56
		12	6	22.58	22.61	22.52
		12	12	22.44	22.36	22.40
		24	0	22.54	22.47	22.50
	64QAM	1	0	22.27	22.11	22.27
		1	12	21.92	22.07	22.01
		1	23	21.53	21.55	21.62
		12	0	22.24	22.26	22.24
		12	6	22.16	22.10	22.23
		12	12	21.96	21.93	22.06
		24	0	22.04	22.08	22.20
	256QAM	1	0	19.63	19.61	19.51
		1	12	19.50	19.41	19.43
		1	23	19.03	19.07	19.07
		12	0	19.65	19.69	19.61
		12	6	19.56	19.61	19.63
		12	12	19.40	19.43	19.41
		24	0	19.54	19.41	19.51

*EIRP = Conducted + antenna gain

ERP Power (dBm)

LTE Band 26 (Part 22)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26865	26915	26965
		Frequency (MHz)		831.5	836.5	841.5
15M	QPSK	1	0	22.13	22.22	22.55
		1	37	21.97	22.18	22.40
		1	74	22.06	22.21	22.36
		36	0	20.99	22.19	21.51
		36	19	21.16	22.14	21.40
		36	39	21.04	22.19	21.46
		75	0	21.01	22.09	21.33
	16QAM	1	0	21.03	21.33	21.56
		1	37	20.96	21.17	21.56
		1	74	21.00	21.34	21.37
		36	0	20.13	21.25	20.55
		36	19	20.07	21.09	20.39
		36	39	20.03	21.07	20.42
		75	0	20.13	21.12	20.42
	64QAM	1	0	19.97	20.34	20.43
		1	37	20.00	20.21	20.37
		1	74	19.96	20.20	20.56
		36	0	18.97	20.12	19.51
		36	19	19.10	20.22	19.44
		36	39	19.04	20.10	19.50
		75	0	19.10	20.12	19.43
	256QAM	1	0	18.13	18.36	18.47
		1	37	18.06	18.19	18.37
		1	74	18.04	18.23	18.41
		36	0	17.05	18.16	17.52
		36	19	17.15	18.17	17.50
		36	39	17.09	18.07	17.40
		75	0	17.09	18.12	17.30

*ERP = Conducted + antenna gain - 2.15

LTE Band 26 (Part 22)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26840	26915	26990
		Frequency (MHz)		829	836.5	844
10M	QPSK	1	0	22.06	22.32	22.37
		1	24	22.16	22.27	22.51
		1	49	22.13	22.28	22.53
		25	0	21.06	22.12	21.54
		25	12	21.15	22.20	21.54
		25	25	21.07	22.10	21.38
		50	0	21.06	22.18	21.40
	16QAM	1	0	21.11	21.19	21.37
		1	24	21.15	21.29	21.52
		1	49	21.09	21.36	21.51
		25	0	20.16	21.15	20.51
		25	12	20.02	21.11	20.40
		25	25	20.08	21.21	20.40
		50	0	20.01	21.25	20.36
	64QAM	1	0	20.13	20.22	20.43
		1	24	20.06	20.19	20.47
		1	49	20.15	20.17	20.54
		25	0	19.06	20.18	19.49
		25	12	18.99	20.08	19.54
		25	25	19.01	20.23	19.42
		50	0	18.97	20.07	19.42
	256QAM	1	0	18.12	18.17	18.54
		1	24	18.08	18.26	18.44
		1	49	18.13	18.31	18.44
		25	0	17.01	18.11	17.52
		25	12	17.02	18.17	17.48
		25	25	17.16	18.21	17.53
		50	0	17.07	18.06	17.35

*ERP = Conducted + antenna gain - 2.15

LTE Band 26 (Part 22)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26815	26915	27015
		Frequency (MHz)		826.5	836.5	846.5
5M	QPSK	1	0	22.04	22.21	22.39
		1	12	22.12	22.24	22.51
		1	24	21.97	22.25	22.36
		12	0	21.01	22.12	21.54
		12	6	21.11	22.11	21.46
		12	13	21.04	22.19	21.55
		25	0	20.98	22.21	21.41
	16QAM	1	0	21.14	21.17	21.46
		1	12	21.13	21.33	21.52
		1	24	21.03	21.20	21.52
		12	0	20.12	21.24	20.38
		12	6	20.09	21.26	20.43
		12	13	20.11	21.24	20.53
		25	0	20.14	21.15	20.44
	64QAM	1	0	19.98	20.16	20.47
		1	12	20.16	20.33	20.49
		1	24	19.97	20.27	20.50
		12	0	19.13	20.15	19.48
		12	6	19.00	20.15	19.36
		12	13	19.11	20.09	19.51
		25	0	19.05	20.09	19.40
	256QAM	1	0	18.04	18.21	18.46
		1	12	18.06	18.17	18.38
		1	24	18.14	18.31	18.54
		12	0	16.97	18.12	17.37
		12	6	17.03	18.26	17.46
		12	13	17.13	18.23	17.43
		25	0	17.11	18.18	17.36

*ERP = Conducted + antenna gain - 2.15

LTE Band 26 (Part 22)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26805	26915	27025
		Frequency (MHz)		825.5	836.5	847.5
3M	QPSK	1	0	21.97	22.17	22.49
		1	7	21.99	22.18	22.39
		1	14	22.03	22.32	22.36
		8	0	21.05	21.16	21.41
		8	3	20.99	21.14	21.39
		8	7	21.06	21.15	21.40
		15	0	20.93	20.97	21.48
	16QAM	1	0	21.14	21.10	21.53
		1	7	21.00	21.23	21.48
		1	14	21.10	21.21	21.31
		8	0	19.98	20.05	20.48
		8	3	19.99	20.14	20.50
		8	7	19.86	20.13	20.40
		15	0	20.03	20.09	20.49
	64QAM	1	0	20.06	20.16	20.51
		1	7	20.06	20.19	20.44
		1	14	20.01	20.25	20.45
		8	0	19.11	19.14	19.51
		8	3	19.02	18.97	19.49
		8	7	19.06	19.12	19.34
		15	0	18.98	19.14	19.42
	256QAM	1	0	18.15	18.23	18.49
		1	7	17.93	18.18	18.43
		1	14	18.13	18.25	18.38
		8	0	17.10	16.99	17.48
		8	3	17.14	17.02	17.50
		8	7	16.95	17.02	17.36
		15	0	16.88	16.97	17.36

*ERP = Conducted + antenna gain - 2.15

LTE Band 26 (Part 22)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26797	26915	27033
		Frequency (MHz)		824.7	836.5	848.3
1.4M	QPSK	1	0	22.04	22.11	22.36
		1	2	22.04	22.23	22.54
		1	5	22.16	22.18	22.28
		3	0	21.05	21.02	21.36
		3	1	21.13	21.09	21.46
		3	3	21.03	21.11	21.41
		6	0	20.96	21.05	21.51
	16QAM	1	0	21.02	21.11	21.41
		1	2	20.94	21.21	21.41
		1	5	21.16	21.25	21.32
		3	0	19.98	20.00	20.44
		3	1	19.97	20.12	20.43
		3	3	20.00	20.05	20.36
		6	0	20.01	20.04	20.40
	64QAM	1	0	20.10	20.26	20.41
		1	2	20.03	20.22	20.48
		1	5	20.04	20.16	20.45
		3	0	19.06	19.01	19.56
		3	1	19.08	19.11	19.37
		3	3	19.01	19.09	19.27
		6	0	18.97	19.13	19.37
	256QAM	1	0	18.06	18.22	18.56
		1	2	18.03	18.16	18.52
		1	5	18.01	18.29	18.40
		3	0	16.97	17.07	17.49
		3	1	17.09	17.03	17.56
		3	3	16.90	17.12	17.39
		6	0	16.89	17.01	17.43

*ERP = Conducted + antenna gain - 2.15

LTE Band 26 (Part 90)				
BW	MCS Index	RB Size	RB Offset	Mid
		Channel		26740
		Frequency (MHz)		819
10M	QPSK	1	0	22.28
		1	24	22.19
		1	49	22.35
		25	0	22.20
		25	12	22.26
		25	25	22.12
		50	0	22.09
	16QAM	1	0	21.18
		1	24	21.35
		1	49	21.29
		25	0	21.09
		25	12	21.22
		25	25	21.22
		50	0	21.19
	64QAM	1	0	20.20
		1	24	20.23
		1	49	20.27
		25	0	20.17
		25	12	20.25
		25	25	20.18
		50	0	20.17
	256QAM	1	0	18.23
		1	24	18.21
		1	49	18.26
		25	0	18.12
		25	12	18.21
		25	25	18.11
		50	0	18.09

*ERP = Conducted + antenna gain - 2.15

LTE Band 26 (Part 90)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26715	26740	26765
		Frequency (MHz)		816.5	819	821.5
5M	QPSK	1	0	22.13	22.18	22.52
		1	12	21.96	22.23	22.50
		1	24	22.14	22.30	22.38
		12	0	21.11	22.22	21.53
		12	6	21.03	22.15	21.51
		12	13	21.10	22.10	21.41
		25	0	20.97	22.25	21.37
	16QAM	1	0	21.03	21.26	21.50
		1	12	21.04	21.16	21.48
		1	24	20.97	21.36	21.40
		12	0	20.08	21.06	20.42
		12	6	20.14	21.12	20.56
		12	13	20.16	21.08	20.54
		25	0	20.08	21.12	20.28
	64QAM	1	0	20.06	20.18	20.42
		1	12	20.12	20.20	20.55
		1	24	20.08	20.17	20.43
		12	0	19.13	20.07	19.37
		12	6	19.08	20.15	19.42
		12	13	18.97	20.06	19.45
		25	0	19.10	20.24	19.33
	256QAM	1	0	17.99	18.36	18.53
		1	12	18.13	18.25	18.53
		1	24	17.97	18.17	18.42
		12	0	17.13	18.18	17.53
		12	6	17.06	18.19	17.39
		12	13	16.98	18.10	17.56
		25	0	17.11	18.25	17.36

*ERP = Conducted + antenna gain - 2.15

LTE Band 26 (Part 90)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26705	26740	26775
		Frequency (MHz)		815.5	819	822.5
3M	QPSK	1	0	22.13	22.10	22.43
		1	7	22.04	22.09	22.52
		1	14	22.11	22.34	22.38
		8	0	21.00	20.97	21.41
		8	3	20.96	20.99	21.50
		8	7	21.03	20.96	21.30
		15	0	20.88	21.01	21.52
	16QAM	1	0	21.15	21.19	21.54
		1	7	21.05	21.19	21.51
		1	14	21.14	21.26	21.37
		8	0	20.01	20.02	20.41
		8	3	20.12	20.13	20.39
		8	7	19.95	20.16	20.35
		15	0	19.99	20.05	20.38
	64QAM	1	0	20.08	20.06	20.40
		1	7	19.90	20.06	20.44
		1	14	19.99	20.26	20.31
		8	0	19.15	19.04	19.49
		8	3	18.99	18.98	19.38
		8	7	18.89	19.15	19.40
		15	0	18.92	19.07	19.50
	256QAM	1	0	17.96	18.22	18.54
		1	7	17.97	18.20	18.46
		1	14	17.99	18.16	18.37
		8	0	17.12	17.02	17.46
		8	3	17.13	17.09	17.42
		8	7	17.04	17.09	17.31
		15	0	17.01	17.04	17.40

*ERP = Conducted + antenna gain - 2.15

LTE Band 26 (Part 90)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26697	26740	26783
		Frequency (MHz)		814.7	819	823.3
1.4M	QPSK	1	0	21.98	22.21	22.51
		1	2	21.97	22.06	22.38
		1	5	22.10	22.21	22.31
		3	0	21.07	21.07	21.50
		3	1	21.14	21.01	21.36
		3	3	21.03	21.07	21.31
		6	0	20.93	21.10	21.44
	16QAM	1	0	21.06	21.13	21.46
		1	2	20.86	21.13	21.45
		1	5	21.15	21.17	21.40
		3	0	19.99	19.98	20.51
		3	1	20.02	20.11	20.41
		3	3	19.95	20.11	20.26
		6	0	19.93	19.99	20.41
	64QAM	1	0	20.13	20.24	20.47
		1	2	19.89	20.11	20.55
		1	5	20.03	20.30	20.34
		3	0	19.10	19.13	19.55
		3	1	19.07	19.03	19.45
		3	3	18.97	19.05	19.40
		6	0	19.06	19.10	19.52
	256QAM	1	0	18.11	18.22	18.43
		1	2	18.04	18.24	18.39
		1	5	18.15	18.20	18.36
		3	0	17.08	17.01	17.55
		3	1	16.98	17.05	17.48
		3	3	17.04	17.02	17.44
		6	0	16.99	17.09	17.37

*ERP = Conducted + antenna gain - 2.15

4.2 Modulation Characteristics Measurement

4.2.1 Limits of Modulation Characteristics

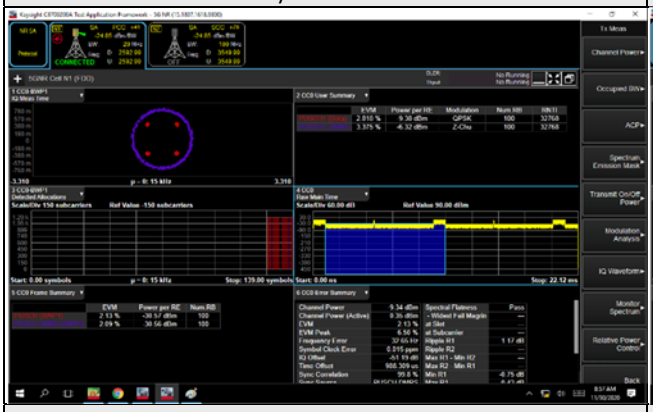
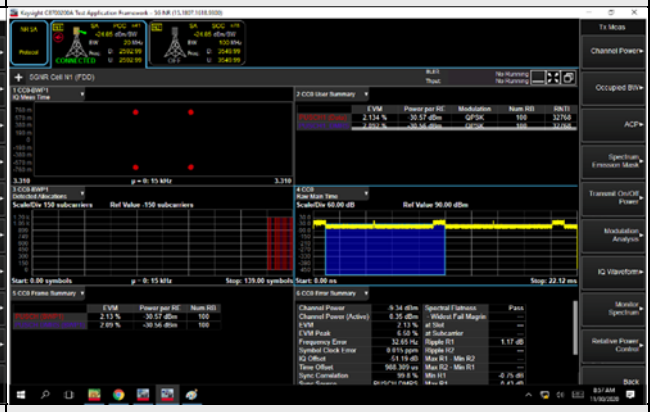
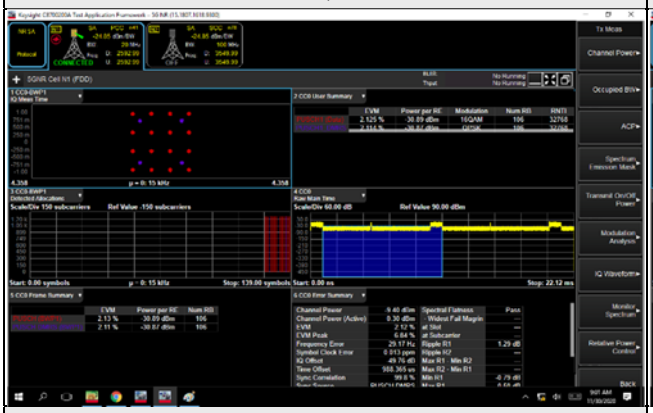
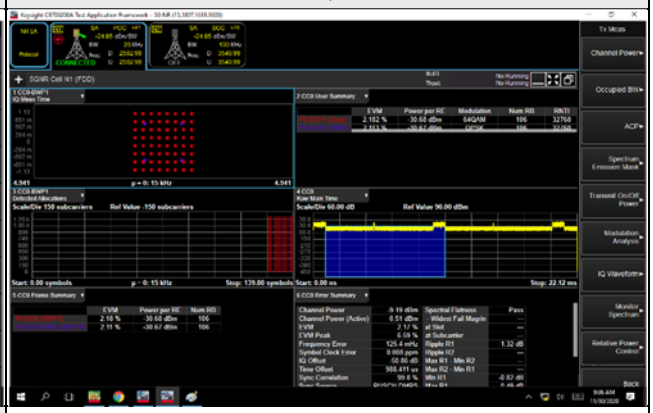
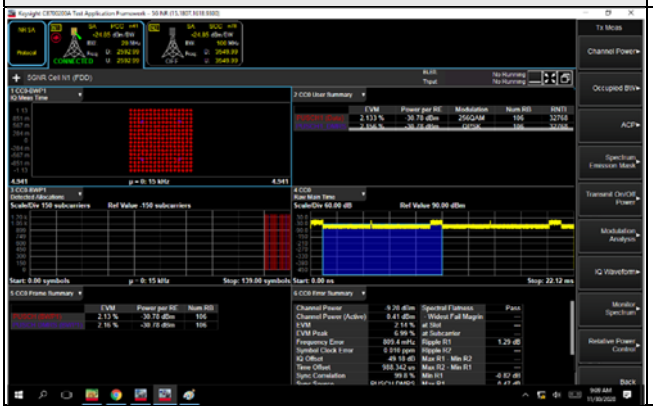
N/A

4.2.2 Test Procedure

Connect the EUT to Communication Simulator via the antenna connector, The frequency band is set as EUT supported Modulation and Channels, the EUT output is matched with 50 ohm load, the waveform quality and constellation of the EUT was tested.

4.2.3 Test Setup

4.2.4 Test Results

n41	
Spectrum Plot of Measurement Value	
Channel: 518598 / Frequency (MHz): 2592.99MHz	
$\pi/2$ BPSK	QPSK
	
16QAM	64QAM
	
256QAM	
	

4.3 Frequency Stability Measurement

4.3.1 Limits of Frequency Stability Measurement

For n41:
According to the FCC part 2.1055 shall be tested the frequency stability. The rule is defined that" The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block." The test extreme voltage is according to the 2.1055(d)(1) Vary primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment and the extreme temperature rule is comply with specification of EUT -30℃ ~ 50℃.

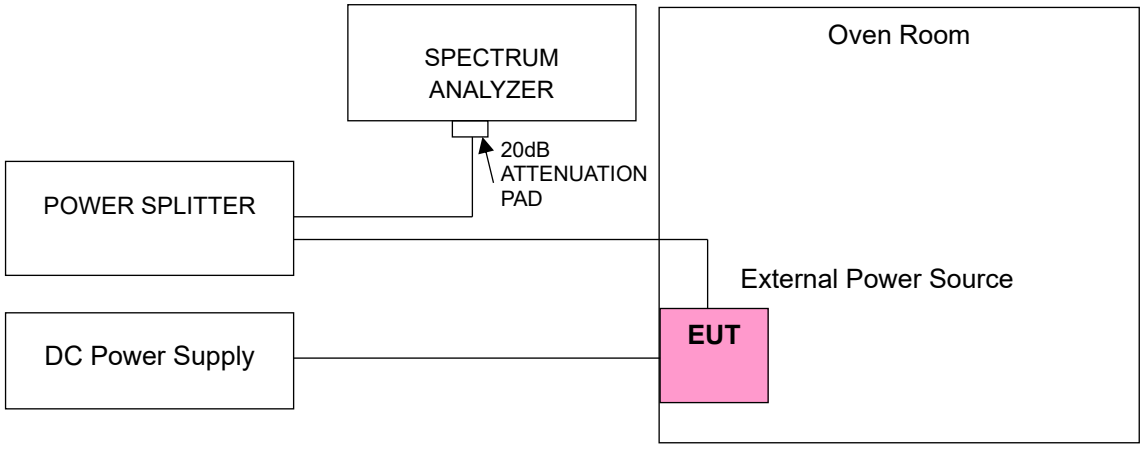
For LTE Band 26:
1.5 ppm is for base and fixed station. 2.5 ppm is for mobile station.

4.3.2 Test Procedure

a. Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.
b. EUT is connected the external power supply to control the DC input power. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.
c. The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the ±0.5 ℃ during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.

Note: The frequency error was recorded frequency error from the communication simulator.

4.3.3 Test Setup



4.3.4 Test Results

Frequency Error vs. Voltage

Voltage (Volts)	n41			
	Channel Bandwidth: 10 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	2501.010003	0.001	2685.000000	-0.001
4.2	2501.010003	0.001	2685.000000	0.000
4.4	2501.010002	0.001	2685.000000	-0.001

Note: The applicant defined the normal working voltage is from 4.2Vdc to 4.4Vdc.

Frequency Error vs. Temperature

Temp. (℃)	n41			
	Channel Bandwidth: 10 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2501.010002	0.001	2685.000000	0.001
-20	2501.010003	0.001	2685.000000	0.001
-10	2501.010003	0.001	2685.000000	0.001
0	2501.010002	0.001	2685.000000	0.000
10	2501.009997	-0.001	2685.000000	0.000
20	2501.009997	-0.001	2685.000000	0.001
30	2501.009997	-0.001	2685.000000	0.001
40	2501.009996	-0.002	2685.000000	-0.001
50	2501.009997	-0.001	2685.000000	0.000

Frequency Error vs. Voltage

Voltage (Volts)	n41			
	Channel Bandwidth: 15 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	2503.500003	0.001	2682.480000	-0.001
4.2	2503.500004	0.001	2682.480000	0.000
4.4	2503.500001	0.000	2682.480000	-0.001

Note: The applicant defined the normal working voltage is from 4.2Vdc to 4.4Vdc.

Frequency Error vs. Temperature

Temp. (℃)	n41			
	Channel Bandwidth: 15 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2503.500003	0.001	2682.480000	0.001
-20	2503.500004	0.001	2682.480000	0.000
-10	2503.500002	0.001	2682.480000	0.001
0	2503.500003	0.001	2682.480000	0.001
10	2503.499997	-0.001	2682.480000	0.001
20	2503.499999	-0.001	2682.480000	0.001
30	2503.499998	-0.001	2682.480000	0.001
40	2503.499997	-0.001	2682.480000	-0.001
50	2503.499996	-0.002	2682.480000	-0.001

Frequency Error vs. Voltage

Voltage (Volts)	n41			
	Channel Bandwidth: 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	2506.020002	0.001	2679.990000	-0.001
4.2	2506.020002	0.001	2679.990000	-0.001
4.4	2506.020003	0.001	2679.990000	-0.001

Note: The applicant defined the normal working voltage is from 4.2Vdc to 4.4Vdc.

Frequency Error vs. Temperature

Temp. (℃)	n41			
	Channel Bandwidth: 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2506.020003	0.001	2679.990000	0.001
-20	2506.020004	0.002	2679.990000	0.001
-10	2506.020003	0.001	2679.990000	0.001
0	2506.020002	0.001	2679.990000	0.001
10	2506.019998	-0.001	2679.990000	0.001
20	2506.019998	-0.001	2679.990000	0.000
30	2506.019997	-0.001	2679.990000	0.001
40	2506.019999	-0.001	2679.990000	-0.001
50	2506.019999	-0.001	2679.990000	-0.001

Frequency Error vs. Voltage

Voltage (Volts)	n41			
	Channel Bandwidth: 40 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	2516.010004	0.002	2669.999999	0.000
4.2	2516.010004	0.001	2669.999996	-0.001
4.4	2516.010004	0.001	2669.999998	-0.001

Note: The applicant defined the normal working voltage is from 4.2Vdc to 4.4Vdc.

Frequency Error vs. Temperature

Temp. (℃)	n41			
	Channel Bandwidth: 40 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2516.010003	0.001	2670.000002	0.001
-20	2516.010003	0.001	2670.000002	0.001
-10	2516.010001	0.000	2670.000004	0.001
0	2516.010004	0.001	2670.000002	0.001
10	2516.009996	-0.001	2670.000004	0.001
20	2516.009997	-0.001	2670.000003	0.001
30	2516.009999	0.000	2670.000001	0.000
40	2516.009999	-0.001	2669.999999	-0.001
50	2516.009998	-0.001	2669.999997	-0.001

Frequency Error vs. Voltage

Voltage (Volts)	n41			
	Channel Bandwidth: 50 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	2521.020002	0.001	2664.989997	-0.001
4.2	2521.020003	0.001	2664.989997	-0.001
4.4	2521.020002	0.001	2664.989997	-0.001

Note: The applicant defined the normal working voltage is from 4.2Vdc to 4.4Vdc.

Frequency Error vs. Temperature

Temp. (℃)	n41			
	Channel Bandwidth: 50 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2521.020004	0.001	2664.990003	0.001
-20	2521.020003	0.001	2664.990003	0.001
-10	2521.020003	0.001	2664.990003	0.001
0	2521.020002	0.001	2664.990003	0.001
10	2521.019996	-0.002	2664.990002	0.001
20	2521.019998	-0.001	2664.990003	0.001
30	2521.019999	-0.001	2664.990003	0.001
40	2521.019997	-0.001	2664.989999	0.000
50	2521.019997	-0.001	2664.989997	-0.001

Frequency Error vs. Voltage

Voltage (Volts)	n41			
	Channel Bandwidth: 60 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	2526.000003	0.001	2659.979997	-0.001
4.2	2526.000003	0.001	2659.979996	-0.001
4.4	2526.000003	0.001	2659.979998	-0.001

Note: The applicant defined the normal working voltage is from 4.2Vdc to 4.4Vdc.

Frequency Error vs. Temperature

Temp. (℃)	n41			
	Channel Bandwidth: 60 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2526.000002	0.001	2659.980003	0.001
-20	2526.000004	0.002	2659.980001	0.000
-10	2526.000004	0.001	2659.980002	0.001
0	2526.000001	0.000	2659.980004	0.001
10	2525.999996	-0.001	2659.980004	0.001
20	2525.999999	0.000	2659.980003	0.001
30	2525.999997	-0.001	2659.980001	0.000
40	2525.999998	-0.001	2659.979997	-0.001
50	2525.999999	0.000	2659.979996	-0.001

Frequency Error vs. Voltage

Voltage (Volts)	n41			
	Channel Bandwidth: 80 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	2526.000001	0.001	2659.979996	-0.001
4.2	2526.000004	0.001	2659.979999	0.000
4.4	2526.000003	0.001	2659.979996	-0.001

Note: The applicant defined the normal working voltage is from 4.2Vdc to 4.4Vdc.

Frequency Error vs. Temperature

Temp. (℃)	n41			
	Channel Bandwidth: 80 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2526.000003	0.001	2659.980001	0.000
-20	2526.000003	0.001	2659.980004	0.001
-10	2526.000002	0.001	2659.980004	0.001
0	2526.000003	0.001	2659.980002	0.001
10	2525.999998	-0.001	2659.980002	0.001
20	2525.999997	-0.001	2659.980003	0.001
30	2525.999997	-0.001	2659.980002	0.001
40	2525.999996	-0.001	2659.979997	-0.001
50	2525.999999	-0.001	2659.979998	-0.001

Frequency Error vs. Voltage

Voltage (Volts)	n41			
	Channel Bandwidth: 90 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	2514.000003	0.001	2644.979997	-0.001
4.2	2514.000003	0.001	2644.979998	-0.001
4.4	2514.000004	0.001	2644.979999	0.000

Note: The applicant defined the normal working voltage is from 4.2Vdc to 4.4Vdc.

Frequency Error vs. Temperature

Temp. (℃)	n41			
	Channel Bandwidth: 90 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2514.000002	0.001	2644.980003	0.001
-20	2514.000002	0.001	2644.980001	0.001
-10	2514.000001	0.000	2644.980004	0.001
0	2514.000003	0.001	2644.980001	0.000
10	2513.999999	-0.001	2644.980002	0.001
20	2513.999998	-0.001	2644.980003	0.001
30	2513.999997	-0.001	2644.980004	0.001
40	2513.999998	-0.001	2644.979998	-0.001
50	2513.999998	-0.001	2644.979998	-0.001

Frequency Error vs. Voltage

Voltage (Volts)	n41			
	Channel Bandwidth: 100 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	2546.010002	0.001	2639.999999	-0.001
4.2	2546.010004	0.002	2639.999997	-0.001
4.4	2546.010001	0.001	2639.999999	0.000

Note: The applicant defined the normal working voltage is from 4.2Vdc to 4.4Vdc.

Frequency Error vs. Temperature

Temp. (℃)	n41			
	Channel Bandwidth: 100 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2546.010002	0.001	2640.000003	0.001
-20	2546.010001	0.000	2640.000004	0.001
-10	2546.010003	0.001	2640.000003	0.001
0	2546.010003	0.001	2640.000001	0.000
10	2546.009997	-0.001	2640.000004	0.001
20	2546.009999	-0.001	2640.000003	0.001
30	2546.009997	-0.001	2640.000002	0.001
40	2546.009999	-0.001	2639.999998	-0.001
50	2546.009996	-0.002	2639.999998	-0.001

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 26 (Part 22)			
	Channel Bandwidth: 1.4 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	824.700001	0.001	848.300004	0.004
4.2	824.700004	0.004	848.300002	0.002
4.4	824.700002	0.002	848.300004	0.004

Note: The applicant defined the normal working voltage is from 4.2Vdc to 4.4Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 26 (Part 22)			
	Channel Bandwidth: 1.4 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	824.700004	0.004	848.300003	0.004
-20	824.700002	0.002	848.300002	0.003
-10	824.700001	0.001	848.300004	0.004
0	824.700001	0.002	848.300001	0.001
10	824.700002	0.003	848.300003	0.003
20	824.699998	-0.003	848.299998	-0.002
30	824.699999	-0.001	848.299998	-0.003
40	824.699998	-0.002	848.299996	-0.004
50	824.699997	-0.004	848.299998	-0.003

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 26 (Part 22)			
	Channel Bandwidth: 3 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	825.500003	0.003	847.500002	0.002
4.2	825.500001	0.002	847.500003	0.003
4.4	825.500001	0.002	847.500003	0.003

Note: The applicant defined the normal working voltage is from 4.2Vdc to 4.4Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 26 (Part 22)			
	Channel Bandwidth: 3 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	825.500003	0.003	847.500003	0.004
-20	825.500004	0.005	847.500003	0.003
-10	825.500002	0.003	847.500002	0.002
0	825.500003	0.004	847.500003	0.004
10	825.500003	0.004	847.500003	0.004
20	825.499997	-0.004	847.499996	-0.005
30	825.499996	-0.005	847.499998	-0.002
40	825.499998	-0.002	847.499998	-0.002
50	825.499998	-0.003	847.499997	-0.003

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 26 (Part 22)			
	Channel Bandwidth: 5 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	826.500004	0.004	846.500004	0.004
4.2	826.500003	0.003	846.500004	0.005
4.4	826.500001	0.002	846.500002	0.002

Note: The applicant defined the normal working voltage is from 4.2Vdc to 4.4Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 26 (Part 22)			
	Channel Bandwidth: 5 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	826.500003	0.003	846.500004	0.004
-20	826.500003	0.004	846.500002	0.003
-10	826.500003	0.004	846.500003	0.004
0	826.500002	0.002	846.500003	0.004
10	826.500001	0.001	846.500004	0.004
20	826.499997	-0.003	846.499997	-0.003
30	826.499997	-0.004	846.499998	-0.003
40	826.499999	-0.001	846.499998	-0.002
50	826.499999	-0.001	846.499997	-0.003

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 26 (Part 22)			
	Channel Bandwidth: 10 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	829.000002	0.002	844.000001	0.002
4.2	829.000002	0.002	844.000003	0.003
4.4	829.000001	0.001	844.000003	0.003

Note: The applicant defined the normal working voltage is from 4.2Vdc to 4.4Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 26 (Part 22)			
	Channel Bandwidth: 10 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	829.000002	0.002	844.000003	0.003
-20	829.000002	0.002	844.000004	0.004
-10	829.000004	0.004	844.000003	0.003
0	829.000002	0.003	844.000001	0.001
10	829.000003	0.004	844.000002	0.003
20	828.999999	-0.002	843.999998	-0.003
30	828.999998	-0.003	843.999997	-0.003
40	828.999999	-0.001	843.999996	-0.004
50	828.999997	-0.004	843.999998	-0.002

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 26 (Part 22)			
	Channel Bandwidth: 15 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	831.500003	0.004	841.500003	0.004
4.2	831.500002	0.003	841.500003	0.003
4.4	831.500004	0.004	841.500003	0.003

Note: The applicant defined the normal working voltage is from 4.2Vdc to 4.4Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 26 (Part 22)			
	Channel Bandwidth: 15 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	831.500003	0.003	841.500002	0.002
-20	831.500003	0.004	841.500002	0.003
-10	831.500003	0.003	841.500003	0.003
0	831.500004	0.005	841.500004	0.005
10	831.500004	0.005	841.500001	0.002
20	831.499996	-0.004	841.499997	-0.004
30	831.499996	-0.005	841.499997	-0.004
40	831.499999	-0.002	841.499998	-0.003
50	831.499996	-0.004	841.499998	-0.003

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 26 (Part 90)			
	Channel Bandwidth: 1.4 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	814.700003	0.004	823.300003	0.004
4.2	814.700003	0.004	823.300001	0.002
4.4	814.700002	0.003	823.300002	0.002

Note: The applicant defined the normal working voltage is from 4.2Vdc to 4.4Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 26 (Part 90)			
	Channel Bandwidth: 1.4 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	814.700004	0.004	823.300002	0.002
-20	814.700003	0.003	823.300003	0.004
-10	814.700002	0.002	823.300001	0.001
0	814.700004	0.005	823.300004	0.005
10	814.700002	0.003	823.300001	0.002
20	814.699996	-0.005	823.299997	-0.004
30	814.699999	-0.002	823.299997	-0.004
40	814.699999	-0.001	823.299997	-0.003
50	814.699999	-0.002	823.299999	-0.002

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 26 (Part 90)			
	Channel Bandwidth: 3MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	815.500004	0.004	822.500002	0.003
4.2	815.500002	0.002	822.500002	0.003
4.4	815.500001	0.001	822.500004	0.004

Note: The applicant defined the normal working voltage is from 4.2Vdc to 4.4Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 26 (Part 90)			
	Channel Bandwidth: 3MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	815.500002	0.003	822.500001	0.001
-20	815.500003	0.003	822.500003	0.004
-10	815.500003	0.004	822.500001	0.001
0	815.500001	0.002	822.500002	0.002
10	815.500004	0.004	822.500003	0.004
20	815.499999	-0.002	822.499997	-0.004
30	815.499996	-0.005	822.499998	-0.002
40	815.499996	-0.005	822.499997	-0.004
50	815.499998	-0.003	822.499996	-0.004

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 26 (Part 90)			
	Channel Bandwidth: 5MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.0	816.500003	0.004	821.500002	0.002
4.2	816.500004	0.004	821.500003	0.004
4.4	816.500002	0.003	821.500003	0.004

Note: The applicant defined the normal working voltage is from 4.2Vdc to 4.4Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 26 (Part 90)			
	Channel Bandwidth: 5MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	816.500003	0.003	821.500002	0.002
-20	816.500004	0.004	821.500002	0.002
-10	816.500002	0.003	821.500002	0.003
0	816.500001	0.001	821.500004	0.004
10	816.500003	0.004	821.500002	0.002
20	816.499996	-0.005	821.499998	-0.003
30	816.499996	-0.005	821.499996	-0.005
40	816.499997	-0.004	821.499999	-0.001
50	816.499997	-0.004	821.499998	-0.002

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 26 (Part 90)	
	Channel Bandwidth: 10 MHz	
	Frequency (MHz)	Frequency Error (ppm)
4.0	819.000004	0.004
4.2	819.000004	0.004
4.4	819.000001	0.001

Note: The applicant defined the normal working voltage is from 4.2Vdc to 4.4Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 26 (Part 90)	
	Channel Bandwidth: 10 MHz	
	Frequency (MHz)	Frequency Error (ppm)
-30	819.000001	0.001
-20	819.000001	0.001
-10	819.000002	0.003
0	819.000001	0.002
10	819.000002	0.003
20	818.999997	-0.004
30	818.999998	-0.003
40	818.999996	-0.005
50	818.999998	-0.003

4.4 Occupied Bandwidth Measurement

4.4.1 Limits of Occupied Bandwidth Measurement

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with resolution bandwidth in the range of 1% to 5% of the anticipated emission bandwidth, and a video bandwidth at least 3x the resolution bandwidth and set the detector to sampling. The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 %of the total mean power of a given emission.

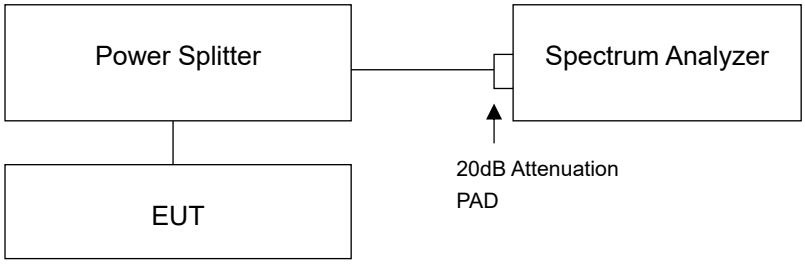
4.4.2 Test Procedure

Occupied Bandwidth

a. The conducted occupied bandwidth used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer. Measurement method refers to ANSI C63.26 section 5.4.4.
b. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth.

26dBc Bandwidth:
For the 26dBc bandwidth measurement method, please refer to section 5.4.3 of ANSI C63.26.

4.4.3 Test Setup

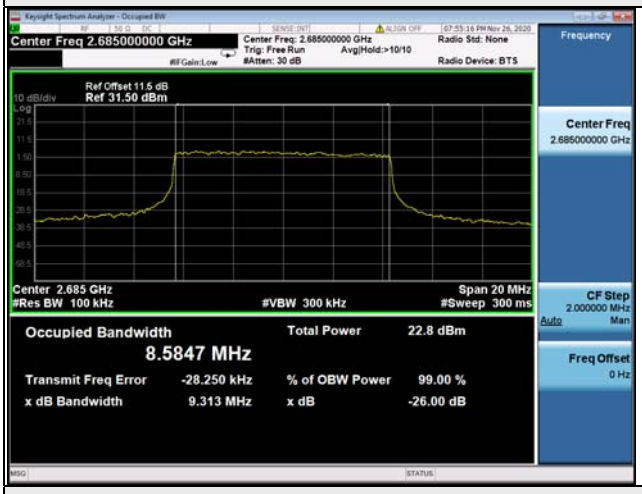
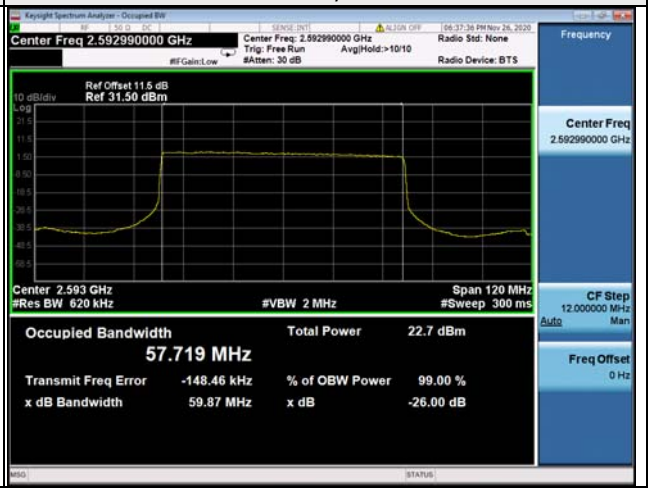


4.4.4 Test Result

Occupied Bandwidth

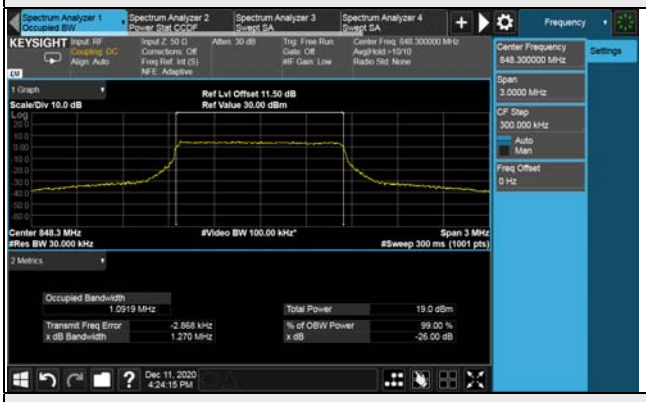
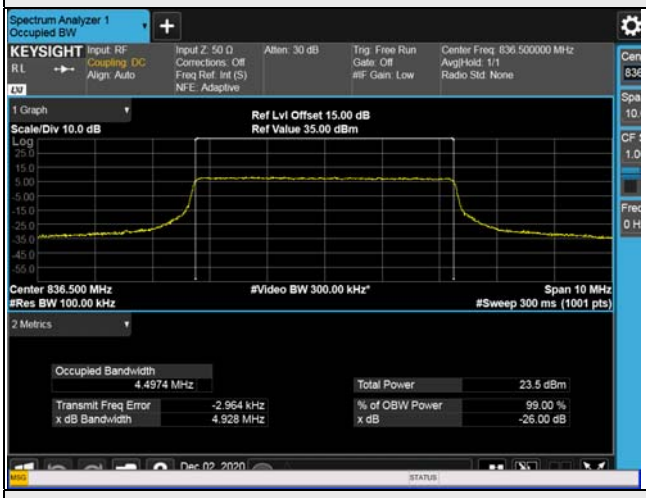
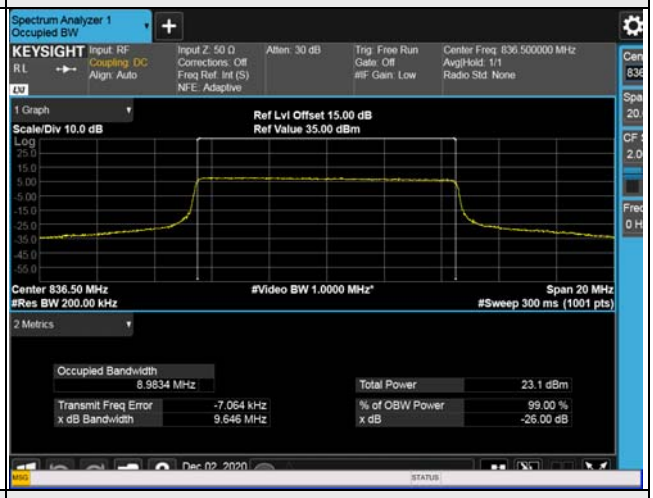
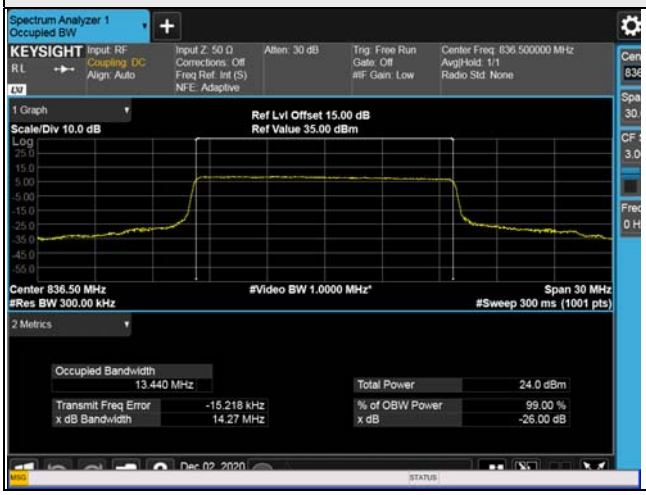
n41, Channel Bandwidth: 10MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
500202	2501.01	8.57	8.58	8.56	8.53	8.54
518598	2592.99	8.57	8.58	8.57	8.53	8.54
537000	2685.00	8.57	8.58	8.57	8.54	8.54
n41, Channel Bandwidth: 15MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
500700	2503.50	12.84	12.86	12.83	12.80	12.82
518598	2592.99	12.84	12.86	12.83	12.81	12.82
536496	2682.48	12.83	12.86	12.84	12.81	12.82
n41, Channel Bandwidth: 20MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
501204	2506.02	17.85	17.85	17.83	17.80	17.83
518598	2592.99	17.85	17.86	17.84	17.80	17.83
535998	2679.99	17.83	17.85	17.83	17.80	17.82
n41, Channel Bandwidth: 40MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
503202	2516.01	35.69	35.72	35.68	35.64	35.67
518598	2592.99	35.70	35.74	35.70	35.68	35.69
534000	2670.00	35.61	35.67	35.64	35.60	35.62
n41, Channel Bandwidth: 50MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
504204	2521.02	45.58	45.62	45.56	45.54	45.57
518598	2592.99	45.62	45.67	45.61	45.60	45.62
532998	2664.99	45.55	45.49	45.49	45.46	45.49

n41, Channel Bandwidth: 60MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
505200	2526.00	57.63	57.61	57.58	57.61	57.61
518598	2592.99	57.72	57.71	57.69	57.70	57.71
531996	2659.98	57.49	57.50	57.47	57.49	57.50
n41, Channel Bandwidth: 80MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
507204	2536.02	76.80	76.75	76.75	76.75	76.75
518598	2592.99	76.99	76.97	77.00	77.05	76.97
529998	2649.99	76.66	76.64	76.63	76.59	76.68
n41, Channel Bandwidth: 90MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
508200	2514.00	85.23	85.28	85.21	85.21	85.23
518598	2592.99	85.52	85.52	85.49	85.49	85.52
528996	2644.98	85.21	85.18	85.18	85.20	85.21
n41, Channel Bandwidth: 100MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
509202	2546.01	95.77	95.74	95.75	95.81	95.83
518598	2592.99	96.13	96.19	96.18	96.18	96.21
528000	2640.00	95.91	95.81	95.76	95.82	95.85

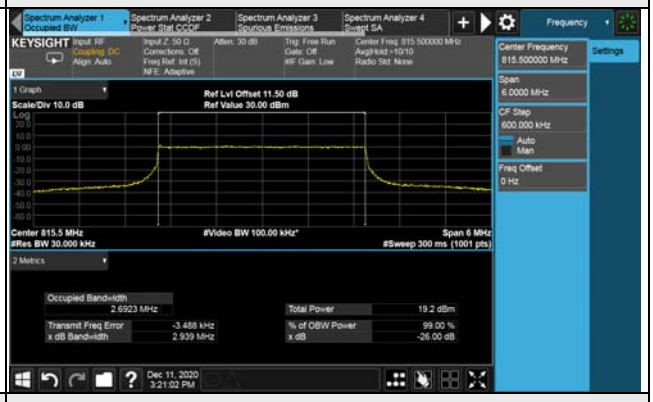
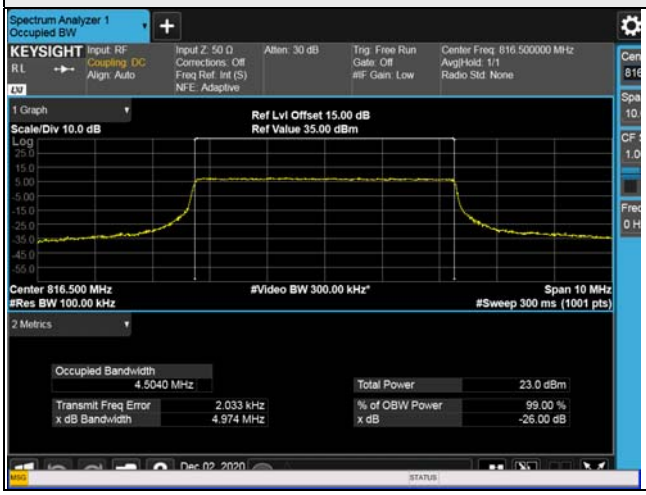
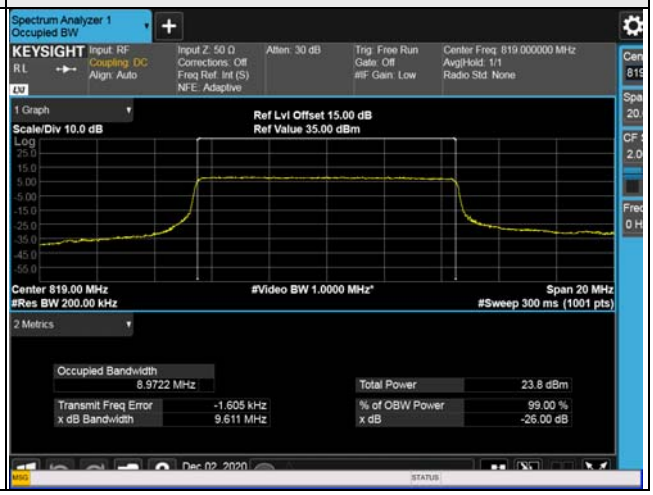
Spectrum Plot of Worst Value	
10MHz / QPSK	15MHz / QPSK
	
20MHz / QPSK	40MHz / QPSK
	
50MHz / QPSK	60MHz / $\pi/2$ BPSK
	

80MHz / 64QAM	90MHz / QPSK
	
100MHz / 256QAM	
	

LTE Band 26 (Part 22), Channel Bandwidth: 1.4MHz					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)			
		QPSK	16QAM	64QAM	256QAM
26797	824.7	1.08	1.09	1.08	1.09
26915	836.5	1.08	1.09	1.08	1.09
27033	848.3	1.09	1.08	1.09	1.09
LTE Band 26 (Part 22), Channel Bandwidth: 3MHz					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)			
		QPSK	16QAM	64QAM	256QAM
26805	825.5	2.68	2.68	2.68	2.69
26915	836.5	2.68	2.68	2.68	2.69
27025	847.5	2.68	2.68	2.68	2.68
LTE Band 26 (Part 22), Channel Bandwidth: 5MHz					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)			
		QPSK	16QAM	64QAM	256QAM
26815	826.5	4.49	4.50	4.49	4.50
26915	836.5	4.49	4.50	4.49	4.50
27015	846.5	4.49	4.49	4.49	4.49
LTE Band 26 (Part 22), Channel Bandwidth: 10MHz					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)			
		QPSK	16QAM	64QAM	256QAM
26840	829.0	8.97	8.97	8.97	8.97
26915	836.5	8.98	8.98	8.98	8.98
26990	844.0	8.97	8.96	8.96	8.96
LTE Band 26 (Part 22), Channel Bandwidth: 15MHz					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)			
		QPSK	16QAM	64QAM	256QAM
26865	831.5	13.43	13.43	13.42	13.43
26915	836.5	13.44	13.43	13.44	13.44
26965	841.5	13.43	13.42	13.41	13.43

Spectrum Plot of Worst Value	
1.4MHz / 256QAM	3MHz / 256QAM
	
5MHz / 16QAM	10MHz / 16QAM
	
15MHz / QPSK	
	

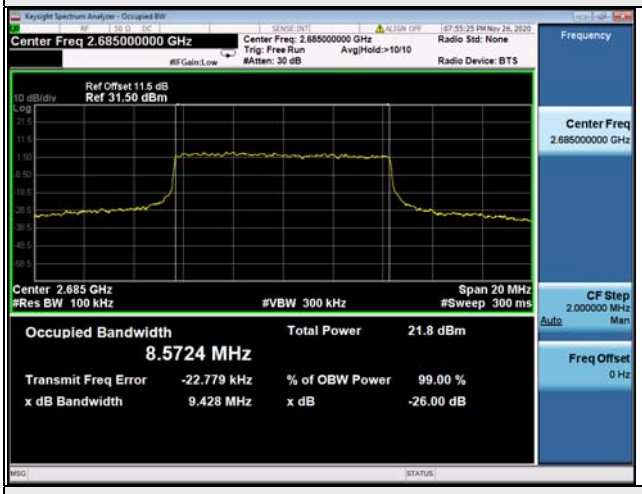
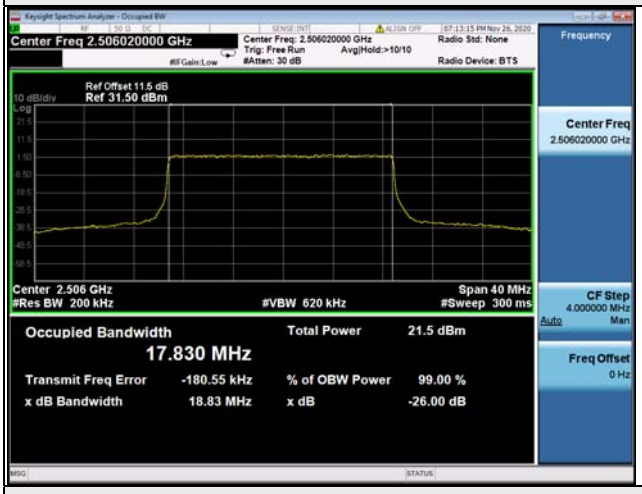
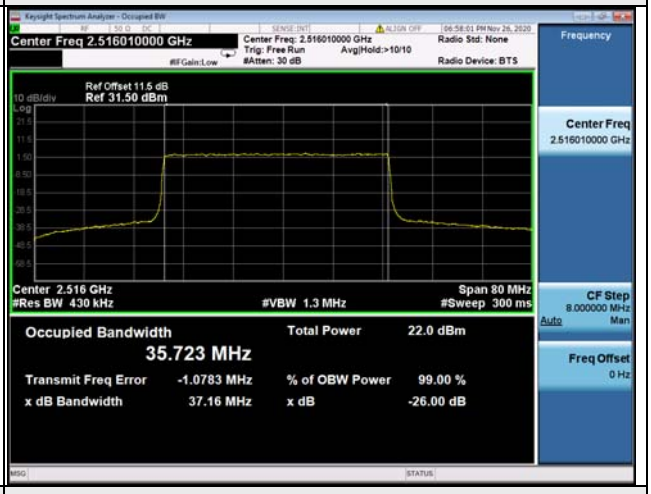
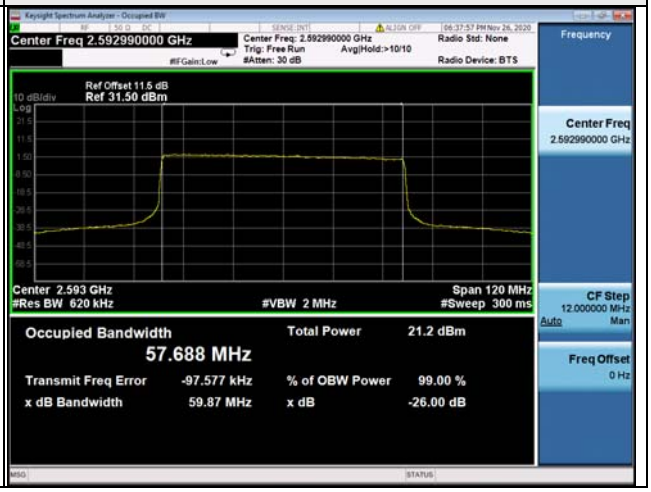
LTE Band 26 (Part 90), Channel Bandwidth: 1.4MHz					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)			
		QPSK	16QAM	64QAM	256QAM
26697	814.7	1.09	1.09	1.09	1.09
26740	819.0	1.09	1.09	1.08	1.09
26783	823.3	1.09	1.08	1.09	1.09
LTE Band 26 (Part 90), Channel Bandwidth: 3MHz					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)			
		QPSK	16QAM	64QAM	256QAM
26705	815.5	2.68	2.69	2.68	2.69
26740	819.0	2.68	2.68	2.68	2.69
26775	822.5	2.68	2.69	2.68	2.69
LTE Band 26 (Part 90), Channel Bandwidth: 5MHz					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)			
		QPSK	16QAM	64QAM	256QAM
26715	816.5	4.50	4.49	4.50	4.49
26740	819.0	4.50	4.49	4.50	4.49
26765	821.5	4.50	4.50	4.50	4.49
LTE Band 26 (Part 90), Channel Bandwidth: 10MHz					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)			
		QPSK	16QAM	64QAM	256QAM
26740	819.0	8.97	8.97	8.97	8.97

Spectrum Plot of Worst Value	
1.4MHz / QPSK	3MHz / 256QAM
	
5MHz / 64QAM	10MHz / QPSK
	

26dB Bandwidth

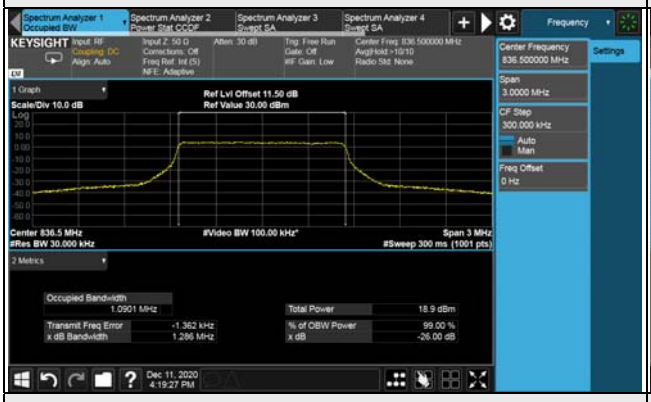
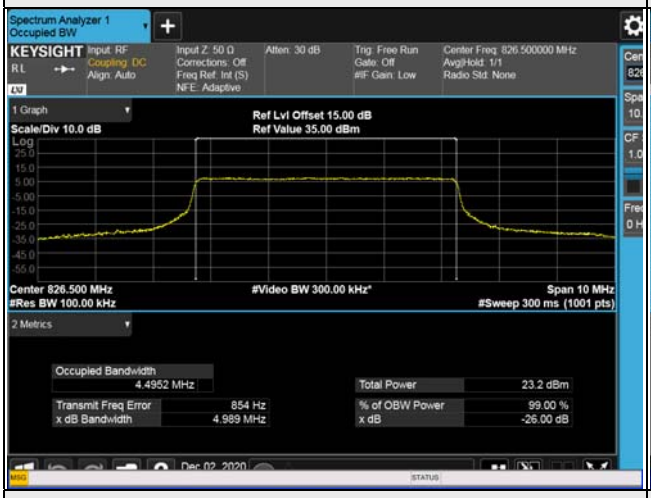
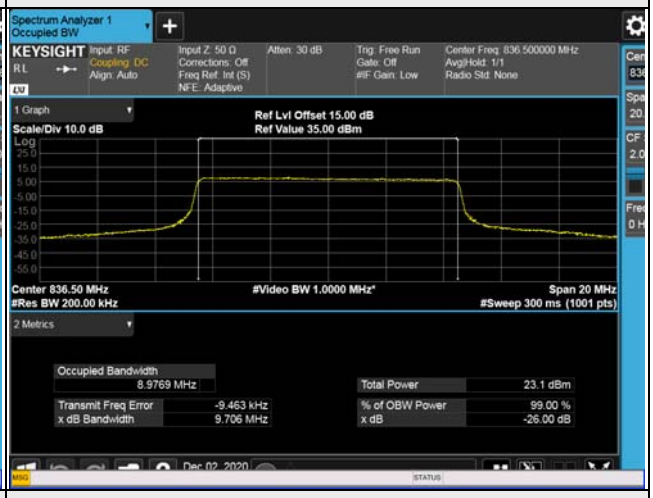
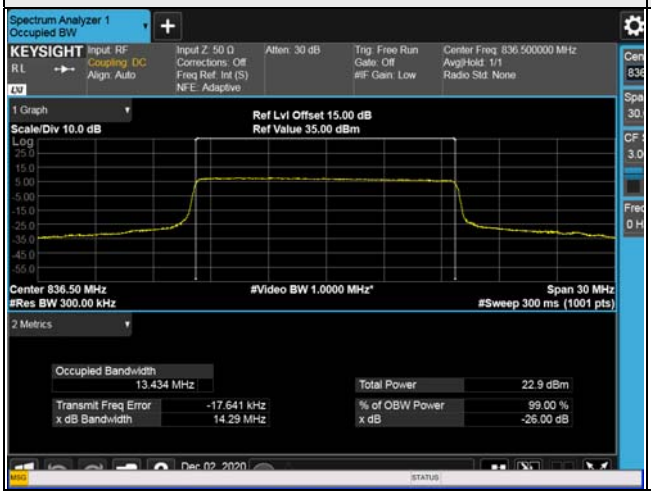
n41, Channel Bandwidth: 10MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
500202	2501.01	9.23	9.32	9.28	9.14	9.13
518598	2592.99	9.18	9.30	9.31	9.12	9.16
537000	2685.00	9.23	9.31	9.43	9.26	9.13
n41, Channel Bandwidth: 15MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
500700	2503.50	13.56	13.66	13.53	13.61	13.61
518598	2592.99	13.55	13.68	13.52	13.59	13.59
536496	2682.48	13.54	13.72	13.58	13.66	13.58
n41, Channel Bandwidth: 20MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
501204	2506.02	18.60	18.67	18.83	18.61	18.71
518598	2592.99	18.61	18.65	18.77	18.61	18.67
535998	2679.99	18.60	18.62	18.74	18.63	18.64
n41, Channel Bandwidth: 40MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
503202	2516.01	37.13	37.16	37.16	37.10	37.12
518598	2592.99	37.12	37.11	37.11	37.07	37.08
534000	2670.00	37.09	37.09	37.10	37.05	37.05
n41, Channel Bandwidth: 50MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
504204	2521.02	47.34	47.36	47.39	47.34	47.36
518598	2592.99	47.34	47.35	47.41	47.33	47.36
532998	2664.99	47.31	47.29	47.33	47.30	47.30

n41, Channel Bandwidth: 60MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
505200	2526.00	59.86	59.79	59.86	59.79	59.83
518598	2592.99	59.87	59.83	59.87	59.83	59.86
531996	2659.98	59.82	59.77	59.82	59.77	59.82
n41, Channel Bandwidth: 80MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
507204	2536.02	79.66	79.69	79.70	79.70	79.69
518598	2592.99	79.72	79.75	79.75	79.73	79.74
529998	2649.99	79.68	79.70	79.67	79.68	79.70
n41, Channel Bandwidth: 90MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
508200	2514.00	88.52	88.55	88.51	88.46	88.53
518598	2592.99	88.56	88.64	88.63	88.52	88.58
528996	2644.98	88.53	88.59	88.60	88.50	88.57
n41, Channel Bandwidth: 100MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
509202	2546.01	99.50	99.47	99.46	99.46	99.50
518598	2592.99	99.52	99.55	99.58	99.55	99.55
528000	2640.00	99.55	99.55	99.53	99.59	99.52

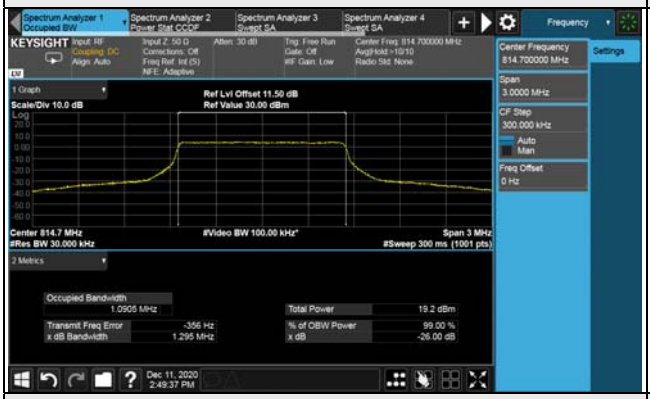
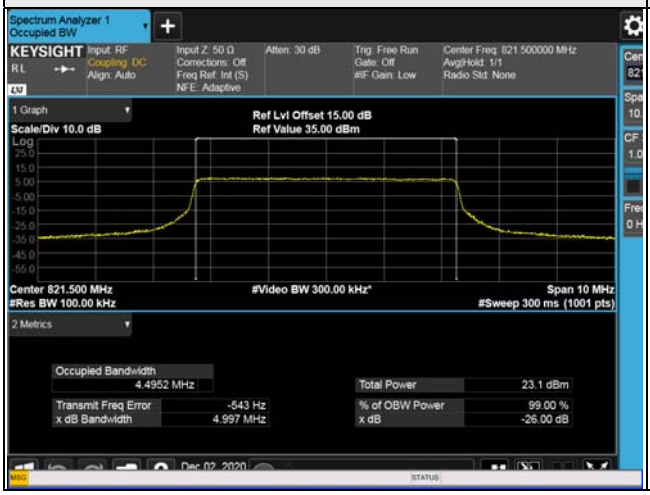
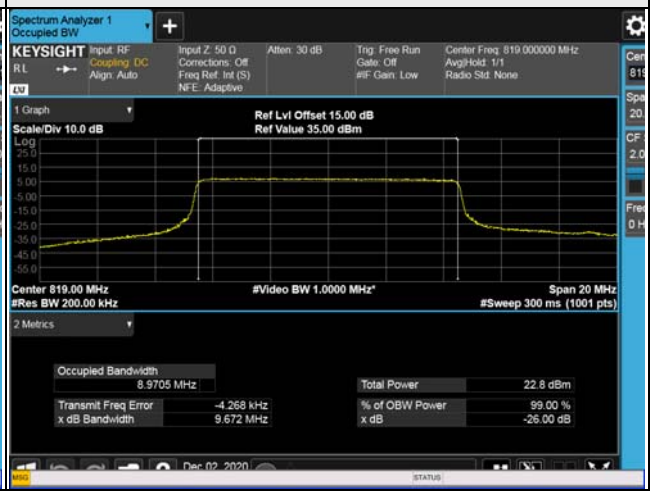
Spectrum Plot of Worst Value	
10MHz / 16QAM	15MHz / QPSK
	
20MHz / 16QAM	40MHz / 16QAM
	
50MHz / 16QAM	60MHz / 16QAM
	

80MHz / 16QAM	90MHz / QPSK
	
100MHz / 64QAM	
	

LTE Band 26 (Part 22), Channel Bandwidth: 1.4MHz					
Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		QPSK	16QAM	64QAM	256QAM
26797	824.7	1.25	1.27	1.27	1.28
26915	836.5	1.24	1.26	1.28	1.28
27033	848.3	1.26	1.26	1.28	1.27
LTE Band 26 (Part 22), Channel Bandwidth: 3MHz					
Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		QPSK	16QAM	64QAM	256QAM
26805	825.5	2.94	2.94	2.93	2.93
26915	836.5	2.91	2.93	2.93	2.90
27025	847.5	2.90	2.90	2.91	2.90
LTE Band 26 (Part 22), Channel Bandwidth: 5MHz					
Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		QPSK	16QAM	64QAM	256QAM
26815	826.5	4.96	4.95	4.95	4.99
26915	836.5	4.94	4.93	4.97	4.93
27015	846.5	4.89	4.93	4.91	4.90
LTE Band 26 (Part 22), Channel Bandwidth: 10MHz					
Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		QPSK	16QAM	64QAM	256QAM
26840	829.0	9.62	9.60	9.66	9.69
26915	836.5	9.63	9.65	9.64	9.71
26990	844.0	9.58	9.54	9.59	9.62
LTE Band 26 (Part 22), Channel Bandwidth: 15MHz					
Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		QPSK	16QAM	64QAM	256QAM
26865	831.5	14.27	14.25	14.27	14.26
26915	836.5	14.27	14.29	14.26	14.26
26965	841.5	14.25	14.29	14.28	14.26

Spectrum Plot of Worst Value	
1.4MHz / 256QAM	3MHz / 16QAM
	
5MHz / 256QAM	10MHz / 256QAM
	
15MHz / 16QAM	
	

LTE Band 26 (Part 90), Channel Bandwidth: 1.4MHz					
Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		QPSK	16QAM	64QAM	256QAM
26697	814.7	1.27	1.27	1.28	1.29
26740	819.0	1.26	1.28	1.27	1.29
26783	823.3	1.27	1.27	1.28	1.27
LTE Band 26 (Part 90), Channel Bandwidth: 3MHz					
Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		QPSK	16QAM	64QAM	256QAM
26705	815.5	2.94	2.93	2.94	2.93
26740	819.0	2.90	2.88	2.94	2.95
26775	822.5	2.91	2.91	2.92	2.94
LTE Band 26 (Part 90), Channel Bandwidth: 5MHz					
Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		QPSK	16QAM	64QAM	256QAM
26715	816.5	4.88	4.93	4.97	4.92
26740	819.0	4.91	4.98	4.95	4.95
26765	821.5	4.89	4.98	5.00	4.92
LTE Band 26 (Part 90), Channel Bandwidth: 10MHz					
Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		QPSK	16QAM	64QAM	256QAM
26740	819.0	9.61	9.67	9.61	9.60

Spectrum Plot of Worst Value	
1.4MHz / 256QAM	3MHz / 256QAM
	
5MHz / 64QAM	10MHz / 16QAM
	

4.5 Band Edge Measurement

4.5.1 Limits of Band Edge Measurement

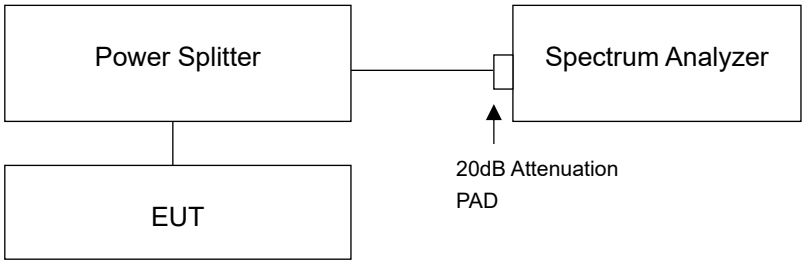
For n41:
According to FCC 27.53(m)(4) specified that power of any emission outside of the channel edge must be attenuated below the transmitting power (P) by a factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least two percent may be employed, except when the 1 megahertz band is 2495-2496 MHz, in which case a resolution bandwidth of at least one percent may be employed.

For LTE Band 26 (Part 22):
Power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

LTE Band 26 (Part 90):
According to FCC part 90.691 shall be tested the emission mask. For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 116 $Log_{10}(f/6.1)$ decibels or 50 + $10Log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.
For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 43 + $10Log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

For § 90.691(a), RBW=300 Hz for offset less than 37.5 kHz from channel edge and RBW=100 kHz for offsets greater than 37.5 kHz is allowed, tested in accordance with FCC KDB 971168 D02 section VIII.

4.5.2 Test Setup



4.5.3 Test Procedures

For n41, LTE Band 26 (Part 90):

a. The testing follows ANSI C63.26 section 5.7
b. The EUT was connected to spectrum analyzer and system simulator via a power divider.
c. The band edges of low and high channels for the highest RF powers were measured.
d. Set RBW >= 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
e. Beyond the 1 MHz band from the band edge, RBW=1MHz was used.
f. Set spectrum analyzer with RMS detector.
g. Checked that all the results comply with the emission limit line.

For LTE Band 26 (Part 90):

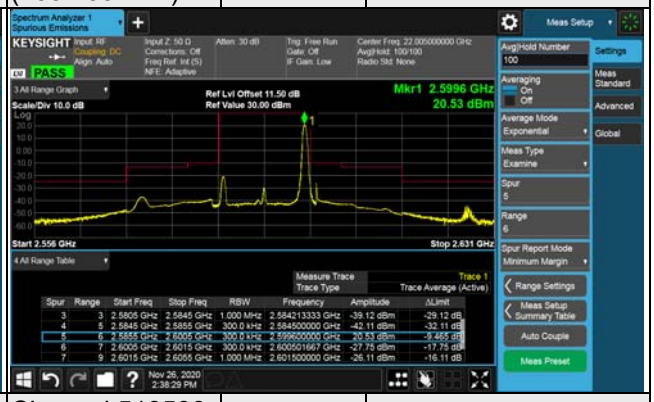
a. The measurement used the power splitter via EUT RF power connector between simulation base station and spectrum analyzer.
b. Record the test plot.

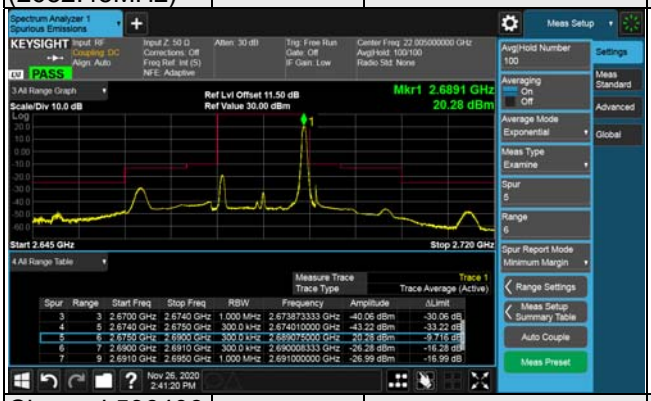
4.5.4 Test Results

Emission Mask

n41, Channel Bandwidth: 10MHz					
Channel 500202 (2501.01MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset
					
Channel 500202 (2501.01MHz)	$\pi/2$ BPSK	1 RB / 23 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	1 RB / 23 RB Offset
					
Channel 500202 (2501.01MHz)	$\pi/2$ BPSK	24 RB / 0 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	24 RB / 0 RB Offset
					

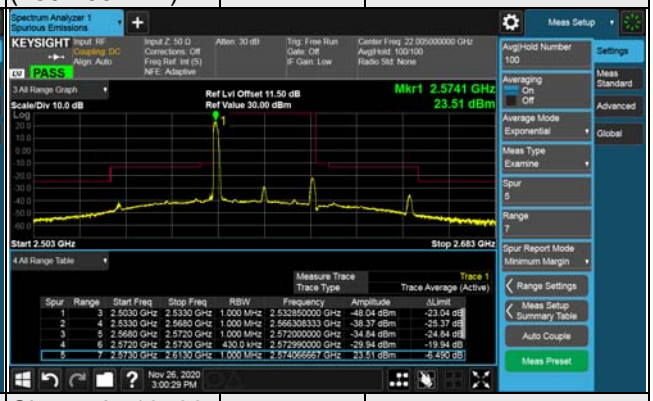
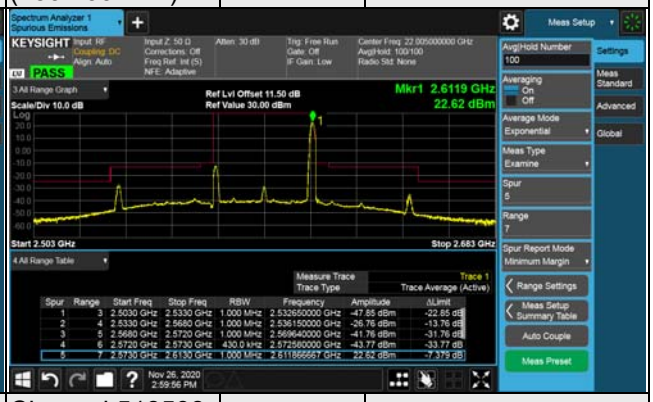
n41, Channel Bandwidth: 10MHz					
Channel 537000 (2685.00MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset			
					
Channel 537000 (2685.00MHz)	$\pi/2$ BPSK	1 RB / 23 RB Offset			
					
Channel 537000 (2685.00MHz)	$\pi/2$ BPSK	24 RB / 0 RB Offset			
					

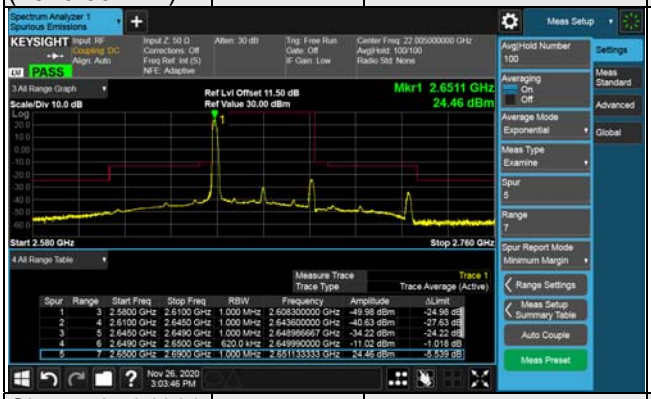
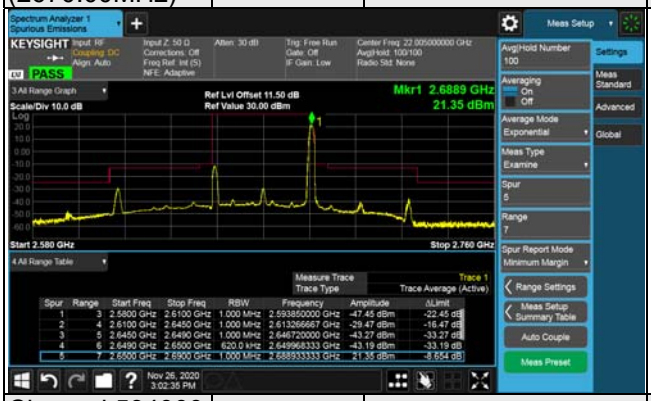
n41, Channel Bandwidth: 15MHz					
Channel 500700 (2503.50MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset
					
Channel 500700 (2503.50MHz)	$\pi/2$ BPSK	1 RB / 37 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	1 RB / 37 RB Offset
					
Channel 500700 (2503.50MHz)	$\pi/2$ BPSK	38 RB / 0 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	38 RB / 0 RB Offset
					

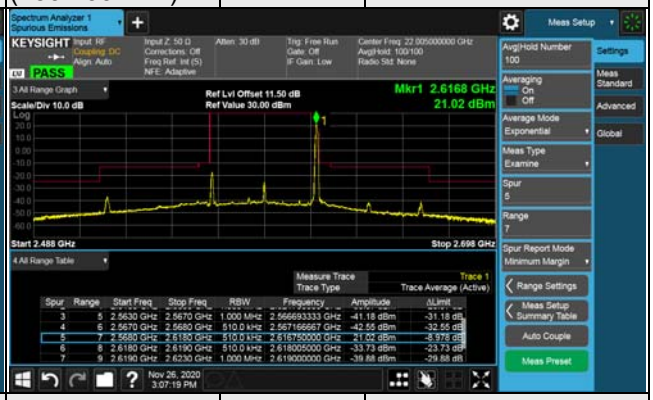
n41, Channel Bandwidth: 15MHz					
Channel 536496 (2682.48MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset			
					
Channel 536496 (2682.48MHz)	$\pi/2$ BPSK	1 RB / 37 RB Offset			
					
Channel 536496 (2682.48MHz)	$\pi/2$ BPSK	38 RB / 0 RB Offset			
					

n41, Channel Bandwidth: 20MHz					
Channel 501204 (2506.02MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset
					
Channel 501204 (2506.02MHz)	$\pi/2$ BPSK	1 RB / 50 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	1 RB / 50 RB Offset
					
Channel 501204 (2506.02MHz)	$\pi/2$ BPSK	51 RB / 0 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	51 RB / 0 RB Offset
					

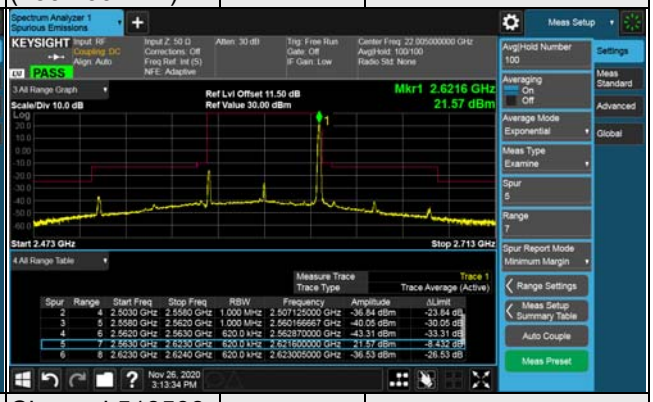
n41, Channel Bandwidth: 20MHz					
Channel 535998 (2679.99MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset			
					
Channel 535998 (2679.99MHz)	$\pi/2$ BPSK	1 RB / 50 RB Offset			
					
Channel 535998 (2679.99MHz)	$\pi/2$ BPSK	51 RB / 0 RB Offset			
					

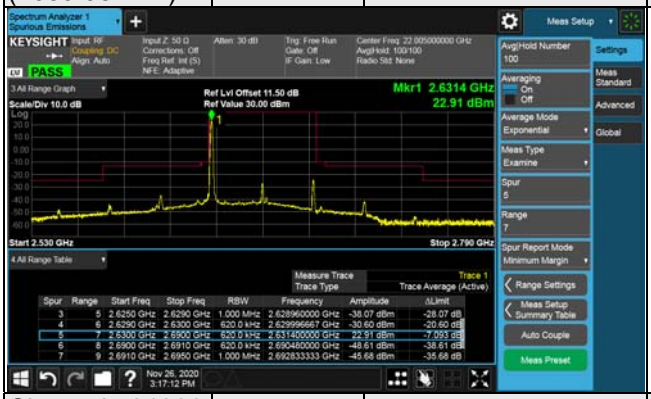
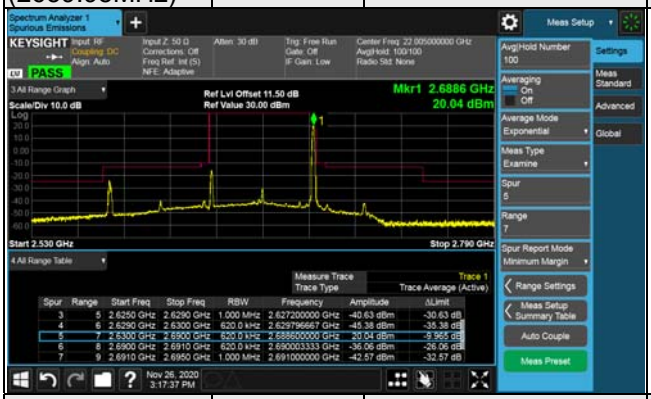
n41, Channel Bandwidth: 40MHz					
Channel 503202 (2516.01MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset
					
Channel 503202 (2516.01MHz)	$\pi/2$ BPSK	1 RB / 105 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	1 RB / 105 RB Offset
					
Channel 503202 (2516.01MHz)	$\pi/2$ BPSK	106 RB / 0 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	106 RB / 0 RB Offset
					

n41, Channel Bandwidth: 40MHz					
Channel 534000 (2670.00MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset			
					
Channel 534000 (2670.00MHz)	$\pi/2$ BPSK	1 RB / 105 RB Offset			
					
Channel 534000 (2670.00MHz)	$\pi/2$ BPSK	106 RB / 0 RB Offset			
					

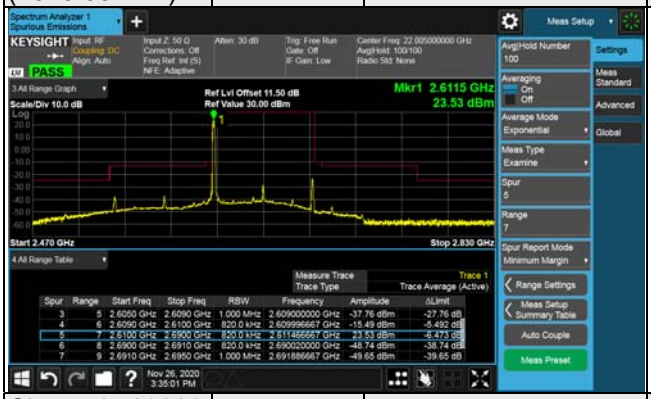
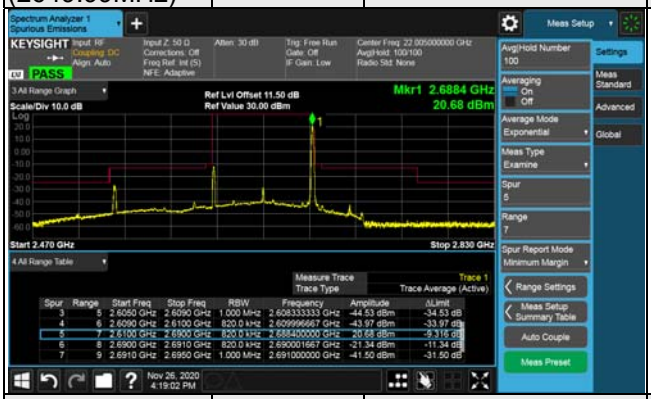
n41, Channel Bandwidth: 50MHz					
Channel 504204 (2521.02MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset
					
Channel 504204 (2521.02MHz)	$\pi/2$ BPSK	1 RB / 132 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	1 RB / 132 RB Offset
					
Channel 504204 (2521.02MHz)	$\pi/2$ BPSK	133 RB / 0 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	133 RB / 0 RB Offset
					

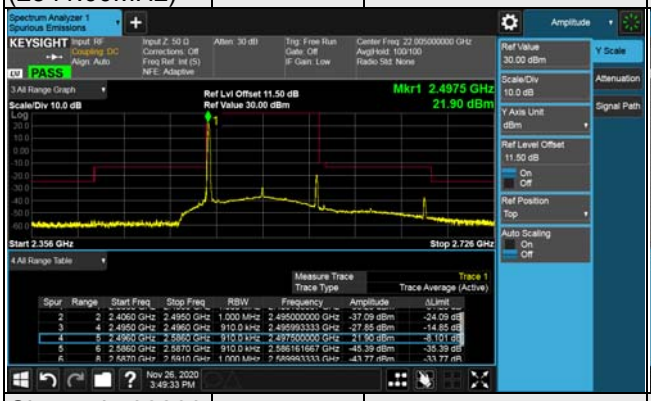
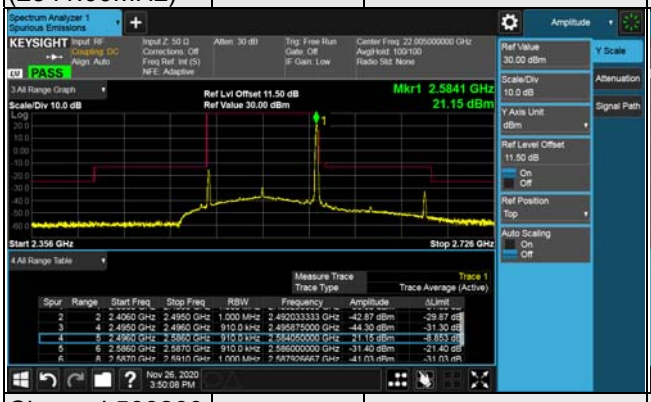
n41, Channel Bandwidth: 50MHz					
Channel 532998 (2664.99MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset			
					
Channel 532998 (2664.99MHz)	$\pi/2$ BPSK	1 RB / 132 RB Offset			
					
Channel 532998 (2664.99MHz)	$\pi/2$ BPSK	133 RB / 0 RB Offset			
					

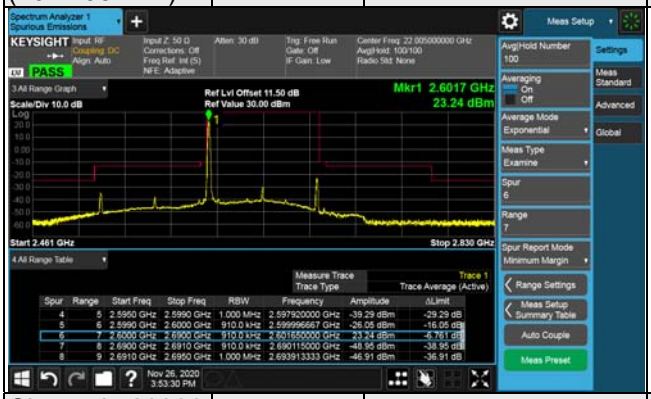
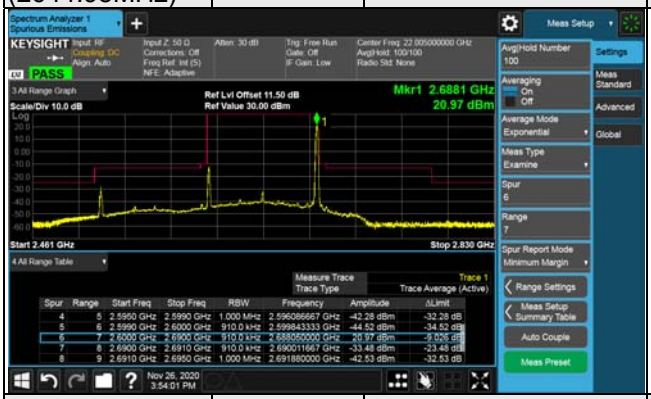
n41, Channel Bandwidth: 60MHz					
Channel 505200 (2526.00MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset
					
Channel 505200 (2526.00MHz)	$\pi/2$ BPSK	1 RB / 161 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	1 RB / 161 RB Offset
					
Channel 505200 (2526.00MHz)	$\pi/2$ BPSK	162 RB / 0 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	162 RB / 0 RB Offset
					

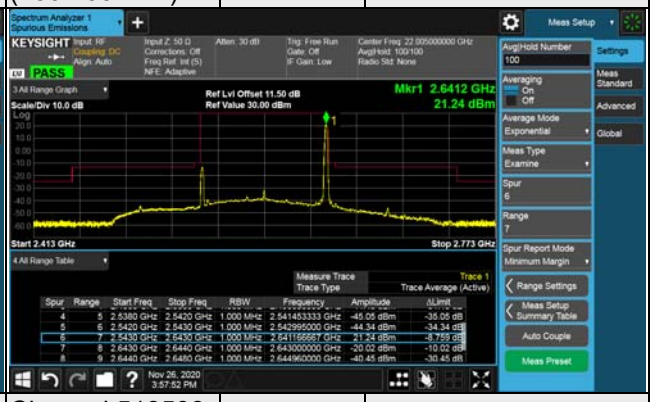
n41, Channel Bandwidth: 60MHz					
Channel 531996 (2659.98MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset			
					
Channel 531996 (2659.98MHz)	$\pi/2$ BPSK	1 RB / 161 RB Offset			
					
Channel 531996 (2659.98MHz)	$\pi/2$ BPSK	162 RB / 0 RB Offset			
					

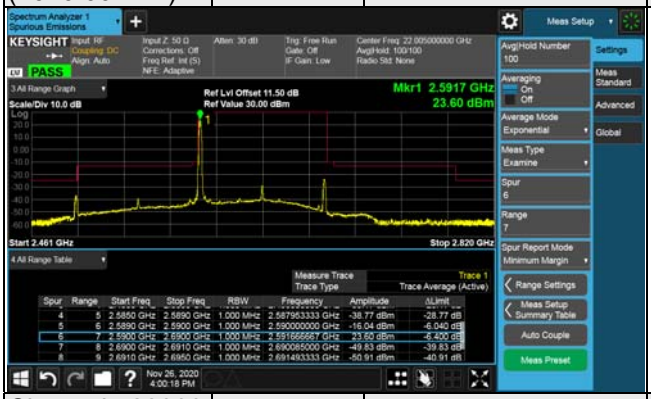
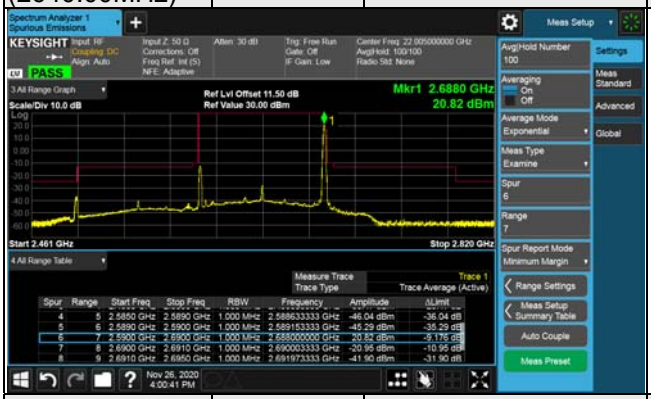
n41, Channel Bandwidth: 80MHz					
Channel 507204 (2536.02MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset
					
Channel 507204 (2536.02MHz)	$\pi/2$ BPSK	1 RB / 216 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	1 RB / 216 RB Offset
					
Channel 507204 (2536.02MHz)	$\pi/2$ BPSK	217 RB / 0 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	217 RB / 0 RB Offset
					

n41, Channel Bandwidth: 80MHz					
Channel 529998 (2649.99MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset			
					
Channel 529998 (2649.99MHz)	$\pi/2$ BPSK	1 RB / 216 RB Offset			
					
Channel 529998 (2649.99MHz)	$\pi/2$ BPSK	217 RB / 0 RB Offset			
					

n41, Channel Bandwidth: 90MHz					
Channel 508200 (2541.00MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset
					
Channel 508200 (2541.00MHz)	$\pi/2$ BPSK	1 RB / 244 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	1 RB / 244 RB Offset
					
Channel 508200 (2541.00MHz)	$\pi/2$ BPSK	245 RB / 0 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	245 RB / 0 RB Offset
					

n41, Channel Bandwidth: 90MHz					
Channel 528996 (2644.98MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset			
					
Channel 528996 (2644.98MHz)	$\pi/2$ BPSK	1 RB / 244 RB Offset			
					
Channel 528996 (2644.98MHz)	$\pi/2$ BPSK	245 RB / 0 RB Offset			
					

n41, Channel Bandwidth: 100MHz					
Channel 509202 (2546.01MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset
					
Channel 509202 (2546.01MHz)	$\pi/2$ BPSK	1 RB / 272 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	1 RB / 272 RB Offset
					
Channel 509202 (2546.01MHz)	$\pi/2$ BPSK	273 RB / 0 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	273 RB / 0 RB Offset
					

n41, Channel Bandwidth: 100MHz					
Channel 528000 (2640.00MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset			
					
Channel 528000 (2640.00MHz)	$\pi/2$ BPSK	1 RB / 272 RB Offset			
					
Channel 528000 (2640.00MHz)	$\pi/2$ BPSK	273 RB / 0 RB Offset