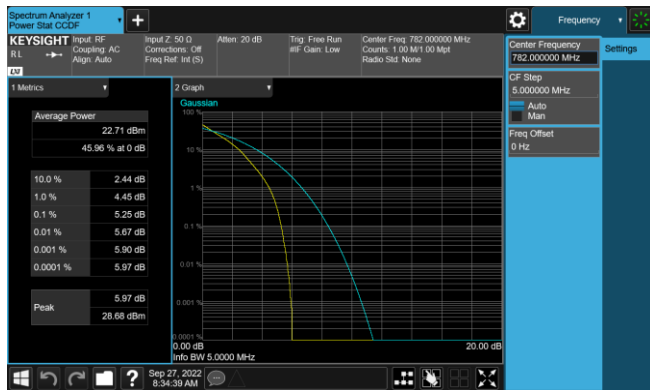
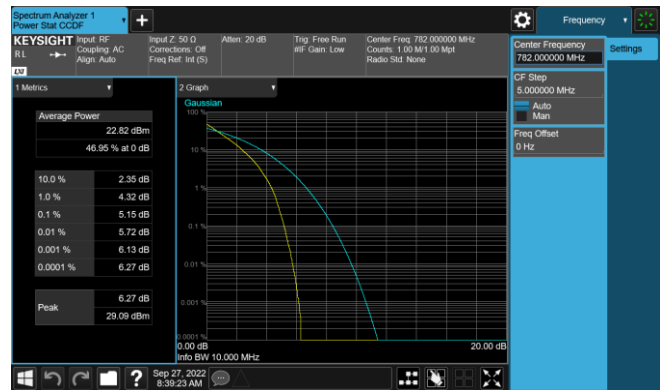


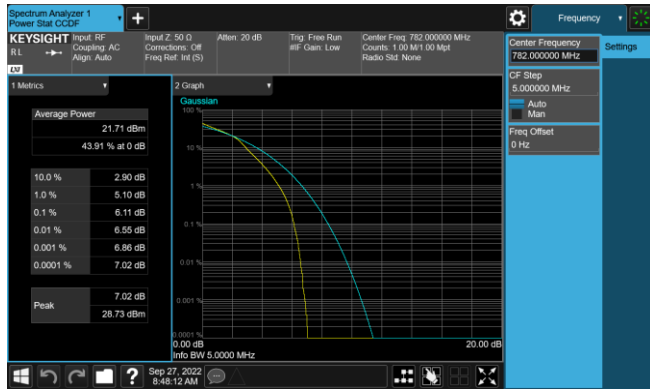
**LTE Band 13 QPSK 5MHz CH23230 25RB#0**



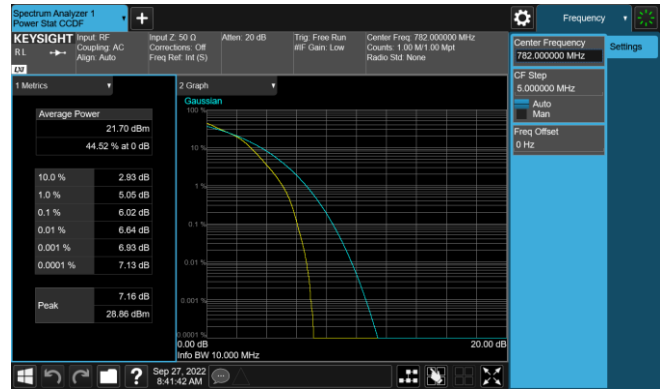
**LTE Band 13 QPSK 10MHz CH23230 50RB#0**



**LTE Band 13 16QAM 5MHz CH23230 25RB#0**

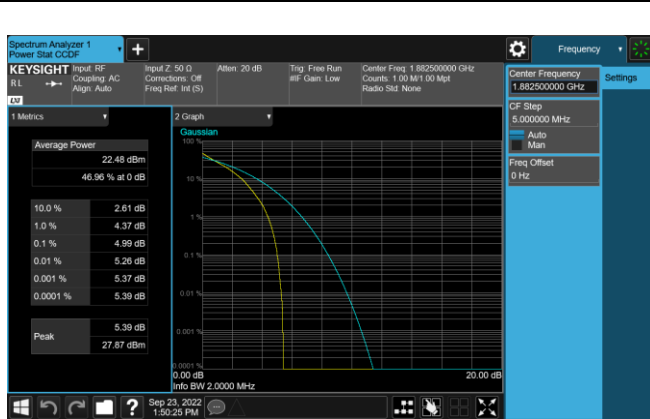
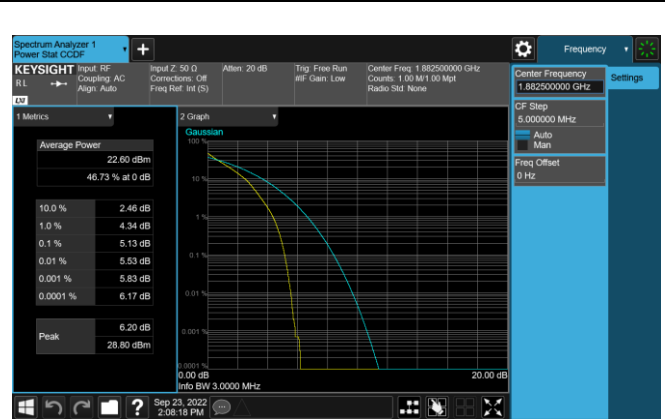
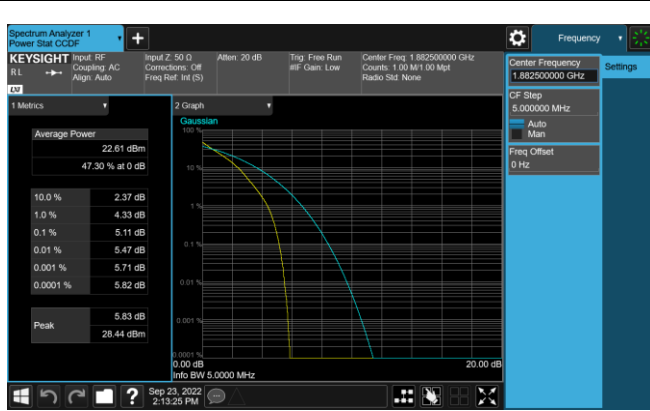
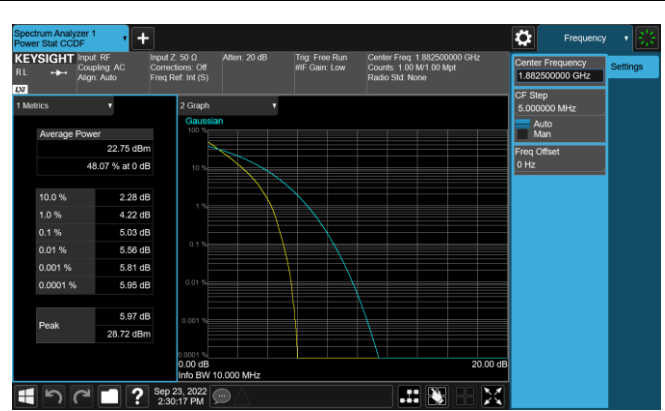
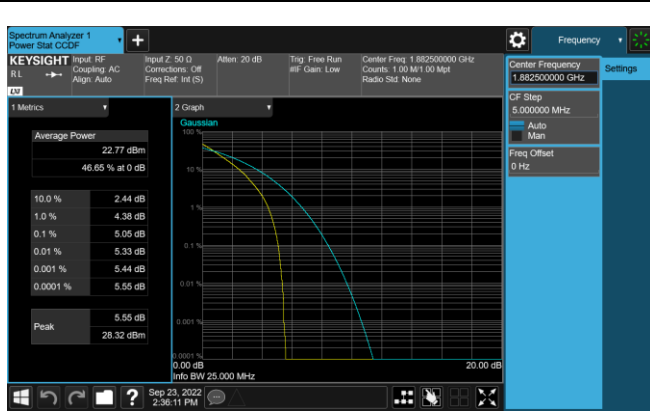
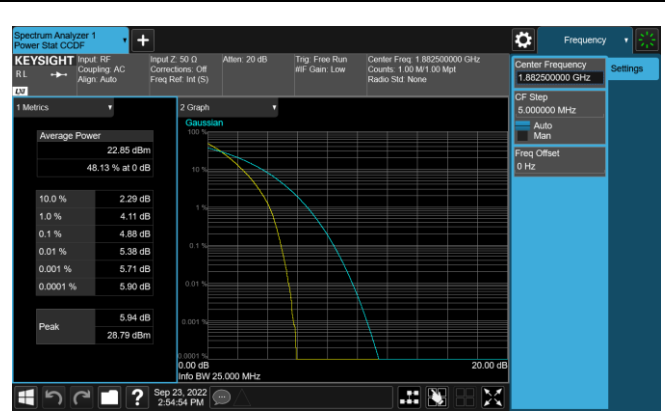


**LTE Band 13 16QAM 10MHz CH23230 50RB#0**



Test Mode	Channel/ Frequency (MHz)	Modulation	Bandwidth (MHz)	RB Size	RB Offset	Test Result
LTE Band 25	CH26365 (1882.5MHz)	QPSK	1.4	6	0	Pass
			3	15	0	Pass
			5	25	0	Pass
			10	50	0	Pass
			15	75	0	Pass
			20	100	0	Pass
		16QAM	1.4	6	0	Pass
			3	15	0	Pass
			5	25	0	Pass
			10	50	0	Pass
			15	75	0	Pass
			20	100	0	Pass

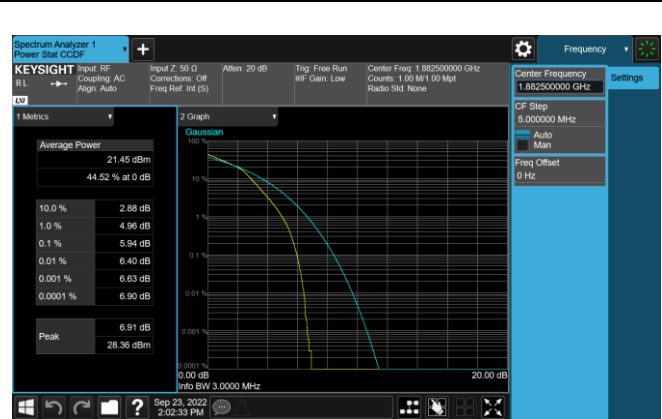
Note: Band25 Covered Band2.

**LTE Band 25 QPSK 1.4MHz CH26365 6RB#0**

**LTE Band 25 QPSK 3MHz CH26365 15RB#0**

**LTE Band 25 QPSK 5MHz CH26365 25RB#0**

**LTE Band 25 QPSK 10MHz CH26365 50RB#0**

**LTE Band 25 QPSK 15MHz CH26365 75RB#0**

**LTE Band 25 QPSK 20MHz CH26365 100RB#0**


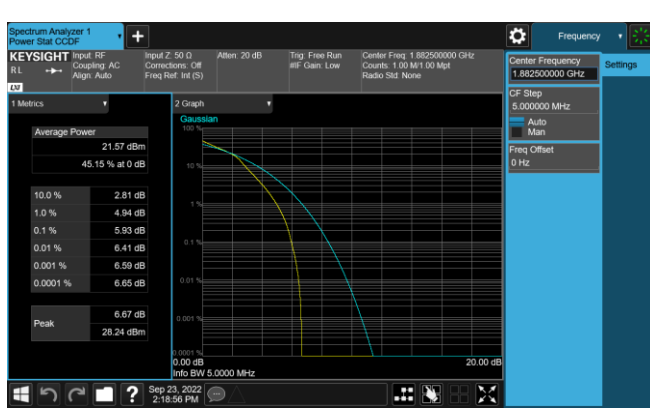
**LTE Band 25 16QAM 1.4MHz CH26365 6RB#0**



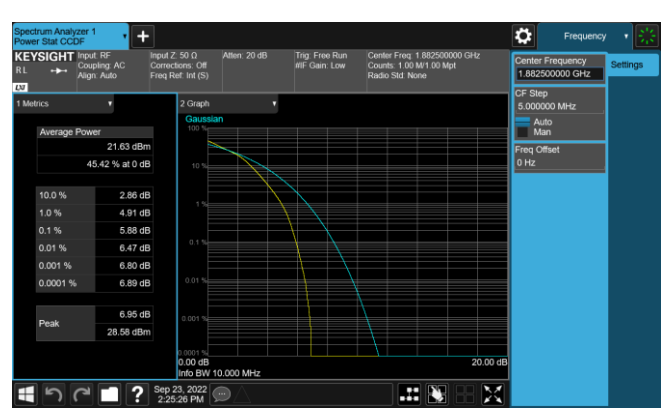
**LTE Band 25 16QAM 3MHz CH26365 15RB#0**



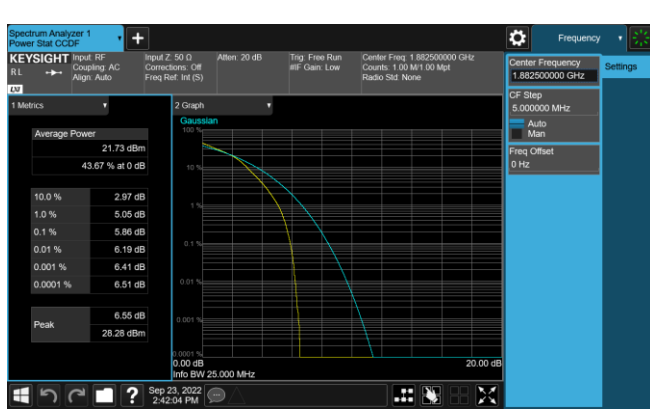
**LTE Band 25 16QAM 5MHz CH26365 25RB#0**



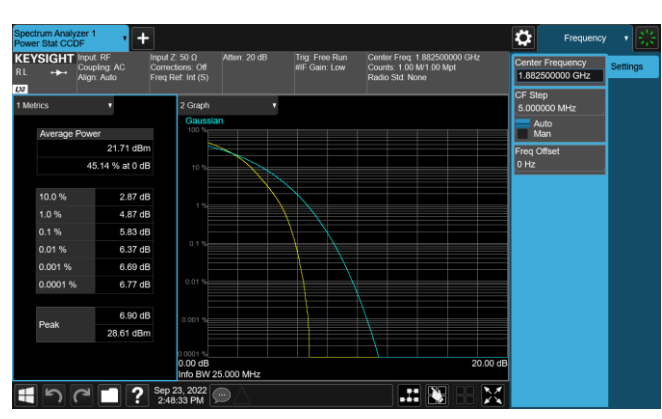
**LTE Band 25 16QAM 10MHz CH26365 50RB#0**



**LTE Band 25 16QAM 15MHz CH26365 75RB#0**

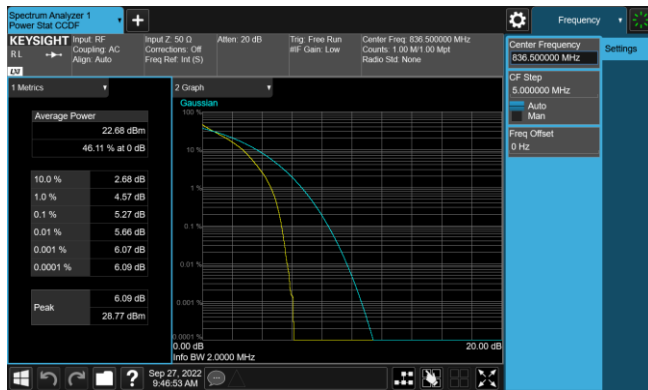
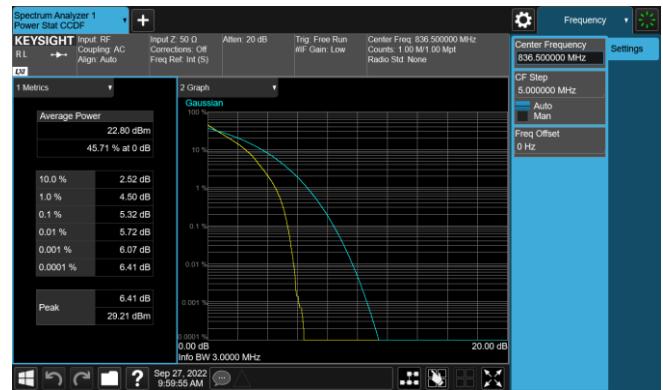
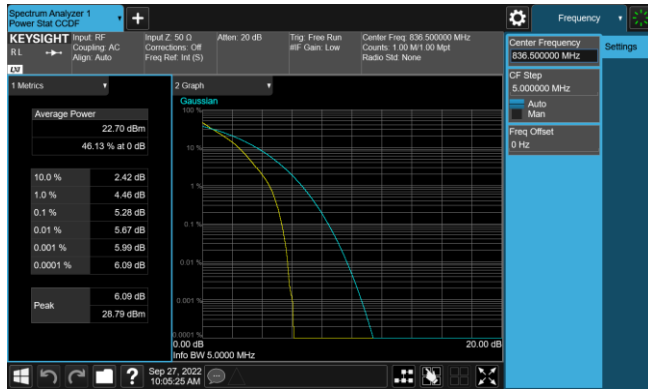
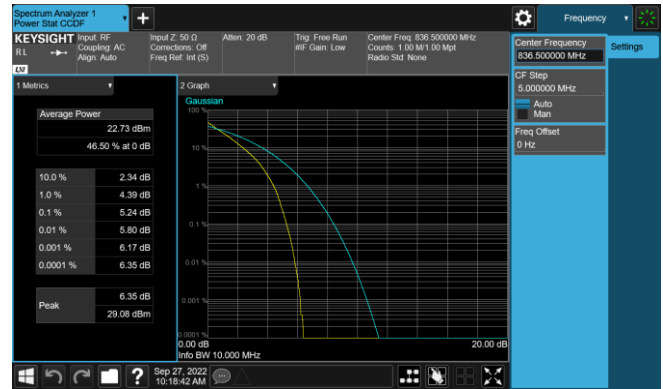
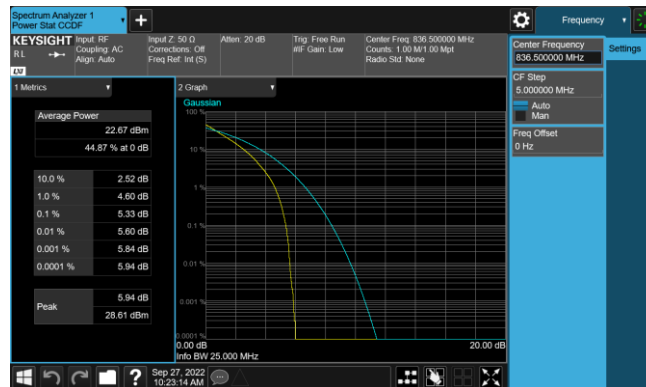


**LTE Band 25 16QAM 20MHz CH26365 100RB#0**



Test Mode	Channel/ Frequency (MHz)	Modulation	Bandwidth (MHz)	RB Size	RB Offset	Test Result
LTE Band 26	CH26915 (836.5MHz)	QPSK	1.4	6	0	Pass
			3	15	0	Pass
			5	25	0	Pass
			10	50	0	Pass
			15	75	0	Pass
		16QAM	1.4	6	0	Pass
			3	15	0	Pass
			5	25	0	Pass
			10	50	0	Pass
			15	75	0	Pass

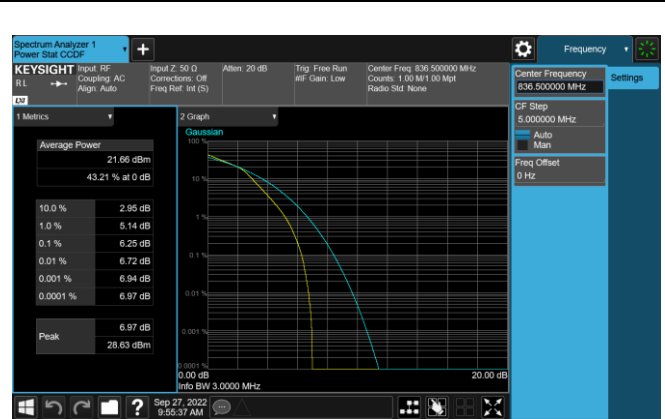
Note: Band26 Covered Band5.

**LTE Band 26 QPSK 1.4MHz CH26915 6RB#0**

**LTE Band 26 QPSK 3MHz CH26915 15RB#0**

**LTE Band 26 QPSK 5MHz CH26915 25RB#0**

**LTE Band 26 QPSK 10MHz CH26915 50RB#0**

**LTE Band 26 QPSK 15MHz CH26915 75RB#0**


**LTE Band 26 16QAM 1.4MHz CH26915 6RB#0**



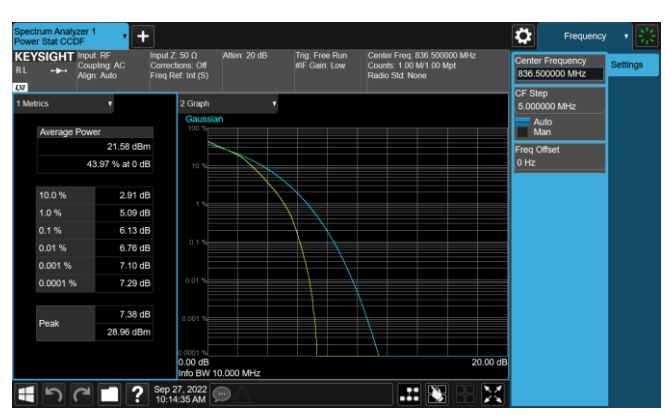
**LTE Band 26 16QAM 3MHz CH26915 15RB#0**



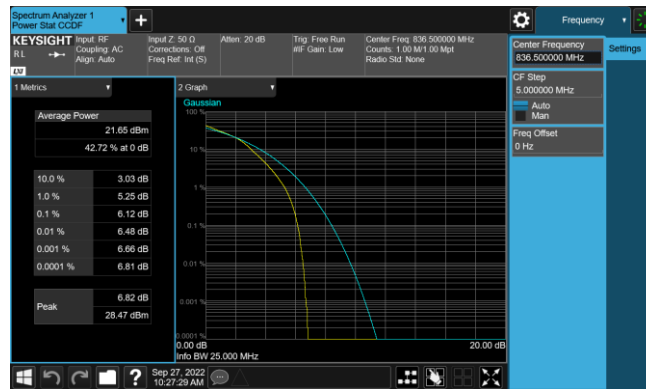
**LTE Band 26 16QAM 5MHz CH26915 25RB#0**



**LTE Band 26 16QAM 10MHz CH26915 50RB#0**



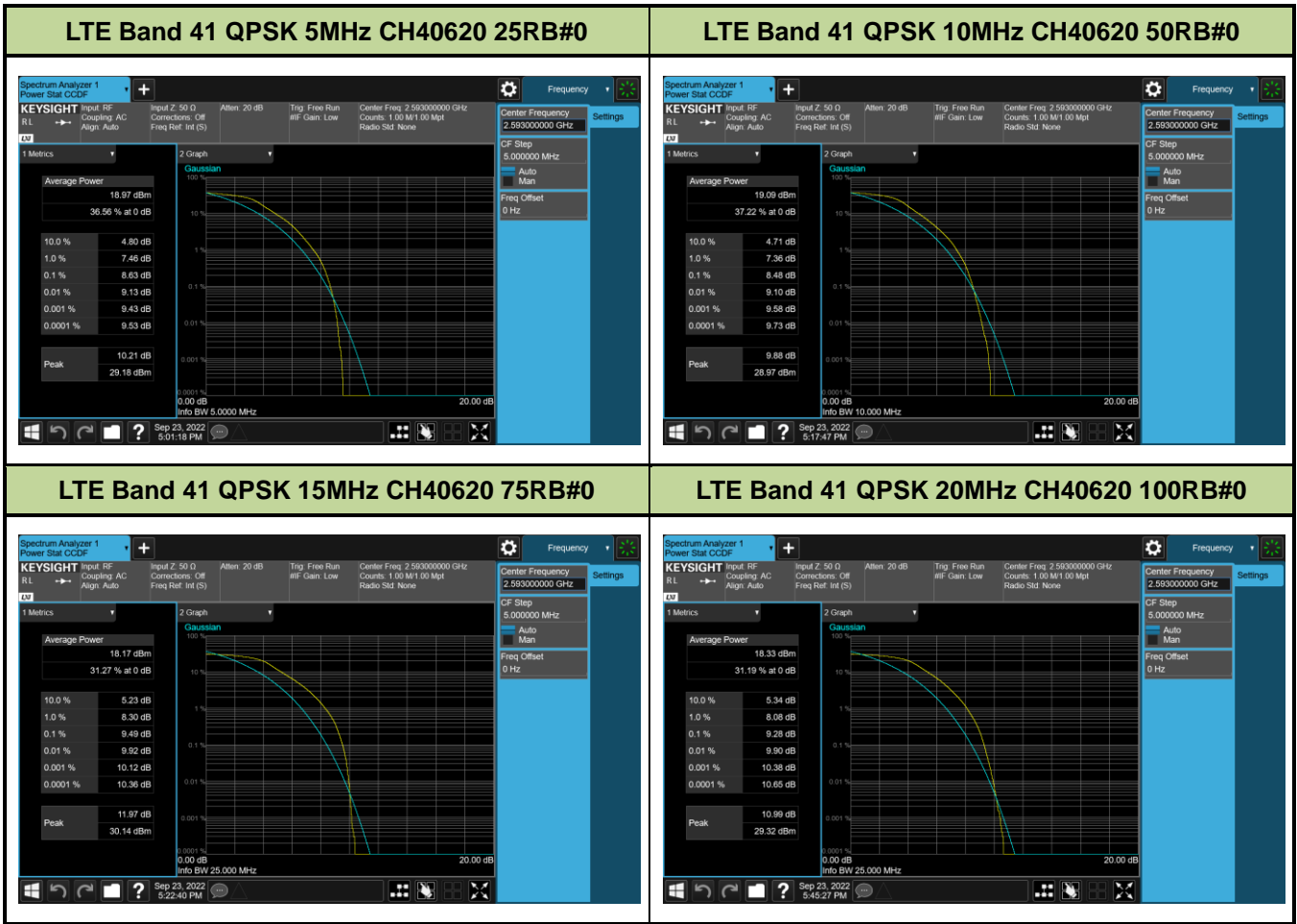
**LTE Band 26 16QAM 15MHz CH26915 75RB#0**



Test Mode	Channel/ Frequency (MHz)	Modulation	Bandwidth (MHz)	RB Size	RB Offset	Test Result
LTE Band 41	CH40620 (2593MHz)	QPSK	5	25	0	Pass
			10	50	0	Pass
			15	75	0	Pass
			20	100	0	Pass
		16QAM	5	25	0	Pass
			10	50	0	Pass
			15	75	0	Pass
			20	100	0	Pass

Note: Band41 Covered Band38.





**LTE Band 41 16QAM 5MHz CH40620 25RB#0**



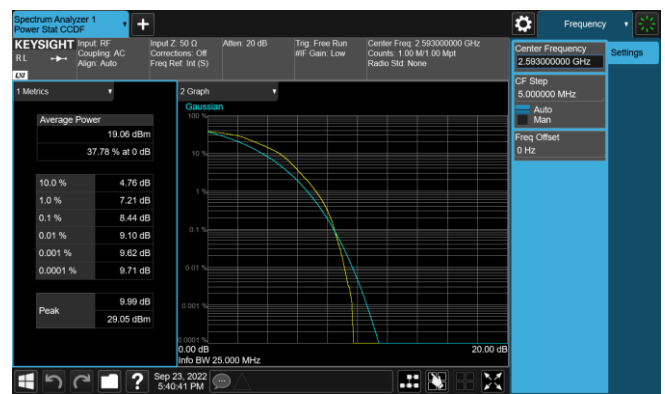
**LTE Band 41 16QAM 10MHz CH40620 50RB#0**



**LTE Band 41 16QAM 15MHz CH40620 75RB#0**



**LTE Band 41 16QAM 20MHz CH40620 100RB#0**



## 7.7. Frequency Stability Under Temperature & Voltage Variations

### 7.7.1 Test Limit

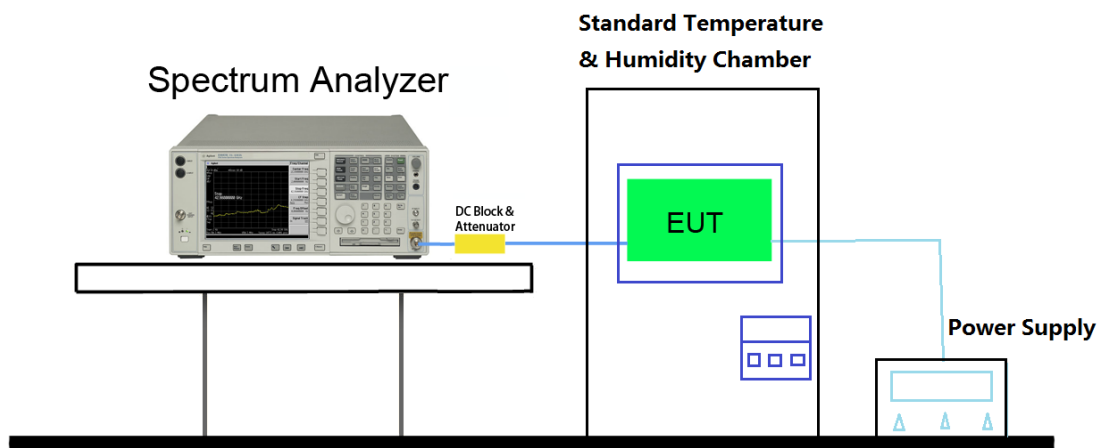
The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Limit	$< \pm 2.5$ ppm
-------	-----------------

### 7.7.2 Test Procedure

KDB 971168 D01v02r02 - Section 9.0 & ANSI/TIA-603-E-2016

### 7.7.3 Test Setup



### 7.7.4 Test Result

Operating Frequency	1732.6MHz
Channel	CH20175
Test Mode	LTE Band 4
Reference Voltage	AC 120V/60Hz

Temperature vs. Frequency Stability						
Voltage (%)	Power (VAC)	Temp (°C)	Declared Frequency (MHz)	Measured Frequency (Hz)	Frequency Tolerance (ppm)	Limit (ppm)
100%	120V/60Hz	-30	1732.6	4.29	0.002	±2.5
		-20	1732.6	5.11	0.003	±2.5
		-10	1732.6	-3.58	-0.002	±2.5
		0	1732.6	4.23	0.002	±2.5
		10	1732.6	6.11	0.004	±2.5
		+ 20 (Ref)	1732.6	-5.79	-0.003	±2.5
		30	1732.6	-3.86	-0.002	±2.5
		40	1732.6	-3.02	-0.002	±2.5
		50	1732.6	5.21	0.003	±2.5
Voltage vs. Frequency Stability						
Voltage (%)	Power (VAC)	Temp (°C)	Declared Frequency (MHz)	Measured Frequency (Hz)	Frequency Tolerance (ppm)	Limit (ppm)
100%	120V/60Hz	20	1732.6	-5.79	-0.003	±2.5
115%	138V/60Hz	20	1732.6	8.18	0.005	±2.5
85%	102V/60Hz	20	1732.6	-4.39	-0.003	±2.5

Operating Frequency	2535MHz
Channel	CH21100
Test Mode	LTE Band 7
Reference Voltage	AC 120V/60Hz

Temperature vs. Frequency Stability						
Voltage (%)	Power (VAC)	Temp (°C)	Declared Frequency (MHz)	Measured Frequency (Hz)	Frequency Tolerance (ppm)	Limit (ppm)
100%	120V/60Hz	-30	2535	-9.76	-0.004	±2.5
		-20	2535	-10.04	-0.004	±2.5
		-10	2535	-7.34	-0.003	±2.5
		0	2535	-7.15	-0.003	±2.5
		10	2535	-12.57	-0.005	±2.5
		+ 20 (Ref)	2535	-10.31	-0.004	±2.5
		30	2535	-8.17	-0.003	±2.5
		40	2535	-8.13	-0.003	±2.5
		50	2535	-11.54	-0.005	±2.5
Voltage vs. Frequency Stability						
Voltage (%)	Power (VAC)	Temp (°C)	Declared Frequency (MHz)	Measured Frequency (Hz)	Frequency Tolerance (ppm)	Limit (ppm)
100%	120V/60Hz	20	2535	-10.31	-0.004	±2.5
115%	138V/60Hz	20	2535	-8.15	-0.003	±2.5
85%	102V/60Hz	20	2535	-9.50	-0.004	±2.5

Operating Frequency	707.5MHz
Channel	CH23095
Test Mode	LTE Band 12
Reference Voltage	AC 120V/60Hz

Temperature vs. Frequency Stability						
Voltage (%)	Power (VAC)	Temp (°C)	Declared Frequency (MHz)	Measured Frequency (Hz)	Frequency Tolerance (ppm)	Limit (ppm)
100%	120V/60Hz	-30	707.5	-2.72	-0.004	±2.5
		-20	707.5	2.90	0.004	±2.5
		-10	707.5	2.47	0.003	±2.5
		0	707.5	-1.90	-0.003	±2.5
		10	707.5	2.40	0.003	±2.5
		+ 20 (Ref)	707.5	-3.52	-0.005	±2.5
		30	707.5	-3.36	-0.005	±2.5
		40	707.5	-3.05	-0.004	±2.5
		50	707.5	-2.82	-0.004	±2.5
Voltage vs. Frequency Stability						
Voltage (%)	Power (VAC)	Temp (°C)	Declared Frequency (MHz)	Measured Frequency (Hz)	Frequency Tolerance (ppm)	Limit (ppm)
100%	120V/60Hz	20	707.5	-3.52	-0.005	±2.5
115%	138V/60Hz	20	707.5	-3.98	-0.006	±2.5
85%	102V/60Hz	20	707.5	-3.89	-0.005	±2.5

Operating Frequency	782MHz
Channel	CH23230
Test Mode	LTE Band 13
Reference Voltage	AC 120V/60Hz

Temperature vs. Frequency Stability						
Voltage (%)	Power (VAC)	Temp (°C)	Declared Frequency (MHz)	Measured Frequency (Hz)	Frequency Tolerance (ppm)	Limit (ppm)
100%	120V/60Hz	-30	782	-3.62	-0.005	±2.5
		-20	782	3.10	0.004	±2.5
		-10	782	3.83	0.005	±2.5
		0	782	2.46	0.003	±2.5
		10	782	-3.62	-0.005	±2.5
		+ 20 (Ref)	782	-2.76	-0.004	±2.5
		30	782	-4.76	-0.006	±2.5
		40	782	-3.32	-0.004	±2.5
		50	782	-3.66	-0.005	±2.5
Voltage vs. Frequency Stability						
Voltage (%)	Power (VAC)	Temp (°C)	Declared Frequency (MHz)	Measured Frequency (Hz)	Frequency Tolerance (ppm)	Limit (ppm)
100%	120V/60Hz	20	782	-2.76	-0.004	±2.5
115%	138V/60Hz	20	782	-3.93	-0.005	±2.5
85%	102V/60Hz	20	782	-4.05	-0.005	±2.5

Operating Frequency	1882.5MHz
Channel	CH26365
Test Mode	LTE Band 25
Reference Voltage	AC 120V/60Hz

Temperature vs. Frequency Stability						
Voltage (%)	Power (VAC)	Temp (°C)	Declared Frequency (MHz)	Measured Frequency (Hz)	Frequency Tolerance (ppm)	Limit (ppm)
100%	120V/60Hz	-30	1882.5	-5.42	-0.003	±2.5
		-20	1882.5	5.76	0.003	±2.5
		-10	1882.5	5.95	0.003	±2.5
		0	1882.5	7.31	0.004	±2.5
		10	1882.5	6.74	0.004	±2.5
		+ 20 (Ref)	1882.5	6.39	0.003	±2.5
		30	1882.5	5.04	0.003	±2.5
		40	1882.5	4.81	0.003	±2.5
		50	1882.5	4.72	0.003	±2.5
Voltage vs. Frequency Stability						
Voltage (%)	Power (VAC)	Temp (°C)	Declared Frequency (MHz)	Measured Frequency (Hz)	Frequency Tolerance (ppm)	Limit (ppm)
100%	120V/60Hz	20	1882.5	6.39	0.003	±2.5
115%	138V/60Hz	20	1882.5	-5.61	-0.003	±2.5
85%	102V/60Hz	20	1882.5	5.45	0.003	±2.5

Note: Band25 Covered Band2.



Operating Frequency	836.5MHz
Channel	CH26915
Test Mode	LTE Band 26
Reference Voltage	AC 120V/60Hz

Temperature vs. Frequency Stability						
Voltage (%)	Power (VAC)	Temp (°C)	Declared Frequency (MHz)	Measured Frequency (Hz)	Frequency Tolerance (ppm)	Limit (ppm)
100%	120V/60Hz	-30	836.5	-3.08	-0.004	±2.5
		-20	836.5	4.31	0.005	±2.5
		-10	836.5	2.69	0.003	±2.5
		0	836.5	2.85	0.003	±2.5
		10	836.5	-3.15	-0.004	±2.5
		+ 20 (Ref)	836.5	-3.56	-0.004	±2.5
		30	836.5	-3.45	-0.004	±2.5
		40	836.5	-3.23	-0.004	±2.5
		50	836.5	2.88	0.003	±2.5
Voltage vs. Frequency Stability						
Voltage (%)	Power (VAC)	Temp (°C)	Declared Frequency (MHz)	Measured Frequency (Hz)	Frequency Tolerance (ppm)	Limit (ppm)
100%	120V/60Hz	20	836.5	-3.56	-0.004	±2.5
115%	138V/60Hz	20	836.5	-3.59	-0.004	±2.5
85%	102V/60Hz	20	836.5	-2.89	-0.003	±2.5

Note: Band26 Covered Band5.

Operating Frequency	2593MHz
Channel	CH40620
Test Mode	LTE Band 41
Reference Voltage	AC 120V/60Hz

Temperature vs. Frequency Stability						
Voltage (%)	Power (VAC)	Temp (°C)	Declared Frequency (MHz)	Measured Frequency (Hz)	Frequency Tolerance (ppm)	Limit (ppm)
100%	120V/60Hz	-30	2593	-12.52	-0.005	±2.5
		-20	2593	10.86	0.004	±2.5
		-10	2593	13.09	0.005	±2.5
		0	2593	17.09	0.007	±2.5
		10	2593	10.66	0.004	±2.5
		+ 20 (Ref)	2593	-9.77	-0.004	±2.5
		30	2593	-9.33	-0.004	±2.5
		40	2593	-10.91	-0.004	±2.5
		50	2593	9.44	0.004	±2.5
Voltage vs. Frequency Stability						
Voltage (%)	Power (VAC)	Temp (°C)	Declared Frequency (MHz)	Measured Frequency (Hz)	Frequency Tolerance (ppm)	Limit (ppm)
100%	120V/60Hz	20	2593	-9.77	-0.004	±2.5
115%	138V/60Hz	20	2593	-11.83	-0.005	±2.5
85%	102V/60Hz	20	2593	-10.24	-0.004	±2.5

Note: Band41 Covered Band38.

\_\_\_\_\_ The End \_\_\_\_\_