RF TEST REPORT

Applicant	Quectel Wireless Solutions Company Limited
FCC ID	XMR2020AG525RGL
Product	LTE Module
Brand	Quectel
Model	AG525R-GL
Report No.	R2410A1542-R5
Issue Date	December 6, 2024

Eurofins TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC CFR47 Part 2 (2023)/ FCC CFR 47 Part 90S (2023)**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Prepared by: Xu Ying *Approved by: Xu Kai*

Eurofins TA Technology (Shanghai) Co., Ltd.

Building 3, No.145, Jintang Rd, Pudong Shanghai, P.R.China
TEL: +86-021-50791141/2/3
FAX: +86-021-50791141/2/3-8000

TABLE OF CONTENT

Summary of measurement results

No.	Test Case	Clause in FCC rules	Verdict
1	RF Power Output and Effective Radiated Power	2.1046/90.635(b)	PASS
2	Occupied Bandwidth	2.1049/ 90.209	PASS
3	Emission Masks	2.1051 / 90.691	PASS
4	Peak-to-Average Power Ratio	KDB 971168 D01(5.7)	PASS
5	Frequency Stability	2.1055 / 90.213	PASS
6	Spurious Emissions at Antenna Terminals	2.1051 / 90.691	PASS
7	Radiates Spurious Emission	2.1053 /90.691	PASS
Date of Testing: (Original) August 24, 2020 ~ October 21, 2020 and November 10, 2020 ~ November 11, 2020			
Date of Sample Received: (Original) August 24, 2020			
Note: All indications of Pass/Fail in this report are opinions expressed by Eurofins TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.			

AG525R-GL (Report No.: R2410A1542-R5) is a variant model of AG525R-GL (Report No.: R2008A0573-R5V1).
The customer declares that AG525R-GL's new version shares the same software and hardware design with original version. They support the same bands. The new version just changed some RF alternative materials.

Considering to the difference, after technical assessment, this product only tested Radiates Spurious Emission based on the worst case of one of the bands in the original report, and the data did not worsen, so they were not recorded in the report.
This report also verifies Transmitter Output Power, powers of new variant are varied due to measurement uncertainty, and sample tolerance of the acceptance range, so they were not recorded in the report.
Other test data please refer to the original report.

The detailed product change description please refers to the *Difference Declaration Letter*.

1. Test Laboratory

1.1. Notes of the Test Report

This report shall not be reproduced in full or partial, without the written approval of **Eurofins TA technology (shanghai) co., Ltd.** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein .Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of the applicable standards stated above.

1.2. Test facility

FCC (Designation number: CN1179, Test Firm Registration Number: 446626)

Eurofins TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

A2LA (Certificate Number: 3857.01)

Eurofins TA Technology (Shanghai) Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement.

1.3. Testing Location

Company:	Eurofins TA Technology (Shanghai) Co., Ltd.
Address:	Building 3, No.145, Jintang Rd, Pudong Shanghai, P.R.China
City:	Shanghai
Post code:	201201
Country:	P. R. China
Contact:	Xu Kai
Telephone:	+86-021-50791141/2/3
Fax:	+86-021-50791141/2/3-8000
Website:	https://www.eurofins.com/electrical-and-electronics
E-mail:	Kain.Xu@cpt.eurofinscn.com

2. General Description of Equipment under Test

2.3. Applicant and Manufacturer Information

Applicant	Quectel Wireless Solutions Company Limited
Applicant address	Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai 200233, China
Manufacturer	Quectel Wireless Solutions Company Limited
Manufacturer address	Building 5, Shanghai Business Park Phase III (Area B), No.1016 Tianlin Road, Minhang District, Shanghai 200233, China

2.4. General Information

EUT Description			
Model	AG525R-GL		
IMEI	(Original) 864228040006472		
Hardware Version	R1.1		
Software Version	AG525RGLAAR01A16M4G_OCPU		
Power Supply	External Power Supply		
Antenna Type	External Antenna		
Antenna Gain	Frequency(MHz)	Gain (dBi)	
	810	3.41	
	820	3.14	
Test Mode(s)	LTE Band 26;		
Test Modulation	QPSK 16QAM 64QAM;		
LTE Category	12		
Maximum E.R.P.	LTE Band 26:	24.46dBm	
Rated Power Supply Voltage	3.8V		
Extreme Voltage	Minimum: 3.3V Maximum: 4.3V		
Extreme Temperature	Lowest: -30°C Highest: +50°C		
Operating Voltage	Minimum: 3.3V Maximum: 4.3V		
Operating Temperature	Lowest: -40°C Highest: +85°C		
Operating Frequency Range(s)	Band	Tx (MHz)	Rx (MHz)
	LTE Band 26	814 ~ 824	859 ~ 869
Note: The EUT is sent from the applicant to Eurofins TA and the information of the EUT is declared by the applicant.			

3. Applied Standards

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

Test standards:
FCC CFR 47 Part 90S (2023)

FCC CFR47 Part 2 (2023)

Reference standard:
ANSI C63.26-2015

KDB 971168 D01 Power Meas License Digital Systems v03r01

4. Test Configuration

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes. EUT stand-up position (Z axis), lie-down position (X, Y axis). Receiver antenna polarization (horizontal and vertical), the worst emission was found in position (Z axis, vertical polarization) and the worst case was recorded.

All mode and data rates and positions were investigated.
The following testing in LTE is set based on the maximum RF Output Power.

Test modes are chosen as the worst case configuration below for LTE Band 26

Test items	Bandwidth (MHz)				Modulation			RB			Test Channel		
	1.4	3	5	10	QPSK	16QAM	64QAM	1	50%	100%	L	M	H
RF Power Output and Effective Radiated Power	O	O	O	O	O	O	O	O	O	O	O	O	O
Occupied Bandwidth	O	O	O	O	O	O	O	-	-	O	-	O	-
Emission Mask	O	O	O	O	O	O	O	O	-	O	O	-	O
Peak-to-Average Power Ratio	O	O	O	O	O	O	O	-	-	O	-	O	-
Frequency Stability	O	O	O	O	O	O	O	O	O	O	O	O	O
Spurious Emissions at Antenna Terminals	O	O	O	O	O	O	O	O	O	O	O	O	O
Radiates Spurious Emission	O	O	O	O	O	O	O	O	O	O	-	O	-
Note	1. The mark “O” means that this configuration is chosen for testing. 2. The mark “-” means that this configuration is not testing.												

5. Test Case Results

5.1. RF Power Output and Effective Radiated Power

Ambient condition

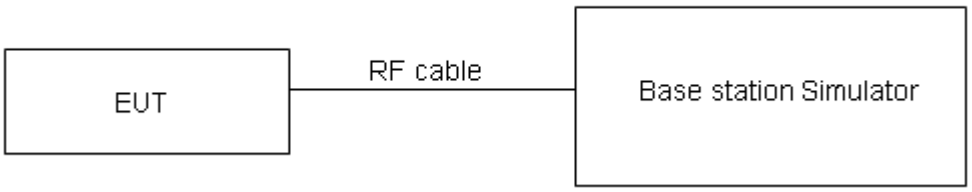
Temperature	Relative humidity
21°C ~25°C	40%~60%

Methods of Measurement

During the process of the testing, The EUT was connected to the Base Station Simulator with a known loss. The EUT is controlled by the Base Station Simulator test set to ensure max power transmission with proper modulation.

ERP can then be calculated as follows:
EIRP (dBm) = Output Power (dBm) - Losses (dB) + Antenna Gain (dBi)
where:dBd refers to gain relative to an ideal dipole.
EIRP (dBm) = ERP (dBm) + 2.15 (dB.)

Test Setup



Limits

Part 90.635 (b) the maximum output power of the transmitter for mobile stations is 100 watts.

Rule Part 90.635(b) specifies that “The maximum output power of the transmitter for mobile stations is 100 watts”.

Limit	≤ 100 W (50 dBm)

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 2, U= 0.4 dB for RF power output, k = 2, U= 1.19 dB for ERP.

Test Results

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	ERP (dBm)	Verdict
LTE Band26	1.4	26697	1	#0	QPSK	23.06	24.32	PASS
LTE Band26	1.4	26697	1	#Mid	QPSK	23.20	24.46	PASS
LTE Band26	1.4	26697	1	#Max	QPSK	23.09	24.35	PASS
LTE Band26	1.4	26697	3	#0	QPSK	23.08	24.34	PASS
LTE Band26	1.4	26697	3	#Mid	QPSK	23.06	24.32	PASS
LTE Band26	1.4	26697	3	#Max	QPSK	23.10	24.36	PASS
LTE Band26	1.4	26697	6	#0	QPSK	22.11	23.37	PASS
LTE Band26	1.4	26697	1	#0	QAM16	22.17	23.43	PASS
LTE Band26	1.4	26697	1	#Mid	QAM16	22.30	23.56	PASS
LTE Band26	1.4	26697	1	#Max	QAM16	22.20	23.46	PASS
LTE Band26	1.4	26697	3	#0	QAM16	22.35	23.61	PASS
LTE Band26	1.4	26697	3	#Mid	QAM16	22.36	23.62	PASS
LTE Band26	1.4	26697	3	#Max	QAM16	22.39	23.65	PASS
LTE Band26	1.4	26697	6	#0	QAM16	21.20	22.46	PASS
LTE Band26	1.4	26697	1	#0	QAM64	21.19	22.45	PASS
LTE Band26	1.4	26697	1	#Mid	QAM64	21.00	22.26	PASS
LTE Band26	1.4	26697	1	#Max	QAM64	20.99	22.25	PASS
LTE Band26	1.4	26697	3	#0	QAM64	19.67	20.93	PASS
LTE Band26	1.4	26697	3	#Mid	QAM64	19.81	21.07	PASS
LTE Band26	1.4	26697	3	#Max	QAM64	19.79	21.05	PASS
LTE Band26	1.4	26697	6	#0	QAM64	19.64	20.90	PASS
LTE Band26	1.4	26740	1	#0	QPSK	22.98	23.97	PASS
LTE Band26	1.4	26740	1	#Mid	QPSK	23.10	24.09	PASS
LTE Band26	1.4	26740	1	#Max	QPSK	23.01	24.00	PASS
LTE Band26	1.4	26740	3	#0	QPSK	23.09	24.08	PASS
LTE Band26	1.4	26740	3	#Mid	QPSK	23.07	24.06	PASS
LTE Band26	1.4	26740	3	#Max	QPSK	23.07	24.06	PASS
LTE Band26	1.4	26740	6	#0	QPSK	22.14	23.13	PASS
LTE Band26	1.4	26740	1	#0	QAM16	22.23	23.22	PASS
LTE Band26	1.4	26740	1	#Mid	QAM16	22.40	23.39	PASS
LTE Band26	1.4	26740	1	#Max	QAM16	22.30	23.29	PASS
LTE Band26	1.4	26740	3	#0	QAM16	22.21	23.20	PASS
LTE Band26	1.4	26740	3	#Mid	QAM16	22.20	23.19	PASS
LTE Band26	1.4	26740	3	#Max	QAM16	22.18	23.17	PASS
LTE Band26	1.4	26740	6	#0	QAM16	21.08	22.07	PASS
LTE Band26	1.4	26740	1	#0	QAM64	21.07	22.06	PASS
LTE Band26	1.4	26740	1	#Mid	QAM64	21.00	21.99	PASS
LTE Band26	1.4	26740	1	#Max	QAM64	20.02	21.01	PASS
LTE Band26	1.4	26740	3	#0	QAM64	19.76	20.75	PASS

LTE Band26	1.4	26740	3	#Mid	QAM64	19.83	20.82	PASS
LTE Band26	1.4	26740	3	#Max	QAM64	19.62	20.61	PASS
LTE Band26	1.4	26740	6	#0	QAM64	19.74	20.73	PASS
LTE Band26	1.4	26783	1	#0	QPSK	23.07	24.06	PASS
LTE Band26	1.4	26783	1	#Mid	QPSK	23.19	24.18	PASS
LTE Band26	1.4	26783	1	#Max	QPSK	23.09	24.08	PASS
LTE Band26	1.4	26783	3	#0	QPSK	23.09	24.08	PASS
LTE Band26	1.4	26783	3	#Mid	QPSK	23.10	24.09	PASS
LTE Band26	1.4	26783	3	#Max	QPSK	23.07	24.06	PASS
LTE Band26	1.4	26783	6	#0	QPSK	22.12	23.11	PASS
LTE Band26	1.4	26783	1	#0	QAM16	21.99	22.98	PASS
LTE Band26	1.4	26783	1	#Mid	QAM16	22.10	23.09	PASS
LTE Band26	1.4	26783	1	#Max	QAM16	22.04	23.03	PASS
LTE Band26	1.4	26783	3	#0	QAM16	22.18	23.17	PASS
LTE Band26	1.4	26783	3	#Mid	QAM16	22.16	23.15	PASS
LTE Band26	1.4	26783	3	#Max	QAM16	22.16	23.15	PASS
LTE Band26	1.4	26783	6	#0	QAM16	21.12	22.11	PASS
LTE Band26	1.4	26783	1	#0	QAM64	21.29	22.28	PASS
LTE Band26	1.4	26783	1	#Mid	QAM64	21.21	22.20	PASS
LTE Band26	1.4	26783	1	#Max	QAM64	21.09	22.08	PASS
LTE Band26	1.4	26783	3	#0	QAM64	19.68	20.67	PASS
LTE Band26	1.4	26783	3	#Mid	QAM64	19.67	20.66	PASS
LTE Band26	1.4	26783	3	#Max	QAM64	19.76	20.75	PASS
LTE Band26	1.4	26783	6	#0	QAM64	19.71	20.70	PASS
LTE Band26	3	26705	1	#0	QPSK	23.01	24.00	PASS
LTE Band26	3	26705	1	#Mid	QPSK	23.13	24.12	PASS
LTE Band26	3	26705	1	#Max	QPSK	23.01	24.00	PASS
LTE Band26	3	26705	8	#0	QPSK	22.16	23.15	PASS
LTE Band26	3	26705	8	#Mid	QPSK	22.16	23.15	PASS
LTE Band26	3	26705	8	#Max	QPSK	22.19	23.18	PASS
LTE Band26	3	26705	15	#0	QPSK	22.26	23.25	PASS
LTE Band26	3	26705	1	#0	QAM16	22.42	23.41	PASS
LTE Band26	3	26705	1	#Mid	QAM16	22.59	23.58	PASS
LTE Band26	3	26705	1	#Max	QAM16	22.41	23.40	PASS
LTE Band26	3	26705	8	#0	QAM16	21.28	22.27	PASS
LTE Band26	3	26705	8	#Mid	QAM16	21.25	22.24	PASS
LTE Band26	3	26705	8	#Max	QAM16	21.27	22.26	PASS
LTE Band26	3	26705	15	#0	QAM16	21.27	22.26	PASS
LTE Band26	3	26705	1	#0	QAM64	21.21	22.20	PASS
LTE Band26	3	26705	1	#Mid	QAM64	21.03	22.02	PASS
LTE Band26	3	26705	1	#Max	QAM64	21.02	22.01	PASS
LTE Band26	3	26705	8	#0	QAM64	19.75	20.74	PASS
LTE Band26	3	26705	8	#Mid	QAM64	19.91	20.90	PASS

LTE Band26	3	26705	8	#Max	QAM64	19.87	20.86	PASS
LTE Band26	3	26705	15	#0	QAM64	19.67	20.66	PASS
LTE Band26	3	26740	1	#0	QPSK	23.05	24.04	PASS
LTE Band26	3	26740	1	#Mid	QPSK	23.18	24.17	PASS
LTE Band26	3	26740	1	#Max	QPSK	23.05	24.04	PASS
LTE Band26	3	26740	8	#0	QPSK	22.18	23.17	PASS
LTE Band26	3	26740	8	#Mid	QPSK	22.19	23.18	PASS
LTE Band26	3	26740	8	#Max	QPSK	22.24	23.23	PASS
LTE Band26	3	26740	15	#0	QPSK	22.26	23.25	PASS
LTE Band26	3	26740	1	#0	QAM16	22.34	23.33	PASS
LTE Band26	3	26740	1	#Mid	QAM16	22.44	23.43	PASS
LTE Band26	3	26740	1	#Max	QAM16	22.33	23.32	PASS
LTE Band26	3	26740	8	#0	QAM16	21.22	22.21	PASS
LTE Band26	3	26740	8	#Mid	QAM16	21.21	22.20	PASS
LTE Band26	3	26740	8	#Max	QAM16	21.23	22.22	PASS
LTE Band26	3	26740	15	#0	QAM16	21.13	22.12	PASS
LTE Band26	3	26740	1	#0	QAM64	21.11	22.10	PASS
LTE Band26	3	26740	1	#Mid	QAM64	21.05	22.04	PASS
LTE Band26	3	26740	1	#Max	QAM64	20.07	21.06	PASS
LTE Band26	3	26740	8	#0	QAM64	19.86	20.85	PASS
LTE Band26	3	26740	8	#Mid	QAM64	19.91	20.90	PASS
LTE Band26	3	26740	8	#Max	QAM64	19.71	20.70	PASS
LTE Band26	3	26740	15	#0	QAM64	19.78	20.77	PASS
LTE Band26	3	26775	1	#0	QPSK	23.13	24.12	PASS
LTE Band26	3	26775	1	#Mid	QPSK	23.28	24.27	PASS
LTE Band26	3	26775	1	#Max	QPSK	23.20	24.19	PASS
LTE Band26	3	26775	8	#0	QPSK	22.28	23.27	PASS
LTE Band26	3	26775	8	#Mid	QPSK	22.25	23.24	PASS
LTE Band26	3	26775	8	#Max	QPSK	22.22	23.21	PASS
LTE Band26	3	26775	15	#0	QPSK	22.26	23.25	PASS
LTE Band26	3	26775	1	#0	QAM16	22.11	23.10	PASS
LTE Band26	3	26775	1	#Mid	QAM16	22.21	23.20	PASS
LTE Band26	3	26775	1	#Max	QAM16	22.14	23.13	PASS
LTE Band26	3	26775	8	#0	QAM16	21.25	22.24	PASS
LTE Band26	3	26775	8	#Mid	QAM16	21.26	22.25	PASS
LTE Band26	3	26775	8	#Max	QAM16	21.25	22.24	PASS
LTE Band26	3	26775	15	#0	QAM16	21.25	22.24	PASS
LTE Band26	3	26775	1	#0	QAM64	21.32	22.31	PASS
LTE Band26	3	26775	1	#Mid	QAM64	21.25	22.24	PASS
LTE Band26	3	26775	1	#Max	QAM64	21.13	22.12	PASS
LTE Band26	3	26775	8	#0	QAM64	19.79	20.78	PASS
LTE Band26	3	26775	8	#Mid	QAM64	19.77	20.76	PASS
LTE Band26	3	26775	8	#Max	QAM64	19.84	20.83	PASS

LTE Band26	3	26775	15	#0	QAM64	19.74	20.73	PASS
LTE Band26	5	26715	1	#0	QPSK	23.08	24.07	PASS
LTE Band26	5	26715	1	#Mid	QPSK	23.18	24.17	PASS
LTE Band26	5	26715	1	#Max	QPSK	23.14	24.13	PASS
LTE Band26	5	26715	12	#0	QPSK	22.17	23.16	PASS
LTE Band26	5	26715	12	#Mid	QPSK	22.18	23.17	PASS
LTE Band26	5	26715	12	#Max	QPSK	22.22	23.21	PASS
LTE Band26	5	26715	25	#0	QPSK	22.29	23.28	PASS
LTE Band26	5	26715	1	#0	QAM16	22.48	23.47	PASS
LTE Band26	5	26715	1	#Mid	QAM16	22.55	23.54	PASS
LTE Band26	5	26715	1	#Max	QAM16	22.50	23.49	PASS
LTE Band26	5	26715	12	#0	QAM16	21.21	22.20	PASS
LTE Band26	5	26715	12	#Mid	QAM16	21.20	22.19	PASS
LTE Band26	5	26715	12	#Max	QAM16	21.23	22.22	PASS
LTE Band26	5	26715	25	#0	QAM16	21.32	22.31	PASS
LTE Band26	5	26715	1	#0	QAM64	21.16	22.15	PASS
LTE Band26	5	26715	1	#Mid	QAM64	21.01	22.00	PASS
LTE Band26	5	26715	1	#Max	QAM64	20.96	21.95	PASS
LTE Band26	5	26715	12	#0	QAM64	19.70	20.69	PASS
LTE Band26	5	26715	12	#Mid	QAM64	19.87	20.86	PASS
LTE Band26	5	26715	12	#Max	QAM64	19.81	20.80	PASS
LTE Band26	5	26715	25	#0	QAM64	19.68	20.67	PASS
LTE Band26	5	26740	1	#0	QPSK	23.13	24.12	PASS
LTE Band26	5	26740	1	#Mid	QPSK	23.22	24.21	PASS
LTE Band26	5	26740	1	#Max	QPSK	23.14	24.13	PASS
LTE Band26	5	26740	12	#0	QPSK	22.18	23.17	PASS
LTE Band26	5	26740	12	#Mid	QPSK	22.18	23.17	PASS
LTE Band26	5	26740	12	#Max	QPSK	22.24	23.23	PASS
LTE Band26	5	26740	25	#0	QPSK	22.25	23.24	PASS
LTE Band26	5	26740	1	#0	QAM16	22.37	23.36	PASS
LTE Band26	5	26740	1	#Mid	QAM16	22.47	23.46	PASS
LTE Band26	5	26740	1	#Max	QAM16	22.37	23.36	PASS
LTE Band26	5	26740	12	#0	QAM16	21.18	22.17	PASS
LTE Band26	5	26740	12	#Mid	QAM16	21.17	22.16	PASS
LTE Band26	5	26740	12	#Max	QAM16	21.24	22.23	PASS
LTE Band26	5	26740	25	#0	QAM16	21.23	22.22	PASS
LTE Band26	5	26740	1	#0	QAM64	21.02	22.01	PASS
LTE Band26	5	26740	1	#Mid	QAM64	21.01	22.00	PASS
LTE Band26	5	26740	1	#Max	QAM64	20.00	20.99	PASS
LTE Band26	5	26740	12	#0	QAM64	19.77	20.76	PASS
LTE Band26	5	26740	12	#Mid	QAM64	19.83	20.82	PASS
LTE Band26	5	26740	12	#Max	QAM64	19.65	20.64	PASS
LTE Band26	5	26740	25	#0	QAM64	19.70	20.69	PASS

LTE Band26	5	26765	1	#0	QPSK	23.05	24.04	PASS
LTE Band26	5	26765	1	#Mid	QPSK	23.13	24.12	PASS
LTE Band26	5	26765	1	#Max	QPSK	23.03	24.02	PASS
LTE Band26	5	26765	12	#0	QPSK	22.14	23.13	PASS
LTE Band26	5	26765	12	#Mid	QPSK	22.15	23.14	PASS
LTE Band26	5	26765	12	#Max	QPSK	22.22	23.21	PASS
LTE Band26	5	26765	25	#0	QPSK	22.20	23.19	PASS
LTE Band26	5	26765	1	#0	QAM16	22.41	23.40	PASS
LTE Band26	5	26765	1	#Mid	QAM16	22.52	23.51	PASS
LTE Band26	5	26765	1	#Max	QAM16	22.46	23.45	PASS
LTE Band26	5	26765	12	#0	QAM16	21.22	22.21	PASS
LTE Band26	5	26765	12	#Mid	QAM16	21.23	22.22	PASS
LTE Band26	5	26765	12	#Max	QAM16	21.27	22.26	PASS
LTE Band26	5	26765	25	#0	QAM16	21.24	22.23	PASS
LTE Band26	5	26765	1	#0	QAM64	21.26	22.25	PASS
LTE Band26	5	26765	1	#Mid	QAM64	21.21	22.20	PASS
LTE Band26	5	26765	1	#Max	QAM64	21.05	22.04	PASS
LTE Band26	5	26765	12	#0	QAM64	19.72	20.71	PASS
LTE Band26	5	26765	12	#Mid	QAM64	19.69	20.68	PASS
LTE Band26	5	26765	12	#Max	QAM64	19.77	20.76	PASS
LTE Band26	5	26765	25	#0	QAM64	19.67	20.66	PASS
LTE Band26	10	26740	1	#0	QPSK	23.07	24.06	PASS
LTE Band26	10	26740	1	#Mid	QPSK	22.98	23.97	PASS
LTE Band26	10	26740	1	#Max	QPSK	22.96	23.95	PASS
LTE Band26	10	26740	25	#0	QPSK	22.28	23.27	PASS
LTE Band26	10	26740	25	#Mid	QPSK	22.26	23.25	PASS
LTE Band26	10	26740	25	#Max	QPSK	22.21	23.20	PASS
LTE Band26	10	26740	50	#0	QPSK	22.25	23.24	PASS
LTE Band26	10	26740	1	#0	QAM16	22.49	23.48	PASS
LTE Band26	10	26740	1	#Mid	QAM16	22.33	23.32	PASS
LTE Band26	10	26740	1	#Max	QAM16	22.38	23.37	PASS
LTE Band26	10	26740	25	#0	QAM16	21.35	22.34	PASS
LTE Band26	10	26740	25	#Mid	QAM16	21.35	22.34	PASS
LTE Band26	10	26740	25	#Max	QAM16	21.31	22.30	PASS
LTE Band26	10	26740	50	#0	QAM16	21.24	22.23	PASS
LTE Band26	10	26740	1	#0	QAM64	21.02	22.01	PASS
LTE Band26	10	26740	1	#Mid	QAM64	21.00	21.99	PASS
LTE Band26	10	26740	1	#Max	QAM64	20.95	21.94	PASS
LTE Band26	10	26740	25	#0	QAM64	19.77	20.76	PASS
LTE Band26	10	26740	25	#Mid	QAM64	19.71	20.70	PASS
LTE Band26	10	26740	25	#Max	QAM64	19.74	20.73	PASS
LTE Band26	10	26740	50	#0	QAM64	19.72	20.71	PASS

5.2. Occupied Bandwidth

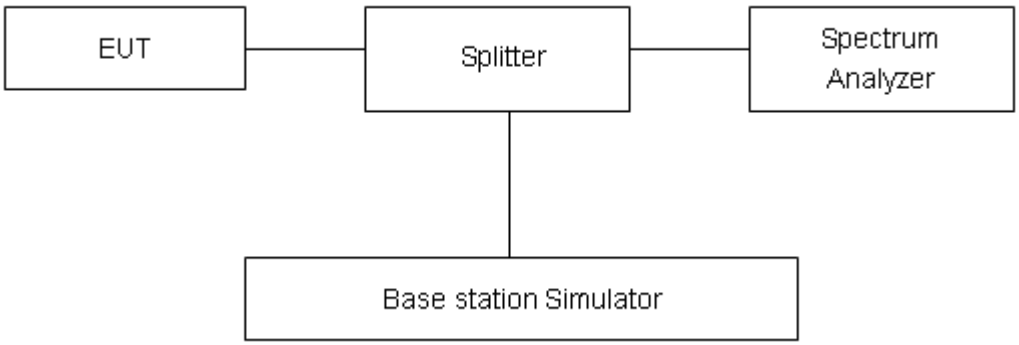
Ambient condition

Temperature	Relative humidity
21°C ~25°C	40%~60%

Method of Measurement

The EUT was connected to Spectrum Analyzer and Base Station Simulator via power Splitter. The occupied bandwidth is measured using spectrum analyzer.
RBW is set to 30 kHz, VBW is set to 91 kHz for LTE Band 26 (1.4MHz),
RBW is set to 62 kHz, VBW is set to 180 kHz for LTE Band 26 (3MHz).
RBW is set to 100 kHz, VBW is set to 300 kHz for LTE Band 26 (5MHz).
RBW is set to 200 kHz, VBW is set to 620kHz for LTE Band 26 (10MHz).
99% power and -26dBc occupied bandwidths are recorded. Spectrum analyzer plots are included on the following pages.

Test Setup



Limits

No specific occupied bandwidth requirements in part 2.1049.
Part 90.209 (a) Each authorization issued to a station licensed under this part will show an emission designator representing the class of emission authorized. The designator will be prefixed by a specified necessary bandwidth. This number does not necessarily indicate the bandwidth occupied by the emission at any instant. In those cases where part 2.202 of this chapter does not provide a formula for the computation of necessary bandwidth, the occupied bandwidth, as defined in part 2 of this chapter, may be used in lieu of the necessary bandwidth.

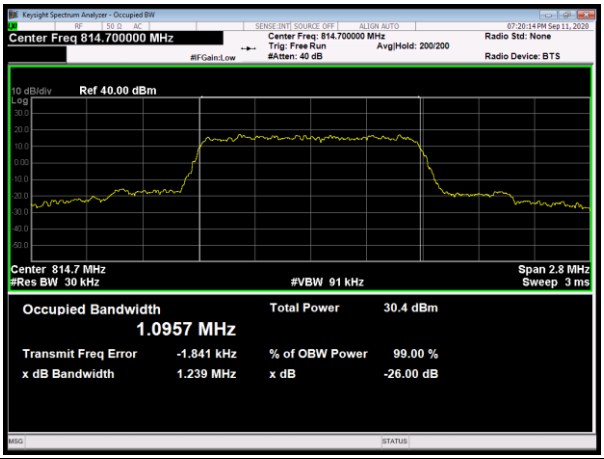
Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 2, U= 624Hz.

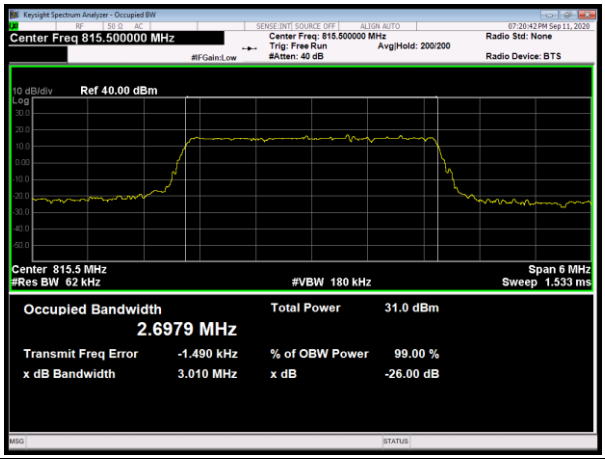
Test Result

LTE Band 26						
RB	Modulation	Bandwidth (MHz)	Channel	Frequency (MHz)	99% Power Bandwidth(MHz)	-26dBc Bandwidth(MHz)
100%	QPSK	1.4	26697	814.7	1.0957	1.239
			26740	819	1.0886	1.237
			26783	823.3	1.0914	1.243
		3	26705	815.5	2.6979	3.010
			26740	819	2.6956	2.963
			26775	822.5	2.7001	3.001
		5	26715	816.5	4.5147	4.975
			26740	819	4.5148	4.932
			26765	821.5	4.5021	4.938
		10	26740	819	8.9834	9.749
	16QAM	1.4	26697	814.7	1.0950	1.244
			26740	819	1.0949	1.223
			26783	823.3	1.0891	1.230
		3	26705	815.5	2.7076	3.048
			26740	819	2.7082	2.973
			26775	822.5	2.6998	2.995
		5	26715	816.5	4.5123	4.962
			26740	819	4.5206	4.996
			26765	821.5	4.5073	4.939
		10	26740	819	9.0096	9.741
	64QAM	1.4	26697	814.7	1.0927	1.246
			26740	819	1.0910	1.234
			26783	823.3	1.0885	1.227
		3	26705	815.5	2.6994	3.022
			26740	819	2.6978	2.992
			26775	822.5	2.6981	2.995
		5	26715	816.5	4.5075	4.917
			26740	819	4.5186	4.975
			26765	821.5	4.5120	4.959
		10	26740	819	8.9650	9.776

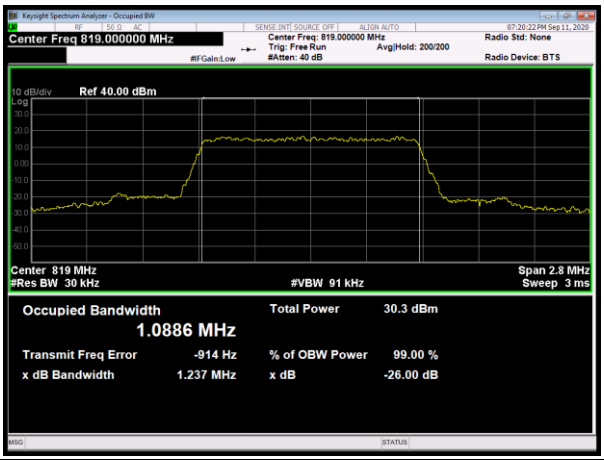
LTE Band 26 QPSK 1.4MHz CH Low



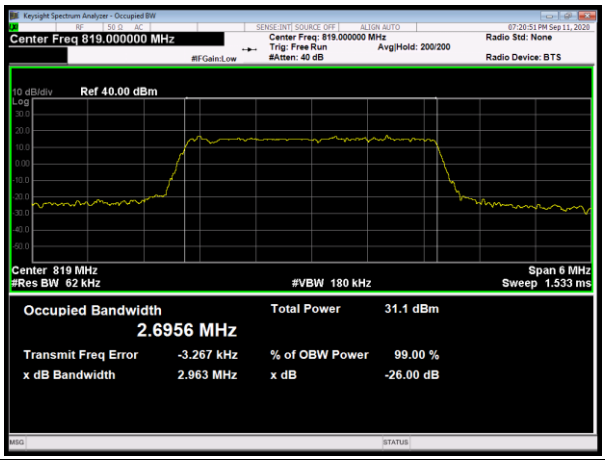
LTE Band 26 QPSK 3MHz CH Low



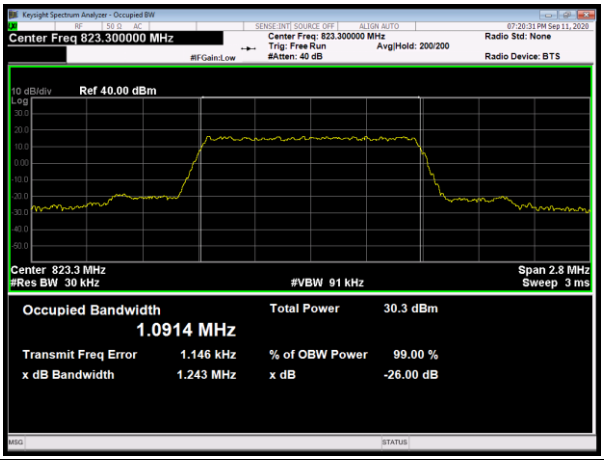
LTE Band 26 QPSK 1.4MHz CH Middle



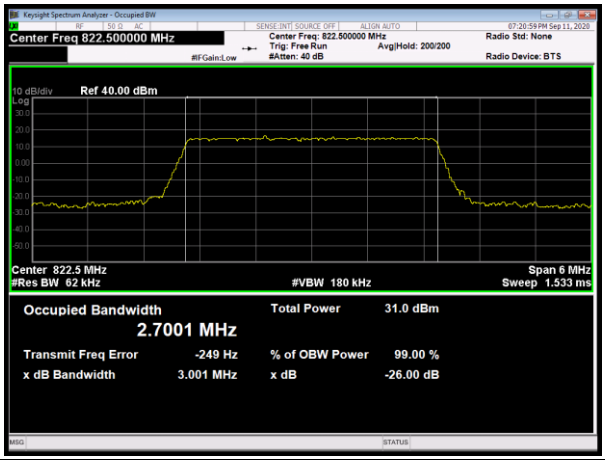
LTE Band 26 QPSK 3MHz CH Middle



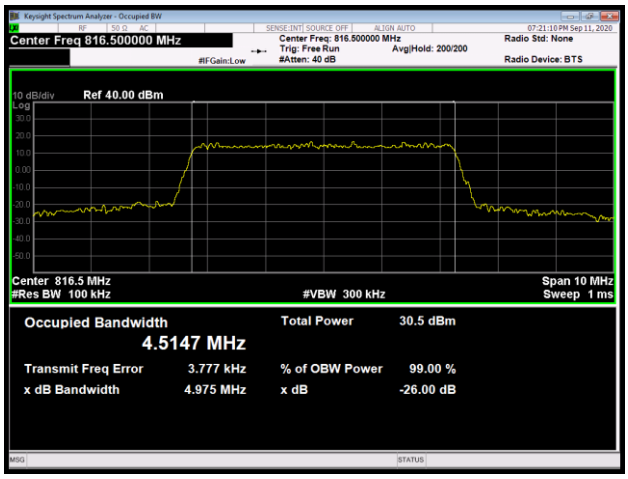
LTE Band 26 QPSK 1.4MHz CH High



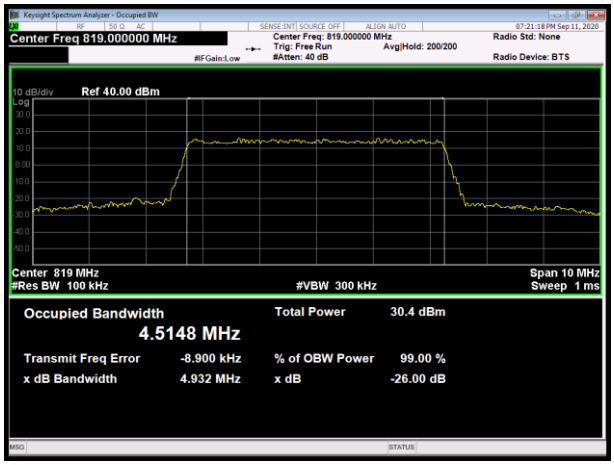
LTE Band 26 QPSK 3MHz CH High



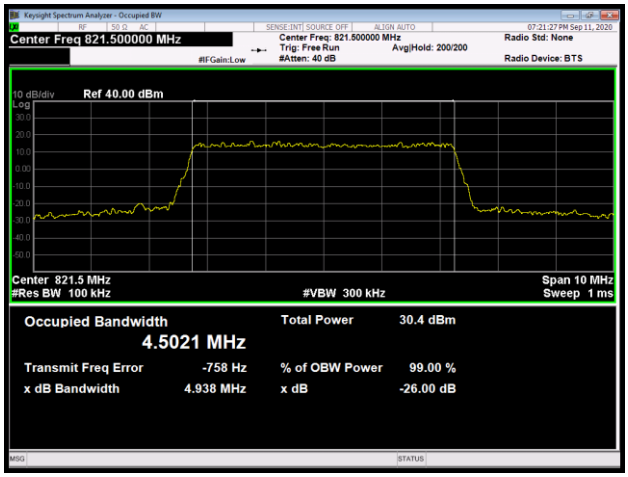
LTE Band 26 QPSK 5MHz CH Low



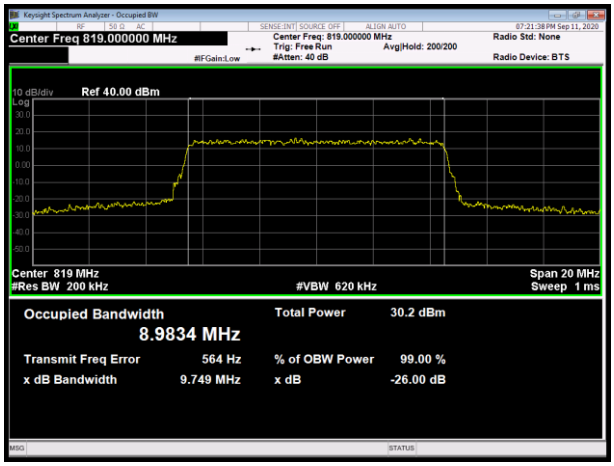
LTE Band 26 QPSK 5MHz CH Middle



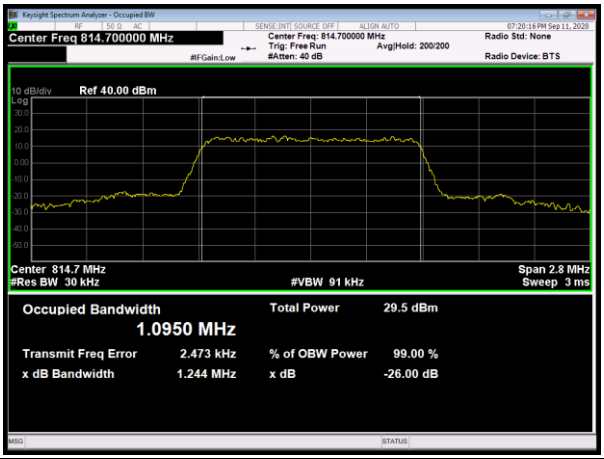
LTE Band 26 QPSK 5MHz CH High



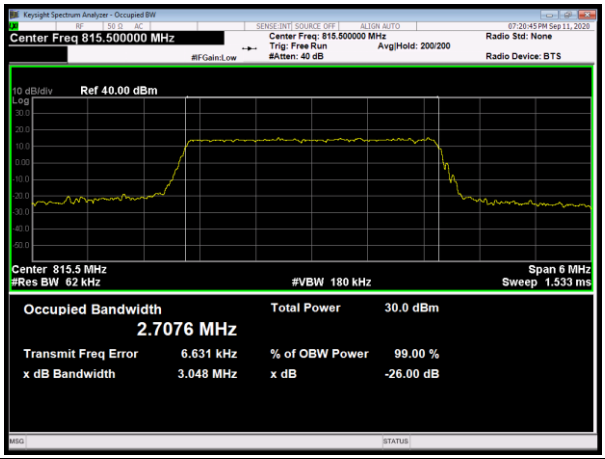
LTE Band 26 QPSK 10MHz CH Middle



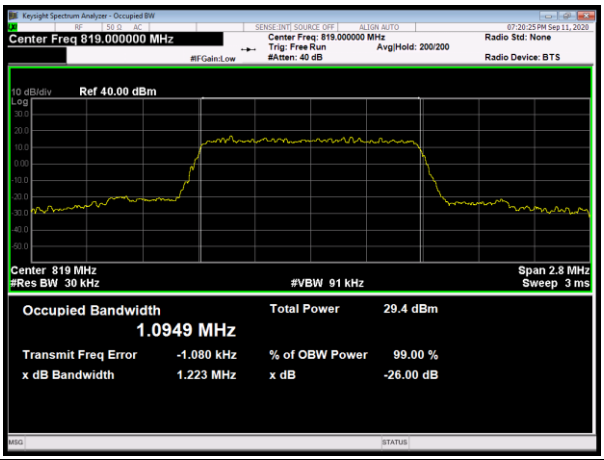
LTE Band 26 16QAM 1.4MHz CH Low



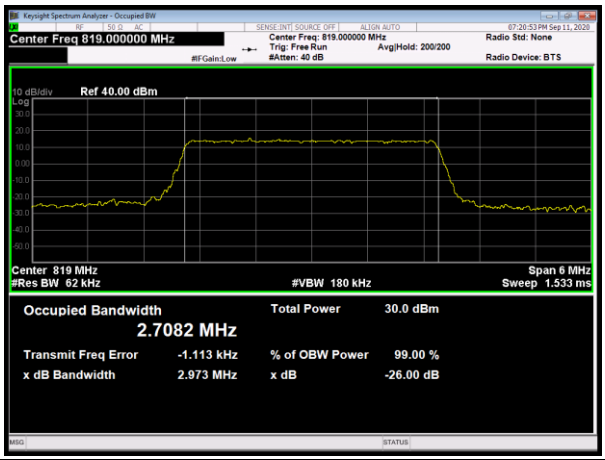
LTE Band 26 16QAM 3MHz CH Low



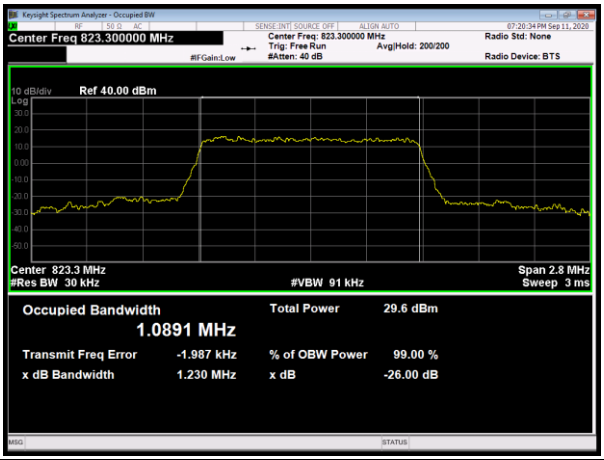
LTE Band 26 16QAM 1.4MHz CH Middle



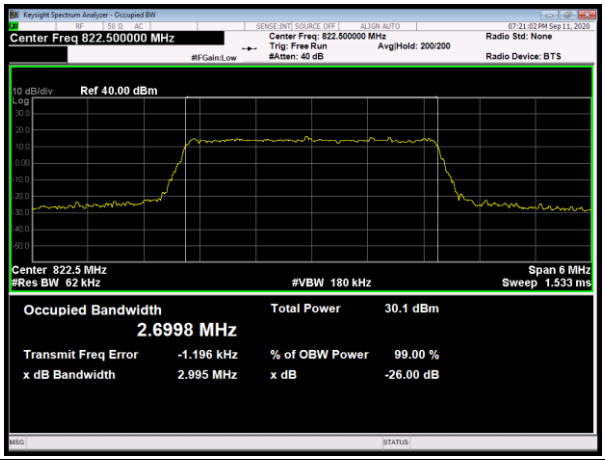
LTE Band 26 16QAM 3MHz CH Middle



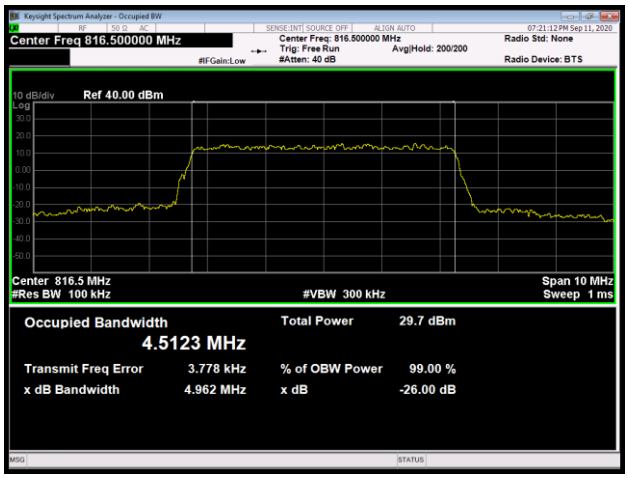
LTE Band 26 16QAM 1.4MHz CH High



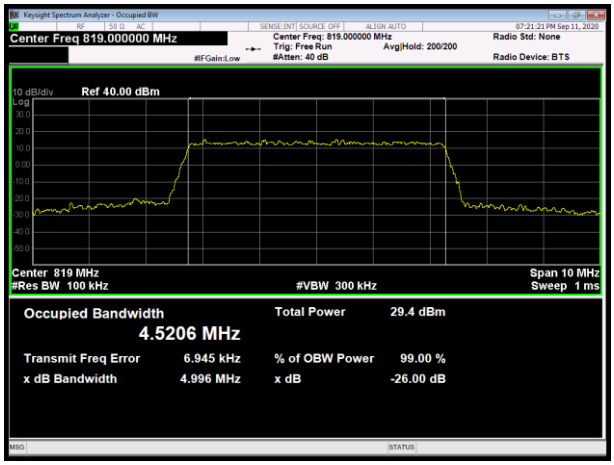
LTE Band 26 16QAM 3MHz CH High



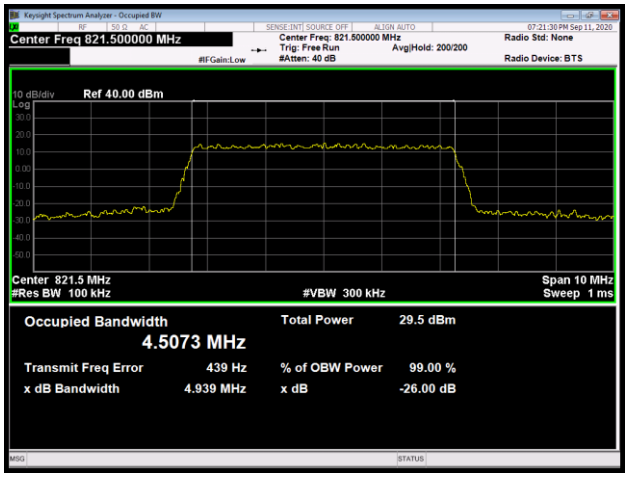
LTE Band 26 16QAM 5MHz CH Low



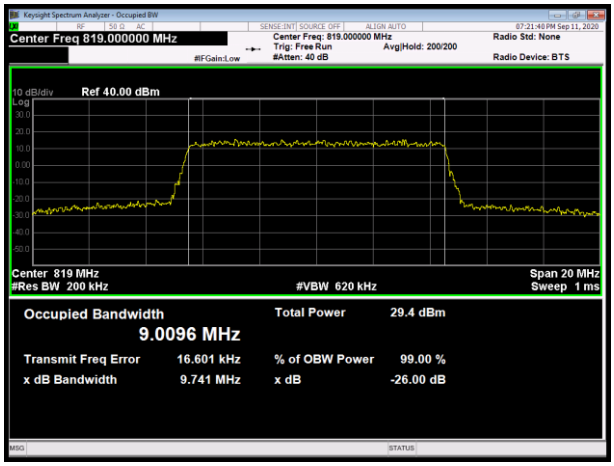
LTE Band 26 16QAM 5MHz CH Middle



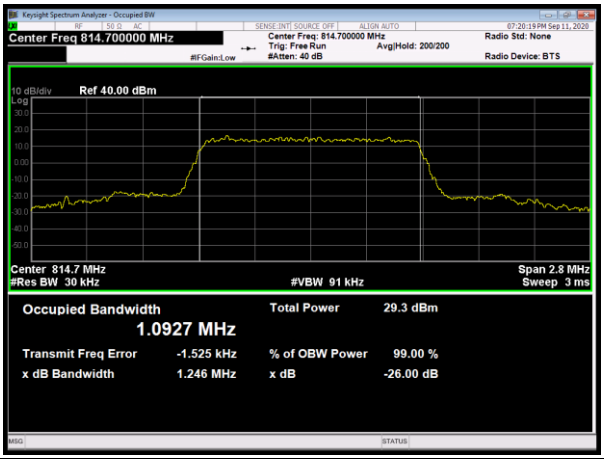
LTE Band 26 16QAM 5MHz CH High



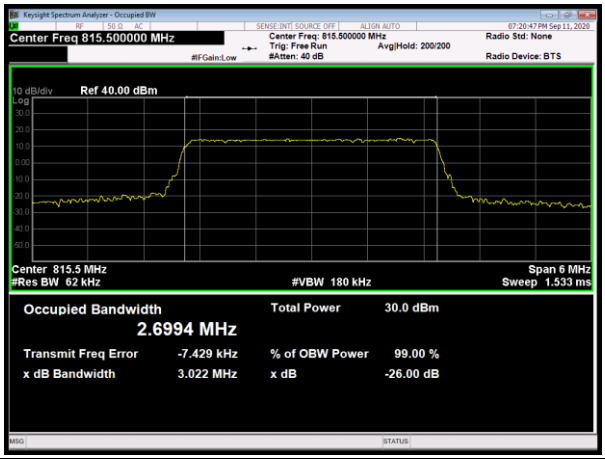
LTE Band 26 16QAM 10MHz CH Middle



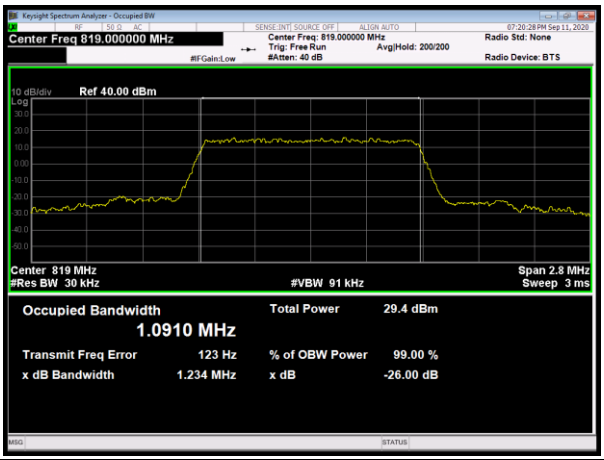
LTE Band 26 64QAM 1.4MHz CH Low



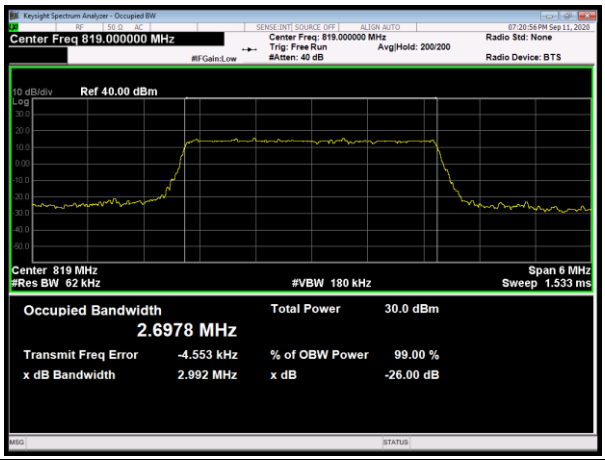
LTE Band 26 64QAM 3MHz CH Low



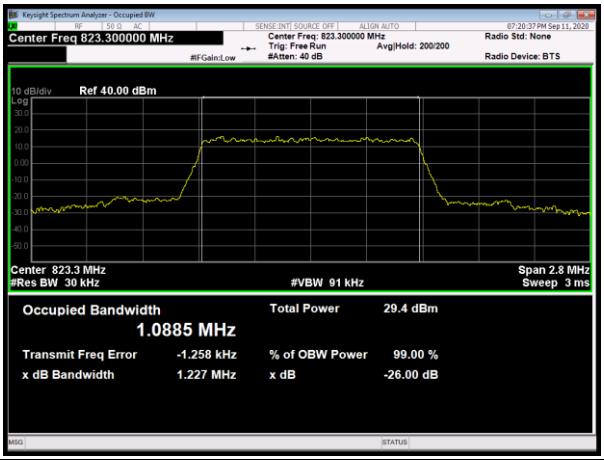
LTE Band 26 64QAM 1.4MHz CH Middle



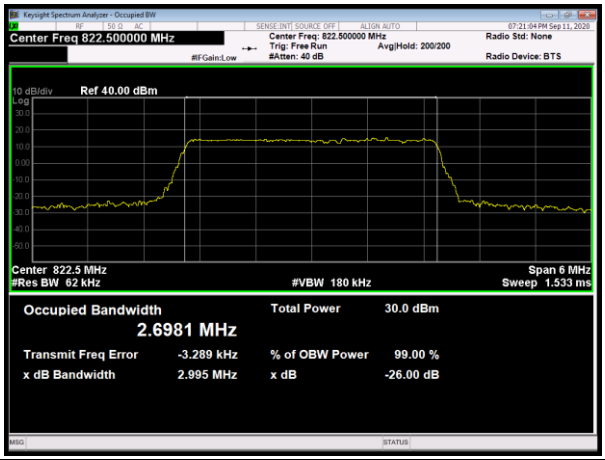
LTE Band 26 64QAM 3MHz CH Middle



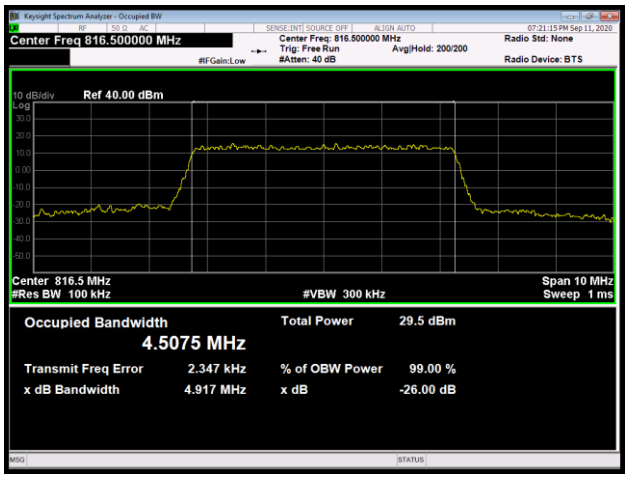
LTE Band 26 64QAM 1.4MHz CH High



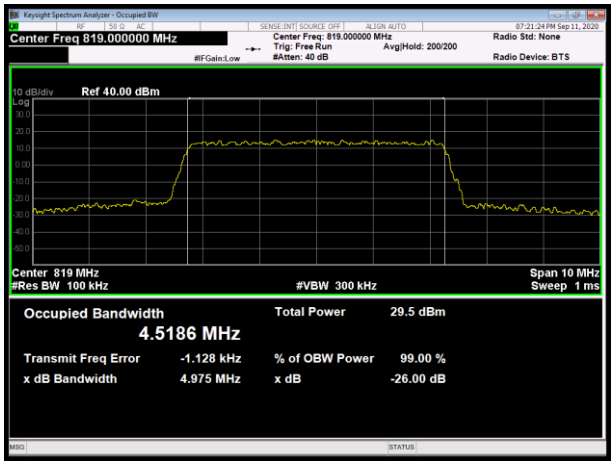
LTE Band 26 64QAM 3MHz CH High



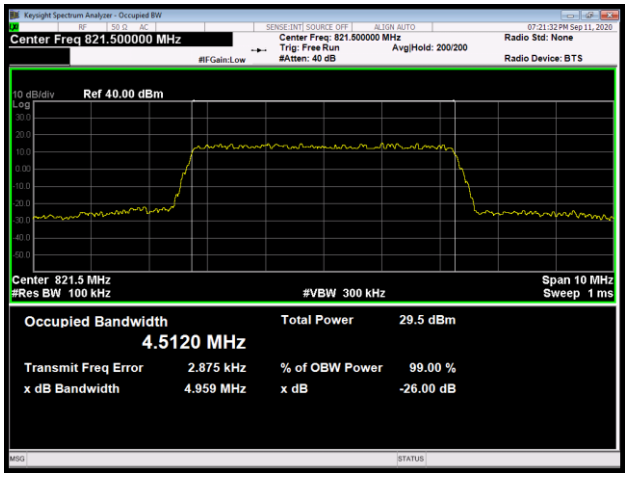
LTE Band 26 64QAM 5MHz CH Low



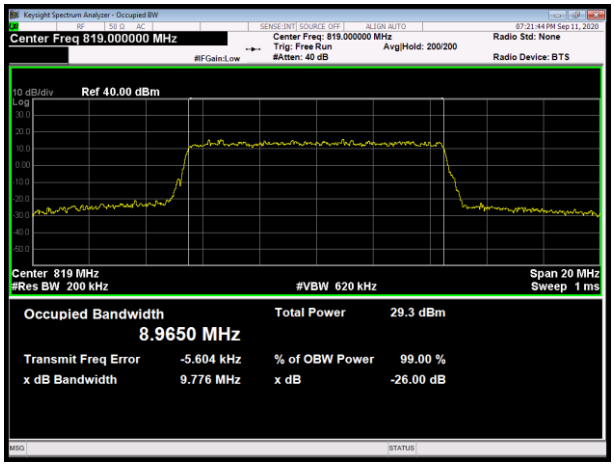
LTE Band 26 64QAM 5MHz CH Middle



LTE Band 26 64QAM 5MHz CH High



LTE Band 26 64QAM 10MHz CH Middle



5.3. Emission Mask

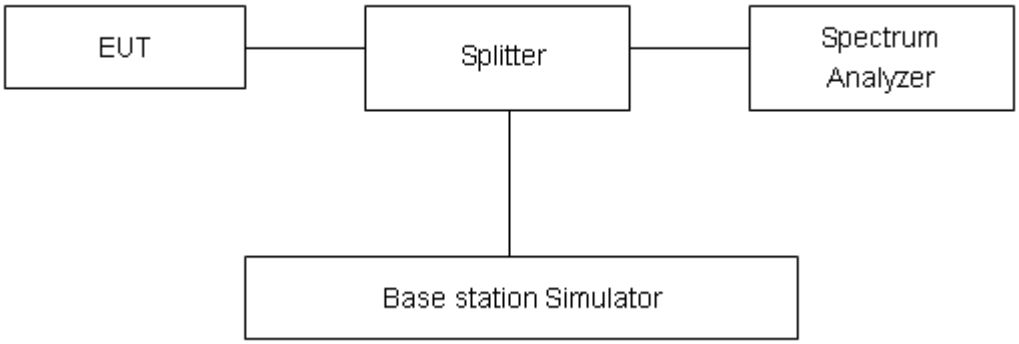
Ambient condition

Temperature	Relative humidity
21°C ~25°C	40%~60%

Method of Measurement

The EUT was connected to Spectrum Analyzer and Base Station Simulator via power Splitter. The band edge of the lowest and highest channels were measured. The average detector is used.
For Section 90.691(a) compliance testing, use RBW = 300 Hz for offsets less than 37.5 kHz from a channel edge; RBW = 100 kHz for offsets greater than 37.5 kHz is allowed.
Spectrum analyzer plots are included on the following pages.

Test Setup



Limits

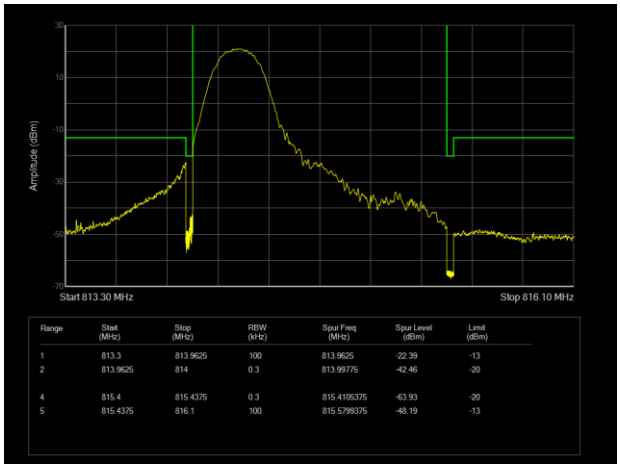
Rule Part 90.691(a) specifies that " For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 116 $Log_{10}(f/6.1)$ decibels or 50 + 10 $Log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz."

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 1.96, U=0.684dB.

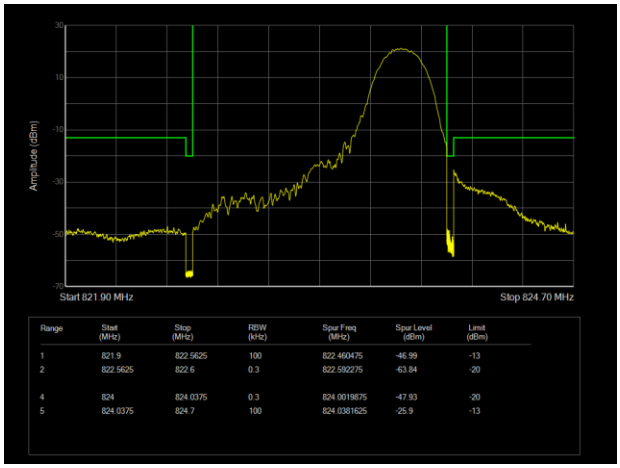
Test Result:

LTE Band 26 QPSK 1.4MHz CH-Low 1RB



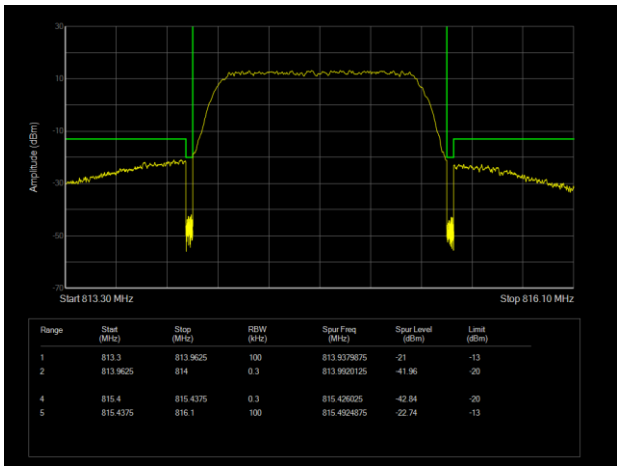
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	813.3	813.9625	100	813.9625	-22.39	-13
2	813.9625	814	0.3	813.99775	-42.46	-20
4	815.4	815.4375	0.3	815.4105375	-63.93	-20
5	815.4375	816.1	100	815.5799375	-48.19	-13

LTE Band 26 QPSK 1.4MHz CH-High 1RB



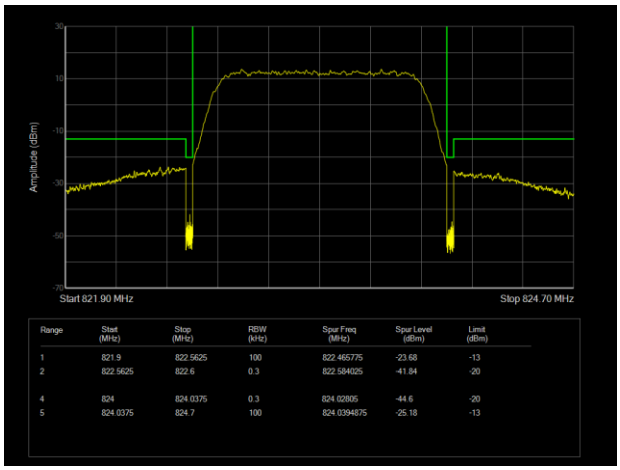
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	821.9	822.5625	100	822.460475	-46.99	-13
2	822.5625	822.6	0.3	822.592275	-63.84	-20
4	824	824.0375	0.3	824.0019875	-47.93	-20
5	824.0375	824.7	100	824.0381625	-25.9	-13

LTE Band 26 QPSK 1.4MHz CH-Low 100%RB



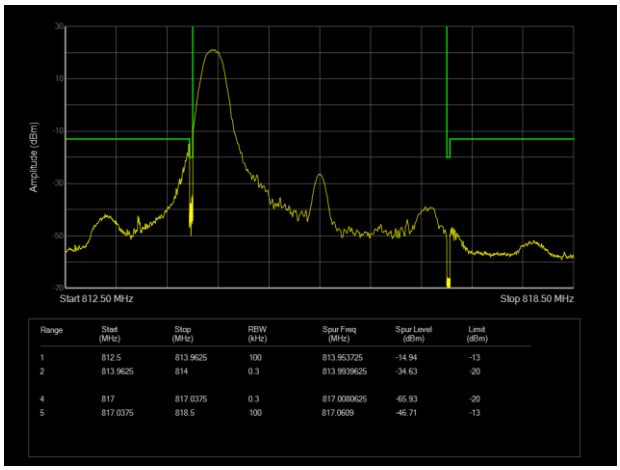
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	813.3	813.9625	100	813.9379875	-21	-13
2	813.9625	814	0.3	813.9920125	-41.96	-20
4	815.4	815.4375	0.3	815.426025	-42.84	-20
5	815.4375	816.1	100	815.4924875	-22.74	-13

LTE Band 26 QPSK 1.4MHz CH-High 100%RB



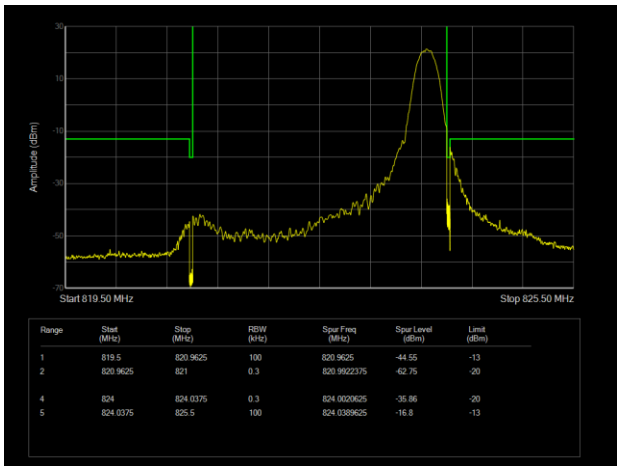
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	821.9	822.5625	100	822.465775	-23.68	-13
2	822.5625	822.6	0.3	822.584025	-41.84	-20
4	824	824.0375	0.3	824.02805	-44.6	-20
5	824.0375	824.7	100	824.0394875	-25.18	-13

LTE Band 26 QPSK 3MHz CH-Low 1RB



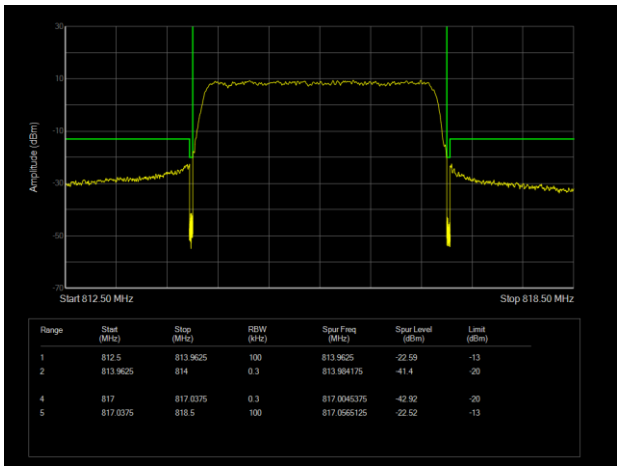
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	812.5	813.9625	100	813.953725	-14.94	-13
2	813.9625	814	0.3	813.9939625	-34.63	-20
4	817	817.0375	0.3	817.0080625	-65.93	-20
5	817.0375	818.5	100	817.0609	-46.71	-13

LTE Band 26 QPSK 3MHz CH-High 1RB



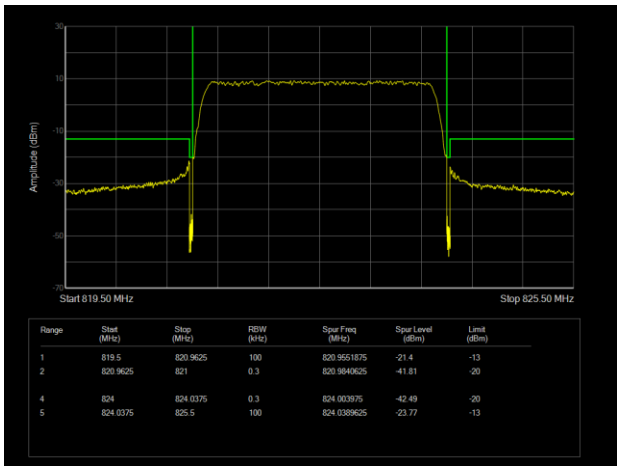
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	819.5	820.9625	100	820.9625	-44.55	-13
2	820.9625	821	0.3	820.9922375	-62.75	-20
4	824	824.0375	0.3	824.0020625	-35.86	-20
5	824.0375	825.5	100	824.0389625	-16.8	-13

LTE Band 26 QPSK 3MHz CH-Low 100%RB



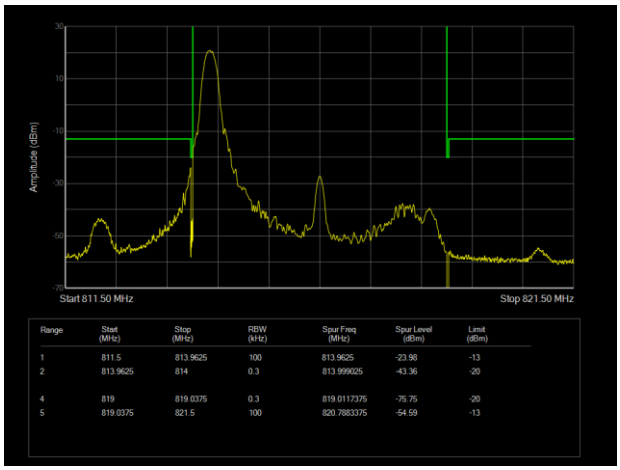
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	812.5	813.9625	100	813.9625	-22.59	-13
2	813.9625	814	0.3	813.984175	-41.4	-20
4	817	817.0375	0.3	817.004375	-42.92	-20
5	817.0375	818.5	100	817.0565125	-22.52	-13

LTE Band 26 QPSK 3MHz CH-High 100%RB



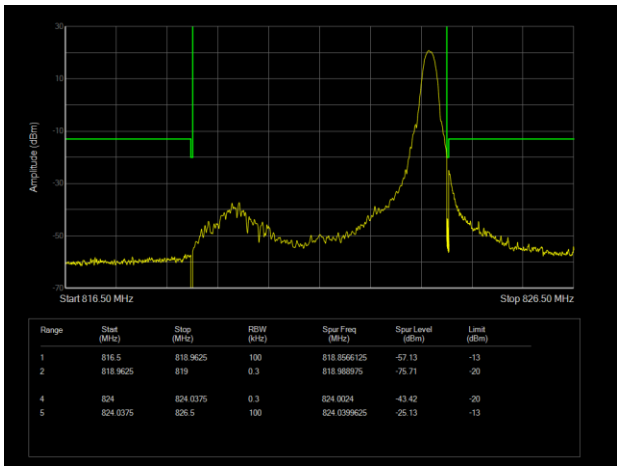
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	819.5	820.9625	100	820.9551875	-21.4	-13
2	820.9625	821	0.3	820.9840625	-41.81	-20
4	824	824.0375	0.3	824.003975	-42.49	-20
5	824.0375	825.5	100	824.0389625	-23.77	-13

LTE Band 26 QPSK 5MHz CH-Low 1RB



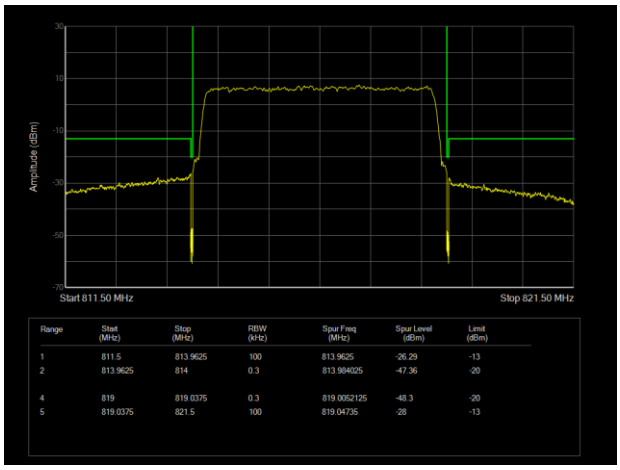
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	811.5	813.9625	100	813.9625	-23.98	-13
2	813.9625	814	0.3	813.999025	-43.36	-20
4	819	819.0375	0.3	819.0117375	-75.75	-20
5	819.0375	821.5	100	820.7883375	-54.59	-13

LTE Band 26 QPSK 5MHz CH-High 1RB



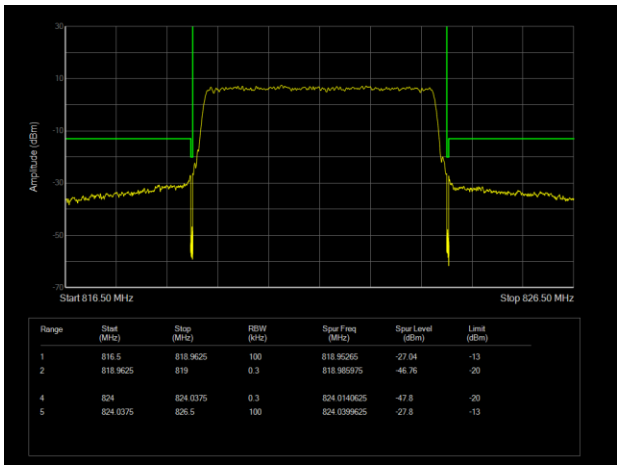
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	816.5	818.9625	100	818.8566125	-57.13	-13
2	818.9625	819	0.3	818.988975	-75.71	-20
4	824	824.0375	0.3	824.0024	-43.42	-20
5	824.0375	826.5	100	824.0399625	-25.13	-13

LTE Band 26 QPSK 5MHz CH-Low 100%RB



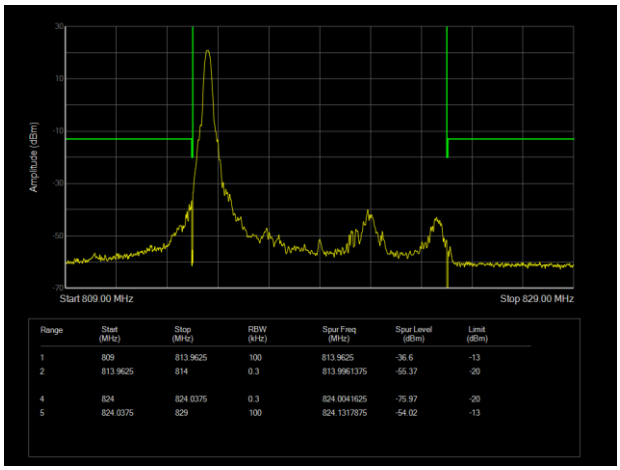
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	811.5	813.9625	100	813.9625	-26.29	-13
2	813.9625	814	0.3	813.984025	-47.36	-20
4	819	819.0375	0.3	819.0052125	-48.3	-20
5	819.0375	821.5	100	819.04735	-28	-13

LTE Band 26 QPSK 5MHz CH-High 100%RB



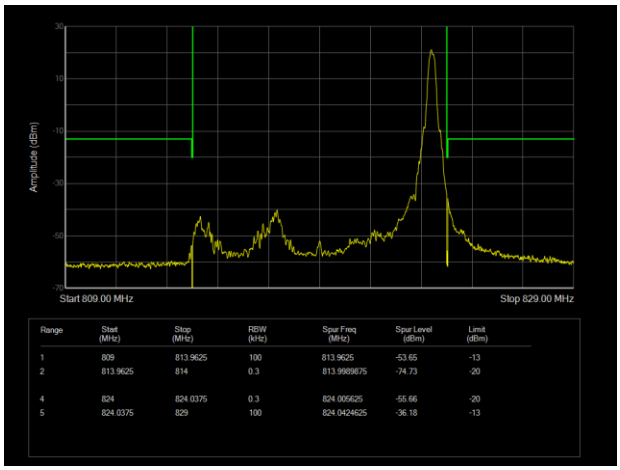
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	816.5	818.9625	100	818.95265	-27.04	-13
2	818.9625	819	0.3	818.985975	-46.76	-20
4	824	824.0375	0.3	824.0140625	-47.8	-20
5	824.0375	826.5	100	824.0399625	-27.8	-13

LTE Band 26 QPSK 10MHz CH-Low 1RB



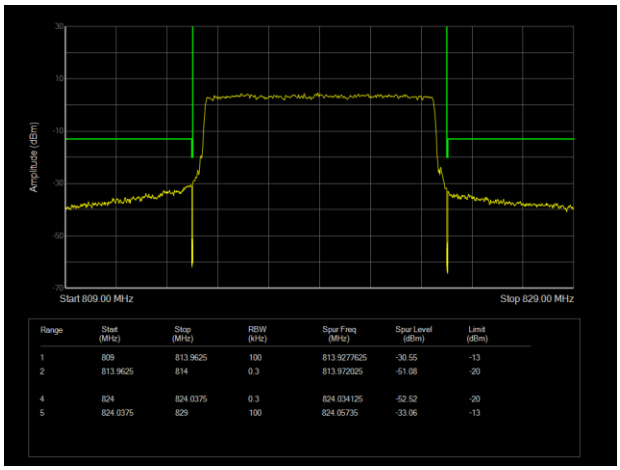
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	809	813.9625	100	813.9625	-36.6	-13
2	813.9625	814	0.3	813.9961375	-55.37	-20
4	824	824.0375	0.3	824.0041625	-75.97	-20
5	824.0375	829	100	824.1317875	-54.02	-13

LTE Band 26 QPSK 10MHz CH-High 1RB



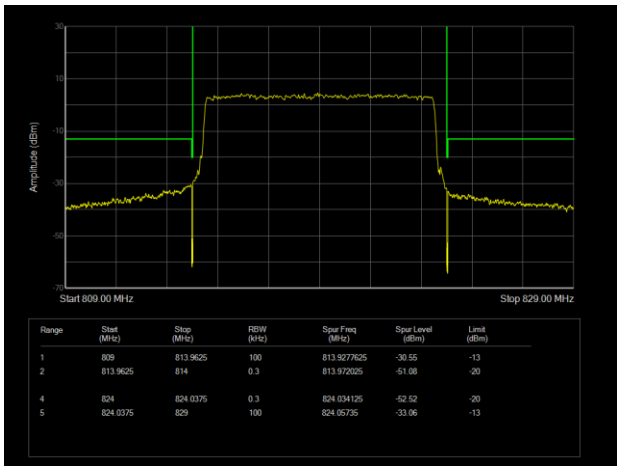
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	809	813.9625	100	813.9625	-53.65	-13
2	813.9625	814	0.3	813.9989875	-74.73	-20
4	824	824.0375	0.3	824.005625	-55.66	-20
5	824.0375	829	100	824.0424625	-36.18	-13

LTE Band 26 QPSK 10MHz CH-Low 100%RB



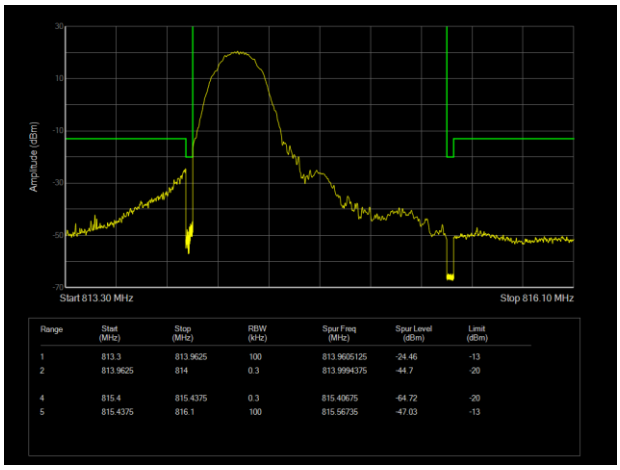
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	809	813.9625	100	813.9277625	-30.55	-13
2	813.9625	814	0.3	813.972025	-51.08	-20
4	824	824.0375	0.3	824.034125	-52.52	-20
5	824.0375	829	100	824.05735	-33.06	-13

LTE Band 26 QPSK 10MHz CH-High 100%RB



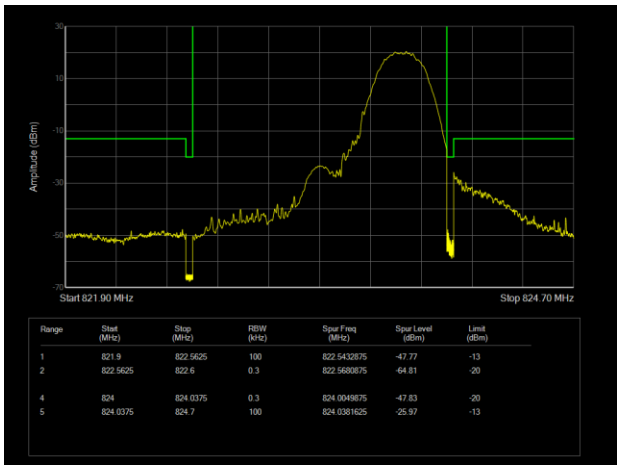
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	809	813.9625	100	813.9277625	-30.55	-13
2	813.9625	814	0.3	813.972025	-51.08	-20
4	824	824.0375	0.3	824.034125	-52.52	-20
5	824.0375	829	100	824.05735	-33.06	-13

LTE Band 26 16QAM 1.4MHz CH-Low 1RB



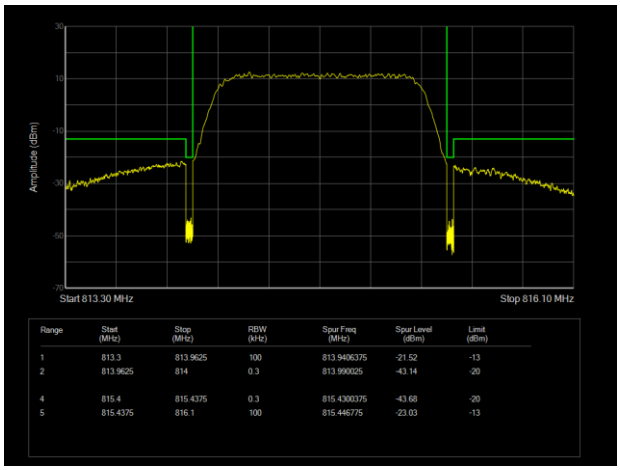
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	813.3	813.9625	100	813.9605125	-24.46	-13
2	813.9625	814	0.3	813.9994375	-44.7	-20
4	815.4	815.4375	0.3	815.40675	-64.72	-20
5	815.4375	816.1	100	815.56735	-47.03	-13

LTE Band 26 16QAM 1.4MHz CH-High 1RB



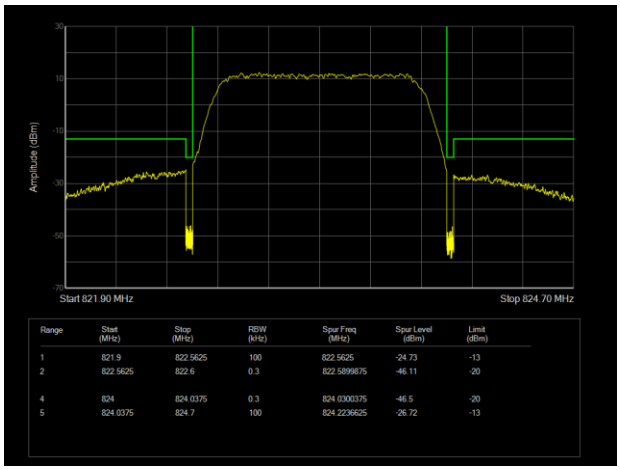
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	821.9	822.5625	100	822.5432875	-47.77	-13
2	822.5625	822.6	0.3	822.5680875	-64.81	-20
4	824	824.0375	0.3	824.0049875	-47.83	-20
5	824.0375	824.7	100	824.0381625	-25.97	-13

LTE Band 26 16QAM 1.4MHz CH-Low 100%RB



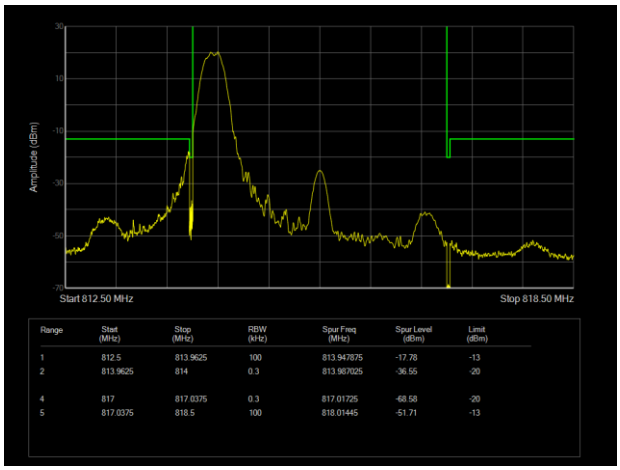
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	813.3	813.9625	100	813.9406375	-21.52	-13
2	813.9625	814	0.3	813.990025	-43.14	-20
4	815.4	815.4375	0.3	815.4300375	-43.68	-20
5	815.4375	816.1	100	815.446775	-23.03	-13

LTE Band 26 16QAM 1.4MHz CH-High 100%RB



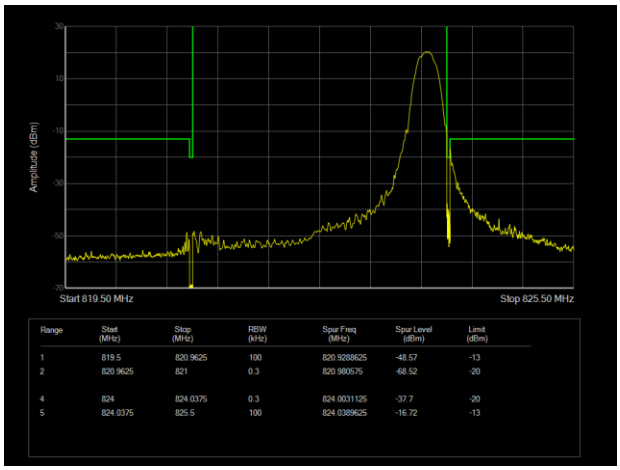
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	821.9	822.5625	100	822.5625	-24.73	-13
2	822.5625	822.6	0.3	822.5899875	-46.11	-20
4	824	824.0375	0.3	824.0300375	-46.5	-20
5	824.0375	824.7	100	824.2236625	-26.72	-13

LTE Band 26 16QAM 3MHz CH-Low 1RB



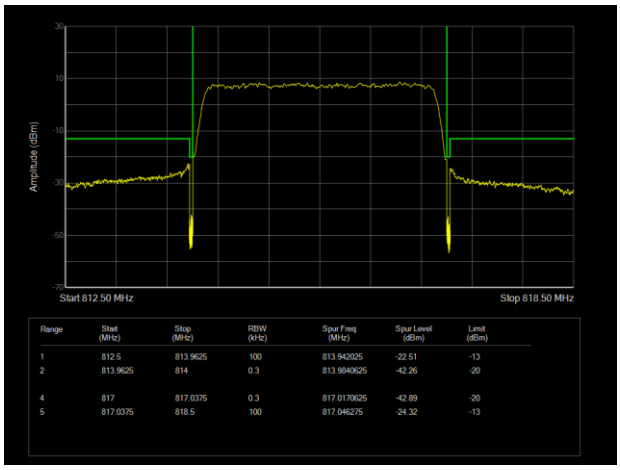
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	812.5	813.9625	100	813.947875	-17.78	-13
2	813.9625	814	0.3	813.987025	-36.55	-20
4	817	817.0375	0.3	817.01725	-68.58	-20
5	817.0375	818.5	100	818.01445	-51.71	-13

LTE Band 2616QAM 3MHz CH-High 1RB



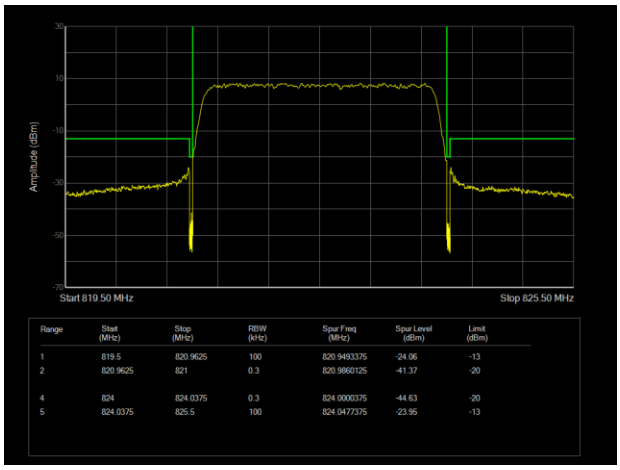
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	819.5	820.9625	100	820.9288625	-48.57	-13
2	820.9625	821	0.3	820.980575	-68.52	-20
4	824	824.0375	0.3	824.0031125	-37.7	-20
5	824.0375	825.5	100	824.0389625	-16.72	-13

LTE Band 26 16QAM 3MHz CH-Low 100%RB



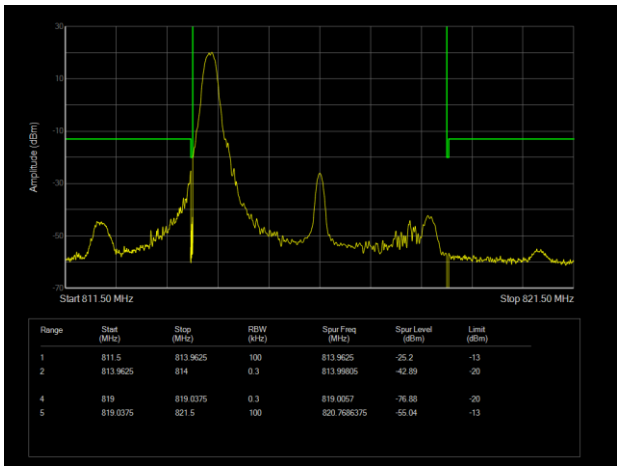
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	812.5	813.9625	100	813.942025	-22.51	-13
2	813.9625	814	0.3	813.9840625	-42.26	-20
4	817	817.0375	0.3	817.0170625	-42.89	-20
5	817.0375	818.5	100	817.046275	-24.32	-13

LTE Band 26 16QAM 3MHz CH-High 100%RB



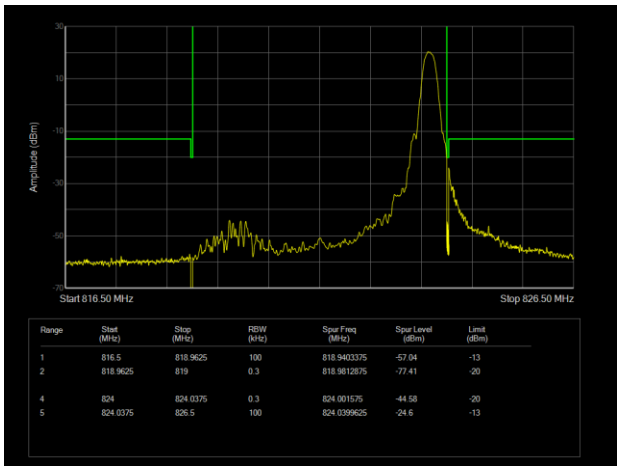
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	819.5	820.9625	100	820.9493375	-24.06	-13
2	820.9625	821	0.3	820.9860125	-41.37	-20
4	824	824.0375	0.3	824.0000375	-44.63	-20
5	824.0375	825.5	100	824.0477375	-23.95	-13

LTE Band 26 16QAM 5MHz CH-Low 1RB



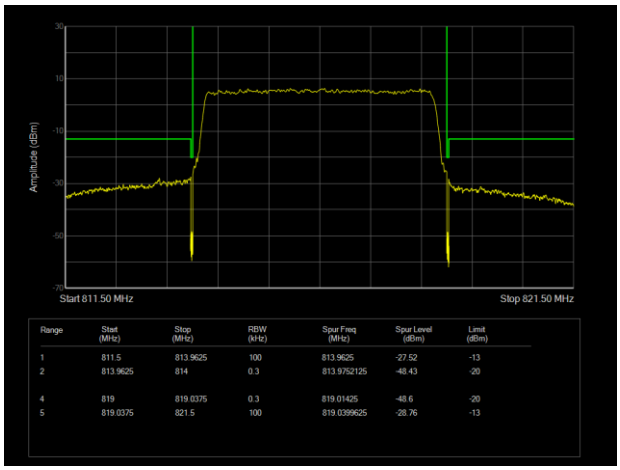
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	811.5	813.9625	100	813.9625	-25.2	-13
2	813.9625	814	0.3	813.99805	-42.89	-20
4	819	819.0375	0.3	819.0057	-76.88	-20
5	819.0375	821.5	100	820.7686375	-55.04	-13

LTE Band 26 16QAM 5MHz CH-High 1RB



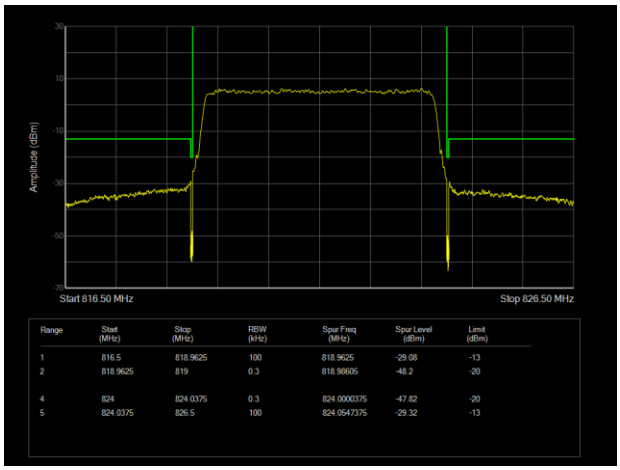
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	816.5	818.9625	100	818.9403375	-57.04	-13
2	818.9625	819	0.3	818.9812875	-77.41	-20
4	824	824.0375	0.3	824.001575	-44.58	-20
5	824.0375	826.5	100	824.0399625	-24.6	-13

LTE Band 26 16QAM 5MHz CH-Low 100%RB



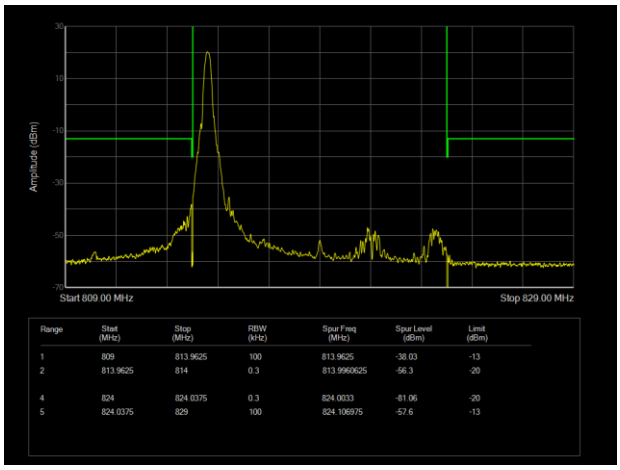
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	811.5	813.9625	100	813.9625	-27.52	-13
2	813.9625	814	0.3	813.9752125	-48.43	-20
4	819	819.0375	0.3	819.01425	-48.6	-20
5	819.0375	821.5	100	819.0399625	-28.76	-13

LTE Band 26 16QAM 5MHz CH-High 100%RB



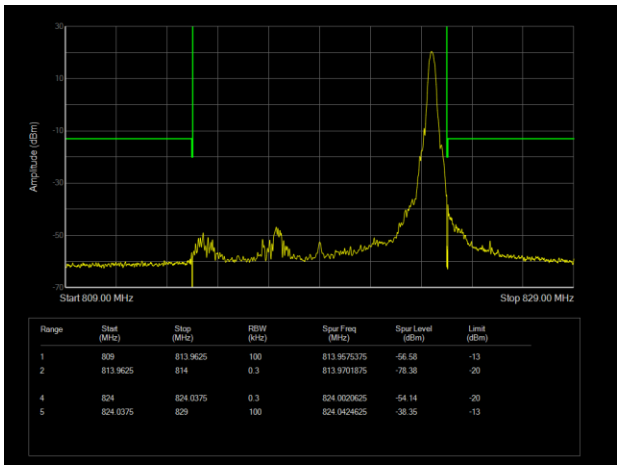
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	816.5	818.9625	100	818.9625	-29.08	-13
2	818.9625	819	0.3	818.98605	-48.2	-20
4	824	824.0375	0.3	824.0000375	-47.82	-20
5	824.0375	826.5	100	824.0547375	-29.32	-13

LTE Band 26 16QAM 10MHz CH-Low 1RB



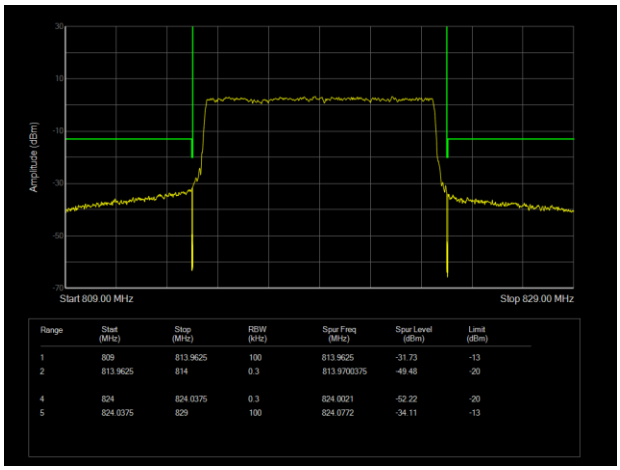
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	809	813.9625	100	813.9625	-38.03	-13
2	813.9625	814	0.3	813.9960625	-56.3	-20
4	824	824.0375	0.3	824.0033	-81.06	-20
5	824.0375	829	100	824.106975	-57.6	-13

LTE Band 26 16QAM 10MHz CH-High 1RB



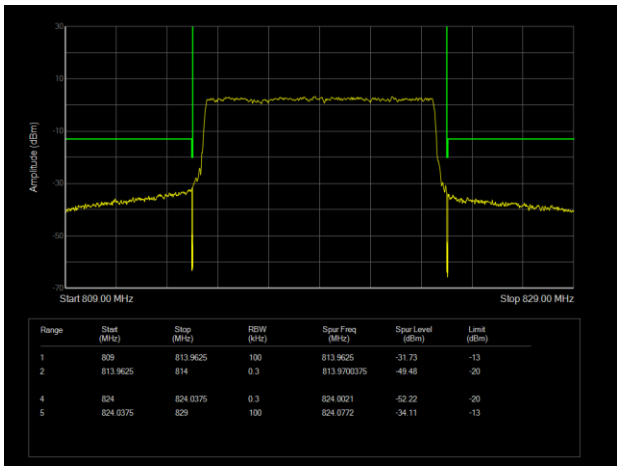
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	809	813.9625	100	813.9575375	-56.58	-13
2	813.9625	814	0.3	813.9701875	-78.38	-20
4	824	824.0375	0.3	824.0020625	-54.14	-20
5	824.0375	829	100	824.0424625	-38.35	-13

LTE Band 26 16QAM 10MHz CH-Low 100%RB



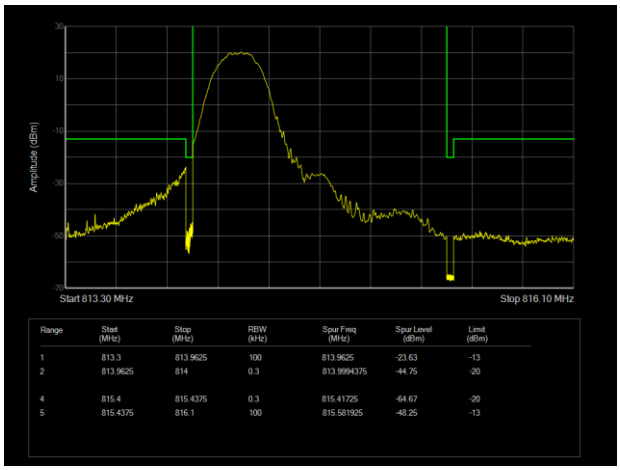
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	809	813.9625	100	813.9625	-31.73	-13
2	813.9625	814	0.3	813.9700375	-49.48	-20
4	824	824.0375	0.3	824.0021	-52.22	-20
5	824.0375	829	100	824.0772	-34.11	-13

LTE Band 26 16QAM 10MHz CH-High 100%RB



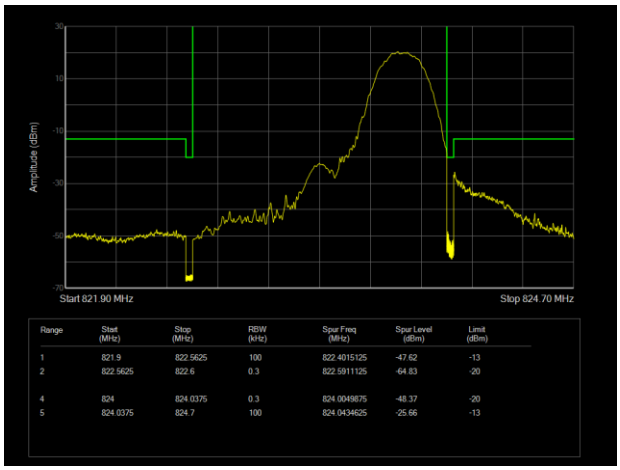
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	809	813.9625	100	813.9625	-31.73	-13
2	813.9625	814	0.3	813.9700375	-49.48	-20
4	824	824.0375	0.3	824.0021	-52.22	-20
5	824.0375	829	100	824.0772	-34.11	-13

LTE Band 26 64QAM 1.4MHz CH-Low 1RB



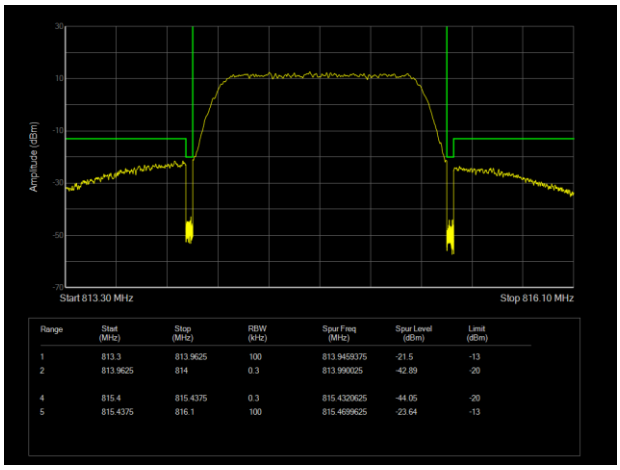
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	813.3	813.9625	100	813.9625	-23.63	-13
2	813.9625	814	0.3	813.9994375	-44.75	-20
4	815.4	815.4375	0.3	815.41725	-64.67	-20
5	815.4375	816.1	100	815.581925	-48.25	-13

LTE Band 26 64QAM 1.4MHz CH-High 1RB



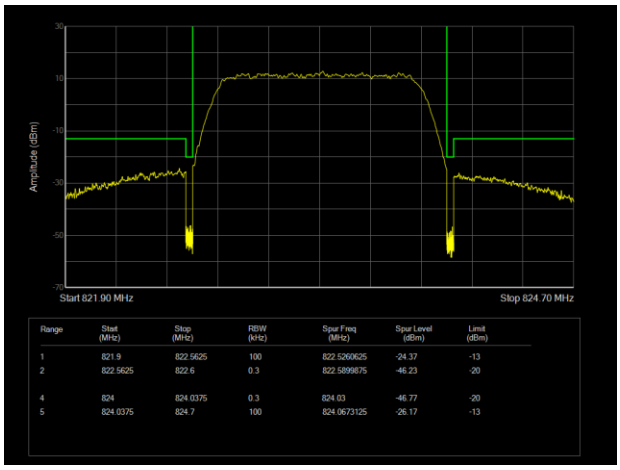
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	821.9	822.5625	100	822.4015125	-47.62	-13
2	822.5625	822.6	0.3	822.5911125	-64.83	-20
4	824	824.0375	0.3	824.0049875	-48.37	-20
5	824.0375	824.7	100	824.0434625	-25.66	-13

LTE Band 26 64QAM 1.4MHz CH-Low 100%RB



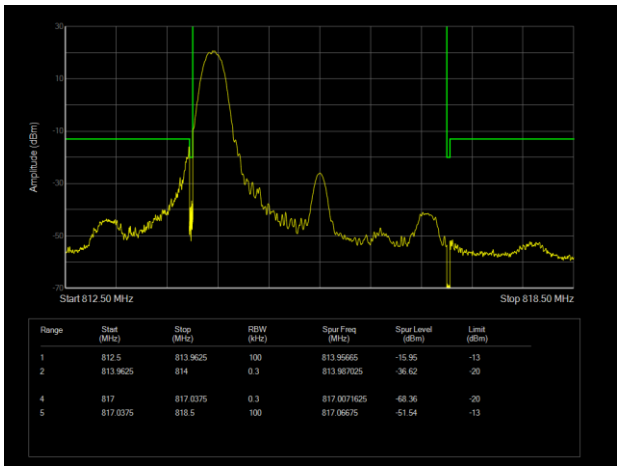
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	813.3	813.9625	100	813.9459375	-21.5	-13
2	813.9625	814	0.3	813.990025	-42.89	-20
4	815.4	815.4375	0.3	815.4320625	-44.05	-20
5	815.4375	816.1	100	815.4689625	-23.64	-13

LTE Band 26 64QAM 1.4MHz CH-High 100%RB



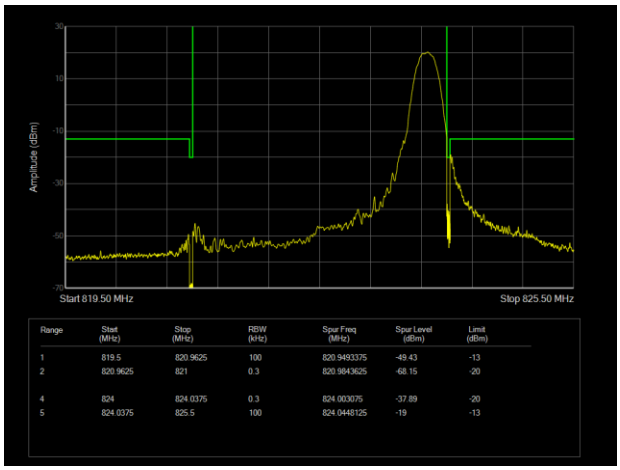
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	821.9	822.5625	100	822.5260625	-24.37	-13
2	822.5625	822.6	0.3	822.5899875	-46.23	-20
4	824	824.0375	0.3	824.03	-46.77	-20
5	824.0375	824.7	100	824.0673125	-26.17	-13

LTE Band 26 64QAM 3MHz CH-Low 1RB



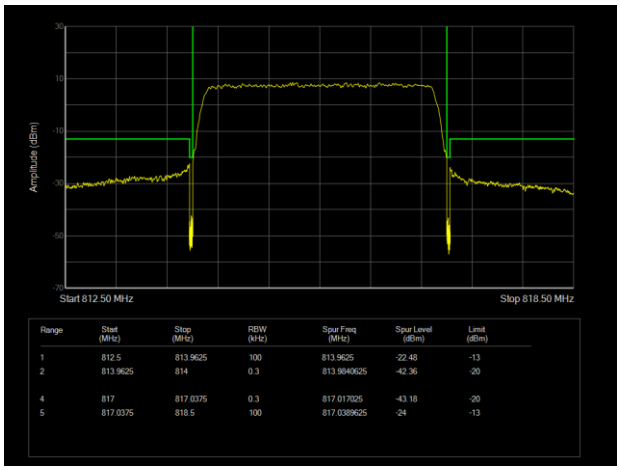
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	812.5	813.9625	100	813.95665	-15.95	-13
2	813.9625	814	0.3	813.987025	-36.62	-20
4	817	817.0375	0.3	817.0071625	-68.36	-20
5	817.0375	818.5	100	817.06675	-51.54	-13

LTE Band 26 64QAM 3MHz CH-High 1RB



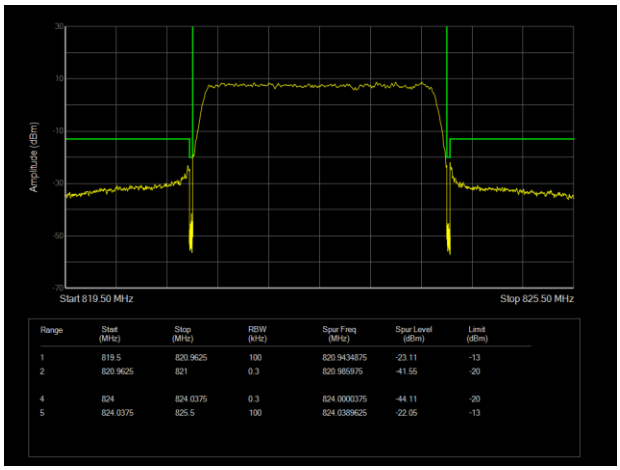
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	819.5	820.9625	100	820.9493375	-49.43	-13
2	820.9625	821	0.3	820.9843625	-68.15	-20
4	824	824.0375	0.3	824.003075	-37.89	-20
5	824.0375	825.5	100	824.0448125	-19	-13

LTE Band 26 64QAM 3MHz CH-Low 100%RB



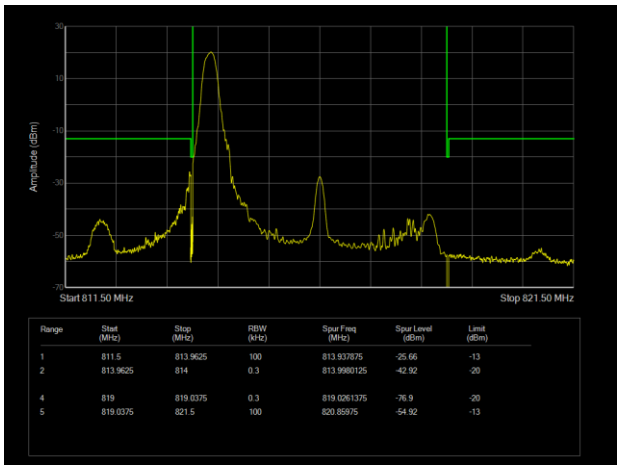
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	812.5	813.9625	100	813.9625	-22.48	-13
2	813.9625	814	0.3	813.9840625	-42.36	-20
4	817	817.0375	0.3	817.017025	-43.18	-20
5	817.0375	818.5	100	817.0389625	-24	-13

LTE Band 26 64QAM 3MHz CH-High 100%RB



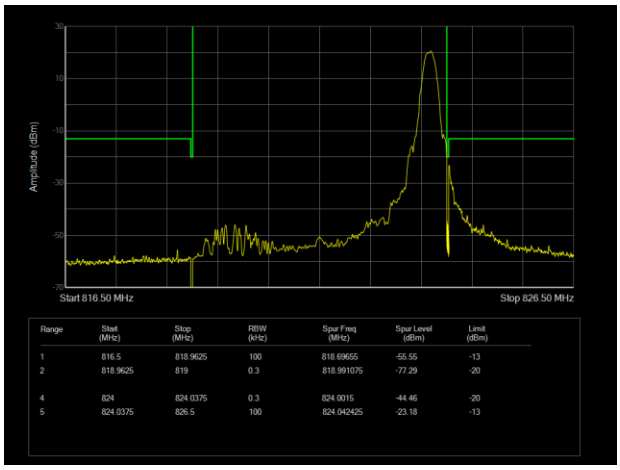
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	819.5	820.9625	100	820.9434875	-23.11	-13
2	820.9625	821	0.3	820.985975	-41.55	-20
4	824	824.0375	0.3	824.0000375	-44.11	-20
5	824.0375	825.5	100	824.0389625	-22.05	-13

LTE Band 26 64QAM 5MHz CH-Low 1RB



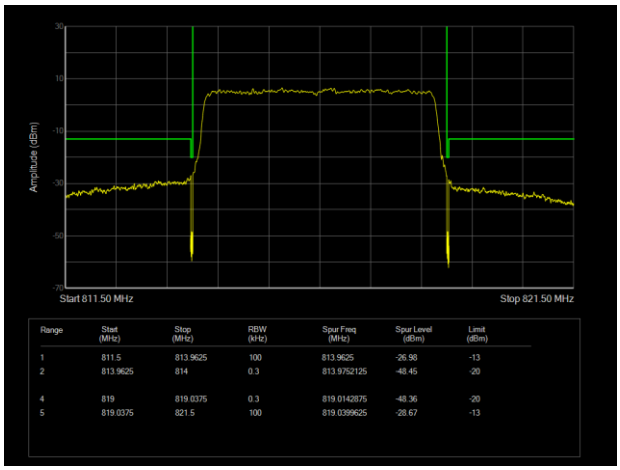
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	811.5	813.9625	100	813.937875	-25.66	-13
2	813.9625	814	0.3	813.9980125	-42.92	-20
4	819	819.0375	0.3	819.0261375	-76.9	-20
5	819.0375	821.5	100	820.85975	-54.92	-13

LTE Band 26 64QAM 5MHz CH-High 1RB



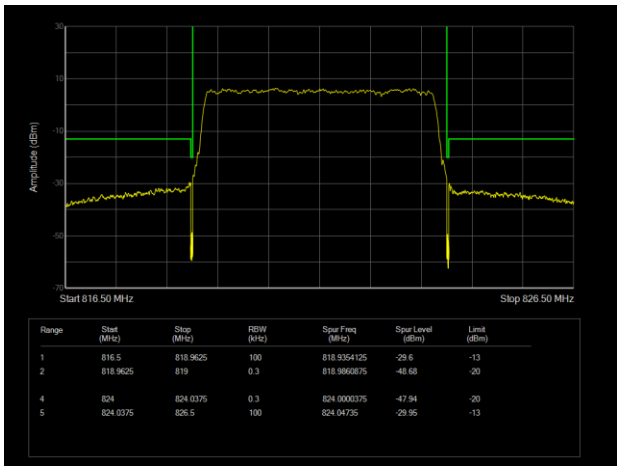
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	816.5	818.9625	100	818.69655	-55.55	-13
2	818.9625	819	0.3	818.991075	-77.29	-20
4	824	824.0375	0.3	824.0015	-44.46	-20
5	824.0375	826.5	100	824.042425	-23.18	-13

LTE Band 26 64QAM 5MHz CH-Low 100%RB



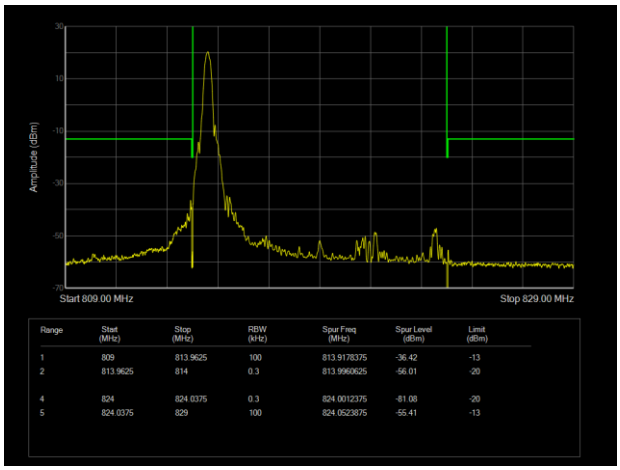
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	811.5	813.9625	100	813.9625	-26.98	-13
2	813.9625	814	0.3	813.9752125	-48.46	-20
4	819	819.0375	0.3	819.0142875	-48.36	-20
5	819.0375	821.5	100	819.0399625	-28.67	-13

LTE Band 26 64QAM 5MHz CH-High 100%RB



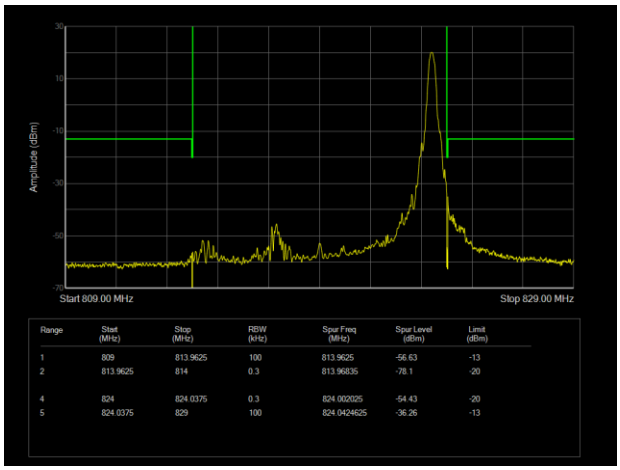
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	816.5	818.9625	100	818.9354125	-29.6	-13
2	818.9625	819	0.3	818.9860875	-48.68	-20
4	824	824.0375	0.3	824.0000375	-47.94	-20
5	824.0375	826.5	100	824.04735	-29.95	-13

LTE Band 26 64QAM 10MHz CH-Low 1RB



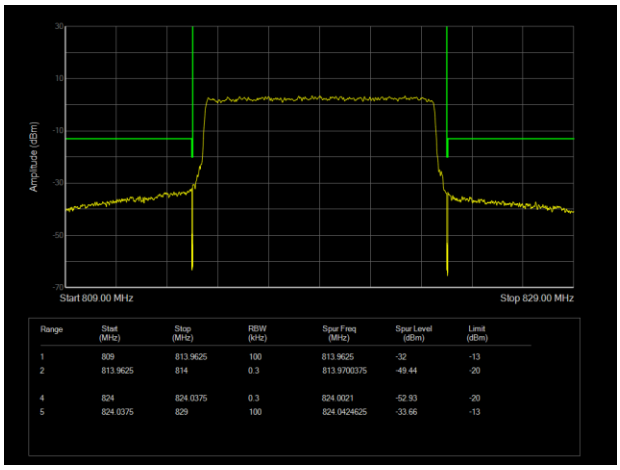
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	809	813.9625	100	813.9178375	-36.42	-13
2	813.9625	814	0.3	813.9960625	-56.01	-20
4	824	824.0375	0.3	824.0012375	-81.08	-20
5	824.0375	829	100	824.0523875	-55.41	-13

LTE Band 26 64QAM 10MHz CH-High 1RB



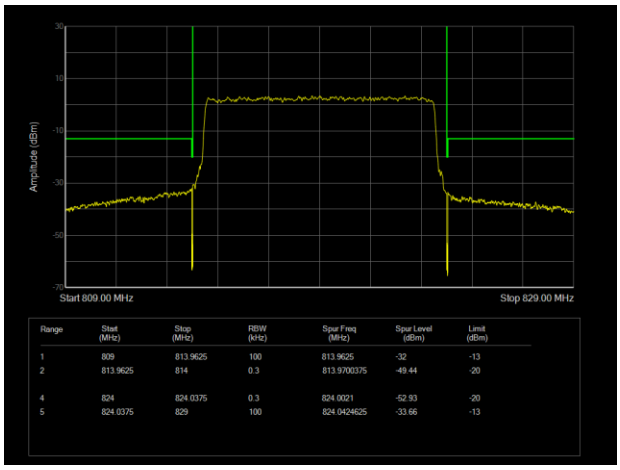
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	809	813.9625	100	813.9625	-56.63	-13
2	813.9625	814	0.3	813.96835	-78.1	-20
4	824	824.0375	0.3	824.002025	-54.43	-20
5	824.0375	829	100	824.0424625	-36.26	-13

LTE Band 26 64QAM 10MHz CH-Low 100%RB



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	809	813.9625	100	813.9625	-32	-13
2	813.9625	814	0.3	813.9700375	-49.44	-20
4	824	824.0375	0.3	824.0021	-52.93	-20
5	824.0375	829	100	824.0424625	-33.66	-13

LTE Band 26 64QAM 10MHz CH-High 100%RB



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	809	813.9625	100	813.9625	-32	-13
2	813.9625	814	0.3	813.9700375	-49.44	-20
4	824	824.0375	0.3	824.0021	-52.93	-20
5	824.0375	829	100	824.0424625	-33.66	-13

5.4. Peak-to-Average Power Ratio (PAPR)

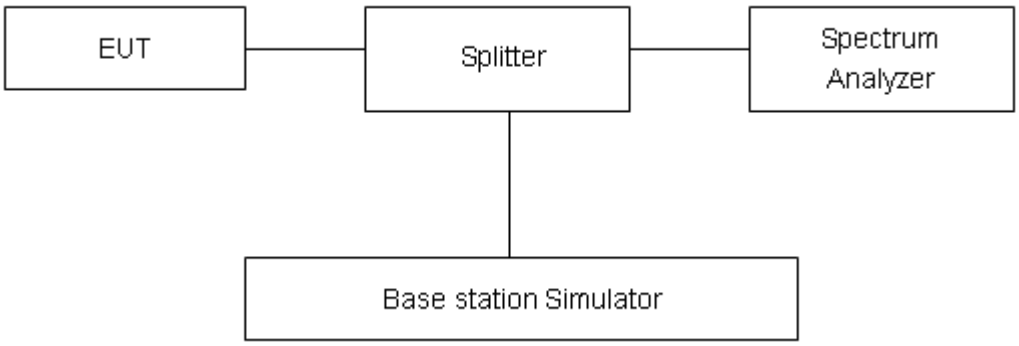
Ambient condition

Temperature	Relative humidity
21°C ~25°C	40%~60%

Methods of Measurement

Measure the total peak power and record as PPk. And measure the total average power and record as PAvg. Both the peak and average power levels must be expressed in the same logarithmic units (*e.g.*, dBm). Determine the PAPR from:
PAPR (dB) = PPk (dBm) - PAvg (dBm).

Test Setup



Limits

In measuring transmissions in this band using an average power technique, the peakto-average ratio (PAR) of the transmission may not exceed 13 dB in 24.232(d).

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the

normal distribution is with the coverage factor k = 2, U= 0.4 dB.

Test Results

LTE Band 26								
RB	Modulation	Bandwidth (MHz)	Channel	Peak (dBm)	Avg (dBm)	PAPR (dB)	Limit (dB)	Conclusion
100%	QPSK	1.4M	26697	27.55	22.29	5.26	13	PASS
			26740	27.37	22.30	5.07	13	PASS
			26783	27.44	22.35	5.09	13	PASS
		3M	26705	27.51	22.40	5.11	13	PASS
			26740	27.36	22.43	4.93	13	PASS
			26775	27.42	22.42	5.00	13	PASS
		5M	26715	27.57	22.43	5.14	13	PASS
			26740	27.50	22.43	5.07	13	PASS
			26765	27.45	22.39	5.06	13	PASS
		10M	26740	27.52	22.41	5.11	13	PASS
	16QAM	1.4M	26697	27.44	21.34	6.10	13	PASS
			26740	27.20	21.34	5.86	13	PASS
			26783	27.42	21.42	6.00	13	PASS
		3M	26705	27.42	21.42	6.00	13	PASS
			26740	27.29	21.43	5.86	13	PASS
			26775	27.30	21.43	5.87	13	PASS
		5M	26715	27.40	21.45	5.95	13	PASS
			26740	27.29	21.47	5.82	13	PASS
			26765	27.29	21.43	5.86	13	PASS
		10M	26740	27.32	21.42	5.90	13	PASS
	64QAM	1.4M	26697	26.40	19.72	6.68	13	PASS
			26740	26.20	19.66	6.54	13	PASS
			26783	26.04	19.56	6.48	13	PASS
		3M	26705	26.37	19.83	6.54	13	PASS
			26740	26.29	19.79	6.50	13	PASS
			26775	26.17	19.79	6.38	13	PASS
		5M	26715	26.34	19.86	6.48	13	PASS
			26740	26.18	19.78	6.40	13	PASS
			26765	26.03	19.73	6.30	13	PASS
		10M	26740	26.19	19.81	6.38	13	PASS

5.5. Frequency Stability

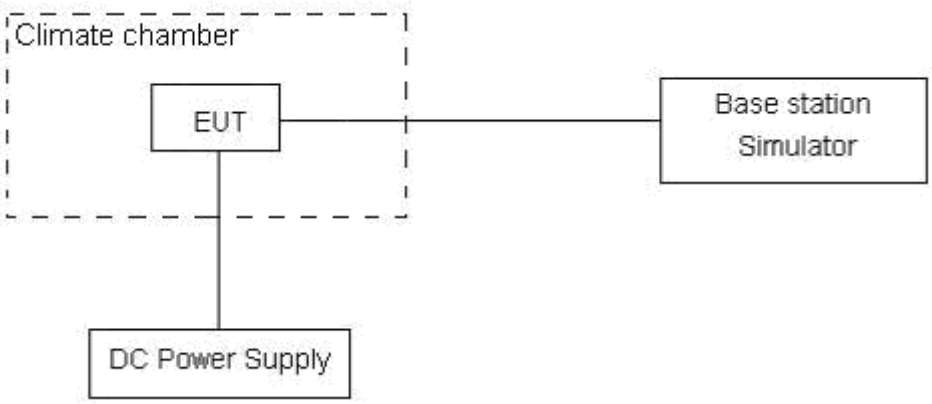
Ambient condition

Temperature	Relative humidity
21°C ~25°C	40%~60%

Method of Measurement

1. Frequency Stability (Temperature Variation)
   The temperature inside the climate chamber is varied from -30°C to +50°C in 10°C step size,
   (1) With all power removed, the temperature was decreased to 0°C and permitted to stabilize for three hours.
   (2) Measure the carrier frequency with the test equipment in a “call mode”. These measurements should be made within 1 minute of powering up the mobile station, to prevent significant self warming.
   (3) Repeat the above measurements at 10°C increments from -30°C to +50°C. Allow at least 1.5 hours at each temperature, un-powered, before making measurements.
2. Frequency Stability (Voltage Variation)
   The frequency stability shall be measured with variation of primary supply voltage as follows:
   Primary Supply Voltage: The primary supply voltage is varied from 85% to 115% of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.
   This transceiver is specified to operate with an input voltage of between 3.3 V and 4.3 V, with a nominal voltage of 3.8V.

Test setup



Limits

According to the Sec. 90.213.(a) Unless noted elsewhere, transmitters used in the services governed by this part must have a minimum frequency stability as specified in the following table.
Minimum Frequency Stability
[Parts per million (ppm)]

Frequency range (MHz)	Fixed and base stations	Mobile stations	
		Over 2 watts output power	2 watts or less output power
814 ~ 824	1.5	2.5	2.5

Measurement Uncertainty

The assessed measurement uncertainty to ensure 99.75％ confidence level for the normal distribution is with the coverage factor k = 3,U= 0.01ppm.

Test Result

LTE Band 26								
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability （ppm）	Frequency Stability （ppm）	Frequency Stability （ppm）	Verdict
BANDWIDTH	1.4MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal（25℃）	Normal	7.13	2.06	16.12	0.00380	0.00110	0.00858	PASS
Extreme（50℃）		15.28	13.86	15.92	0.00813	0.00737	0.00847	PASS
Extreme（40℃）		7.34	1.96	15.53	0.00390	0.00104	0.00826	PASS
Extreme（30℃）		1.86	11.05	4.23	0.00099	0.00588	0.00225	PASS
Extreme（20℃）		16.84	17.18	7.50	0.00896	0.00914	0.00399	PASS
Extreme（10℃）		4.49	6.84	3.64	0.00239	0.00364	0.00194	PASS
Extreme（0℃）		9.37	8.30	17.16	0.00498	0.00441	0.00913	PASS
Extreme（-10℃）		1.39	12.91	15.71	0.00074	0.00687	0.00835	PASS
Extreme（-20℃）		9.77	15.82	10.81	0.00520	0.00842	0.00575	PASS
Extreme（-30℃）		16.90	15.37	3.12	0.00899	0.00817	0.00166	PASS
25℃	LV	5.78	1.84	16.22	0.00307	0.00098	0.00863	PASS
	HV	15.72	9.84	8.27	0.00836	0.00523	0.00440	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability （ppm）	Frequency Stability （ppm）	Frequency Stability （ppm）	Verdict
BANDWIDTH	3MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal（25℃）	Normal	10.17	16.72	16.42	0.00541	0.00889	0.00873	PASS
Extreme（50℃）		4.78	3.95	10.69	0.00254	0.00210	0.00569	PASS
Extreme（40℃）		13.23	4.06	10.48	0.00704	0.00216	0.00557	PASS
Extreme（30℃）		15.50	7.63	12.05	0.00824	0.00406	0.00641	PASS
Extreme（20℃）		16.16	8.01	15.45	0.00860	0.00426	0.00822	PASS
Extreme（10℃）		4.93	9.41	13.06	0.00262	0.00501	0.00695	PASS
Extreme（0℃）		11.32	10.95	9.83	0.00602	0.00583	0.00523	PASS
Extreme（-10℃）		1.54	7.35	2.23	0.00082	0.00391	0.00119	PASS
Extreme（-20℃）		4.42	16.13	15.32	0.00235	0.00858	0.00815	PASS
Extreme（-30℃）		7.90	5.67	2.71	0.00420	0.00301	0.00144	PASS
25℃	LV	2.36	3.70	7.85	0.00126	0.00197	0.00418	PASS
	HV	15.93	2.27	3.03	0.00847	0.00121	0.00161	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability （ppm）	Frequency Stability （ppm）	Frequency Stability （ppm）	Verdict
BANDWIDTH	5MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal（25℃）	Normal	9.35	3.62	9.74	0.00497	0.00193	0.00518	PASS
Extreme（50℃）		6.78	3.96	15.58	0.00361	0.00211	0.00829	PASS

Extreme（40℃）		11.22	16.95	4.15	0.00597	0.00902	0.00221	PASS
Extreme（30℃）		11.52	5.33	8.95	0.00613	0.00283	0.00476	PASS
Extreme（20℃）		10.85	9.27	16.23	0.00577	0.00493	0.00863	PASS
Extreme（10℃）		12.37	17.63	12.84	0.00658	0.00938	0.00683	PASS
Extreme（0℃）		9.64	13.28	3.65	0.00513	0.00706	0.00194	PASS
Extreme（-10℃）		15.29	2.06	17.37	0.00813	0.00110	0.00924	PASS
Extreme（-20℃）		13.76	6.08	10.97	0.00732	0.00324	0.00583	PASS
Extreme（-30℃）		6.56	8.27	6.15	0.00349	0.00440	0.00327	PASS
25℃	LV	13.17	12.53	8.36	0.00701	0.00667	0.00445	PASS
	HV	2.79	8.82	2.99	0.00148	0.00469	0.00159	PASS
Condition		Freq.Error (Hz)	Freq.Error (Hz)	Freq.Error (Hz)	Frequency Stability（ppm）	Frequency Stability（ppm）	Frequency Stability（ppm）	Verdict
BANDWIDTH	10MHz							
Temperature	Voltage	64QAM	16QAM	QPSK	64QAM	16QAM	QPSK	
Normal（25℃）	Normal	16.48	12.13	4.28	0.00876	0.00645	0.00228	PASS
Extreme（50℃）		9.38	1.89	13.37	0.00499	0.00101	0.00711	PASS
Extreme（40℃）		6.56	7.85	12.65	0.00349	0.00418	0.00673	PASS
Extreme（30℃）		5.22	7.70	16.71	0.00278	0.00410	0.00889	PASS
Extreme（20℃）		17.16	2.30	15.53	0.00913	0.00122	0.00826	PASS
Extreme（10℃）		10.07	12.78	9.32	0.00535	0.00680	0.00496	PASS
Extreme（0℃）		9.83	8.16	11.54	0.00523	0.00434	0.00614	PASS
Extreme（-10℃）		2.76	1.85	6.70	0.00147	0.00098	0.00356	PASS
Extreme（-20℃）		5.93	4.57	1.01	0.00315	0.00243	0.00054	PASS
Extreme（-30℃）		6.99	10.67	12.33	0.00372	0.00568	0.00656	PASS
25℃	LV	6.39	8.23	1.62	0.00340	0.00438	0.00086	PASS
	HV	2.56	3.87	14.72	0.00136	0.00206	0.00783	PASS

5.6. Spurious Emissions at Antenna Terminals

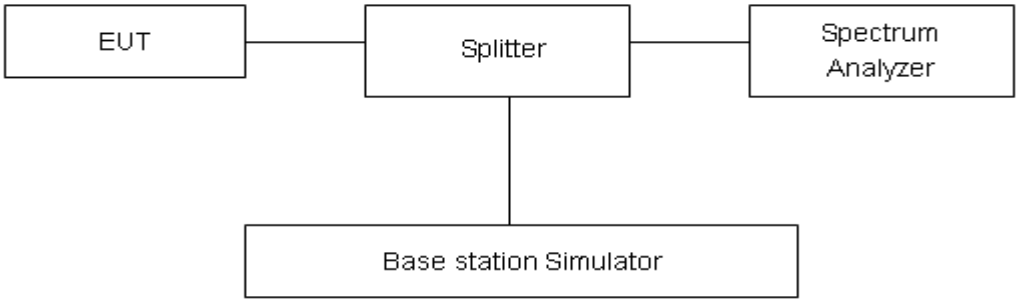
Ambient condition

Temperature	Relative humidity
21°C ~25°C	40%~60%

Method of Measurement

The EUT was connected to Spectrum Analyzer and Base Station Simulator via power Splitter. The measurement is carried out using a spectrum analyzer. The spectrum analyzer scans from 30MHz to the 10th harmonic of the carrier. The peak detector is used.
RBW is set to 1 kHz (0.009MHz~ 0.15 MHz),
RBW is set to 10 kHz (0.15 MHz~ 30 MHz)
RBW is set to 100 kHz (30MHz~1000 MHz)
RBW is set to 1000 kHz (above 1000MHz)
Sweep is set to ATUO.

Test setup



Limits

Rule Part 90.691 specifies that “The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.”

Limit	-13 dBm

Measurement Uncertainty

The assessed measurement uncertainty to ensure 99.75% confidence level for the normal distribution is with the coverage factor k = 1.96.

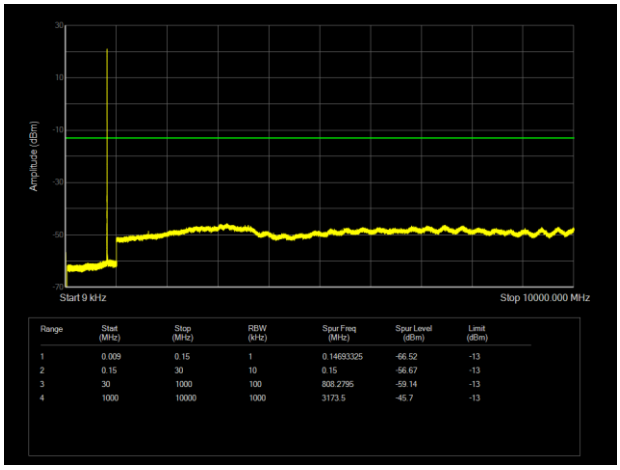
Frequency	Uncertainty
9kHz-1GHz	0.684 dB

1GHz-12.75GHz	1.407 dB

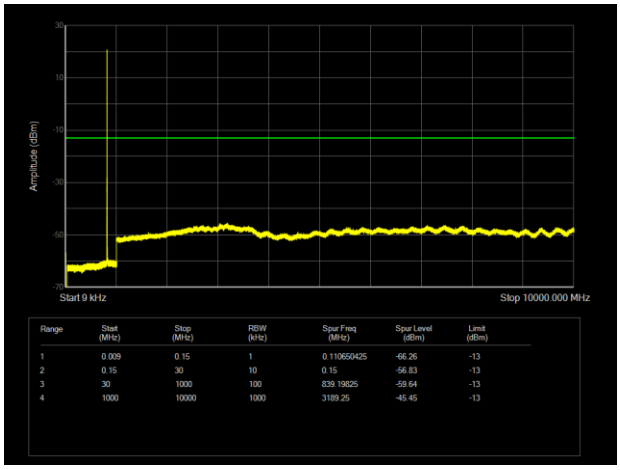
Test Result

If disturbances were found more than 20dB below limit line, the mark is not required for the EUT.
The signal beyond the limit is carrier.

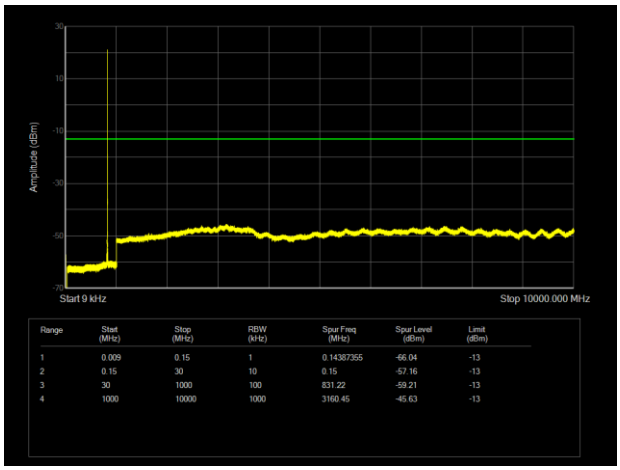
LTE Band 26 1.4MHz CH-Low 9kHz~10GHz



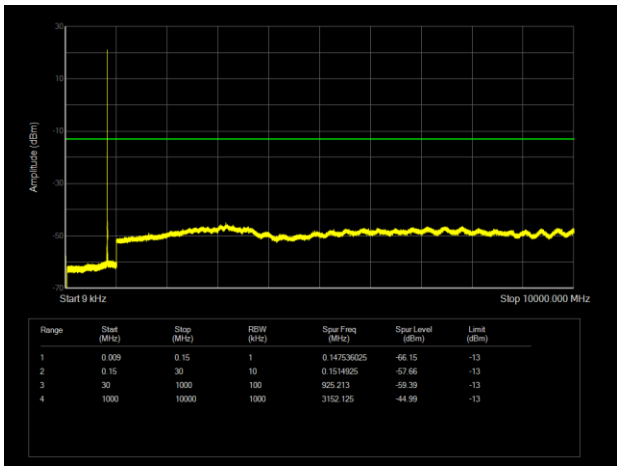
LTE Band 26 3MHz CH-Low 9kHz~10GHz



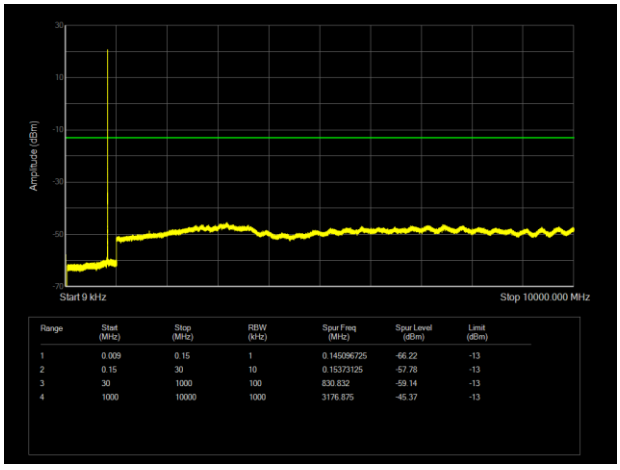
LTE Band 26 1.4MHz CH-Middle 9kHz~10GHz



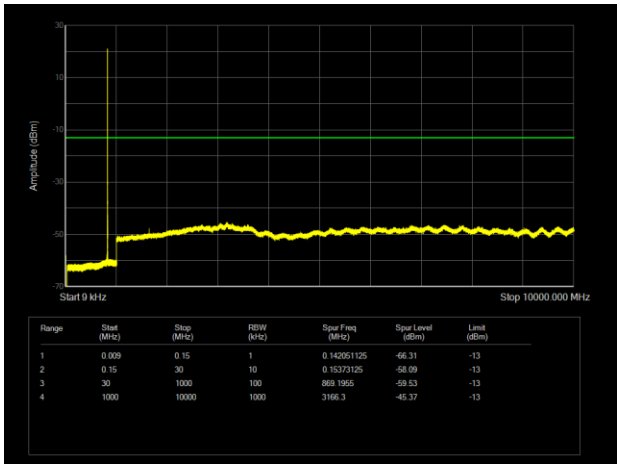
LTE Band 26 3MHz CH-Middle 9kHz~10GHz



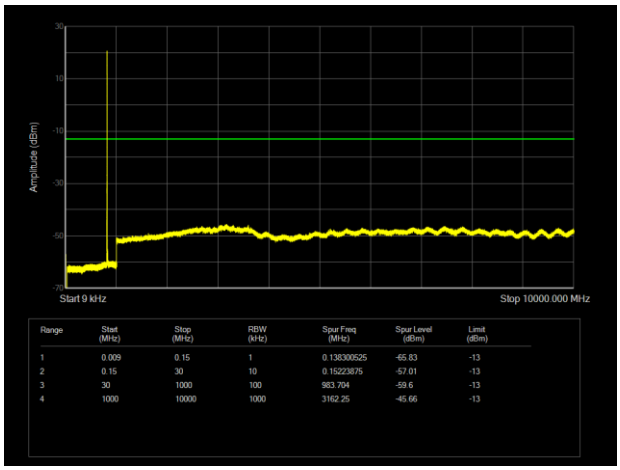
LTE Band 26 1.4MHz CH-High 9kHz~10GHz



LTE Band 26 3MHz CH-High 9kHz~10GHz

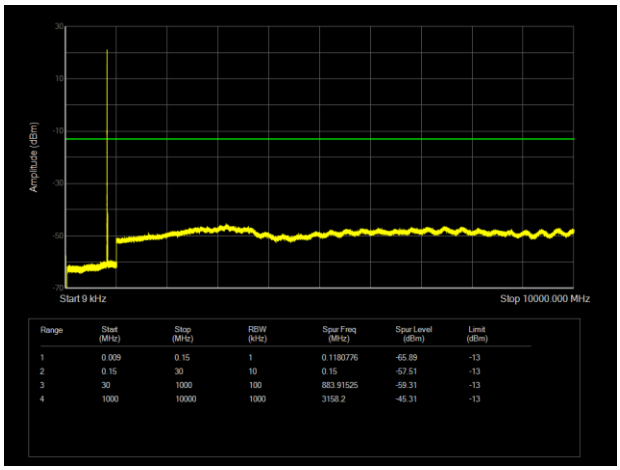


LTE Band 26 5MHz CH-Low 9kHz~10GHz



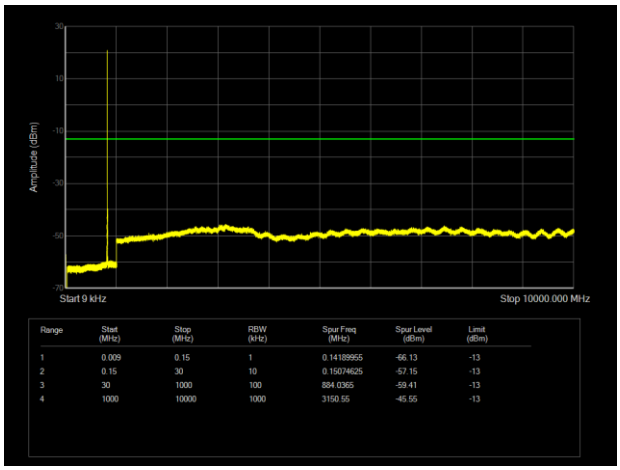
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.138300525	-65.83	-13
2	0.15	30	10	0.15223875	-57.01	-13
3	30	1000	100	963.704	-59.6	-13
4	1000	10000	1000	3162.25	-45.66	-13

LTE Band 26 10MHz CH-Middle 9kHz~10GHz



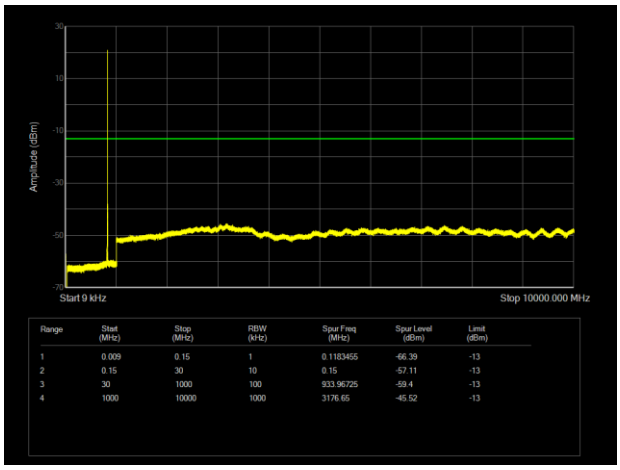
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.1180776	-65.89	-13
2	0.15	30	10	0.15	-57.51	-13
3	30	1000	100	883.91525	-59.31	-13
4	1000	10000	1000	3158.2	-45.31	-13

LTE Band 26 5MHz CH-Middle 9kHz~10GHz



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.14189955	-66.13	-13
2	0.15	30	10	0.15074625	-57.15	-13
3	30	1000	100	884.0365	-59.41	-13
4	1000	10000	1000	3150.55	-45.55	-13

LTE Band 26 5MHz CH-High 9kHz~10GHz



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.1183455	-66.39	-13
2	0.15	30	10	0.15	-57.11	-13
3	30	1000	100	933.96725	-59.4	-13
4	1000	10000	1000	3176.65	-45.52	-13

5.7. Radiates Spurious Emission

Ambient condition

Temperature	Relative humidity
21°C ~25°C	40%~60%

Method of Measurement

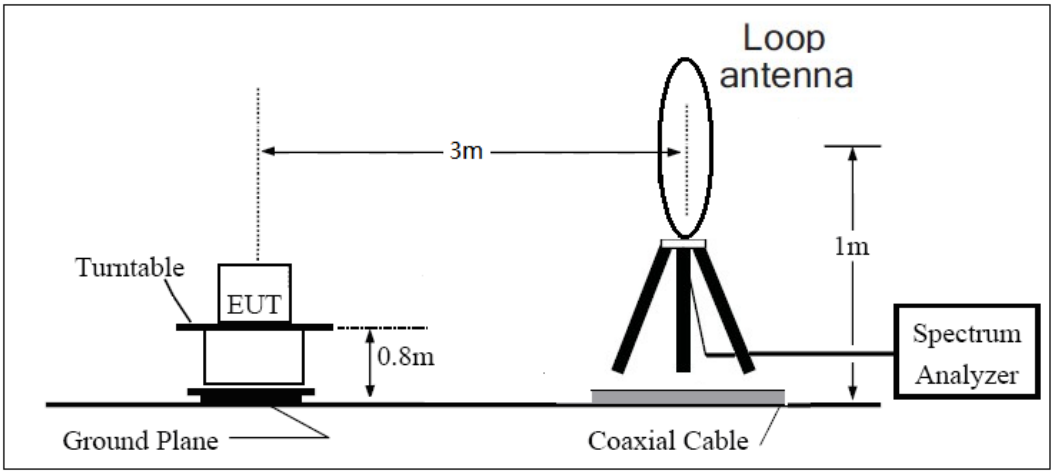
1. The testing follows FCC KDB 971168 v03r01 Section 5.8 and ANSI C63.26 (2015).
2. Below 1GHz: The EUT is placed on a turntable 0.8 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H). Above 1GHz: (Note: the FCC's permission to use 1.5m as an alternative per TCBC Conf call of Dec. 2, 2014.) The EUT is placed on a turntable 1.5 meters above the ground in the chamber, 3 meter away from the antenna. The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H).
3. A loop antenna, A log-periodic antenna or horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator and the level will be adjusted till the same power value on the spectrum analyzer or receiver. The level of the spurious emissions can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.
4. The EUT is then put into continuously transmitting mode at its maximum power level during the test. Set Test Receiver or Spectrum RBW=200Hz,VBW=600Hz for 9kHz-150kHz , RBW=10kHz, VBW=30kHz 150kHz-30MHz , RBW=100kHz,VBW=300kHz for 30MHz to 1GHz and RBW=1MHz, VBW=3MHz for above 1GHz, And the maximum value of the receiver should be recorded as (Pr).
5. The EUT shall be replaced by a substitution antenna. In the chamber, an substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (PMea) is applied to the input of the substitution antenna, and adjust the level of the signal generator output until the value of the receiver reach the previously recorded (Pr). The power of signal source (PMea) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.
6. A amplifier should be connected to the Signal Source output port. And the cable should be connect between the Amplifier and the Substitution Antenna. The cable loss (Pcl) ,the Substitution Antenna Gain (Ga) and the Amplifier Gain (PAg) should be recorded after test.
7. The measurement results are obtained as described below:
Power(EIRP)=PMea- PAg - Pcl + Ga
The measurement results are amend as described below:
Power(EIRP)=PMea- Pcl + Ga
8. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dBi)

and known input power. ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP = EIRP-2.15dBi.

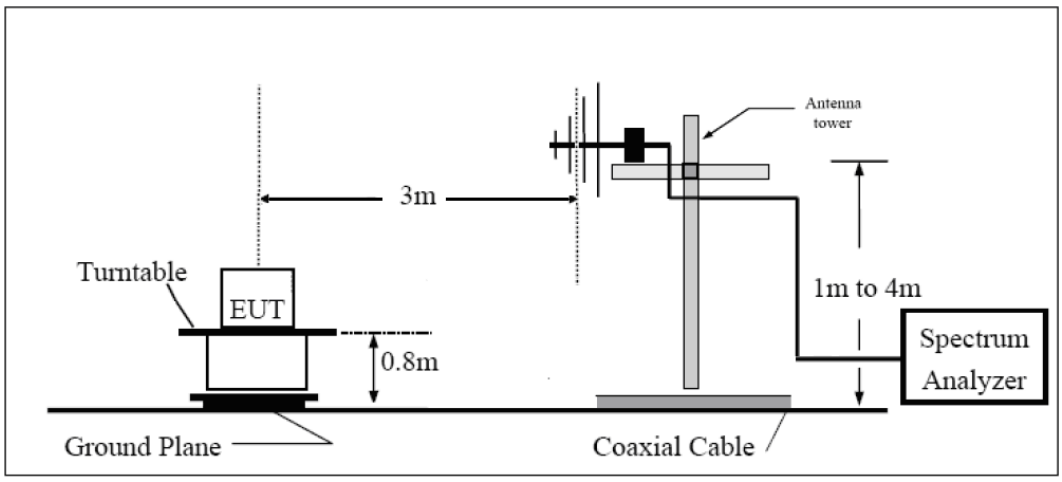
The modulation mode and RB allocation refer to section 5.1, using the maximum output power configuration.

Test setup

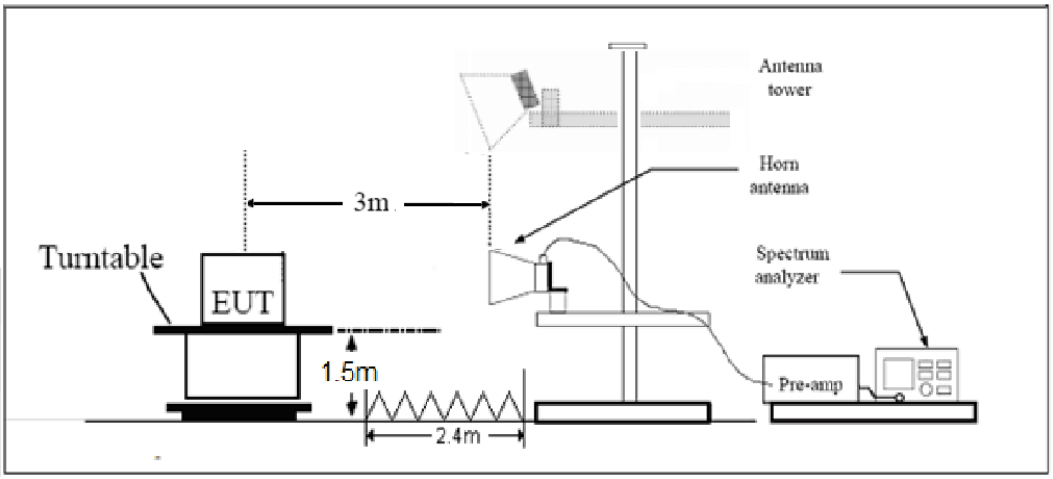
9KHz ~ 30MHz



30MHz~~~ 1GHz



Above 1GHz



Limits

Rule Part 90.691 specifies that “The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.”

Limit	-13 dBm

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95％ confidence level for the normal distribution is with the coverage factor k = 1.96, U= 3.55 dB.

Test Result

Sweep the whole frequency band through the range from 30MHz to the 10th harmonic of the carrier, the emissions below the noise floor will not be recorded in the report.

LTE Band 26 1.4MHz CH Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1638.0	-64.02	2.00	10.75	vertical	-57.42	-13.00	44.42	90
3	2457.0	-61.57	2.51	11.05	vertical	-55.18	-13.00	42.18	225
4	3346.0	-58.11	4.20	11.15	vertical	-53.31	-13.00	40.31	180
5	4182.5	-55.39	5.20	11.15	vertical	-51.59	-13.00	38.59	225
6	5019.0	-54.68	5.50	11.95	vertical	-50.38	-13.00	37.38	90
7	5855.5	-55.85	5.70	13.55	vertical	-50.15	-13.00	37.15	45
8	6692.0	-57.05	6.30	13.75	vertical	-51.75	-13.00	38.75	315
9	7528.5	-52.18	6.80	13.85	vertical	-47.28	-13.00	34.28	45
10	8365.0	-53.41	6.90	14.25	vertical	-48.21	-13.00	35.21	90
Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor. 2.The worst emission was found in the antenna is Horizontal position.									

LTE Band 26 5MHz CH Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1638.0	-64.85	2.00	10.75	vertical	-58.25	-13.00	45.25	0
3	2457.0	-62.95	2.51	11.05	vertical	-56.56	-13.00	43.56	45
4	3276.0	-57.43	4.20	11.15	vertical	-52.63	-13.00	39.63	0
5	4095.0	-55.16	5.20	11.15	vertical	-51.36	-13.00	38.36	45
6	4914.0	-54.85	5.50	11.95	vertical	-50.55	-13.00	37.55	315
7	5733.0	-56.48	5.70	13.55	vertical	-50.78	-13.00	37.78	90
8	6552.0	-56.65	6.30	13.75	vertical	-51.35	-13.00	38.35	45
9	7371.0	-53.34	6.80	13.85	vertical	-48.44	-13.00	35.44	225
10	8190.0	-52.94	6.90	14.25	vertical	-47.74	-13.00	34.74	180
Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor. 2.The worst emission was found in the antenna is Horizontal position.									

LTE Band 26 10MHz CH Middle

Harmonic	Frequency (MHz)	SG (dBm)	Cable Loss (dB)	Gain (dBi)	Antenna Polarization	ERP Level (dBm)	Limit (dBm)	Margin (dB)	Azimuth (deg)
2	1638.0	-64.67	2.00	10.75	vertical	-58.07	-13.00	45.07	45
3	2457.0	-62.82	2.51	11.05	vertical	-56.43	-13.00	43.43	315
4	3276.0	-58.47	4.20	11.15	vertical	-53.67	-13.00	40.67	45
5	4095.0	-56.02	5.20	11.15	vertical	-52.22	-13.00	39.22	270
6	4914.0	-54.46	5.50	11.95	vertical	-50.16	-13.00	37.16	90
7	5733.0	-56.06	5.70	13.55	vertical	-50.36	-13.00	37.36	45
8	6552.0	-57.20	6.30	13.75	vertical	-51.90	-13.00	38.90	315
9	7371.0	-54.59	6.80	13.85	vertical	-49.69	-13.00	36.69	225
10	8190.0	-52.97	6.90	14.25	vertical	-47.77	-13.00	34.77	180

Note: 1.The other Spurious RF Radiated emissions level is no more than noise floor.
2.The worst emission was found in the antenna is Horizontal position.

6. Main Test Instruments

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
Base Station Simulator	R&S	CMW500	113824	2020-05-18	2021-05-17
Power Splitter	Hua Xiang	SHX-GF2-2-13	10120101	/	/
Spectrum Analyzer	Agilent	N9010A	MY50210259	2020-05-18	2021-05-17
Signal Analyzer	R&S	FSV30	100815	2019-12-15	2020-12-14
Trilog Antenna	SCHWARZBECK	VUBL 9163	9163-201	2017-11-18	2020-11-17
Horn Antenna	R&S	HF907	102723	2018-08-11	2021-08-10
Signal generator	R&S	SMF 100A	102235	2020-05-18	2021-05-17
Climatic Chamber	ESPEC	SU-242	93000506	2017-12-17	2020-12-16
RF Cable	Agilent	SMA 15cm	0001	2020-06-12	2020-12-11
Software	R&S	EMC32	9.26.0	/	/

********END OF REPORT ********

ANNEX A: The EUT Appearance

The EUT Appearance are submitted separately.

ANNEX B: Test Setup Photos

The Test Setup Photos are submitted separately.

ANNEX C: Product Change Description

The Product Change Description are submitted separately.