FCC TEST REPORT

Product Name:	Tablet
Trade Mark:	
Model No.:	T8
Report Number:	210707002RFM-2
Test Standards:	FCC 47 CFR Part 22 FCC 47 CFR Part 24 FCC 47 CFR Part 27 FCC 47 CFR Part 90
FCC ID:	2AUOUT8
Test Result:	PASS
Date of Issue:	October 22, 2021

Prepared for:

Rhino Mobility LLC
8 The Green, Suite A, Dover, Delaware, 19901, USA

Prepared by:

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Approved by: Kevin Liang, Assistant Manager (UnionTrust Laboratories *Certified*)

Date: October 22, 2021

Version

Version No.	Date	Description
V1.0	October 22, 2021	Original

CONTENTS

1. GENERAL INFORMATION

1.1 CLIENT INFORMATION

Applicant:	Rhino Mobility LLC
Address of Applicant:	8 The Green, Suite A, Dover, Delaware, 19901, USA
Manufacturer:	Rhino Mobility LLC
Address of Manufacturer:	8 The Green, Suite A, Dover, Delaware, 19901, USA

1.2 EUT INFORMATION

1.2.1 General Description of EUT

Product Name:	Tablet		
Model No.:	T8		
Trade Mark:			
DUT Stage:	Production Unit		
EUT Supports Function:	GSM Bands:	GSM850/1900	
	UTRA Bands:	Band II/ Band IV/ Band V	
	E-UTRA Bands:	FDD Band 2/ Band 4/ Band 5/ Band 7/ Band 12/Band 17/Band 25/ Band 26/ Band 30/Band 66/ Band 71	
		TDD Band 41	
	2.4 GHz ISM Band:	IEEE 802.11b/g/n	
		Bluetooth 5.0	
	5 GHz U-NII Bands:	5 150 MHz to 5 250 MHz	IEEE 802.11a/n
		5 250 MHz to 5 350 MHz	IEEE 802.11a/n
		5 470 MHz to 5 725 MHz	IEEE 802.11a/n
		5 725 MHz to 5 850 MHz	IEEE 802.11a/n
	RNSS Bands:	1559 MHz to 1610 MHz	GPS/ GLONASS
	NFC:	13.553 MHz to 13.567 MHz	
Sample Received Date:	June 25, 2021		
Sample Tested Date:	June 25, 2021 to September 10, 2021		

1.2.2 Description of Accessories

Adapter	
Model No.:	XY-PQ018U1
Input:	100-240 V~50/60 Hz 0.5A
Output:	3.6-6.0V ⎓ 3.0A /6.0-9.0V ⎓ 2.0A /9.0-12.0V ⎓ 1.5A

Battery	
Model No.:	BPT8
Battery Type:	Li-ion
Rated Voltage:	3.8 Vdc
Limited Charge Voltage:	4.35 Vdc
Rated Capacity:	5100 mAh

Cable(1)	
Description:	USB Type-C Plug Cable
Cable Type:	Unshielded without ferrite
Length:	2.0 Meter

Cable(2)	
Description:	USB Type-C Plug Cable
Cable Type:	Unshielded without ferrite
Length:	1.0 Meter

1.3 PRODUCT SPECIFICATION SUBJECTIVE TO THIS STANDARD

Support Networks:	LTE	
Type of Modulation:	LTE Band 2/4/5/7/12/17/25/26/30/41/66/71:	UL:QPSK, 16QAM DL:QPSK, 16QAM, 64QAM
Antenna Type:	FPCB Antenna	
Antenna Gain:	LTE Band 2:	2.2 dBi
	LTE Band 4:	1.7dBi
	LTE Band 5:	0.3 dBi
	LTE Band 7:	3.6 dBi
	LTE Band 12:	1.1 dBi
	LTE Band 17:	4.2 dBi
	LTE Band 25:	2.8 dBi
	LTE Band 26(824–849MHz):	0.3 dBi
	LTE Band 26(814-824MHz):	0.2 dBi
	LTE Band 30:	2.5 dBi
	LTE Band 41:	3.2 dBi
	LTE Band 66:	1.84 dBi
	LTE Band 71:	3.44 dBi
Normal Test Voltage:	3.8 Vdc	
Extreme Test Voltage:	3.5 to 4.2Vdc	
Extreme Test Temperature:	-20 ℃ to +55 ℃	

Summary of Results:								
Bands	BW (MHz)	Modulation	Frequency Range (MHz)	Max RF Output Power (dBm)		EIRP (W)	99% BW (MHz)	Emission Designator
				Conducted (Average)	ERP/EIRP (Average)			
2	1.4	QPSK	1850.7-1909.3	22.20	24.40	0.27542	1.1057	1M11G7D
		16QAM		21.77	23.97	0.24946	1.1009	1M10W7D
	3	QPSK	1851.5-1908.5	22.14	24.34	0.27164	2.7028	2M70G7D
		16QAM		21.68	23.88	0.24434	2.6947	2M69W7D
	5	QPSK	1852.5-1907.5	22.16	24.36	0.27290	4.5367	4M54G7D
		16QAM		21.70	23.90	0.24547	4.5273	4M53W7D
	10	QPSK	1855.0-1905.0	22.27	24.47	0.27990	9.0318	9M03G7D
		16QAM		21.65	23.85	0.24266	9.0253	9M03W7D
	15	QPSK	1857.5-1902.5	22.23	24.43	0.27733	13.551	13M6G7D
		16QAM		21.71	23.91	0.24604	13.567	13M6W7D
	20	QPSK	1860.0-1900.0	22.28	24.48	0.28054	18.120	18M1G7D
		16QAM		21.83	24.03	0.25293	18.077	18M1W7D
4	1.4	QPSK	1710.7-1754.3	22.78	24.48	0.28054	1.1026	1M10G7D
		16QAM		22.00	23.70	0.23442	1.1000	1M10W7D
	3	QPSK	1711.5-1753.5	22.66	24.36	0.27290	2.7021	2M70G7D
		16QAM		22.28	23.98	0.25003	2.6968	2M70W7D
	5	QPSK	1712.5-1752.5	22.81	24.51	0.28249	4.5302	4M53G7D
		16QAM		22.46	24.16	0.26062	4.5442	4M54W7D
	10	QPSK	1715-1750	22.72	24.42	0.27669	9.0056	9M01G7D
		16QAM		22.31	24.01	0.25177	9.0129	9M01W7D
	15	QPSK	1717.5-1747.5	22.76	24.46	0.27925	13.515	13M5G7D
		16QAM		22.31	24.01	0.25177	13.531	13M5W7D
	20	QPSK	1720-1745	22.83	24.53	0.28379	18.040	18M0G7D
		16QAM		22.46	24.16	0.26062	18.043	18M0W7D
5	1.4	QPSK	824.7-848.3	24.06	22.21	0.16634	1.0996	1M10G7D
		16QAM		23.11	21.26	0.13366	1.1006	1M10W7D
	3	QPSK	825.5-847.5	24.03	22.18	0.16520	2.7041	2M70G7D
		16QAM		23.53	21.68	0.14723	2.6950	2M70W7D
	5	QPSK	826.5-846.5	24.07	22.22	0.16672	4.5445	4M54G7D
		16QAM		23.47	21.62	0.14521	4.5543	4M55W7D
	10	QPSK	829-844	24.14	22.29	0.16943	9.0377	9M04G7D
		16QAM		23.62	21.77	0.15031	9.0127	9M01W7D

Summary of Results:								
Bands	BW (MHz)	Modulation	Frequency Range (MHz)	Max RF Output Power (dBm)		EIRP (W)	99% BW (MHz)	Emission Designator
				Conducted (Average)	ERP/EIRP (Average)			
7	5	QPSK	2502.5-2567.5	18.73	22.33	0.17100	4.5353	4M54G7D
		16QAM		18.52	22.12	0.16293	4.5327	4M53W7D
	10	QPSK	2505-2565	18.72	22.32	0.17061	9.0101	9M01G7D
		16QAM		18.48	22.08	0.16144	9.0113	9M01W7D
	15	QPSK	2507.5-2562.5	18.59	22.19	0.16558	13.513	13M5G7D
		16QAM		18.62	22.22	0.16672	13.512	13M5W7D
	20	QPSK	2510-2560	18.77	22.37	0.17258	18.008	18M0G7D
		16QAM		18.65	22.25	0.16788	18.028	18M0W7D
12	1.4	QPSK	699.7-715.3	23.05	22.00	0.15849	1.0973	1M10G7D
		16QAM		22.61	21.56	0.14322	1.1007	1M10W7D
	3	QPSK	700.5-714.5	23.03	21.98	0.15776	2.7051	2M71G7D
		16QAM		22.64	21.59	0.14421	2.6951	2M70W7D
	5	QPSK	701.5-713.5	23.04	21.99	0.15812	4.5462	4M55G7D
		16QAM		22.64	21.59	0.14421	4.5523	4M55W7D
	10	QPSK	704-711	23.11	22.06	0.16069	9.0123	9M01G7D
		16QAM		22.70	21.65	0.14622	9.0194	9M02W7D
17	5	QPSK	706.5-713.5	23.76	25.81	0.38107	4.5409	4M54G7D
		16QAM		23.05	25.10	0.32359	4.5465	4M55W7D
	10	QPSK	709-711	23.83	24.88	0.30761	9.0361	9M04G7D
		16QAM		23.14	25.19	0.33037	9.0359	9M04W7D

Summary of Results:								
Bands	BW (MHz)	Modulation	Frequency Range (MHz)	Max RF Output Power (dBm)		EIRP (W)	99% BW (MHz)	Emission Designator
				Conducted (Average)	ERP/EIRP (Average)			
25	1.4	QPSK	1850.7-1914.3	22.27	25.07	0.32137	1.0995	1M10G7D
		16QAM		21.83	24.63	0.29040	1.0965	1M10W7D
	3	QPSK	1851.5-1913.5	22.39	25.19	0.33037	2.7095	2M71G7D
		16QAM		21.95	24.75	0.29854	2.7003	2M70W7D
	5	QPSK	1852.5-1912.5	22.40	25.20	0.33113	4.5276	4M53G7D
		16QAM		21.97	24.77	0.29992	4.5413	4M54W7D
	10	QPSK	1855.0-1910.0	22.42	25.22	0.33266	9.0211	9M02G7D
		16QAM		21.85	24.65	0.29174	9.0057	9M01W7D
	15	QPSK	1857.5-1907.5	22.48	25.28	0.33729	13.509	13M5G7D
		16QAM		21.84	24.64	0.29107	13.523	13M5W7D
	20	QPSK	1860.0-1905.0	22.51	25.31	0.33963	18.000	18M0G7D
		16QAM		21.99	24.79	0.30130	18.063	18M1W7D
26	1.4	QPSK	824.7-848.3	22.93	21.08	0.12823	1.1063	1M11G7D
		16QAM		22.13	20.28	0.10666	1.1012	1M10W7D
	3	QPSK	825.5-847.5	22.82	20.97	0.12503	2.7044	2M70G7D
		16QAM		22.56	20.71	0.11776	2.6988	2M70W7D
	5	QPSK	826.5-846.5	22.86	21.01	0.12618	4.5366	4M54G7D
		16QAM		22.25	20.40	0.10965	4.5421	4M54W7D
	10	QPSK	829-844	22.90	21.05	0.12735	9.0206	9M02G7D
		16QAM		22.58	20.73	0.11830	9.0340	9M03W7D
	15	QPSK	831.5-841.5	22.97	21.12	0.12942	13.521	13M5G7D
		16QAM		22.47	20.62	0.11535	13.522	13M5W7D

Summary of Results:								
Bands	BW (MHz)	Modulation	Frequency Range (MHz)	Max RF Output Power (dBm)		EIRP (W)	99% BW (MHz)	Emission Designator
				Conducted (Average)	ERP/EIRP (Average)			
26 (Part 90S)	1.4	QPSK	814.7-823.3	22.94	20.99	0.12560	1.1038	1M10G7D
		16QAM		22.20	20.25	0.10593	1.1006	1M10W7D
	3	QPSK	815.5-822.5	22.89	20.94	0.12417	2.7056	2M71G7D
		16QAM		22.51	20.56	0.11376	2.6954	2M70W7D
	5	QPSK	816.5-821.5	22.88	20.93	0.12388	4.5301	4M53G7D
		16QAM		22.26	20.31	0.10740	4.5506	4M55W7D
	10	QPSK	819	22.95	21.00	0.12589	8.9608	8M96G7D
		16QAM		22.45	20.50	0.11220	8.9843	8M98W7D
30	5	QPSK	2307.5-2312.5	20.74	23.24	0.21086	4.4848	4M48G7D
		16QAM		20.97	23.47	0.22233	4.4900	4M49W7D
	10	QPSK	2310-2310	21.08	23.58	0.22803	8.9564	8M96G7D
		16QAM		21.15	23.65	0.23174	8.9480	8M95W7D
41	5	QPSK	2557.5-2562.5	24.05	27.25	0.53088	4.5278	4M53G7D
		16QAM		23.67	26.87	0.48641	4.5317	4M53W7D
	10	QPSK	2560-2650	24.21	27.41	0.55081	9.0367	9M04G7D
		16QAM		23.28	26.48	0.44463	9.0092	9M01W7D
	15	QPSK	2562.5-2647.5	24.14	27.34	0.54200	13.523	13M5G7D
		16QAM		23.32	26.52	0.44875	13.567	13M6W7D
	20	QPSK	2565-2645	24.24	27.44	0.55463	17.976	18M0G7D
		16QAM		23.41	26.61	0.45814	18.015	18M0W7D

Summary of Results:								
Bands	BW (MHz)	Modulation	Frequency Range (MHz)	Max RF Output Power (dBm)		EIRP (W)	99% BW (MHz)	Emission Designator
				Conducted (Average)	ERP/EIRP (Average)			
66	1.4	QPSK	1710.7-1779.3	22.30	24.14	0.25942	1.1057	1M11G7D
		16QAM		21.93	23.77	0.23823	1.1001	1M10W7D
	3	QPSK	1711.5-1778.5	22.23	24.07	0.25527	2.7036	2M70G7D
		16QAM		21.85	23.69	0.23388	2.6958	2M70W7D
	5	QPSK	1712.5-1777.5	22.28	24.12	0.25823	4.5318	4M53G7D
		16QAM		21.75	23.59	0.22856	4.5440	4M54W7D
	10	QPSK	1715-1775	22.33	24.17	0.26122	9.0240	9M02G7D
		16QAM		21.76	23.60	0.22909	9.0131	9M01W7D
	15	QPSK	1717.5-1772.5	22.27	24.11	0.25763	13.554	13M6G7D
		16QAM		21.92	23.76	0.23768	13.519	13M5W7D
	20	QPSK	1720-1770	22.35	24.19	0.26242	18.041	18M0G7D
		16QAM		21.94	23.78	0.23878	18.072	18M1W7D
71	5	QPSK	665.5-695.5	24.20	25.49	0.29444	4.5467	4M55G7D
		16QAM		23.72	25.01	0.25763	4.5366	4M54W7D
	10	QPSK	668-693	24.19	25.48	0.29107	9.0427	9M04G7D
		16QAM		23.73	25.02	0.25468	9.0233	9M02W7D
	15	QPSK	670.5-690.5	24.24	25.53	0.29444	13.528	13M5G7D
		16QAM		23.89	25.18	0.25704	13.529	13M5W7D
	20	QPSK	673-688	24.28	25.57	0.29174	18.046	18M0G7D
		16QAM		23.91	25.20	0.25882	18.030	18M0W7D

1.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested with associated equipment below.

1) Support Equipment

Description	Manufacturer	Model No.	Serial Number	Supplied by
Notebook	Lenovo	E450	SL10G10780	UnionTrust

2) Support Cable

Cable No.	Description	Connector	Length	Supplied by
1	Antenna Cable	SMA	0.30 Meter	UnionTrust

1.5 TEST LOCATION

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: Unit D/E of 9/F and 16/F, Block A, Building 6, Baoneng science and technology park, Longhua district, Shenzhen, China
Telephone: +86 (0) 755 2823 0888
Fax: +86 (0) 755 2823 0886

1.6 TEST FACILITY

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L9069
The measuring equipment utilized to perform the tests documented in this report has been calibrated once a year or in accordance with the manufacturer's recommendations, and is traceable under the ISO/IEC 17025 to international or national standards. Equipment has been calibrated by accredited calibration laboratories.

A2LA-Lab Certificate No.: 4312.01
Shenzhen UnionTrust Quality and Technology Co., Ltd. has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

ISED Wireless Device Testing Laboratories
CAB identifier: CN0032

FCC Accredited Lab.
Designation Number: CN1194
Test Firm Registration Number: 259480

1.7 DEVIATION FROM STANDARDS

None.

1.8 ABNORMALITIES FROM STANDARD CONDITIONS

None.

1.9 OTHER INFORMATION REQUESTED BY THE CUSTOMER

None.

1.10 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the Product as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

No.	Item	Measurement Uncertainty
1	Conducted emission 9KHz-150KHz	±3.2 dB
2	Conducted emission 150KHz-30MHz	±2.7 dB
3	Radiated spurious emissions 30MHz-1GHz	± 4.9 dB
4	Radiated spurious emissions 1GHz-18GHz	± 4.8 dB
5	Radiated spurious emissions 18GHz-40GHz	± 5.1 dB
6	Occupied Bandwidth	± 1.86 %
7	DC Supply Voltages	± 0.68 %
8	Temperature	± 0.62 °C
9	Humidity	± 3.9 %
10	Conducted spurious emissions	± 2.7 dB
11	DC Supply Voltages	± 0.68 %
12	AC Supply Voltages	± 1.2 %
13	Radio Frequency	± 6.5 x 10^{-8}
14	RF Power, Conducted	± 0.9 dB

2. TEST SUMMARY

FCC 47 CFR Part 24 Test Cases (Band 2 & Band 25)			
Test Item	**Test Requirement**	**Test Method**	**Result**
Equivalent Isotropic Radiated Power (EIRP)	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 24.232(c)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Conducted Output Power	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 24.232(c)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Peak-to-average ratio	FCC 47 CFR Part 24.232(d)	KDB 971168 D01v03r01	PASS
99%&26dB Bandwidth	FCC 47 CFR Part 2.1049(h) & FCC 47 CFR Part 24.238(b)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Band Edge at antenna terminals	FCC 47 CFR Part 2.1051 & FCC 47 CFR Part 24.238(a)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Spurious emissions at antenna terminals	FCC 47 CFR Part 2.1051 & FCC 47 CFR Part 24.238(a)(b)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Field strength of spurious radiation	FCC 47 CFR Part 2.1053 & FCC 47 CFR Part 24.238(a)(b)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Frequency stability	FCC 47 CFR Part 2.1055 & FCC 47 CFR Part 24.235	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS

FCC 47 CFR Part 27 Test Cases (LTE Band 4 & Band 66)			
Test Item	**Test Requirement**	**Test Method**	**Result**
Equivalent Isotropic Radiated Power (EIRP)	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 27.50(d)(4)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Conducted Output Power	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 27.50(d)(4)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Peak-to-average ratio	FCC 47 CFR Part 27.50(d)(5)	KDB 971168 D01v03r01	PASS
99%&26dB Bandwidth	FCC 47 CFR Part 2.1049(h) FCC 47 CFR Part 27.53(h)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Band Edge at antenna terminals	FCC 47 CFR Part 27.53(h)(1)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Spurious emissions at antenna terminals	FCC 47 CFR Part 2.1051 & FCC 47 CFR Part 27.53(h)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Field strength of spurious radiation	FCC 47 CFR Part 2.1053 & FCC 47 CFR Part 27.53(h)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Frequency stability	FCC 47 CFR Part 2.1055 & FCC 47 CFR Part 27.54	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS

FCC 47 CFR Part 22 Test Cases (Band 5 & Band 26)			
Test Item	**Test Requirement**	**Test Method**	**Result**
Effective Radiated Power (ERP)	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 22.913(a)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Conducted Output Power	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 22.913(a)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Peak-to-average ratio	FCC 47 CFR Part 22.913(a)	KDB 971168 D01v03r01	PASS
99%&26dB Bandwidth	FCC 47 CFR Part 2.1049(h)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Band Edge at antenna terminals	FCC 47 CFR Part 2.1051 & FCC 47 CFR Part 22.917(a)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Spurious emissions at antenna terminals	FCC 47 CFR Part 2.1051 & FCC 47 CFR Part 22.917(a)(b)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Field strength of spurious radiation	FCC 47 CFR Part 2.1053 & FCC 47 CFR Part 22.917(a)(b)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Frequency stability	FCC 47 CFR Part 2.1055 &	ANSI C63.26-2015 &	PASS

	FCC 47 CFR Part 22.355	KDB 971168 D01v03r01	

FCC 47 CFR Part 27 Test Cases (LTE Band 7 & Band 41)			
Test Item	**Test Requirement**	**Test Method**	**Result**
Equivalent Isotropic Radiated Power (EIRP)	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 27.50(h)(2)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Conducted Output Power	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 27.50(h)(2)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Peak-to-average ratio	FCC 47 CFR Part 27.50(d)(5)	KDB 971168 D01v03r01	PASS
99%&26dB Bandwidth	FCC 47 CFR Part 2.1049(h)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Band Edge at antenna terminals	FCC 47 CFR Part 27.53(m)(4)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Spurious emissions at antenna terminals	FCC 47 CFR Part 2.1051 & FCC 47 CFR Part 27.53(m)(4)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Field strength of spurious radiation	FCC 47 CFR Part 2.1053 & FCC 47 CFR Part 27.53(m)(4)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Frequency stability	FCC 47 CFR Part 2.1055 & FCC 47 CFR Part 27.54	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS

FCC 47 CFR Part 27 Test Cases (LTE Band 12 &17& 71)			
Test Item	**Test Requirement**	**Test Method**	**Result**
Effective Radiated Power (ERP)	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 27.50(c)(10)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Conducted Output Power	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 27.50(c)(10)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Peak-to-average ratio	FCC 47 CFR Part 27.50(d)(5)	KDB 971168 D01v03r01	PASS
99%&26dB Bandwidth	FCC 47 CFR Part 2.1049(h) FCC 47 CFR Part 27.53(g)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Band Edge at antenna terminals	FCC 47 CFR Part 27.53(g)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Spurious emissions at antenna terminals	FCC 47 CFR Part 2.1051 & FCC 47 CFR Part 27.53(g)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Field strength of spurious radiation	FCC 47 CFR Part 2.1053 & FCC 47 CFR Part 27.53(g)	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS
Frequency stability	FCC 47 CFR Part 2.1055 & FCC 47 CFR Part 27.54	ANSI C63.26-2015 & KDB 971168 D01v03r01	PASS

FCC 47 CFR Part 90 Test Cases (LTE Band 26)			
Test Item	**Test Requirement**	**Test Method**	**Result**
Effective Radiated Power (ERP)	FCC 47 CFR Part 2.1046 & FCC 47 CFR Part 90.635	ANSI/TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
Conducted Output Power	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 90.635	ANSI/TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
Peak-to-average ratio	N/A	ANSI/TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
99%&26dB Bandwidth	FCC 47 CFR Part 2.1049(h)	ANSI/TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
Emission Mask	FCC 47 CFR Part 2.1051 & FCC 47 CFR Part 90.691	ANSI/TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
Spurious emissions at antenna terminals	FCC 47 CFR Part 2.1051 & FCC 47 CFR Part 90.691	ANSI/TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
Field strength of spurious radiation	FCC 47 CFR Part 2.1053 & FCC 47 CFR Part 90.691	ANSI/TIA-603-E-2016 & KDB 971168 D01v03r01	PASS
Frequency stability	FCC 47 CFR Part 2.1055 & FCC 47 CFR Part 90.213	ANSI/TIA-603-E-2016 & KDB 971168 D01v03r01	PASS

FCC 47 CFR Part 27 Test Cases (LTE Band 30)			
Test Item	**Test Requirement**	**Test Method**	**Result**
Equivalent Isotropic Radiated Power (EIRP)	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 27.50(a)(3)	ANSI/TIA/EIA-603-D 2010 & KDB 971168 D01v02r02	PASS
Conducted Output Power	FCC 47 CFR Part 2.1046(a) & FCC 47 CFR Part 27.50(a)(3)	ANSI/TIA/EIA-603-D 2010 & KDB 971168 D01v02r02	PASS
Peak-to-average ratio	FCC 47 CFR Part 27.50(a)(B)	KDB 971168 D01v02r02	PASS
99%&26dB Bandwidth	FCC 47 CFR Part 2.1049(h) FCC 47 CFR Part 27.50(a)	ANSI/TIA/EIA-603-D 2010 & KDB 971168 D01v02r02	PASS
Band Edge at antenna terminals	FCC 47 CFR Part 27.53(a)(4)	ANSI/TIA/EIA-603-D 2010 & KDB 971168 D01v02r02	PASS
Spurious emissions at antenna terminals	FCC 47 CFR Part 2.1051 & FCC 47 CFR Part 27.53(a) (4)	ANSI/TIA/EIA-603-D 2010 & KDB 971168 D01v02r02	PASS
Field strength of spurious radiation	FCC 47 CFR Part 2.1053 & FCC 47 CFR Part 27.53(a) (4)	ANSI/TIA/EIA-603-D 2010 & KDB 971168 D01v02r02	PASS
Frequency stability	FCC 47 CFR Part 2.1055 & FCC 47 CFR Part 27.54	ANSI/TIA/EIA-603-D 2010 & KDB 971168 D01v02r02	PASS

3. EQUIPMENT LIST

Radiated Emission Test Equipment List						
Used	**Equipment**	**Manufacturer**	**Model No.**	**Serial Number**	**Cal. date (mm dd, yyyy)**	**Cal. Due date (mm dd, yyyy)**
☒	3m SAC	ETS-LINDGREN	3m	N/A	Jan. 22, 2021	Jan. 21, 2024
☒	Receiver	R&S	ESIB26	100114	Nov. 18, 2020	Nov. 17, 2021
☒	Loop Antenna	ETS-LINDGREN	6502	00202525	Nov. 14, 2020	Nov. 13, 2022
☒	Broadband Antenna	ETS-LINDGREN	3142E	00201566	Nov. 14, 2020	Nov. 13, 2022
☒	6dB Attenuator	Talent	RA6A5-N-18	18103001	Nov. 10, 2020	Nov. 9, 2021
☒	Preamplifier	HP	8447F	2805A02960	Nov. 10, 2020	Nov. 9, 2021
☒	Double-Ridged Waveguide Horn Antenna (Pre-amplifier)	ETS-LINDGREN	3117-PA	00201541	Apr. 30, 2021	Apr. 29, 2023
☒	Pre-amplifier	ETS-Lindgren	00118385	00201874	Nov. 10, 2020	Nov. 9, 2021
☒	Double-Ridged Waveguide Horn Antenna (Pre-amplifier)	ETS-LINDGREN	3116C-PA	00202652	Nov. 14, 2020	Nov. 13, 2022
☒	Pre-amplifier	ETS-Lindgren	00118384	00202652	Nov. 17, 2020	Nov. 16, 2022
☒	Multi device Controller	ETS-LINDGREN	7006-001	00160105	N/A	N/A
☒	Test Software	Audix	e3	Software Version: 9.160323		

RF Test Equipment List						
Used	**Equipment**	**Manufacturer**	**Model No.**	**Serial Number**	**Cal. date (mm dd, yyyy)**	**Cal. Due date (mm dd, yyyy)**
☒	Receiver	R&S	ESR7	1316.3003K07 -101181-K3	Nov. 18, 2020	Nov. 17, 2021
☒	EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY51440197	Apr. 22, 2021	Apr. 21, 2022
☒	Wideband Radio Communication Tester	R&S	CMW500	119583	Apr. 22, 2021	Apr. 21, 2022
☒	DC Source	KIKUSUI	PWR400L	LK003024	N/A	N/A
	Digital multimeter	FLUKE	15B+	30701460WS 15	Nov. 12, 2020	Nov. 11, 2021
☒	Temp & Humidity chamber	Votisch	VT4002	58566133290 020	Apr. 21, 2021	Apr. 20, 2022

4. TEST CONFIGURATION

4.1 ENVIRONMENTAL CONDITIONS FOR TESTING

Test Environment	Selected Values During Tests		
Test Condition	Ambient		
	Temperature (°C)	Voltage (V)	Relative Humidity (%)
TN/VN	+15 to +35	3.8	20 to 75
TL/VL	-20	3.5	20 to 75
TH/VL	+55	3.5	20 to 75
TL/VH	-20	4.2	20 to 75
TH/VH	+55	4.2	20 to 75

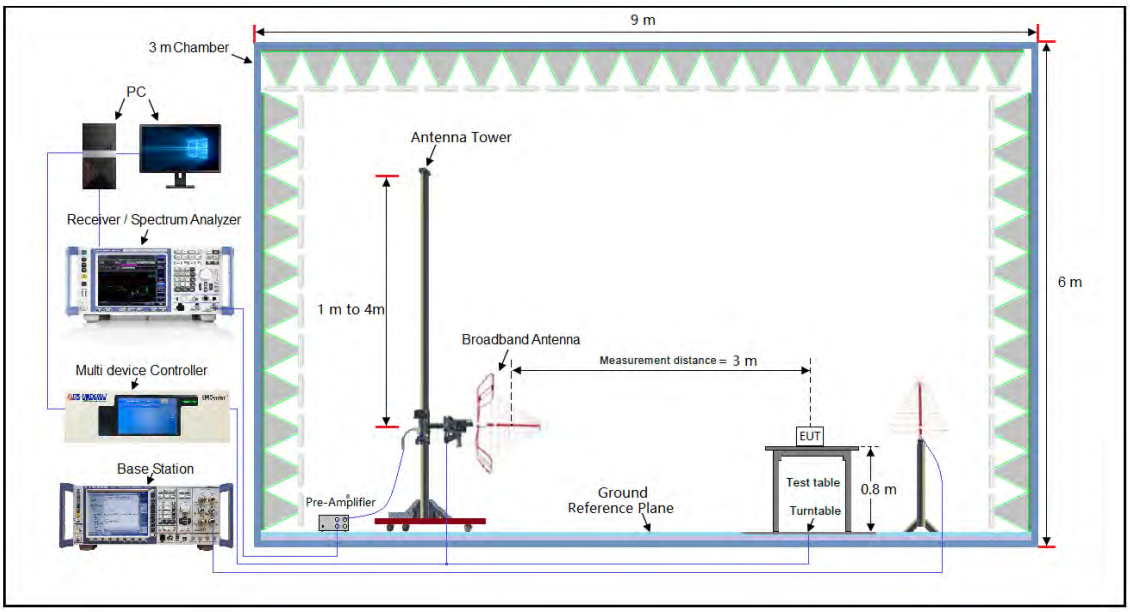
Remark:

1) The EUT just work in such extreme temperature of -20 ℃ to +55 °C and the extreme voltage of 3.5 V to 4.2 V, so here the EUT is tested in the temperature of -20 ℃ to +55 °C and the voltage of 3.5 V to 4.2 V.
2) VN: Normal Voltage; TN: Normal Temperature;
TL: Low Extreme Test Temperature; TH: High Extreme Test Temperature;
VL: Low Extreme Test Voltage; VH: High Extreme Test Voltage.

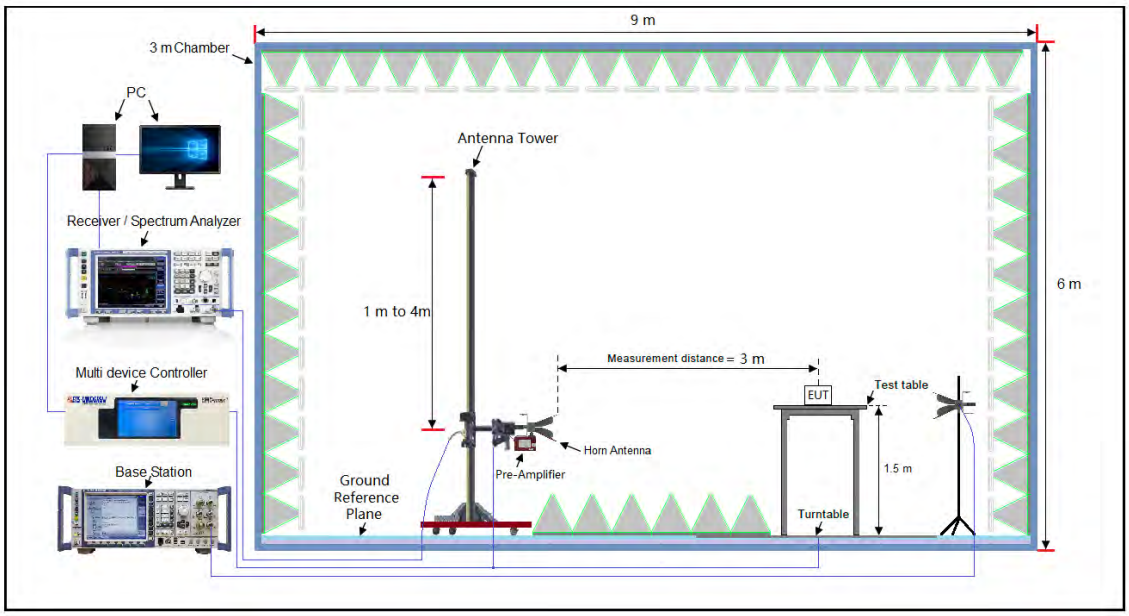
4.2 TEST SETUP

4.2.1 For Radiated Emissions test setup

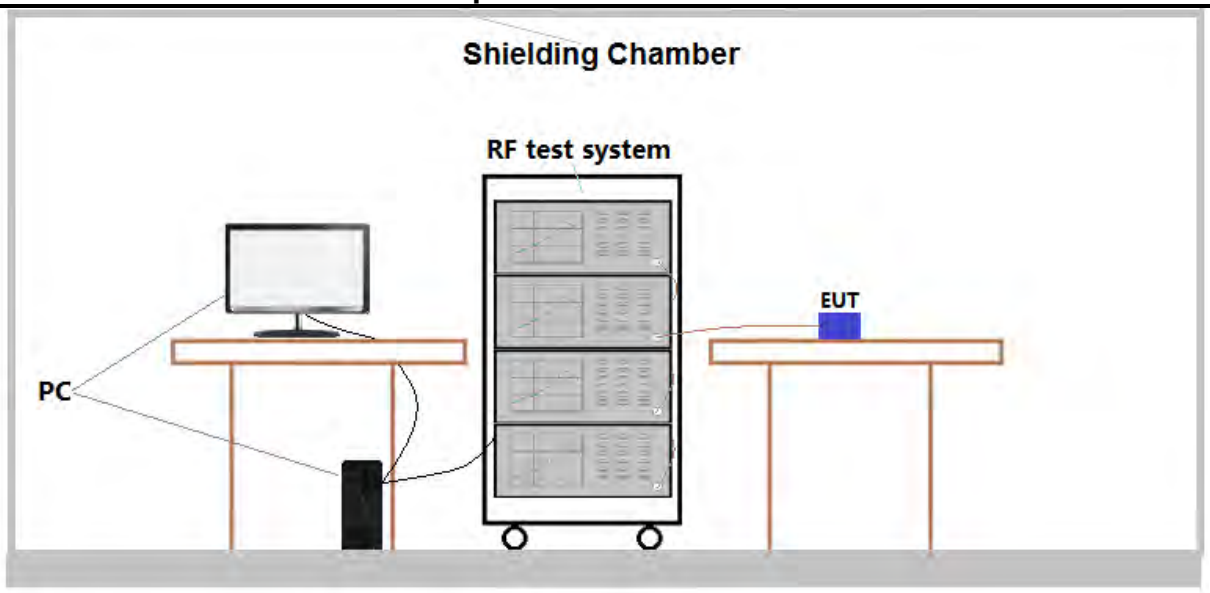
Radiated Emissions 30MHz to 1GHz Test setup



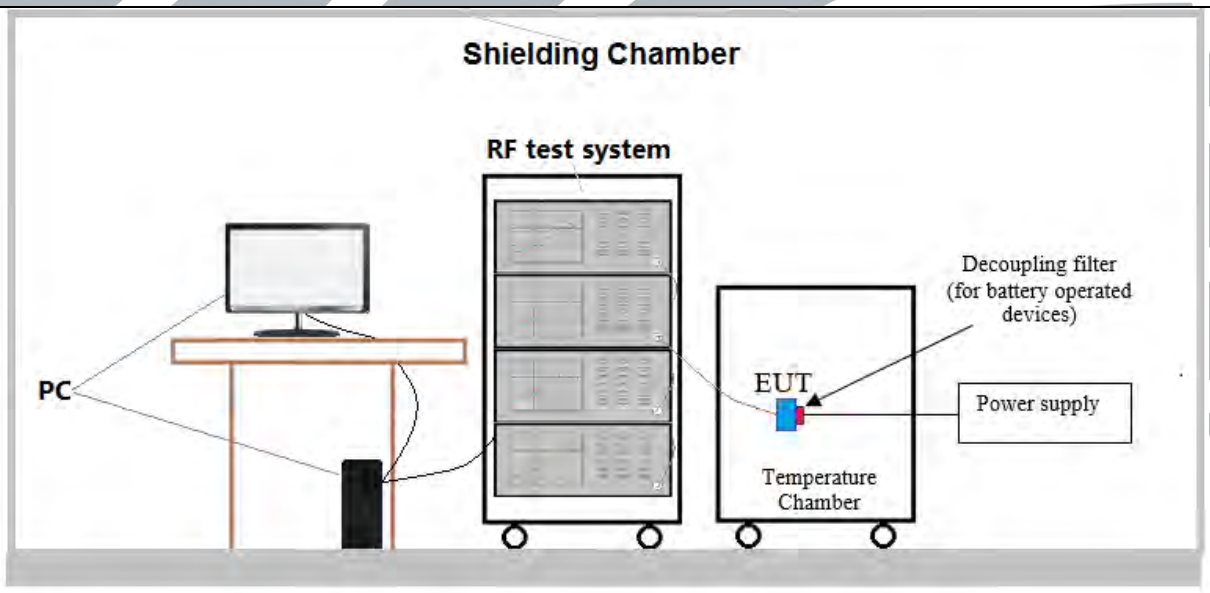
Radiated Emissions Above 1GHz Test setup



4.2.2 For Conducted RF test setup



Normal Environment



Extreme Environment

4.3 TEST CHANNELS

Band	Test Frequency ID	Bandwidth (MHz)	Number [UL]	Frequency of Uplink (MHz)
LTE Band 2 TX: 1850-1910MHz	Low Range	1.4	18607	1850.7
		3	18615	1851.5
		5	18625	1852.5
		10	18650	1855
		15	18675	1857.5
		20	18700	1860
	Middle Range	1.4/3/5/10/15/20	18900	1880
	High Range	1.4	19193	1909.3
		3	19185	1908.5
		5	19175	1907.5
		10	19150	1905
		15	19125	1902.5
		20	19100	1900
LTE Band 4 TX: 1710-1755MHz	Low Range	1.4	19957	1710.7
		3	19965	1711.5
		5	19975	1712.5
		10	20000	1715
		15	20025	1717.5
		20	20050	1720
	Middle Range	1.4/3/5/10/ 15/20	20175	1732.5
	High Range	1.4	20393	1754.3
		3	20385	1753.5
		5	20375	1752.5
		10	20350	1750
		15	20325	1747.5
		20	20300	1745
LTE band 5 TX: 824–849MHz	Low Range	1.4	20407	824.7
		3	20415	825.5
		5	20425	826.5
		10	20450	829
	Middle Range	1.4/3/5/10	20525	836.5
	High Range	1.4	20643	848.3
		3	20635	847.5
		5	20625	846.5
		10	20600	844
LTE Band 7 TX: 2500-2570MHz	Low Range	5	20775	2502.5
		10	20800	2505
		15	20825	2507.5
		20	20850	2510
	Middle Range	5/10/15/20	21100	2535
	High Range	5	21425	2567.5
		10	21400	2565
		15	21375	2562.5

		20	21350	2560
LTE Band 12 TX: 699-716MHz	Low Range	1.4	23017	699.7
		3	23025	700.5
		5	23035	701.5
		10	23060	704
	Middle Range	1.4/3/5/10	23095	707.5
	High Range	1.4	23173	715.3
		3	23165	714.5
		5	23155	713.5
		10	23130	711
LTE Band 17 TX:704-716MHz	Low Range	5	23755	706.5
		10	23780	709
	Middle Range	5/10	23790	710
	High Range	5	23825	713.5
		10	23800	711
LTE Band 25 TX: 1850-1915MHz	Low Range	1.4	26047	1850.7
		3	26055	1851.5
		5	26065	1852.5
		10	26090	1855
		15	26115	1857.5
		20	26140	1860
	Middle Range	1.4/3/5/10/15/20	26340	1880
	High Range	1.4	26683	1914.3
		3	26675	1913.5
		5	26665	1912.5
		10	26640	1910
		15	26615	1907.5
		20	26590	1905
LTE band 26 TX:824–849MHz	Low Range	1.4	26797	824.7
		3	26805	825.5
		5	26815	826.5
		10	26840	829
		15	26865	831.5
	Middle Range	1.4/3/5/10/15	26915	836.5
	High Range	1.4	27033	848.3
		3	27025	847.5
		5	27015	846.5
		10	26990	844
		15	26965	841.5
LTE band 26 TX: 814-824MHz	Low Range	1.4	26697	814.7
		3	26705	815.5
		5	26715	816.5
		10	/	/
		15	/	/
	Middle Range	1.4/3/5/10	26740	819
	High Range	1.4	26783	823.3

		3	26775	822.5
		5	26765	821.5
		10	/	/
		15	/	/
LTE Band 30 TX:2305-2315MHz	Low Range	5	27685	2307.5
		10	/	/
	Middle Range	5/10	27710	2310
	High Range	5	27735	2312.5
		10	/	/
LTE Band 41 TX: 2496-2690MHz	Low Range	5	39675	2498.5
		10	39700	2501
		15	39725	2503.5
		20	39750	2506
	Middle Range	5/10/ 15/20	40620	2593
	High Range	5	41565	2687.5
		10	41540	2685
		15	41515	2682.5
		20	41490	2680
LTE Band 66 TX: 1710-1780MHz	Low Range	1.4	131979	1710.7
		3	131987	1711.5
		5	131997	1712.5
		10	132022	1715
		15	132047	1717.5
		20	132072	1720
	Middle Range	1.4/3/5/10/ 15/20	132322	1745
	High Range	1.4	132665	1779.3
		3	132657	1778.5
		5	132647	1777.5
		10	132622	1775
		15	132597	1772.5
		20	132572	1770
LTE Band 71 TX: 663–698MHz	Low Range	5	133147	665.5
		10	133172	668
		15	133197	670.5
		20	133222	673
	Middle Range	5/10/15	133297	680.5
		20	133322	683
	High Range	5	133447	695.5
		10	133422	693
		15	133397	690.5
		20	133372	688

4.4 SYSTEM TEST CONFIGURATION

For emissions testing, the equipment under test (EUT) setup to transmit continuously to simplify the measurement methodology. Care was taken to ensure proper power supply voltages during testing. During testing, radiated emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario. It was powered by a 3.8V battery. Only the worst case data were recorded in this test report.

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, X/Y/Z axis, and antenna ports.
The worst case was found when positioned as the table below.

Band	Mode	Antenna Port	Worst-case axis positioning
LTE Band 2	1TX	Chain 0	X axis
LTE Band 4	1TX	Chain 0	X axis
LTE Band 5	1TX	Chain 0	X axis
LTE Band 7	1TX	Chain 0	X axis
LTE Band 12	1TX	Chain 0	X axis
LTE Band 17	1TX	Chain 0	X axis
LTE Band 25	1TX	Chain 0	X axis
LTE Band 26	1TX	Chain 0	X axis
LTE Band 30	1TX	Chain 0	X axis
LTE Band 41	1TX	Chain 0	X axis
LTE Band 66	1TX	Chain 0	X axis
LTE Band 71	1TX	Chain 0	X axis

All readings are extrapolated back to the equivalent three meter reading using inverse scaling with distance. Analyzer resolution is 100 kHz or greater for frequencies below 1000MHz. The resolution is 1 MHz or greater for frequencies above 1000MHz. The spurious emissions more than 20 dB below the permissible value are not reported.

Radiated emission measurement were performed from the lowest radio frequency signal generated in the device which is greater than 9 kHz to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.

4.5 PRE-SCAN

Pre-scan under all rate at lowest middle and highest channel, find the transmitter power as below.

4.5.1 LTE Band 2

LTE Band 2 Maximum Average Power (dBm)										
Modulation	RB		Test Channel			RB		Test Channel		
	Size	Offset	Low	Mid	High	Size	Offset	Low	Mid	High
	Channel Bandwidth: 1.4 MHz					Channel Bandwidth: 3 MHz				
QPSK	1	0	21.69	21.72	21.70	1	0	21.67	21.84	21.77
	1	2	22.06	21.86	22.20	1	7	22.14	22.10	22.12
	1	5	21.62	21.66	21.76	1	14	21.65	21.68	21.83
	3	0	21.93	21.81	22.10	8	0	20.92	21.03	21.06
	3	1	21.91	21.87	21.94	8	3	20.96	20.94	20.95
	3	3	21.77	21.80	22.08	8	7	20.76	21.07	21.17
	6	0	20.81	20.71	20.99	15	0	20.88	21.10	21.00
16QAM	1	0	20.76	20.66	21.20	1	0	20.81	21.07	21.32
	1	2	21.36	20.86	21.77	1	7	21.25	21.41	21.68
	1	5	20.97	20.70	21.33	1	14	20.83	21.12	21.32
	3	0	21.07	21.01	21.14	8	0	19.94	20.13	20.25
	3	1	21.06	20.88	21.07	8	3	20.09	20.02	20.21
	3	3	20.96	20.94	21.05	8	7	20.05	20.07	20.03
	6	0	20.00	19.83	20.23	15	0	19.93	20.10	20.17
	Channel Bandwidth: 5 MHz					Channel Bandwidth: 10 MHz				
QPSK	1	0	21.73	21.87	21.79	1	0	21.79	21.84	21.80
	1	12	21.99	22.16	22.13	1	24	22.10	22.27	22.21
	1	24	21.72	21.76	21.88	1	49	21.64	21.80	21.83
	12	0	20.87	21.12	21.02	25	0	20.91	21.13	21.18
	12	6	20.83	20.92	21.09	25	12	20.96	20.91	21.01
	12	13	20.88	21.09	21.16	25	25	20.74	20.93	21.03
	25	0	20.89	21.05	21.13	50	0	20.88	21.03	21.12
16QAM	1	0	20.90	21.00	21.15	1	0	20.91	21.04	21.32
	1	12	21.41	21.58	21.70	1	24	21.32	21.39	21.65
	1	24	20.87	21.06	21.24	1	49	20.97	21.06	21.22
	12	0	19.95	20.25	20.21	25	0	19.95	20.12	20.24
	12	6	19.96	20.17	20.23	25	12	19.95	20.01	20.18
	12	13	19.92	20.15	20.16	25	25	19.97	20.09	20.00
	25	0	19.91	20.22	20.26	50	0	19.97	20.08	20.14

LTE Band 2 Maximum Average Power (dBm)										
Modulation	RB		Test Channel			RB		Test Channel		
	Size	Offset	Low	Mid	High	Size	Offset	Low	Mid	High
	Channel Bandwidth: 15 MHz					Channel Bandwidth: 20 MHz				
QPSK	1	0	21.81	21.73	21.79	1	0	21.84	21.87	21.84
	1	37	21.96	22.23	22.04	1	50	22.16	22.28	22.23
	1	74	21.71	21.71	21.85	1	99	21.78	21.86	21.92
	37	0	20.93	21.10	21.07	50	0	20.97	21.18	21.20
	37	19	20.95	20.92	21.07	50	25	21.01	21.08	21.13
	37	39	20.84	21.05	21.13	50	50	20.91	21.10	21.18
	75	0	20.85	21.01	21.01	100	0	20.95	21.12	21.17
16QAM	1	0	20.86	21.02	21.24	1	0	20.93	21.11	21.34
	1	37	21.40	21.58	21.71	1	50	21.41	21.59	21.83
	1	74	20.94	21.01	21.35	1	99	21.02	21.15	21.41
	37	0	19.90	20.25	20.22	50	0	20.08	20.30	20.30
	37	19	20.08	20.12	20.17	50	25	20.10	20.21	20.24
	37	39	20.03	20.11	20.15	50	50	20.07	20.18	20.17
	75	0	19.86	20.15	20.13	100	0	20.02	20.23	20.27

4.5.2 LTE Band 4

LTE Band 4 Maximum Average Power (dBm)										
Modulation	RB		Test Channel			RB		Test Channel		
	Size	Offset	Low	Mid	High	Size	Offset	Low	Mid	High
	Channel Bandwidth: 1.4 MHz					Channel Bandwidth: 3 MHz				
QPSK	1	0	22.38	22.26	22.29	1	0	22.34	22.45	22.42
	1	2	22.71	22.46	22.65	1	7	22.83	22.65	22.66
	1	5	22.34	22.29	22.25	1	14	22.33	22.24	22.14
	3	0	22.41	22.37	22.55	8	0	21.49	21.53	21.49
	3	1	22.63	22.41	22.51	8	3	21.56	21.62	21.65
	3	3	22.78	22.38	22.64	8	7	21.68	21.56	21.59
	6	0	21.54	21.29	21.74	15	0	21.63	21.58	21.72
16QAM	1	0	21.53	21.36	21.66	1	0	21.60	21.97	21.68
	1	2	21.91	21.60	22.00	1	7	22.03	22.28	22.07
	1	5	21.67	21.40	21.64	1	14	21.63	22.02	21.63
	3	0	21.55	21.32	21.66	8	0	20.49	20.71	20.66
	3	1	21.79	21.56	21.66	8	3	20.80	20.59	20.77
	3	3	21.75	21.33	21.75	8	7	20.73	20.73	20.86
	6	0	20.63	20.40	20.80	15	0	20.79	20.74	20.83

LTE Band 4 Maximum Average Power (dBm)										
Modulation	RB		Test Channel			RB		Test Channel		
	Size	Offset	Low	Mid	High	Size	Offset	Low	Mid	High
Channel Bandwidth: 5 MHz						Channel Bandwidth: 10 MHz				
QPSK	1	0	22.38	22.33	22.34	1	0	22.41	22.46	22.42
	1	12	22.81	22.65	22.63	1	24	22.72	22.69	22.65
	1	24	22.38	22.40	22.24	1	49	22.38	22.23	22.16
	12	0	21.60	21.48	21.48	25	0	21.47	21.50	21.62
	12	6	21.51	21.56	21.62	25	12	21.51	21.51	21.63
	12	13	21.69	21.72	21.55	25	25	21.79	21.58	21.53
	25	0	21.59	21.58	21.79	50	0	21.54	21.50	21.75
16QAM	1	0	21.64	21.97	21.65	1	0	21.62	21.92	21.72
	1	12	21.87	22.46	22.01	1	24	21.90	22.31	22.13
	1	24	21.70	22.04	21.64	1	49	21.57	21.94	21.58
	12	0	20.51	20.78	20.81	25	0	20.55	20.76	20.80
	12	6	20.69	20.65	20.69	25	12	20.64	20.61	20.77
	12	13	20.73	20.78	20.89	25	25	20.73	20.78	20.84
	25	0	20.79	20.68	20.86	50	0	20.76	20.70	20.83
Channel Bandwidth: 15 MHz						Channel Bandwidth: 20 MHz				
QPSK	1	0	22.42	22.44	22.28	1	0	22.46	22.49	22.45
	1	37	22.66	22.76	22.72	1	50	22.83	22.81	22.76
	1	74	22.20	22.35	22.29	1	99	22.40	22.42	22.31
	37	0	21.42	21.44	21.59	50	0	21.60	21.62	21.62
	37	19	21.62	21.62	21.64	50	25	21.69	21.63	21.65
	37	39	21.66	21.63	21.62	50	50	21.80	21.73	21.65
	75	0	21.56	21.56	21.76	100	0	21.65	21.69	21.81
16QAM	1	0	21.52	21.94	21.68	1	0	21.69	21.98	21.78
	1	37	22.05	22.31	22.06	1	50	22.05	22.46	22.18
	1	74	21.66	21.93	21.73	1	99	21.74	22.07	21.76
	37	0	20.63	20.71	20.68	50	0	20.64	20.84	20.84
	37	19	20.69	20.58	20.77	50	25	20.84	20.76	20.82
	37	39	20.62	20.80	20.76	50	50	20.81	20.86	20.90
	75	0	20.61	20.79	20.70	100	0	20.80	20.80	20.86

4.5.3 LTE Band 5

LTE Band 5 Maximum Average Power (dBm)										
Modulation	RB		Test Channel			RB		Test Channel		
	Size	Offset	Low	Mid	High	Size	Offset	Low	Mid	High
Channel Bandwidth: 1.4 MHz						Channel Bandwidth: 3 MHz				
QPSK	1	0	23.80	23.79	23.78	1	0	23.81	23.83	23.83
	1	2	23.97	24.06	23.91	1	7	23.96	24.03	23.96
	1	5	23.81	23.84	23.93	1	14	23.98	23.82	23.79
	3	0	23.87	23.94	23.88	8	0	22.89	22.96	22.87
	3	1	23.92	23.97	23.78	8	3	22.86	22.78	22.81
	3	3	23.78	23.93	23.79	8	7	22.85	22.90	22.87
	6	0	22.77	22.90	22.80	15	0	22.81	22.81	22.80
16QAM	1	0	23.03	22.80	22.84	1	0	22.94	23.32	22.81
	1	2	23.09	22.97	23.00	1	7	23.20	23.53	22.92
	1	5	22.95	22.81	22.74	1	14	22.92	23.38	22.91
	3	0	22.97	22.98	22.91	8	0	21.94	22.04	21.96
	3	1	23.02	23.11	23.00	8	3	22.03	22.02	22.03
	3	3	23.07	22.97	22.84	8	7	22.07	22.02	21.93
	6	0	21.95	21.88	21.95	15	0	21.91	21.89	21.94
Channel Bandwidth: 5 MHz						Channel Bandwidth: 10 MHz				
QPSK	1	0	23.87	23.79	23.86	1	0	23.91	23.93	23.94
	1	12	23.95	24.07	24.04	1	24	24.14	24.08	24.07
	1	24	23.80	23.86	23.88	1	49	24.00	23.88	23.95
	12	0	22.77	22.85	22.87	25	0	22.91	22.96	22.88
	12	6	22.82	22.72	22.76	25	12	22.95	22.92	22.93
	12	13	22.84	22.86	22.83	25	25	22.95	22.95	22.87
	25	0	22.88	22.85	22.76	50	0	22.91	22.93	22.86
16QAM	1	0	22.94	23.46	22.76	1	0	23.06	23.49	22.94
	1	12	23.02	23.47	22.99	1	24	23.20	23.62	23.04
	1	24	23.02	23.37	22.87	1	49	23.08	23.43	22.94
	12	0	21.93	22.05	21.90	25	0	22.01	22.12	22.05
	12	6	21.94	21.95	21.95	25	12	22.07	22.09	22.08
	12	13	22.07	22.04	21.95	25	25	22.09	22.10	22.03
	25	0	21.87	21.95	21.82	50	0	22.02	22.02	21.97

4.5.4 LTE Band 7

LTE Band 7 Maximum Average Power (dBm)										
Modulation	RB		Test Channel			RB		Test Channel		
	Size	Offset	Low	Mid	High	Size	Offset	Low	Mid	High
Channel Bandwidth: 5 MHz						Channel Bandwidth: 10 MHz				
QPSK	1	0	18.07	18.10	18.26	1	0	18.43	18.54	18.37
	1	12	18.73	18.25	18.48	1	24	18.72	18.56	18.55
	1	24	18.31	18.14	18.37	1	49	18.20	18.44	18.29
	12	0	17.62	17.26	17.76	25	0	17.57	17.65	17.84
	12	6	17.79	17.27	17.74	25	12	17.82	17.69	17.83
	12	13	17.80	17.29	17.77	25	25	17.77	17.83	17.82
	25	0	17.72	17.28	17.76	50	0	17.79	17.72	17.85
16QAM	1	0	17.82	17.51	17.95	1	0	17.66	17.64	18.03
	1	12	18.25	17.67	18.52	1	24	18.22	18.21	18.48
	1	24	17.71	17.56	18.17	1	49	17.76	17.63	18.17
	12	0	16.60	16.21	16.72	25	0	16.68	16.56	16.69
	12	6	16.71	16.35	16.71	25	12	16.67	16.76	16.76
	12	13	16.65	16.25	16.85	25	25	16.69	16.77	16.77
	25	0	16.75	16.27	16.72	50	0	16.69	16.61	16.75
Channel Bandwidth: 15 MHz						Channel Bandwidth: 20 MHz				
QPSK	1	0	18.42	18.43	18.25	1	0	18.46	18.56	18.45
	1	37	18.59	18.73	18.53	1	50	18.77	18.74	18.64
	1	74	18.32	18.47	18.40	1	99	18.38	18.52	18.41
	37	0	17.68	17.65	17.69	50	0	17.75	17.78	17.88
	37	19	17.84	17.77	17.80	50	25	17.86	17.87	17.89
	37	39	17.75	17.78	17.89	50	50	17.87	17.86	17.94
	75	0	17.78	17.68	17.86	100	0	17.82	17.85	17.87
16QAM	1	0	17.73	17.79	17.95	1	0	17.85	17.79	18.11
	1	37	18.24	18.10	18.62	1	50	18.35	18.28	18.65
	1	74	17.68	17.70	18.12	1	99	17.80	17.82	18.18
	37	0	16.66	16.67	16.77	50	0	16.76	16.73	16.87
	37	19	16.72	16.74	16.70	50	25	16.86	16.84	16.86
	37	39	16.78	16.64	16.80	50	50	16.84	16.79	16.88
	75	0	16.80	16.66	16.80	100	0	16.80	16.79	16.85

4.5.5 LTE Band 12

LTE Band 12 Maximum Average Power (dBm)										
Modulation	RB		Test Channel			RB		Test Channel		
	Size	Offset	Low	Mid	High	Size	Offset	Low	Mid	High
Channel Bandwidth: 1.4 MHz						Channel Bandwidth: 3 MHz				
QPSK	1	0	22.88	22.24	22.85	1	0	22.86	22.67	22.74
	1	2	23.04	22.43	23.05	1	7	22.95	23.03	22.94
	1	5	22.82	22.23	22.81	1	14	22.85	22.88	22.91
	3	0	22.81	22.39	22.80	8	0	21.82	21.96	21.97
	3	1	22.94	22.39	22.84	8	3	21.90	21.94	21.98
	3	3	22.86	22.35	22.96	8	7	21.76	21.80	21.94
	6	0	21.78	21.29	21.94	15	0	21.83	21.91	21.97
16QAM	1	0	22.24	21.35	21.80	1	0	22.27	21.97	21.80
	1	2	22.61	21.53	22.06	1	7	22.64	22.21	22.08
	1	5	22.50	21.37	21.76	1	14	22.42	22.07	21.94
	3	0	21.75	21.35	22.04	8	0	20.81	20.84	20.94
	3	1	21.88	21.55	21.96	8	3	20.95	20.84	20.97
	3	3	21.76	21.35	21.97	8	7	20.78	20.87	21.04
	6	0	20.87	20.32	20.99	15	0	20.88	20.80	20.85
Channel Bandwidth: 5 MHz						Channel Bandwidth: 10 MHz				
QPSK	1	0	22.86	22.67	22.90	1	0	22.92	22.83	22.94
	1	12	22.98	23.04	23.03	1	24	23.10	23.09	23.11
	1	24	22.73	22.77	22.93	1	49	22.90	22.97	22.96
	12	0	21.92	21.92	21.82	25	0	21.94	21.98	21.98
	12	6	21.85	21.87	21.82	25	12	21.99	21.98	22.00
	12	13	21.70	21.95	21.82	25	25	21.90	21.99	21.96
	25	0	21.91	21.94	21.84	50	0	21.92	21.98	21.97
16QAM	1	0	22.34	21.88	21.80	1	0	22.41	22.00	21.89
	1	12	22.64	22.13	22.08	1	24	22.70	22.23	22.12
	1	24	22.36	21.94	21.79	1	49	22.50	22.10	21.95
	12	0	20.80	20.91	20.92	25	0	20.95	20.99	21.06
	12	6	20.92	20.91	21.04	25	12	21.01	20.98	21.05
	12	13	20.77	20.77	21.01	25	25	20.94	20.97	21.04
	25	0	20.78	20.78	20.92	50	0	20.90	20.96	21.01

4.5.6 LTE Band 17

LTE Band 17 Maximum Average Power (dBm)										
Modulation	RB		Test Channel			RB		Test Channel		
	Size	Offset	Low	Mid	High	Size	Offset	Low	Mid	High
	Channel Bandwidth: 5 MHz					Channel Bandwidth: 10 MHz				
QPSK	1	0	23.63	22.91	23.75	1	0	23.77	23.75	23.75
	1	12	23.67	22.97	23.76	1	24	23.81	23.82	23.83
	1	24	23.41	22.87	23.59	1	49	23.61	23.65	23.61
	12	0	22.74	22.17	22.63	25	0	22.83	22.83	22.81
	12	6	22.63	22.09	22.70	25	12	22.78	22.85	22.80
	12	13	22.61	22.01	22.78	25	25	22.70	22.82	22.81
	25	0	22.68	22.07	22.74	50	0	22.77	22.79	22.80
16QAM	1	0	22.72	22.08	23.00	1	0	22.81	22.66	23.14
	1	12	22.72	22.12	23.05	1	24	22.77	22.81	23.10
	1	24	22.76	22.01	23.02	1	49	22.85	22.62	23.02
	12	0	21.76	21.10	21.68	25	0	21.89	21.82	21.74
	12	6	21.77	21.14	21.62	25	12	21.81	21.78	21.79
	12	13	21.71	20.93	21.79	25	25	21.77	21.71	21.81
	25	0	21.63	21.10	21.74	50	0	21.73	21.77	21.78

4.5.7 LTE Band 25

LTE Band 25 Maximum Average Power (dBm)										
Modulation	RB		Test Channel			RB		Test Channel		
	Size	Offset	Low	Mid	High	Size	Offset	Low	Mid	High
	Channel Bandwidth: 1.4 MHz					Channel Bandwidth: 3 MHz				
QPSK	1	0	21.79	20.85	21.82	1	0	21.78	21.97	21.86
	1	2	22.24	21.05	22.27	1	7	22.39	22.39	22.38
	1	5	21.78	20.82	21.91	1	14	21.95	21.99	22.02
	3	0	22.12	20.94	22.40	8	0	21.13	21.27	21.23
	3	1	22.06	21.00	22.21	8	3	21.05	21.22	21.26
	3	3	22.17	20.95	22.16	8	7	21.19	21.16	21.33
	6	0	21.11	19.90	21.40	15	0	21.01	21.34	21.38
16QAM	1	0	21.16	19.82	21.50	1	0	21.07	21.08	21.50
	1	2	21.56	20.02	21.83	1	7	21.60	21.66	21.95
	1	5	21.12	19.90	21.56	1	14	21.06	21.11	21.57
	3	0	21.17	20.02	21.39	8	0	20.14	20.18	20.32
	3	1	21.23	20.03	21.33	8	3	20.16	20.19	20.38
	3	3	21.02	20.01	21.31	8	7	20.10	20.24	20.31
	6	0	20.31	18.87	20.21	15	0	20.27	20.13	20.30

LTE Band 25 Maximum Average Power (dBm)										
Modulation	RB		Test Channel			RB		Test Channel		
	Size	Offset	Low	Mid	High	Size	Offset	Low	Mid	High
Channel Bandwidth: 5 MHz						Channel Bandwidth: 10 MHz				
QPSK	1	0	21.83	22.02	21.88	1	0	21.88	22.01	21.79
	1	12	22.40	22.32	22.30	1	24	22.25	22.42	22.35
	1	24	21.80	22.00	21.90	1	49	21.85	21.95	21.88
	12	0	21.18	21.27	21.33	25	0	21.21	21.30	21.34
	12	6	21.14	21.16	21.38	25	12	21.17	21.16	21.30
	12	13	21.03	21.22	21.32	25	25	21.13	21.19	21.34
	25	0	21.03	21.34	21.35	50	0	21.01	21.23	21.33
16QAM	1	0	21.21	21.25	21.49	1	0	21.22	21.13	21.49
	1	12	21.60	21.75	21.97	1	24	21.51	21.60	21.85
	1	24	21.16	21.22	21.38	1	49	21.19	21.09	21.48
	12	0	20.15	20.09	20.44	25	0	20.19	20.18	20.38
	12	6	20.12	20.10	20.30	25	12	20.22	20.19	20.38
	12	13	20.07	20.12	20.33	25	25	19.99	20.10	20.24
	25	0	20.17	20.20	20.28	50	0	20.25	20.15	20.20
Channel Bandwidth: 15 MHz						Channel Bandwidth: 20 MHz				
QPSK	1	0	21.78	21.90	21.81	1	0	21.94	22.05	21.98
	1	37	22.29	22.48	22.39	1	50	22.40	22.51	22.44
	1	74	21.88	21.90	21.89	1	99	21.98	22.08	22.06
	37	0	21.10	21.18	21.42	50	0	21.22	21.35	21.42
	37	19	21.09	21.19	21.38	50	25	21.20	21.30	21.39
	37	39	21.13	21.08	21.20	50	50	21.20	21.23	21.36
	75	0	21.15	21.26	21.38	100	0	21.17	21.38	21.48
16QAM	1	0	21.09	21.17	21.52	1	0	21.25	21.28	21.56
	1	37	21.58	21.70	21.84	1	50	21.68	21.75	21.99
	1	74	21.17	21.16	21.54	1	99	21.23	21.24	21.58
	37	0	20.25	20.24	20.37	50	0	20.30	20.29	20.46
	37	19	20.17	20.16	20.33	50	25	20.26	20.28	20.41
	37	39	20.08	20.23	20.19	50	50	20.14	20.27	20.38
	75	0	20.29	20.12	20.25	100	0	20.32	20.29	20.38

4.5.8 LTE Band 26

LTE Band 26 Maximum Average Power (dBm)										
Modulation	RB		Test Channel			RB		Test Channel		
	Size	Offset	Low	Mid	High	Size	Offset	Low	Mid	High
Channel Bandwidth: 1.4 MHz						Channel Bandwidth: 3 MHz				
QPSK	1	0	22.74	22.73	22.72	1	0	22.79	22.76	22.78
	1	2	22.90	22.89	22.93	1	7	22.80	22.77	22.82
	1	5	22.72	22.75	22.73	1	14	22.81	22.80	22.81
	3	0	22.83	22.82	22.89	8	0	21.89	21.87	21.81
	3	1	22.86	22.88	22.88	8	3	21.93	21.90	21.83
	3	3	22.79	22.87	22.84	8	7	21.93	21.86	21.76
	6	0	21.90	21.87	21.78	15	0	21.90	21.85	21.79
16QAM	1	0	21.84	21.92	21.71	1	0	22.56	22.02	21.93
	1	2	22.02	22.10	21.91	1	7	22.54	22.03	21.82
	1	5	21.90	21.96	21.73	1	14	22.50	22.01	21.74
	3	0	22.14	21.85	21.91	8	0	21.04	20.85	20.99
	3	1	22.06	22.13	22.00	8	3	21.06	21.02	20.96
	3	3	22.16	21.94	21.86	8	7	21.08	20.86	20.92
	6	0	20.92	20.96	20.82	15	0	20.97	20.84	20.97
Channel Bandwidth: 5 MHz						Channel Bandwidth: 10 MHz				
QPSK	1	0	22.74	22.64	22.70	1	0	22.77	22.74	22.76
	1	12	22.85	22.79	22.86	1	24	22.87	22.82	22.90
	1	24	22.76	22.72	22.70	1	49	22.80	22.74	22.76
	12	0	21.91	21.85	21.88	25	0	21.95	21.98	21.87
	12	6	21.97	21.93	21.94	25	12	21.94	21.95	21.93
	12	13	21.92	21.84	21.71	25	25	21.96	21.87	21.83
	25	0	21.92	21.89	21.77	50	0	21.90	21.92	21.86
16QAM	1	0	22.13	21.84	21.75	1	0	21.90	22.45	21.98
	1	12	22.25	21.96	21.85	1	24	22.10	22.58	22.15
	1	24	22.14	21.86	21.58	1	49	21.92	22.44	21.88
	12	0	20.93	20.84	20.86	25	0	21.02	21.01	20.91
	12	6	21.12	20.96	20.98	25	12	21.07	20.96	21.02
	12	13	20.98	20.77	20.74	25	25	21.06	20.97	20.83
	25	0	20.92	20.94	20.96	50	0	20.96	20.96	20.87

LTE Band 26					
Modulation	RB		Test Channel		
	Size	Offset	Low	Mid	High
Channel Bandwidth: 15 MHz					
QPSK	1	0	22.67	22.73	22.70
	1	12	22.82	22.76	22.97
	1	24	22.74	22.68	22.68
	12	0	21.91	21.95	21.93
	12	6	21.96	21.94	21.93
	12	13	21.85	21.95	21.99
	25	0	21.95	21.97	21.99
16QAM	1	0	22.25	22.42	21.90
	1	12	22.32	22.47	22.04
	1	24	22.22	22.36	21.91
	12	0	20.86	20.90	20.95
	12	6	20.89	20.90	20.98
	12	13	20.88	20.93	20.92
	25	0	20.87	20.94	20.94

4.5.9 LTE Band 26 (Part 90S)

LTE Band 26 Maximum Average Power (dBm)										
Modulation	RB		Test Channel			RB		Test Channel		
	Size	Offset	Low	Mid	High	Size	Offset	Low	Mid	High
	Channel Bandwidth: 1.4 MHz					Channel Bandwidth: 3 MHz				
QPSK	1	0	22.77	22.75	22.77	1	0	22.83	22.89	22.80
	1	2	22.87	22.94	22.92	1	7	22.85	22.84	22.73
	1	5	22.72	22.76	22.75	1	14	22.84	22.83	22.80
	3	0	22.89	22.88	22.87	8	0	21.92	21.94	21.91
	3	1	22.92	22.92	22.92	8	3	21.94	21.95	21.93
	3	3	22.94	22.93	22.89	8	7	21.93	21.93	21.89
	6	0	21.88	21.93	21.91	15	0	21.92	21.95	21.91
16QAM	1	0	21.93	21.88	21.88	1	0	22.09	21.97	22.51
	1	2	22.15	22.07	22.06	1	7	22.07	21.98	22.47
	1	5	21.97	21.93	21.92	1	14	22.08	21.96	22.48
	3	0	21.90	22.06	22.18	8	0	20.88	21.00	21.05
	3	1	22.15	22.16	22.03	8	3	21.05	21.02	21.06
	3	3	21.97	22.09	22.20	8	7	20.93	21.01	21.08
	6	0	20.91	20.89	20.93	15	0	20.90	20.97	20.97

LTE Band 26 Maximum Average Power (dBm)										
Modulation	RB		Test Channel			RB		Test Channel		
	Size	Offset	Low	Mid	High	Size	Offset	Low	Mid	High
	Channel Bandwidth: 5 MHz					Channel Bandwidth: 10 MHz				
QPSK	1	0	22.73	22.76	22.74	1	0	/	22.76	/
	1	12	22.88	22.85	22.83	1	24	/	22.95	/
	1	24	22.79	22.76	22.79	1	49	/	22.79	/
	12	0	21.84	21.82	21.91	25	0	/	21.87	/
	12	6	21.96	21.96	21.92	25	12	/	21.95	/
	12	13	21.93	21.93	21.88	25	25	/	21.97	/
	25	0	21.88	21.93	21.91	50	0	/	21.91	/
16QAM	1	0	21.74	22.11	21.94	1	0	/	22.44	/
	1	12	21.86	22.26	22.06	1	24	/	22.45	/
	1	24	21.82	22.16	21.96	1	49	/	22.42	/
	12	0	20.79	20.90	20.84	25	0	/	20.93	/
	12	6	21.03	21.13	21.01	25	12	/	20.98	/
	12	13	20.93	20.91	20.86	25	25	/	21.01	/
	25	0	20.97	20.93	20.94	50	0	/	20.90	/

4.5.10 LTE Band 30

LTE Band 30 Maximum Average Power (dBm)										
Modulation	RB		Test Channel			RB		Test Channel		
	Size	Offset	Low	Mid	High	Size	Offset	Low	Mid	High
	Channel Bandwidth: 5 MHz					Channel Bandwidth: 10 MHz				
QPSK	1	0	20.61	20.54	20.57	1	0	/	20.84	/
	1	12	20.70	20.67	20.74	1	24	/	21.08	/
	1	24	20.59	20.53	20.62	1	49	/	20.86	/
	12	0	20.67	20.66	20.65	25	0	/	20.81	/
	12	6	20.73	20.74	20.74	25	12	/	20.92	/
	12	13	20.68	20.69	20.67	25	25	/	20.86	/
	25	0	20.64	20.65	20.65	50	0	/	20.84	/
16QAM	1	0	20.88	20.62	20.49	1	0	/	20.97	/
	1	12	20.97	20.77	20.63	1	24	/	21.15	/
	1	24	20.84	20.67	20.51	1	49	/	21.01	/
	12	0	20.68	20.60	20.63	25	0	/	20.86	/
	12	6	20.82	20.76	20.78	25	12	/	20.90	/
	12	13	20.67	20.65	20.65	25	25	/	20.94	/
	25	0	20.66	20.70	20.74	50	0	/	20.88	/

4.5.11 LTE Band 41

LTE Band 41 Maximum Average Power (dBm)										
Modulation	RB		Test Channel			RB		Test Channel		
	Size	Offset	Low	Mid	High	Size	Offset	Low	Mid	High
Channel Bandwidth: 5 MHz						Channel Bandwidth: 10 MHz				
QPSK	1	0	23.68	23.55	23.51	1	0	23.74	23.61	23.66
	1	12	23.86	23.68	24.05	1	24	23.96	24.02	24.21
	1	24	23.33	23.58	23.52	1	49	23.39	23.56	23.59
	12	0	22.62	22.59	22.67	25	0	22.59	22.72	22.75
	12	6	22.75	22.63	22.87	25	12	22.73	22.74	22.80
	12	13	22.62	22.59	22.88	25	25	22.58	22.63	22.73
	25	0	22.73	22.63	22.84	50	0	22.57	22.64	22.81
16QAM	1	0	22.32	23.55	22.83	1	0	22.37	22.42	22.81
	1	12	23.05	23.67	23.34	1	24	22.89	22.88	23.28
	1	24	22.49	23.57	22.89	1	49	22.46	22.40	22.71
	12	0	21.54	22.58	21.62	25	0	21.61	21.74	21.70
	12	6	21.71	21.71	21.82	25	12	21.71	21.71	21.97
	12	13	21.75	22.61	21.91	25	25	21.66	21.65	21.96
	25	0	21.77	22.60	21.87	50	0	21.72	21.52	21.86
Channel Bandwidth: 15 MHz						Channel Bandwidth: 20 MHz				
QPSK	1	0	23.60	23.61	23.61	1	0	23.76	23.66	23.69
	1	37	23.93	23.87	24.14	1	50	24.04	24.05	24.24
	1	74	23.34	23.40	23.63	1	99	23.47	23.56	23.69
	37	0	22.60	22.62	22.77	50	0	22.71	22.78	22.86
	37	19	22.67	22.79	22.79	50	25	22.80	22.83	22.88
	37	39	22.67	22.70	22.87	50	50	22.76	22.79	22.91
	75	0	22.67	22.72	22.78	100	0	22.77	22.78	22.92
16QAM	1	0	22.43	22.43	22.85	1	0	22.52	22.47	22.88
	1	37	22.94	22.88	23.32	1	50	23.08	23.05	23.41
	1	74	22.49	22.43	22.87	1	99	22.56	22.52	22.89
	37	0	21.61	21.69	21.70	50	0	21.70	21.81	21.79
	37	19	21.76	21.75	22.02	50	25	21.79	21.83	22.02
	37	39	21.57	21.77	21.94	50	50	21.76	21.80	21.96
	75	0	21.68	21.60	21.78	100	0	21.77	21.70	21.97

4.5.12 LTE Band 66

LTE Band 66 Maximum Average Power (dBm)										
Modulation	RB		Test Channel			RB		Test Channel		
	Size	Offset	Low	Mid	High	Size	Offset	Low	Mid	High
Channel Bandwidth: 1.4 MHz						Channel Bandwidth: 3 MHz				
QPSK	1	0	21.80	21.83	21.73	1	0	21.66	21.73	21.65
	1	2	22.23	22.30	22.22	1	7	22.17	22.23	22.17
	1	5	21.83	21.67	21.79	1	14	21.67	21.68	21.66
	3	0	22.09	22.02	21.96	8	0	20.99	21.01	21.06
	3	1	22.03	21.92	22.06	8	3	20.99	21.07	21.00
	3	3	22.10	21.90	21.83	8	7	20.98	21.00	20.97
	6	0	20.98	21.01	21.05	15	0	20.97	20.87	21.00
16QAM	1	0	21.34	21.00	20.97	1	0	21.35	21.00	20.81
	1	2	21.93	21.48	21.31	1	7	21.85	21.54	21.29
	1	5	21.28	21.12	20.92	1	14	21.19	21.14	21.03
	3	0	21.17	20.98	21.13	8	0	20.06	20.09	20.12
	3	1	21.22	21.14	21.12	8	3	20.18	20.21	20.09
	3	3	21.20	21.04	21.06	8	7	20.26	20.06	20.06
	6	0	20.11	20.28	20.01	15	0	20.24	20.11	20.11
Channel Bandwidth: 5 MHz						Channel Bandwidth: 10 MHz				
QPSK	1	0	21.81	21.75	21.72	1	0	21.79	21.83	21.80
	1	12	22.28	22.13	22.22	1	24	22.33	22.27	22.18
	1	24	21.78	21.67	21.75	1	49	21.74	21.83	21.73
	12	0	20.92	20.97	21.07	25	0	21.07	21.09	20.99
	12	6	21.06	21.00	20.96	25	12	21.00	21.00	20.99
	12	13	21.15	20.94	20.86	25	25	21.04	20.91	20.91
	25	0	21.07	20.91	20.99	50	0	21.02	21.00	21.05
16QAM	1	0	21.28	20.93	20.82	1	0	21.23	21.02	20.99
	1	12	21.75	21.58	21.37	1	24	21.76	21.43	21.40
	1	24	21.21	20.98	21.06	1	49	21.19	20.97	21.03
	12	0	20.16	20.13	20.03	25	0	20.04	20.14	20.19
	12	6	20.10	20.19	20.21	25	12	20.19	20.23	20.05
	12	13	20.29	19.95	20.06	25	25	20.22	20.08	19.95
	25	0	20.21	20.16	20.13	50	0	20.07	20.18	20.13

LTE Band 66 Maximum Average Power (dBm)										
Modulation	RB		Test Channel			RB		Test Channel		
	Size	Offset	Low	Mid	High	Size	Offset	Low	Mid	High
	Channel Bandwidth: 15 MHz					Channel Bandwidth: 20 MHz				
QPSK	1	0	21.74	21.82	21.72	1	0	21.82	21.88	21.84
	1	37	22.15	22.27	22.17	1	50	22.35	22.31	22.28
	1	74	21.85	21.83	21.72	1	99	21.86	21.85	21.85
	37	0	21.04	21.09	20.96	50	0	21.12	21.13	21.12
	37	19	20.98	21.02	21.06	50	25	21.09	21.09	21.11
	37	39	21.03	20.99	20.88	50	50	21.18	21.06	21.00
	75	0	20.94	20.99	20.94	100	0	21.13	21.03	21.06
16QAM	1	0	21.21	21.01	20.94	1	0	21.36	21.12	20.99
	1	37	21.92	21.50	21.40	1	50	21.94	21.61	21.44
	1	74	21.33	21.02	20.98	1	99	21.38	21.15	21.10
	37	0	20.12	20.11	20.17	50	0	20.22	20.18	20.23
	37	19	20.06	20.21	20.09	50	25	20.25	20.27	20.22
	37	39	20.28	20.12	20.04	50	50	20.31	20.15	20.10
	75	0	20.06	20.10	20.11	100	0	20.26	20.29	20.18

4.5.13 LTE Band 71

LTE Band 71 Maximum Average Power (dBm)										
Modulation	RB		Test Channel			RB		Test Channel		
	Size	Offset	Low	Mid	High	Size	Offset	Low	Mid	High
Channel Bandwidth: 5 MHz						Channel Bandwidth: 10 MHz				
QPSK	1	0	23.95	23.75	23.66	1	0	23.89	23.77	23.71
	1	12	24.14	23.89	24.20	1	24	24.19	24.13	24.16
	1	24	23.71	23.72	23.78	1	49	23.67	23.82	23.76
	12	0	22.84	22.88	23.01	25	0	22.99	22.94	22.93
	12	6	23.17	23.08	23.01	25	12	23.11	23.08	23.04
	12	13	23.14	22.84	22.95	25	25	23.03	22.99	23.00
	25	0	23.02	22.58	23.05	50	0	22.97	23.10	23.11
16QAM	1	0	23.36	22.40	22.93	1	0	23.31	23.04	23.10
	1	12	23.72	22.54	23.50	1	24	23.73	23.49	23.53
	1	24	23.36	22.38	23.14	1	49	23.34	23.01	23.11
	12	0	21.97	21.55	21.91	25	0	21.85	22.06	22.07
	12	6	21.99	21.68	22.13	25	12	22.08	22.15	21.97
	12	13	22.16	21.53	22.08	25	25	22.09	22.00	21.97
	25	0	22.05	21.60	22.02	50	0	21.91	21.99	22.02
Channel Bandwidth: 15 MHz						Channel Bandwidth: 20 MHz				
QPSK	1	0	23.88	23.82	23.66	1	0	23.96	23.88	23.78
	1	37	24.01	24.24	24.15	1	50	24.21	24.28	24.26
	1	74	23.78	23.82	23.75	1	99	23.79	23.84	23.88
	37	0	22.96	23.09	22.90	50	0	23.04	23.13	23.06
	37	19	23.09	23.10	23.11	50	25	23.20	23.17	23.16
	37	39	23.02	23.07	22.97	50	50	23.17	23.14	23.09
	75	0	22.89	23.09	23.00	100	0	23.08	23.13	23.12
16QAM	1	0	23.29	23.03	23.05	1	0	23.44	23.14	23.10
	1	37	23.89	23.56	23.53	1	50	23.91	23.67	23.57
	1	74	23.48	23.06	23.06	1	99	23.53	23.19	23.18
	37	0	21.93	22.03	22.05	50	0	22.03	22.10	22.11
	37	19	21.95	22.13	22.01	50	25	22.14	22.19	22.14
	37	39	22.15	22.04	22.06	50	50	22.18	22.07	22.12
	75	0	21.90	21.91	22.00	100	0	22.10	22.10	22.07

Pre-scan all bandwidth and RB, find worse case mode are chosen to the report, the LTE worse case mode applicability and tested channel detail as below:

Item	Band	Bandwidth(MHz)						Modulation			RB			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	1	Half	Full	L	M	H
ERP/EIRP	2	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☐	☐	☒	☒	☒
	4	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☐	☐	☒	☒	☒
	5	☒	☒	☒	☒	--	--	☒	☒	☐	☒	☐	☐	☒	☒	☒
	7	-	-	☒	☒	☒	☒	☒	☒	☐	☒	☐	☐	☒	☒	☒
	12	☒	☒	☒	☒	-	-	☒	☒	☐	☒	☐	☐	☒	☒	☒
	17	-	-	☒	☒	-	-	☒	☒	☐	☒	☐	☐	☒	☒	☒
	25	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☐	☐	☒	☒	☒
	26	☒	☒	☒	☒	☒	--	☒	☒	☐	☒	☐	☐	☒	☒	☒
	30	-	-	☒	☒	-	-	☒	☒	☐	☒	☐	☐	☒	☒	☒
	41	-	-	☒	☒	☒	☒	☒	☒	☐	☒	☐	☐	☒	☒	☒
	66	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☐	☐	☒	☒	☒
	71	-	-	☒	☒	☒	☒	☒	☒	☐	☒	☐	☐	☒	☒	☒
Conducted output power	2	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☒	☒	☒	☒	☒
	4	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☒	☒	☒	☒	☒
	5	☒	☒	☒	☒	--	--	☒	☒	☐	☒	☒	☒	☒	☒	☒
	7	-	-	☒	☒	☒	☒	☒	☒	☐	☒	☒	☒	☒	☒	☒
	12	☒	☒	☒	☒	-	-	☒	☒	☐	☒	☒	☒	☒	☒	☒
	17	-	-	☒	☒	-	-	☒	☒	☐	☒	☒	☒	☒	☒	☒
	25	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☒	☒	☒	☒	☒
	26	☒	☒	☒	☒	☒	--	☒	☒	☐	☒	☒	☒	☒	☒	☒
	30	-	-	☒	☒	-	-	☒	☒	☐	☒	☒	☒	☒	☒	☒
	41	-	-	☒	☒	☒	☒	☒	☒	☐	☒	☒	☒	☒	☒	☒
	66	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☒	☒	☒	☒	☒
	71	-	-	☒	☒	☒	☒	☒	☒	☐	☒	☒	☒	☒	☒	☒

Item	Band	Bandwidth(MHz)						Modulation			RB			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	1	Half	Full	L	M	H
99%&26dB Bandwidth	2	☒	☒	☒	☒	☒	☒	☒	☒	☐	☐	☐	☒	☒	☒	☒
	4	☒	☒	☒	☒	☒	☒	☒	☒	☐	☐	☐	☒	☒	☒	☒
	5	☒	☒	☒	☒	--	--	☒	☒	☐	☐	☐	☒	☒	☒	☒
	7	-	-	☒	☒	☒	☒	☒	☒	☐	☐	☐	☒	☒	☒	☒
	12	☒	☒	☒	☒	-	-	☒	☒	☐	☐	☐	☒	☒	☒	☒
	17	-	-	☒	☒	-	-	☒	☒	☐	☐	☐	☒	☒	☒	☒
	25	☒	☒	☒	☒	☒	☒	☒	☒	☐	☐	☐	☒	☒	☒	☒
	26	☒	☒	☒	☒	☒	--	☒	☒	☐	☐	☐	☒	☒	☒	☒
	30	-	-	☒	☒	-	-	☒	☒	☐	☐	☐	☒	☒	☒	☒
	41	-	-	☒	☒	☒	☒	☒	☒	☐	☐	☐	☒	☒	☒	☒
	66	☒	☒	☒	☒	☒	☒	☒	☒	☐	☐	☐	☒	☒	☒	☒
	71	-	-	☒	☒	☒	☒	☒	☒	☐	☐	☐	☒	☒	☒	☒
peak-to-average ratio	2	☐	☐	☐	☐	☐	☒	☒	☒	☐	☒	☐	☒	☒	☐	☒
	4	☐	☐	☐	☐	☐	☒	☒	☒	☐	☒	☐	☒	☒	☐	☒
	5	☐	☐	☐	☒	--	--	☒	☒	☐	☒	☐	☒	☒	☐	☒
	7	-	-	☐	☐	☐	☒	☒	☒	☐	☒	☐	☒	☒	☐	☒
	12	☐	☐	☐	☒	-	-	☒	☒	☐	☒	☐	☒	☒	☐	☒
	17	-	-	☒	☒	-	-	☒	☒	☐	☒	☐	☒	☒	☒	☒
	25	☐	☐	☐	☐	☐	☒	☒	☒	☐	☒	☐	☒	☒	☐	☒
	26	☐	☐	☐	☐	☒	--	☒	☒	☐	☒	☐	☒	☒	☐	☒
	30	-	-	☒	☒	-	-	☒	☒	☐	☒	☐	☒	☒	☐	☒
	41	-	-	☐	☐	☐	☒	☒	☒	☐	☒	☐	☒	☒	☐	☒
	66	☐	☐	☐	☐	☐	☒	☒	☒	☐	☒	☐	☒	☒	☐	☒
	71	-	-	☐	☐	☐	☒	☒	☒	☐	☒	☐	☒	☒	☐	☒

Item	Band	Bandwidth(MHz)						Modulation			RB			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	1	Half	Full	L	M	H
Band Edge at antenna terminals	2	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☐	☒	☒	☐	☒
	4	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☐	☒	☒	☐	☒
	5	☒	☒	☒	☒	--	--	☒	☒	☐	☒	☐	☒	☒	☐	☒
	7	-	-	☒	☒	☒	☒	☒	☒	☐	☒	☐	☒	☒	☐	☒
	12	☒	☒	☒	☒	-	-	☒	☒	☐	☒	☐	☒	☒	☐	☒
	17	-	-	☒	☒	-	-	☒	☒	☐	☒	☐	☒	☒	☐	☒
	25	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☐	☒	☒	☐	☒
	26	☒	☒	☒	☒	☒	--	☒	☒	☐	☒	☐	☒	☒	☐	☒
	30	-	-	☒	☒	-	-	☒	☒	☐	☒	☐	☒	☒	☐	☒
	41	-	-	☒	☒	☒	☒	☒	☒	☐	☒	☐	☒	☒	☐	☒
	66	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☐	☒	☒	☐	☒
	71	-	-	☒	☒	☒	☒	☒	☒	☐	☒	☐	☒	☒	☐	☒
Spurious emissions at antenna terminals	2	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☐	☐	☒	☒	☒
	4	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☐	☐	☒	☒	☒
	5	☒	☒	☒	☒	--	--	☒	☒	☐	☒	☐	☐	☒	☒	☒
	7	-	-	☒	☒	☒	☒	☒	☒	☐	☒	☐	☐	☒	☒	☒
	12	☒	☒	☒	☒	-	-	☒	☒	☐	☒	☐	☐	☒	☒	☒
	17	-	-	☒	☒	-	-	☒	☒	☐	☒	☐	☐	☒	☒	☒
	25	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☐	☐	☒	☒	☒
	26	☒	☒	☒	☒	☒	--	☒	☒	☐	☒	☐	☐	☒	☒	☒
	30	-	-	☒	☒	-	-	☒	☒	☐	☒	☐	☐	☒	☒	☒
	41	-	-	☒	☒	☒	☒	☒	☒	☐	☒	☐	☐	☒	☒	☒
	66	☒	☒	☒	☒	☒	☒	☒	☒	☐	☒	☐	☐	☒	☒	☒
	71	-	-	☒	☒	☒	☒	☒	☒	☐	☒	☐	☐	☒	☒	☒

Item	Band	Bandwidth(MHz)						Modulation			RB			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	1	Half	Full	L	M	H
Field strength of spurious radiation	2	☐	☐	☐	☐	☐	☒	☒	☐	☐	☒	☐	☐	☒	☒	☒
	4	☐	☐	☐	☐	☐	☒	☒	☐	☐	☒	☐	☐	☒	☒	☒
	5	☐	☐	☐	☒	--	--	☒	☐	☐	☒	☐	☐	☒	☒	☒
	7	-	-	☐	☐	☐	☒	☒	☐	☐	☒	☐	☐	☒	☒	☒
	12	☐	☐	☐	☒	-	-	☒	☐	☐	☒	☐	☐	☒	☒	☒
	17	-	-	☒	☒	-	-	☒	☐	☐	☒	☐	☐	☐	☒	☐
	25	☐	☐	☐	☐	☐	☒	☒	☐	☐	☒	☐	☐	☒	☒	☒
	26	☐	☐	☐	☐	☒	--	☒	☐	☐	☒	☐	☐	☒	☒	☒
	30	-	-	☒	☒	-	-	☒	☐	☐	☒	☐	☐	☐	☒	☐
	41	-	-	☐	☐	☐	☒	☒	☐	☐	☒	☐	☐	☒	☒	☒
	66	☐	☐	☐	☐	☐	☒	☒	☐	☐	☒	☐	☐	☒	☒	☒
	71	-	-	☐	☐	☐	☒	☒	☐	☐	☒	☐	☐	☒	☒	☒
Frequency stability	2	☐	☐	☐	☐	☐	☒	☒	☐	☐	☐	☐	☒	☐	☒	☐
	4	☐	☐	☐	☐	☐	☒	☒	☐	☐	☐	☐	☒	☐	☒	☐
	5	☐	☐	☐	☒	--	--	☒	☐	☐	☐	☐	☒	☐	☒	☐
	7	-	-	☐	☐	☐	☒	☒	☐	☐	☐	☐	☒	☐	☒	☐
	12	☐	☐	☐	☒	-	-	☒	☐	☐	☐	☐	☒	☐	☒	☐
	17	-	-	☒	☒	-	-	☒	☐	☐	☐	☐	☒	☐	☒	☐
	25	☐	☐	☐	☐	☐	☒	☒	☐	☐	☐	☐	☒	☐	☒	☐
	26	☐	☐	☐	☐	☒	--	☒	☐	☐	☐	☐	☒	☐	☒	☐
	30	-	-	☒	☒	-	-	☒	☐	☐	☐	☐	☒	☐	☒	☐
	41	-	-	☐	☐	☐	☒	☒	☐	☐	☐	☐	☒	☐	☒	☐
	66	☐	☐	☐	☐	☐	☒	☒	☐	☐	☐	☐	☒	☐	☒	☐
	71	-	-	☐	☐	☐	☒	☒	☐	☐	☐	☐	☒	☐	☒	☐

Remark:
The mark "☒" means is chosen for testing; The mark "☐" means is not chosen for testing;
The mark "-" means is not supported bandwidth

5. RADIO TECHNICAL REQUIREMENTS SPECIFICATION

5.1 REFERENCE DOCUMENTS FOR TESTING

No.	Identity	Document Title
1	FCC 47 CFR Part 2	Frequency allocations and radio treaty matters; general rules and regulations
2	FCC 47 CFR Part 22	Public Mobile Services
3	FCC 47 CFR Part 27	Miscellaneous Wireless Communications Services
4	FCC 47 CFR Part 24	Personal Communications Services
5	FCC 47 CFR Part 90	Private Land Mobile Radio Services
6	ANSI C63.26-2015	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services
7	KDB 971168 D01	KDB 971168 D01 Power Meas License Digital Systems v03r01

5.2 ERP OR EIRP

Test Requirement: FCC 47 CFR Part 2.1046(a)
LTE Band 2 & LTE Band 25: FCC 47 CFR Part 24.232(c)
LTE Band 4 & LTE Band 66: FCC 47 CFR Part 27.50(d)(4)
LTE Band 5 & LTE Band 26: FCC 47 CFR Part 22.913(a)
LTE Band 7 & Band 41: FCC 47 CFR Part 27.50(h)(2)
LTE Band 12 & Band 17 Band 71: FCC 47 CFR Part 27.50(c)(10)
LTE Band 30: FCC 47 CFR Part 27.50(a)(3)
LTE Band 26: FCC 47 CFR Part 90.635

Test Method: KDB 971168 D01v03r01 Section 5.6 & ANSI C63.26-2015

Limit:

FCC 47 CFR Part 22.913(a):
The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

FCC 47 CFR Part 24.232(c):
Mobile and portable stations are limited to 2 watts EIRP.

FCC 47 CFR Part 27.50(d)(4):
Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.

FCC 47 CFR Part 27.50(c)(10):
Portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP.

FCC 47 CFR Part 27.50(h)(2):
Mobile and other user stations. Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

FCC 47 CFR Part 27.50(a)(3): For mobile and portable stations transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band, the average EIRP must not exceed 50 milliwatts within any 1 megahertz of authorized bandwidth, except that for mobile and portable stations compliant with 3GPP LTE standards or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 megahertz of authorized bandwidth but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth. For mobile and portable stations using time division duplexing (TDD) technology, the duty cycle must not exceed 38 percent in the 2305-2315 MHz and 2350-2360 MHz bands. Mobile and portable stations using FDD technology are restricted to transmitting in the 2305-2315 MHz band. Power averaging shall not include intervals in which the transmitter is off.

FCC 47 CFR Part 90.635:

(a) The effective radiated power and antenna height for base stations may not exceed 1 kilowatt (30 dBw) and 304 m. (1,000 ft.) above average terrain (AAT), respectively, or the equivalent thereof as determined from the Table. These are maximum values, and applicants will be required to justify power levels and antenna heights requested.

(b) The maximum output power of the transmitter for mobile stations is 100 watts (20 dBw).

Table—Equivalent Power and Antenna Heights for Base Stations in the 851–869 MHz and 935–940 MHz Bands Which Have a Requirement for a 32 km (20 mi) Service Area Radius

Antenna height (ATT) meters (feet)	Effective radiated power (watts)[1 2 4]
Above 1,372 (4,500)	65
Above 1,220 (4,000) to 1,372 (4,500)	70
Above 1,067 (3,500) to 1,220 (4,000)	75
Above 915 (3,000) to 1,067 (3,500)	100
Above 763 (2,500) to 915 (3,000)	140
Above 610 (2,000) to 763 (2,500)	200
Above 458 (1,500) to 610 (2,000)	350
Above 305 (1,000) to 458 (1,500)	600
Up to 305 (1,000)	[3]1,000

1. Power is given in terms of effective radiated power (ERP).
2. Applicants in the Los Angeles, CA, area who demonstrate a need to serve both the downtown and fringe areas will be permitted to utilize an ERP of 1 kw at the following mountaintop sites: Santiago Park, Sierra Peak, Mount Lukens, and Mount Wilson.
3. Stations with antennas below 305 m (1,000 ft) (AAT) will be restricted to a maximum power of 1 kw (ERP).
4. Licensees in San Diego, CA, will be permitted to utilize an ERP of 500 watts at the following mountaintop sites: Palomar, Otay, Woodson and Miguel.

Test Procedure:

$$\text{ERP or EIRP} = P_{Meas} + G_T - L_C$$

where:

ERP or EIRP = effective radiated power or equivalent isotropically radiated power, respectively (expressed in the same units as PMeas, typically dBW or dBm);

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

G_T = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

1) L_C = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

Test Setup: Refer to section 4.2.1 for details.

Instruments Used: Refer to section 3 for details

Test Mode: Link mode

Test Results: Pass

Test Data: See table below

5.2.1 LTE Band 2

LTE Band 2 Maximum EIRP (dBm)					
Channel	QPSK; RB:1	16QAM; RB:1	64QAM; RB:1	Limit (dBm)	Result
Channel Bandwidth: 1.4MHz					
Lowest	24.26	23.56	/	33.01	Pass
Middle	24.07	23.21	/	33.01	Pass
Highest	24.40	23.97	/	33.01	Pass
Channel Bandwidth: 3MHz					
Lowest	24.34	23.45	/	33.01	Pass
Middle	24.30	23.61	/	33.01	Pass
Highest	24.32	23.88	/	33.01	Pass
Channel Bandwidth: 5MHz					
Lowest	24.19	23.61	/	33.01	Pass
Middle	24.36	23.78	/	33.01	Pass
Highest	24.33	23.90	/	33.01	Pass
Channel Bandwidth: 10MHz					
Lowest	24.30	23.52	/	33.01	Pass
Middle	24.47	23.59	/	33.01	Pass
Highest	24.41	23.85	/	33.01	Pass
Channel Bandwidth: 15MHz					
Lowest	24.16	23.60	/	33.01	Pass
Middle	24.43	23.78	/	33.01	Pass
Highest	24.24	23.91	/	33.01	Pass
Channel Bandwidth: 20MHz					
Lowest	24.36	23.61	/	33.01	Pass
Middle	24.48	23.79	/	33.01	Pass
Highest	24.43	24.03	/	33.01	Pass

5.2.2 LTE Band 4

LTE Band 4 Maximum EIRP (dBm)					
Channel	QPSK; RB:1	16QAM; RB:1	64QAM; RB:1	Limit (dBm)	Result
Channel Bandwidth: 1.4MHz					
Lowest	24.48	23.61	/	30.00	Pass
Middle	24.16	23.30	/	30.00	Pass
Highest	24.35	23.70	/	30.00	Pass
Channel Bandwidth: 3MHz					
Lowest	24.00	23.73	/	30.00	Pass
Middle	24.35	23.98	/	30.00	Pass
Highest	24.36	23.77	/	30.00	Pass
Channel Bandwidth: 5MHz					
Lowest	24.51	23.57	/	30.00	Pass
Middle	24.35	24.16	/	30.00	Pass
Highest	24.33	23.71	/	30.00	Pass
Channel Bandwidth: 10MHz					
Lowest	24.42	23.60	/	30.00	Pass
Middle	24.39	24.01	/	30.00	Pass
Highest	24.35	23.83	/	30.00	Pass
Channel Bandwidth: 15MHz					
Lowest	24.36	23.75	/	30.00	Pass
Middle	24.46	24.01	/	30.00	Pass
Highest	24.42	23.76	/	30.00	Pass
Channel Bandwidth: 20MHz					
Lowest	24.53	23.75	/	30.00	Pass
Middle	24.51	24.16	/	30.00	Pass
Highest	24.46	23.88	/	30.00	Pass

5.2.3 LTE Band 5

LTE Band 5 Maximum ERP (dBm)					
Channel	QPSK; RB:1	16QAM; RB:1	64QAM; RB:1	Limit (dBm)	Result
Channel Bandwidth: 1.4MHz					
Lowest	22.12	21.24	/	38.45	Pass
Middle	22.21	21.26	/	38.45	Pass
Highest	22.06	21.15	/	38.45	Pass
Channel Bandwidth: 3MHz					
Lowest	22.13	21.35	/	38.45	Pass
Middle	22.18	21.68	/	38.45	Pass
Highest	22.11	21.07	/	38.45	Pass
Channel Bandwidth: 5MHz					
Lowest	22.10	21.17	/	38.45	Pass
Middle	22.22	21.62	/	38.45	Pass
Highest	22.19	21.14	/	38.45	Pass
Channel Bandwidth: 10MHz					
Lowest	22.29	21.35	/	38.45	Pass
Middle	22.23	21.77	/	38.45	Pass
Highest	22.22	21.19	/	38.45	Pass

5.2.4 LTE Band 7

LTE Band 7 Maximum EIRP (dBm)					
Channel	QPSK; RB:1	16QAM; RB:1	64QAM; RB:1	Limit (dBm)	Result
Channel Bandwidth: 5MHz					
Lowest	22.33	21.85	/	33.01	Pass
Middle	21.85	21.27	/	33.01	Pass
Highest	22.08	22.12	/	33.01	Pass
Channel Bandwidth: 10MHz					
Lowest	22.32	21.82	/	33.01	Pass
Middle	22.16	21.81	/	33.01	Pass
Highest	22.15	22.08	/	33.01	Pass
Channel Bandwidth: 15MHz					
Lowest	22.19	21.84	/	33.01	Pass
Middle	21.97	21.70	/	33.01	Pass
Highest	22.13	22.22	/	33.01	Pass
Channel Bandwidth: 20MHz					
Lowest	22.37	21.95	/	33.01	Pass
Middle	22.34	21.88	/	33.01	Pass
Highest	22.24	22.25	/	33.01	Pass

5.2.5 LTE Band 12

LTE Band 12 Maximum ERP (dBm)					
Channel	QPSK; RB:1	16QAM; RB:1	64QAM; RB:1	Limit (dBm)	Result
Channel Bandwidth: 1.4MHz					
Lowest	21.99	21.56	/	34.77	Pass
Middle	21.38	20.50	/	34.77	Pass
Highest	22.00	21.01	/	34.77	Pass
Channel Bandwidth: 3MHz					
Lowest	21.90	21.59	/	34.77	Pass
Middle	21.98	21.16	/	34.77	Pass
Highest	21.89	21.03	/	34.77	Pass
Channel Bandwidth: 5MHz					
Lowest	21.93	21.59	/	34.77	Pass
Middle	21.99	21.08	/	34.77	Pass
Highest	21.98	21.03	/	34.77	Pass
Channel Bandwidth: 10MHz					
Lowest	22.05	21.65	/	34.77	Pass
Middle	22.04	21.18	/	34.77	Pass
Highest	22.06	21.07	/	34.77	Pass

5.2.6 LTE Band 17

Maximum ERP (dBm)					
Channel	QPSK; RB:1	16QAM; RB:1	64QAM; RB:1	Limit (dBm)	Result
Channel Bandwidth: 5MHz					
Lowest	25.72	24.81	/	34.77	Pass
Middle	25.02	24.17	/	34.77	Pass
Highest	25.81	25.10	/	34.77	Pass
Channel Bandwidth: 10MHz					
Lowest	24.86	24.90	/	34.77	Pass
Middle	24.87	24.86	/	34.77	Pass
Highest	24.88	25.19	/	34.77	Pass

5.2.7 LTE Band 25

LTE Band 25 Maximum EIRP (dBm)					
Channel	QPSK; RB:1	16QAM; RB:1	64QAM; RB:1	Limit (dBm)	Result
Channel Bandwidth: 1.4MHz					
Lowest	25.04	24.36	/	33.01	Pass
Middle	23.85	22.83	/	33.01	Pass
Highest	25.07	24.63	/	33.01	Pass
Channel Bandwidth: 3MHz					
Lowest	25.19	24.40	/	33.01	Pass
Middle	25.19	24.46	/	33.01	Pass
Highest	25.18	24.75	/	33.01	Pass
Channel Bandwidth: 5MHz					
Lowest	25.20	24.40	/	33.01	Pass
Middle	25.12	24.55	/	33.01	Pass
Highest	25.10	24.77	/	33.01	Pass
Channel Bandwidth: 10MHz					
Lowest	25.05	24.31	/	33.01	Pass
Middle	25.22	24.40	/	33.01	Pass
Highest	25.15	24.65	/	33.01	Pass
Channel Bandwidth: 15MHz					
Lowest	25.09	24.38	/	33.01	Pass
Middle	25.28	24.50	/	33.01	Pass
Highest	25.19	24.64	/	33.01	Pass
Channel Bandwidth: 20MHz					
Lowest	25.20	24.48	/	33.01	Pass
Middle	25.31	24.55	/	33.01	Pass
Highest	25.24	24.79	/	33.01	Pass

5.2.8 LTE Band 26

LTE Band 26 Maximum ERP (dBm)					
Channel	QPSK; RB:1	16QAM; RB:1	64QAM; RB:1	Limit (dBm)	Result
Channel Bandwidth: 1.4MHz					
Lowest	21.05	20.17	/	38.45	Pass
Middle	21.04	20.28	/	38.45	Pass
Highest	21.08	20.15	/	38.45	Pass
Channel Bandwidth: 3MHz					
Lowest	20.96	20.71	/	38.45	Pass
Middle	20.95	20.18	/	38.45	Pass
Highest	20.97	20.08	/	38.45	Pass
Channel Bandwidth: 5MHz					
Lowest	21.00	20.40	/	38.45	Pass
Middle	20.94	20.11	/	38.45	Pass
Highest	21.01	20.00	/	38.45	Pass
Channel Bandwidth: 10MHz					
Lowest	21.02	20.25	/	38.45	Pass
Middle	20.97	20.73	/	38.45	Pass
Highest	21.05	20.30	/	38.45	Pass
Channel Bandwidth: 15MHz					
Lowest	20.97	20.47	/	38.45	Pass
Middle	20.91	20.62	/	38.45	Pass
Highest	21.12	20.19	/	38.45	Pass

5.2.9 LTE Band 26 (Part 90S)

LTE Band 26 Maximum ERP (dBm)					
Channel	QPSK; RB:1	16QAM; RB:1	64QAM; RB:1	Limit (dBm)	Result
Channel Bandwidth: 1.4MHz					
Lowest	20.99	20.20	/	50	Pass
Middle	20.99	20.21	/	50	Pass
Highest	20.97	20.25	/	50	Pass
Channel Bandwidth: 3MHz					
Lowest	20.90	20.14	/	50	Pass
Middle	20.94	20.03	/	50	Pass
Highest	20.85	20.56	/	50	Pass
Channel Bandwidth: 5MHz					
Lowest	20.93	19.91	/	50	Pass
Middle	20.90	20.31	/	50	Pass
Highest	20.88	20.11	/	50	Pass
Channel Bandwidth: 10MHz					
Middle	21.00	20.50	/	50	Pass

5.2.10 LTE Band 30

Maximum EIRP (dBm)					
Channel	QPSK; RB:1	16QAM; RB:1	64QAM; RB:1	Limit (dBm)	Result
Channel Bandwidth: 5MHz					
Lowest	23.23	23.47	/	23.98	Pass
Middle	23.24	23.27	/	23.98	Pass
Highest	23.24	23.28	/	23.98	Pass
Channel Bandwidth: 10MHz					
Middle	23.58	23.65	/	23.98	Pass

5.2.11 LTE Band 41

LTE Band 41 Maximum EIRP (dBm)					
Channel	QPSK; RB:1	16QAM; RB:1	64QAM; RB:1	Limit (dBm)	Result
Channel Bandwidth: 5MHz					
Lowest	27.06	26.25	/	33.01	Pass
Middle	26.88	26.87	/	33.01	Pass
Highest	27.25	26.54	/	33.01	Pass
Channel Bandwidth: 10MHz					
Lowest	27.16	26.09	/	33.01	Pass
Middle	27.22	26.08	/	33.01	Pass
Highest	27.41	26.48	/	33.01	Pass
Channel Bandwidth: 15MHz					
Lowest	27.13	26.14	/	33.01	Pass
Middle	27.07	26.08	/	33.01	Pass
Highest	27.34	26.52	/	33.01	Pass
Channel Bandwidth: 20MHz					
Lowest	27.24	26.28	/	33.01	Pass
Middle	27.25	26.25	/	33.01	Pass
Highest	27.44	26.61	/	33.01	Pass

5.2.12 LTE Band 66

LTE Band 66 Maximum EIRP (dBm)					
Channel	QPSK; RB:1	16QAM; RB:1	64QAM; RB:1	Limit (dBm)	Result
Channel Bandwidth: 1.4MHz					
Lowest	24.07	23.77	/	30.00	Pass
Middle	24.14	23.32	/	30.00	Pass
Highest	24.06	23.15	/	30.00	Pass
Channel Bandwidth: 3MHz					
Lowest	24.01	23.69	/	30.00	Pass
Middle	24.07	23.38	/	30.00	Pass
Highest	24.01	23.13	/	30.00	Pass
Channel Bandwidth: 5MHz					
Lowest	24.12	23.59	/	30.00	Pass
Middle	23.97	23.42	/	30.00	Pass
Highest	24.06	23.21	/	30.00	Pass
Channel Bandwidth: 10MHz					
Lowest	24.17	23.60	/	30.00	Pass
Middle	24.11	23.27	/	30.00	Pass
Highest	24.02	23.24	/	30.00	Pass
Channel Bandwidth: 15MHz					
Lowest	23.99	23.76	/	30.00	Pass
Middle	24.11	23.34	/	30.00	Pass
Highest	24.01	23.24	/	30.00	Pass
Channel Bandwidth: 20MHz					
Lowest	24.19	23.78	/	30.00	Pass
Middle	24.15	23.45	/	30.00	Pass
Highest	24.12	23.28	/	30.00	Pass

5.2.13 LTE 71

LTE Band 71 Maximum ERP (dBm)					
Channel	QPSK; RB:1	16QAM; RB:1	64QAM; RB:1	Limit (dBm)	Result
Channel Bandwidth: 5MHz					
Lowest	25.43	25.01	/	33.01	Pass
Middle	25.18	23.83	/	33.01	Pass
Highest	25.49	24.79	/	33.01	Pass
Channel Bandwidth: 10MHz					
Lowest	25.48	25.02	/	33.01	Pass
Middle	25.42	24.78	/	33.01	Pass
Highest	25.45	24.82	/	33.01	Pass
Channel Bandwidth: 15MHz					
Lowest	25.30	25.18	/	33.01	Pass
Middle	25.53	24.85	/	33.01	Pass
Highest	25.44	24.82	/	33.01	Pass
Channel Bandwidth: 20MHz					
Lowest	25.50	25.20	/	33.01	Pass
Middle	25.57	24.96	/	33.01	Pass
Highest	25.55	24.86	/	33.01	Pass

5.3 CONDUCTED OUTPUT POWER

Test Requirement: FCC 47 CFR Part 2.1046(a)
LTE Band 2 & LTE Band 25: FCC 47 CFR Part 24.232(c)
LTE Band 4 & LTE Band 66: FCC 47 CFR Part 27.50(d)(4)
LTE Band 5 & LTE Band 26: FCC 47 CFR Part 22.913(a)
LTE Band 7 & Band 41: FCC 47 CFR Part 27.50(h)(2)
LTE Band 12 & Band 17& Band 71: FCC 47 CFR Part 27.50(c)(10)
LTE Band 30: FCC 47 CFR Part 27.50(a)(3)
LTE Band 26: FCC 47 CFR Part 90.635

Test Method: KDB 971168 D01v03r01 & ANSI C63.26-2015

Limit:

FCC 47 CFR Part 22.913(a):
The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

FCC 47 CFR Part 24.232(c):
Mobile and portable stations are limited to 2 watts EIRP.

FCC 47 CFR Part 27.50(d)(4):
Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.

FCC 47 CFR Part 27.50(c)(10):
Portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP.

FCC 47 CFR Part 27.50(h)(2):
Mobile and other user stations. Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

FCC 47 CFR Part 27.50(a)(3): For mobile and portable stations transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band, the average EIRP must not exceed 50 milliwatts within any 1 megahertz of authorized bandwidth, except that for mobile and portable stations compliant with 3GPP LTE standards or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 megahertz of authorized bandwidth but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth. For mobile and portable stations using time division duplexing (TDD) technology, the duty cycle must not exceed 38 percent in the 2305-2315 MHz and 2350-2360 MHz bands. Mobile and portable stations using FDD technology are restricted to transmitting in the 2305-2315 MHz band. Power averaging shall not include intervals in which the transmitter is off.

FCC 47 CFR Part 90.635:
(a) The effective radiated power and antenna height for base stations may not exceed 1 kilowatt (30 dBw) and 304 m. (1,000 ft.) above average terrain (AAT), respectively, or the equivalent thereof as determined from the Table. These are maximum values, and applicants will be required to justify power levels and antenna heights requested.
(b) The maximum output power of the transmitter for mobile stations is 100 watts (20 dBw).
Table—Equivalent Power and Antenna Heights for Base Stations in the 851–869 MHz and 935–940 MHz Bands Which Have a Requirement for a 32 km (20 mi) Service Area Radius

Antenna height (ATT) meters (feet)	Effective radiated power (watts)[1 2 4]
Above 1,372 (4,500)	65
Above 1,220 (4,000) to 1,372 (4,500)	70
Above 1,067 (3,500) to 1,220 (4,000)	75
Above 915 (3,000) to 1,067 (3,500)	100
Above 763 (2,500) to 915 (3,000)	140

Above 610 (2,000) to 763 (2,500)	200
Above 458 (1,500) to 610 (2,000)	350
Above 305 (1,000) to 458 (1,500)	600
Up to 305 (1,000)	[3]1,000

1. Power is given in terms of effective radiated power (ERP).
2. Applicants in the Los Angeles, CA, area who demonstrate a need to serve both the downtown and fringe areas will be permitted to utilize an ERP of 1 kw at the following mountaintop sites: Santiago Park, Sierra Peak, Mount Lukens, and Mount Wilson.
3. Stations with antennas below 305 m (1,000 ft) (AAT) will be restricted to a maximum power of 1 kw (ERP).
4. Licensees in San Diego, CA, will be permitted to utilize an ERP of 500 watts at the following mountaintop sites: Palomar, Otay, Woodson and Miguel.

Test Procedure:

The EUT was set up for the maximum power with LTE 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.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

Test Setup: Refer to section 4.2.2 for details.

Instruments Used: Refer to section 3 for details

Test Mode: Link mode

Test Results: Pass

Test Data: The full result refer to section 4.5 for details.

5.4 PEAK-TO-AVERAGE RATIO

Test Requirement:	**LTE Band 2 & LTE Band 25:** FCC 47 CFR Part 24.232(d) **LTE Band 4 & LTE Band 66:** FCC 47 CFR Part 27.50(d)(5) **LTE Band 5 & LTE Band 26:** FCC 47 CFR Part 22.913(a) **LTE Band 7 & Band 41:** FCC 47 CFR Part 27.50(d)(5) **LTE Band 12 & Band 17:** FCC 47 CFR Part 27.50(d)(5) **LTE Band 30:** FCC 47 CFR Part 27.50(a)(3)
Test Method:	KDB 971168 D01v03r01 Section 5.7
Limit:	In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB

Test Procedure:

The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer.

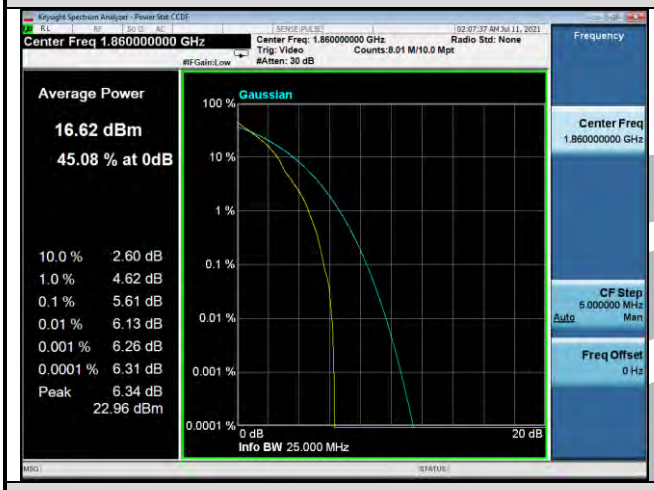
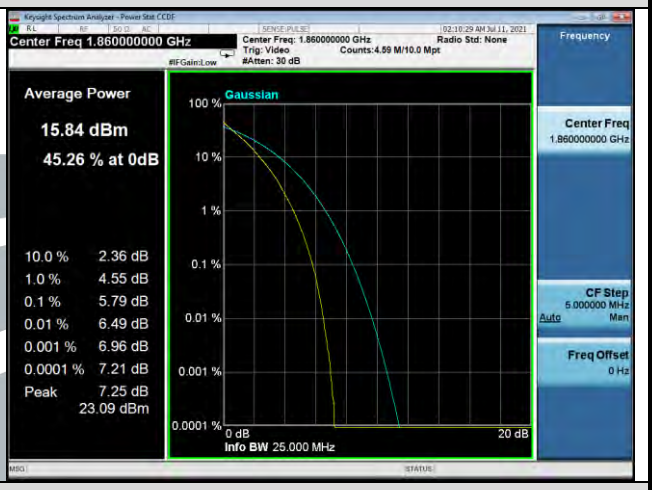
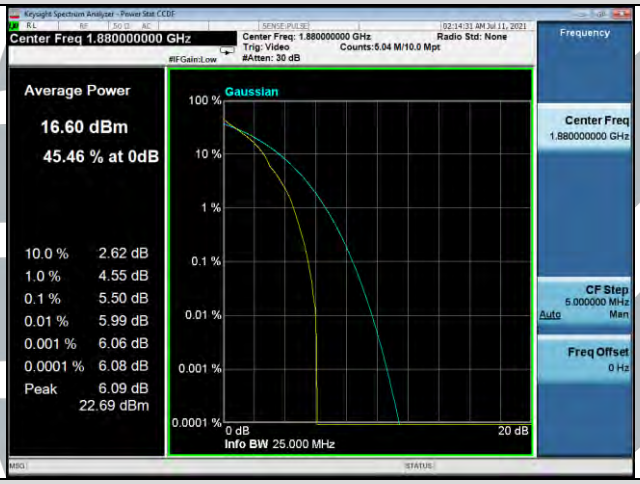
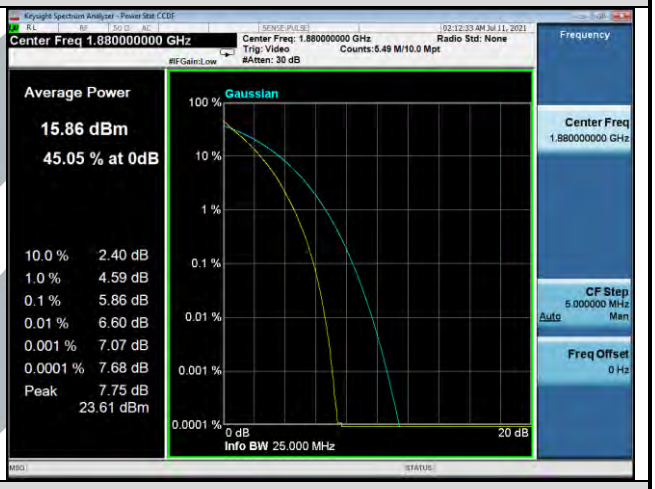
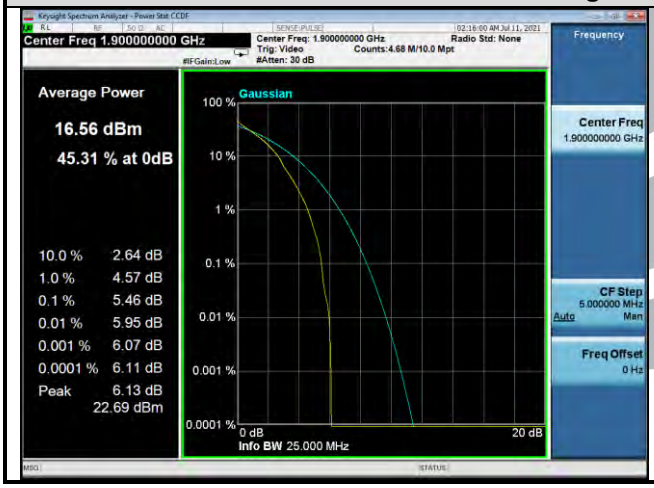
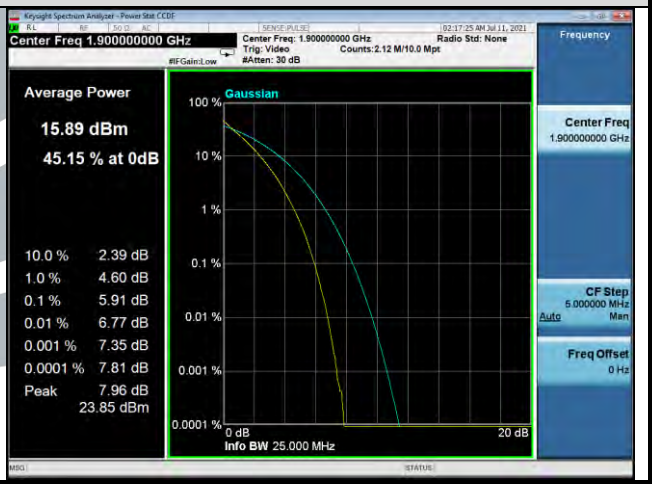
a) Set resolution/measurement bandwidth ≥ signal's occupied bandwidth
b) Set the number of counts to a value that stabilizes the measured CCDF curve
c) Record the maximum PAPR level associated with a probability of 0.1 %

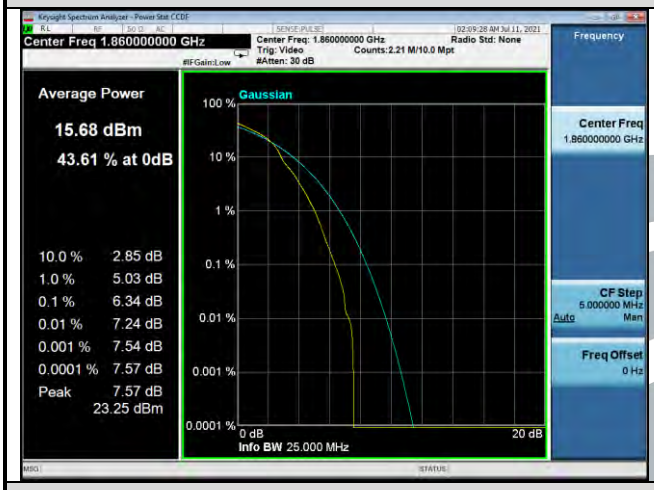
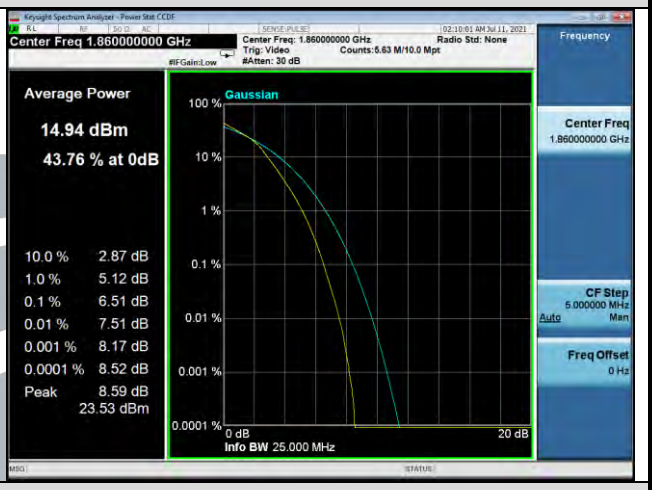
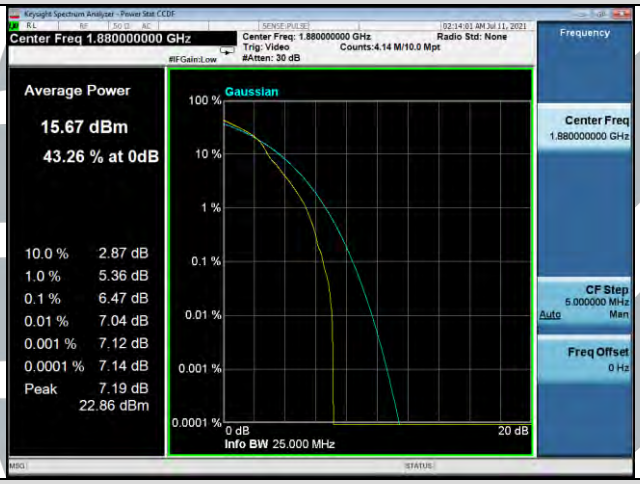
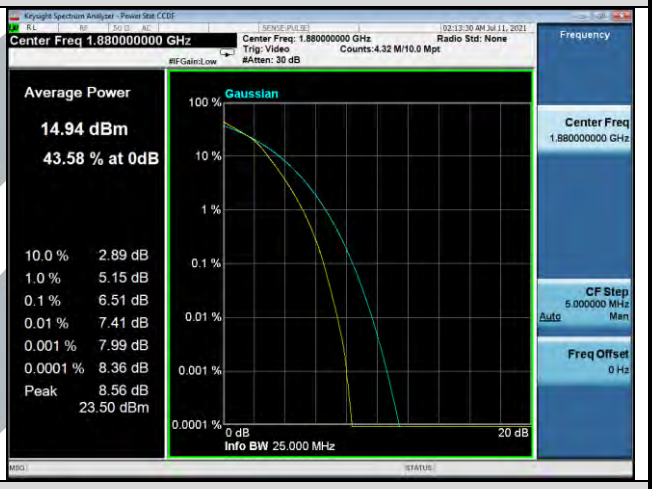
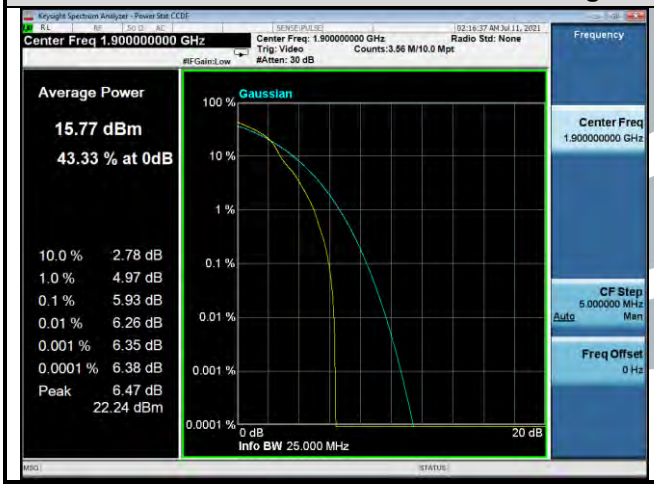
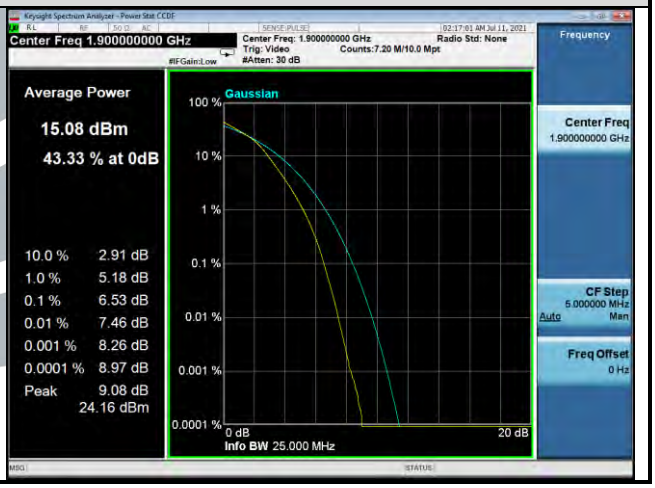
Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

Test Setup:	Refer to section 4.2.2 for details.
Instruments Used:	Refer to section 3 for details
Test Mode:	Link mode
Test Results:	Pass
Test Data:	See table below

5.4.1 LTE Band 2

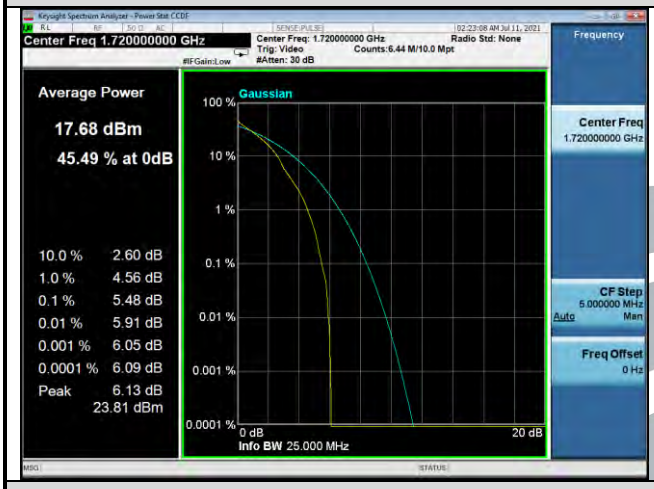
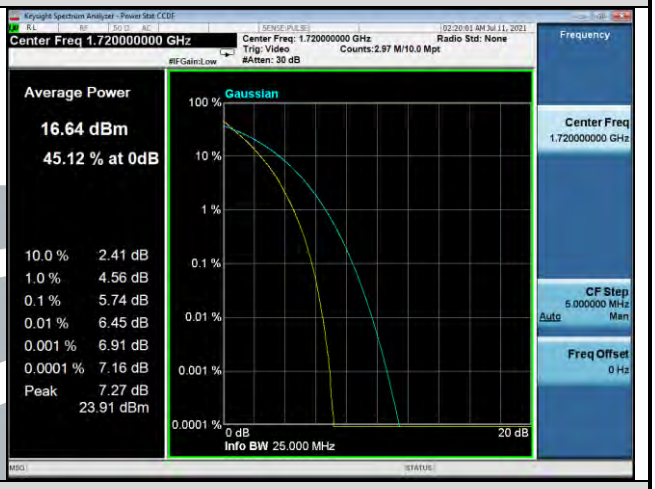
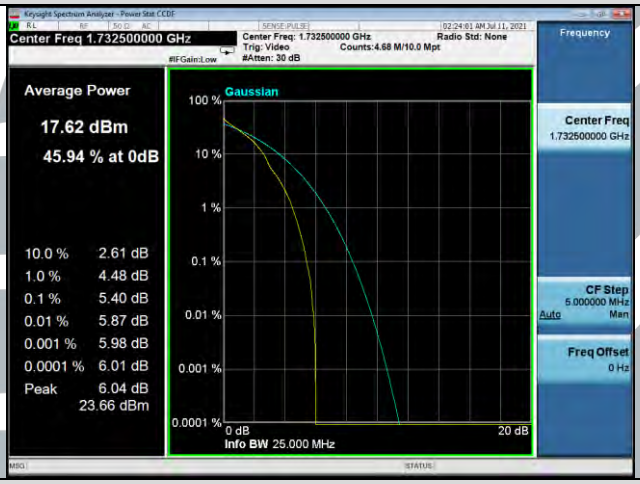
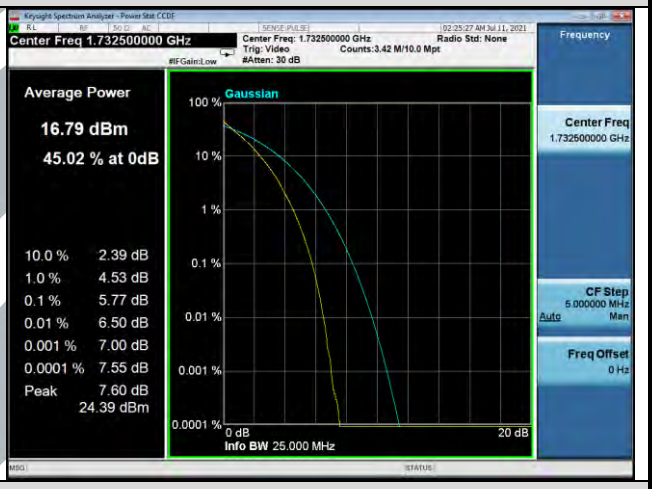
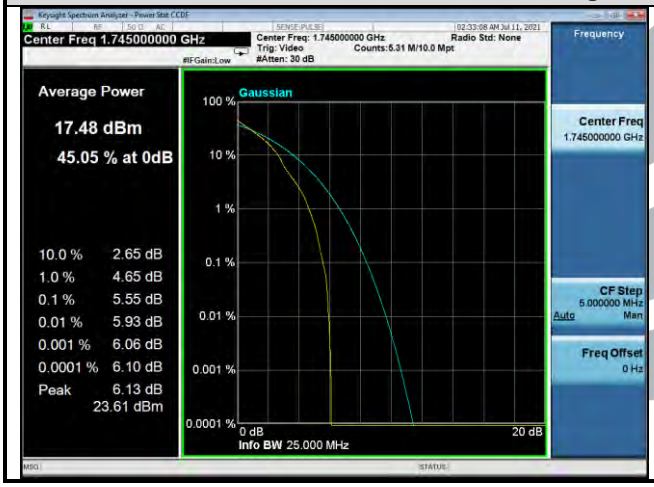
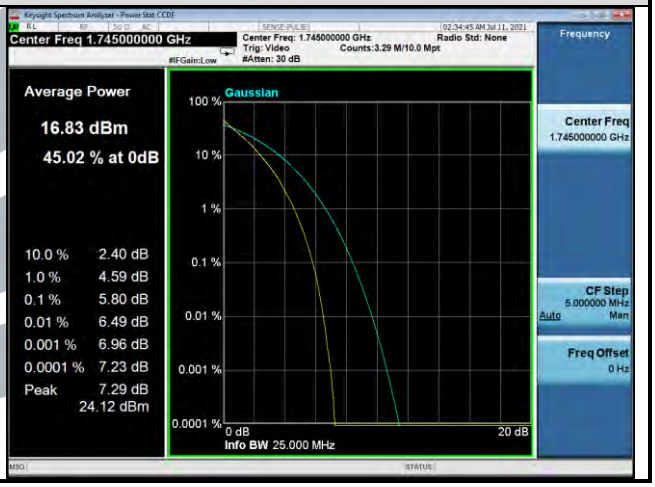
LTE Band 2 Peak-to-average ratio (dB)						
Channel	**RB Configuration**	**Channel Bandwidth: 20 MHz**			**Limit (dB)**	**Result**
		QPSK	**16QAM**	**64QAM**		
Lowest	1 RB	5.61	6.34	/	13	Pass
	Full RB	5.79	6.51	/	13	Pass
Middle	1 RB	5.50	6.47	/	13	Pass
	Full RB	5.86	6.51	/	13	Pass
Highest	1 RB	5.46	5.93	/	13	Pass
	Full RB	5.91	6.53	/	13	Pass

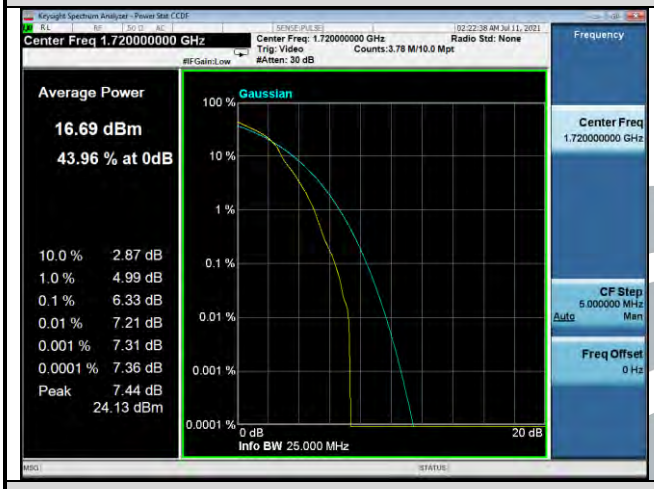
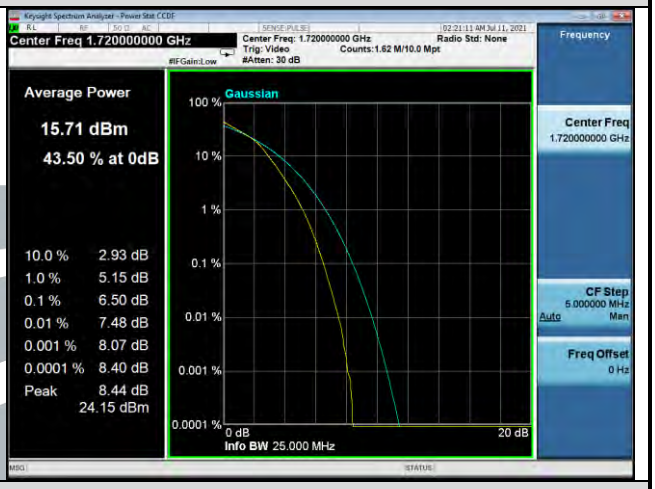
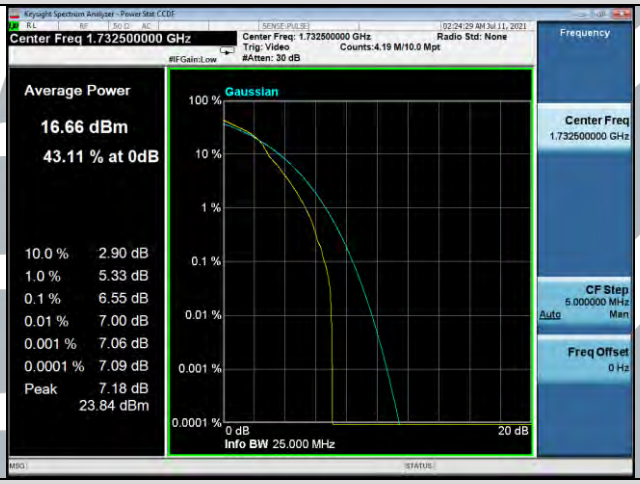
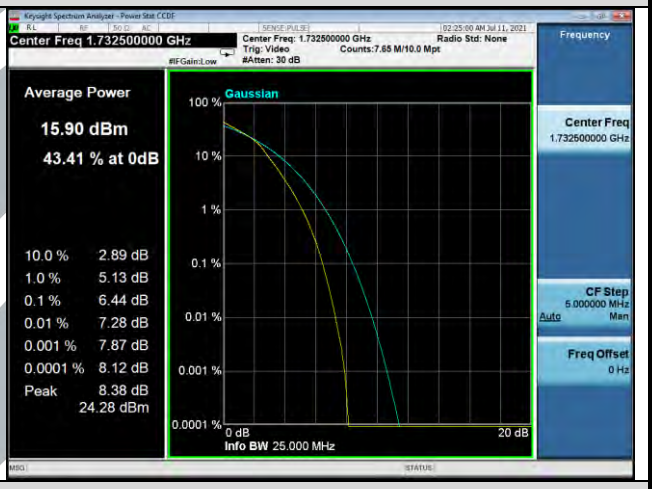
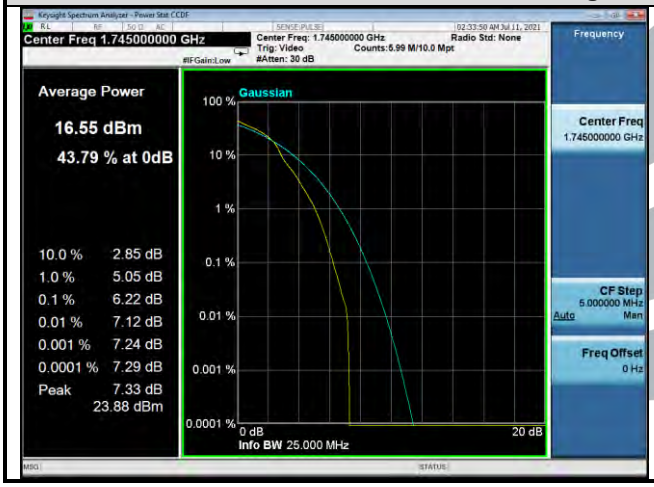
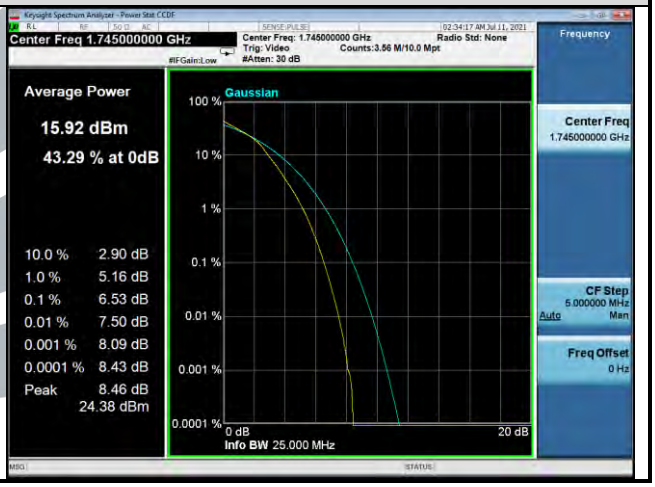
LTE Band 2 / 20 MHz / QPSK	
1 RB	Full RB
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

LTE Band 2 / 20 MHz / 16QAM	
1 RB	Full RB
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

5.4.2 LTE Band 4

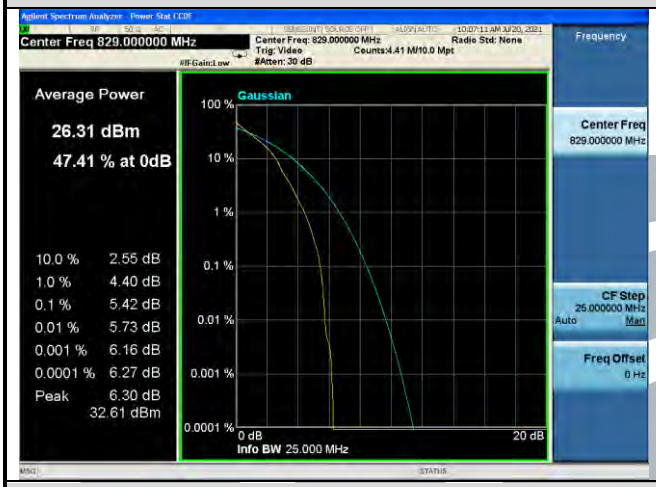
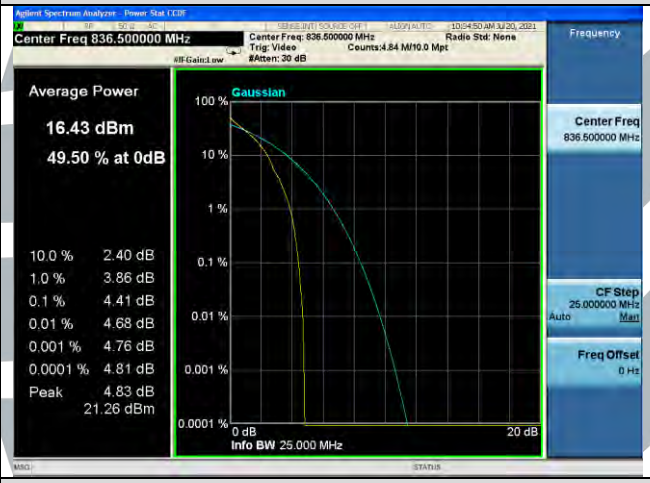
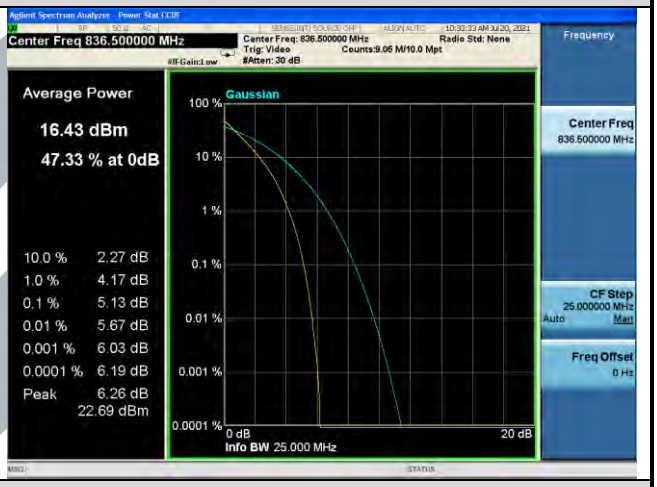
LTE Band 4 Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 20 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Lowest	1 RB	5.48	6.33	/	13	Pass
	Full RB	5.74	6.50	/	13	Pass
Middle	1 RB	5.40	6.55	/	13	Pass
	Full RB	5.77	6.44	/	13	Pass
Highest	1 RB	5.55	6.22	/	13	Pass
	Full RB	5.80	6.53	/	13	Pass

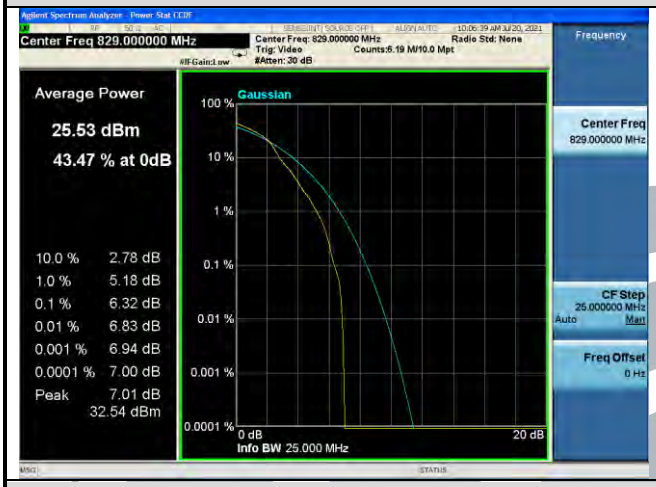
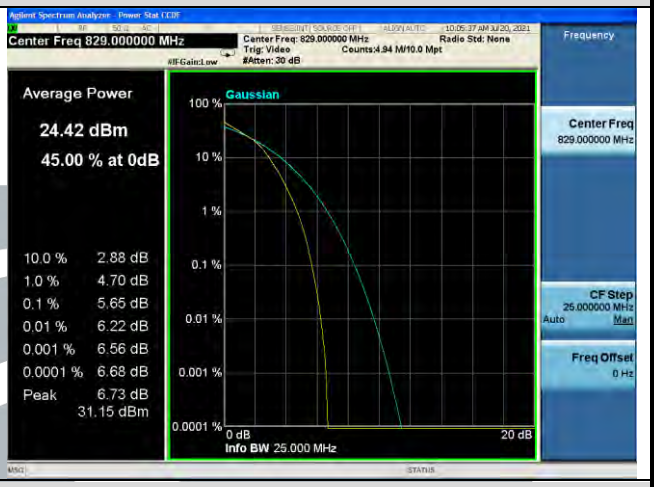
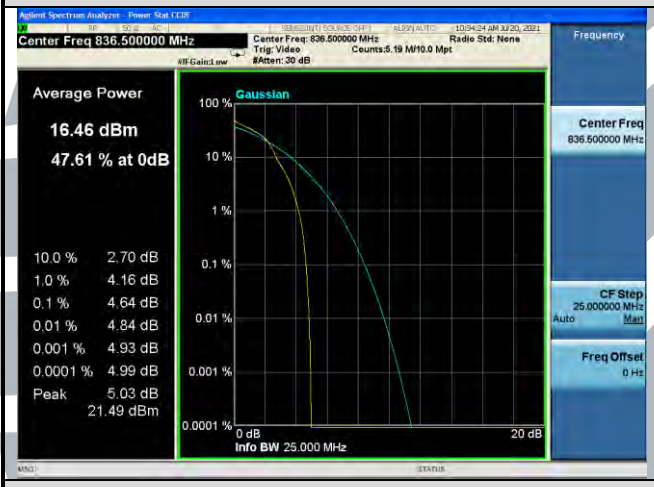
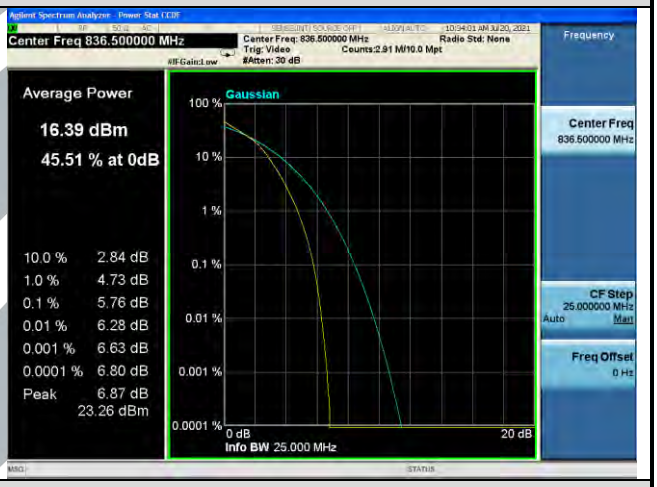
LTE Band 4 / 20MHz / QPSK	
1 RB	Full RB
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

LTE Band 4 / 20MHz / 16QAM	
1 RB	Full RB
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

5.4.3 LTE Band 5

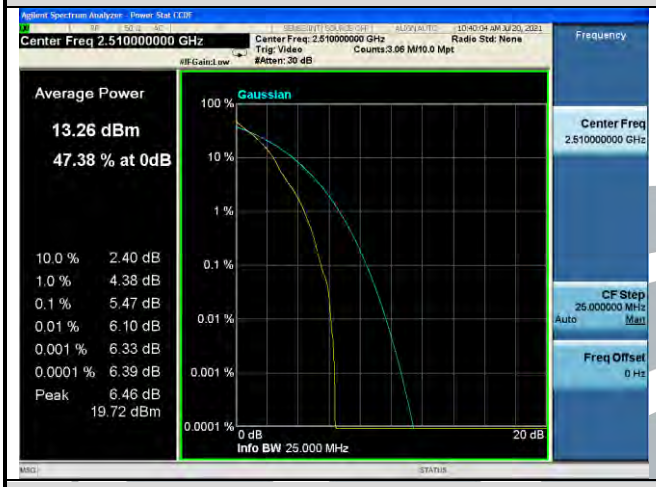
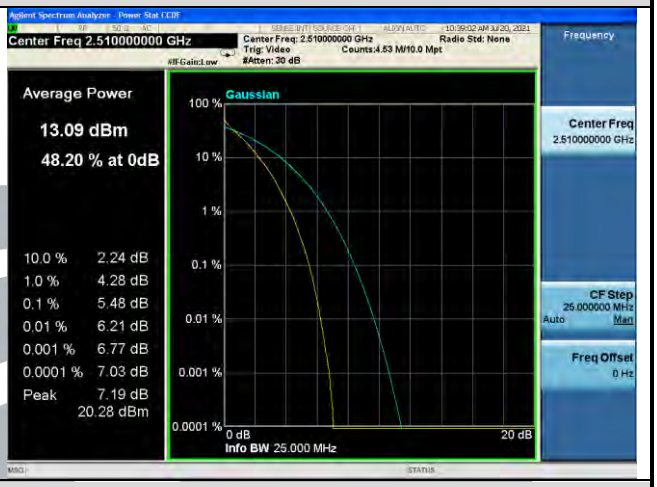
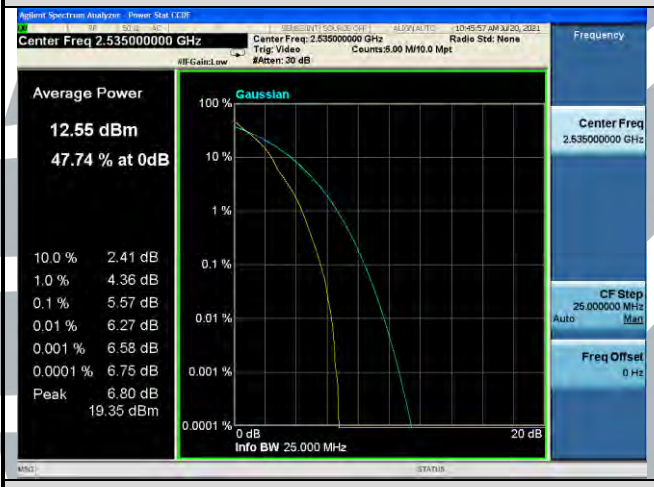
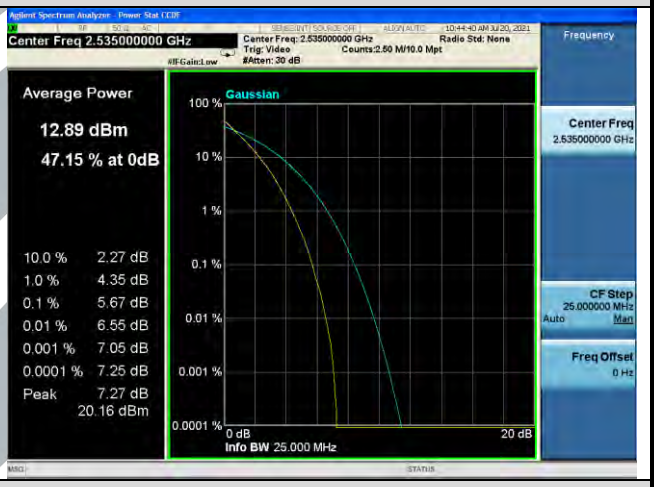
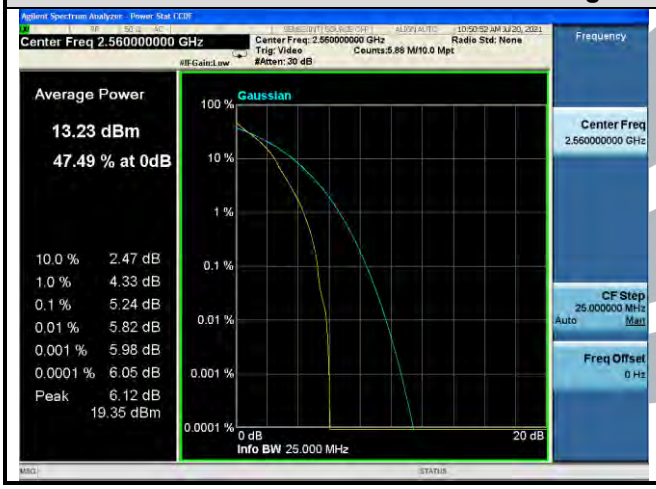
LTE Band 5 Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 10 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Lowest	1 RB	5.42	6.32	/	13	Pass
	Full RB	4.90	5.65	/	13	Pass
Middle	1 RB	4.41	4.64	/	13	Pass
	Full RB	5.13	5.76	/	13	Pass
Highest	1 RB	5.43	6.12	/	13	Pass
	Full RB	5.23	5.66	/	13	Pass

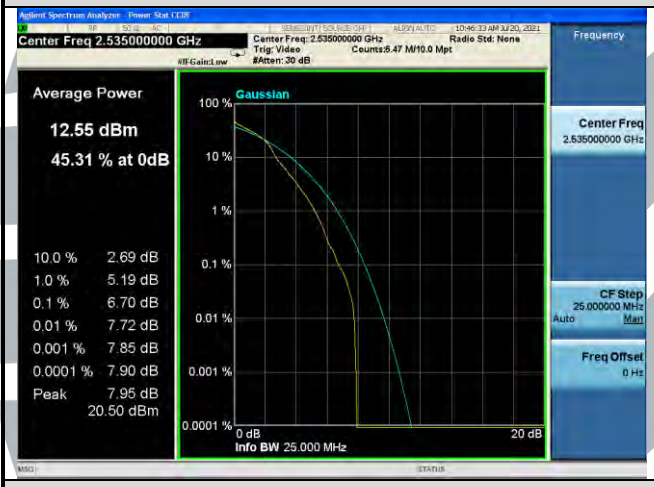
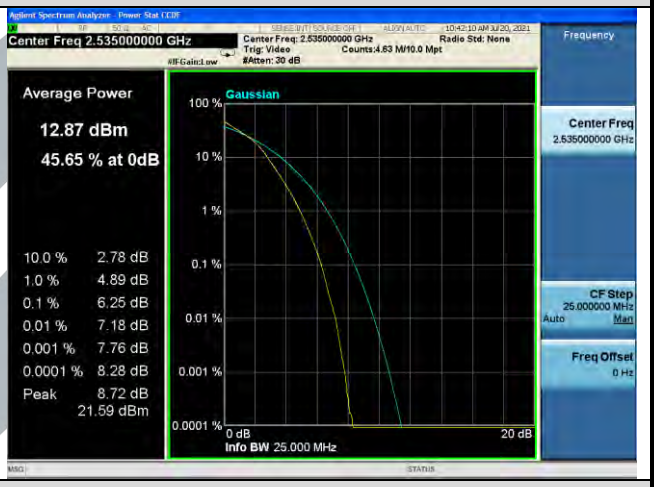
LTE Band 5 / 10 MHz / QPSK	
1 RB	Full RB
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

LTE Band 5 / 10 MHz / 16QAM	
1 RB	Full RB
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

5.4.4 LTE Band 7

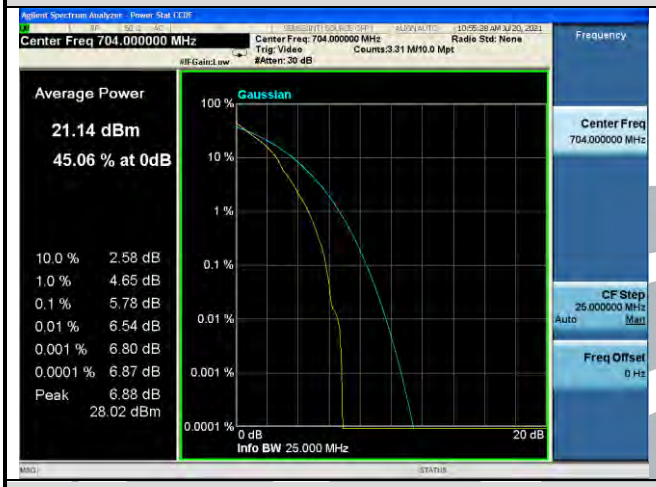
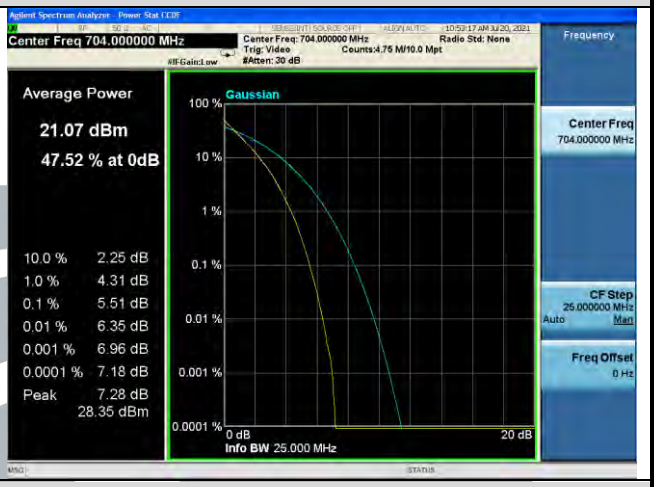
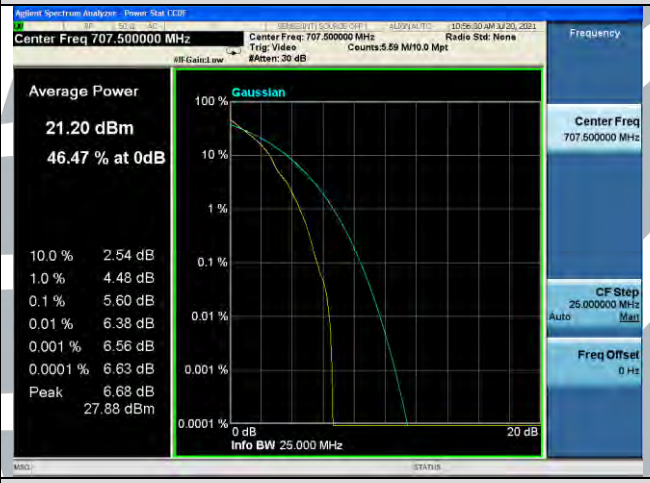
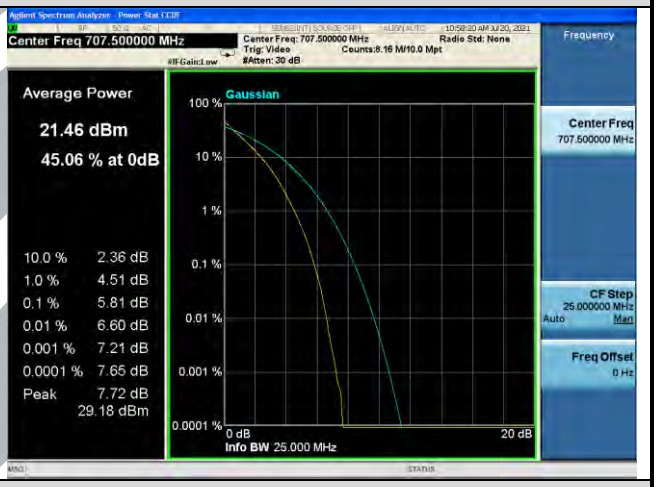
LTE Band 7 Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 20 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Lowest	1 RB	5.47	6.17	/	13	Pass
	Full RB	5.48	6.20	/	13	Pass
Middle	1 RB	5.57	6.70	/	13	Pass
	Full RB	5.67	6.25	/	13	Pass
Highest	1 RB	5.24	5.68	/	13	Pass
	Full RB	5.63	6.31	/	13	Pass

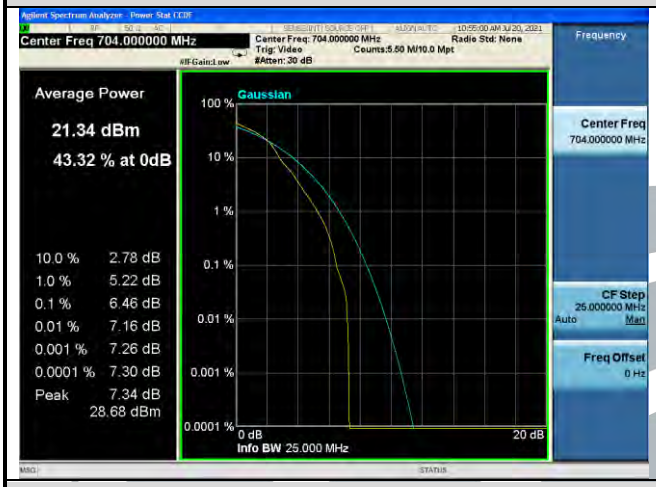
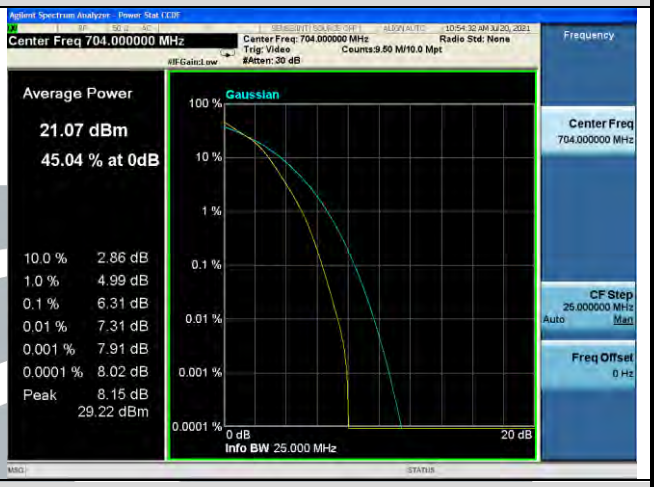
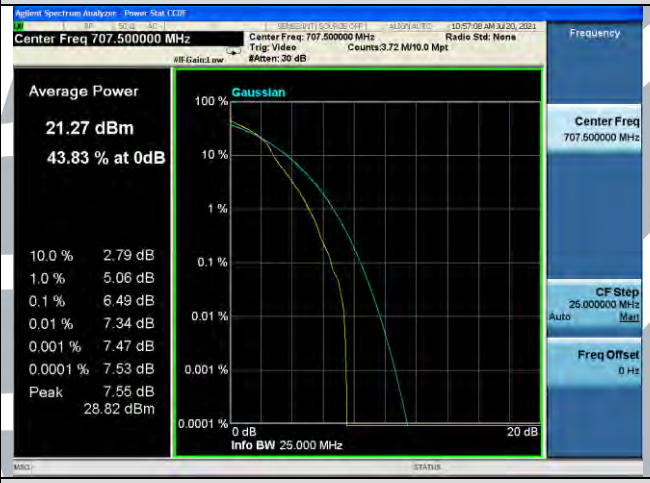
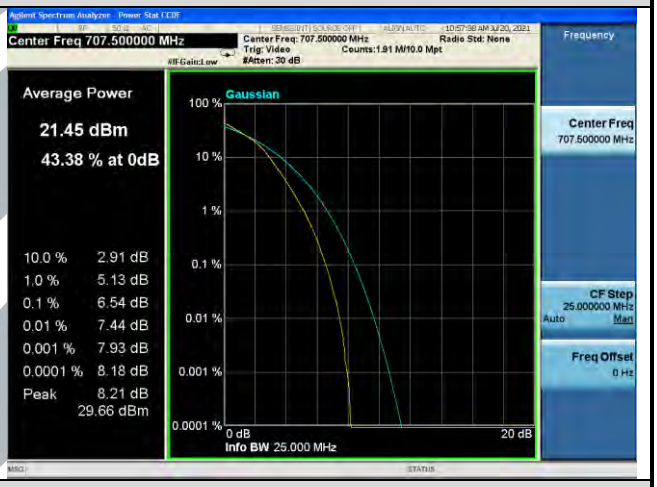
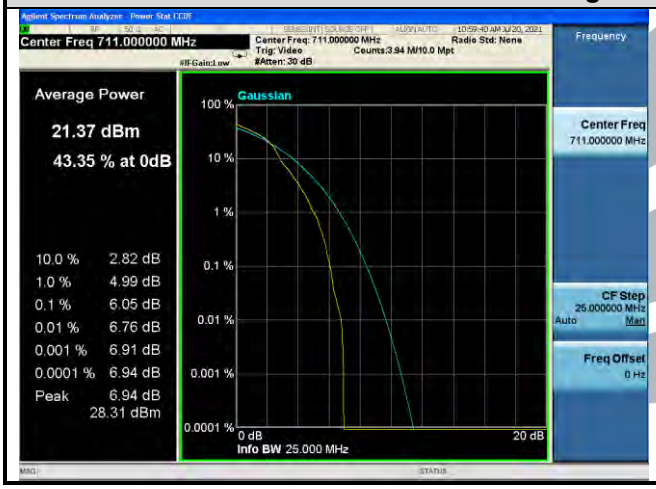
LTE Band 7 / 20MHz / QPSK	
1 RB	Full RB
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

LTE Band 7 / 20MHz / 16QAM	
1 RB	Full RB
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

5.4.5 LTE Band 12

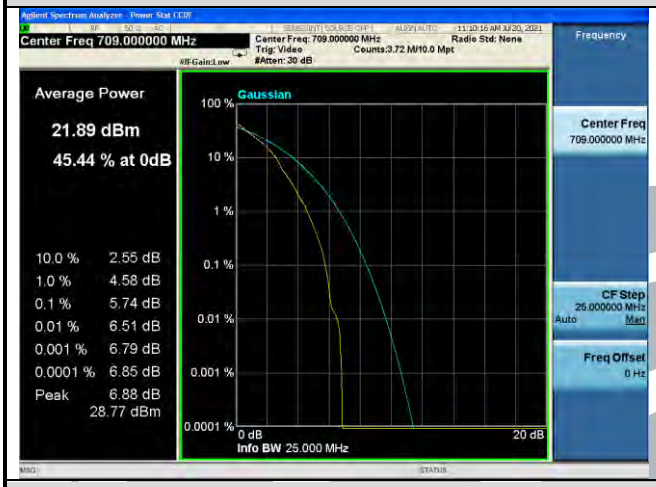
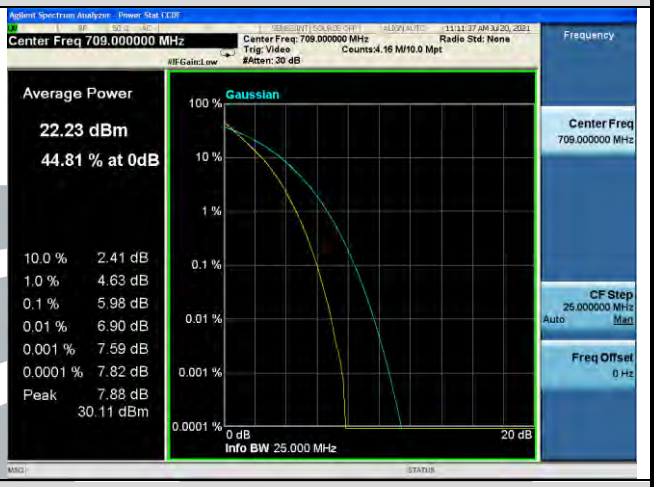
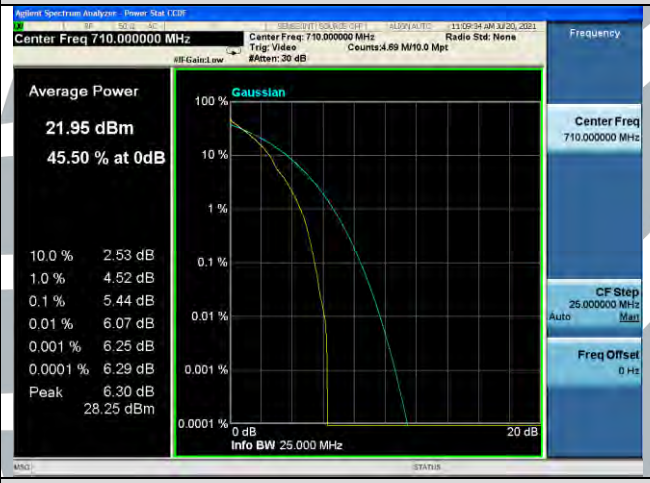
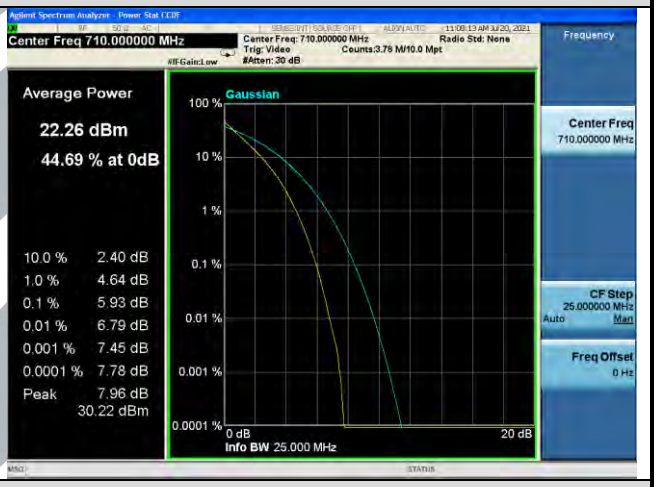
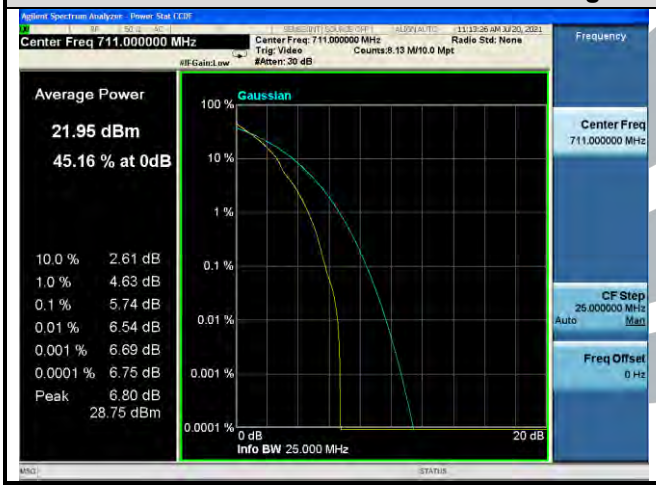
LTE Band 12 Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 10 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Lowest	1 RB	5.78	6.46	/	13	Pass
	Full RB	5.51	6.31	/	13	Pass
Middle	1 RB	5.60	6.49	/	13	Pass
	Full RB	5.81	6.54	/	13	Pass
Highest	1 RB	5.51	6.05	/	13	Pass
	Full RB	5.81	6.56	/	13	Pass

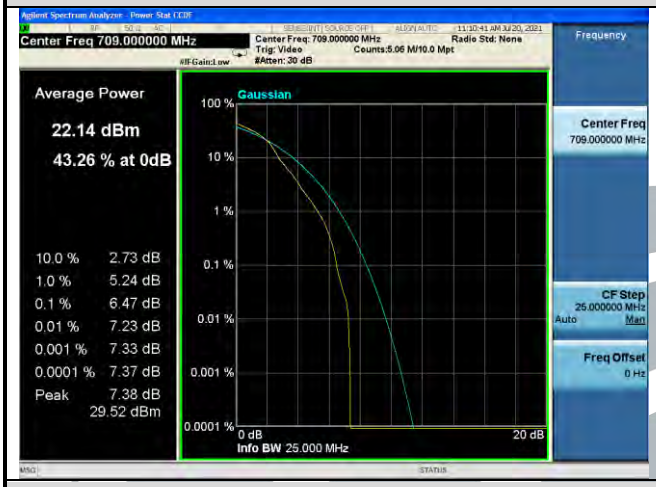
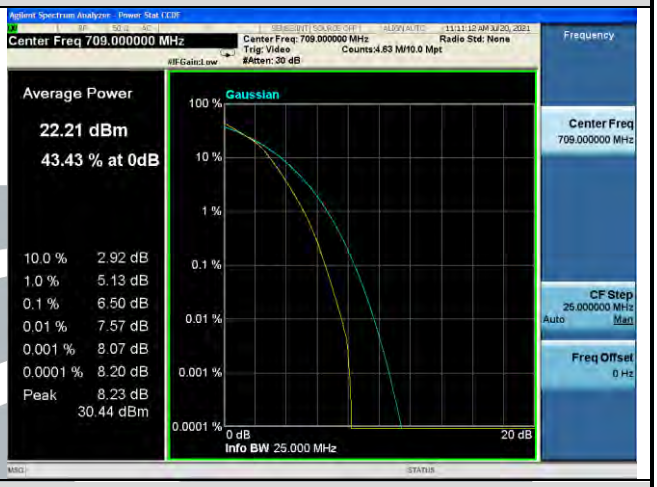
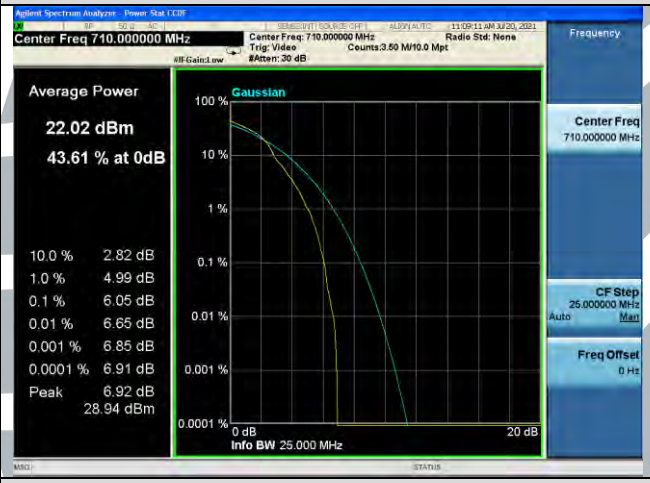
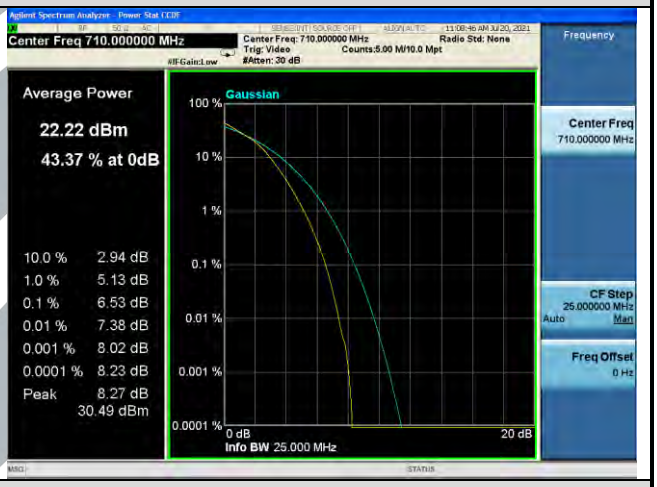
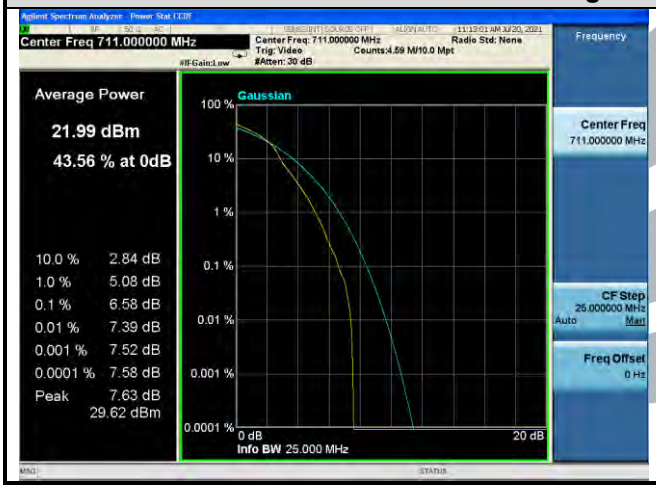
LTE Band 12 / 10MHz / QPSK	
1 RB	Full RB
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

LTE Band 12 / 10MHz / 16QAM	
1 RB	Full RB
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

5.4.6 LTE Band 17

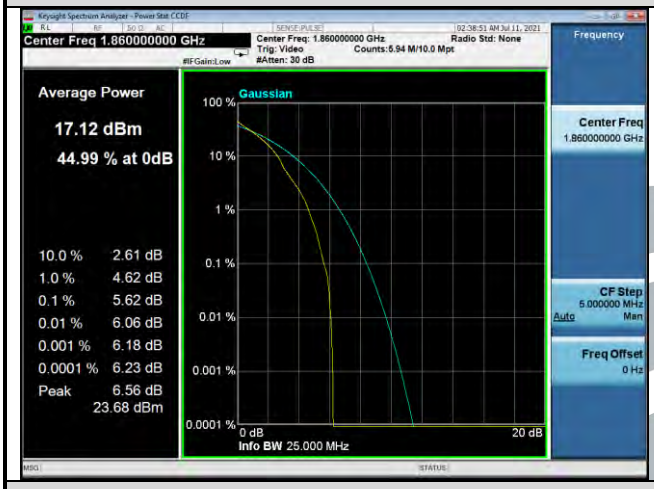
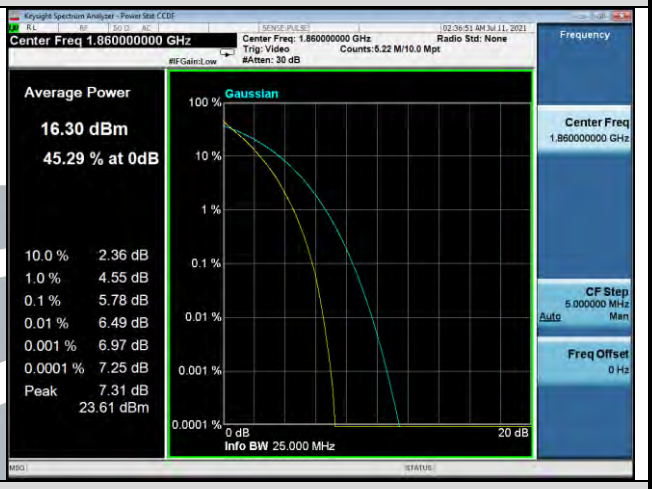
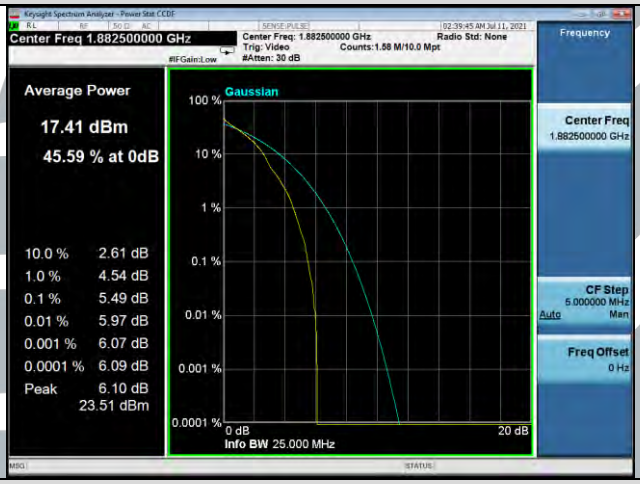
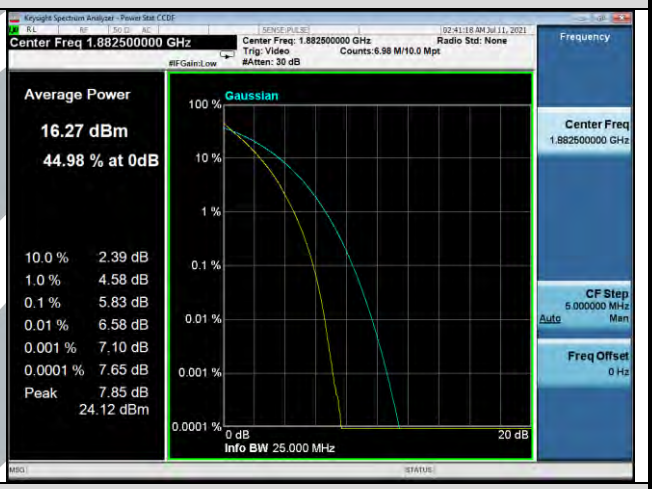
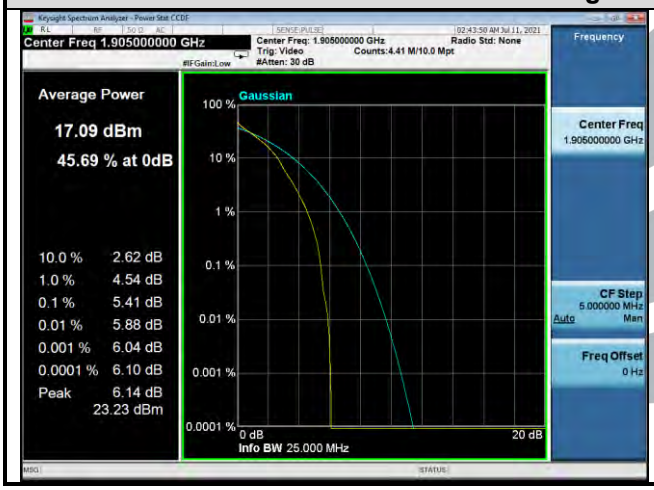
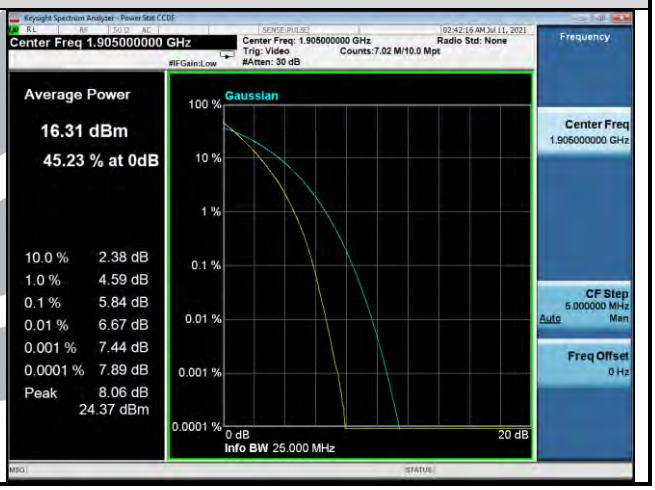
LTE Band 17 Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 10 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Lowest	1 RB	5.74	6.47	/	13	Pass
	Full RB	5.98	6.50	/	13	Pass
Middle	1 RB	5.44	6.05	/	13	Pass
	Full RB	5.93	6.53	/	13	Pass
Highest	1 RB	5.74	6.58	/	13	Pass
	Full RB	5.86	6.51	/	13	Pass

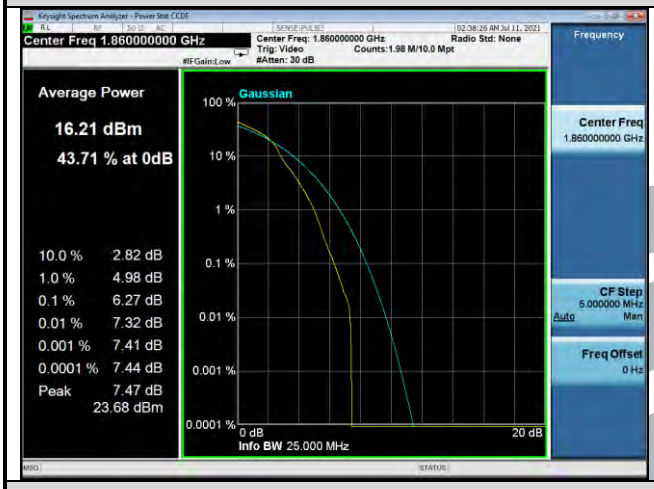
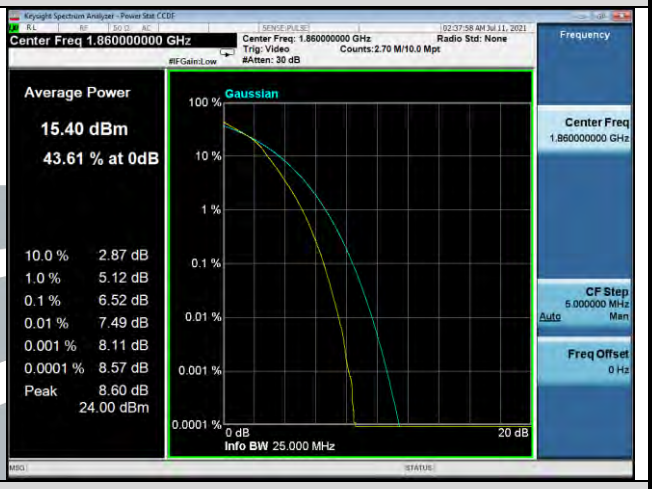
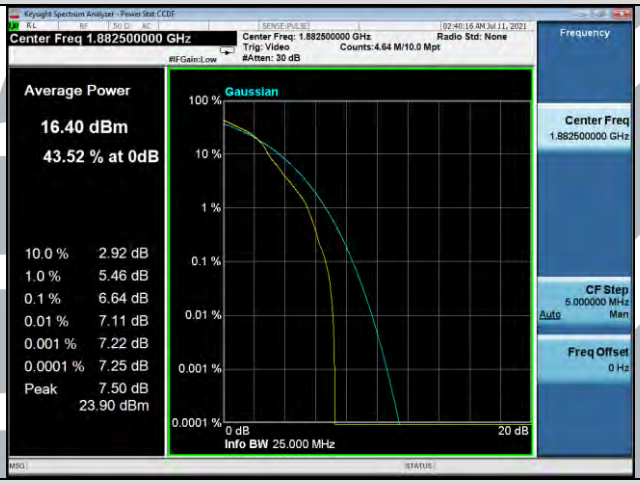
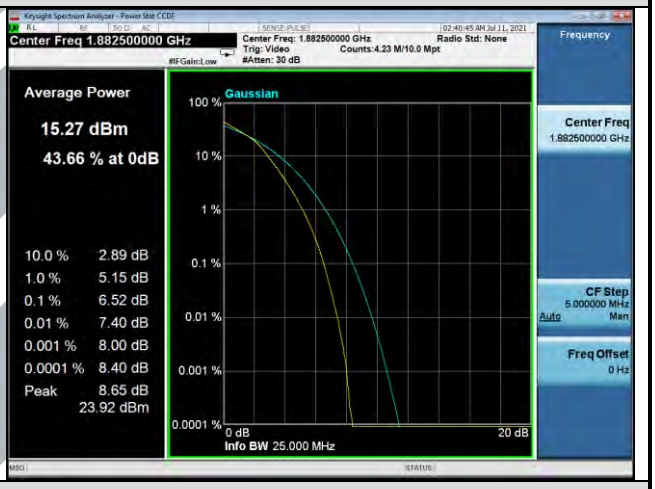
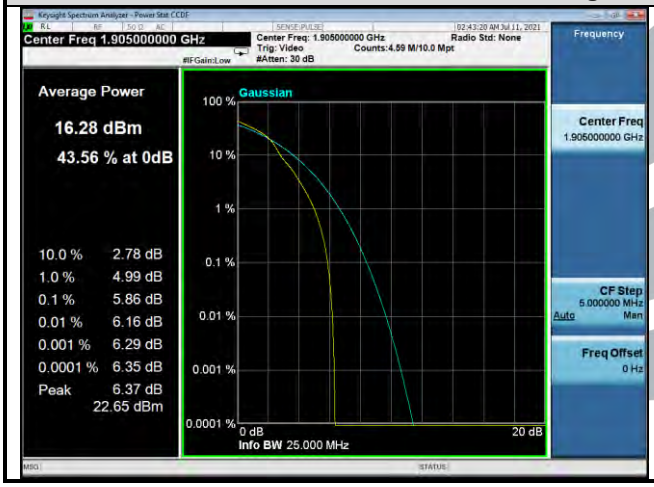
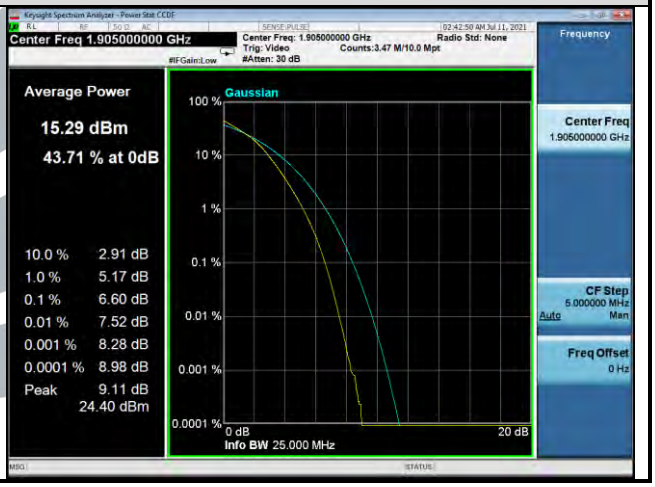
LTE Band 17/ 10MHz / QPSK	
1 RB	Full RB
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

LTE Band 17/ 10MHz / 16QAM	
1 RB	Full RB
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

5.4.7 LTE Band 25

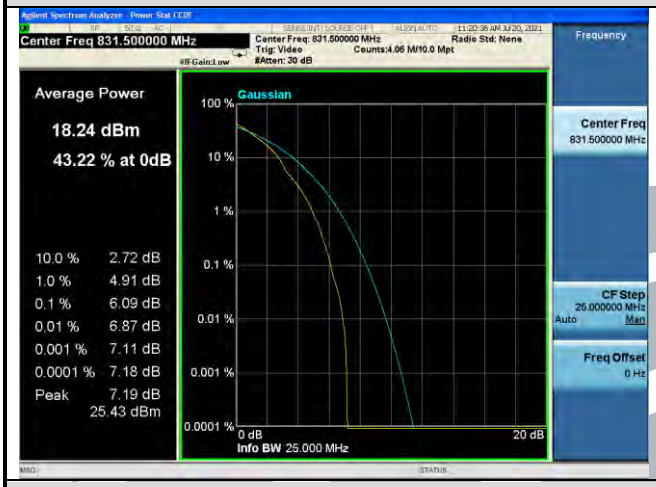
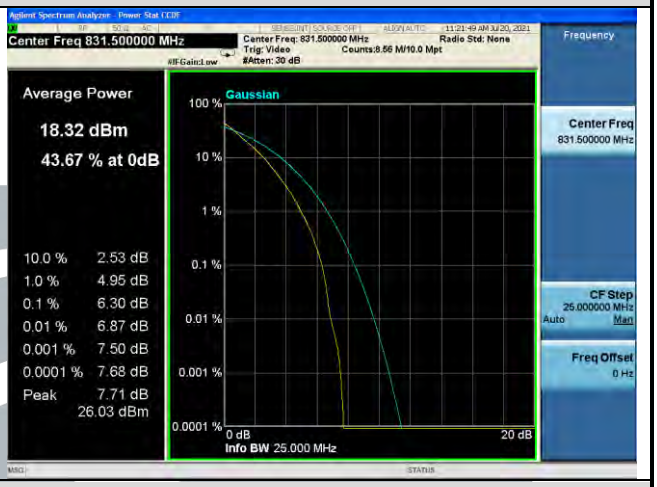
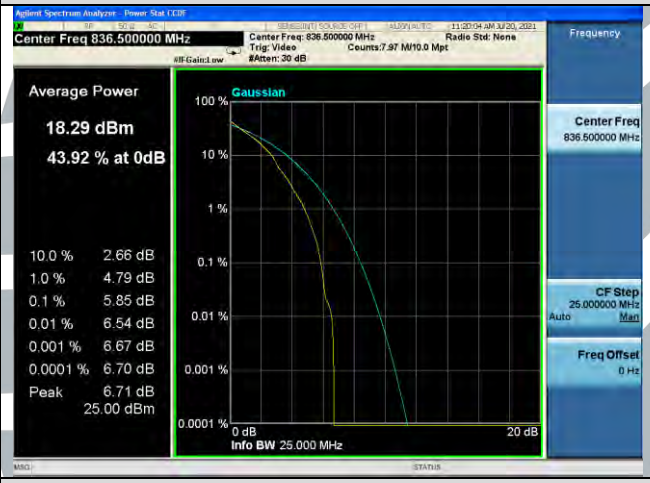
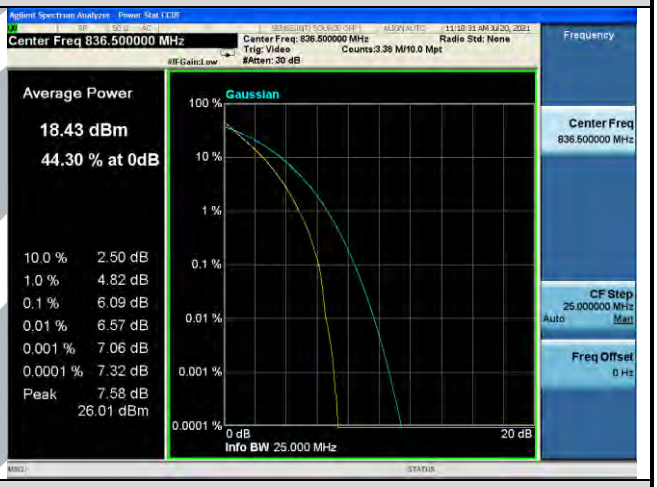
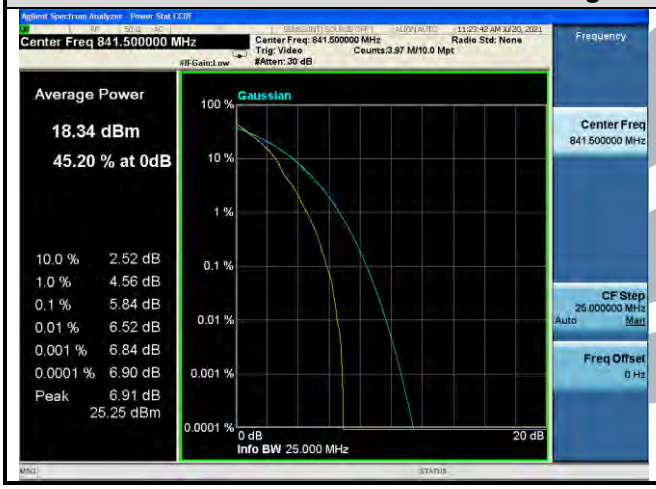
LTE Band 25 Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 20 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Lowest	1 RB	5.62	6.27	/	13	Pass
	Full RB	5.78	6.52	/	13	Pass
Middle	1 RB	5.49	6.64	/	13	Pass
	Full RB	5.83	6.52	/	13	Pass
Highest	1 RB	5.41	5.86	/	13	Pass
	Full RB	5.84	6.60	/	13	Pass

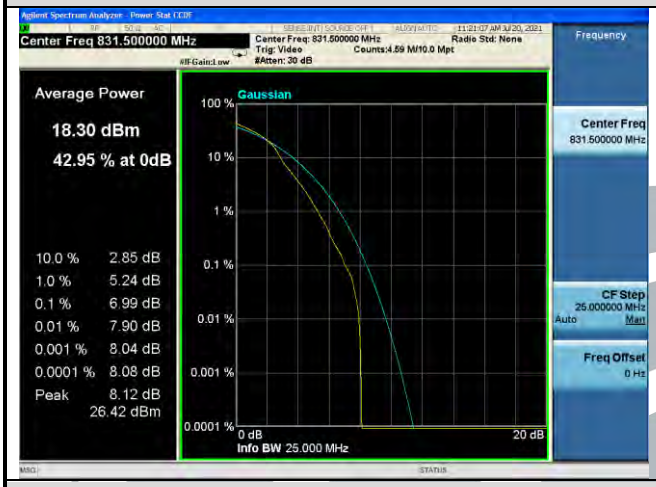
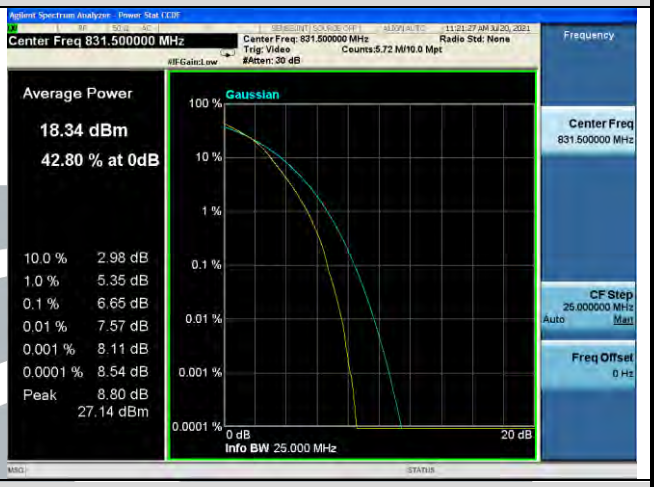
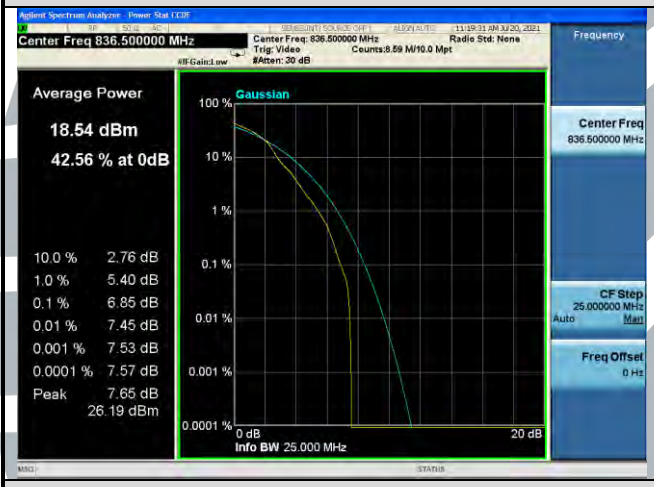
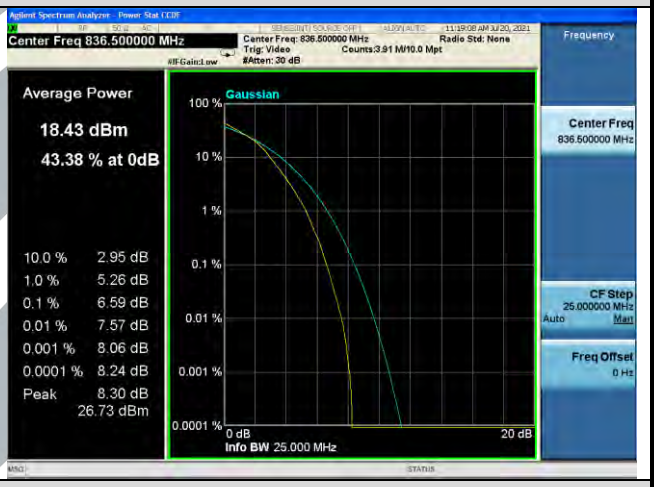
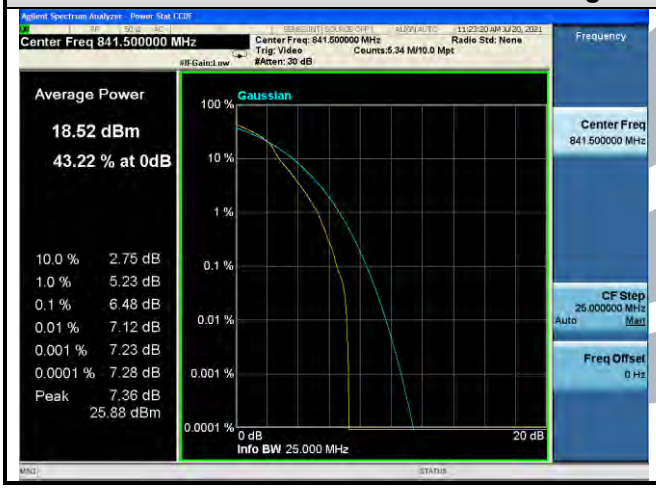
LTE Band 25 / 20 MHz / QPSK	
1 RB	Full RB
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

LTE Band 25 / 20 MHz / 16QAM	
1 RB	Full RB
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

5.4.8 LTE Band 26

LTE Band 26 Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 15 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Lowest	1 RB	6.09	6.99	/	13	Pass
	Full RB	6.30	6.65	/	13	Pass
Middle	1 RB	5.85	6.85	/	13	Pass
	Full RB	6.09	6.59	/	13	Pass
Highest	1 RB	5.84	6.48	/	13	Pass
	Full RB	6.30	6.72	/	13	Pass

LTE Band 26 / 15MHz / QPSK	
1 RB	Full RB
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

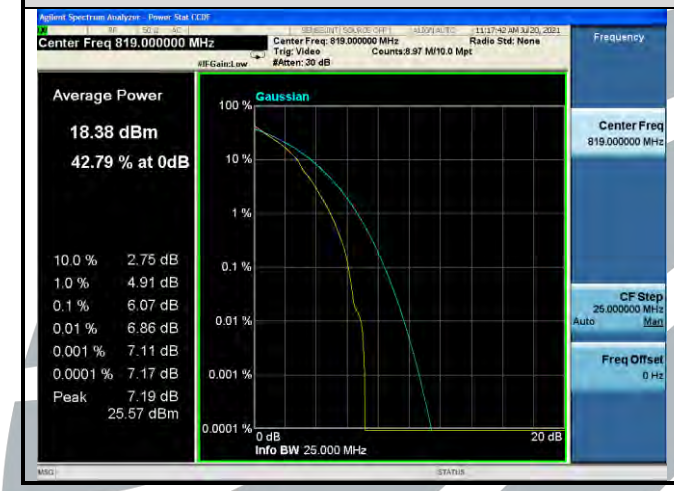
LTE Band 26 / 15MHz / 16QAM	
1 RB	Full RB
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

5.4.9 LTE Band 26 (Part 90S)

LTE Band 26 Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 10 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Middle	1 RB	6.07	6.93	/	13	Pass
	Full RB	5.79	6.44	/	13	Pass

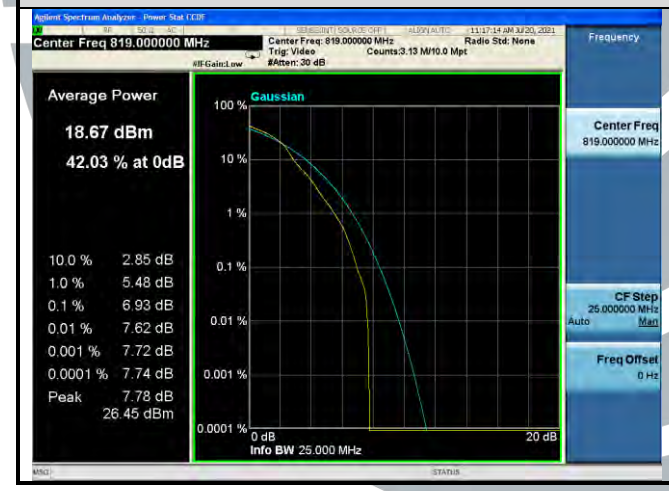
LTE Band 26 / 10MHz / QPSK

1 RB	Full RB
Middle Channel	



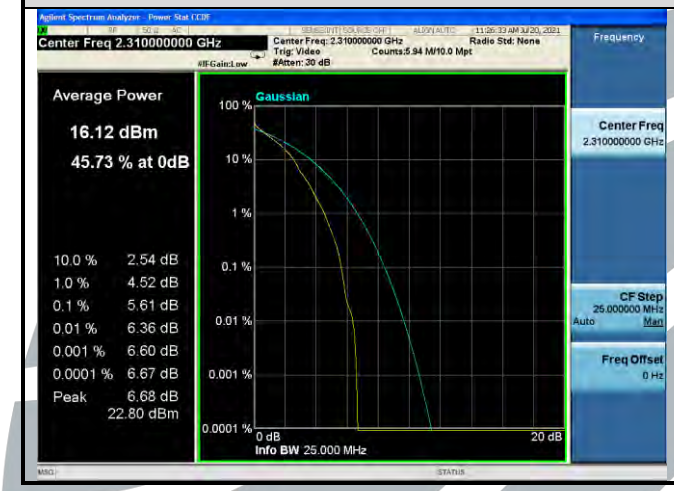
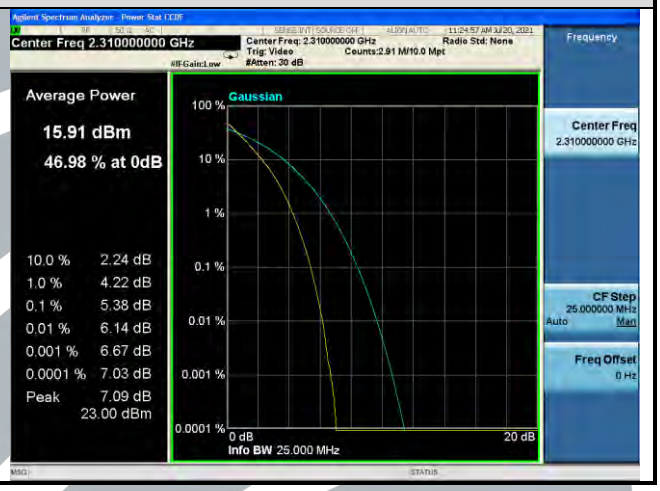
LTE Band 26 / 10MHz / 16QAM

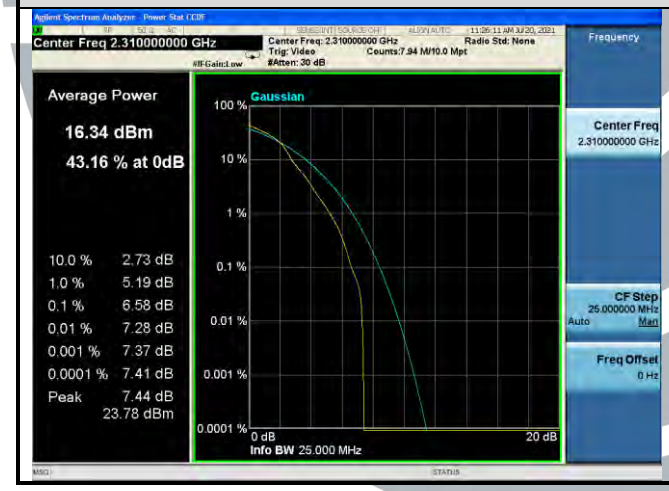
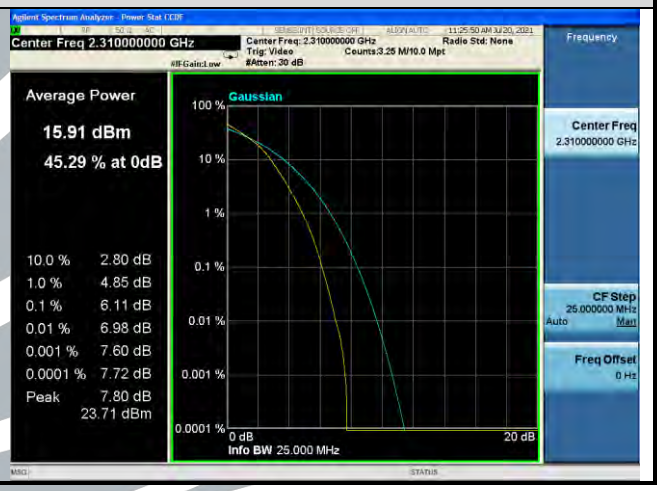
1 RB	Full RB
Middle Channel	



5.4.10 LTE Band 30

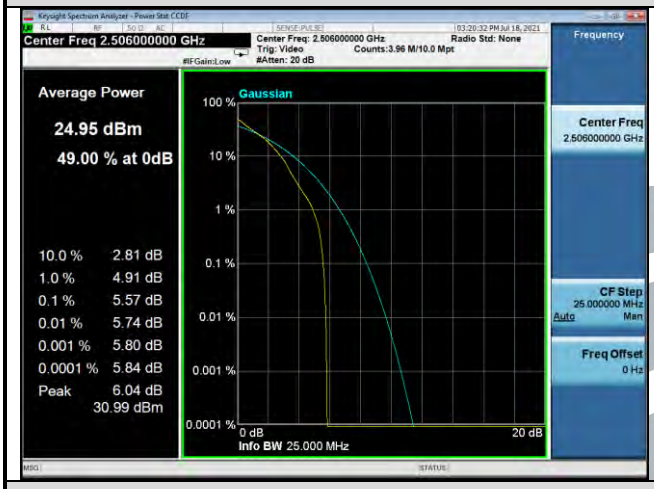
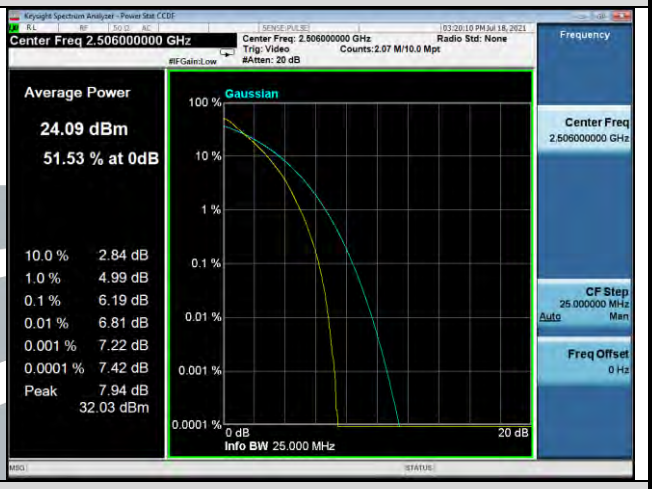
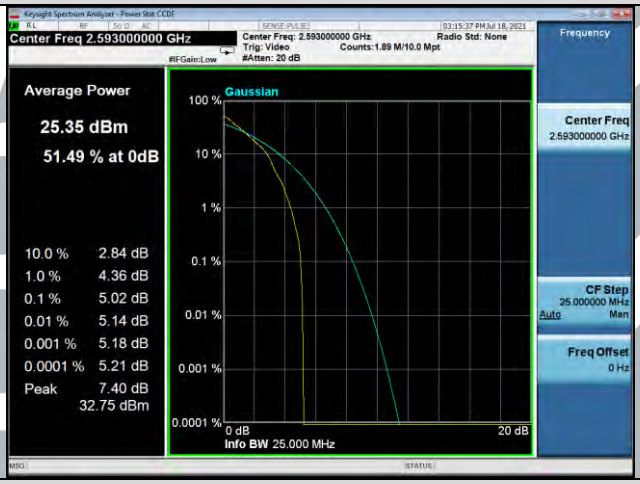
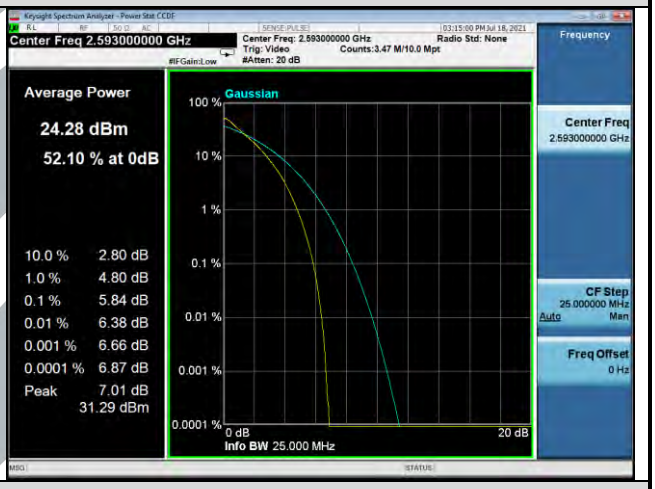
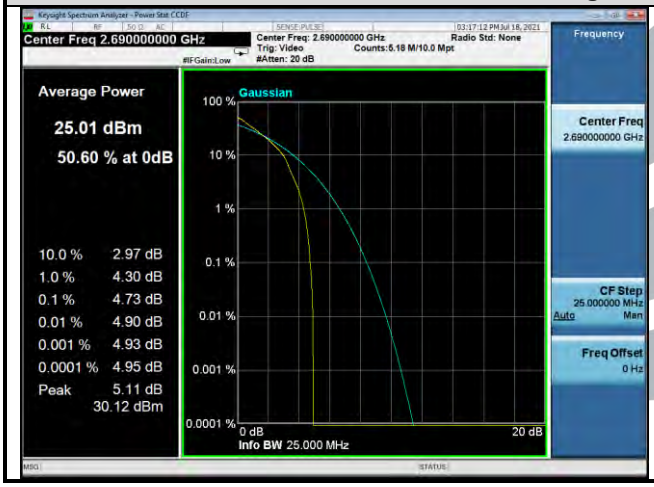
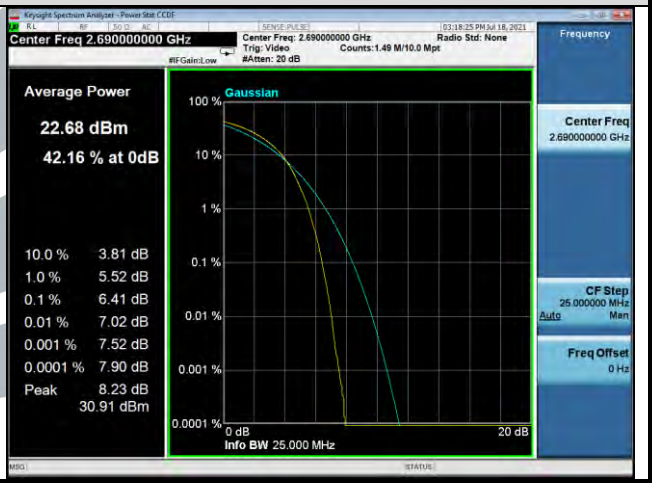
LTE Band 30Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 10 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Middle	1 RB	5.61	6.58	/	13	Pass
	Full RB	5.38	6.11	/	13	Pass

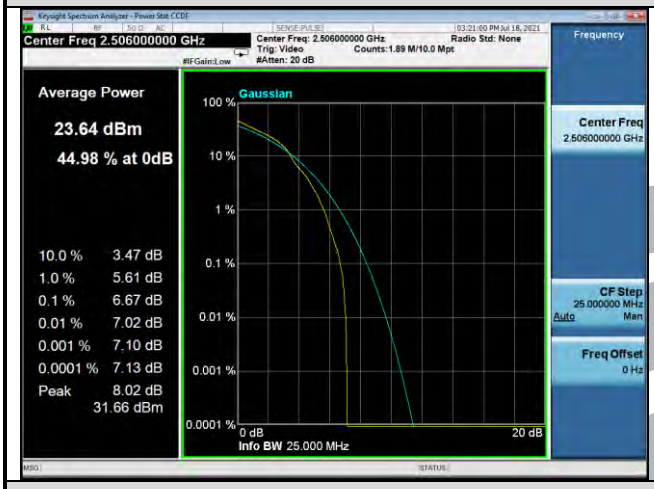
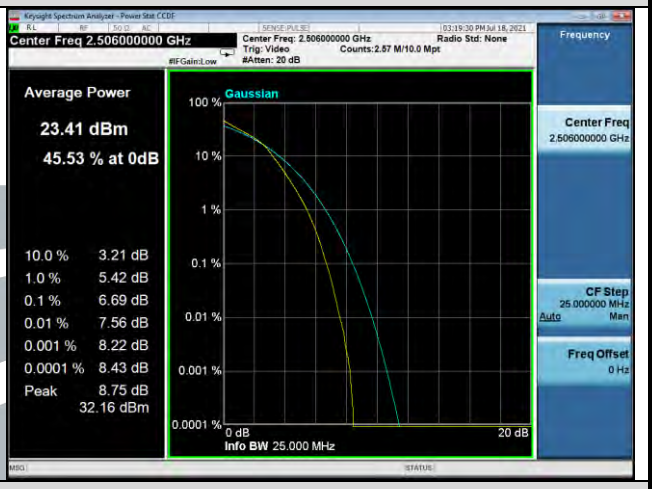
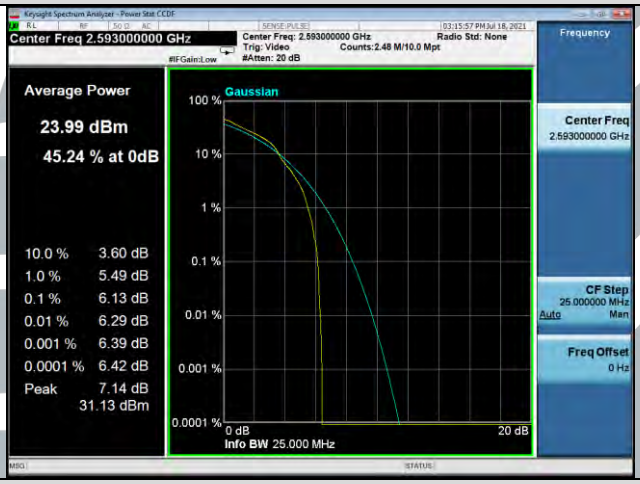
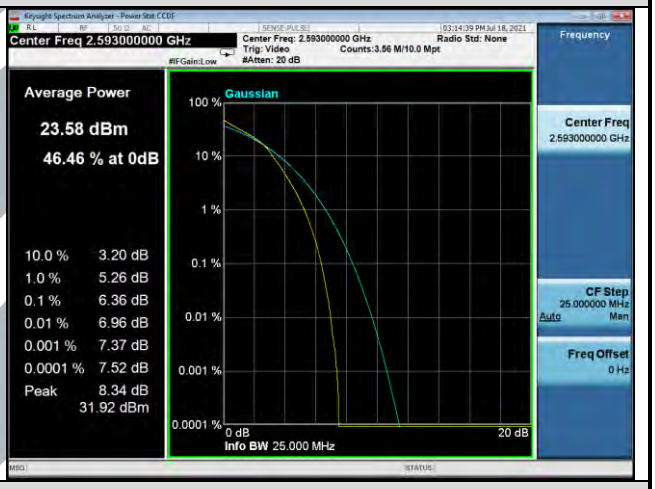
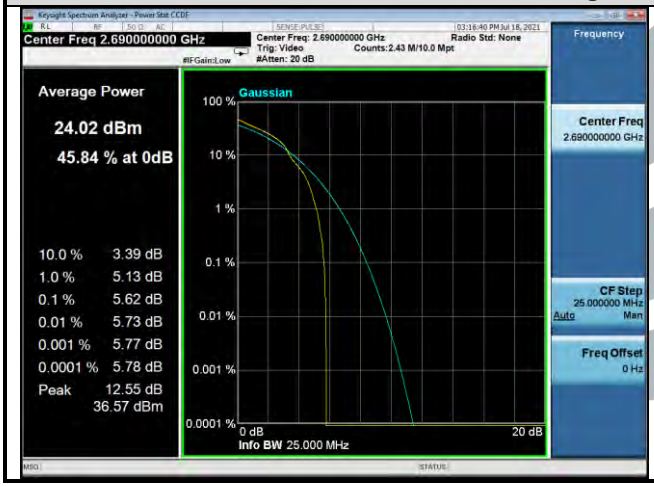
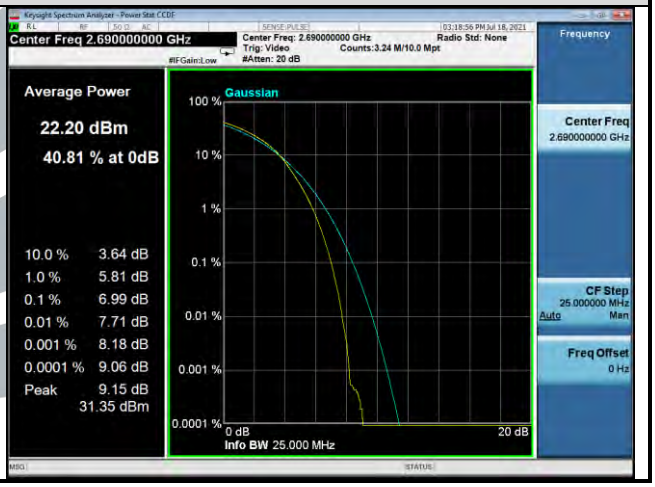
LTE Band 30 / 10MHz / QPSK	
1 RB	Full RB
Middle Channel	
	

LTE Band 30/ 10MHz / 16QAM	
1 RB	Full RB
Middle Channel	
	

5.4.11 LTE Band 41

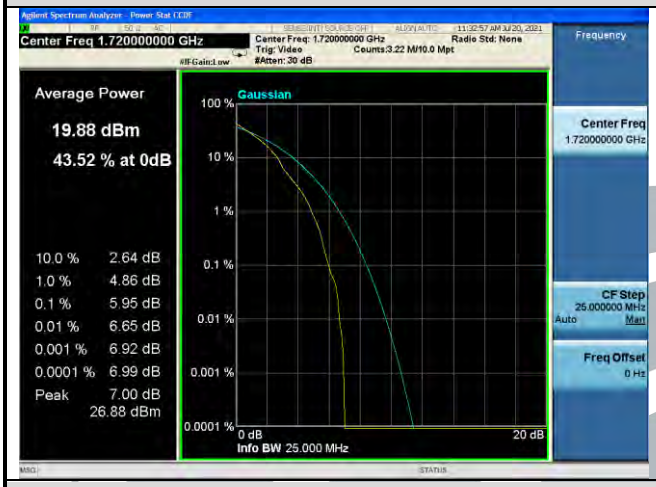
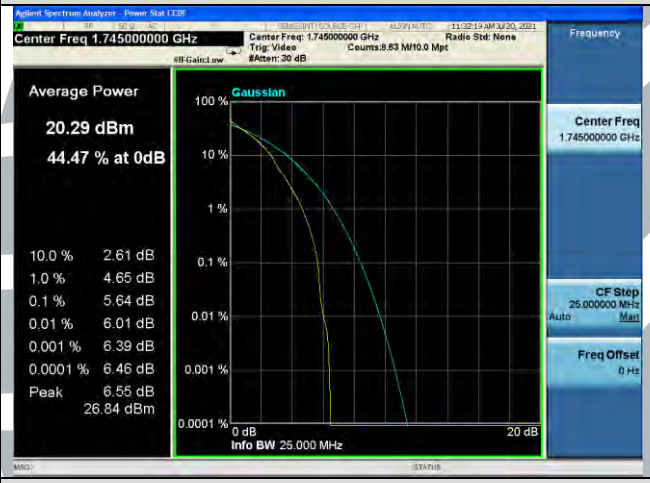
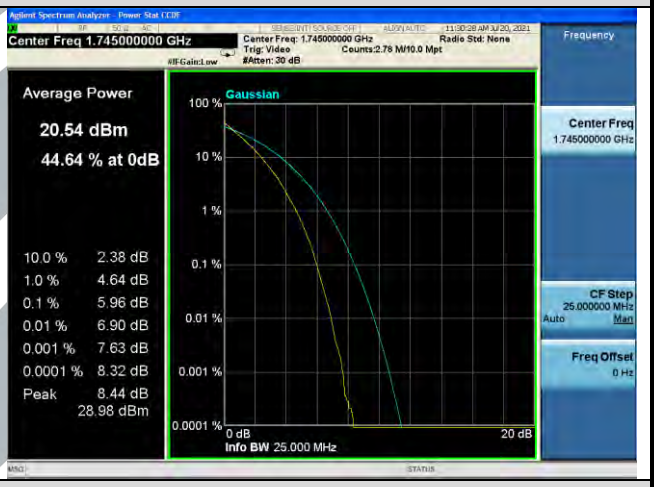
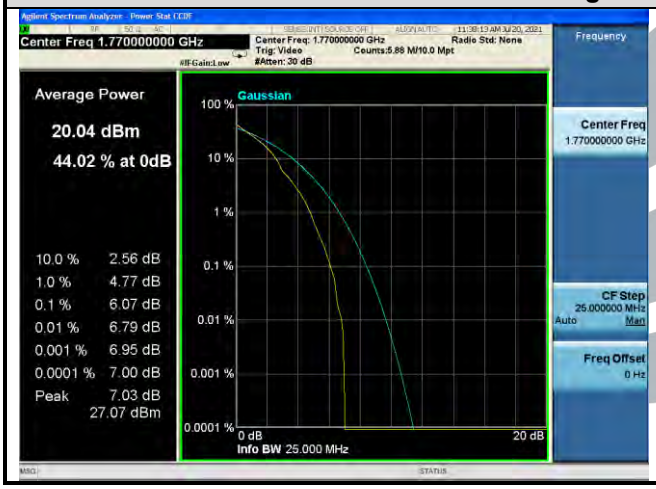
LTE Band 41 Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 20 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Lowest	1 RB	5.57	6.67	/	13	Pass
	Full RB	6.19	6.69	/	13	Pass
Middle	1 RB	5.02	6.13	/	13	Pass
	Full RB	5.84	6.36	/	13	Pass
Highest	1 RB	4.73	5.62	/	13	Pass
	Full RB	6.41	6.99	/	13	Pass

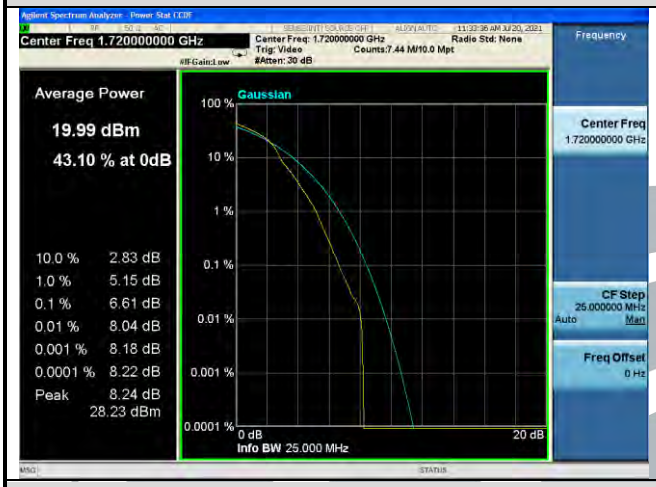
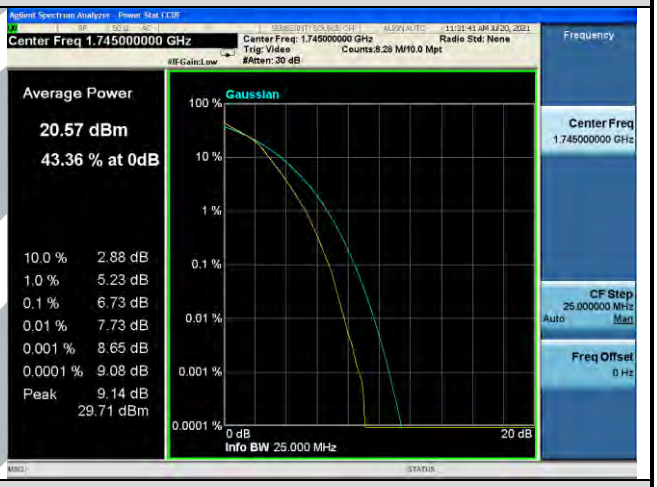
LTE Band 41 / 20MHz / QPSK	
1 RB	Full RB
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

LTE Band 41 / 20MHz / 16QAM	
1 RB	Full RB
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

5.4.12 LTE Band 66

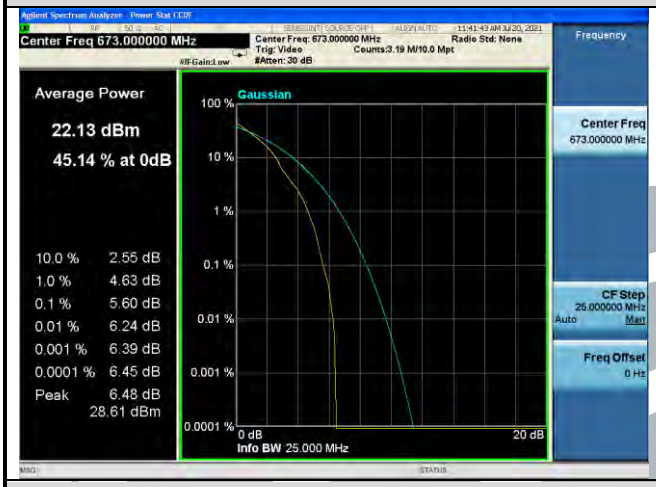
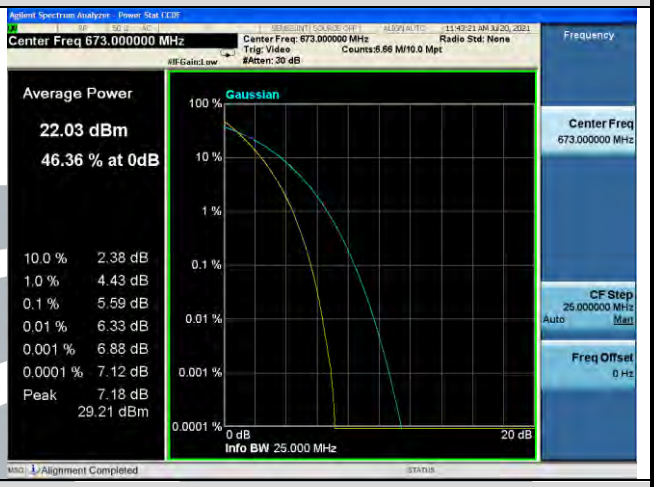
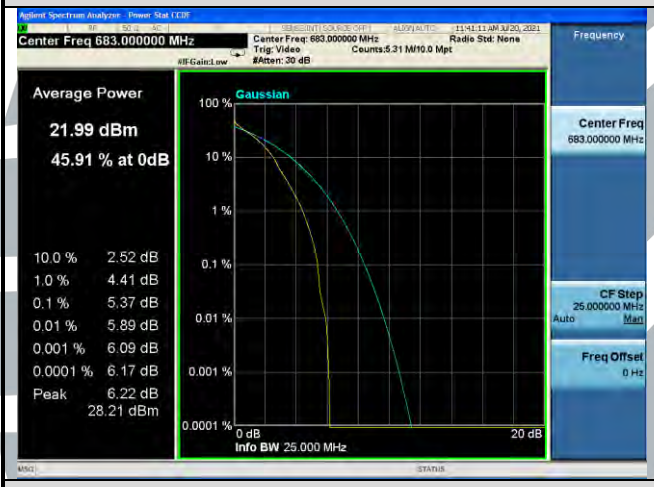
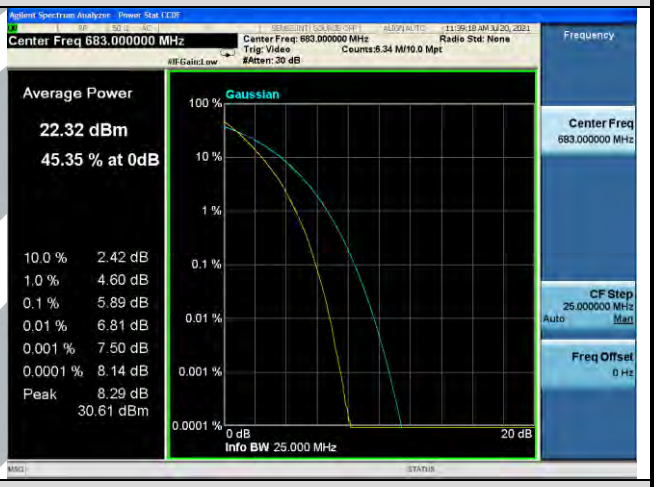
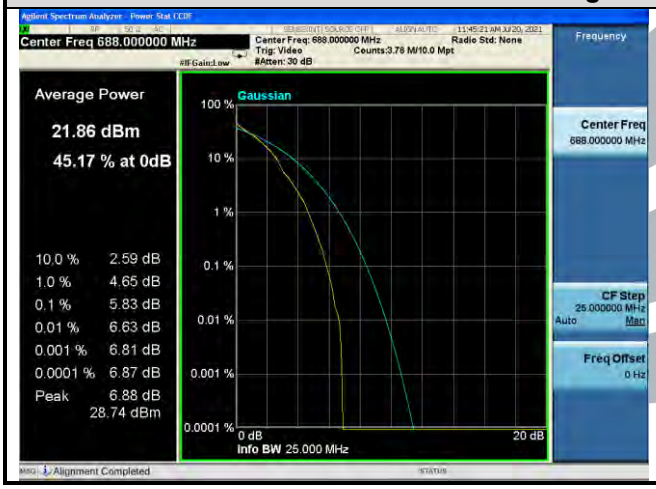
LTE Band 66 Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 20 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Lowest	1 RB	5.95	6.61	/	13	Pass
	Full RB	5.92	6.67	/	13	Pass
Middle	1 RB	5.64	6.12	/	13	Pass
	Full RB	5.96	6.73	/	13	Pass
Highest	1 RB	6.07	7.18	/	13	Pass
	Full RB	5.95	6.54	/	13	Pass

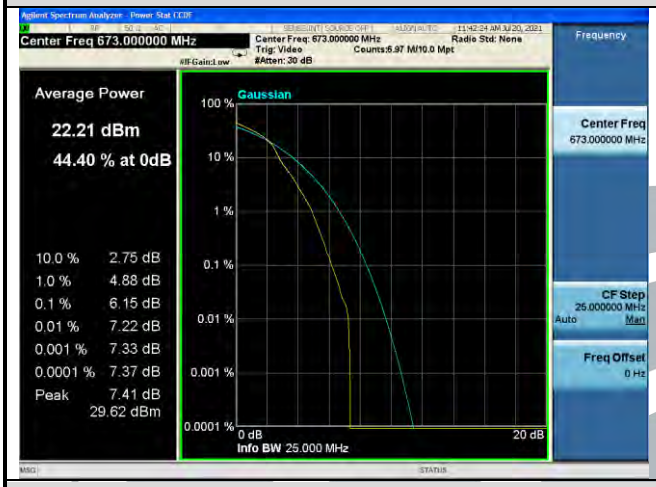
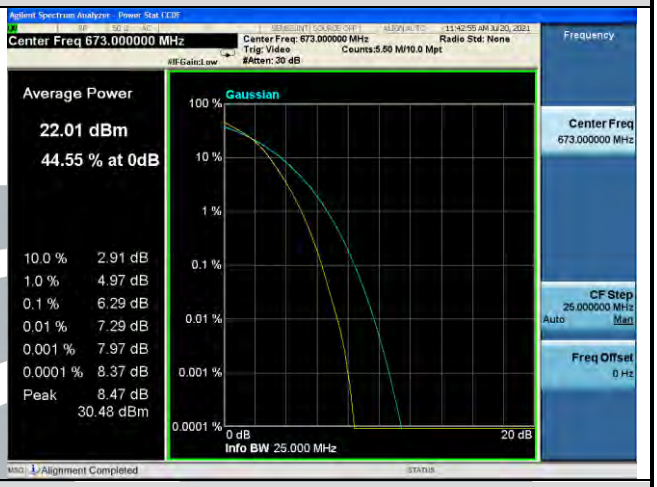
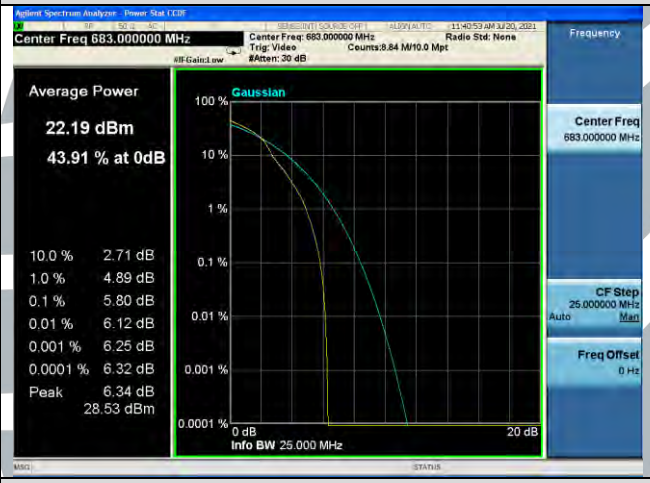
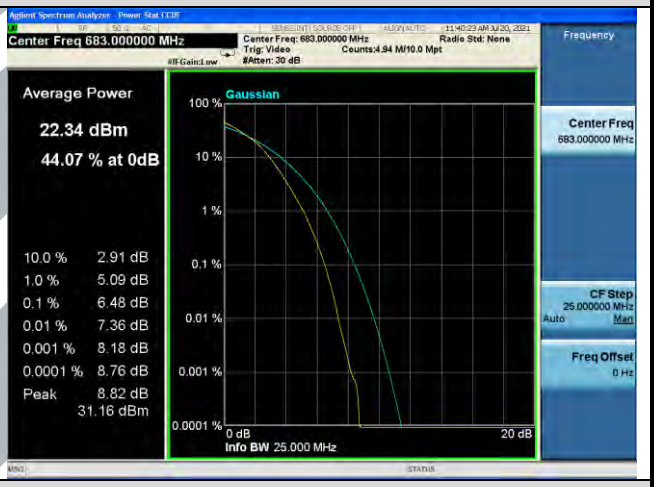
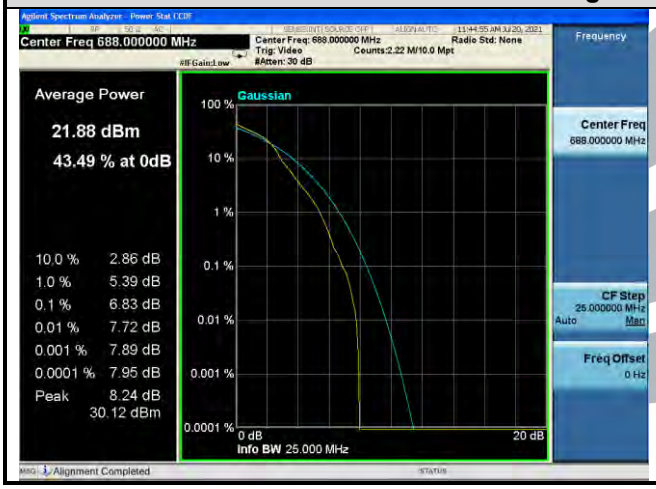
LTE Band 66 / 20MHz / QPSK	
1 RB	Full RB
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

LTE Band 66 / 20MHz / 16QAM	
1 RB	Full RB
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

5.4.13 LTE Band 71

LTE Band 71 Peak-to-average ratio (dB)						
Channel	RB Configuration	Channel Bandwidth: 20 MHz			Limit (dB)	Result
		QPSK	16QAM	64QAM		
Lowest	1 RB	5.60	6.15	/	13	Pass
	Full RB	5.59	6.29	/	13	Pass
Middle	1 RB	5.37	5.80	/	13	Pass
	Full RB	5.89	6.48	/	13	Pass
Highest	1 RB	5.83	6.83	/	13	Pass
	Full RB	5.63	6.28	/	13	Pass

LTE Band 71 / 20MHz / QPSK	
1 RB	Full RB
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

LTE Band 71 / 20MHz / 16QAM	
1 RB	Full RB
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

5.5 99%&26DB BANDWIDTH

Test Requirement: FCC 47 CFR Part 2.1049(h)

Test Method: ANSI C63.26-2015 & KDB 971168 D01v03r01 Section 4

Limit: No Limit, for reporting purposes only.

Test Procedure:

The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer. The occupied bandwidth was measured with the spectrum analyzer at the low, middle and high channel in each band. The 99% and -26dB bandwidths was also measured and recorded.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

Test Setup: Refer to section 4.2.2 for details.

Instruments Used: Refer to section 3 for details

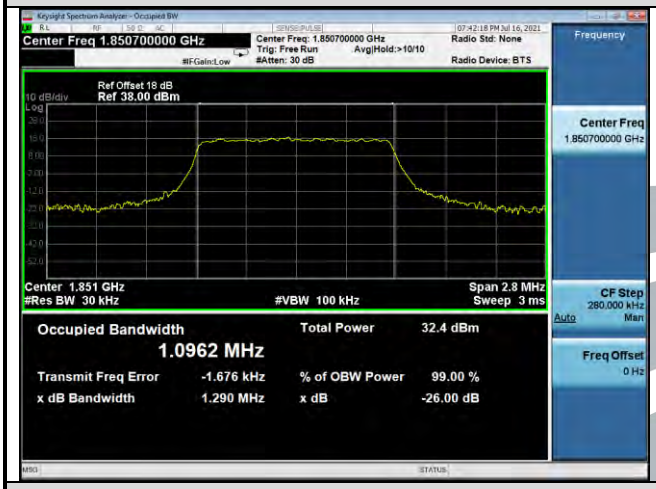
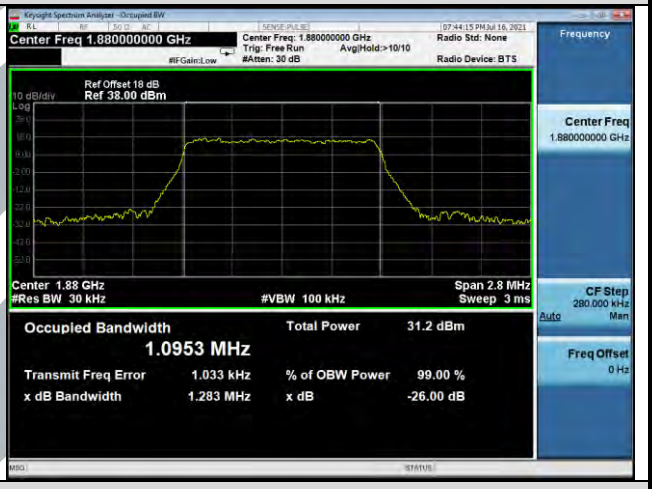
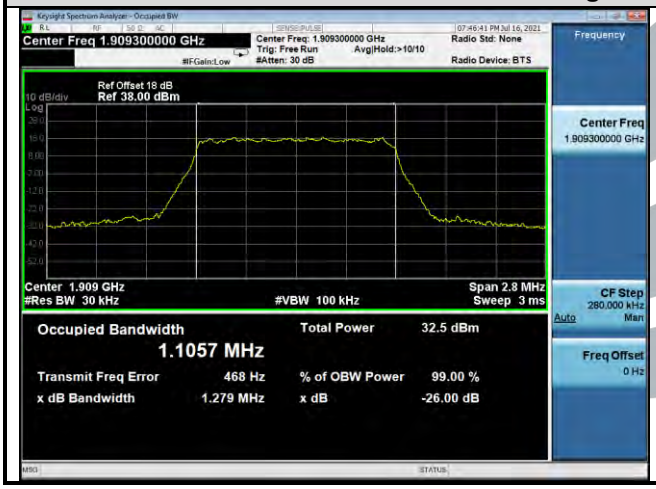
Test Mode: Link mode

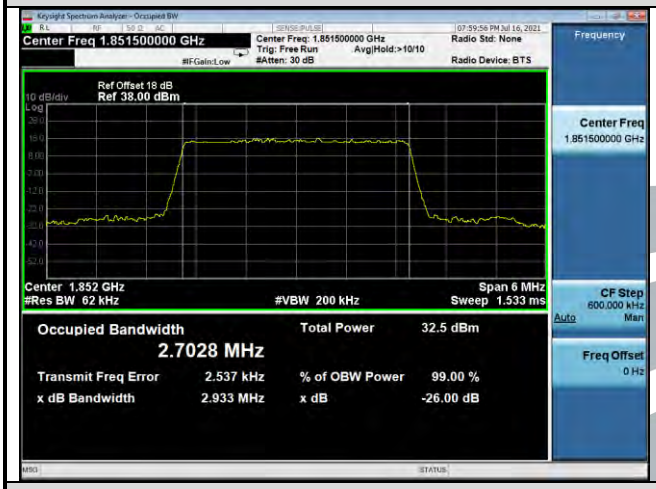
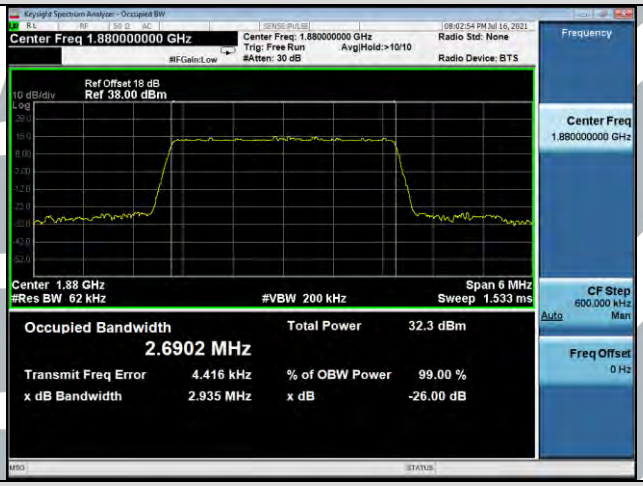
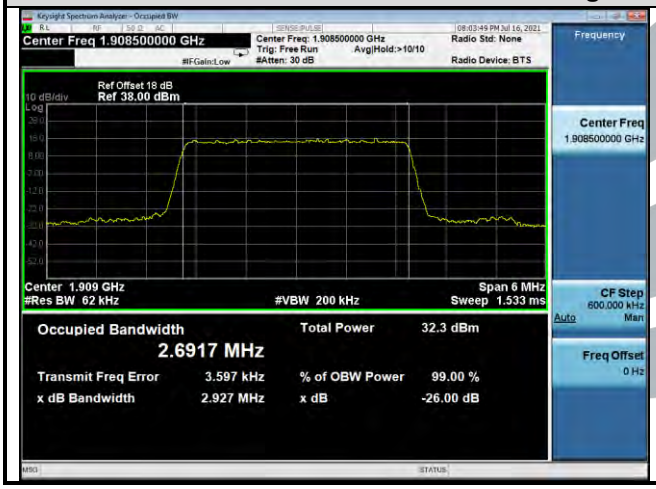
Test Results: Pass

Test Data: See table below

5.5.1 LTE Band 2

LTE Band 2								
Channel	RB Configuration		26 dB BW (MHz)			99% BW (MHz)		
	Size	Offset	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Channel Bandwidth: 1.4 MHz								
Lowest	6	0	1.290	1.302	/	1.0962	1.1009	/
Middle	6	0	1.312	1.283	/	1.0999	1.0953	/
Highest	6	0	1.279	1.276	/	1.1057	1.0965	/
Channel Bandwidth: 3 MHz								
Lowest	15	0	2.933	2.937	/	2.7028	2.6939	/
Middle	15	0	2.935	2.940	/	2.6902	2.6944	/
Highest	15	0	2.927	2.925	/	2.6917	2.6947	/
Channel Bandwidth: 5 MHz								
Lowest	25	0	5.170	5.167	/	4.5190	4.5264	/
Middle	25	0	5.176	5.155	/	4.5367	4.5184	/
Highest	25	0	5.198	5.174	/	4.5223	4.5273	/
Channel Bandwidth: 10 MHz								
Lowest	50	0	10.14	10.16	/	8.9975	9.0082	/
Middle	50	0	10.12	9.995	/	9.0318	9.0045	/
Highest	50	0	10.00	10.02	/	9.0023	9.0253	/
Channel Bandwidth: 15 MHz								
Lowest	75	0	15.17	15.05	/	13.490	13.505	/
Middle	75	0	14.97	15.00	/	13.511	13.514	/
Highest	75	0	17.42	16.62	/	13.551	13.567	/
Channel Bandwidth: 20 MHz								
Lowest	100	0	19.85	19.87	/	18.022	17.999	/
Middle	100	0	19.64	19.76	/	18.010	18.048	/
Highest	100	0	21.23	20.64	/	18.120	18.077	/

LTE Band 2_ Channel Bandwidth: 1.4 MHz	
QPSK	16QAM
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

LTE Band 2_ Channel Bandwidth: 3 MHz	
QPSK	16QAM
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

LTE Band 2_ Channel Bandwidth: 5 MHz	
QPSK	16QAM
Lowest Channel	
	
Middle Channel	
	
Highest Channel