FCC Test Report
(ENDC: n41+Band 2/25/26/41/66)

Report No.:	RF200109E02B-12
FCC ID:	2AQ68T99W175
Test Model:	T99W175
Received Date:	Jan. 10, 2020
Test Date:	Feb. 26 ~ May 18, 2020
Issued Date:	May 27, 2020
Applicant:	Hon Lin Technology Co., Ltd.
Address:	11F, No. 32, Jihu Rd., Neihu Dist., Taipei City 114, Taiwan R.O.C.
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
RF200109E02B-12	Original release	May 27, 2020

1 Certificate of Conformity

Product:	5G WWAN Module
Brand:	Foxconn
Test Model:	T99W175
Sample Status:	Engineering Sample
Applicant:	Hon Lin Technology Co., Ltd.
Test Date:	Feb. 26 ~ May 18, 2020
Standards:	FCC Part 22, Subpart H FCC Part 24, Subpart E FCC Part 27, Subpart M, L 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 : Pettie Chen , **Date:** May 25, 2020

Pettie Chen / Senior Specialist

Approved by : Bruce Chen , **Date:** May 25, 2020

Bruce Chen / Senior Project Engineer

2 Summary of Test Results

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 -34.9dB at 168.71MHz.

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

Applied Standard: FCC Part 24 & Part 2			
FCC Clause	Test Item	Result	Remarks
2.1046 24.232	Effective radiated power	Pass	Meet the requirement of limit.
2.1046 24.232(d)	Peak To Average Ratio	Pass	Meet the requirement of limit.
2.1047	Modulation Characteristics	Pass	Meet the requirement
2.1055 24.235	Frequency Stability	Pass	Meet the requirement of limit.
2.1049 24.238(b)	Occupied Bandwidth	Pass	Meet the requirement of limit.
24.238(b)	Band Edge Measurements	Pass	Meet the requirement of limit.
2.1051 24.238	Conducted Spurious Emissions	Pass	Meet the requirement of limit.
2.1053 24.238	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -30.0dB at 30.97MHz.

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

Applied Standard: FCC Part 27 & Part 2					
FCC Clause			Test Item	Result	Remarks
n41	LTE B41	LTE B66			
2.1046 27.50 (h)(2)	2.1046 27.50 (h)(2)	2.1046 27.50 (d)(4)	Equivalent Isotropically Radiated Power / Equivalent Radiated Power	Pass	Meet the requirement of limit.
2.1047	----	----	Modulation Characteristics	Pass	Meet the requirement of limit.
----	----	27.50 (d)(5)	Peak To Average Ratio	Pass	Meet the requirement of limit.
2.1055 27.54	2.1055 27.54	2.1055 27.54	Frequency Stability Stay with the authorized bands of operation	Pass	Meet the requirement of limit.
2.1049	2.1049	2.1049	Occupied Bandwidth	Pass	Meet the requirement of limit.
2.1051 27.53 (m)(4)(6)	2.1051 27.53 (m)(4)(6)	2.1051 27.53(h)	Band Edge Measurements	Pass	Meet the requirement of limit.
2.1051 27.53 (m)(4)(6)	2.1051 27.53 (m)(4)(6)	2.1051 27.53(h)	Conducted Spurious Emissions	Pass	Meet the requirement of limit.
2.1053 27.53 (m)(4)(6)	2.1053 27.53 (m)(4)(6)	2.1053 27.53(h)	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -17.1dB at 5185.98MHz.

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

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 -34.6dB at 167.74MHz.

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	Sep. 23, 2019	Sep. 22, 2020
Spectrum Analyzer KEYSIGHT	N9030B	MY57140953	Jul. 03, 2019	Jul. 02, 2020
Radio Communication Analyzer Anritsu	MT8000A	6262012865	Dec. 12, 2019	Dec. 11, 2020
MXG Vector signal generator Agilent	N5182B	MY53050162	Jan. 14, 2020	Jan. 13, 2021
HORN Antenna ETS	3117	00034128	Nov. 24, 2019	Nov. 23, 2020
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Nov. 11, 2019	Nov. 10, 2020
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-1170	Nov. 24, 2019	Nov. 23, 2020
HORN Antenna ETS	3117	00034128	Nov. 24, 2019	Nov. 23, 2020
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Nov. 24, 2019	Nov. 23, 2020
Loop Antenna TESEQ	HLA 6121	45745	Jul. 01, 2019	Jun. 30, 2020
Preamplifier Agilent (Below 1GHz)	8447D	2944A10631	Jul. 11, 2019	Jul. 10, 2020
Preamplifier KEYSIGHT (Above 1GHz)	83017A	MY53270295	Jun. 11, 2019	Jun. 10, 2020
RF Coaxial Cable WOKEN With 5dB PAD	8D-FB	Cable-CH4-01	Aug. 20, 2019	Aug. 19, 2020
RF Coaxial Cable EMCI	EMC102-KM-KM-3000	150929	Aug. 20, 2019	Aug. 19, 2020
RF Coaxial Cable EMCI	EMC102-KM-KM-600	150928	Aug. 20, 2019	Aug. 19, 2020
RF signal cable HUBER+SUHNER	SUCOFLEX 104	MY 13380+295012/04	Jul. 11, 2019	Jul. 10, 2020
RF signal cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH4-03 (250724)	Jul. 11, 2019	Jul. 10, 2020
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
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
Standard Temperature And Humidity Chamber	MHU-225AU	920842	May 31, 2019	May 30, 2020
JFW 20dB attenuation	50HF-020-SMA	NA	NA	NA
True RMS Clamp Meter Fluke	325	31130711WS	May 21, 2019	May 20, 2020
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	5G WWAN Module
Brand	Foxconn
Test Model	T99W175
Status of EUT	Engineering Sample
Power Supply Rating	5 Vdc (Host equipment) 3.135Vdc~3.63Vdc (Module)

n41

Modulation Type	$\pi/2$ BPSK, QPSK, 16QAM, 64QAM, 256QAM						
Waveform Type	CP-OFDM, DFT-s-OFDM						
Operating Frequency	n41	Channel Bandwidth 20MHz	2506.02MHz ~ 2679.99MHz				
		Channel Bandwidth 40MHz	2516.01MHz ~ 2670.00MHz				
		Channel Bandwidth 50MHz	2521.02MHz ~ 2664.99MHz				
		Channel Bandwidth 60MHz	2526.00MHz ~ 2659.98MHz				
		Channel Bandwidth 80MHz	2536.02MHz ~ 2649.99MHz				
		Channel Bandwidth 90MHz	2541.00MHz ~ 2644.98MHz				
		Channel Bandwidth 100MHz	2546.01MHz ~ 2640.00MHz				
Max. EIRP Power (HPUE)			$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
	n41	Channel Bandwidth 20MHz	1321.296mW (31.21dBm)	1221.800mW (30.87dBm)	1213.389mW (30.84dBm)	1104.079mW (30.43dBm)	665.273mW (28.23dBm)
		Channel Bandwidth 40MHz	1303.167mW (31.15dBm)	1282.331mW (31.08dBm)	1233.105mW (30.91dBm)	1124.605mW (30.51dBm)	669.885mW (28.26dBm)
		Channel Bandwidth 50MHz	1309.182mW (31.17dBm)	1291.219mW (31.11dBm)	1218.990mW (30.86dBm)	1114.295mW (30.47dBm)	674.528mW (28.29dBm)
		Channel Bandwidth 60MHz	1318.257mW (31.20dBm)	1279.381mW (31.07dBm)	1221.800mW (30.87dBm)	1137.627mW (30.56dBm)	672.977mW (28.28dBm)
		Channel Bandwidth 80MHz	1306.171mW (31.16dBm)	1288.250mW (31.10dBm)	1216.186mW (30.85dBm)	1124.605mW (30.51dBm)	668.344mW (28.25dBm)
		Channel Bandwidth 90MHz	1318.257mW (31.20dBm)	1256.030mW (30.99dBm)	1224.616mW (30.88dBm)	1122.018mW (30.50dBm)	672.977mW (28.28dBm)
		Channel Bandwidth 100MHz	1315.225mW (31.19dBm)	1282.331mW (31.08dBm)	1227.439mW (30.89dBm)	1101.539mW (30.42dBm)	671.429mW (28.27dBm)
Max. EIRP Power			$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
	n41	Channel Bandwidth 20MHz	769.130mW (28.86dBm)	749.894mW (28.75dBm)	709.578mW (28.51dBm)	650.130mW (28.13dBm)	381.944mW (25.82dBm)
		Channel Bandwidth 40MHz	746.449mW (28.73dBm)	751.623mW (28.76dBm)	703.072mW (28.47dBm)	650.130mW (28.13dBm)	390.841mW (25.92dBm)
		Channel Bandwidth 50MHz	746.449mW (28.73dBm)	736.207mW (28.67dBm)	712.853mW (28.53dBm)	647.143mW (28.11dBm)	389.942mW (25.91dBm)
		Channel Bandwidth 60MHz	776.247mW (28.90dBm)	751.623mW (28.76dBm)	699.842mW (28.45dBm)	648.634mW (28.12dBm)	392.645mW (25.94dBm)
		Channel Bandwidth 80MHz	758.578mW (28.80dBm)	743.019mW (28.71dBm)	701.455mW (28.46dBm)	659.174mW (28.19dBm)	388.150mW (25.89dBm)
		Channel Bandwidth 90MHz	772.681mW (28.88dBm)	739.605mW (28.69dBm)	712.853mW (28.53dBm)	656.145mW (28.17dBm)	386.367mW (25.87dBm)
		Channel Bandwidth 100MHz	767.361mW (28.85dBm)	736.207mW (28.67dBm)	711.214mW (28.52dBm)	630.957mW (28.00dBm)	390.841mW (25.92dBm)

			$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
Emission Designator	n41	Channel Bandwidth 20MHz	18M0G7D	17M8G7D	17M8D7W	17M8D7W	18M1D7W
		Channel Bandwidth 40MHz	37M5G7D	37M8G7D	37M8D7W	37M8D7W	37M8D7W
		Channel Bandwidth 50MHz	47M1G7D	47M5G7D	47M5D7W	47M5D7W	47M4D7W
		Channel Bandwidth 60MHz	57M9G7D	57M9G7D	57M9D7W	57M9D7W	57M9D7W
		Channel Bandwidth 80MHz	77M2G7D	77M5G7D	77M5D7W	77M5D7W	77M5D7W
		Channel Bandwidth 90MHz	86M9G7D	87M5G7D	87M5D7W	87M5D7W	87M3D7W
		Channel Bandwidth 100MHz	96M6G7D	97M4G7D	97M4D7W	97M3D7W	97M4D7W

LTE Band

Modulation Type	QPSK, 16QAM, 64QAM, 256QAM		
Operating Frequency	LTE Band 2	Channel Bandwidth 1.4MHz	1850.7MHz ~1909.3MHz
		Channel Bandwidth 3MHz	1851.5MHz ~1908.5MHz
		Channel Bandwidth 5MHz	1852.5MHz ~1907.5MHz
		Channel Bandwidth 10MHz	1855.0MHz ~1905.0MHz
		Channel Bandwidth 15MHz	1857.5MHz ~1902.5MHz
		Channel Bandwidth 20MHz	1860.0MHz ~1900.0MHz
	LTE Band 25	Channel Bandwidth 1.4MHz	1850.7~1914.3MHz
		Channel Bandwidth 3MHz	1851.5~1913.5MHz
		Channel Bandwidth 5MHz	1852.5~1912.5MHz
		Channel Bandwidth 10MHz	1855.0~1910.0MHz
		Channel Bandwidth 15MHz	1857.5~1907.5MHz
		Channel Bandwidth 20MHz	1860.0~1905.0MHz
	LTE Band 26 (Part 22)	Channel Bandwidth 1.4MHz	824.7~848.3MHz
		Channel Bandwidth 3MHz	825.5~847.5MHz
		Channel Bandwidth 5MHz	826.5~846.5MHz
		Channel Bandwidth 10MHz	829.0~844.0MHz
		Channel Bandwidth 15MHz	831.5~841.5MHz
	LTE Band 26 (Part 90)	Channel Bandwidth 1.4MHz	814.7MHz ~ 823.3MHz
		Channel Bandwidth 3MHz	815.5MHz ~ 822.5MHz
		Channel Bandwidth 5MHz	816.5MHz ~ 821.5MHz
		Channel Bandwidth 10MHz	819.0MHz
	LTE Band 41	Channel Bandwidth 5MHz	2498.5MHz ~ 2687.5 MHz
		Channel Bandwidth 10MHz	2501.0MHz ~ 2685.0 MHz
		Channel Bandwidth 15MHz	2503.5MHz ~ 2682.5 MHz
		Channel Bandwidth 20MHz	2506.0MHz ~ 2680.0 MHz
	LTE Band 66	Channel Bandwidth 1.4MHz	1710.7MHz ~ 1779.3MHz
		Channel Bandwidth 3MHz	1711.5MHz ~ 1778.5MHz
		Channel Bandwidth 5MHz	1712.5MHz ~ 1777.5MHz
		Channel Bandwidth 10MHz	1715.0MHz ~ 1775.0MHz
		Channel Bandwidth 15MHz	1717.5MHz ~ 1772.5MHz
		Channel Bandwidth 20MHz	1720.0MHz ~ 1770.0MHz

			QPSK	16QAM	64QAM	256QAM
Max. ERP Power	LTE Band 26 (Part 22)	Channel Bandwidth 1.4MHz	306.196mW (24.86dBm)	239.883mW (23.80dBm)	192.752mW (22.85dBm)	148.936mW (21.73dBm)
		Channel Bandwidth 3MHz	306.196mW (24.86dBm)	242.661mW (23.85dBm)	192.752mW (22.85dBm)	154.525mW (21.89dBm)
		Channel Bandwidth 5MHz	306.196mW (24.86dBm)	240.991mW (23.82dBm)	192.752mW (22.85dBm)	152.405mW (21.83dBm)
		Channel Bandwidth 10MHz	301.995mW (24.80dBm)	240.436mW (23.81dBm)	193.197mW (22.86dBm)	151.008mW (21.79dBm)
		Channel Bandwidth 15MHz	304.089mW (24.83dBm)	239.883mW (23.80dBm)	191.426mW (22.82dBm)	152.055mW (21.82dBm)
	LTE Band 26 (Part 90)	Channel Bandwidth 1.4MHz	306.196mW (24.86dBm)	242.661mW (23.85dBm)	190.108mW (22.79dBm)	148.594mW (21.72dBm)
		Channel Bandwidth 3MHz	304.789mW (24.84dBm)	239.332mW (23.79dBm)	188.799mW (22.76dBm)	150.314mW (21.77dBm)
		Channel Bandwidth 5MHz	302.691mW (24.81dBm)	242.103mW (23.84dBm)	191.867mW (22.83dBm)	154.525mW (21.89dBm)
		Channel Bandwidth 10MHz	303.389mW (24.82dBm)	231.739mW (23.65dBm)	192.752mW (22.85dBm)	146.893mW (21.67dBm)
Max. EIRP Power			QPSK	16QAM	64QAM	256QAM
	LTE Band 2	Channel Bandwidth 1.4MHz	550.808mW (27.41dBm)	443.609mW (26.47dBm)	349.140mW (25.43dBm)	286.418mW (24.57dBm)
		Channel Bandwidth 3MHz	538.270mW (27.31dBm)	440.555mW (26.44dBm)	351.560mW (25.46dBm)	284.446mW (24.54dBm)
		Channel Bandwidth 5MHz	554.626mW (27.44dBm)	440.555mW (26.44dBm)	351.560mW (25.46dBm)	283.792mW (24.53dBm)
		Channel Bandwidth 10MHz	549.541mW (27.40dBm)	442.588mW (26.46dBm)	347.536mW (25.41dBm)	285.759mW (24.56dBm)
		Channel Bandwidth 15MHz	558.470mW (27.47dBm)	443.609mW (26.47dBm)	350.752mW (25.45dBm)	280.543mW (24.48dBm)
		Channel Bandwidth 20MHz	558.470mW (27.47dBm)	438.531mW (26.42dBm)	351.560mW (25.46dBm)	288.403mW (24.60dBm)
	LTE Band 25	Channel Bandwidth 1.4MHz	555.904mW (27.45dBm)	438.531mW (26.42dBm)	345.939mW (25.39dBm)	303.389mW (24.82dBm)
		Channel Bandwidth 3MHz	558.470mW (27.47dBm)	435.512mW (26.39dBm)	350.752mW (25.45dBm)	289.068mW (24.61dBm)
		Channel Bandwidth 5MHz	558.470mW (27.47dBm)	442.588mW (26.46dBm)	349.945mW (25.44dBm)	349.945mW (24.75dBm)
		Channel Bandwidth 10MHz	549.541mW (27.40dBm)	435.512mW (26.39dBm)	351.560mW (25.46dBm)	304.089mW (24.83dBm)
		Channel Bandwidth 15MHz	555.904mW (27.45dBm)	443.609mW (26.47dBm)	349.945mW (25.44dBm)	303.389mW (24.82dBm)
		Channel Bandwidth 20MHz	558.470mW (27.47dBm)	437.522mW (26.41dBm)	351.560mW (25.46dBm)	297.167mW (24.73dBm)
	LTE Band 41 (HPUE)	Channel Bandwidth 5MHz	1202.264mW (30.80dBm)	952.796mW (29.79dBm)	755.092mW (28.78dBm)	598.412mW (27.77dBm)
		Channel Bandwidth 10MHz	1199.499mW (30.79dBm)	954.993mW (29.80dBm)	753.356mW (28.77dBm)	587.489mW (27.69dBm)
		Channel Bandwidth 15MHz	1199.499mW (30.79dBm)	952.796mW (29.79dBm)	755.092mW (28.78dBm)	603.949mW (27.81dBm)
		Channel Bandwidth 20MHz	1199.499mW (30.79dBm)	944.061mW (29.75dBm)	756.833mW (28.79dBm)	601.174mW (27.79dBm)
	LTE Band 41	Channel Bandwidth 5MHz	662.217mW (28.21dBm)	524.807mW (27.20dBm)	415.911mW (26.19dBm)	329.610mW (25.18dBm)
		Channel Bandwidth 10MHz	660.693mW (28.20dBm)	526.017mW (27.21dBm)	414.954mW (26.18dBm)	323.594mW (25.10dBm)
		Channel Bandwidth 15MHz	660.693mW (28.20dBm)	524.807mW (27.20dBm)	415.911mW (26.19dBm)	332.660mW (25.22dBm)
		Channel Bandwidth 20MHz	660.693mW (28.20dBm)	519.996mW (27.16dBm)	416.869mW (26.20dBm)	331.131mW (25.20dBm)
	LTE Band 66	Channel Bandwidth 1.4MHz	552.077mW (27.42dBm)	441.570mW (26.45dBm)	351.560mW (25.46dBm)	279.254mW (24.46dBm)
		Channel Bandwidth 3MHz	554.626mW (27.44dBm)	441.570mW (26.45dBm)	339.625mW (25.31dBm)	268.534mW (24.29dBm)
		Channel Bandwidth 5MHz	553.350mW (27.43dBm)	440.555mW (26.44dBm)	351.560mW (25.46dBm)	281.190mW (24.49dBm)
		Channel Bandwidth 10MHz	557.186mW (27.46dBm)	443.609mW (26.47dBm)	351.560mW (25.46dBm)	283.139mW (24.52dBm)
		Channel Bandwidth 15MHz	554.626mW (27.44dBm)	441.570mW (26.45dBm)	351.560mW (25.46dBm)	281.190mW (24.49dBm)
		Channel Bandwidth 20MHz	548.277mW (27.39dBm)	436.516mW (26.40dBm)	342.768mW (25.35dBm)	277.332mW (24.43dBm)

			QPSK	16QAM	64QAM	256QAM
Emission Designator	LTE Band 2	Channel Bandwidth 1.4MHz	1M09G7D	1M09D7W	1M09D7W	1M09D7W
		Channel Bandwidth 3MHz	2M70G7D	2M70D7W	2M70D7W	2M70D7W
		Channel Bandwidth 5MHz	4M49G7D	4M49D7W	4M50D7W	4M48D7W
		Channel Bandwidth 10MHz	8M96G7D	8M97D7W	8M97D7W	8M96D7W
		Channel Bandwidth 15MHz	13M5G7D	13M5D7W	13M5D7W	13M5D7W
		Channel Bandwidth 20MHz	18M1G7D	18M0D7W	18M0D7W	18M0D7W
	LTE Band 25	Channel Bandwidth 1.4MHz	1M09G7D	1M09D7W	1M09D7W	1M09D7W
		Channel Bandwidth 3MHz	2M70G7D	2M70D7W	2M70D7W	2M70D7W
		Channel Bandwidth 5MHz	4M49G7D	4M49D7W	4M49D7W	4M49D7W
		Channel Bandwidth 10MHz	8M95G7D	8M96D7W	8M95D7W	8M95D7W
		Channel Bandwidth 15MHz	13M5G7D	13M4D7W	13M4D7W	13M4D7W
		Channel Bandwidth 20MHz	17M9G7D	17M9D7W	18M0D7W	17M9D7W
	LTE Band 26 (Part 22)	Channel Bandwidth 1.4MHz	1M09G7D	1M09D7W	1M09D7W	1M09D7W
		Channel Bandwidth 3MHz	2M70G7D	2M70D7W	2M70D7W	2M70D7W
		Channel Bandwidth 5MHz	4M49G7D	4M49D7W	4M50D7W	4M49D7W
		Channel Bandwidth 10MHz	8M96G7D	8M96D7W	8M96D7W	8M96D7W
		Channel Bandwidth 15MHz	13M5G7D	13M4D7W	13M4D7W	13M4D7W
	LTE Band 26 (Part 90)	Channel Bandwidth 1.4MHz	1M09G7D	1M09D7W	1M09D7W	1M08D7W
		Channel Bandwidth 3MHz	2M70G7D	2M70D7W	2M69D7W	2M69D7W
		Channel Bandwidth 5MHz	4M49G7D	4M49D7W	4M49D7W	4M48D7W
		Channel Bandwidth 10MHz	8M96G7D	8M96D7W	8M96D7W	8M95D7W
	LTE Band 41	Channel Bandwidth 5MHz	4M49G7D	4M49D7W	4M50D7W	4M48D7W
		Channel Bandwidth 10MHz	8M96G7D	8M97D7W	8M97D7W	8M96D7W
		Channel Bandwidth 15MHz	13M5G7D	13M5D7W	13M5D7W	13M4D7W
		Channel Bandwidth 20MHz	17M9G7D	17M9D7W	18M0D7W	17M9D7W
	LTE Band 66	Channel Bandwidth 1.4MHz	1M09G7D	1M09D7W	1M09D7W	1M09D7W
		Channel Bandwidth 3MHz	2M70G7D	2M70D7W	2M70D7W	2M70D7W
		Channel Bandwidth 5MHz	4M49G7D	4M49D7W	4M50D7W	4M49D7W
		Channel Bandwidth 10MHz	8M96G7D	8M97D7W	8M97D7W	8M97D7W
		Channel Bandwidth 15MHz	13M5G7D	13M5D7W	13M5D7W	13M5D7W
		Channel Bandwidth 20MHz	18M0G7D	18M0D7W	18M0D7W	18M0D7W
Antenna Type	Refer to Note as below					
Antenna Connector	Refer to Note as below					
Accessory Device	NA					
Cable Supplied	NA					

Output Power / Emission Designator	n41+LTE Band 2		Maximum EIRP	Sum Bandwidth
		n41	776.247mW (28.90dBm)	75M8D7W
		LTE Band 2 (EIRP)	288.403mW (24.60dBm)	
			EIRP	MAX Sum Bandwidth
		n41	636.796mW (28.04dBm)	115MD7W
		LTE Band 2 (EIRP)	258.226mW (24.12dBm)	
	n41+LTE Band 25		Maximum EIRP	Sum Bandwidth
		n41	776.247mW (28.90dBm)	66M8D7W
		LTE Band 25 (EIRP)	304.089mW (24.83dBm)	
			EIRP	MAX Sum Bandwidth
		n41	636.796mW (28.04dBm)	115MD7W
		LTE Band 25 (EIRP)	271.019mW (24.33dBm)	
	n41+LTE Band 26 (Part 22)		Maximum EIRP/ERP	Sum Bandwidth
		n41	776.247mW (28.90dBm)	60M6D7W
		LTE Band 26 (ERP)	154.525mW (21.89dBm)	
			EIRP/ERP	MAX Sum Bandwidth
		n41	636.796mW (28.04dBm)	111MD7W
		LTE Band 26 (ERP)	140.605mW (21.48dBm)	
	n41+LTE Band 26 (Part 90)		Maximum EIRP/ERP	Sum Bandwidth
		n41	776.247mW (28.90dBm)	62M3D7W
		LTE Band 26 (ERP)	154.525mW (21.89dBm)	
			EIRP/ERP	MAX Sum Bandwidth
		n41	636.796mW (28.04dBm)	106MD7W
		LTE Band 26 (ERP)	135.207mW (21.31dBm)	

Output Power / Emission Designator	n41(HPUE)+ LTE Band 41 (Contiguous)		Maximum EIRP	Sum Bandwidth
		n41 (HPUE)	1655.770mW (32.19dBm)	31M4D7W
		LTE Band 41 (EIRP)		
			EIRP	MAX Sum Bandwidth
		n41 (HPUE)	1428.894mW (31.55dBm)	115MD7W
		LTE Band 41 (EIRP)		
	n41(HPUE)+ LTE Band 41 (Non-Contiguous)		Maximum EIRP	Sum Bandwidth
		n41 (HPUE)	1321.296mW (31.21dBm)	31M4D7W
		LTE Band 41 (EIRP)	332.660mW (25.22dBm)	
			EIRP	MAX Sum Bandwidth
		n41 (HPUE)	1111.732mW (30.46dBm)	115MD7W
		LTE Band 41 (EIRP)	317.687mW (25.02dBm)	
	n41+ LTE Band 41(HPUE) (Contiguous)		Maximum EIRP	Sum Bandwidth
		n41	2192.805mW (31.40dBm)	71M3D7W
		LTE Band 41(HPUE) (EIRP)		
			EIRP	MAX Sum Bandwidth
		n41	1230.269mW (30.84dBm)	115MD7W
		LTE Band 41(HPUE) (EIRP)		
	n41+ LTE Band 41(HPUE) (Non-Contiguous)		Maximum EIRP	Sum Bandwidth
		n41	776.247mW (28.90dBm)	71M3D7W
		LTE Band 41(HPUE) (EIRP)	603.949mW (27.81dBm)	
			EIRP	MAX Sum Bandwidth
		n41	636.796mW (28.04dBm)	115MD7W
		LTE Band 41(HPUE) (EIRP)	576.766mW (27.61dBm)	
	n41+LTE Band 41 (Contiguous)		Maximum EIRP	Sum Bandwidth
		n41	1109.175mW (30.45dBm)	71M3D7W
		LTE Band 41 (EIRP)		
			EIRP	MAX Sum Bandwidth
		n41	954.993mW (29.80dBm)	115MD7W
		LTE Band 41 (EIRP)		
	n41+LTE Band 41 (Non-Contiguous)		Maximum EIRP	Sum Bandwidth
		n41	776.247mW (28.90dBm)	71M3D7W
		LTE Band 41 (EIRP)	332.660mW (25.22dBm)	
			EIRP	MAX Sum Bandwidth
		n41	636.796mW (28.04dBm)	115MD7W
		LTE Band 41 (EIRP)	317.687mW (25.02dBm)	
	n41+LTE Band 66		Maximum EIRP	Sum Bandwidth
		n41	776.247mW (28.90dBm)	66M8D7W
		LTE Band 66 (EIRP)	283.139mW (24.52dBm)	
			EIRP	MAX Sum Bandwidth
		n41	636.796mW (28.04dBm)	115MD7W
		LTE Band 66 (EIRP)	262.422mW (24.19dBm)	

Note:

1. This report is prepared for FCC class II permissive change. This report is issued as a supplementary report of BV CPS report no.: RF200109E02-13. Difference compared with the original report is adding Modulation Type 256QAM by software. In this software changed, will not impact the 5G NR characteristic, therefore all test results are keeping as original report stated. Therefore, the EUT was tested all tests for 256QAM and presented in the test report.
2. There are four Difference HW of T99W175.

Brand	Model	HW
Foxconn	T99W175	1. 3G+LTE+Sub6+eSIM
		2. 3G+LTE+Sub6 only w/o eSIM
		3. 3G+LTE+Sub6+eSIM+GNSS connector
		4. 3G+LTE+Sub6 only+w/o eSIM+GNSS connector

*After pre-testing, “HW: 1. 3G+LTE+Sub6+eSIM” is the worst for the final tests.

3. After pre-testing, “DFT-s-OFDM” is the worst for the final tests.

4. The following antennas were provided to the EUT.

Antenna No.	RF Chain No.	Brand	Model	Antenna Net Gain(dBi)	Frequency range (MHz)	Antenna Type	Connector Type
1		WHA YU	C107-511720-A	4.41	660~803	PCB	I-PEX
2		WHA YU	C107-511721-A	3.81 4.03	791~960 1447.9~1606	PCB	I-PEX
3		WHA YU	C107-511722-A	4.27 5.31	1710~2170 2500~2690	PCB	I-PEX
4		WHA YU	C107-511723-A	2.99 0.92	2300~2400 3500~3700	PCB	I-PEX
5		WHA YU	C107-511724-A	6.45	5150~5925	PCB	I-PEX
6		WHA YU	C107-511725-A	4.89	3400~3700	PCB	I-PEX
7		AVX	5000106-R1-X01	2.91	699~803	Monopole	I-PEX
8		AVX	5000107-R1-X01	2.59	791~960	Monopole	I-PEX
9		AVX	5000108-R1-X01	2.85	1427~1610	Monopole	I-PEX
10		AVX	5000109-R1-X01	2.23 2.94	1710~2200 5150~5925	Monopole	I-PEX
11		AVX	5000110-R1-X01	0.9	2300~2690	Monopole	I-PEX
12		AVX	5000111-R1-X01	0.87	3300~5000	Monopole	I-PEX
13	Tx1/ Rx1	Ethertronics	5003806	0.4 -1.61 0.39 2.95 1.98 0.38 0.83 2.31	698-821 824-960 1425-1515 1710-2200 2300-2690 3300-4200 4400-5000 5150-5925	PIFA	I-PEX
	Rx2	Ethertronics	5003807	-2.24 -4.52 2.87 2.99 2.93 2.91 2.23 -0.85 -3.04	716-821 824-960 1425-1515 1557-1610 1805-2200 2300-2690 3300-4200 4400-5000 5150-5925	PIFA	I-PEX
	Tx2/ Rx3	Ethertronics	5003806	2.21 2.25 -0.45 2.6	1710-2200 2300-2690 3300-4200 4400-5000	PIFA	I-PEX
	Rx4	Ethertronics	5003700	1.38 2.87 0.6 -2.09	1805-2200 2300-2690 3300-4200 4400-5000	PIFA	I-PEX

Antenna No.	RF Chain No.	Brand	Model	Antenna Net Gain(dBi)	Frequency range (MHz)	Antenna Type	Connector Type
14	Ant. 0 (TX/RX)	Master Wave	NA	2.4 2.2 2.9 2.9 2.9 NA	880~960 1020~2170 2545~2595 3565~3600 3900~4000 GPS	PCB	I-PEX
	Ant. 2 (TX/RX)	Master Wave	NA	NA 2.2 2.8 2.9 2.8 NA	880~960 1020~2170 2545~2595 3565~3600 3900~4000 GPS	PCB	I-PEX
	Ant. 1 (RX)	Master Wave	NA	NA 5.3 5.1 4.3 4.5 NA	880~960 1020~2170 2545~2595 3565~3600 3900~4000 GPS	PCB	I-PEX
	Ant. 3 (RX)	Master Wave	NA	1.3 6.8 3.7 6.4 6.2 3.7	880~960 1020~2170 2545~2595 3565~3600 3900~4000 GPS	PCB	I-PEX

*The antenna for the final tests as following table.

	Band	Antenna
5GNR	41 (30kHz) /20/40/50/60/80/90/100	Antenna 3

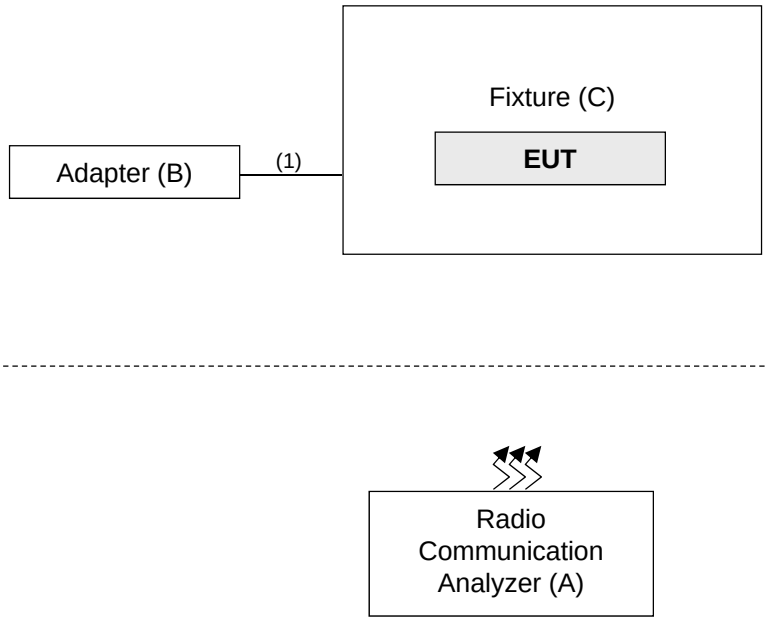
	Band	Antenna
LTE	2	Antenna 3
	25	Antenna 3
	26	Antenna 2
	41	Antenna 3
	66	Antenna 3

5. The EUT supports the following ENDC configuration.

	FCC 5G FR1			ENDC
	Band	SCS	Bandwidth (MHz)	
5GNR	n2	15kHz	5/10/15/20	Band 5/12/13/30/48/66
	n5	15kHz	5/10/15/20	Band 2/7/12/48/66
	n7	15kHz	5/10/15/20	Band 5/12
	n12	15kHz	5/10/15	Band 2/66
	n41	30kHz	20/40/50/60/80/90/100	Band 2/25/26/66/41
	n66	15kHz	5/10/15/20	Band 5/12/13/30/48/71
	n71	15kHz	5/10/15/20	Band 2/7/66

*n41 (HPUE) is support LTE Band 41 only.

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.	Radio Communication Analyzer	Anritsu	MT8821C	6261806803	NA	-
B.	Adapter	LITEON	PA-1050-39	NA	NA	-
C.	Fixture	NA	NA	NA	NA	Provided by client.

Note:

1. All power cords of the above support units are non-shielded (1.8m).
2. Item A acted as a communication partner to transfer data.

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	USB cable	1	1.5	Y	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 Z-plane. Following channel(s) was (were) selected for the final test as listed below.

n41

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	EIRP	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 / 50 RB Offset 1 RB / 99 RB Offset 50 RB / 0 RB Offset 50 RB / 25 RB Offset 50 RB / 50 RB Offset 100 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
		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

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Frequency Stability	501204 to 535998	501204 (2506.02MHz), 535998 (2679.99MHz)	20MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset
		503202 to 534000	503202 (2516.01MHz), 534000 (2670.00MHz)	40MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset
		504204 to 532998	504204 (2521.02MHz), 532998 (2664.99MHz)	50MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset
		505200 to 531996	505200 (2526.00MHz), 531996 (2659.98MHz)	60MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset
		507204 to 529998	507204 (2536.02MHz), 529998 (2649.99MHz)	80MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset
		508200 to 528996	508200 (2541.00MHz), 528996 (2644.98MHz)	90MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset
		509202 to 528000	509202 (2546.01MHz), 528000 (2640.00MHz)	100MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset
-	Emission Bandwidth	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	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 / 50 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 / 105 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 / 132 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 / 161 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 / 216 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 / 244 RB Offset 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	1 RB / 0 RB Offset 1 RB / 272 RB Offset 273 RB / 0 RB Offset
-	Peak to Average Ratio	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	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	501204 to 535998	501204 (2506.02MHz)	20MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset
		509202 to 528000	509202 (2546.01MHz)	100MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset
-	Radiated Emission Above 1GHz	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 2

EUT Configure Mode	Test item	Available channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	EIRP	18607 to 19193	18607 (1850.70MHz), 18900 (1880.00MHz), 19193 (1909.30MHz)	1.4MHz	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
		18615 to 19185	18615 (1851.50MHz), 18900 (1880.00MHz), 19185 (1908.50MHz)	3MHz	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
		18625 to 19175	18625 (1852.50MHz), 18900 (1880.00MHz), 19175 (1907.50MHz)	5MHz	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
		18650 to 19150	18650 (1855.00MHz), 18900 (1880.00MHz), 19150 (1905.00MHz)	10MHz	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
		18675 to 19125	18675 (1857.50MHz), 18900 (1880.00MHz), 19125 (1902.50MHz)	15MHz	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
		18700 to 19100	18700 (1860.00MHz), 18900 (1880.00MHz), 19100 (1900.00MHz)	20MHz	256QAM	1 RB / 0 RB Offset 1 RB / 50 RB Offset 1 RB / 99 RB Offset 50 RB / 0 RB Offset 50 RB / 25 RB Offset 50 RB / 50 RB Offset 100 RB / 0 RB Offset
-	Frequency Stability	18607 to 19193	18607 (1850.70MHz), 19193 (1909.30MHz)	1.4MHz	256QAM	5 RB / 0 RB Offset
		18615 to 19185	18615 (1851.50MHz), 19185 (1908.50MHz)	3MHz	256QAM	15 RB / 0 RB Offset
		18625 to 19175	18625 (1852.50MHz), 19175 (1907.50MHz)	5MHz	256QAM	25 RB / 0 RB Offset
		18650 to 19150	18650 (1855.00MHz), 19150 (1905.00MHz)	10MHz	256QAM	50 RB / 0 RB Offset
		18675 to 19125	18675 (1857.50MHz), 19125 (1902.50MHz)	15MHz	256QAM	75 RB / 0 RB Offset
		18700 to 19100	18700 (1860.00MHz), 19100 (1900.00MHz)	20MHz	256QAM	100 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Occupied Bandwidth	18607 to 19193	18607 (1850.70MHz), 18900 (1880.00MHz), 19193 (1909.30MHz)	1.4MHz	256QAM	5 RB / 0 RB Offset
		18615 to 19185	18615 (1851.50MHz), 18900 (1880.00MHz), 19185 (1908.50MHz)	3MHz	256QAM	15 RB / 0 RB Offset
		18625 to 19175	18625 (1852.50MHz), 18900 (1880.00MHz), 19175 (1907.50MHz)	5MHz	256QAM	25 RB / 0 RB Offset
		18650 to 19150	18650 (1855.00MHz), 18900 (1880.00MHz), 19150 (1905.00MHz)	10MHz	256QAM	50 RB / 0 RB Offset
		18675 to 19125	18675 (1857.50MHz), 18900 (1880.00MHz), 19125 (1902.50MHz)	15MHz	256QAM	75 RB / 0 RB Offset
		18700 to 19100	18700 (1860.00MHz), 18900 (1880.00MHz), 19100 (1900.00MHz)	20MHz	256QAM	100 RB / 0 RB Offset
-	Band Edge	18607 to 19193	18607 (1850.70MHz), 19193 (1909.30MHz)	1.4MHz	256QAM	1 RB / 0 RB Offset 1 RB / 5 RB Offset 6 RB / 0 RB Offset
		18615 to 19185	18615 (1851.50MHz), 19185 (1908.50MHz)	3MHz	256QAM	1 RB / 0 RB Offset 1 RB / 14 RB Offset 15 RB / 0 RB Offset
		18625 to 19175	18625 (1852.50MHz), 19175 (1907.50MHz)	5MHz	256QAM	1 RB / 0 RB Offset 1 RB / 24 RB Offset 25 RB / 0 RB Offset
		18650 to 19150	18650 (1855.00MHz), 19150 (1905.00MHz)	10MHz	256QAM	1 RB / 0 RB Offset 1 RB / 49 RB Offset 50 RB / 0 RB Offset
		18675 to 19125	18675 (1857.50MHz), 19125 (1902.50MHz)	15MHz	256QAM	1 RB / 0 RB Offset 1 RB / 74 RB Offset 75 RB / 0 RB Offset
		18700 to 19100	18700 (1860.00MHz), 19100 (1900.00MHz)	20MHz	256QAM	1 RB / 0 RB Offset 1 RB / 99 RB Offset 100 RB / 0 RB Offset
-	Peak to Average Ratio	18607 to 19193	18607 (1850.70MHz), 18900 (1880.00MHz), 19193 (1909.30MHz)	1.4MHz	256QAM	1 RB / 0 RB Offset
		18615 to 19185	18615 (1851.50MHz), 18900 (1880.00MHz), 19185 (1908.50MHz)	3MHz	256QAM	1 RB / 0 RB Offset
		18625 to 19175	18625 (1852.50MHz), 18900 (1880.00MHz), 19175 (1907.50MHz)	5MHz	256QAM	1 RB / 0 RB Offset
		18650 to 19150	18650 (1855.00MHz), 18900 (1880.00MHz), 19150 (1905.00MHz)	10MHz	256QAM	1 RB / 0 RB Offset
		18675 to 19125	18675 (1857.50MHz), 18900 (1880.00MHz), 19125 (1902.50MHz)	15MHz	256QAM	1 RB / 0 RB Offset
		18700 to 19100	18700 (1860.00MHz), 18900 (1880.00MHz), 19100 (1900.00MHz)	20MHz	256QAM	1 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Conducted Emission	18607 to 19193	18607 (1850.70MHz), 18900 (1880.00MHz), 19193 (1909.30MHz)	1.4MHz	256QAM	1 RB / 0 RB Offset
		18615 to 19185	18615 (1851.50MHz), 18900 (1880.00MHz), 19185 (1908.50MHz)	3MHz	256QAM	1 RB / 0 RB Offset
		18625 to 19175	18625 (1852.50MHz), 18900 (1880.00MHz), 19175 (1907.50MHz)	5MHz	256QAM	1 RB / 0 RB Offset
		18650 to 19150	18650 (1855.00MHz), 18900 (1880.00MHz), 19150 (1905.00MHz)	10MHz	256QAM	1 RB / 0 RB Offset
		18675 to 19125	18675 (1857.50MHz), 18900 (1880.00MHz), 19125 (1902.50MHz)	15MHz	256QAM	1 RB / 0 RB Offset
		18700 to 19100	18700 (1860.00MHz), 18900 (1880.00MHz), 19100 (1900.00MHz)	20MHz	256QAM	1 RB / 0 RB Offset
-	Radiated Emission Below 1GHz	18700 to 19100	19100 (1900.00MHz)	20MHz	256QAM	1 RB / 0 RB Offset
-	Radiated Emission Above 1GHz	18607 to 19193	18607 (1850.70MHz), 18900 (1880.00MHz), 19193 (1909.30MHz)	1.4MHz	256QAM	1 RB / 0 RB Offset
		18625 to 19175	18625 (1852.50MHz), 18900 (1880.00MHz), 19175 (1907.50MHz)	5MHz	256QAM	1 RB / 0 RB Offset
		18700 to 19100	18700 (1860.00MHz), 18900 (1880.00MHz), 19100 (1900.00MHz)	20MHz	256QAM	1 RB / 0 RB Offset

Note: For radiated emission above 1GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the lowest, 5MHz & highest channel bandwidth for final test.

LTE Band 25

EUT Configure Mode	Test item	Available channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	EIRP	26047 to 26683	26047 (1850.7MHz), 26365 (1882.5MHz), 26683 (1914.3MHz)	1.4MHz	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
		26055 to 26675	26055 (1851.5MHz), 26365 (1882.5MHz), 26675 (1913.5MHz)	3MHz	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
		26065 to 26665	26065 (1852.5MHz), 26365 (1882.5MHz), 26665 (1912.5MHz)	5MHz	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
		26090 to 26640	26090 (1855.0MHz), 26365 (1882.5MHz), 26640 (1910.0MHz)	10MHz	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
		26115 to 26615	26115 (1857.5MHz), 26365 (1882.5MHz), 26615 (1907.5MHz)	15MHz	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
		26140 to 26590	26140 (1860.0MHz), 26365 (1882.5MHz), 26590 (1905.0MHz)	20MHz	256QAM	1 RB / 0 RB Offset 1 RB / 50 RB Offset 1 RB / 99 RB Offset 50 RB / 0 RB Offset 50 RB / 25 RB Offset 50 RB / 50 RB Offset 100 RB / 0 RB Offset
-	Frequency Stability	26047 to 26683	26047 (1850.7MHz), 26683 (1914.3MHz)	1.4MHz	256QAM	6 RB / 0 RB Offset
		26055 to 26675	26055 (1851.5MHz), 26675 (1913.5MHz)	3MHz	256QAM	15 RB / 0 RB Offset
		26065 to 26665	26065 (1852.5MHz), 26665 (1912.5MHz)	5MHz	256QAM	25 RB / 0 RB Offset
		26090 to 26640	26090 (1855.0MHz), 26640 (1910.0MHz)	10MHz	256QAM	50 RB / 0 RB Offset
		26115 to 26615	26115 (1857.5MHz), 26615 (1907.5MHz)	15MHz	256QAM	75 RB / 0 RB Offset
		26140 to 26590	26140 (1860.0MHz), 26590 (1905.0MHz)	20MHz	256QAM	100 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Occupied Bandwidth	26047 to 26683	26047 (1850.7MHz), 26365 (1882.5MHz), 26683 (1914.3MHz)	1.4MHz	256QAM	6 RB / 0 RB Offset
		26055 to 26675	26055 (1851.5MHz), 26365 (1882.5MHz), 26675 (1913.5MHz)	3MHz	256QAM	15 RB / 0 RB Offset
		26065 to 26665	26065 (1852.5MHz), 26365 (1882.5MHz), 26665 (1912.5MHz)	5MHz	256QAM	25 RB / 0 RB Offset
		26090 to 26640	26090 (1855.0MHz), 26365 (1882.5MHz), 26640 (1910.0MHz)	10MHz	256QAM	50 RB / 0 RB Offset
		26115 to 26615	26115 (1857.5MHz), 26365 (1882.5MHz), 26615 (1907.5MHz)	15MHz	256QAM	75 RB / 0 RB Offset
		26140 to 26590	26140 (1860.0MHz), 26365 (1882.5MHz), 26590 (1905.0MHz)	20MHz	256QAM	100 RB / 0 RB Offset
-	Band Edge	26047 to 26683	26047 (1850.7MHz), 26683 (1914.3MHz)	1.4MHz	256QAM	1 RB / 0 RB Offset 1 RB / 5 RB Offset 6 RB / 0 RB Offset
		26055 to 26675	26055 (1851.5MHz), 26675 (1913.5MHz)	3MHz	256QAM	1 RB / 0 RB Offset 1 RB / 14 RB Offset 15 RB / 0 RB Offset
		26065 to 26665	26065 (1852.5MHz), 26665 (1912.5MHz)	5MHz	256QAM	1 RB / 0 RB Offset 1 RB / 24 RB Offset 25 RB / 0 RB Offset
		26090 to 26640	26090 (1855.0MHz), 26640 (1910.0MHz)	10MHz	256QAM	1 RB / 0 RB Offset 1 RB / 49 RB Offset 50 RB / 0 RB Offset
		26115 to 26615	26115 (1857.5MHz), 26615 (1907.5MHz)	15MHz	256QAM	1 RB / 0 RB Offset 1 RB / 74 RB Offset 75 RB / 0 RB Offset
		26140 to 26590	26140 (1860.0MHz), 26590 (1905.0MHz)	20MHz	256QAM	1 RB / 0 RB Offset 1 RB / 99 RB Offset 100 RB / 0 RB Offset
-	Peak to Average Ratio	26047 to 26683	26047 (1850.7MHz), 26365 (1882.5MHz), 26683 (1914.3MHz)	1.4MHz	256QAM	1 RB / 0 RB Offset
		26055 to 26675	26055 (1851.5MHz), 26365 (1882.5MHz), 26675 (1913.5MHz)	3MHz	256QAM	1 RB / 0 RB Offset
		26065 to 26665	26065 (1852.5MHz), 26365 (1882.5MHz), 26665 (1912.5MHz)	5MHz	256QAM	1 RB / 0 RB Offset
		26090 to 26640	26090 (1855.0MHz), 26365 (1882.5MHz), 26640 (1910.0MHz)	10MHz	256QAM	1 RB / 0 RB Offset
		26115 to 26615	26115 (1857.5MHz), 26365 (1882.5MHz), 26615 (1907.5MHz)	15MHz	256QAM	1 RB / 0 RB Offset
		26140 to 26590	26140 (1860.0MHz), 26365 (1882.5MHz), 26590 (1905.0MHz)	20MHz	256QAM	1 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Conducted Emission	26047 to 26683	26047 (1850.7MHz), 26365 (1882.5MHz), 26683 (1914.3MHz)	1.4MHz	256QAM	1 RB / 0 RB Offset
		26055 to 26675	26055 (1851.5MHz), 26365 (1882.5MHz), 26675 (1913.5MHz)	3MHz	256QAM	1 RB / 0 RB Offset
		26065 to 26665	26065 (1852.5MHz), 26365 (1882.5MHz), 26665 (1912.5MHz)	5MHz	256QAM	1 RB / 0 RB Offset
		26090 to 26640	26090 (1855.0MHz), 26365 (1882.5MHz), 26640 (1910.0MHz)	10MHz	256QAM	1 RB / 0 RB Offset
		26115 to 26615	26115 (1857.5MHz), 26365 (1882.5MHz), 26615 (1907.5MHz)	15MHz	256QAM	1 RB / 0 RB Offset
		26140 to 26590	26140 (1860.0MHz), 26365 (1882.5MHz), 26590 (1905.0MHz)	20MHz	256QAM	1 RB / 0 RB Offset
-	Radiated Emission Below 1GHz	26140 to 26590	26590 (1905.0MHz)	20MHz	256QAM	1 RB / 0 RB Offset
-	Radiated Emission Above 1GHz	26047 to 26683	26047 (1850.7MHz), 26365 (1882.5MHz), 26683 (1914.3MHz)	1.4MHz	256QAM	1 RB / 0 RB Offset
		26065 to 26665	26065 (1852.5MHz), 26365 (1882.5MHz), 26665 (1912.5MHz)	5MHz	256QAM	1 RB / 0 RB Offset
		26140 to 26590	26140 (1860.0MHz), 26365 (1882.5MHz), 26590 (1905.0MHz)	20MHz	256QAM	1 RB / 0 RB Offset

Note: For radiated emission above 1GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the lowest, 5MHz & highest channel bandwidth for final test.

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	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	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	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	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	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	256QAM	6 RB / 0 RB Offset
		26805 to 27025	26805 (825.5MHz), 27025 (847.5MHz)	3MHz	256QAM	15 RB / 0 RB Offset
		26815 to 27015	26815 (826.5MHz), 27015 (846.5MHz)	5MHz	256QAM	25 RB / 0 RB Offset
		26840 to 26990	26840 (829MHz), 26990 (844MHz)	10MHz	256QAM	50 RB / 0 RB Offset
		26865 to 26965	26865 (831.5MHz), 26965 (841.5MHz)	15MHz	256QAM	75 RB / 0 RB Offset

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

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission Below 1GHz	26865 to 26965	26965 (841.5MHz)	15MHz	256QAM	1 RB / 0 RB Offset
-	Radiated Emission Above 1GHz	26797 to 27033	26797 (824.7MHz), 26915 (836.5MHz), 27033 (848.3MHz)	1.4MHz	256QAM	1 RB / 0 RB Offset
		26815 to 27015	26815 (826.5MHz), 26915 (836.5MHz), 27015 (846.5MHz)	5MHz	256QAM	1 RB / 0 RB Offset
		26865 to 26965	26865 (831.5MHz), 26915 (836.5MHz), 26965 (841.5MHz)	15MHz	256QAM	1 RB / 0 RB Offset

Note: For radiated emission above 1GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the lowest, 5MHz & highest channel bandwidth for final test.

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	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	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	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	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
-	Modulation Characteristics	26740	26740 (819.0MHz)	10MHz	256QAM	50 RB / 0 RB Offset
-	Frequency Stability	26697 to 26783	26697 (814.7MHz), 26783 (823.3MHz)	1.4MHz	256QAM	6 RB / 0 RB Offset
		26705 to 26775	26705 (815.5MHz), 26775 (822.5MHz)	3MHz	256QAM	15 RB / 0 RB Offset
		26715 to 26765	26715 (816.5MHz), 26765 (821.5MHz)	5MHz	256QAM	25 RB / 0 RB Offset
		26740	26740 (819.0MHz)	10MHz	256QAM	50 RB / 0 RB Offset
-	Occupied Bandwidth	26697 to 26783	26697 (814.7MHz), 26740 (819.0MHz), 26783 (823.3MHz)	1.4MHz	256QAM	6 RB / 0 RB Offset
		26705 to 26775	26705 (815.5MHz), 26740 (819.0MHz), 26775 (822.5MHz)	3MHz	256QAM	15 RB / 0 RB Offset
		26715 to 26765	26715 (816.5MHz), 26740 (819.0MHz), 26765 (821.5MHz)	5MHz	256QAM	25 RB / 0 RB Offset
		26740	26740 (819.0MHz)	10MHz	256QAM	50 RB / 0 RB Offset
-	Emission Masks	26697 to 26783	26697 (814.7MHz), 26740 (819.0MHz), 26783 (823.3MHz)	1.4MHz	256QAM	1 RB / 0 RB Offset 6 RB / 0 RB Offset
		26705 to 26775	26705 (815.5MHz), 26740 (819.0MHz), 26775 (822.5MHz)	3MHz	256QAM	1 RB / 0 RB Offset 15 RB / 0 RB Offset
		26715 to 26765	26715 (816.5MHz), 26740 (819.0MHz), 26765 (821.5MHz)	5MHz	256QAM	1 RB / 0 RB Offset 25 RB / 0 RB Offset
		26740	26740 (819.0MHz)	10MHz	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	256QAM	1 RB / 0 RB Offset
		26705 to 26775	26705 (815.5MHz), 26740 (819.0MHz), 26775 (822.5MHz)	3MHz	256QAM	1 RB / 0 RB Offset
		26715 to 26765	26715 (816.5MHz), 26740 (819.0MHz), 26765 (821.5MHz)	5MHz	256QAM	1 RB / 0 RB Offset
		26740	26740 (819.0MHz)	10MHz	256QAM	1 RB / 0 RB Offset
-	Radiated Emission Below 1GHz	26740	26740 (819.0MHz)	10MHz	256QAM	1 RB / 0 RB Offset
-	Radiated Emission Above 1GHz	26697 to 26783	26697 (814.7MHz), 26740 (819.0MHz), 26783 (823.3MHz)	1.4MHz	256QAM	1 RB / 0 RB Offset
		26715 to 26765	26715 (816.5MHz), 26740 (819.0MHz), 26765 (821.5MHz)	5MHz	256QAM	1 RB / 0 RB Offset
		26740	26740 (819.0MHz)	10MHz	256QAM	1 RB / 0 RB Offset

Note: For radiated emission above 1GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the lowest, 5MHz & highest channel bandwidth for final test.

LTE Band 41

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	EIRP	39675 to 41565	39675 (2498.5MHz), 40620 (2593.0MHz), 41565 (2687.5MHz)	5MHz	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
		39700 to 41540	39700 (2501.0MHz), 40620 (2593.0MHz), 41540 (2685.0MHz)	10MHz	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
		39725 to 41515	39725 (2503.5MHz), 40620 (2593.0MHz), 41515 (2682.5MHz)	15MHz	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
		39750 to 41490	39750 (2506.0MHz), 40620 (2593.0MHz), 41490 (2680.0MHz)	20MHz	256QAM	1 RB / 0 RB Offset 1 RB / 50 RB Offset 1 RB / 99 RB Offset 50 RB / 0 RB Offset 50 RB / 25 RB Offset 50 RB / 50 RB Offset 100 RB / 0 RB Offset
-	Modulation Characteristics	39750 to 41490	40620 (2593.0MHz)	20MHz	256QAM	100 RB / 0 RB Offset
-	Frequency Stability	39675 to 41565	39675 (2498.5MHz), 41565 (2687.5MHz)	5MHz	256QAM	25 RB / 0 RB Offset
		39700 to 41540	39700 (2501.0MHz), 41540 (2685.0MHz)	10MHz	256QAM	50 RB / 0 RB Offset
		39725 to 41515	39725 (2503.5MHz), 41515 (2682.5MHz)	15MHz	256QAM	75 RB / 0 RB Offset
		39750 to 41490	39750 (2506.0MHz), 41490 (2680.0MHz)	20MHz	256QAM	100 RB / 0 RB Offset
-	Emission Bandwidth	39675 to 41565	39675 (2498.5MHz), 40620 (2593.0MHz), 41565 (2687.5MHz)	5MHz	256QAM	25RB / 0RB Offset
		39700 to 41540	39700 (2501.0MHz), 40620 (2593.0MHz), 41540 (2685.0MHz)	10MHz	256QAM	50RB / 0RB Offset
		39725 to 41515	39725 (2503.5MHz), 40620 (2593.0MHz), 41515 (2682.5MHz)	15MHz	256QAM	75 RB / 0 RB Offset
		39750 to 41490	39750 (2506.0MHz), 40620 (2593.0MHz), 41490 (2680.0MHz)	20MHz	256QAM	100 RB / 0 RB Offset
-	Band Edge	39675 to 41565	39675 (2498.5MHz), 40620 (2593.0MHz), 41565 (2687.5MHz)	5MHz	256QAM	1 RB / 0 RB Offset 1 RB / 24 RB Offset 25 RB / 0 RB Offset
		39700 to 41540	39700 (2501.0MHz), 40620 (2593.0MHz), 41540 (2685.0MHz)	10MHz	256QAM	1 RB / 0 RB Offset 1 RB / 49 RB Offset 50 RB / 0 RB Offset
		39725 to 41515	39725 (2503.5MHz), 40620 (2593.0MHz), 41515 (2682.5MHz)	15MHz	256QAM	1 RB / 0 RB Offset 1 RB / 74 RB Offset 75 RB / 0 RB Offset
		39750 to 41490	39750 (2506.0MHz), 40620 (2593.0MHz), 41490 (2680.0MHz)	20MHz	256QAM	1 RB / 0 RB Offset 1 RB / 99 RB Offset 100 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Peak to Average Ratio	39675 to 41565	39675 (2498.5MHz), 40620 (2593.0MHz), 41565 (2687.5MHz)	5MHz	256QAM	1 RB / 0 RB Offset
		39700 to 41540	39700 (2501.0MHz), 40620 (2593.0MHz), 41540 (2685.0MHz)	10MHz	256QAM	1 RB / 0 RB Offset
		39725 to 41515	39725 (2503.5MHz), 40620 (2593.0MHz), 41515 (2682.5MHz)	15MHz	256QAM	1 RB / 0 RB Offset
		39750 to 41490	39750 (2506.0MHz), 40620 (2593.0MHz), 41490 (2680.0MHz)	20MHz	256QAM	1 RB / 0 RB Offset
-	Conducted Emission	39675 to 41565	39675 (2498.5MHz), 40620 (2593.0MHz), 41565 (2687.5MHz)	5MHz	256QAM	1 RB / 0 RB Offset
		39700 to 41540	39700 (2501.0MHz), 40620 (2593.0MHz), 41540 (2685.0MHz)	10MHz	256QAM	1 RB / 0 RB Offset
		39725 to 41515	39725 (2503.5MHz), 40620 (2593.0MHz), 41515 (2682.5MHz)	15MHz	256QAM	1 RB / 0 RB Offset
		39750 to 41490	39750 (2506.0MHz), 40620 (2593.0MHz), 41490 (2680.0MHz)	20MHz	256QAM	1 RB / 0 RB Offset
-	Radiated Emission Below 1GHz	39675 to 41565	40620 (2593.0MHz)	5MHz	256QAM	1 RB / 0 RB Offset
-	Radiated Emission Above 1GHz	39675 to 41565	39675 (2498.5MHz), 40620 (2593.0MHz), 41565 (2687.5MHz)	5MHz	256QAM	1 RB / 0 RB Offset
		39750 to 41490	39750 (2506.0MHz), 40620 (2593.0MHz), 41490 (2680.0MHz)	20MHz	256QAM	1 RB / 0 RB Offset

Note: For radiated emission above 1GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the 5MHz & highest channel bandwidth for final test.

LTE Band 66

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	EIRP	131979 to 132665	131979 (1710.7MHz), 132322 (1745.0MHz), 132665 (1779.3MHz)	1.4MHz	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
		131987 to 132657	131987 (1711.5MHz), 132322 (1745.0MHz), 132657 (1778.5MHz)	3MHz	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
		131997 to 132647	131997 (1712.5MHz), 132322 (1745.0MHz), 132647 (1777.5MHz)	5MHz	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
		132022 to 132622	132022 (1715.0MHz), 132322 (1745.0MHz), 132622 (1775.0MHz)	10MHz	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
		132047 to 132597	132047 (1717.5MHz), 132322 (1745.0MHz), 132597 (1772.5MHz)	15MHz	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
		132072 to 132572	132072 (1720.0MHz), 132322 (1745.0MHz), 132572 (1770.0MHz)	20MHz	256QAM	1 RB / 0 RB Offset 1 RB / 50 RB Offset 1 RB / 99 RB Offset 50 RB / 0 RB Offset 50 RB / 25 RB Offset 50 RB / 50 RB Offset 100 RB / 0 RB Offset
-	Modulation Characteristics	132072 to 132572	132322 (1745.0MHz)	20MHz	256QAM	100 RB / 0 RB Offset
-	Frequency Stability	131979 to 132665	131979 (1710.7MHz), 132665 (1779.3MHz)	1.4MHz	256QAM	6 RB / 0 RB Offset
		131987 to 132657	131987 (1711.5MHz), 132657 (1778.5MHz)	3MHz	256QAM	15 RB / 0 RB Offset
		131997 to 132647	131997 (1712.5MHz), 132647 (1777.5MHz)	5MHz	256QAM	25 RB / 0 RB Offset
		132022 to 132622	132022 (1715.0MHz), 132622 (1775.0MHz)	10MHz	256QAM	50 RB / 0 RB Offset
		132047 to 132597	132047 (1717.5MHz), 132597 (1772.5MHz)	15MHz	256QAM	75 RB / 0 RB Offset
		132072 to 132572	132072 (1720.0MHz), 132572 (1770.0MHz)	20MHz	256QAM	100 RB / 0 RB Offset

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Emission Bandwidth	131979 to 132665	131979 (1710.7MHz), 132322 (1745.0MHz), 132665 (1779.3MHz)	1.4MHz	256QAM	6 RB / 0 RB Offset
		131987 to 132657	131987 (1711.5MHz), 132322 (1745.0MHz), 132657 (1778.5MHz)	3MHz	256QAM	15 RB / 0 RB Offset
		131997 to 132647	131997 (1712.5MHz), 132322 (1745.0MHz), 132647 (1777.5MHz)	5MHz	256QAM	25 RB / 0 RB Offset
		132022 to 132622	132022 (1715.0MHz), 132322 (1745.0MHz), 132622 (1775.0MHz)	10MHz	256QAM	50 RB / 0 RB Offset
		132047 to 132597	132047 (1717.5MHz), 132322 (1745.0MHz), 132597 (1772.5MHz)	15MHz	256QAM	75 RB / 0 RB Offset
		132072 to 132572	132072 (1720.0MHz), 132322 (1745.0MHz), 132572 (1770.0MHz)	20MHz	256QAM	100 RB / 0 RB Offset
-	Band Edge	131979 to 132665	131979 (1710.7MHz), 132665 (1779.3MHz)	1.4MHz	256QAM	1 RB / 0 RB Offset 1 RB / 5 RB Offset 6 RB / 0 RB Offset
		131987 to 132657	131987 (1711.5MHz), 132657 (1778.5MHz)	3MHz	256QAM	1 RB / 0 RB Offset 1 RB / 14 RB Offset 15 RB / 0 RB Offset
		131997 to 132647	131997 (1712.5MHz), 132647 (1777.5MHz)	5MHz	256QAM	1 RB / 0 RB Offset 1 RB / 24 RB Offset 25 RB / 0 RB Offset
		132022 to 132622	132022 (1715.0MHz), 132622 (1775.0MHz)	10MHz	256QAM	1 RB / 0 RB Offset 1 RB / 49 RB Offset 50 RB / 0 RB Offset
		132047 to 132597	132047 (1717.5MHz), 132597 (1772.5MHz)	15MHz	256QAM	1 RB / 0 RB Offset 1 RB / 74 RB Offset 75 RB / 0 RB Offset
		132072 to 132572	132072 (1720.0MHz), 132572 (1770.0MHz)	20MHz	256QAM	1 RB / 0 RB Offset 1 RB / 99 RB Offset 100 RB / 0 RB Offset
-	Peak to Average Ratio	131979 to 132665	131979 (1710.7MHz), 132322 (1745.0MHz), 132665 (1779.3MHz)	1.4MHz	256QAM	1 RB / 0 RB Offset
		131987 to 132657	131987 (1711.5MHz), 132322 (1745.0MHz), 132657 (1778.5MHz)	3MHz	256QAM	1 RB / 0 RB Offset
		131997 to 132647	131997 (1712.5MHz), 132322 (1745.0MHz), 132647 (1777.5MHz)	5MHz	256QAM	1 RB / 0 RB Offset
		132022 to 132622	132022 (1715.0MHz), 132322 (1745.0MHz), 132622 (1775.0MHz)	10MHz	256QAM	1 RB / 0 RB Offset
		132047 to 132597	132047 (1717.5MHz), 132322 (1745.0MHz), 132597 (1772.5MHz)	15MHz	256QAM	1 RB / 0 RB Offset
		132072 to 132572	132072 (1720.0MHz), 132322 (1745.0MHz), 132572 (1770.0MHz)	20MHz	256QAM	1 RB / 0 RB Offset

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Conducted Emission	131979 to 132665	131979 (1710.7MHz), 132322 (1745.0MHz), 132665 (1779.3MHz)	1.4MHz	256QAM	1 RB / 0 RB Offset
		131987 to 132657	131987 (1711.5MHz), 132322 (1745.0MHz), 132657 (1778.5MHz)	3MHz	256QAM	1 RB / 0 RB Offset
		131997 to 132647	131997 (1712.5MHz), 132322 (1745.0MHz), 132647 (1777.5MHz)	5MHz	256QAM	1 RB / 0 RB Offset
		132022 to 132622	132022 (1715.0MHz), 132322 (1745.0MHz), 132622 (1775.0MHz)	10MHz	256QAM	1 RB / 0 RB Offset
		132047 to 132597	132047 (1717.5MHz), 132322 (1745.0MHz), 132597 (1772.5MHz)	15MHz	256QAM	1 RB / 0 RB Offset
		132072 to 132572	132072 (1720.0MHz), 132322 (1745.0MHz), 132572 (1770.0MHz)	20MHz	256QAM	1 RB / 0 RB Offset
-	Radiated Emission Below 1GHz	132072 to 132572	132322 (1745.0MHz)	20MHz	256QAM	1 RB / 0 RB Offset
-	Radiated Emission Above 1GHz	131979 to 132665	131979 (1710.7MHz), 132322 (1745.0MHz), 132665 (1779.3MHz)	1.4MHz	256QAM	1 RB / 0 RB Offset
		131997 to 132647	131997 (1712.5MHz), 132322 (1745.0MHz), 132647 (1777.5MHz)	5MHz	256QAM	1 RB / 0 RB Offset
		132072 to 132572	132072 (1720.0MHz), 132322 (1745.0MHz), 132572 (1770.0MHz)	20MHz	256QAM	1 RB / 0 RB Offset

Note: For radiated emission above 1GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the lowest, 5MHz & highest channel bandwidth for final test.

Test Condition:

Test Item	Environmental Conditions	Input Power	Tested By
EIRP / ERP	25deg. C, 70%RH	5Vdc	James Yang
Modulation characteristics	24deg. C, 64%RH	5Vdc	James Yang
Frequency Stability	24deg. C, 64%RH	5Vdc	James Yang
Occupied Bandwidth	24deg. C, 64%RH	5Vdc	James Yang
Band Edge	24deg. C, 64%RH	5Vdc	James Yang
Peak To Average Ratio	24deg. C, 64%RH	5Vdc	James Yang
Conducted Emission	24deg. C, 64%RH	5Vdc	James Yang
Radiated Emission	22deg. C, 68%RH	120Vac, 60Hz	Greg Lin

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 24
FCC 47 CFR Part 27
FCC 47 CFR Part 90
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

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

LTE Band 4, LTE Band 66:
Mobile / Portable station are limited to 1 watts e.i.r.p.

LTE Band 2, LTE Band 25:
Mobile / Portable station are limited to 2 watts e.r.p.

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

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:

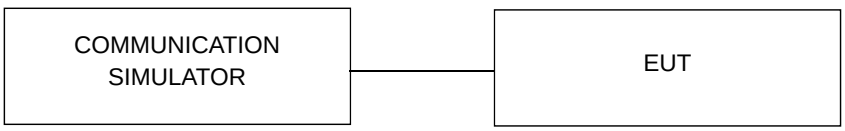
The EUT was set up for the maximum power with 5GNR link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

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:
ERP or EIRP = $P_{Meas} + G_T$
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)

n41 (HPUE)						
BW	MCS Index	Channel		501204	518598	535998
		Frequency (MHz)		2506.02	2592.99	2679.99
20M	$\pi/2$ BPSK	1	0	25.54	25.67	25.57
		1	25	25.77	25.51	25.71
		1	50	**25.90**	25.73	25.77
		25	0	25.12	25.57	25.32
		25	12	25.50	25.40	25.38
		25	25	25.26	25.10	25.42
		51	0	25.68	25.49	25.56
	QPSK	1	0	25.59	25.69	25.53
		1	25	25.76	25.55	25.60
		1	50	25.73	**25.80**	25.60
		25	0	25.51	25.49	25.56
		25	12	25.42	25.47	25.51
		25	25	25.54	25.48	25.41
		51	0	25.57	25.59	25.46
	16QAM	1	0	25.48	25.48	25.26
		1	25	25.29	25.45	25.24
		1	50	**25.53**	25.16	25.38
		25	0	25.07	25.31	24.93
		25	12	25.05	24.90	24.80
		25	25	25.35	24.82	24.94
		51	0	24.84	25.24	25.38
	64QAM	1	0	24.84	25.02	25.01
		1	25	24.90	24.81	24.99
		1	50	25.02	25.03	**25.12**
		25	0	24.80	24.82	25.00
		25	12	24.44	24.49	24.93
		25	25	24.51	24.99	24.58
		51	0	24.58	24.57	24.62
	256QAM	1	0	22.40	22.38	22.50
		1	25	22.64	22.91	**22.92**
		1	50	22.58	22.58	22.70
		25	0	22.37	22.62	22.47
		25	12	21.85	22.49	22.24
		25	25	22.34	21.88	22.28
		51	0	22.48	22.58	22.06

n41 (HPUE)						
BW	MCS Index	Channel		503202	518598	534000
		Frequency (MHz)		2516.01	2592.99	2670
40M	$\pi/2$ BPSK	1	0	25.67	25.64	25.56
		1	53	25.75	25.64	25.56
		1	105	25.60	**25.84**	25.59
		53	0	25.24	25.52	25.50
		53	26	25.59	25.30	25.16
		53	53	25.53	25.26	25.42
		106	0	25.49	25.45	25.20
	QPSK	1	0	25.65	**25.77**	25.53
		1	53	25.52	25.65	25.65
		1	105	25.72	25.74	25.57
		53	0	25.51	25.51	25.40
		53	26	25.39	25.30	25.41
		53	53	25.39	25.59	25.56
		106	0	25.41	25.38	25.44
	16QAM	1	0	25.53	25.29	25.13
		1	53	25.29	**25.60**	25.51
		1	105	25.22	25.55	25.49
		53	0	24.83	24.85	25.22
		53	26	25.04	25.35	25.19
		53	53	25.18	25.06	25.11
		106	0	24.81	25.26	24.97
	64QAM	1	0	25.08	**25.20**	24.91
		1	53	24.93	24.87	25.12
		1	105	25.15	25.09	24.83
		53	0	24.74	24.99	24.91
		53	26	24.82	24.96	24.86
		53	53	24.98	24.76	24.81
		106	0	24.92	24.61	24.92
	256QAM	1	0	22.44	22.70	22.90
		1	53	22.56	22.50	22.39
		1	105	22.79	**22.95**	22.64
		53	0	22.17	22.43	22.42
		53	26	22.17	21.99	21.94
		53	53	22.26	22.56	21.91
		106	0	22.68	21.86	22.08

n41 (HPUE)						
BW	MCS Index	Channel		504204	518598	532998
		Frequency (MHz)		2521.02	2592.99	2664.99
50M	$\pi/2$ BPSK	1	0	**25.86**	25.54	25.55
		1	66	25.69	25.57	25.63
		1	132	25.81	25.70	25.68
		66	0	25.65	25.34	25.26
		66	33	25.60	25.21	25.59
		66	66	25.56	25.12	25.43
		133	0	25.16	25.64	25.17
	QPSK	1	0	25.70	25.63	25.70
		1	66	25.67	25.64	25.50
		1	132	**25.80**	25.51	25.54
		66	0	25.37	25.46	25.46
		66	33	25.49	25.48	25.60
		66	66	25.44	25.43	25.30
		133	0	25.35	25.33	25.40
	16QAM	1	0	25.54	25.34	25.11
		1	66	25.46	25.14	25.33
		1	132	25.43	**25.55**	25.12
		66	0	25.01	25.21	25.12
		66	33	25.35	25.32	25.38
		66	66	24.87	25.37	24.87
		133	0	24.89	24.95	25.31
	64QAM	1	0	24.94	25.02	25.03
		1	66	**25.16**	24.94	24.84
		1	132	25.12	24.91	25.10
		66	0	24.87	24.42	24.65
		66	33	24.54	24.63	24.77
		66	66	24.77	25.00	24.96
		133	0	24.77	24.54	24.98
	256QAM	1	0	22.45	22.83	22.66
		1	66	22.39	22.55	22.85
		1	132	22.69	**22.98**	22.39
		66	0	22.43	22.07	22.53
		66	33	22.57	21.91	22.08
		66	66	22.14	22.51	22.47
		133	0	22.60	22.09	22.52

n41 (HPUE)						
BW	MCS Index	Channel		505200	518598	531996
		Frequency (MHz)		2526	2592.99	2659.98
60M	$\pi/2$ BPSK	1	0	25.68	**25.89**	25.78
		1	81	25.56	25.60	25.66
		1	161	25.67	25.87	25.76
		81	0	25.35	25.36	25.27
		81	40	25.36	25.49	25.66
		81	81	25.48	25.39	25.59
		162	0	25.38	25.25	25.59
	QPSK	1	0	25.64	25.64	25.70
		1	81	25.75	25.56	**25.76**
		1	161	25.57	25.61	25.68
		81	0	25.31	25.32	25.59
		81	40	25.43	25.30	25.49
		81	81	25.53	25.47	25.49
		162	0	25.30	25.32	25.32
	16QAM	1	0	**25.56**	25.20	25.40
		1	81	25.14	25.44	25.44
		1	161	25.48	25.35	25.31
		81	0	24.96	25.01	24.83
		81	40	25.20	25.11	24.95
		81	81	25.10	25.15	24.83
		162	0	24.85	25.28	24.97
	64QAM	1	0	**25.25**	24.86	24.85
		1	81	25.19	24.98	25.09
		1	161	24.98	24.99	24.97
		81	0	24.47	24.60	24.50
		81	40	24.56	24.40	24.59
		81	81	24.66	24.68	24.63
		162	0	24.44	24.86	24.59
	256QAM	1	0	22.72	22.96	22.31
		1	81	22.56	22.90	22.44
		1	161	22.45	22.58	**22.97**
		81	0	21.87	22.57	22.14
		81	40	21.98	22.39	22.01
		81	81	22.64	22.18	22.44
		162	0	21.86	22.34	21.87

n41 (HPUE)						
BW	MCS Index	Channel		507204	518598	529998
		Frequency (MHz)		2536.02	2592.99	2649.99
80M	$\pi/2$ BPSK	1	0	25.73	25.74	**25.85**
		1	108	25.78	25.68	25.81
		1	216	25.69	25.74	25.76
		108	0	25.64	25.29	25.50
		108	54	25.18	25.56	25.57
		108	108	25.41	25.19	25.44
		217	0	25.70	25.12	25.42
	QPSK	1	0	25.62	**25.79**	25.66
		1	108	25.75	25.57	25.65
		1	216	25.63	25.70	25.51
		108	0	25.38	25.31	25.60
		108	54	25.60	25.60	25.30
		108	108	25.45	25.39	25.40
		217	0	25.42	25.43	25.43
	16QAM	1	0	**25.54**	25.25	25.28
		1	108	25.19	25.49	25.31
		1	216	25.26	25.31	25.12
		108	0	25.12	24.95	24.96
		108	54	25.11	25.14	24.89
		108	108	24.80	24.99	25.35
		217	0	24.94	25.08	25.18
	64QAM	1	0	24.86	24.89	24.99
		1	108	24.97	**25.20**	24.80
		1	216	25.12	24.89	25.19
		108	0	24.92	24.87	24.60
		108	54	24.58	24.48	24.53
		108	108	24.45	24.88	24.50
		217	0	24.84	24.99	24.42
	256QAM	1	0	22.83	22.77	22.84
		1	108	**22.94**	22.31	22.68
		1	216	22.46	22.89	22.82
		108	0	21.82	21.98	22.24
		108	54	22.51	22.61	21.94
		108	108	21.99	21.87	22.34
		217	0	21.99	22.56	21.96

n41 (HPUE)						
BW	MCS Index	Channel		508200	518598	528996
		Frequency (MHz)		2541	2592.99	2644.98
90M	$\pi/2$ BPSK	1	0	25.82	25.80	25.88
		1	122	**25.89**	25.51	25.65
		1	244	25.59	25.72	25.79
		122	0	25.54	25.66	25.22
		122	61	25.26	25.61	25.35
		122	122	25.40	25.67	25.27
		245	0	25.57	25.27	25.67
	QPSK	1	0	25.61	25.58	25.54
		1	122	**25.68**	25.55	25.60
		1	244	25.50	25.51	25.59
		122	0	25.51	25.43	25.50
		122	61	25.53	25.52	25.50
		122	122	25.48	25.60	25.46
		245	0	25.33	25.30	25.39
	16QAM	1	0	25.44	25.51	25.55
		1	122	25.22	**25.57**	25.45
		1	244	25.16	25.49	25.55
		122	0	25.19	25.38	25.24
		122	61	24.81	24.80	24.92
		122	122	25.14	25.35	25.20
		245	0	24.83	25.31	25.08
	64QAM	1	0	25.11	25.05	24.80
		1	122	24.82	24.92	**25.19**
		1	244	24.89	24.92	24.96
		122	0	24.70	24.57	24.69
		122	61	24.67	24.80	24.49
		122	122	24.65	24.49	24.48
		245	0	24.73	24.92	24.63
	256QAM	1	0	22.50	22.50	22.73
		1	122	22.69	22.72	22.93
		1	244	22.72	22.74	**22.97**
		122	0	21.83	21.89	22.38
		122	61	22.65	22.42	22.27
		122	122	22.00	22.31	22.50
		245	0	22.41	21.97	22.11

n41 (HPUE)						
BW	MCS Index	Channel		509202	518598	528000
		Frequency (MHz)		2546.01	2592.99	2640
100M	$\pi/2$ BPSK	1	0	25.64	25.79	25.53
		1	136	25.66	25.55	**25.88**
		1	272	25.84	25.84	25.70
		136	0	25.39	25.70	25.52
		136	68	25.33	25.56	25.53
		136	136	25.67	25.55	25.50
		273	0	25.30	25.39	25.59
	QPSK	1	0	25.54	25.70	25.75
		1	136	25.74	25.69	**25.77**
		1	272	25.63	25.51	25.60
		136	0	25.59	25.48	25.58
		136	68	25.56	25.31	25.40
		136	136	25.43	25.37	25.31
		273	0	25.40	25.48	25.33
	16QAM	1	0	25.56	25.35	25.15
		1	136	25.16	**25.58**	25.26
		1	272	25.45	25.30	25.55
		136	0	25.04	25.36	24.99
		136	68	24.81	25.25	25.19
		136	136	25.09	24.91	24.88
		273	0	25.34	25.15	25.30
	64QAM	1	0	24.83	24.84	24.82
		1	136	25.04	24.90	**25.11**
		1	272	25.01	25.06	25.00
		136	0	24.70	24.47	24.43
		136	68	24.52	24.86	24.90
		136	136	24.88	24.65	24.83
		273	0	24.78	24.56	24.94
	256QAM	1	0	22.69	22.54	**22.96**
		1	136	22.44	22.59	22.91
		1	272	22.93	22.40	22.92
		136	0	22.42	22.66	21.83
		136	68	22.02	22.40	22.21
		136	136	22.46	22.63	21.98
		273	0	22.33	22.66	22.22

n41						
BW	MCS Index	Channel		501204	518598	535998
		Frequency (MHz)		2506.02	2592.99	2679.99
20M	$\pi/2$ BPSK	1	0	23.11	23.22	23.21
		1	25	23.34	23.18	23.34
		1	50	**23.55**	23.38	23.38
		25	0	22.71	23.17	22.91
		25	12	23.15	22.98	22.99
		25	25	22.95	22.78	23.08
		51	0	23.24	23.12	23.15
	QPSK	1	0	23.25	23.30	23.18
		1	25	23.38	23.12	23.24
		1	50	23.40	**23.44**	23.16
		25	0	23.18	23.15	23.19
		25	12	23.09	23.08	23.19
		25	25	23.17	23.12	23.09
		51	0	23.13	23.22	23.14
	16QAM	1	0	23.03	23.10	22.86
		1	25	22.92	23.14	22.82
		1	50	**23.20**	22.73	23.08
		25	0	22.69	22.97	22.62
		25	12	22.66	22.56	22.46
		25	25	22.97	22.39	22.59
		51	0	22.52	22.93	22.96
	64QAM	1	0	22.41	22.67	22.60
		1	25	22.60	22.45	22.60
		1	50	22.69	22.67	**22.82**
		25	0	22.38	22.39	22.68
		25	12	22.07	22.09	22.50
		25	25	22.13	22.59	22.16
		51	0	22.25	22.17	22.28
	256QAM	1	0	20.09	20.00	20.12
		1	25	20.31	**20.51**	20.49
		1	50	20.18	20.23	20.31
		25	0	19.94	20.24	20.05
		25	12	19.49	20.06	19.86
		25	25	19.93	19.52	19.97
		51	0	20.07	20.18	19.72

n41						
BW	MCS Index	Channel		503202	518598	534000
		Frequency (MHz)		2516.01	2592.99	2670
40M	$\pi/2$ BPSK	1	0	23.35	23.23	23.20
		1	53	23.35	23.22	23.13
		1	105	23.25	**23.42**	23.15
		53	0	22.79	23.16	23.17
		53	26	23.27	22.89	22.79
		53	53	23.11	22.81	22.98
		106	0	23.10	23.12	22.85
	QPSK	1	0	23.25	**23.45**	23.17
		1	53	23.19	23.20	23.24
		1	105	23.35	23.34	23.25
		53	0	23.11	23.20	22.98
		53	26	22.99	22.91	23.01
		53	53	23.03	23.24	23.24
		106	0	23.05	22.99	23.07
	16QAM	1	0	23.10	22.85	22.76
		1	53	22.86	**23.16**	23.16
		1	105	22.88	23.16	23.06
		53	0	22.41	22.54	22.78
		53	26	22.72	22.92	22.86
		53	53	22.81	22.68	22.67
		106	0	22.42	22.92	22.66
	64QAM	1	0	22.73	22.82	22.56
		1	53	22.63	22.52	22.74
		1	105	**22.82**	22.74	22.50
		53	0	22.38	22.57	22.53
		53	26	22.49	22.61	22.46
		53	53	22.54	22.43	22.49
		106	0	22.57	22.17	22.52
	256QAM	1	0	20.06	20.34	20.50
		1	53	20.18	20.06	20.05
		1	105	20.36	**20.61**	20.24
		53	0	19.76	20.04	20.05
		53	26	19.82	19.58	19.63
		53	53	19.83	20.17	19.50
		106	0	20.34	19.48	19.77

n41						
BW	MCS Index	Channel		504204	518598	532998
		Frequency (MHz)		2521.02	2592.99	2664.99
50M	$\pi/2$ BPSK	1	0	**23.42**	23.20	23.11
		1	66	23.27	23.15	23.23
		1	132	23.38	23.28	23.30
		66	0	23.28	22.96	22.95
		66	33	23.26	22.83	23.19
		66	66	23.18	22.76	23.04
		133	0	22.78	23.21	22.74
	QPSK	1	0	23.34	23.29	**23.36**
		1	66	23.36	23.22	23.17
		1	132	23.35	23.11	23.09
		66	0	22.97	23.01	23.03
		66	33	23.16	23.17	23.16
		66	66	23.06	23.13	22.89
		133	0	23.03	22.96	23.07
	16QAM	1	0	**23.22**	23.02	22.77
		1	66	23.09	22.77	22.97
		1	132	23.13	23.12	22.69
		66	0	22.60	22.85	22.80
		66	33	22.98	23.00	23.02
		66	66	22.54	22.93	22.53
		133	0	22.50	22.60	22.86
	64QAM	1	0	22.50	22.71	22.64
		1	66	**22.80**	22.63	22.39
		1	132	22.72	22.53	22.80
		66	0	22.46	22.00	22.22
		66	33	22.15	22.31	22.41
		66	66	22.35	22.57	22.53
		133	0	22.45	22.18	22.67
	256QAM	1	0	20.02	20.44	20.24
		1	66	19.98	20.10	20.51
		1	132	20.32	**20.60**	19.94
		66	0	20.11	19.74	20.18
		66	33	20.16	19.50	19.64
		66	66	19.79	20.20	20.04
		133	0	20.18	19.72	20.16

n41						
BW	MCS Index	Channel		505200	518598	531996
		Frequency (MHz)		2526	2592.99	2659.98
60M	$\pi/2$ BPSK	1	0	23.36	**23.59**	23.33
		1	81	23.26	23.26	23.24
		1	161	23.30	23.51	23.41
		81	0	22.98	22.94	22.96
		81	40	22.92	23.08	23.21
		81	81	23.16	23.08	23.15
		162	0	22.98	22.83	23.22
	QPSK	1	0	23.34	23.20	23.26
		1	81	**23.45**	23.21	23.44
		1	161	23.13	23.18	23.35
		81	0	22.86	22.96	23.22
		81	40	23.09	22.87	23.18
		81	81	23.10	23.11	23.10
		162	0	22.94	22.90	22.90
	16QAM	1	0	23.12	22.83	23.01
		1	81	22.78	**23.14**	23.05
		1	161	23.05	23.05	22.96
		81	0	22.62	22.56	22.52
		81	40	22.79	22.77	22.57
		81	81	22.75	22.71	22.49
		162	0	22.51	22.97	22.65
	64QAM	1	0	**22.81**	22.46	22.41
		1	81	22.81	22.65	22.65
		1	161	22.54	22.59	22.63
		81	0	22.03	22.19	22.13
		81	40	22.11	21.96	22.20
		81	81	22.27	22.37	22.23
		162	0	22.05	22.42	22.18
	256QAM	1	0	20.37	20.53	19.99
		1	81	20.15	20.46	20.07
		1	161	20.14	20.27	**20.63**
		81	0	19.49	20.18	19.76
		81	40	19.67	20.08	19.57
		81	81	20.33	19.82	20.07
		162	0	19.44	20.03	19.51

n41						
BW	MCS Index	Channel		507204	518598	529998
		Frequency (MHz)		2536.02	2592.99	2649.99
80M	$\pi/2$ BPSK	1	0	23.33	23.34	**23.49**
		1	108	23.44	23.27	23.41
		1	216	23.34	23.29	23.45
		108	0	23.27	22.85	23.20
		108	54	22.75	23.21	23.21
		108	108	22.99	22.82	23.02
		217	0	23.28	22.71	23.05
	QPSK	1	0	23.32	23.40	23.24
		1	108	**23.40**	23.23	23.29
		1	216	23.31	23.34	23.08
		108	0	22.94	22.92	23.27
		108	54	23.19	23.25	22.87
		108	108	23.02	23.06	23.03
		217	0	23.07	23.10	23.11
	16QAM	1	0	23.14	22.89	22.88
		1	108	22.77	**23.15**	22.87
		1	216	22.82	22.98	22.70
		108	0	22.72	22.59	22.56
		108	54	22.77	22.70	22.53
		108	108	22.48	22.61	22.95
		217	0	22.58	22.70	22.85
	64QAM	1	0	22.45	22.55	22.59
		1	108	22.61	22.78	22.45
		1	216	22.74	22.57	**22.88**
		108	0	22.61	22.52	22.16
		108	54	22.24	22.12	22.17
		108	108	22.14	22.53	22.13
		217	0	22.49	22.58	22.07
	256QAM	1	0	20.40	20.38	20.51
		1	108	**20.58**	19.97	20.31
		1	216	20.06	20.56	20.40
		108	0	19.41	19.57	19.89
		108	54	20.14	20.25	19.58
		108	108	19.64	19.44	20.01
		217	0	19.56	20.19	19.65

n41						
BW	MCS Index	Channel		508200	518598	528996
		Frequency (MHz)		2541	2592.99	2644.98
90M	$\pi/2$ BPSK	1	0	23.51	23.43	**23.57**
		1	122	23.47	23.10	23.32
		1	244	23.25	23.33	23.40
		122	0	23.17	23.21	22.90
		122	61	22.92	23.25	22.90
		122	122	22.97	23.25	22.94
		245	0	23.17	22.93	23.30
	QPSK	1	0	23.28	23.15	23.21
		1	122	**23.38**	23.13	23.21
		1	244	23.12	23.11	23.22
		122	0	23.21	23.03	23.07
		122	61	23.13	23.17	23.14
		122	122	23.16	23.28	23.15
		245	0	23.02	22.95	23.00
	16QAM	1	0	23.03	23.10	23.14
		1	122	22.87	**23.22**	23.12
		1	244	22.74	23.17	23.21
		122	0	22.82	23.08	22.90
		122	61	22.48	22.48	22.51
		122	122	22.69	22.90	22.81
		245	0	22.48	22.93	22.75
	64QAM	1	0	22.72	22.62	22.42
		1	122	22.46	22.57	**22.86**
		1	244	22.54	22.53	22.65
		122	0	22.32	22.15	22.29
		122	61	22.35	22.50	22.13
		122	122	22.30	22.13	22.17
		245	0	22.30	22.56	22.20
	256QAM	1	0	20.14	20.08	20.35
		1	122	20.30	20.30	**20.56**
		1	244	20.28	20.38	20.56
		122	0	19.51	19.51	19.97
		122	61	20.21	20.02	19.87
		122	122	19.55	19.89	20.05
		245	0	20.07	19.64	19.75

n41						
BW	MCS Index	Channel		509202	518598	528000
		Frequency (MHz)		2546.01	2592.99	2640
100M	$\pi/2$ BPSK	1	0	23.28	23.38	23.19
		1	136	23.30	23.22	**23.54**
		1	272	23.39	23.51	23.27
		136	0	22.98	23.30	23.12
		136	68	22.90	23.17	23.15
		136	136	23.24	23.21	23.06
		273	0	22.90	23.06	23.22
	QPSK	1	0	23.18	23.35	23.30
		1	136	**23.36**	23.30	23.33
		1	272	23.31	23.20	23.28
		136	0	23.21	23.05	23.14
		136	68	23.25	22.95	22.97
		136	136	22.99	23.06	23.00
		273	0	23.06	23.16	22.99
	16QAM	1	0	23.13	22.98	22.78
		1	136	22.75	**23.21**	22.87
		1	272	23.05	22.88	23.16
		136	0	22.66	22.97	22.58
		136	68	22.46	22.80	22.86
		136	136	22.74	22.47	22.56
		273	0	22.95	22.73	22.89
	64QAM	1	0	22.51	22.47	22.38
		1	136	22.68	22.58	**22.69**
		1	272	22.69	22.65	22.58
		136	0	22.26	22.14	22.05
		136	68	22.12	22.51	22.54
		136	136	22.49	22.28	22.43
		273	0	22.39	22.17	22.55
	256QAM	1	0	20.25	20.24	**20.61**
		1	136	20.08	20.15	20.52
		1	272	20.49	20.09	20.48
		136	0	20.05	20.24	19.51
		136	68	19.66	20.08	19.87
		136	136	20.02	20.20	19.61
		273	0	19.94	20.25	19.82

LTE Band 2						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		18607	18900	19193
		Frequency (MHz)		1850.7	1880	1909.3
1.4M	256QAM	1	0	20.17	20.04	19.76
		1	2	19.97	19.91	19.81
		1	5	19.99	20.04	19.81
		3	0	19.99	19.74	19.98
		3	1	**20.30**	20.12	20.02
		3	3	19.71	20.16	19.90
		6	0	19.79	20.10	20.10
BW	MCS Index	Channel		18615	18900	19185
		Frequency (MHz)		1851.5	1880	1908.5
3M	256QAM	1	0	19.71	19.94	19.68
		1	7	20.23	20.07	19.68
		1	14	**20.27**	19.73	19.86
		8	0	19.81	19.75	19.78
		8	3	20.17	19.75	19.77
		8	7	20.05	19.93	19.97
		15	0	19.98	19.89	19.75
BW	MCS Index	Channel		18625	18900	19175
		Frequency (MHz)		1852.5	1880	1907.5
5M	256QAM	1	0	19.90	19.92	19.96
		1	12	19.80	19.95	19.73
		1	24	19.96	20.08	19.67
		12	0	**20.26**	20.09	20.03
		12	6	19.73	20.12	19.95
		12	13	20.21	20.18	19.91
		25	0	19.99	19.76	19.85

LTE Band 2						
BW	MCS Index	Channel		18650	18900	19150
		Frequency (MHz)		1855	1880	1905
10M	256QAM	1	0	**20.29**	20.10	19.82
		1	24	19.59	19.89	19.98
		1	49	19.96	20.10	19.98
		25	0	20.03	19.72	19.73
		25	12	20.20	20.07	19.78
		25	25	19.67	19.75	19.92
		50	0	20.27	20.01	19.71
BW	MCS Index	Channel		18675	18900	19125
		Frequency (MHz)		1857.5	1880	1902.5
15M	256QAM	1	0	20.21	20.18	20.06
		1	37	19.75	20.20	20.06
		1	74	20.18	**20.21**	19.98
		36	0	19.90	19.76	19.84
		36	19	19.69	19.92	20.00
		36	39	19.77	19.82	20.04
		75	0	20.05	20.12	19.70
BW	MCS Index	Channel		18700	18900	19100
		Frequency (MHz)		1860	1880	1900
20M	256QAM	1	0	19.93	19.77	19.87
		1	50	19.80	20.02	19.89
		1	99	19.83	20.07	19.93
		50	0	20.19	19.83	19.75
		50	25	20.18	20.17	19.73
		50	50	**20.33**	19.90	19.83
		100	0	19.62	20.22	19.85

LTE Band 25						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26047	26365	26683
		Frequency (MHz)		1850.7	1882.5	1914.3
1.4M	256QAM	1	0	19.82	20.19	19.77
		1	2	20.31	19.83	19.77
		1	5	19.60	19.84	19.96
		3	0	20.25	19.72	20.54
		3	1	19.65	20.04	20.11
		3	3	19.97	20.51	**20.55**
		6	0	19.73	20.21	20.23
BW	MCS Index	Channel		26055	26365	26675
		Frequency (MHz)		1851.5	1882.5	1913.5
3M	256QAM	1	0	19.66	19.75	20.29
		1	7	20.10	19.47	20.10
		1	14	19.80	19.50	20.31
		8	0	19.71	19.96	19.81
		8	3	19.66	19.79	20.30
		8	7	19.57	19.57	**20.34**
		15	0	20.21	20.16	19.70
BW	MCS Index	Channel		26065	26365	26665
		Frequency (MHz)		1852.5	1882.5	1912.5
5M	256QAM	1	0	19.92	20.24	20.34
		1	12	20.05	20.32	20.21
		1	24	20.37	19.73	19.73
		12	0	19.98	**20.48**	20.06
		12	6	19.68	19.63	19.68
		12	13	19.63	20.48	20.10
		25	0	19.89	19.92	19.96

LTE Band 25						
BW	MCS Index	Channel		26090	26365	26640
		Frequency (MHz)		1855	1882.5	1910
10M	256QAM	1	0	20.16	**20.56**	19.59
		1	24	20.13	19.90	19.94
		1	49	20.01	19.95	19.91
		25	0	19.88	19.69	19.98
		25	12	20.27	19.81	20.52
		25	25	19.67	20.49	19.56
		50	0	19.99	19.64	19.73
BW	MCS Index	Channel		26115	26365	26615
		Frequency (MHz)		1857.5	1882.5	1907.5
15M	256QAM	1	0	20.39	**20.55**	19.93
		1	37	19.67	19.57	20.39
		1	74	20.26	19.92	20.25
		36	0	19.81	19.78	19.62
		36	19	19.79	19.97	20.00
		36	39	20.12	20.48	20.08
		75	0	20.11	20.23	20.52
BW	MCS Index	Channel		26140	26365	26590
		Frequency (MHz)		1860	1882.5	1905
20M	256QAM	1	0	20.37	19.80	19.86
		1	50	19.80	19.72	20.07
		1	99	19.79	20.05	20.25
		50	0	20.40	**20.46**	19.65
		50	25	20.33	19.73	20.08
		50	50	19.67	20.42	19.57
		100	0	19.86	20.07	20.06

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	256QAM	1	0	19.85	19.54	19.73
		1	2	19.67	19.89	19.76
		1	5	19.74	**20.07**	19.85
		3	0	19.99	19.99	19.65
		3	1	19.55	19.78	19.97
		3	3	19.72	19.49	20.05
		6	0	20.01	19.56	19.90
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26805	26915	27025
		Frequency (MHz)		825.5	836.5	847.5
3M	256QAM	1	0	**20.23**	20.07	20.03
		1	7	20.08	20.01	19.94
		1	14	19.94	19.50	20.10
		8	0	20.06	20.13	20.07
		8	3	19.52	19.56	19.93
		8	7	19.59	19.85	19.94
		15	0	19.52	19.74	20.02
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26815	26915	27015
		Frequency (MHz)		826.5	836.5	846.5
5M	256QAM	1	0	19.67	19.71	20.10
		1	12	19.57	19.56	20.07
		1	24	20.13	19.83	19.96
		12	0	**20.17**	20.06	19.94
		12	6	19.65	19.58	19.64
		12	13	20.00	19.70	19.62
		25	0	19.67	20.03	19.80

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	256QAM	1	0	19.82	19.57	19.63
		1	24	19.86	19.56	19.71
		1	49	19.98	20.03	19.94
		25	0	19.74	20.10	20.05
		25	12	20.10	19.56	19.56
		25	25	19.82	**20.13**	19.71
		50	0	19.67	19.69	19.82
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26865	26915	26965
		Frequency (MHz)		831.5	836.5	841.5
15M	256QAM	1	0	19.59	19.93	19.88
		1	37	19.70	19.51	19.86
		1	74	**20.16**	19.50	19.95
		36	0	20.09	19.75	19.85
		36	19	20.05	19.83	19.66
		36	39	20.08	19.72	19.72
		75	0	20.08	19.82	19.67

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	256QAM	1	0	19.87	19.68	20.05
		1	2	19.59	19.92	**20.06**
		1	5	19.90	19.93	19.77
		3	0	19.77	19.99	19.72
		3	1	19.99	19.81	19.85
		3	3	19.67	20.03	19.75
		6	0	19.92	19.76	19.78
BW	MCS Index	Channel		26705	26740	26775
		Frequency (MHz)		815.5	819	822.5
3M	256QAM	1	0	19.94	19.76	19.83
		1	7	19.78	19.84	19.60
		1	14	19.90	19.72	19.81
		8	0	19.66	19.59	19.87
		8	3	**20.11**	19.71	19.93
		8	7	19.90	19.77	19.95
		15	0	19.86	19.50	19.84
BW	MCS Index	Channel		26715	26740	26765
		Frequency (MHz)		816.5	819	821.5
5M	256QAM	1	0	19.62	19.76	19.74
		1	12	19.64	19.99	19.99
		1	24	19.82	20.13	19.83
		12	0	20.10	19.58	20.08
		12	6	**20.23**	19.82	19.98
		12	13	19.54	20.07	19.97
		25	0	20.03	19.94	20.05
BW	MCS Index	Channel		26740		
		Frequency (MHz)		819		
10M	256QAM	1	0	**20.01**		
		1	24	19.77		
		1	49	19.92		
		25	0	19.69		
		25	12	19.54		
		25	25	19.55		
		50	0	19.65		

LTE Band 41 (HPUE)						
BW	MCS Index	Channel		39675	40620	41565
		Frequency (MHz)		2498.5	2593	2687.5
5M	256QAM	1	0	21.55	22.29	22.32
		1	12	21.55	22.26	21.85
		1	24	22.22	21.77	22.41
		12	0	22.06	22.25	21.77
		12	6	21.53	22.01	22.31
		12	13	22.18	22.25	22.17
		25	0	21.94	22.04	**22.46**
BW	MCS Index	Channel		39700	40620	41540
		Frequency (MHz)		2501	2593	2685
10M	256QAM	1	0	21.48	22.09	21.95
		1	24	21.49	**22.38**	22.24
		1	49	21.73	22.28	22.15
		25	0	21.88	21.92	22.23
		25	12	22.34	22.04	22.19
		25	25	21.48	21.99	22.03
		50	0	21.98	22.09	22.16
BW	MCS Index	Channel		39725	40620	41515
		Frequency (MHz)		2503.5	2593	2682.5
15M	256QAM	1	0	22.30	21.89	22.26
		1	37	21.43	22.12	**22.50**
		1	74	21.46	21.95	22.44
		36	0	21.72	22.35	21.92
		36	19	21.84	22.24	22.14
		36	39	22.18	21.89	22.26
		75	0	22.00	21.95	22.45
BW	MCS Index	Channel		39750	40620	41490
		Frequency (MHz)		2506	2593	2680
20M	256QAM	1	0	21.86	22.33	**22.48**
		1	50	22.08	22.11	21.62
		1	99	21.87	22.31	21.67
		50	0	21.86	22.00	22.32
		50	25	21.48	21.76	21.68
		50	50	21.78	22.05	22.24
		100	0	21.90	22.30	21.93

LTE Band 41						
BW	MCS Index	Channel		39675	40620	41565
		Frequency (MHz)		2498.5	2593	2687.5
5M	256QAM	1	0	18.96	19.70	19.73
		1	12	18.96	19.67	19.26
		1	24	19.63	19.18	19.82
		12	0	19.47	19.66	19.18
		12	6	18.94	19.42	19.72
		12	13	19.59	19.66	19.58
		25	0	19.35	19.45	**19.87**
BW	MCS Index	Channel		39700	40620	41540
		Frequency (MHz)		2501	2593	2685
10M	256QAM	1	0	18.89	19.50	19.36
		1	24	18.90	**19.79**	19.65
		1	49	19.14	19.69	19.56
		25	0	19.29	19.33	19.64
		25	12	19.75	19.45	19.60
		25	25	18.89	19.40	19.44
		50	0	19.39	19.50	19.57
BW	MCS Index	Channel		39725	40620	41515
		Frequency (MHz)		2503.5	2593	2682.5
15M	256QAM	1	0	19.71	19.30	19.67
		1	37	18.84	19.53	**19.91**
		1	74	18.87	19.36	19.85
		36	0	19.13	19.76	19.33
		36	19	19.25	19.65	19.55
		36	39	19.59	19.30	19.67
		75	0	19.41	19.36	19.86
BW	MCS Index	Channel		39750	40620	41490
		Frequency (MHz)		2506	2593	2680
20M	256QAM	1	0	19.27	19.74	**19.89**
		1	50	19.49	19.52	19.03
		1	99	19.28	19.72	19.08
		50	0	19.27	19.41	19.73
		50	25	18.89	19.17	19.09
		50	50	19.19	19.46	19.65
		100	0	19.31	19.71	19.34

LTE Band 66						
BW	MCS Index	Channel		131979	132322	132665
		Frequency (MHz)		1710.7	1745	1779.3
1.4M	256QAM	1	0	**20.19**	20.09	20.03
		1	2	19.58	19.80	19.78
		1	5	19.86	19.72	20.06
		3	0	19.75	19.51	20.13
		3	1	19.62	19.60	20.13
		3	3	19.80	19.97	19.97
		6	0	19.91	19.92	19.76
BW	MCS Index	Channel		131987	132322	132657
		Frequency (MHz)		1711.5	1745	1778.5
3M	256QAM	1	0	19.85	19.97	19.64
		1	7	19.83	19.54	20.01
		1	14	19.97	19.94	**20.02**
		8	0	19.74	19.49	19.72
		8	3	19.75	19.63	19.73
		8	7	19.82	19.60	19.85
		15	0	19.53	19.61	19.96
BW	MCS Index	Channel		131997	132322	132647
		Frequency (MHz)		1712.5	1745	1777.5
5M	256QAM	1	0	20.02	19.98	19.72
		1	12	20.14	19.91	19.68
		1	24	19.52	19.77	**20.22**
		12	0	19.93	19.87	19.86
		12	6	19.75	19.67	19.73
		12	13	20.05	19.89	20.04
		25	0	19.51	19.57	20.10

LTE Band 66						
BW	MCS Index	Channel		132022	132322	132622
		Frequency (MHz)		1715	1745	1775
10M	256QAM	1	0	**20.25**	20.11	19.95
		1	24	20.13	19.75	20.22
		1	49	19.98	20.06	20.07
		25	0	20.03	19.93	19.70
		25	12	20.11	19.83	20.07
		25	25	19.66	19.67	20.14
		50	0	19.80	19.80	20.15
BW	MCS Index	Channel		132047	132322	132597
		Frequency (MHz)		1717.5	1745	1772.5
15M	256QAM	1	0	20.03	19.90	19.84
		1	37	19.74	20.06	19.78
		1	74	19.84	19.52	**20.22**
		36	0	19.59	19.96	20.19
		36	19	20.13	19.50	19.93
		36	39	19.84	19.55	20.20
		75	0	19.54	19.57	20.02
BW	MCS Index	Channel		132072	132322	132575
		Frequency (MHz)		1720	1745	1770
20M	256QAM	1	0	19.58	19.58	19.85
		1	50	19.78	19.69	20.01
		1	99	20.01	19.83	20.14
		50	0	19.71	19.48	19.95
		50	25	19.85	20.12	19.81
		50	50	19.98	19.57	**20.16**
		100	0	19.89	19.83	19.92

EIRP Power (dBm)

n41 (HPUE)						
BW	MCS Index	Channel		501204	518598	535998
		Frequency (MHz)		2506.02	2592.99	2679.99
20M	$\pi/2$ BPSK	1	0	30.85	30.98	30.88
		1	25	31.08	30.82	31.02
		1	50	**31.21**	31.04	31.08
		25	0	30.43	30.88	30.63
		25	12	30.81	30.71	30.69
		25	25	30.57	30.41	30.73
		51	0	30.99	30.80	30.87
	QPSK	1	0	30.90	31.00	30.84
		1	25	31.07	30.86	30.91
		1	50	31.04	31.11	30.91
		25	0	30.82	30.80	**30.87**
		25	12	30.73	30.78	30.82
		25	25	30.85	30.79	30.72
		51	0	30.88	30.90	30.77
	16QAM	1	0	30.79	30.79	30.57
		1	25	30.60	30.76	30.55
		1	50	**30.84**	30.47	30.69
		25	0	30.38	30.62	30.24
		25	12	30.36	30.21	30.11
		25	25	30.66	30.13	30.25
		51	0	30.15	30.55	30.69
	64QAM	1	0	30.15	30.33	30.32
		1	25	30.21	30.12	30.30
		1	50	30.33	30.34	**30.43**
		25	0	30.11	30.13	30.31
		25	12	29.75	29.80	30.24
		25	25	29.82	30.30	29.89
		51	0	29.89	29.88	29.93
	256QAM	1	0	27.71	27.69	27.81
		1	25	27.95	28.22	**28.23**
		1	50	27.89	27.89	28.01
		25	0	27.68	27.93	27.78
		25	12	27.16	27.80	27.55
		25	25	27.65	27.19	27.59
		51	0	27.79	27.89	27.37

*EIRP = Conducted + antenna gain (5.31dBi)

n41 (HPUE)						
BW	MCS Index	Channel		503202	518598	534000
		Frequency (MHz)		2516.01	2592.99	2670
40M	$\pi/2$ BPSK	1	0	30.98	30.95	30.87
		1	53	31.06	30.95	30.87
		1	105	30.91	**31.15**	30.90
		53	0	30.55	30.83	30.81
		53	26	30.90	30.61	30.47
		53	53	30.84	30.57	30.73
		106	0	30.80	30.76	30.51
	QPSK	1	0	30.96	**31.08**	30.84
		1	53	30.83	30.96	30.96
		1	105	31.03	31.05	30.88
		53	0	30.82	30.82	30.71
		53	26	30.70	30.61	30.72
		53	53	30.70	30.90	30.87
		106	0	30.72	30.69	30.75
	16QAM	1	0	30.84	30.60	30.44
		1	53	30.60	**30.91**	30.82
		1	105	30.53	30.86	30.80
		53	0	30.14	30.16	30.53
		53	26	30.35	30.66	30.50
		53	53	30.49	30.37	30.42
		106	0	30.12	30.57	30.28
	64QAM	1	0	30.39	**30.51**	30.22
		1	53	30.24	30.18	30.43
		1	105	30.46	30.40	30.14
		53	0	30.05	30.30	30.22
		53	26	30.13	30.27	30.17
		53	53	30.29	30.07	30.12
		106	0	30.23	29.92	30.23
	256QAM	1	0	27.75	28.01	28.21
		1	53	27.87	27.81	27.70
		1	105	28.10	**28.26**	27.95
		53	0	27.48	27.74	27.73
		53	26	27.48	27.30	27.25
		53	53	27.57	27.87	27.22
		106	0	27.99	27.17	27.39

*EIRP = Conducted + antenna gain (5.31dBi)

n41 (HPUE)						
BW	MCS Index	Channel		504204	518598	532998
		Frequency (MHz)		2521.02	2592.99	2664.99
50M	$\pi/2$ BPSK	1	0	**31.17**	30.85	30.86
		1	66	31.00	30.88	30.94
		1	132	31.12	31.01	30.99
		66	0	30.96	30.65	30.57
		66	33	30.91	30.52	30.90
		66	66	30.87	30.43	30.74
		133	0	30.47	30.95	30.48
	QPSK	1	0	31.01	30.94	31.01
		1	66	30.98	30.95	30.81
		1	132	**31.11**	30.82	30.85
		66	0	30.68	30.77	30.77
		66	33	30.80	30.79	30.91
		66	66	30.75	30.74	30.61
		133	0	30.66	30.64	30.71
	16QAM	1	0	30.85	30.65	30.42
		1	66	30.77	30.45	30.64
		1	132	30.74	**30.86**	30.43
		66	0	30.32	30.52	30.43
		66	33	30.66	30.63	30.69
		66	66	30.18	30.68	30.18
		133	0	30.20	30.26	30.62
	64QAM	1	0	30.25	30.33	30.34
		1	66	**30.47**	30.25	30.15
		1	132	30.43	30.22	30.41
		66	0	30.18	29.73	29.96
		66	33	29.85	29.94	30.08
		66	66	30.08	30.31	30.27
		133	0	30.08	29.85	30.29
	256QAM	1	0	27.76	28.14	27.97
		1	66	27.70	27.86	28.16
		1	132	28.00	**28.29**	27.70
		66	0	27.74	27.38	27.84
		66	33	27.88	27.22	27.39
		66	66	27.45	27.82	27.78
		133	0	27.91	27.40	27.83

*EIRP = Conducted + antenna gain (5.31dBi)

n41 (HPUE)						
BW	MCS Index	Channel		505200	518598	531996
		Frequency (MHz)		2526	2592.99	2659.98
60M	$\pi/2$ BPSK	1	0	30.99	**31.20**	31.09
		1	81	30.87	30.91	30.97
		1	161	30.98	31.18	31.07
		81	0	30.66	30.67	30.58
		81	40	30.67	30.80	30.97
		81	81	30.79	30.70	30.90
		162	0	30.69	30.56	30.90
	QPSK	1	0	30.95	30.95	31.01
		1	81	31.06	30.87	**31.07**
		1	161	30.88	30.92	30.99
		81	0	30.62	30.63	30.90
		81	40	30.74	30.61	30.80
		81	81	30.84	30.78	30.80
		162	0	30.61	30.63	30.63
	16QAM	1	0	**30.87**	30.51	30.71
		1	81	30.45	30.75	30.75
		1	161	30.79	30.66	30.62
		81	0	30.27	30.32	30.14
		81	40	30.51	30.42	30.26
		81	81	30.41	30.46	30.14
		162	0	30.16	30.59	30.28
	64QAM	1	0	**30.56**	30.17	30.16
		1	81	30.50	30.29	30.40
		1	161	30.29	30.30	30.28
		81	0	29.78	29.91	29.81
		81	40	29.87	29.71	29.90
		81	81	29.97	29.99	29.94
		162	0	29.75	30.17	29.90
	256QAM	1	0	28.03	28.27	27.62
		1	81	27.87	28.21	27.75
		1	161	27.76	27.89	**28.28**
		81	0	27.18	27.88	27.45
		81	40	27.29	27.70	27.32
		81	81	27.95	27.49	27.75
		162	0	27.17	27.65	27.18

*EIRP = Conducted + antenna gain (5.31dBi)

n41 (HPUE)						
BW	MCS Index	Channel		507204	518598	529998
		Frequency (MHz)		2536.02	2592.99	2649.99
80M	$\pi/2$ BPSK	1	0	31.04	31.05	**31.16**
		1	108	31.09	30.99	31.12
		1	216	31.00	31.05	31.07
		108	0	30.95	30.60	30.81
		108	54	30.49	30.87	30.88
		108	108	30.72	30.50	30.75
		217	0	31.01	30.43	30.73
	QPSK	1	0	30.93	**31.10**	30.97
		1	108	31.06	30.88	30.96
		1	216	30.94	31.01	30.82
		108	0	30.69	30.62	30.91
		108	54	30.91	30.91	30.61
		108	108	30.76	30.70	30.71
		217	0	30.73	30.74	30.74
	16QAM	1	0	**30.85**	30.56	30.59
		1	108	30.50	30.80	30.62
		1	216	30.57	30.62	30.43
		108	0	30.43	30.26	30.27
		108	54	30.42	30.45	30.20
		108	108	30.11	30.30	30.66
		217	0	30.25	30.39	30.49
	64QAM	1	0	30.17	30.20	30.30
		1	108	30.28	**30.51**	30.11
		1	216	30.43	30.20	30.50
		108	0	30.23	30.18	29.91
		108	54	29.89	29.79	29.84
		108	108	29.76	30.19	29.81
		217	0	30.15	30.30	29.73
	256QAM	1	0	28.14	28.08	28.15
		1	108	**28.25**	27.62	27.99
		1	216	27.77	28.20	28.13
		108	0	27.13	27.29	27.55
		108	54	27.82	27.92	27.25
		108	108	27.30	27.18	27.65
		217	0	27.30	27.87	27.27

*EIRP = Conducted + antenna gain (5.31dBi)

n41 (HPUE)						
BW	MCS Index	Channel		508200	518598	528996
		Frequency (MHz)		2541	2592.99	2644.98
90M	$\pi/2$ BPSK	1	0	31.13	31.11	31.19
		1	122	**31.20**	30.82	30.96
		1	244	30.90	31.03	31.10
		122	0	30.85	30.97	30.53
		122	61	30.57	30.92	30.66
		122	122	30.71	30.98	30.58
		245	0	30.88	30.58	30.98
	QPSK	1	0	30.92	30.89	30.85
		1	122	**30.99**	30.86	30.91
		1	244	30.81	30.82	30.90
		122	0	30.82	30.74	30.81
		122	61	30.84	30.83	30.81
		122	122	30.79	30.91	30.77
		245	0	30.64	30.61	30.70
	16QAM	1	0	30.75	30.82	30.86
		1	122	30.53	**30.88**	30.76
		1	244	30.47	30.80	30.86
		122	0	30.50	30.69	30.55
		122	61	30.12	30.11	30.23
		122	122	30.45	30.66	30.51
		245	0	30.14	30.62	30.39
	64QAM	1	0	30.42	30.36	30.11
		1	122	30.13	30.23	**30.50**
		1	244	30.20	30.23	30.27
		122	0	30.01	29.88	30.00
		122	61	29.98	30.11	29.80
		122	122	29.96	29.80	29.79
		245	0	30.04	30.23	29.94
	256QAM	1	0	27.81	27.81	28.04
		1	122	28.00	28.03	28.24
		1	244	28.03	28.05	**28.28**
		122	0	27.14	27.20	27.69
		122	61	27.96	27.73	27.58
		122	122	27.31	27.62	27.81
		245	0	27.72	27.28	27.42

*EIRP = Conducted + antenna gain (5.31dBi)

n41 (HPUE)						
BW	MCS Index	Channel		509202	518598	528000
		Frequency (MHz)		2546.01	2592.99	2640
100M	$\pi/2$ BPSK	1	0	30.95	31.10	30.84
		1	136	30.97	30.86	**31.19**
		1	272	31.15	31.15	31.01
		136	0	30.70	31.01	30.83
		136	68	30.64	30.87	30.84
		136	136	30.98	30.86	30.81
		273	0	30.61	30.70	30.90
	QPSK	1	0	30.85	31.01	31.06
		1	136	31.05	31.00	**31.08**
		1	272	30.94	30.82	30.91
		136	0	30.90	30.79	30.89
		136	68	30.87	30.62	30.71
		136	136	30.74	30.68	30.62
		273	0	30.71	30.79	30.64
	16QAM	1	0	30.87	30.66	30.46
		1	136	30.47	**30.89**	30.57
		1	272	30.76	30.61	30.86
		136	0	30.35	30.67	30.30
		136	68	30.12	30.56	30.50
		136	136	30.40	30.22	30.19
		273	0	30.65	30.46	30.61
	64QAM	1	0	30.14	30.15	30.13
		1	136	30.35	30.21	**30.42**
		1	272	30.32	30.37	30.31
		136	0	30.01	29.78	29.74
		136	68	29.83	30.17	30.21
		136	136	30.19	29.96	30.14
		273	0	30.09	29.87	30.25
	256QAM	1	0	28.00	27.85	**28.27**
		1	136	27.75	27.90	28.22
		1	272	28.24	27.71	28.23
		136	0	27.73	27.97	27.14
		136	68	27.33	27.71	27.52
		136	136	27.77	27.94	27.29
		273	0	27.64	27.97	27.53

*EIRP = Conducted + antenna gain (5.31dBi)

n41						
BW	MCS Index	Channel		501204	518598	535998
		Frequency (MHz)		2506.02	2592.99	2679.99
20M	$\pi/2$ BPSK	1	0	28.42	28.53	28.52
		1	25	28.65	28.49	28.65
		1	50	**28.86**	28.69	28.69
		25	0	28.02	28.48	28.22
		25	12	28.46	28.29	28.30
		25	25	28.26	28.09	28.39
		51	0	28.55	28.43	28.46
	QPSK	1	0	28.56	28.61	28.49
		1	25	28.69	28.43	28.55
		1	50	28.71	**28.75**	28.47
		25	0	28.49	28.46	28.50
		25	12	28.40	28.39	28.50
		25	25	28.48	28.43	28.40
		51	0	28.44	28.53	28.45
	16QAM	1	0	28.34	28.41	28.17
		1	25	28.23	28.45	28.13
		1	50	**28.51**	28.04	28.39
		25	0	28.00	28.28	27.93
		25	12	27.97	27.87	27.77
		25	25	28.28	27.70	27.90
		51	0	27.83	28.24	28.27
	64QAM	1	0	27.72	27.98	27.91
		1	25	27.91	27.76	27.91
		1	50	28.00	27.98	**28.13**
		25	0	27.69	27.70	27.99
		25	12	27.38	27.40	27.81
		25	25	27.44	27.90	27.47
		51	0	27.56	27.48	27.59
	256QAM	1	0	25.40	25.31	25.43
		1	25	25.62	**25.82**	25.80
		1	50	25.49	25.54	25.62
		25	0	25.25	25.55	25.36
		25	12	24.80	25.37	25.17
		25	25	25.24	24.83	25.28
		51	0	25.38	25.49	25.03

*EIRP = Conducted + antenna gain (5.31dBi)

n41						
BW	MCS Index	Channel		503202	518598	534000
		Frequency (MHz)		2516.01	2592.99	2670
40M	$\pi/2$ BPSK	1	0	28.66	28.54	28.51
		1	53	28.66	28.53	28.44
		1	105	28.56	**28.73**	28.46
		53	0	28.10	28.47	28.48
		53	26	28.58	28.20	28.10
		53	53	28.42	28.12	28.29
		106	0	28.41	28.43	28.16
	QPSK	1	0	28.56	**28.76**	28.48
		1	53	28.50	28.51	28.55
		1	105	28.66	28.65	28.56
		53	0	28.42	28.51	28.29
		53	26	28.30	28.22	28.32
		53	53	28.34	28.55	28.55
		106	0	28.36	28.30	28.38
	16QAM	1	0	28.41	28.16	28.07
		1	53	28.17	**28.47**	28.47
		1	105	28.19	28.47	28.37
		53	0	27.72	27.85	28.09
		53	26	28.03	28.23	28.17
		53	53	28.12	27.99	27.98
		106	0	27.73	28.23	27.97
	64QAM	1	0	28.04	28.13	27.87
		1	53	27.94	27.83	28.05
		1	105	**28.13**	28.05	27.81
		53	0	27.69	27.88	27.84
		53	26	27.80	27.92	27.77
		53	53	27.85	27.74	27.80
		106	0	27.88	27.48	27.83
	256QAM	1	0	25.37	25.65	25.81
		1	53	25.49	25.37	25.36
		1	105	25.67	**25.92**	25.55
		53	0	25.07	25.35	25.36
		53	26	25.13	24.89	24.94
		53	53	25.14	25.48	24.81
		106	0	25.65	24.79	25.08

*EIRP = Conducted + antenna gain (5.31dBi)

n41						
BW	MCS Index	Channel		504204	518598	532998
		Frequency (MHz)		2521.02	2592.99	2664.99
50M	$\pi/2$ BPSK	1	0	**28.73**	28.51	28.42
		1	66	28.58	28.46	28.54
		1	132	28.69	28.59	28.61
		66	0	28.59	28.27	28.26
		66	33	28.57	28.14	28.50
		66	66	28.49	28.07	28.35
		133	0	28.09	28.52	28.05
	QPSK	1	0	28.65	28.60	**28.67**
		1	66	28.67	28.53	28.48
		1	132	28.66	28.42	28.40
		66	0	28.28	28.32	28.34
		66	33	28.47	28.48	28.47
		66	66	28.37	28.44	28.20
		133	0	28.34	28.27	28.38
	16QAM	1	0	**28.53**	28.33	28.08
		1	66	28.40	28.08	28.28
		1	132	28.44	28.43	28.00
		66	0	27.91	28.16	28.11
		66	33	28.29	28.31	28.33
		66	66	27.85	28.24	27.84
		133	0	27.81	27.91	28.17
	64QAM	1	0	27.81	28.02	27.95
		1	66	**28.11**	27.94	27.70
		1	132	28.03	27.84	28.11
		66	0	27.77	27.31	27.53
		66	33	27.46	27.62	27.72
		66	66	27.66	27.88	27.84
		133	0	27.76	27.49	27.98
	256QAM	1	0	25.33	25.75	25.55
		1	66	25.29	25.41	25.82
		1	132	25.63	**25.91**	25.25
		66	0	25.42	25.05	25.49
		66	33	25.47	24.81	24.95
		66	66	25.10	25.51	25.35
		133	0	25.49	25.03	25.47

*EIRP = Conducted + antenna gain (5.31dBi)

n41						
BW	MCS Index	Channel		505200	518598	531996
		Frequency (MHz)		2526	2592.99	2659.98
60M	$\pi/2$ BPSK	1	0	28.67	**28.90**	28.64
		1	81	28.57	28.57	28.55
		1	161	28.61	28.82	28.72
		81	0	28.29	28.25	28.27
		81	40	28.23	28.39	28.52
		81	81	28.47	28.39	28.46
		162	0	28.29	28.14	28.53
	QPSK	1	0	28.65	28.51	28.57
		1	81	**28.76**	28.52	28.75
		1	161	28.44	28.49	28.66
		81	0	28.17	28.27	28.53
		81	40	28.40	28.18	28.49
		81	81	28.41	28.42	28.41
		162	0	28.25	28.21	28.21
	16QAM	1	0	28.43	28.14	28.32
		1	81	28.09	**28.45**	28.36
		1	161	28.36	28.36	28.27
		81	0	27.93	27.87	27.83
		81	40	28.10	28.08	27.88
		81	81	28.06	28.02	27.80
		162	0	27.82	28.28	27.96
	64QAM	1	0	**28.12**	27.77	27.72
		1	81	28.12	27.96	27.96
		1	161	27.85	27.90	27.94
		81	0	27.34	27.50	27.44
		81	40	27.42	27.27	27.51
		81	81	27.58	27.68	27.54
		162	0	27.36	27.73	27.49
	256QAM	1	0	25.68	25.84	25.30
		1	81	25.46	25.77	25.38
		1	161	25.45	25.58	**25.94**
		81	0	24.80	25.49	25.07
		81	40	24.98	25.39	24.88
		81	81	25.64	25.13	25.38
		162	0	24.75	25.34	24.82

*EIRP = Conducted + antenna gain (5.31dBi)

n41						
BW	MCS Index	Channel		507204	518598	529998
		Frequency (MHz)		2536.02	2592.99	2649.99
80M	$\pi/2$ BPSK	1	0	28.64	28.65	**28.80**
		1	108	28.75	28.58	28.72
		1	216	28.65	28.60	28.76
		108	0	28.58	28.16	28.51
		108	54	28.06	28.52	28.52
		108	108	28.30	28.13	28.33
		217	0	28.59	28.02	28.36
	QPSK	1	0	28.63	28.71	28.55
		1	108	**28.71**	28.54	28.60
		1	216	28.62	28.65	28.39
		108	0	28.25	28.23	28.58
		108	54	28.50	28.56	28.18
		108	108	28.33	28.37	28.34
		217	0	28.38	28.41	28.42
	16QAM	1	0	28.45	28.20	28.19
		1	108	28.08	**28.46**	28.18
		1	216	28.13	28.29	28.01
		108	0	28.03	27.90	27.87
		108	54	28.08	28.01	27.84
		108	108	27.79	27.92	28.26
		217	0	27.89	28.01	28.16
	64QAM	1	0	27.76	27.86	27.90
		1	108	27.92	28.09	27.76
		1	216	28.05	27.88	**28.19**
		108	0	27.92	27.83	27.47
		108	54	27.55	27.43	27.48
		108	108	27.45	27.84	27.44
		217	0	27.80	27.89	27.38
	256QAM	1	0	25.71	25.69	25.82
		1	108	**25.89**	25.28	25.62
		1	216	25.37	25.87	25.71
		108	0	24.72	24.88	25.20
		108	54	25.45	25.56	24.89
		108	108	24.95	24.75	25.32
		217	0	24.87	25.50	24.96

*EIRP = Conducted + antenna gain (5.31dBi)

n41						
BW	MCS Index	Channel		508200	518598	528996
		Frequency (MHz)		2541	2592.99	2644.98
90M	$\pi/2$ BPSK	1	0	28.82	28.74	**28.88**
		1	122	28.78	28.41	28.63
		1	244	28.56	28.64	28.71
		122	0	28.48	28.52	28.21
		122	61	28.23	28.56	28.21
		122	122	28.28	28.56	28.25
		245	0	28.48	28.24	28.61
	QPSK	1	0	28.59	28.46	28.52
		1	122	**28.69**	28.44	28.52
		1	244	28.43	28.42	28.53
		122	0	28.52	28.34	28.38
		122	61	28.44	28.48	28.45
		122	122	28.47	28.59	28.46
		245	0	28.33	28.26	28.31
	16QAM	1	0	28.34	28.41	28.45
		1	122	28.18	**28.53**	28.43
		1	244	28.05	28.48	28.52
		122	0	28.13	28.39	28.21
		122	61	27.79	27.79	27.82
		122	122	28.00	28.21	28.12
		245	0	27.79	28.24	28.06
	64QAM	1	0	28.03	27.93	27.73
		1	122	27.77	27.88	**28.17**
		1	244	27.85	27.84	27.96
		122	0	27.63	27.46	27.60
		122	61	27.66	27.81	27.44
		122	122	27.61	27.44	27.48
		245	0	27.61	27.87	27.51
	256QAM	1	0	25.45	25.39	25.66
		1	122	25.61	25.61	**25.87**
		1	244	25.59	25.69	25.87
		122	0	24.82	24.82	25.28
		122	61	25.52	25.33	25.18
		122	122	24.86	25.20	25.36
		245	0	25.38	24.95	25.06

*EIRP = Conducted + antenna gain (5.31dBi)

n41						
BW	MCS Index	Channel		509202	518598	528000
		Frequency (MHz)		2546.01	2592.99	2640
100M	$\pi/2$ BPSK	1	0	28.59	28.69	28.50
		1	136	28.61	28.53	**28.85**
		1	272	28.70	28.82	28.58
		136	0	28.29	28.61	28.43
		136	68	28.21	28.48	28.46
		136	136	28.55	28.52	28.37
		273	0	28.21	28.37	28.53
	QPSK	1	0	28.49	28.66	28.61
		1	136	**28.67**	28.61	28.64
		1	272	28.62	28.51	28.59
		136	0	28.52	28.36	28.45
		136	68	28.56	28.26	28.28
		136	136	28.30	28.37	28.31
		273	0	28.37	28.47	28.30
	16QAM	1	0	28.44	28.29	28.09
		1	136	28.06	**28.52**	28.18
		1	272	28.36	28.19	28.47
		136	0	27.97	28.28	27.89
		136	68	27.77	28.11	28.17
		136	136	28.05	27.78	27.87
		273	0	28.26	28.04	28.20
	64QAM	1	0	27.82	27.78	27.69
		1	136	27.99	27.89	**28.00**
		1	272	28.00	27.96	27.89
		136	0	27.57	27.45	27.36
		136	68	27.43	27.82	27.85
		136	136	27.80	27.59	27.74
		273	0	27.70	27.48	27.86
	256QAM	1	0	25.56	25.55	**25.92**
		1	136	25.39	25.46	25.83
		1	272	25.80	25.40	25.79
		136	0	25.36	25.55	24.82
		136	68	24.97	25.39	25.18
		136	136	25.33	25.51	24.92
		273	0	25.25	25.56	25.13

*EIRP = Conducted + antenna gain (5.31dBi)

LTE Band 2						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		18607	18900	19193
		Frequency (MHz)		1850.7	1880	1909.3
1.4M	256QAM	1	0	24.44	24.31	24.03
		1	2	24.24	24.18	24.08
		1	5	24.26	24.31	24.08
		3	0	24.26	24.01	24.25
		3	1	**24.57**	24.39	24.29
		3	3	23.98	24.43	24.17
		6	0	24.06	24.37	24.37
BW	MCS Index	Channel		18615	18900	19185
		Frequency (MHz)		1851.5	1880	1908.5
3M	256QAM	1	0	23.98	24.21	23.95
		1	7	24.50	24.34	23.95
		1	14	**24.54**	24.00	24.13
		8	0	24.08	24.02	24.05
		8	3	24.44	24.02	24.04
		8	7	24.32	24.20	24.24
		15	0	24.25	24.16	24.02
BW	MCS Index	Channel		18625	18900	19175
		Frequency (MHz)		1852.5	1880	1907.5
5M	256QAM	1	0	24.17	24.19	24.23
		1	12	24.07	24.22	24.00
		1	24	24.23	24.35	23.94
		12	0	**24.53**	24.36	24.30
		12	6	24.00	24.39	24.22
		12	13	24.48	24.45	24.18
		25	0	24.26	24.03	24.12

*EIRP = Conducted + antenna gain (4.27dBi)

LTE Band 2						
BW	MCS Index	Channel		18650	18900	19150
		Frequency (MHz)		1855	1880	1905
10M	256QAM	1	0	**24.56**	24.37	24.09
		1	24	23.86	24.16	24.25
		1	49	24.23	24.37	24.25
		25	0	24.30	23.99	24.00
		25	12	24.47	24.34	24.05
		25	25	23.94	24.02	24.19
		50	0	24.54	24.28	23.98
BW	MCS Index	Channel		18675	18900	19125
		Frequency (MHz)		1857.5	1880	1902.5
15M	256QAM	1	0	24.48	24.45	24.33
		1	37	24.02	24.47	24.33
		1	74	24.45	**24.48**	24.25
		36	0	24.17	24.03	24.11
		36	19	23.96	24.19	24.27
		36	39	24.04	24.09	24.31
		75	0	24.32	24.39	23.97
BW	MCS Index	Channel		18700	18900	19100
		Frequency (MHz)		1860	1880	1900
20M	256QAM	1	0	24.20	24.04	24.14
		1	50	24.07	24.29	24.16
		1	99	24.10	24.34	24.20
		50	0	24.46	24.10	24.02
		50	25	24.45	24.44	24.00
		50	50	**24.60**	24.17	24.10
		100	0	23.89	24.49	24.12

*EIRP = Conducted + antenna gain (4.27dBi)

LTE Band 25						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26047	26365	26683
		Frequency (MHz)		1850.7	1882.5	1914.3
1.4M	256QAM	1	0	24.09	24.46	24.04
		1	2	24.58	24.10	24.04
		1	5	23.87	24.11	24.23
		3	0	24.52	23.99	24.81
		3	1	23.92	24.31	24.38
		3	3	24.24	24.78	**24.82**
		6	0	24.00	24.48	24.50
BW	MCS Index	Channel		26055	26365	26675
		Frequency (MHz)		1851.5	1882.5	1913.5
3M	256QAM	1	0	23.93	24.02	24.56
		1	7	24.37	23.74	24.37
		1	14	24.07	23.77	24.58
		8	0	23.98	24.23	24.08
		8	3	23.93	24.06	24.57
		8	7	23.84	23.84	**24.61**
		15	0	24.48	24.43	23.97
BW	MCS Index	Channel		26065	26365	26665
		Frequency (MHz)		1852.5	1882.5	1912.5
5M	256QAM	1	0	24.19	24.51	24.61
		1	12	24.32	24.59	24.48
		1	24	24.64	24.00	24.00
		12	0	24.25	**24.75**	24.33
		12	6	23.95	23.90	23.95
		12	13	23.90	24.75	24.37
		25	0	24.16	24.19	24.23

*EIRP = Conducted + antenna gain (4.27dBi)

LTE Band 25						
BW	MCS Index	Channel		26090	26365	26640
		Frequency (MHz)		1855	1882.5	1910
10M	256QAM	1	0	24.43	**24.83**	23.86
		1	24	24.40	24.17	24.21
		1	49	24.28	24.22	24.18
		25	0	24.15	23.96	24.25
		25	12	24.54	24.08	24.79
		25	25	23.94	24.76	23.83
		50	0	24.26	23.91	24.00
BW	MCS Index	Channel		26115	26365	26615
		Frequency (MHz)		1857.5	1882.5	1907.5
15M	256QAM	1	0	24.66	**24.82**	24.20
		1	37	23.94	23.84	24.66
		1	74	24.53	24.19	24.52
		36	0	24.08	24.05	23.89
		36	19	24.06	24.24	24.27
		36	39	24.39	24.75	24.35
		75	0	24.38	24.50	24.79
BW	MCS Index	Channel		26140	26365	26590
		Frequency (MHz)		1860	1882.5	1905
20M	256QAM	1	0	24.64	24.07	24.13
		1	50	24.07	23.99	24.34
		1	99	24.06	24.32	24.52
		50	0	24.67	**24.73**	23.92
		50	25	24.60	24.00	24.35
		50	50	23.94	24.69	23.84
		100	0	24.13	24.34	24.33

*EIRP = Conducted + antenna gain (4.27dBi)

LTE Band 41 (HPUE)						
BW	MCS Index	Channel		39675	40620	41565
		Frequency (MHz)		2498.5	2593	2687.5
5M	256QAM	1	0	26.86	27.60	27.63
		1	12	26.86	27.57	27.16
		1	24	27.53	27.08	27.72
		12	0	27.37	27.56	27.08
		12	6	26.84	27.32	27.62
		12	13	27.49	27.56	27.48
		25	0	27.25	27.35	**27.77**
BW	MCS Index	Channel		39700	40620	41540
		Frequency (MHz)		2501	2593	2685
10M	256QAM	1	0	26.79	27.40	27.26
		1	24	26.80	**27.69**	27.55
		1	49	27.04	27.59	27.46
		25	0	27.19	27.23	27.54
		25	12	27.65	27.35	27.50
		25	25	26.79	27.30	27.34
		50	0	27.29	27.40	27.47
BW	MCS Index	Channel		39725	40620	41515
		Frequency (MHz)		2503.5	2593	2682.5
15M	256QAM	1	0	27.61	27.20	27.57
		1	37	26.74	27.43	**27.81**
		1	74	26.77	27.26	27.75
		36	0	27.03	27.66	27.23
		36	19	27.15	27.55	27.45
		36	39	27.49	27.20	27.57
		75	0	27.31	27.26	27.76
BW	MCS Index	Channel		39750	40620	41490
		Frequency (MHz)		2506	2593	2680
20M	256QAM	1	0	27.17	27.64	**27.79**
		1	50	27.39	27.42	26.93
		1	99	27.18	27.62	26.98
		50	0	27.17	27.31	27.63
		50	25	26.79	27.07	26.99
		50	50	27.09	27.36	27.55
		100	0	27.21	27.61	27.24

*EIRP = Conducted + antenna gain (5.31dBi)

LTE Band 41						
BW	MCS Index	Channel		39675	40620	41565
		Frequency (MHz)		2498.5	2593	2687.5
5M	256QAM	1	0	24.27	25.01	25.04
		1	12	24.27	24.98	24.57
		1	24	24.94	24.49	25.13
		12	0	24.78	24.97	24.49
		12	6	24.25	24.73	25.03
		12	13	24.90	24.97	24.89
		25	0	24.66	24.76	**25.18**
BW	MCS Index	Channel		39700	40620	41540
		Frequency (MHz)		2501	2593	2685
10M	256QAM	1	0	24.20	24.81	24.67
		1	24	24.21	**25.10**	24.96
		1	49	24.45	25.00	24.87
		25	0	24.60	24.64	24.95
		25	12	25.06	24.76	24.91
		25	25	24.20	24.71	24.75
		50	0	24.70	24.81	24.88
BW	MCS Index	Channel		39725	40620	41515
		Frequency (MHz)		2503.5	2593	2682.5
15M	256QAM	1	0	25.02	24.61	24.98
		1	37	24.15	24.84	**25.22**
		1	74	24.18	24.67	25.16
		36	0	24.44	25.07	24.64
		36	19	24.56	24.96	24.86
		36	39	24.90	24.61	24.98
		75	0	24.72	24.67	25.17
BW	MCS Index	Channel		39750	40620	41490
		Frequency (MHz)		2506	2593	2680
20M	256QAM	1	0	24.58	25.05	**25.20**
		1	50	24.80	24.83	24.34
		1	99	24.59	25.03	24.39
		50	0	24.58	24.72	25.04
		50	25	24.20	24.48	24.40
		50	50	24.50	24.77	24.96
		100	0	24.62	25.02	24.65

*EIRP = Conducted + antenna gain (5.31dBi)

LTE Band 66						
BW	MCS Index	Channel		131979	132322	132665
		Frequency (MHz)		1710.7	1745	1779.3
1.4M	256QAM	1	0	**24.46**	24.36	24.30
		1	2	23.85	24.07	24.05
		1	5	24.13	23.99	24.33
		3	0	24.02	23.78	24.40
		3	1	23.89	23.87	24.40
		3	3	24.07	24.24	24.24
		6	0	24.18	24.19	24.03
BW	MCS Index	Channel		131987	132322	132657
		Frequency (MHz)		1711.5	1745	1778.5
3M	256QAM	1	0	24.12	24.24	23.91
		1	7	24.10	23.81	24.28
		1	14	24.24	24.21	**24.29**
		8	0	24.01	23.76	23.99
		8	3	24.02	23.90	24.00
		8	7	24.09	23.87	24.12
		15	0	23.80	23.88	24.23
BW	MCS Index	Channel		131997	132322	132647
		Frequency (MHz)		1712.5	1745	1777.5
5M	256QAM	1	0	24.29	24.25	23.99
		1	12	24.41	24.18	23.95
		1	24	23.79	24.04	**24.49**
		12	0	24.20	24.14	24.13
		12	6	24.02	23.94	24.00
		12	13	24.32	24.16	24.31
		25	0	23.78	23.84	24.37

*EIRP = Conducted + antenna gain (4.27dBi)

LTE Band 66						
BW	MCS Index	Channel		132022	132322	132622
		Frequency (MHz)		1715	1745	1775
10M	256QAM	1	0	**24.52**	24.38	24.22
		1	24	24.40	24.02	24.49
		1	49	24.25	24.33	24.34
		25	0	24.30	24.20	23.97
		25	12	24.38	24.10	24.34
		25	25	23.93	23.94	24.41
		50	0	24.07	24.07	24.42
BW	MCS Index	Channel		132047	132322	132597
		Frequency (MHz)		1717.5	1745	1772.5
15M	256QAM	1	0	24.30	24.17	24.11
		1	37	24.01	24.33	24.05
		1	74	24.11	23.79	**24.49**
		36	0	23.86	24.23	24.46
		36	19	24.40	23.77	24.20
		36	39	24.11	23.82	24.47
		75	0	23.81	23.84	24.29
BW	MCS Index	Channel		132072	132322	132575
		Frequency (MHz)		1720	1745	1770
20M	256QAM	1	0	23.85	23.85	24.12
		1	50	24.05	23.96	24.28
		1	99	24.28	24.10	24.41
		50	0	23.98	23.75	24.22
		50	25	24.12	24.39	24.08
		50	50	24.25	23.84	**24.43**
		100	0	24.16	24.10	24.19

*EIRP = Conducted + antenna gain (4.27dBi)

ERP Power (dBm)

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	256QAM	1	0	21.51	21.20	21.39
		1	2	21.33	21.55	21.42
		1	5	21.40	**21.73**	21.51
		3	0	21.65	21.65	21.31
		3	1	21.21	21.44	21.63
		3	3	21.38	21.15	21.71
		6	0	21.67	21.22	21.56
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26805	26915	27025
		Frequency (MHz)		825.5	836.5	847.5
3M	256QAM	1	0	**21.89**	21.73	21.69
		1	7	21.74	21.67	21.60
		1	14	21.60	21.16	21.76
		8	0	21.72	21.79	21.73
		8	3	21.18	21.22	21.59
		8	7	21.25	21.51	21.60
		15	0	21.18	21.40	21.68
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26815	26915	27015
		Frequency (MHz)		826.5	836.5	846.5
5M	256QAM	1	0	21.33	21.37	21.76
		1	12	21.23	21.22	21.73
		1	24	21.79	21.49	21.62
		12	0	**21.83**	21.72	21.60
		12	6	21.31	21.24	21.30
		12	13	21.66	21.36	21.28
		25	0	21.33	21.69	21.46

*ERP = Conducted + antenna gain (3.81dBi)-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	256QAM	1	0	21.48	21.23	21.29
		1	24	21.52	21.22	21.37
		1	49	21.64	21.69	21.60
		25	0	21.40	21.76	21.71
		25	12	21.76	21.22	21.22
		25	25	21.48	**21.79**	21.37
		50	0	21.33	21.35	21.48
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26865	26915	26965
		Frequency (MHz)		831.5	836.5	841.5
15M	256QAM	1	0	21.25	21.59	21.54
		1	37	21.36	21.17	21.52
		1	74	**21.82**	21.16	21.61
		36	0	21.75	21.41	21.51
		36	19	21.71	21.49	21.32
		36	39	21.74	21.38	21.38
		75	0	21.74	21.48	21.33

*ERP = Conducted + antenna gain (3.81dBi)-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	256QAM	1	0	21.53	21.34	21.71
		1	2	21.25	21.58	**21.72**
		1	5	21.56	21.59	21.43
		3	0	21.43	21.65	21.38
		3	1	21.65	21.47	21.51
		3	3	21.33	21.69	21.41
		6	0	21.58	21.42	21.44
BW	MCS Index	Channel		26705	26740	26775
		Frequency (MHz)		815.5	819	822.5
3M	256QAM	1	0	21.60	21.42	21.49
		1	7	21.44	21.50	21.26
		1	14	21.56	21.38	21.47
		8	0	21.32	21.25	21.53
		8	3	**21.77**	21.37	21.59
		8	7	21.56	21.43	21.61
		15	0	21.52	21.16	21.50
BW	MCS Index	Channel		26715	26740	26765
		Frequency (MHz)		816.5	819	821.5
5M	256QAM	1	0	21.28	21.42	21.40
		1	12	21.30	21.65	21.65
		1	24	21.48	21.79	21.49
		12	0	21.76	21.24	21.74
		12	6	**21.89**	21.48	21.64
		12	13	21.20	21.73	21.63
		25	0	21.69	21.60	21.71
BW	MCS Index	Channel		26740		
		Frequency (MHz)		819		
10M	256QAM	1	0	**21.67**		
		1	24	21.43		
		1	49	21.58		
		25	0	21.35		
		25	12	21.20		
		25	25	21.21		
		50	0	21.31		

*ERP = Conducted + antenna gain (3.81dBi)-2.15

4.2 Modulation Characteristics Measurement

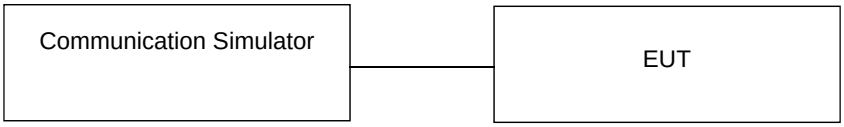
4.2.1 Limits of Modulation Characteristics

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): 2592.99 MHz	
$\pi/2$ BPSK	QPSK
	
16QAM	64QAM
	
256QAM	
	

4.3 Frequency Stability Measurement

4.3.1 Limits of Frequency Stability Measurement

For n41, LTE Band 41, LTE Band 66:
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 2, LTE Band 25, LTE Band 26:
1.5 ppm is for base and fixed station. 2.5 ppm is for mobile station.

4.3.2 Test Procedure

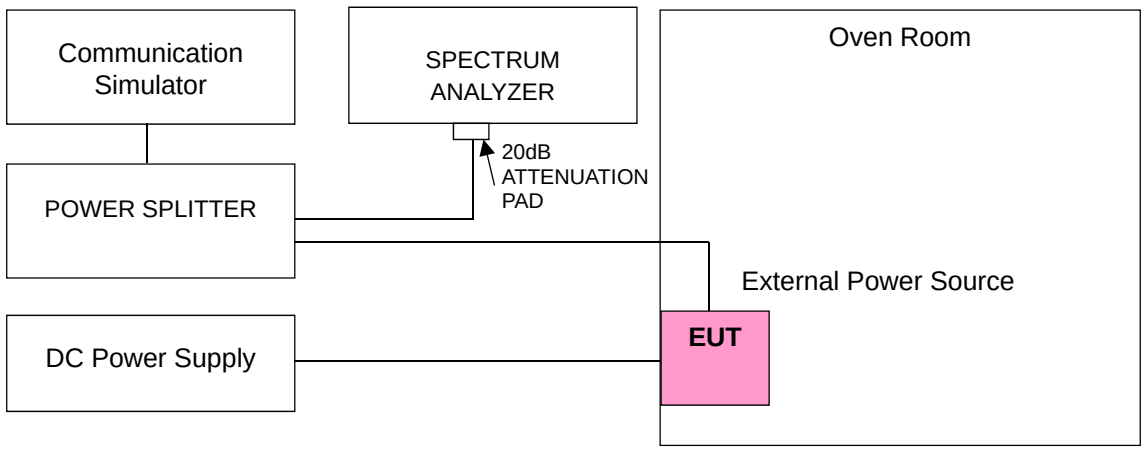
a. Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.

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: 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.25	2506.020003	0.001	2679.990003	0.001
5	2506.020002	0.001	2679.990002	0.001
5.75	2506.020002	0.001	2679.990002	0.001

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

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	2506.020001	0.001	2679.990004	0.001
-20	2506.020002	0.001	2679.990003	0.001
-10	2506.020003	0.001	2679.990002	0.001
0	2506.020003	0.001	2679.990003	0.001
10	2506.020002	0.001	2679.990004	0.001
20	2506.019998	-0.001	2679.989998	-0.001
30	2506.019997	-0.001	2679.989997	-0.001
40	2506.019998	-0.001	2679.989996	-0.001
50	2506.019997	-0.001	2679.989997	-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)
4.25	2516.010002	0.001	2670.000003	0.001
5	2516.010001	0.000	2670.000002	0.001
5.75	2516.010004	0.002	2670.000003	0.001

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

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	2670.000003	0.001
-20	2516.010002	0.001	2670.000001	0.000
-10	2516.010003	0.001	2670.000004	0.001
0	2516.010001	0.000	2670.000001	0.000
10	2516.010002	0.001	2670.000004	0.001
20	2516.009997	-0.001	2669.999998	-0.001
30	2516.009997	-0.001	2669.999998	-0.001
40	2516.009998	-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)
4.25	2521.020004	0.001	2664.990004	0.001
5	2521.020003	0.001	2664.990003	0.001
5.75	2521.020001	0.000	2664.990002	0.001

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

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	2521.020002	0.001	2664.990002	0.001
-20	2521.020003	0.001	2664.990001	0.001
-10	2521.020004	0.001	2664.990004	0.001
0	2521.020004	0.001	2664.990001	0.000
10	2521.020003	0.001	2664.990001	0.000
20	2521.019996	-0.002	2664.989998	-0.001
30	2521.019999	0.000	2664.989998	-0.001
40	2521.019998	-0.001	2664.989999	0.000
50	2521.019998	-0.001	2664.989998	-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)
4.25	2526.000003	0.001	2659.980002	0.001
5	2526.000001	0.001	2659.980002	0.001
5.75	2526.000002	0.001	2659.980004	0.001

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

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	2526.000004	0.001	2659.980003	0.001
-20	2526.000002	0.001	2659.980003	0.001
-10	2526.000002	0.001	2659.980004	0.001
0	2526.000004	0.001	2659.980002	0.001
10	2526.000004	0.002	2659.980002	0.001
20	2525.999998	-0.001	2659.979998	-0.001
30	2525.999997	-0.001	2659.979998	-0.001
40	2525.999999	-0.001	2659.979998	-0.001
50	2525.999999	0.000	2659.979997	-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)
4.25	2536.020003	0.001	2649.990003	0.001
5	2536.020004	0.002	2649.990004	0.001
5.75	2536.020003	0.001	2649.990002	0.001

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

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	2536.020004	0.001	2649.990002	0.001
-20	2536.020003	0.001	2649.990003	0.001
-10	2536.020003	0.001	2649.990003	0.001
0	2536.020002	0.001	2649.990001	0.000
10	2536.020003	0.001	2649.990004	0.001
20	2536.019998	-0.001	2649.989997	-0.001
30	2536.019996	-0.002	2649.989998	-0.001
40	2536.019999	0.000	2649.989998	-0.001
50	2536.019998	-0.001	2649.989999	0.000

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)
4.25	2541.000003	0.001	2644.980004	0.002
5	2541.000003	0.001	2644.980001	0.000
5.75	2541.000001	0.001	2644.980003	0.001

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

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	2541.000003	0.001	2644.980001	0.000
-20	2541.000003	0.001	2644.980003	0.001
-10	2541.000004	0.001	2644.980003	0.001
0	2541.000003	0.001	2644.980003	0.001
10	2541.000002	0.001	2644.980003	0.001
20	2540.999998	-0.001	2644.979998	-0.001
30	2540.999996	-0.002	2644.979999	0.000
40	2540.999997	-0.001	2644.979997	-0.001
50	2540.999998	-0.001	2644.979997	-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)
4.25	2546.010001	0.001	2640.000004	0.001
5	2546.010004	0.001	2640.000003	0.001
5.75	2546.010002	0.001	2640.000004	0.001

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

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	2546.010001	0.000	2640.000003	0.001
-20	2546.010002	0.001	2640.000004	0.001
-10	2546.010002	0.001	2640.000003	0.001
0	2546.010002	0.001	2640.000002	0.001
10	2546.010002	0.001	2640.000002	0.001
20	2546.009997	-0.001	2639.999998	-0.001
30	2546.009997	-0.001	2639.999997	-0.001
40	2546.009998	-0.001	2639.999998	-0.001
50	2546.009997	-0.001	2639.999996	-0.001

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 2			
	Channel Bandwidth: 1.4 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.25	1850.700004	0.002	1909.300000	0.001
5	1850.700003	0.002	1909.300004	0.002
5.75	1850.700002	0.001	1909.300002	0.001

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 2			
	Channel Bandwidth: 1.4 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	1850.700001	0.001	1909.300004	0.002
-20	1850.700004	0.002	1909.300003	0.002
-10	1850.700004	0.002	1909.300003	0.002
0	1850.700002	0.001	1909.300003	0.002
10	1850.700001	0.001	1909.300003	0.002
20	1850.699998	-0.001	1909.299998	-0.001
30	1850.699998	-0.001	1909.299996	-0.002
40	1850.699998	-0.001	1909.299997	-0.002
50	1850.699997	-0.002	1909.299998	-0.001

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 2			
	Channel Bandwidth: 3 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.25	1851.500002	0.001	1908.500004	0.002
5	1851.500003	0.001	1908.500001	0.001
5.75	1851.500002	0.001	1908.500001	0.001

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 2			
	Channel Bandwidth: 3 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	1851.500001	0.001	1908.500003	0.001
-20	1851.500002	0.001	1908.500002	0.001
-10	1851.500002	0.001	1908.500001	0.001
0	1851.500004	0.002	1908.500003	0.001
10	1851.500003	0.001	1908.500003	0.002
20	1851.499999	-0.001	1908.499998	-0.001
30	1851.499997	-0.002	1908.499997	-0.002
40	1851.499996	-0.002	1908.499998	-0.001
50	1851.499997	-0.002	1908.499999	-0.001

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 2			
	Channel Bandwidth: 5 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.25	1852.500003	0.002	1907.500004	0.002
5	1852.500002	0.001	1907.500003	0.001
5.75	1852.500002	0.001	1907.500002	0.001

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 2			
	Channel Bandwidth: 5 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	1852.500003	0.002	1907.500003	0.002
-20	1852.500002	0.001	1907.500001	0.001
-10	1852.500003	0.001	1907.500001	0.001
0	1852.500001	0.001	1907.500004	0.002
10	1852.500004	0.002	1907.500003	0.001
20	1852.499998	-0.001	1907.499997	-0.002
30	1852.499996	-0.002	1907.499998	-0.001
40	1852.499998	-0.001	1907.499997	-0.002
50	1852.499998	-0.001	1907.499998	-0.001

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 2			
	Channel Bandwidth: 10 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.25	1855.000004	0.002	1905.000002	0.001
5	1855.000003	0.002	1905.000003	0.001
5.75	1855.000003	0.002	1905.000002	0.001

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 2			
	Channel Bandwidth: 10 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	1855.000002	0.001	1905.000002	0.001
-20	1855.000002	0.001	1905.000002	0.001
-10	1855.000003	0.002	1905.000004	0.002
0	1855.000001	0.001	1905.000004	0.002
10	1855.000001	0.001	1905.000004	0.002
20	1854.999997	-0.001	1904.999996	-0.002
30	1854.999999	-0.001	1904.999998	-0.001
40	1854.999998	-0.001	1904.999997	-0.001
50	1854.999998	-0.001	1904.999997	-0.002

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 2			
	Channel Bandwidth: 15 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.25	1857.500002	0.001	1902.500003	0.002
5	1857.500002	0.001	1902.500002	0.001
5.75	1857.500002	0.001	1902.500002	0.001

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 2			
	Channel Bandwidth: 15 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	1857.500002	0.001	1902.500003	0.002
-20	1857.500003	0.002	1902.500001	0.001
-10	1857.500002	0.001	1902.500002	0.001
0	1857.500002	0.001	1902.500002	0.001
10	1857.500002	0.001	1902.500003	0.002
20	1857.499998	-0.001	1902.499997	-0.002
30	1857.499999	-0.001	1902.499997	-0.001
40	1857.499996	-0.002	1902.499997	-0.002
50	1857.499998	-0.001	1902.499999	-0.001

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 2			
	Channel Bandwidth: 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.25	1860.000003	0.002	1900.000001	0.001
5	1860.000003	0.001	1900.000004	0.002
5.75	1860.000002	0.001	1900.000002	0.001

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 2			
	Channel Bandwidth: 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	1860.000004	0.002	1900.000003	0.001
-20	1860.000002	0.001	1900.000003	0.001
-10	1860.000002	0.001	1900.000003	0.002
0	1860.000003	0.002	1900.000004	0.002
10	1860.000002	0.001	1900.000001	0.001
20	1859.999998	-0.001	1899.999997	-0.002
30	1859.999997	-0.002	1899.999998	-0.001
40	1859.999997	-0.002	1899.999998	-0.001
50	1859.999996	-0.002	1899.999998	-0.001

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 25			
	Channel Bandwidth: 1.4 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.25	1850.700003	0.001	1914.300002	0.001
5	1850.700002	0.001	1914.300002	0.001
5.75	1850.700001	0.001	1914.300002	0.001

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 25			
	Channel Bandwidth: 1.4 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	1850.700003	0.002	1914.300002	0.001
-20	1850.700003	0.001	1914.300004	0.002
-10	1850.700003	0.002	1914.300004	0.002
0	1850.700003	0.001	1914.300002	0.001
10	1850.700002	0.001	1914.300001	0.001
20	1850.699998	-0.001	1914.299998	-0.001
30	1850.699999	-0.001	1914.299996	-0.002
40	1850.699997	-0.002	1914.299998	-0.001
50	1850.699999	-0.001	1914.299997	-0.001

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 25			
	Channel Bandwidth: 3 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.25	1851.500002	0.001	1913.500004	0.002
5	1851.500003	0.002	1913.500002	0.001
5.75	1851.500002	0.001	1913.500003	0.002

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 25			
	Channel Bandwidth: 3 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	1851.500003	0.002	1913.500002	0.001
-20	1851.500003	0.002	1913.500003	0.002
-10	1851.500001	0.001	1913.500001	0.001
0	1851.500003	0.002	1913.500002	0.001
10	1851.500001	0.001	1913.500001	0.001
20	1851.499997	-0.001	1913.499999	-0.001
30	1851.499997	-0.002	1913.499999	-0.001
40	1851.499997	-0.002	1913.499997	-0.002
50	1851.499996	-0.002	1913.499998	-0.001

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 25			
	Channel Bandwidth: 5 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.25	1852.500003	0.001	1912.500001	0.001
5	1852.500002	0.001	1912.500003	0.001
5.75	1852.500004	0.002	1912.500004	0.002

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 25			
	Channel Bandwidth: 5 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	1852.500004	0.002	1912.500001	0.001
-20	1852.500003	0.002	1912.500002	0.001
-10	1852.500003	0.002	1912.500002	0.001
0	1852.500002	0.001	1912.500004	0.002
10	1852.500003	0.002	1912.500003	0.002
20	1852.499999	-0.001	1912.499997	-0.001
30	1852.499998	-0.001	1912.499999	-0.001
40	1852.499999	-0.001	1912.499998	-0.001
50	1852.499998	-0.001	1912.499999	-0.001

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 25			
	Channel Bandwidth: 10 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.25	1855.000002	0.001	1910.000002	0.001
5	1855.000004	0.002	1910.000003	0.001
5.75	1855.000001	0.001	1910.000001	0.001

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 25			
	Channel Bandwidth: 10 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	1855.000003	0.002	1910.000003	0.001
-20	1855.000002	0.001	1910.000003	0.002
-10	1855.000001	0.001	1910.000003	0.002
0	1855.000001	0.001	1910.000002	0.001
10	1855.000002	0.001	1910.000003	0.002
20	1854.999997	-0.001	1909.999998	-0.001
30	1854.999998	-0.001	1909.999997	-0.001
40	1854.999996	-0.002	1909.999998	-0.001
50	1854.999998	-0.001	1909.999999	-0.001

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 25			
	Channel Bandwidth: 15 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.25	1857.500003	0.002	1907.500002	0.001
5	1857.500003	0.002	1907.500001	0.001
5.75	1857.500002	0.001	1907.500002	0.001

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 25			
	Channel Bandwidth: 15 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	1857.500004	0.002	1907.500003	0.002
-20	1857.500003	0.002	1907.500002	0.001
-10	1857.500002	0.001	1907.500003	0.001
0	1857.500004	0.002	1907.500003	0.001
10	1857.500001	0.001	1907.500003	0.002
20	1857.499998	-0.001	1907.499998	-0.001
30	1857.499997	-0.002	1907.499996	-0.002
40	1857.499996	-0.002	1907.499997	-0.002
50	1857.499996	-0.002	1907.499998	-0.001

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 25			
	Channel Bandwidth: 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.25	1860.000003	0.001	1905.000001	0.001
5	1860.000002	0.001	1905.000004	0.002
5.75	1860.000004	0.002	1905.000004	0.002

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 25			
	Channel Bandwidth: 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	1860.000004	0.002	1905.000002	0.001
-20	1860.000002	0.001	1905.000002	0.001
-10	1860.000002	0.001	1905.000002	0.001
0	1860.000002	0.001	1905.000004	0.002
10	1860.000003	0.002	1905.000002	0.001
20	1859.999996	-0.002	1904.999997	-0.002
30	1859.999998	-0.001	1904.999997	-0.001
40	1859.999997	-0.002	1904.999997	-0.002
50	1859.999997	-0.002	1904.999996	-0.002

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)
4.25	824.700004	0.004	848.300004	0.005
5	824.700004	0.005	848.300001	0.001
5.75	824.700004	0.005	848.300001	0.001

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

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	824.700002	0.002	848.300001	0.001
-20	824.700003	0.004	848.300004	0.004
-10	824.700002	0.002	848.300003	0.004
0	824.700003	0.003	848.300003	0.004
10	824.700002	0.003	848.300004	0.004
20	824.699999	-0.002	848.299996	-0.004
30	824.699998	-0.002	848.299997	-0.003
40	824.699997	-0.004	848.299997	-0.003
50	824.699997	-0.004	848.299997	-0.004

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)
4.25	825.500004	0.005	847.500003	0.003
5	825.500002	0.003	847.500001	0.001
5.75	825.500004	0.005	847.500002	0.002

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

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	0.004	847.500004	0.004
-20	825.500002	0.003	847.500002	0.002
-10	825.500003	0.004	847.500002	0.002
0	825.500002	0.002	847.500003	0.003
10	825.500004	0.004	847.500001	0.001
20	825.499997	-0.003	847.499997	-0.003
30	825.499996	-0.005	847.499997	-0.004
40	825.499999	-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)
4.25	826.500001	0.001	846.500004	0.005
5	826.500002	0.002	846.500004	0.004
5.75	826.500002	0.002	846.500003	0.004

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

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	826.500002	0.003	846.500004	0.004
-20	826.500003	0.004	846.500004	0.004
-10	826.500004	0.004	846.500003	0.004
0	826.500003	0.003	846.500004	0.004
10	826.500001	0.001	846.500002	0.002
20	826.499997	-0.004	846.499997	-0.004
30	826.499999	-0.001	846.499997	-0.004
40	826.499997	-0.003	846.499997	-0.004
50	826.499997	-0.003	846.499998	-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)
4.25	829.000004	0.005	844.000004	0.004
5	829.000003	0.003	844.000003	0.003
5.75	829.000003	0.003	844.000003	0.003

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

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	829.000004	0.004	844.000002	0.002
-20	829.000003	0.004	844.000001	0.002
-10	829.000004	0.004	844.000002	0.003
0	829.000001	0.002	844.000003	0.003
10	829.000003	0.003	844.000004	0.004
20	828.999998	-0.003	843.999999	-0.001
30	828.999999	-0.001	843.999997	-0.004
40	828.999997	-0.003	843.999998	-0.002
50	828.999999	-0.001	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)
4.25	831.500002	0.003	841.500003	0.003
5	831.500002	0.002	841.500001	0.001
5.75	831.500003	0.004	841.500002	0.002

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

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	831.500002	0.002	841.500001	0.001
-20	831.500004	0.005	841.500001	0.002
-10	831.500002	0.002	841.500002	0.002
0	831.500001	0.001	841.500003	0.004
10	831.500001	0.001	841.500002	0.002
20	831.499998	-0.003	841.499998	-0.003
30	831.499998	-0.002	841.499998	-0.003
40	831.499997	-0.003	841.499999	-0.001
50	831.499999	-0.002	841.499999	-0.001

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)
4.25	814.700004	0.004	823.300001	0.001
5	814.700002	0.003	823.300002	0.002
5.75	814.700003	0.003	823.300002	0.003

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

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	814.700001	0.002	823.300004	0.004
-20	814.700002	0.003	823.300004	0.004
-10	814.700002	0.003	823.300002	0.002
0	814.700001	0.002	823.300002	0.003
10	814.700002	0.002	823.300002	0.002
20	814.699998	-0.003	823.299997	-0.003
30	814.699997	-0.004	823.299997	-0.004
40	814.699998	-0.002	823.299998	-0.002
50	814.699996	-0.004	823.299996	-0.005

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)
4.25	815.500001	0.001	822.500002	0.002
5	815.500001	0.001	822.500001	0.002
5.75	815.500003	0.004	822.500001	0.002

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

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	815.500004	0.005	822.500003	0.003
-20	815.500002	0.002	822.500002	0.002
-10	815.500002	0.003	822.500004	0.004
0	815.500002	0.003	822.500004	0.005
10	815.500002	0.003	822.500003	0.003
20	815.499998	-0.003	822.499998	-0.002
30	815.499999	-0.001	822.499998	-0.003
40	815.499998	-0.003	822.499998	-0.002
50	815.499997	-0.004	822.499997	-0.003

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)
4.25	816.500001	0.002	821.500004	0.005
5	816.500002	0.003	821.500004	0.004
5.75	816.500004	0.005	821.500003	0.004

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

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	816.500004	0.005	821.500004	0.005
-20	816.500002	0.002	821.500002	0.002
-10	816.500001	0.001	821.500003	0.004
0	816.500003	0.004	821.500002	0.002
10	816.500003	0.004	821.500003	0.004
20	816.499997	-0.004	821.499997	-0.003
30	816.499997	-0.003	821.499998	-0.002
40	816.499996	-0.004	821.499997	-0.004
50	816.499998	-0.003	821.499998	-0.003

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 26 (Part 90)	
	Channel Bandwidth: 10 MHz	
	Frequency (MHz)	Frequency Error (ppm)
4.25	819.000004	0.004
5	819.000002	0.002
5.75	819.000002	0.002

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 26 (Part 90)	
	Channel Bandwidth: 10 MHz	
	Frequency (MHz)	Frequency Error (ppm)
-30	819.000004	0.004
-20	819.000003	0.003
-10	819.000001	0.001
0	819.000004	0.005
10	819.000003	0.004
20	818.999997	-0.004
30	818.999999	-0.001
40	818.999999	-0.001
50	818.999997	-0.004

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 41			
	Channel Bandwidth: 5 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.25	2498.500003	0.001	2687.500001	0.001
5	2498.500003	0.001	2687.500002	0.001
5.75	2498.500004	0.002	2687.500004	0.001

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 41			
	Channel Bandwidth: 5 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2498.500003	0.001	2687.500004	0.001
-20	2498.500003	0.001	2687.500004	0.001
-10	2498.500002	0.001	2687.500002	0.001
0	2498.500003	0.001	2687.500004	0.001
10	2498.500003	0.001	2687.500002	0.001
20	2498.499996	-0.002	2687.499998	-0.001
30	2498.499996	-0.002	2687.499997	-0.001
40	2498.499996	-0.002	2687.499998	-0.001
50	2498.499999	0.000	2687.499997	-0.001

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 41			
	Channel Bandwidth: 10 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.25	2501.000002	0.001	2685.000004	0.001
5	2501.000001	0.000	2685.000004	0.001
5.75	2501.000001	0.001	2685.000002	0.001

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 41			
	Channel Bandwidth: 10 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2501.000002	0.001	2685.000004	0.001
-20	2501.000003	0.001	2685.000004	0.001
-10	2501.000004	0.002	2685.000003	0.001
0	2501.000003	0.001	2685.000004	0.001
10	2501.000001	0.000	2685.000003	0.001
20	2500.999998	-0.001	2684.999997	-0.001
30	2500.999999	-0.001	2684.999998	-0.001
40	2500.999998	-0.001	2684.999997	-0.001
50	2500.999997	-0.001	2684.999998	-0.001

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 41			
	Channel Bandwidth: 15 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.25	2503.500003	0.001	2682.500004	0.001
5	2503.500002	0.001	2682.500003	0.001
5.75	2503.500004	0.002	2682.500001	0.000

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 41			
	Channel Bandwidth: 15 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2503.500003	0.001	2682.500004	0.001
-20	2503.500003	0.001	2682.500004	0.001
-10	2503.500004	0.001	2682.500002	0.001
0	2503.500002	0.001	2682.500002	0.001
10	2503.500002	0.001	2682.500003	0.001
20	2503.499999	-0.001	2682.499997	-0.001
30	2503.499997	-0.001	2682.499996	-0.001
40	2503.499999	-0.001	2682.499998	-0.001
50	2503.499999	-0.001	2682.499998	-0.001

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 41			
	Channel Bandwidth: 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.25	2506.000002	0.001	2680.000003	0.001
5	2506.000004	0.001	2680.000004	0.001
5.75	2506.000001	0.000	2680.000001	0.000

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 41			
	Channel Bandwidth: 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2506.000003	0.001	2680.000002	0.001
-20	2506.000004	0.001	2680.000003	0.001
-10	2506.000004	0.002	2680.000001	0.000
0	2506.000002	0.001	2680.000001	0.000
10	2506.000004	0.001	2680.000003	0.001
20	2505.999998	-0.001	2679.999999	-0.001
30	2505.999997	-0.001	2679.999998	-0.001
40	2505.999997	-0.001	2679.999998	-0.001
50	2505.999998	-0.001	2679.999998	-0.001

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 66			
	Channel Bandwidth: 1.4 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.25	1710.700003	0.002	1779.300004	0.002
5	1710.700004	0.002	1779.300003	0.002
5.75	1710.700002	0.001	1779.300003	0.002

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 66			
	Channel Bandwidth: 1.4 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	1710.700002	0.001	1779.300001	0.001
-20	1710.700003	0.002	1779.300001	0.001
-10	1710.700002	0.001	1779.300002	0.001
0	1710.700001	0.001	1779.300003	0.002
10	1710.700004	0.002	1779.300003	0.001
20	1710.699999	-0.001	1779.299999	-0.001
30	1710.699999	-0.001	1779.299997	-0.002
40	1710.699998	-0.001	1779.299997	-0.002
50	1710.699996	-0.002	1779.299999	-0.001

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 66			
	Channel Bandwidth: 3 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.25	1711.500003	0.002	1778.500002	0.001
5	1711.500003	0.002	1778.500003	0.002
5.75	1711.500004	0.002	1778.500003	0.001

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 66			
	Channel Bandwidth: 3 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	1711.500001	0.001	1778.500002	0.001
-20	1711.500002	0.001	1778.500003	0.002
-10	1711.500003	0.002	1778.500004	0.002
0	1711.500003	0.002	1778.500001	0.001
10	1711.500004	0.002	1778.500003	0.001
20	1711.499996	-0.002	1778.499999	-0.001
30	1711.499997	-0.002	1778.499997	-0.001
40	1711.499998	-0.001	1778.499997	-0.002
50	1711.499997	-0.002	1778.499998	-0.001

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 66			
	Channel Bandwidth: 5 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.25	1712.500001	0.001	1777.500001	0.001
5	1712.500003	0.002	1777.500002	0.001
5.75	1712.500002	0.001	1777.500003	0.002

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 66			
	Channel Bandwidth: 5 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	1712.500002	0.001	1777.500003	0.002
-20	1712.500004	0.002	1777.500001	0.001
-10	1712.500004	0.002	1777.500004	0.002
0	1712.500002	0.001	1777.500002	0.001
10	1712.500001	0.001	1777.500003	0.002
20	1712.499997	-0.002	1777.499997	-0.002
30	1712.499999	-0.001	1777.499999	-0.001
40	1712.499997	-0.002	1777.499997	-0.002
50	1712.499996	-0.002	1777.499997	-0.002

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 66			
	Channel Bandwidth: 10 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.25	1715.000002	0.001	1775.000003	0.002
5	1715.000003	0.002	1775.000001	0.001
5.75	1715.000003	0.002	1775.000002	0.001

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 66			
	Channel Bandwidth: 10 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	1715.000003	0.002	1775.000004	0.002
-20	1715.000004	0.002	1775.000001	0.001
-10	1715.000002	0.001	1775.000002	0.001
0	1715.000002	0.001	1775.000002	0.001
10	1715.000003	0.002	1775.000004	0.002
20	1714.999997	-0.002	1774.999998	-0.001
30	1714.999997	-0.002	1774.999997	-0.002
40	1714.999999	-0.001	1774.999996	-0.002
50	1714.999999	-0.001	1774.999998	-0.001

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 66			
	Channel Bandwidth: 15 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.25	1717.500004	0.002	1772.500002	0.001
5	1717.500003	0.002	1772.500002	0.001
5.75	1717.500002	0.001	1772.500002	0.001

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 66			
	Channel Bandwidth: 15 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	1717.500003	0.002	1772.500002	0.001
-20	1717.500002	0.001	1772.500003	0.002
-10	1717.500001	0.001	1772.500003	0.001
0	1717.500004	0.002	1772.500004	0.002
10	1717.500001	0.001	1772.500004	0.002
20	1717.499998	-0.001	1772.499997	-0.002
30	1717.499999	-0.001	1772.499996	-0.002
40	1717.499996	-0.002	1772.499996	-0.002
50	1717.499996	-0.002	1772.499999	-0.001

Frequency Error vs. Voltage

Voltage (Volts)	LTE Band 66			
	Channel Bandwidth: 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
4.25	1720.000004	0.002	1770.000003	0.002
5	1720.000004	0.002	1770.000002	0.001
5.75	1720.000003	0.002	1770.000004	0.002

Note: The applicant defined the normal working voltage is from 4.25Vdc to 5.75Vdc.

Frequency Error vs. Temperature

Temp. (℃)	LTE Band 66			
	Channel Bandwidth: 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	1720.000004	0.002	1770.000002	0.001
-20	1720.000003	0.002	1770.000002	0.001
-10	1720.000001	0.001	1770.000003	0.001
0	1720.000001	0.001	1770.000004	0.002
10	1720.000001	0.001	1770.000004	0.002
20	1719.999996	-0.002	1769.999999	-0.001
30	1719.999997	-0.002	1769.999997	-0.002
40	1719.999997	-0.002	1769.999998	-0.001
50	1719.999998	-0.001	1769.999998	-0.001

4.4 Occupied Bandwidth Measurement

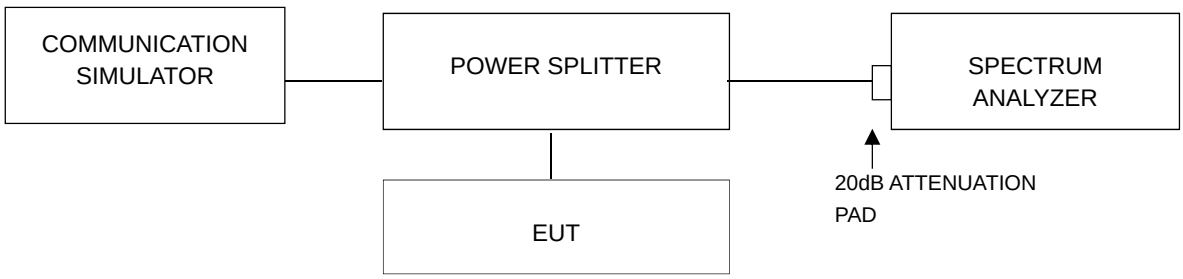
4.4.1 Limits of Occupied Bandwidth Measurement

The occupied bandwidth (OBW), that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 % of the total mean power radiated by a given emission.

4.4.2 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with RBW = 100kHz and VBW = 300kHz (Channel Bandwidth: 5MHz), RBW = 200kHz and VBW = 1MHz (Channel Bandwidth: 10MHz), RBW = 300kHz and VBW = 1MHz (Channel Bandwidth: 15MHz) and RBW = 430kHz and VBW = 1.3MHz (Channel Bandwidth: 20MHz). The 26dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 26dB.

4.4.3 Test Setup



4.4.4 Test Result

Occupied Bandwidth

n41

n41, Channel Bandwidth 20MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
501204	2506.02	17.95	17.75	17.81	17.82	18.19
518598	2592.99	18.00	17.80	17.84	17.78	18.03
535998	2679.99	18.03	17.83	17.83	17.83	18.03
n41, Channel Bandwidth 40MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
503202	2516.01	37.29	37.70	37.70	37.67	37.79
518598	2592.99	37.44	37.81	37.81	37.80	37.81
534000	2670.00	37.47	37.82	37.81	37.80	37.47
n41, Channel Bandwidth 50MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
504204	2521.02	46.88	47.44	47.44	47.45	47.44
518598	2592.99	47.02	47.48	47.48	47.49	47.07
532998	2664.99	47.09	47.47	47.46	47.47	47.08
n41, Channel Bandwidth 60MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
505200	2526.00	57.70	57.57	57.57	57.57	57.70
518598	2592.99	57.86	57.87	57.86	57.87	57.88
531996	2659.98	57.84	57.73	57.72	57.71	57.87
n41, Channel Bandwidth 80MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
507204	2536.02	76.94	77.21	77.25	77.13	77.24
518598	2592.99	77.22	77.50	77.52	77.45	77.49
529998	2649.99	77.14	77.28	77.32	77.21	77.27

n41, Channel Bandwidth 90MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
508200	2541.00	86.77	87.18	87.18	87.18	87.21
518598	2592.99	86.88	87.51	87.50	87.53	86.88
528996	2644.98	86.87	87.21	87.21	87.19	87.25
n41, Channel Bandwidth 100MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
509202	2546.01	96.45	96.03	96.06	96.07	97.29
518598	2592.99	96.55	97.39	97.41	97.33	97.36
528000	2640.00	96.53	97.09	97.14	97.05	96.50

Spectrum Plot of Worst Value	
20MHz / 256QAM	40MHz / QPSK
	
50MHz / 64QAM	60MHz / 256QAM
	
80MHz / 16QAM	90MHz / 64QAM
	
100MHz / 16QAM	
	

LTE Band 2

LTE Band 2, Channel Bandwidth 1.4MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
18607	1850.7	1.09
18900	1880.0	1.08
19193	1909.3	1.08
LTE Band 2, Channel Bandwidth 3MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
18615	1851.5	2.70
18900	1880.0	2.70
19185	1908.5	2.70
LTE Band 2, Channel Bandwidth 5MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
18625	1852.5	4.48
18900	1880.0	4.48
19175	1907.5	4.48
LTE Band 2, Channel Bandwidth 10MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
18650	1855.0	8.95
18900	1880.0	8.96
19150	1905.0	8.96
LTE Band 2, Channel Bandwidth 15MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
18675	1857.5	13.43
18900	1880.0	13.44
19125	1902.5	13.47

LTE Band 2, Channel Bandwidth 20MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
18700	1860.0	17.91
18900	1880.0	17.94
19100	1900.0	17.99

Spectrum Plot of Worst Value	
1.4MHz / 256QAM	3MHz / 256QAM
	
5MHz / 256QAM	10MHz / 256QAM
	
15MHz / 256QAM	20MHz / 256QAM
	

LTE Band 25

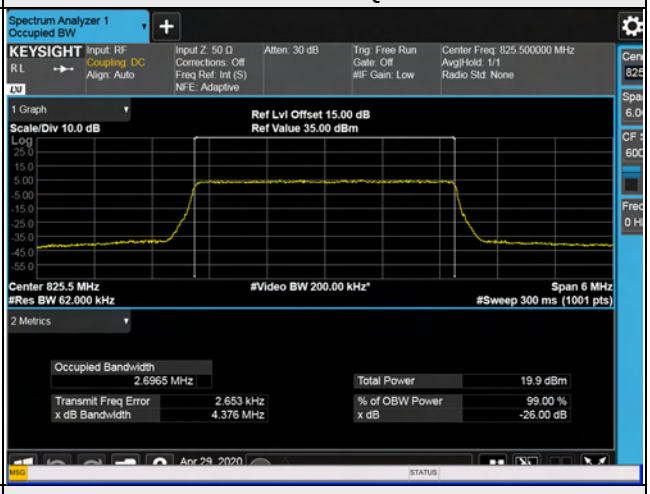
LTE Band 25, Channel Bandwidth 1.4MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
26047	1850.7	1.09
26365	1882.5	1.09
26683	1914.3	1.09
LTE Band 25, Channel Bandwidth 3MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
26055	1851.5	2.70
26365	1882.5	2.69
26675	1913.5	2.69
LTE Band 25, Channel Bandwidth 5MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
26065	1852.5	4.49
26365	1882.5	4.48
26665	1912.5	4.48
LTE Band 25, Channel Bandwidth 10MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
26090	1855.0	8.95
26365	1882.5	8.95
26640	1910.0	8.94
LTE Band 25, Channel Bandwidth 15MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
26115	1857.5	13.42
26365	1882.5	13.43
26615	1907.5	13.43

LTE Band 25, Channel Bandwidth 20MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
26140	1860.0	17.91
26365	1882.5	17.92
26590	1905.0	17.94

Spectrum Plot of Worst Value	
1.4MHz / 256QAM	3MHz / 256QAM
	
5MHz / 256QAM	10MHz / 256QAM
	
15MHz / 256QAM	20MHz / 256QAM
	

LTE Band 26 (Part 22)

LTE Band 26 (Part 22), Channel Bandwidth 1.4MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
26797	824.7	1.08
26915	836.5	1.08
27033	848.3	1.09
LTE Band 26 (Part 22), Channel Bandwidth 3MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
26805	825.5	2.70
26915	836.5	2.69
27025	847.5	2.69
LTE Band 26 (Part 22), Channel Bandwidth 5MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
26815	826.5	4.49
26915	836.5	4.49
27015	846.5	4.48
LTE Band 26 (Part 22), Channel Bandwidth 10MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
26840	829.0	8.95
26915	836.5	8.96
26990	844.0	8.94
LTE Band 26 (Part 22), Channel Bandwidth 15MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
26865	831.5	13.42
26915	836.5	13.44
26965	841.5	13.42

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

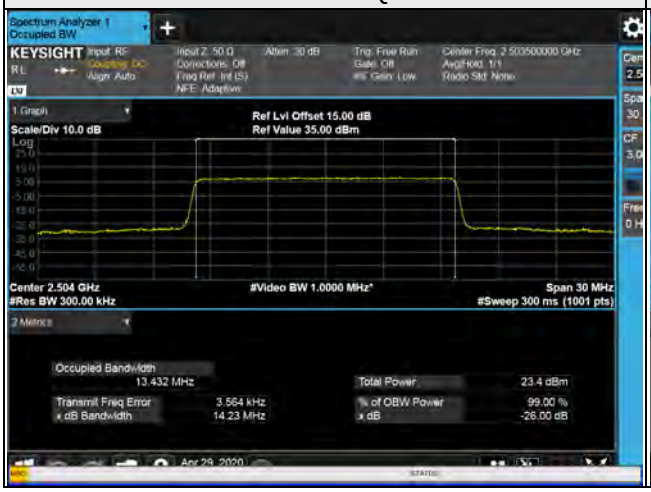
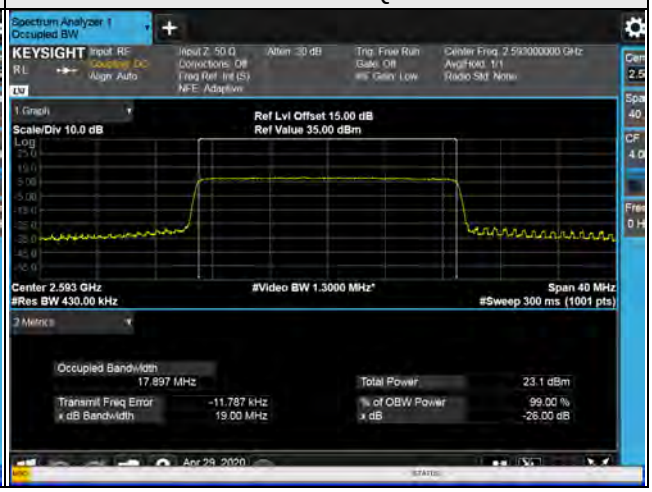
LTE Band 26 (Part 90)

LTE Band 26 (Part 90), Channel Bandwidth 1.4MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
26697	814.7	1.08
26740	819.0	1.08
26783	823.3	1.08
LTE Band 26 (Part 90), Channel Bandwidth 3MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
26705	815.5	2.69
26740	819.0	2.69
26775	822.5	2.69
LTE Band 26 (Part 90), Channel Bandwidth 5MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
26715	816.5	4.48
26740	819.0	4.48
26765	821.5	4.48
LTE Band 26 (Part 90), Channel Bandwidth 10MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
26740	819.0	8.95

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

LTE Band 41

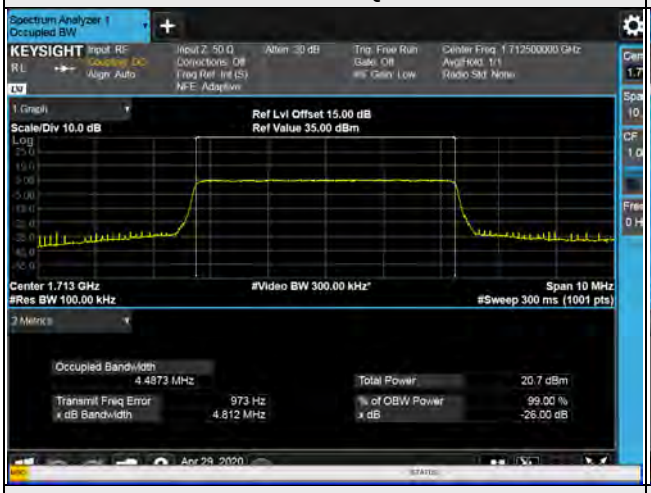
LTE Band 41, Channel Bandwidth 5MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
39675	2498.5	4.48
40620	2593	4.47
41565	2687.5	4.47
LTE Band 41, Channel Bandwidth 10MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
39700	2501	8.96
40620	2593	8.94
41540	2685	8.95
LTE Band 41, Channel Bandwidth 15MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
39725	2503.5	13.43
40620	2593	13.42
41515	2682.5	13.42
LTE Band 41, Channel Bandwidth 20MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
39750	2506	17.89
40620	2593	17.90
41490	2680	17.89

Spectrum Plot of Worst Value	
5MHz / 256QAM	10MHz / 256QAM
	
15MHz / 256QAM	20MHz / 256QAM
	

LTE Band 66

LTE Band 66, Channel Bandwidth 1.4MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
131979	1710.7	1.08
132322	1745.0	1.09
132665	1779.3	1.08
LTE Band 66, Channel Bandwidth 3MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
131987	1711.5	2.70
132322	1745.0	2.69
132657	1778.5	2.70
LTE Band 66, Channel Bandwidth 5MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
131997	1712.5	4.49
132322	1745.0	4.48
132647	1777.5	4.48
LTE Band 66, Channel Bandwidth 10MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
132022	1715.0	8.96
132322	1745.0	8.96
132622	1775.0	8.97
LTE Band 66, Channel Bandwidth 15MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
132047	1717.5	13.45
132322	1745.0	13.47
132597	1772.5	13.49

LTE Band 66, Channel Bandwidth 20MHz		
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)
		256QAM
132072	1720.0	17.92
132322	1745.0	17.99
132572	1770.0	17.99

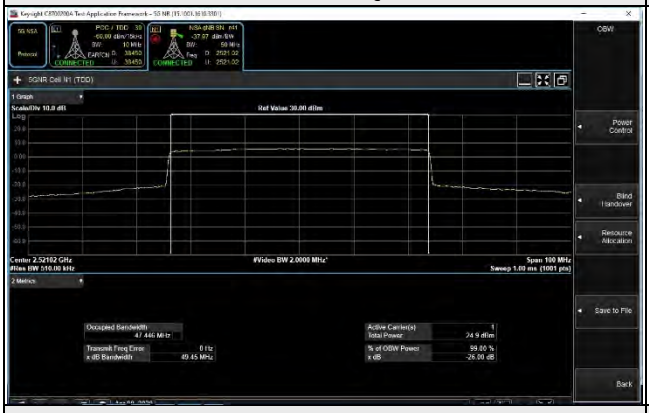
Spectrum Plot of Worst Value	
1.4MHz / 256QAM	3MHz / 256QAM
	
5MHz / 256QAM	10MHz / 256QAM
	
15MHz / 256QAM	20MHz / 256QAM
	

26dB Bandwidth

n41

n41, Channel Bandwidth 20MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
501204	2506.02	18.56	18.51	18.51	18.51	18.97
518598	2592.99	18.68	18.49	18.47	18.49	18.57
535998	2679.99	18.58	18.47	18.47	18.46	18.59
n41, Channel Bandwidth 40MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
503202	2516.01	37.06	39.17	39.15	39.17	39.16
518598	2592.99	37.03	39.25	39.21	39.24	39.18
534000	2670.00	37.04	39.20	39.22	39.21	37.03
n41, Channel Bandwidth 50MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
504204	2521.02	47.29	49.42	49.45	49.38	49.10
518598	2592.99	47.35	49.20	49.19	49.19	47.33
532998	2664.99	47.33	49.14	49.11	49.15	47.34
n41, Channel Bandwidth 60MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
505200	2526.00	59.79	59.75	59.75	59.76	59.74
518598	2592.99	59.80	60.16	60.14	60.12	59.80
531996	2659.98	59.78	59.83	59.81	59.83	59.78
n41, Channel Bandwidth 80MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
507204	2536.02	79.64	80.05	80.06	80.00	79.98
518598	2592.99	79.72	80.28	80.38	80.28	80.03
529998	2649.99	79.65	80.03	80.04	80.02	79.98

n41, Channel Bandwidth 90MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
508200	2541.00	131.10	90.43	90.40	90.39	90.27
518598	2592.99	89.79	92.31	90.91	91.03	89.68
528996	2644.98	89.73	90.37	90.37	90.29	90.29
n41, Channel Bandwidth 100MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
509202	2546.01	99.61	99.41	99.44	99.43	100.60
518598	2592.99	99.65	100.60	100.60	100.60	100.60
528000	2640.00	99.62	100.50	100.50	100.40	99.47

Spectrum Plot of Worst Value	
20MHz / 256QAM	40MHz / QPSK
	
50MHz / 16QAM	60MHz / QPSK
	
80MHz / 16QAM	90MHz / $\pi/2$ BPSK
	
100MHz / QPSK	
	

LTE Band 2

LTE Band 2, Channel Bandwidth 1.4MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
18607	1850.7	1.21
18900	1880.0	1.21
19193	1909.3	1.21
LTE Band 2, Channel Bandwidth 3MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
18615	1851.5	2.92
18900	1880.0	2.92
19185	1908.5	2.91
LTE Band 2, Channel Bandwidth 5MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
18625	1852.5	4.82
18900	1880.0	4.80
19175	1907.5	4.80
LTE Band 2, Channel Bandwidth 10MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
18650	1855.0	9.50
18900	1880.0	9.51
19150	1905.0	9.50
LTE Band 2, Channel Bandwidth 15MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
18675	1857.5	14.23
18900	1880.0	14.22
19125	1902.5	14.25

LTE Band 2, Channel Bandwidth 20MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
18700	1860.0	19.00
18900	1880.0	19.01
19100	1900.0	19.10

Spectrum Plot of Worst Value	
1.4MHz / 256QAM	3MHz / 256QAM
	
5MHz / 256QAM	10MHz / 256QAM
	
15MHz / 256QAM	20MHz / 256QAM
	

LTE Band 25

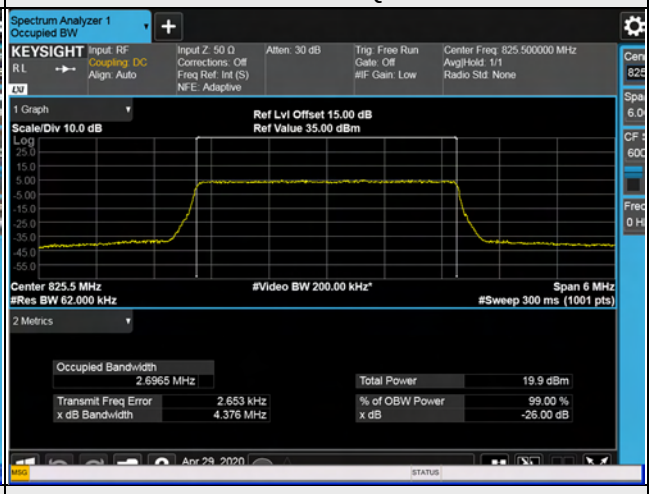
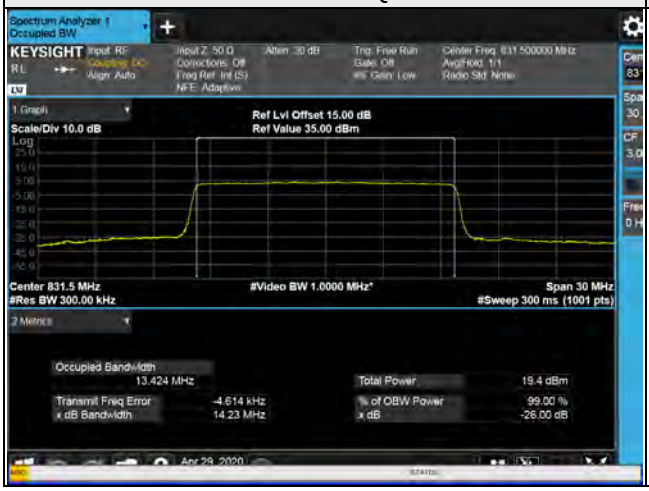
LTE Band 25, Channel Bandwidth 1.4MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
26047	1850.7	1.21
26365	1882.5	1.20
26683	1914.3	1.21
LTE Band 25, Channel Bandwidth 3MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
26055	1851.5	2.92
26365	1882.5	2.90
26675	1913.5	2.92
LTE Band 25, Channel Bandwidth 5MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
26065	1852.5	4.81
26365	1882.5	4.75
26665	1912.5	4.79
LTE Band 25, Channel Bandwidth 10MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
26090	1855.0	9.50
26365	1882.5	9.48
26640	1910.0	9.48
LTE Band 25, Channel Bandwidth 15MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
26115	1857.5	14.24
26365	1882.5	14.22
26615	1907.5	14.21

LTE Band 25, Channel Bandwidth 20MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
26140	1860.0	23.58
26365	1882.5	18.99
26590	1905.0	19.01

Spectrum Plot of Worst Value	
1.4MHz / 256QAM	3MHz / 256QAM
	
5MHz / 256QAM	10MHz / 256QAM
	
15MHz / 256QAM	20MHz / 256QAM
	

LTE Band 26 (Part 22)

LTE Band 26 (Part 22), Channel Bandwidth 1.4MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
26797	824.7	1.20
26915	836.5	1.20
27033	848.3	1.20
LTE Band 26 (Part 22), Channel Bandwidth 3MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
26805	825.5	4.38
26915	836.5	2.89
27025	847.5	2.91
LTE Band 26 (Part 22), Channel Bandwidth 5MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
26815	826.5	4.81
26915	836.5	4.80
27015	846.5	4.78
LTE Band 26 (Part 22), Channel Bandwidth 10MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
26840	829.0	9.50
26915	836.5	9.51
26990	844.0	9.47
LTE Band 26 (Part 22), Channel Bandwidth 15MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
26865	831.5	14.23
26915	836.5	14.21
26965	841.5	14.22

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

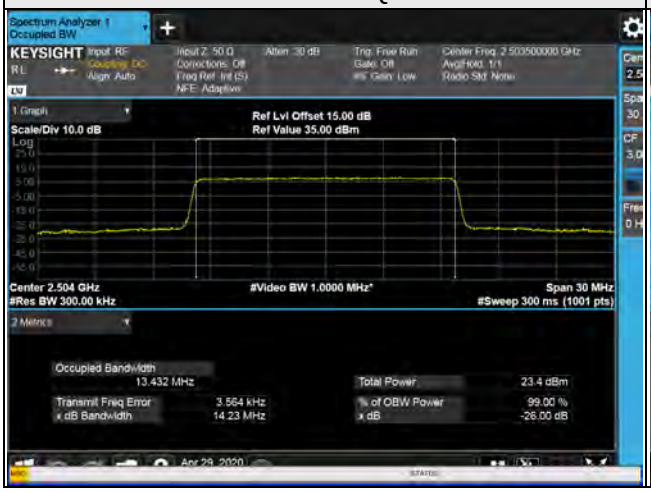
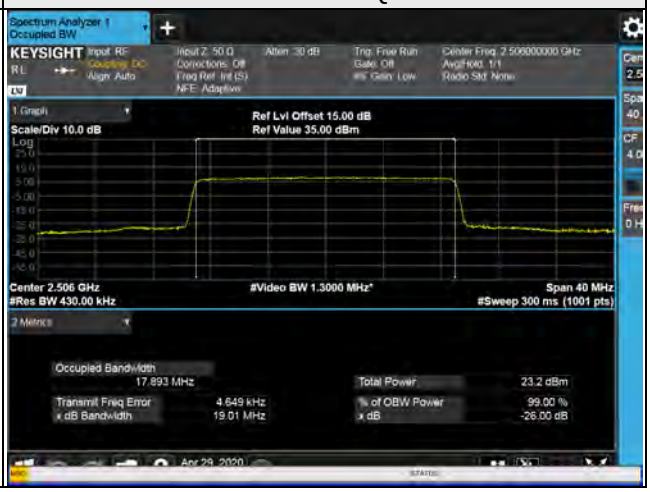
LTE Band 26 (Part 90)

LTE Band 26 (Part 90), Channel Bandwidth 1.4MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
26697	814.7	1.21
26740	819.0	1.20
26783	823.3	1.20
LTE Band 26 (Part 90), Channel Bandwidth 3MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
26705	815.5	2.91
26740	819.0	2.89
26775	822.5	2.89
LTE Band 26 (Part 90), Channel Bandwidth 5MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
26715	816.5	4.80
26740	819.0	4.79
26765	821.5	4.78
LTE Band 26 (Part 90), Channel Bandwidth 10MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
26740	819.0	9.49

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

LTE Band 41

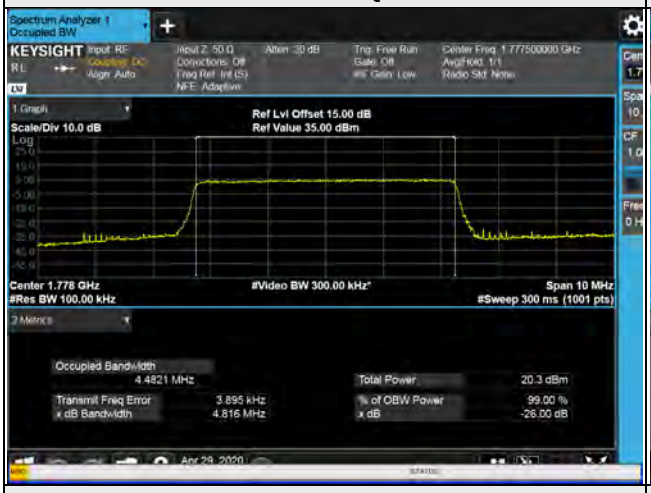
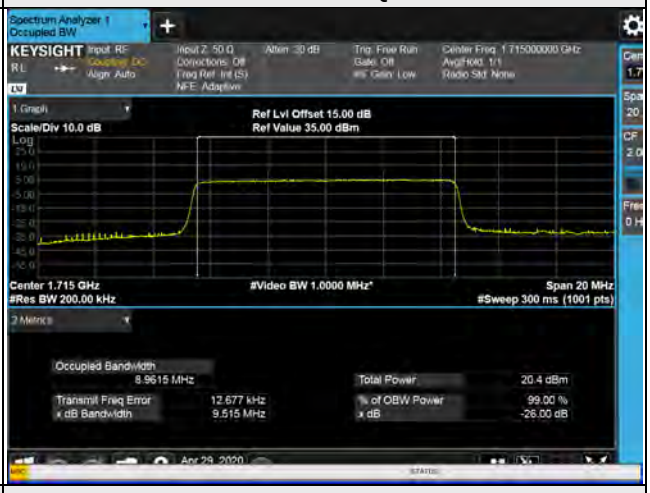
LTE Band 41, Channel Bandwidth 5MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
39675	2498.5	4.79
40620	2593	4.78
41565	2687.5	4.78
LTE Band 41, Channel Bandwidth 10MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
39700	2501	9.52
40620	2593	9.50
41540	2685	9.49
LTE Band 41, Channel Bandwidth 15MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
39725	2503.5	14.23
40620	2593	14.21
41515	2682.5	14.21
LTE Band 41, Channel Bandwidth 20MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
39750	2506	19.01
40620	2593	19.00
41490	2680	18.97

Spectrum Plot of Worst Value	
5MHz / 256QAM	10MHz / 256QAM
	
15MHz / 256QAM	20MHz / 256QAM
	

LTE Band 66

LTE Band 66, Channel Bandwidth 1.4MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
131979	1710.7	1.21
132322	1745.0	1.21
132665	1779.3	1.20
LTE Band 66, Channel Bandwidth 3MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
131987	1711.5	2.92
132322	1745.0	2.92
132657	1778.5	2.92
LTE Band 66, Channel Bandwidth 5MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
131997	1712.5	4.81
132322	1745.0	4.75
132647	1777.5	4.82
LTE Band 66, Channel Bandwidth 10MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
132022	1715.0	9.52
132322	1745.0	9.50
132622	1775.0	9.50
LTE Band 66, Channel Bandwidth 15MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
132047	1717.5	14.21
132322	1745.0	14.23
132597	1772.5	14.26

LTE Band 66, Channel Bandwidth 20MHz		
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
		256QAM
132072	1720.0	22.79
132322	1745.0	19.04
132572	1770.0	19.09

Spectrum Plot of Worst Value	
1.4MHz / 256QAM	3MHz / 256QAM
	
5MHz / 256QAM	10MHz / 256QAM
	
15MHz / 256QAM	20MHz / 256QAM
	

4.5 Channel 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 2, LTE Band 25, LTE Band 26
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.

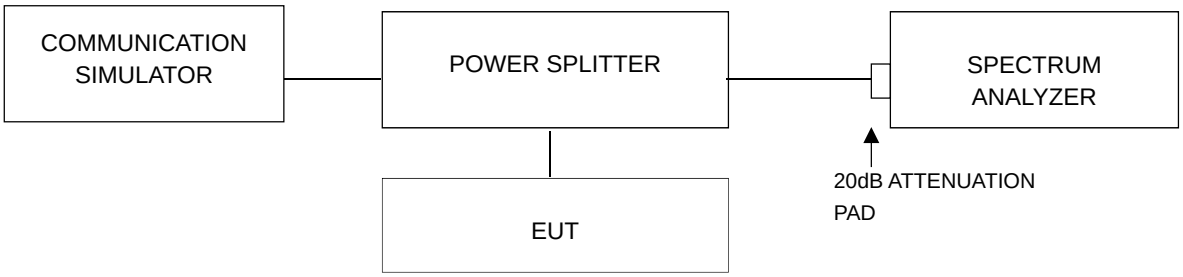
LTE Band 26 (Part 90):
Emission Mask:
According to FCC part 90.691 shall be tested the emission mask. For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 116 $Log_{10}(f/6.1)$ 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.

For LTE Band 41
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 66
According to FCC 27.53(h) for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 log (P) dB.

4.5.2 Test Setup



4.5.3 Test Procedures

a. The EUT was set up for the rated peak power. The power was measured with Spectrum Analyzer. Band edge measurements were done at 2 channels: low, middle and high operational frequency range. Emission mask measurements were done at 3 channels: low and high operational frequency range.

b. n41 operations in the 20 MHz to 100 MHz channel BW mode, extend the 1% range from 1M to 2M above and below the channel edge and then reduce the limit. As an alternative, the highest power level measured in a narrower RBW (relative to the specified reference bandwidth) can be scaled by applying a correction factor determined from: 10 log [(reference bandwidth) / (resolution or measurement bandwidth)] measurement procedure refer to ANSI 63.26 section 5.7.2 a)

c. Record the max trace plot into the test report.

For LTE Band 26 (Part 22)

a. All measurements were done at low and high operational frequency range.

b. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 15kHz and VB of the spectrum is 51kHz (LTE Channel Bandwidth 1.4MHz).

c. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 30kHz and VB of the spectrum is 100kHz (LTE Channel Bandwidth 3MHz).

d. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 51kHz and VB of the spectrum is 160kHz (LTE Channel Bandwidth 5MHz).

e. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 100kHz and VB of the spectrum is 300kHz (LTE Channel Bandwidth 10MHz).

f. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 150kHz and VB of the spectrum is 470kHz (LTE Channel Bandwidth 15MHz).

g. Record the max trace plot into the test report.

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.

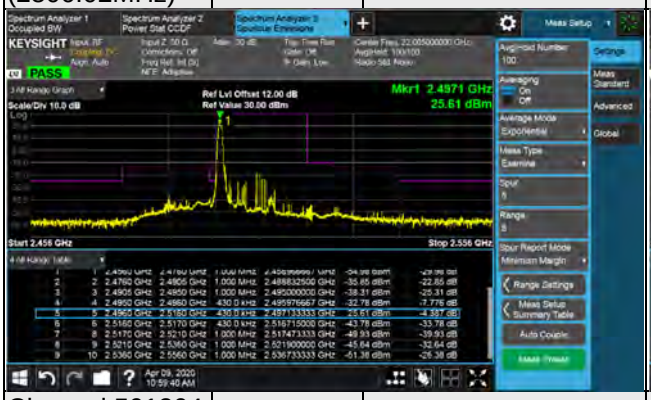
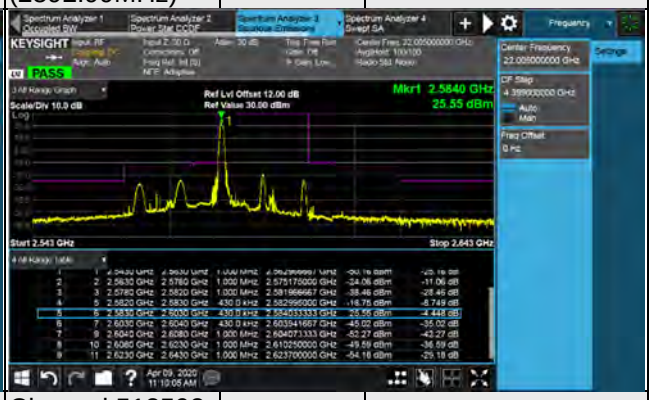
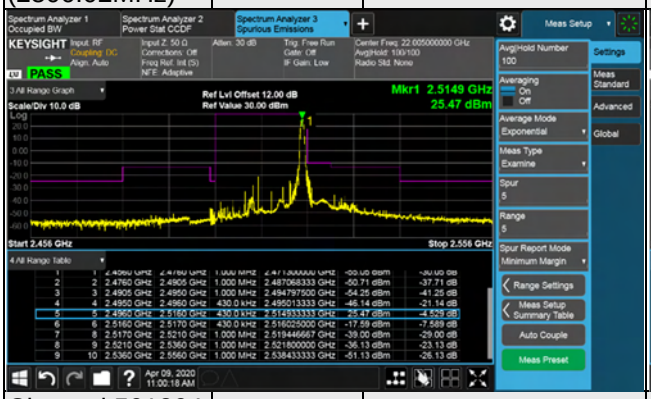
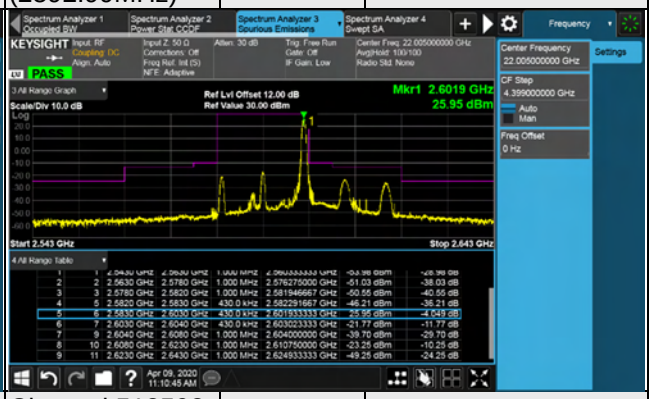
For LTE Band 41, LTE Band 66

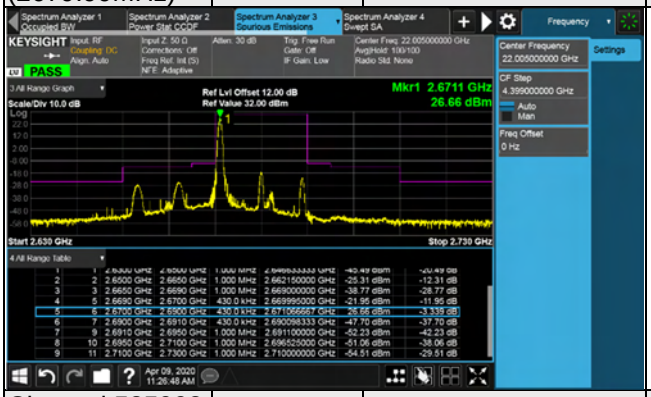
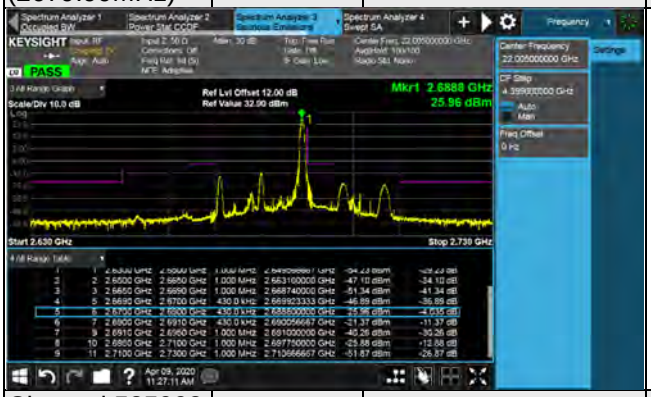
a. The EUT was set up for the rated peak power. The power was measured with Spectrum Analyzer. Band edge measurements were done at 3 channels: low, middle and high operational frequency range. Emission mask measurements were done at 2 channels: low and high operational frequency range.
b. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 15kHz and VB of the spectrum is 51kHz (LTE Channel Bandwidth 1.4MHz).
c. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 30kHz and VB of the spectrum is 100kHz (LTE Channel Bandwidth 3MHz).
d. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 51kHz and VB of the spectrum is 160kHz (LTE Channel Bandwidth 5MHz).
e. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 100kHz and VB of the spectrum is 300kHz (LTE Channel Bandwidth 10MHz).
f. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 150kHz and VB of the spectrum is 470kHz (LTE Channel Bandwidth 15MHz).
g. The center frequency of spectrum is the band edge frequency and span is 1MHz. RB of the spectrum is 200kHz and VB of the spectrum is 1MHz (LTE Channel Bandwidth 20MHz).
h. LTE Band 41 operations in the 5 MHz and 10 MHz channel BW mode, extend the 1% range from 1M to 2M above and below the channel edge and then reduce the limit further by 10 log (1000/100)=10dB (i.e. total -10 + -10=-20dB) to compensate for the integration from 100k to 1M.
i. Record the max trace plot into the test report.

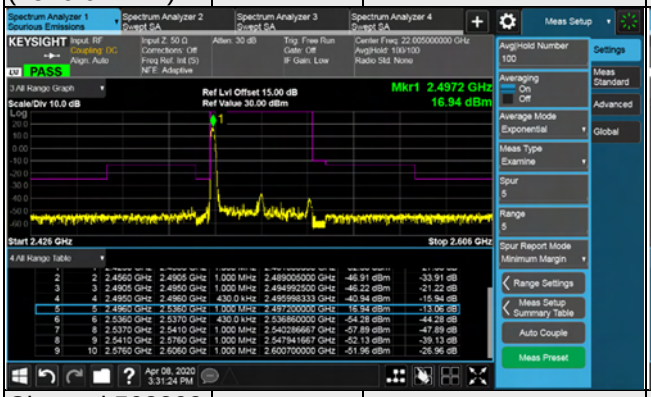
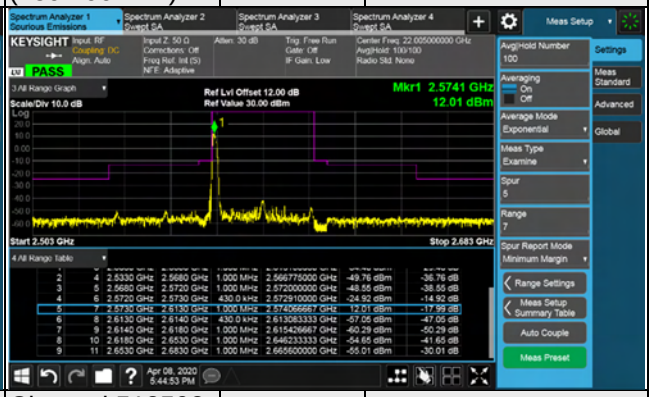
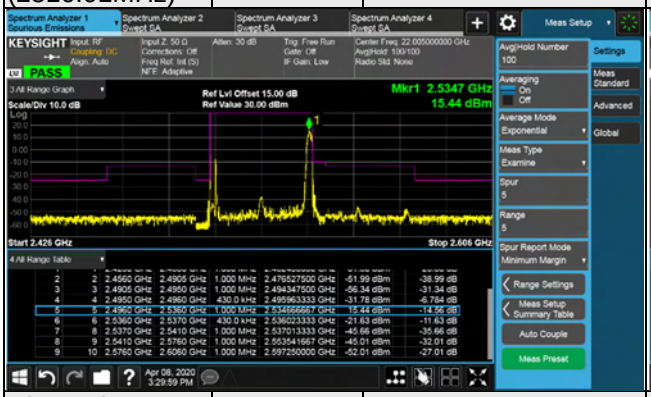
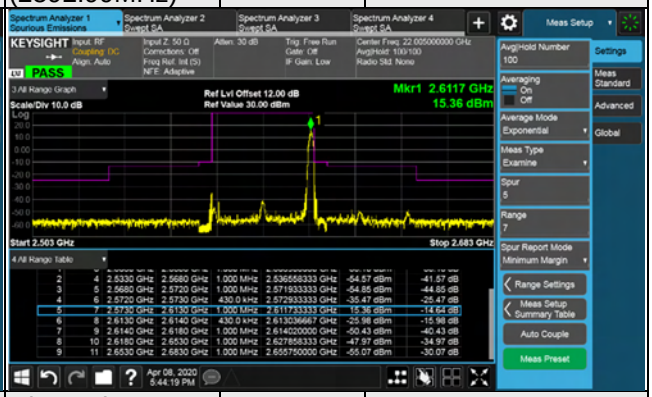
4.5.4 Test Results

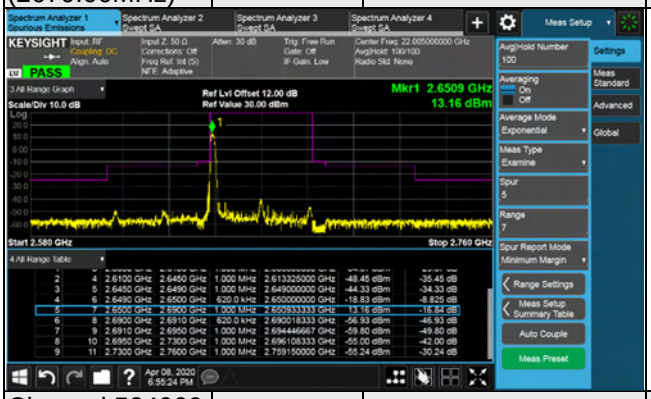
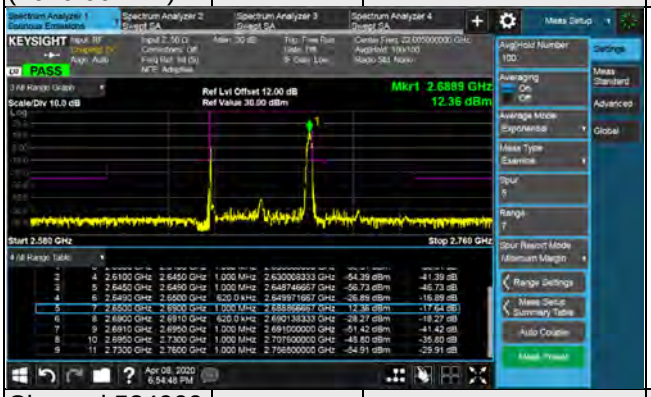
n41

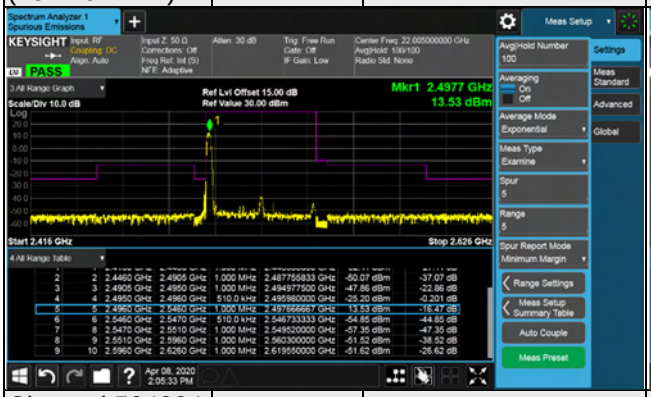
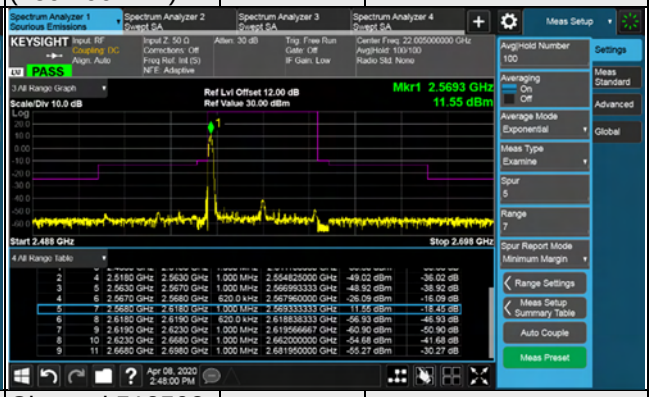
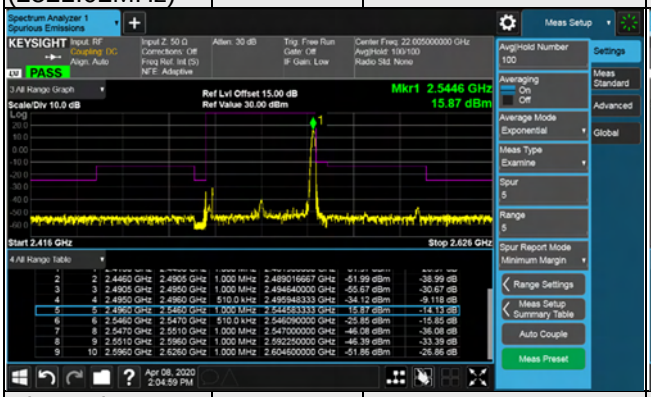
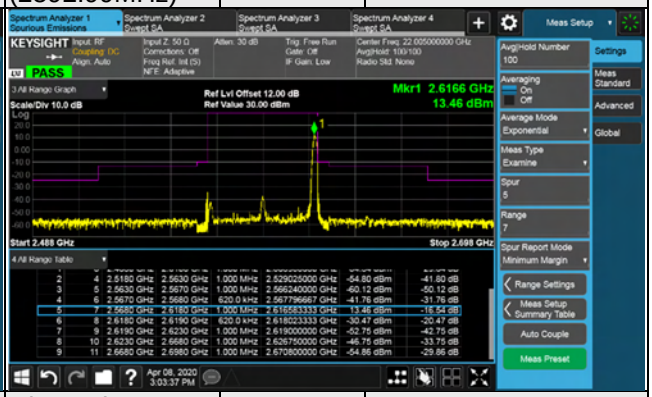
Emission Mask:

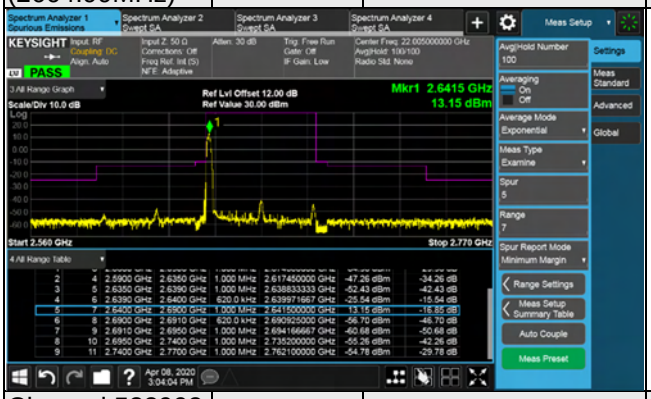
Channel Bandwidth: 20MHz					
Channel 501204 (2506.02MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset
					
Channel 501204 (2506.02MHz)	$\pi/2$ BPSK	1 RB / 50 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	1 RB / 50 RB Offset
					
Channel 501204 (2506.02MHz)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

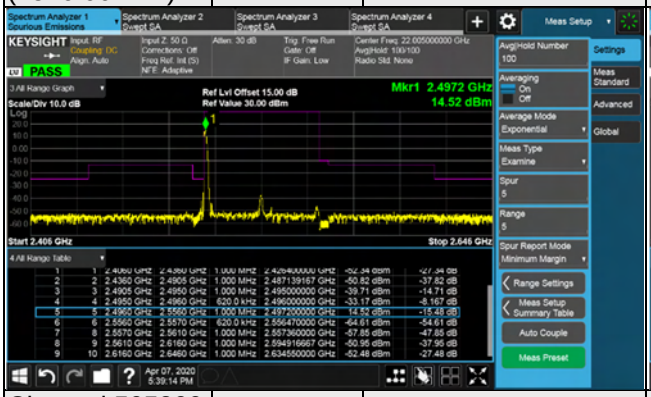
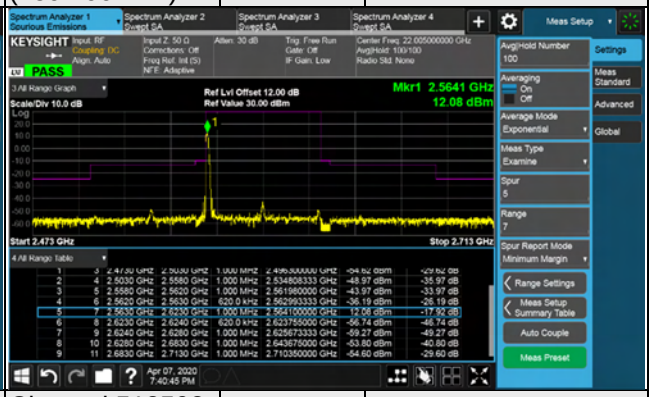
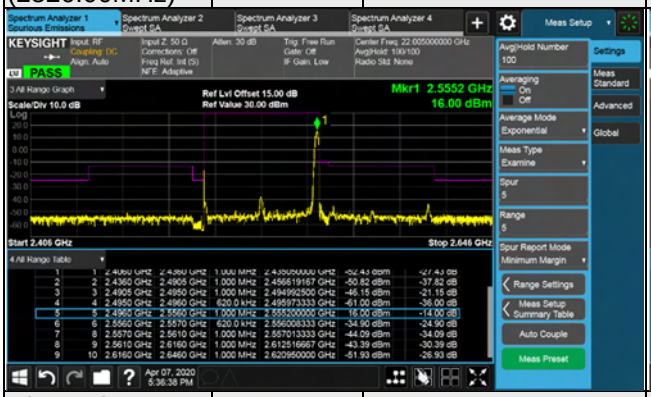
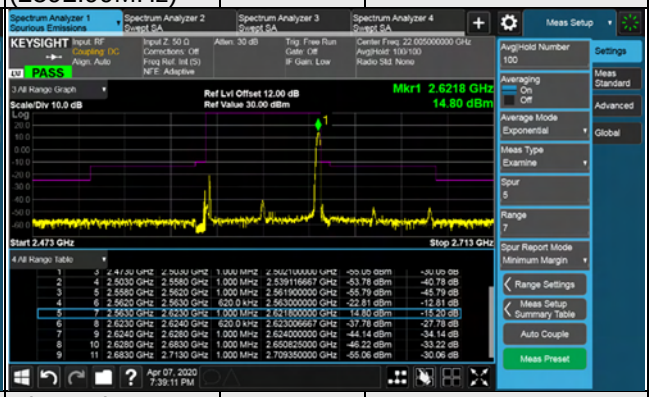
Channel Bandwidth: 20MHz					
Channel 535998 (2679.99MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset			
					
Channel 535998 (2679.99MHz)	$\pi/2$ BPSK	1 RB / 50 RB Offset			
					
Channel 535998 (2679.99MHz)	$\pi/2$ BPSK	51 RB / 0 RB Offset			
					

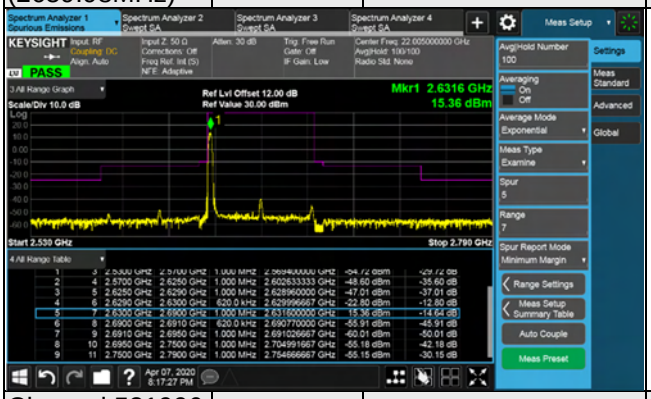
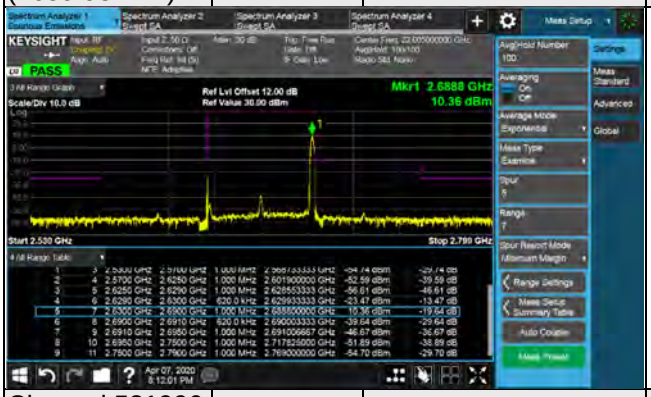
Channel Bandwidth: 40MHz					
Channel 503202 (2516.01MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset
					
Channel 503202 (2516.01MHz)	$\pi/2$ BPSK	1 RB / 105 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	1 RB / 105 RB Offset
					
Channel 503202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

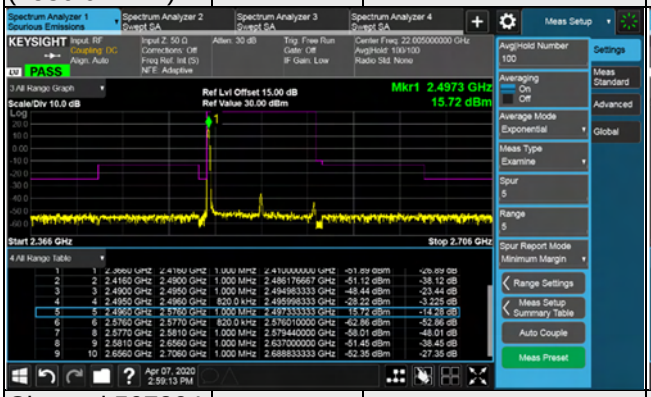
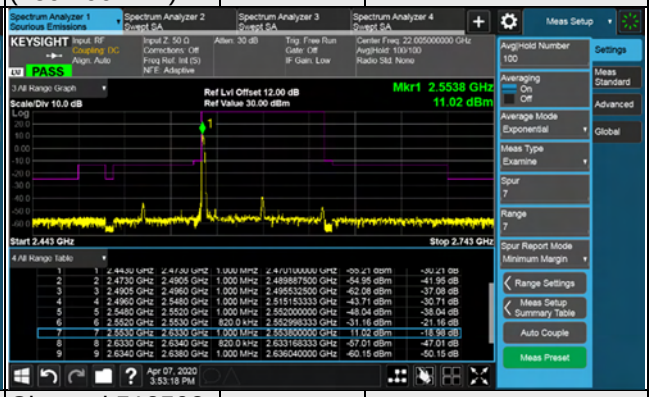
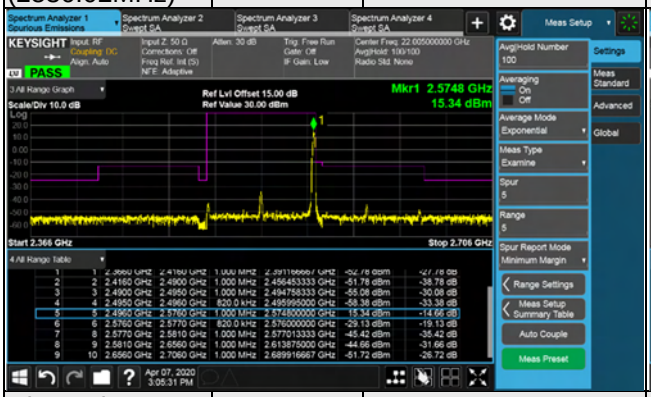
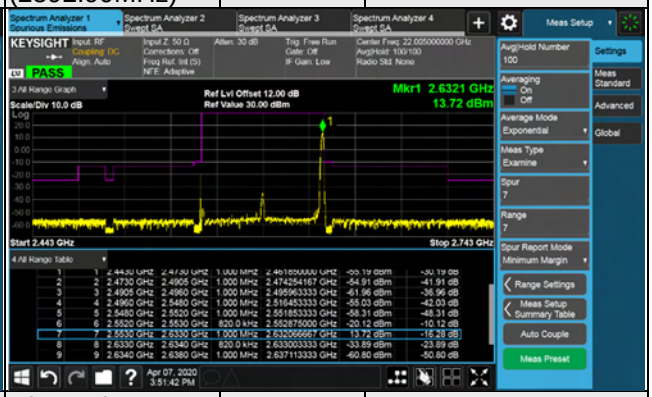
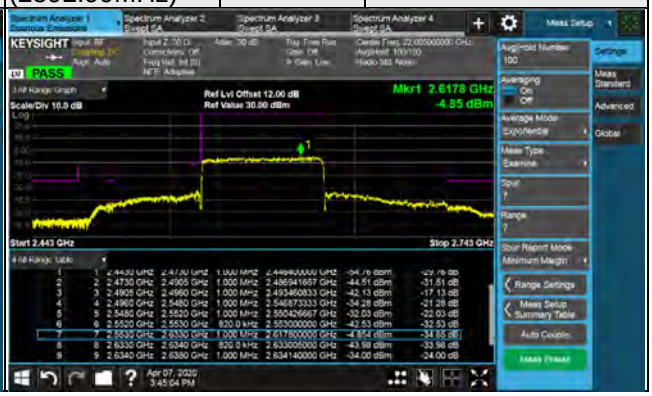
Channel Bandwidth: 40MHz					
Channel 534000 (2670.00MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset			
					
Channel 534000 (2670.00MHz)	$\pi/2$ BPSK	1 RB / 105 RB Offset			
					
Channel 534000 (2670.00MHz)	$\pi/2$ BPSK	106 RB / 0 RB Offset			
					

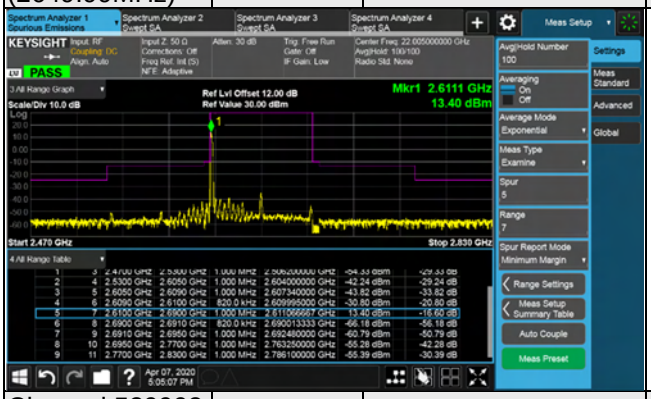
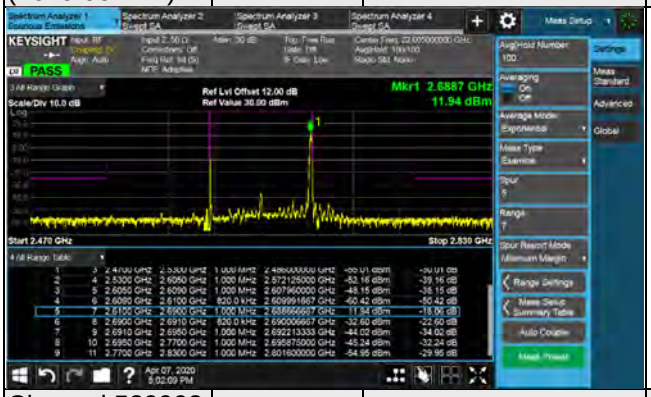
Channel Bandwidth: 50MHz					
Channel 504204 (2521.02MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset
					
Channel 504204 (2521.02MHz)	$\pi/2$ BPSK	1 RB / 132 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	1 RB / 132 RB Offset
					
Channel 504204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

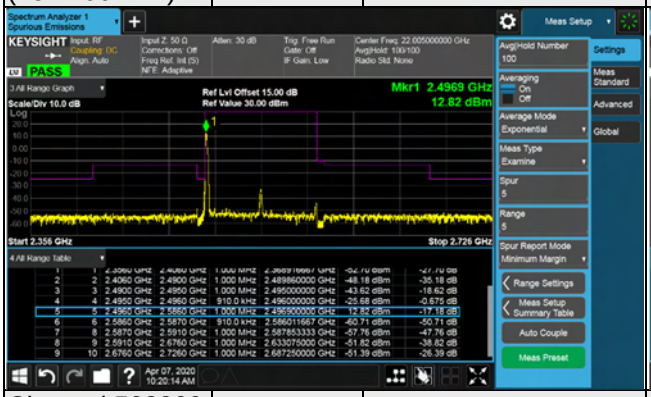
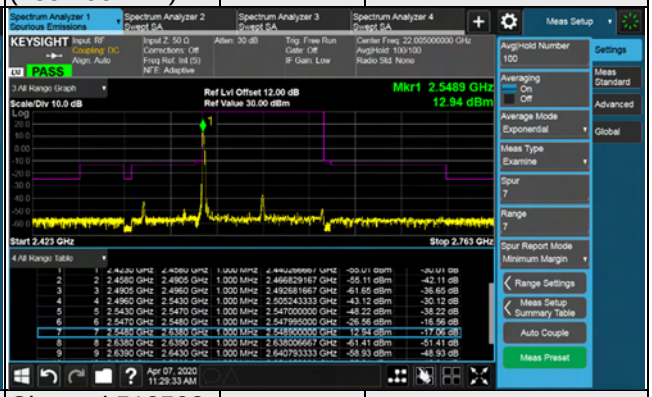
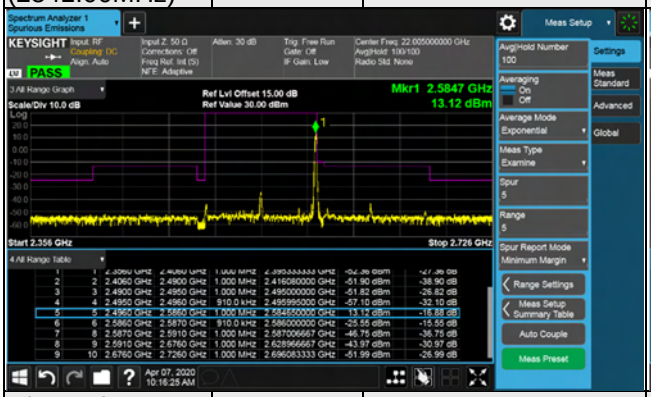
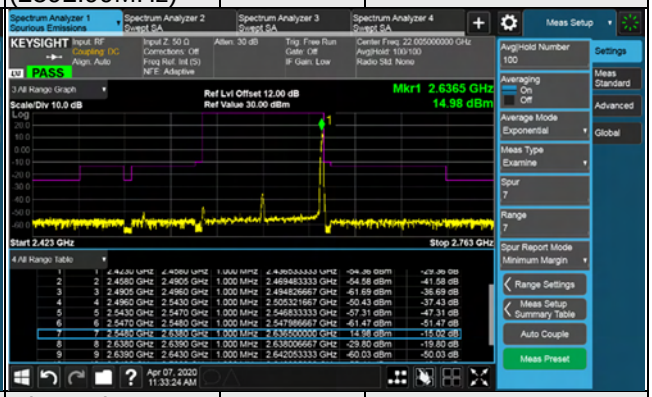
Channel Bandwidth: 50MHz					
Channel 532998 (2664.99MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset			
					
Channel 532998 (2664.99MHz)	$\pi/2$ BPSK	1 RB / 132 RB Offset			
					
Channel 532998 (2664.99MHz)	$\pi/2$ BPSK	133 RB / 0 RB Offset			
					

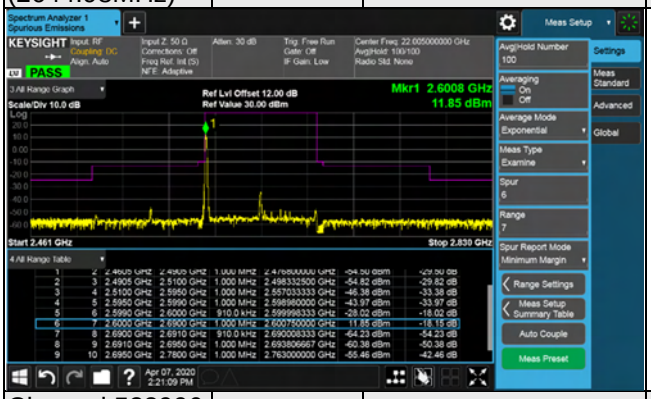
Channel Bandwidth: 60MHz					
Channel 505200 (2526.00MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	1 RB / 0 RB Offset
					
Channel 505200 (2526.00MHz)	$\pi/2$ BPSK	1 RB / 161 RB Offset	Channel 518598 (2592.99MHz)	$\pi/2$ BPSK	1 RB / 161 RB Offset
					
Channel 505200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

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			
					

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
					

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			
					

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
					

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