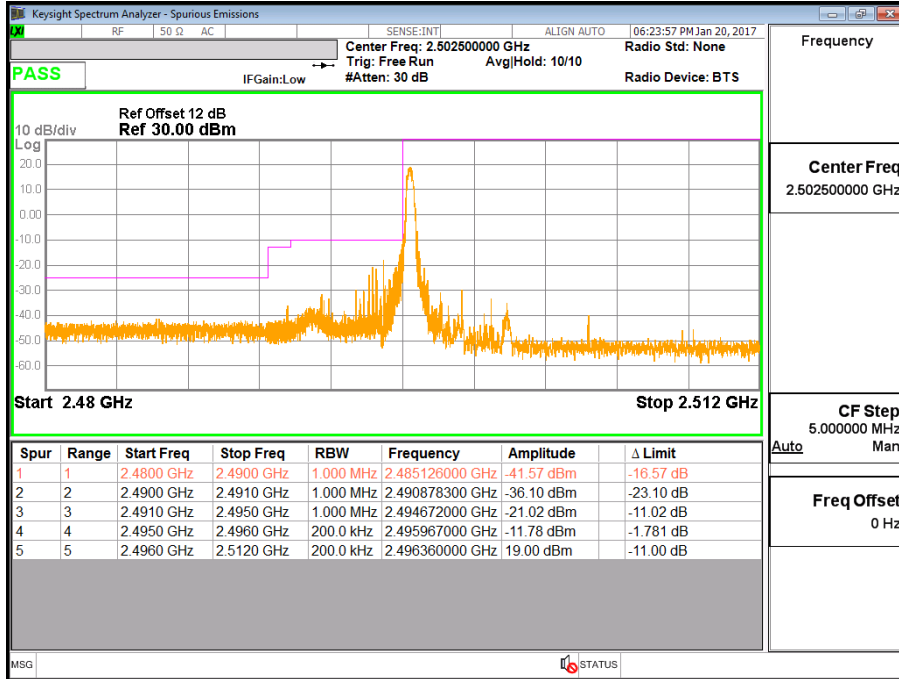
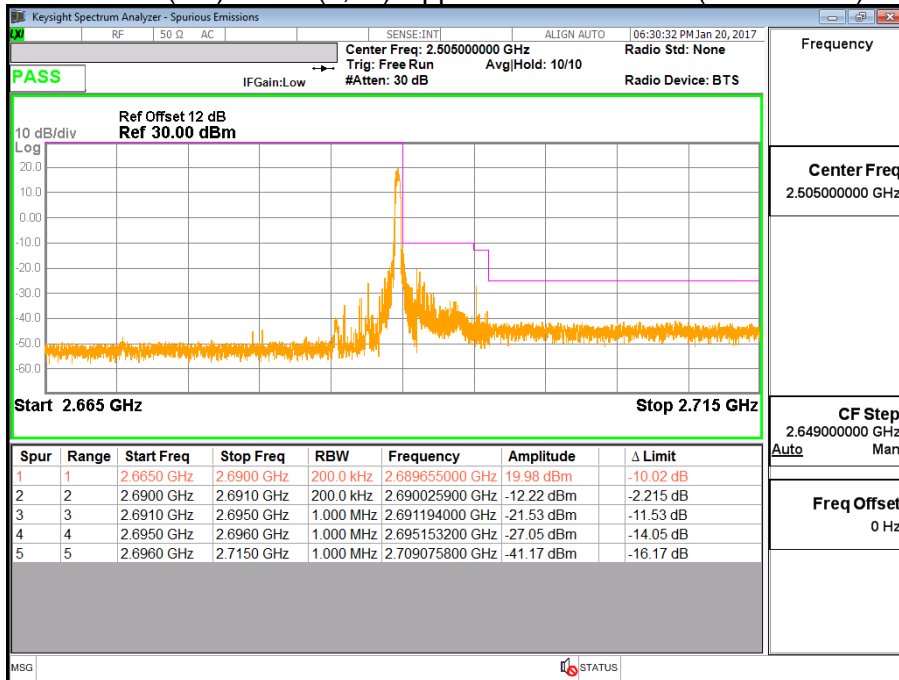


Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Mode	Spurious Emission At Antenna Terminals (+/-1MHz)		
Date of Test	2017/01/20	Test Site	CTR
Test Condition	Block Edge Test (Band 41 (5M))		

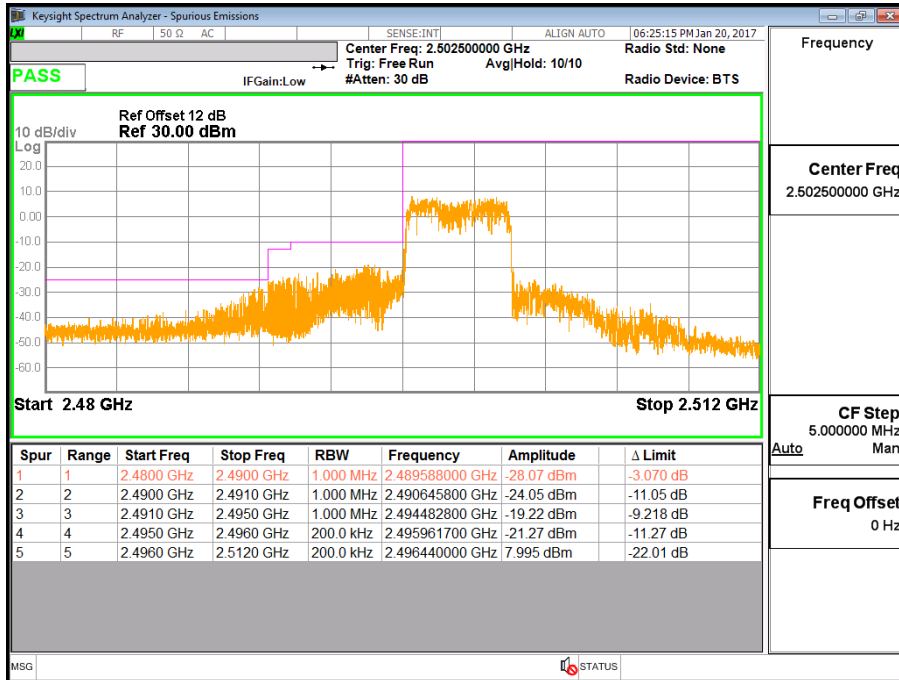
Band 41 (5M) QPSK(1,0) Lower Channel 39675 (2498.5MHz)



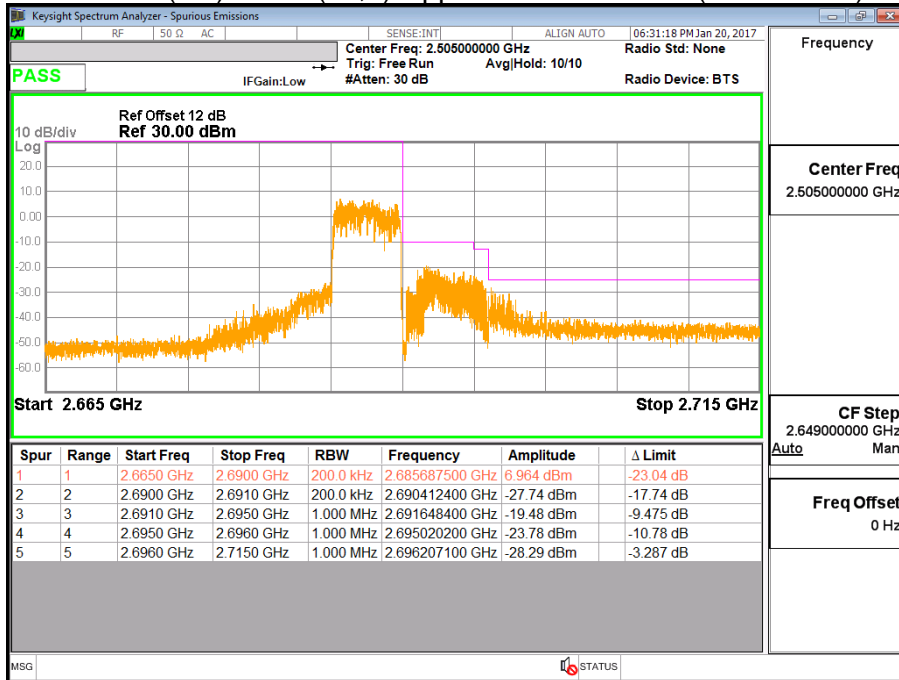
Band 41 (5M) QPSK(1,24) Upper Channel 41565 (2687.5MHz)



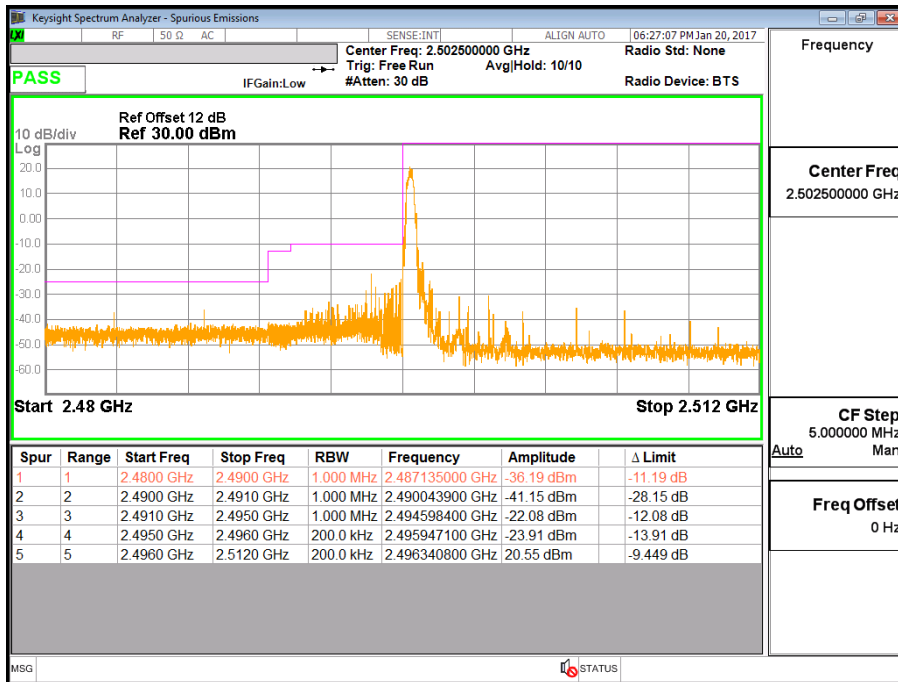
Band 41 (5M) QPSK(25,0) Lower Channel 39675 (2498.5MHz)



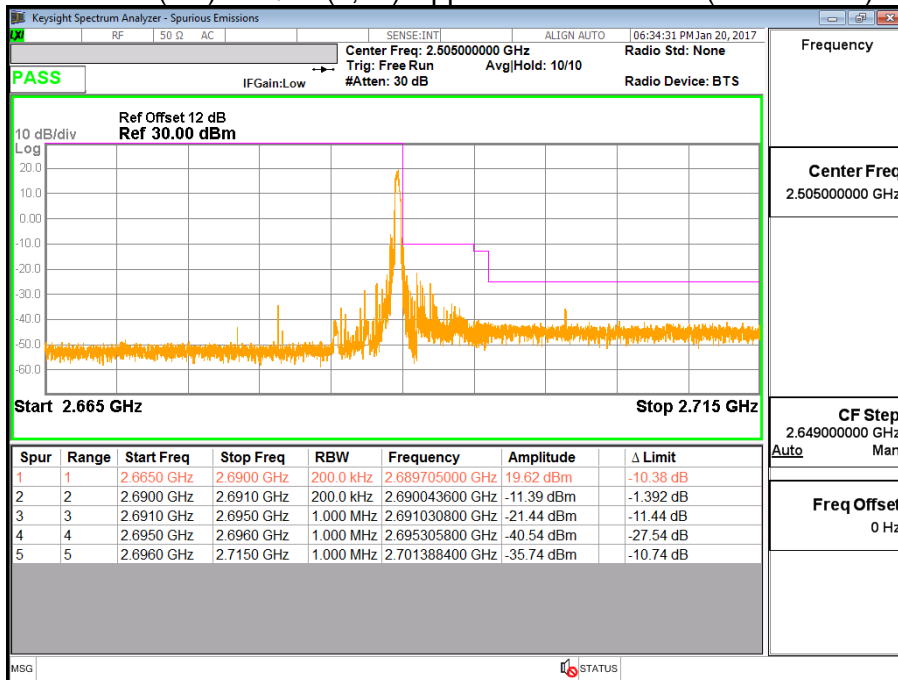
Band 41 (5M) QPSK(25,0) Upper Channel 41565 (2687.5MHz)



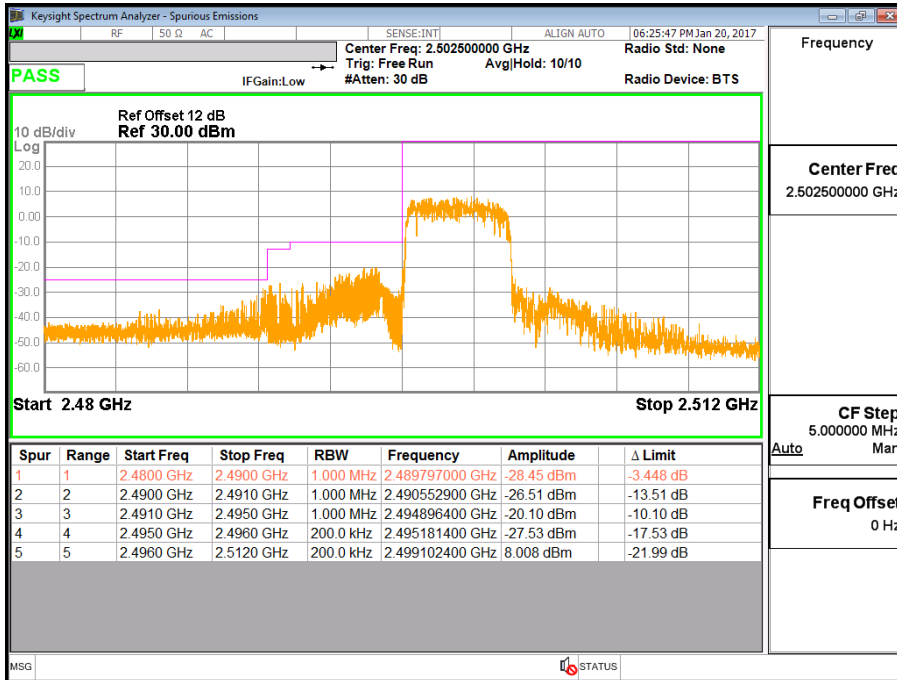
Band 41 (5M) 16QAM(1,0) Lower Channel 39675 (2498.5MHz)



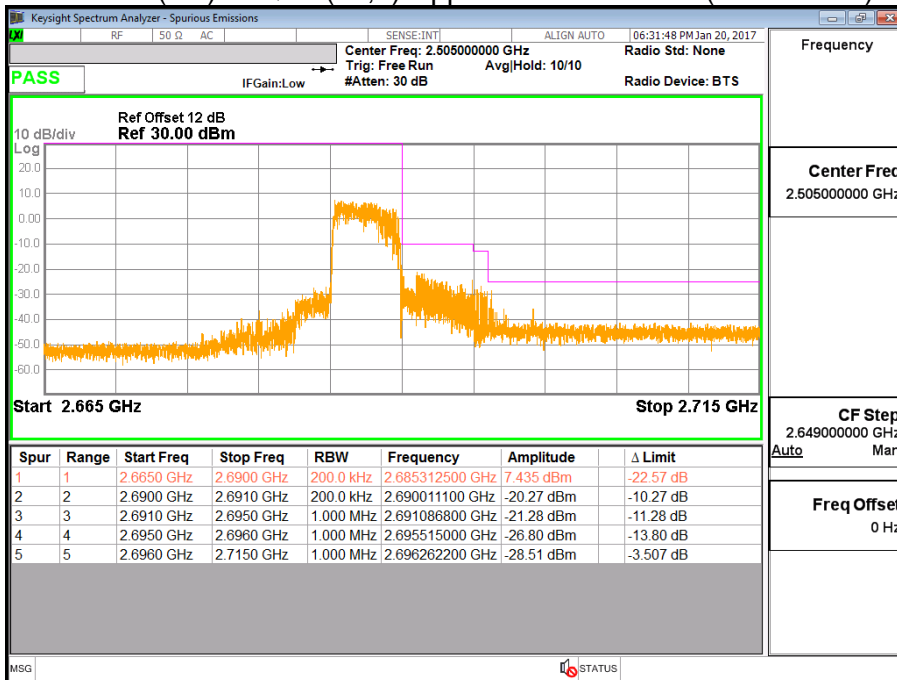
Band 41 (5M) 16QAM(1,24) Upper Channel 41565 (2687.5MHz)



Band 41 (5M) 16QAM(25,0) Lower Channel 39675 (2498.5MHz)

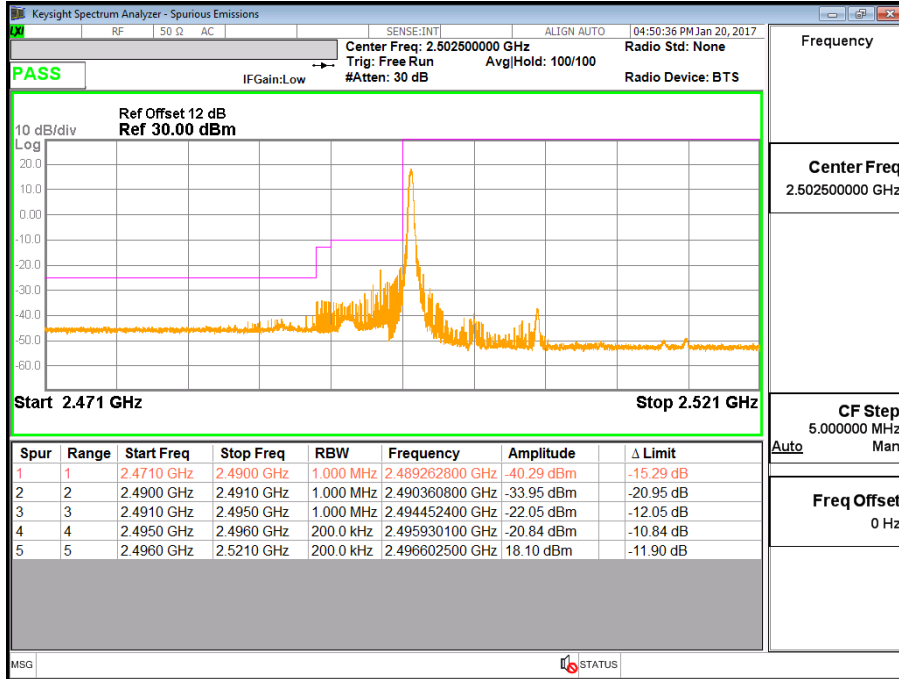


Band 41 (5M) 16QAM(25,0) Upper Channel 41565 (2687.5MHz)

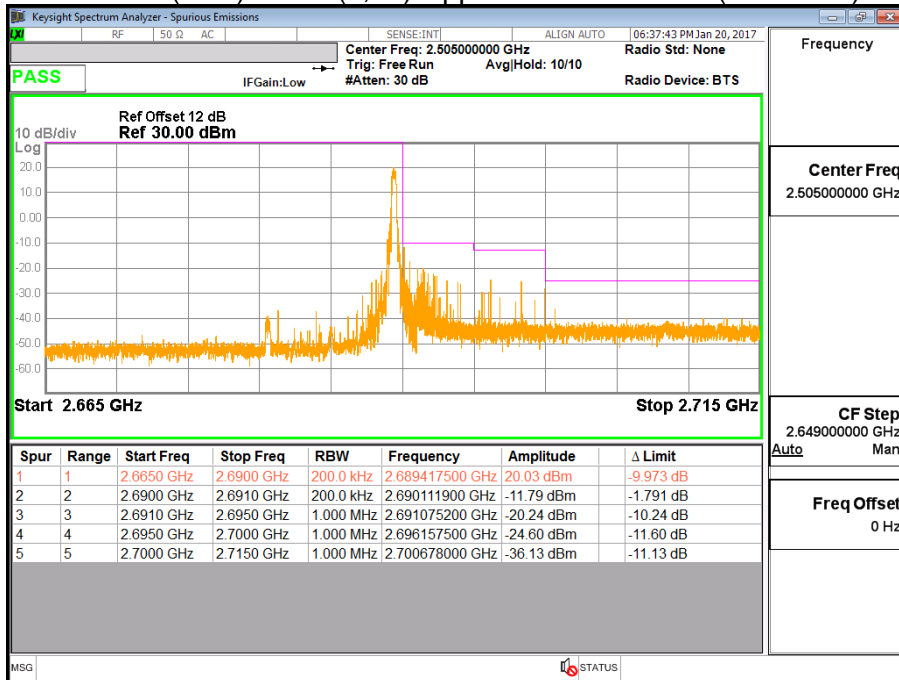


Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Mode	Spurious Emission At Antenna Terminals (+/-1MHz)		
Date of Test	2017/01/20	Test Site	CTR
Test Condition	Block Edge Test (Band 41 (10M))		

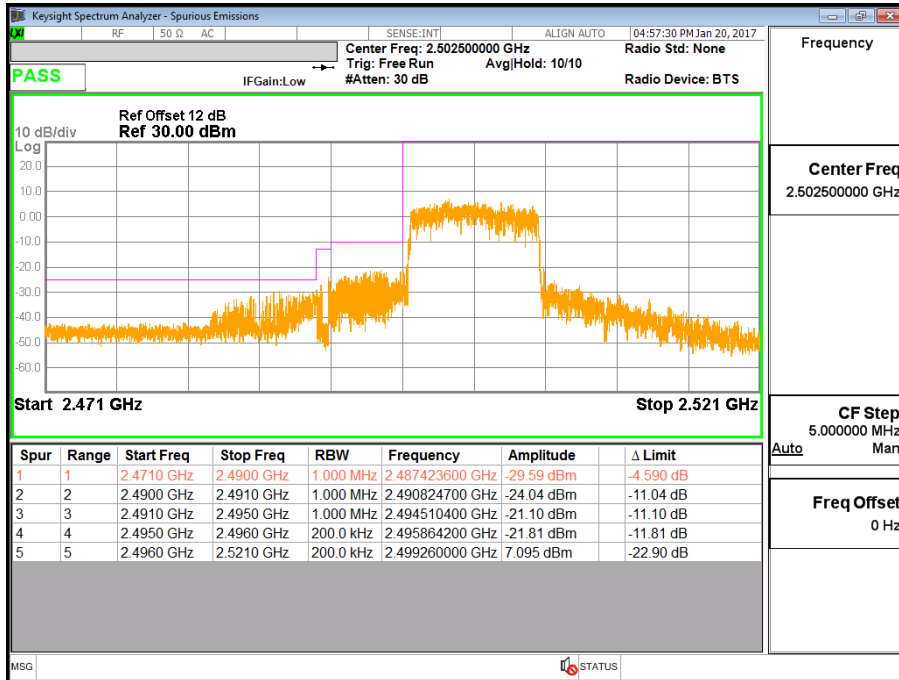
Band 41 (10M) QPSK(1,0) Lower Channel 39700 (2501MHz)



Band 41 (10M) QPSK(1,49) Upper Channel 41540 (2685MHz)



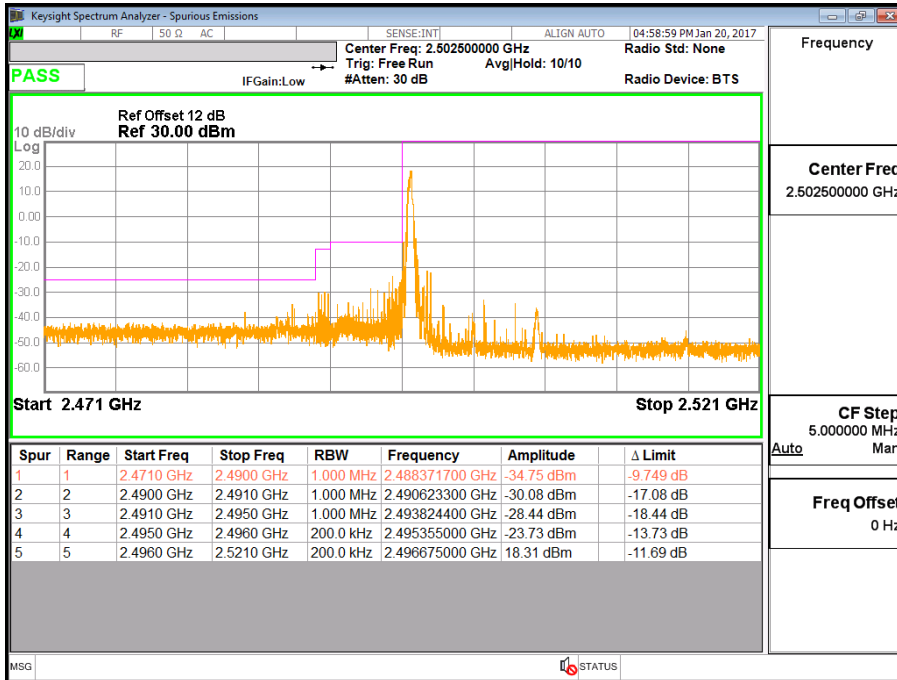
Band 41 (10M) QPSK(50,0) Lower Channel 39700 (2501MHz)



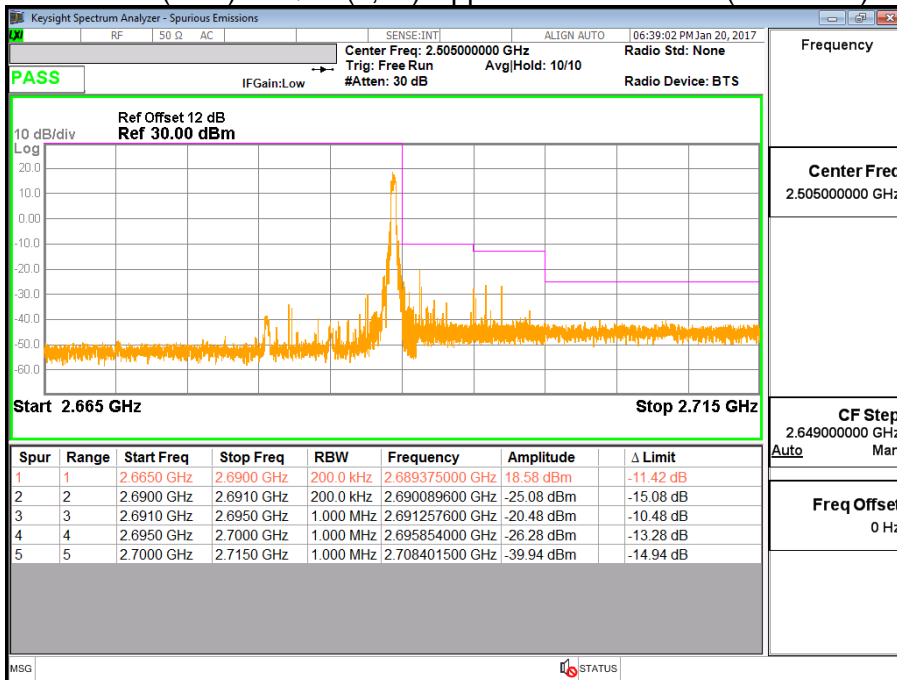
Band 41 (10M) QPSK(50,0) Upper Channel 41540 (2685MHz)



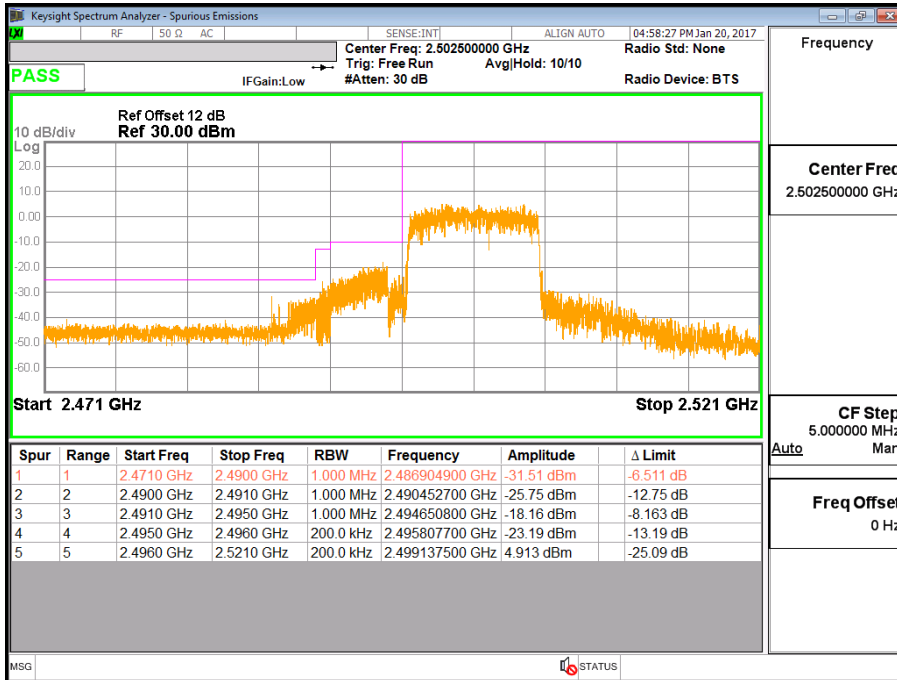
Band 41 (10M) 16QAM(1,0) Lower Channel 39700 (2501MHz)



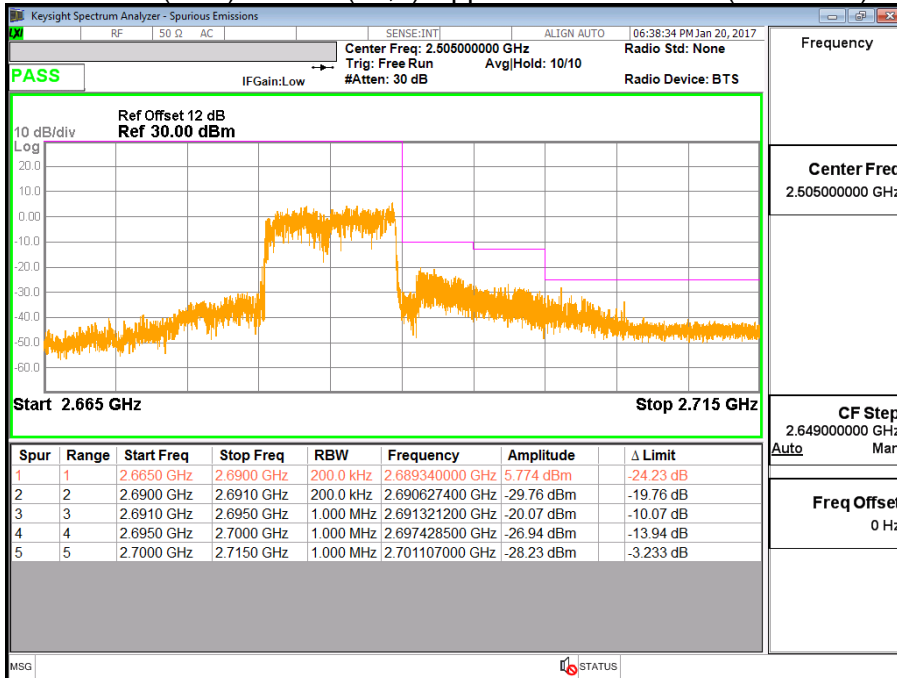
Band 41 (10M) 16QAM(1,49) Upper Channel 41540 (2685MHz)



Band 41 (10M) 16QAM(50,0) Lower Channel 39700 (2501MHz)

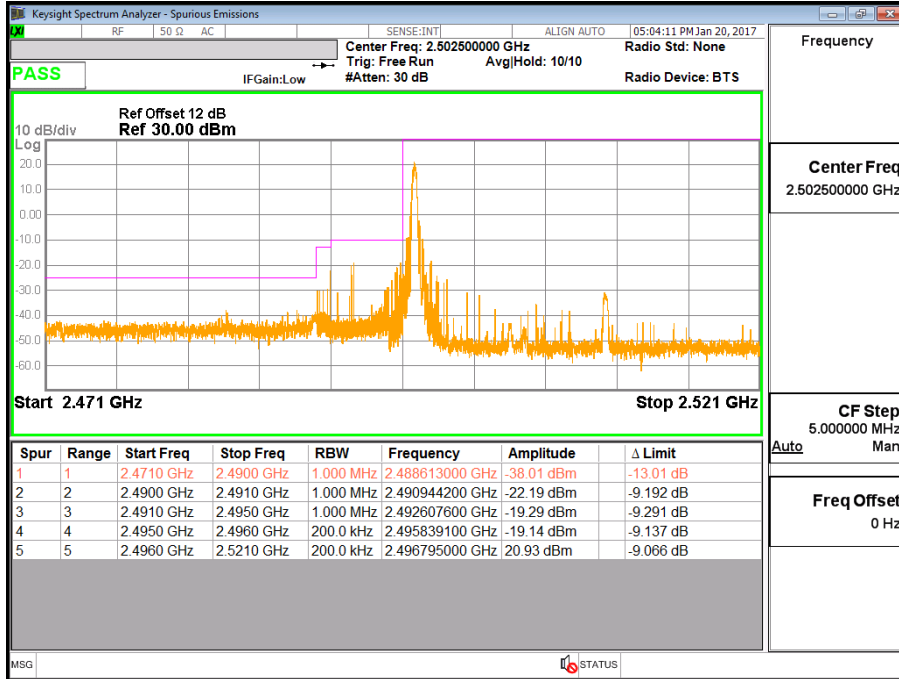


Band 41 (10M) 16QAM(50,0) Upper Channel 41540 (2685MHz)

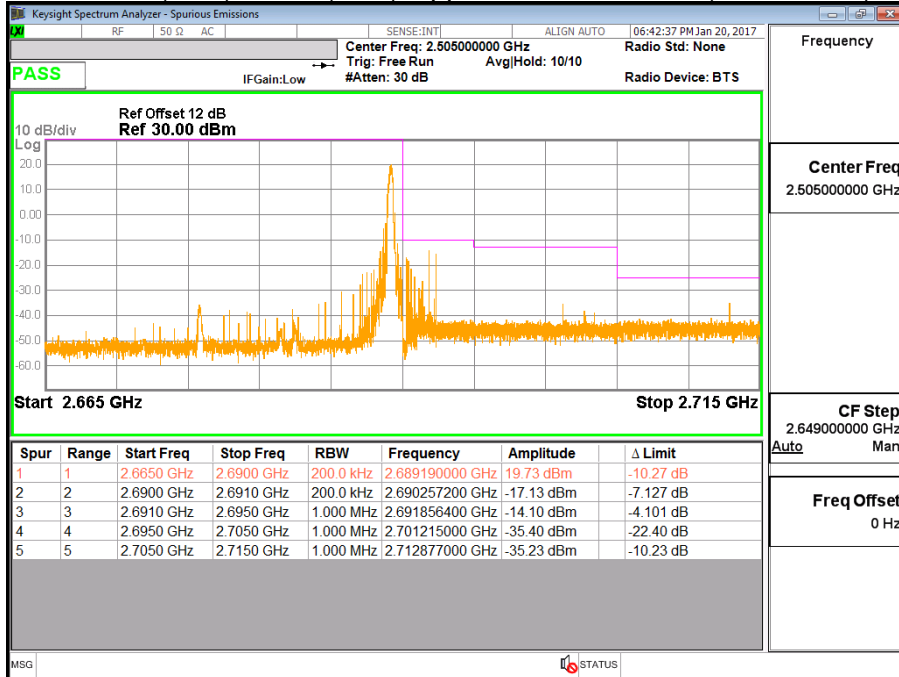


Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Mode	Spurious Emission At Antenna Terminals (+/-1MHz)		
Date of Test	2017/01/20	Test Site	CTR
Test Condition	Block Edge Test (Band 41 (15M))		

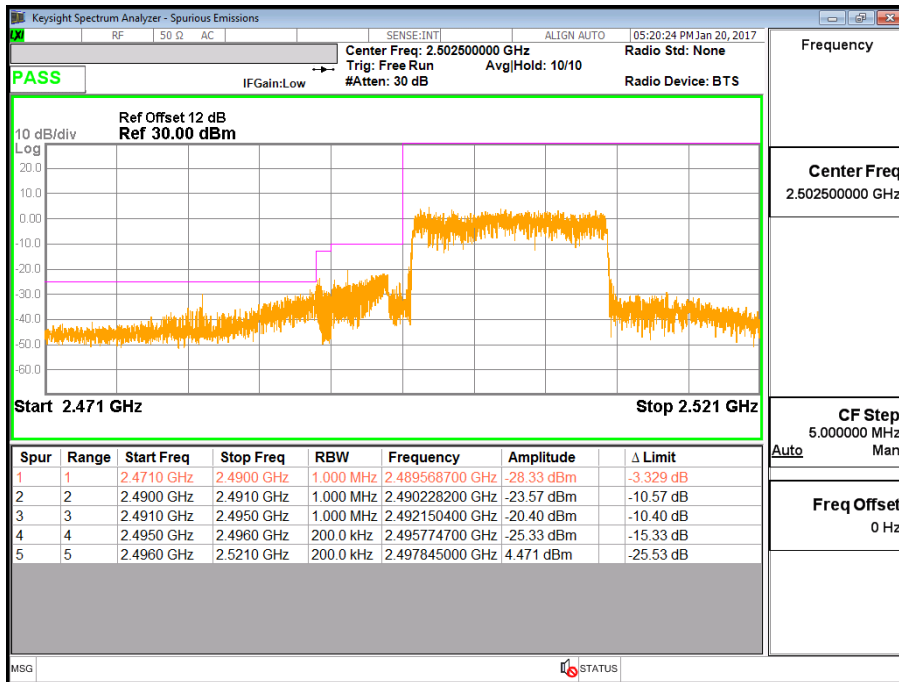
Band 41 (15M)QPSK(1,0) Lower Channel 39725 (2503.5MHz)



Band 41 (15M) QPSK(1,74) Upper Channel 41515 (2682.5MHz)



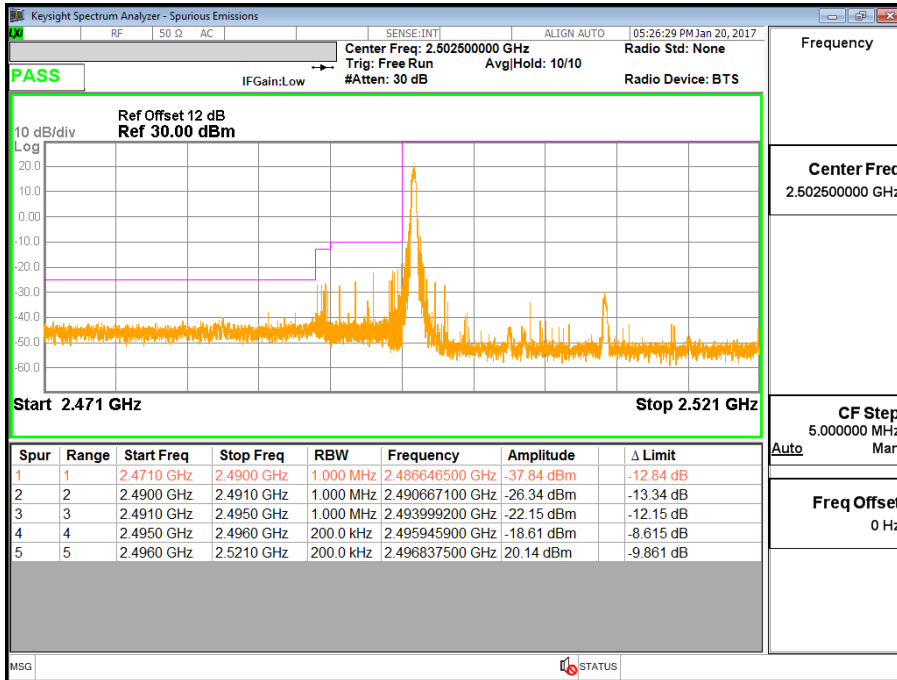
Band 41 (15M) QPSK(75,0) Lower Channel 39725 (2503.5MHz)



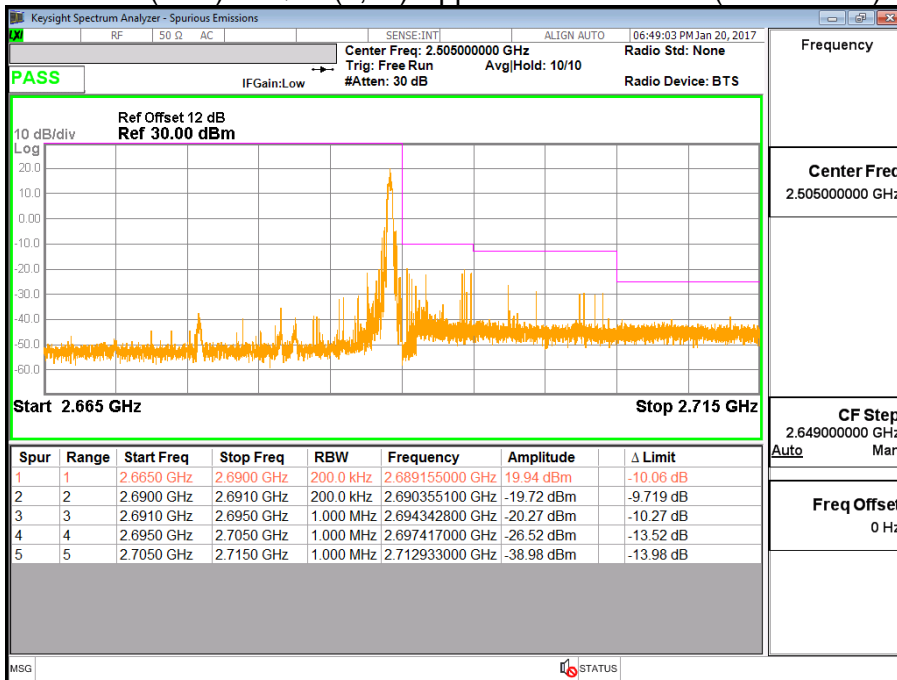
Band 41 (15M) QPSK(75,0) Upper Channel 41515 (2682.5MHz)



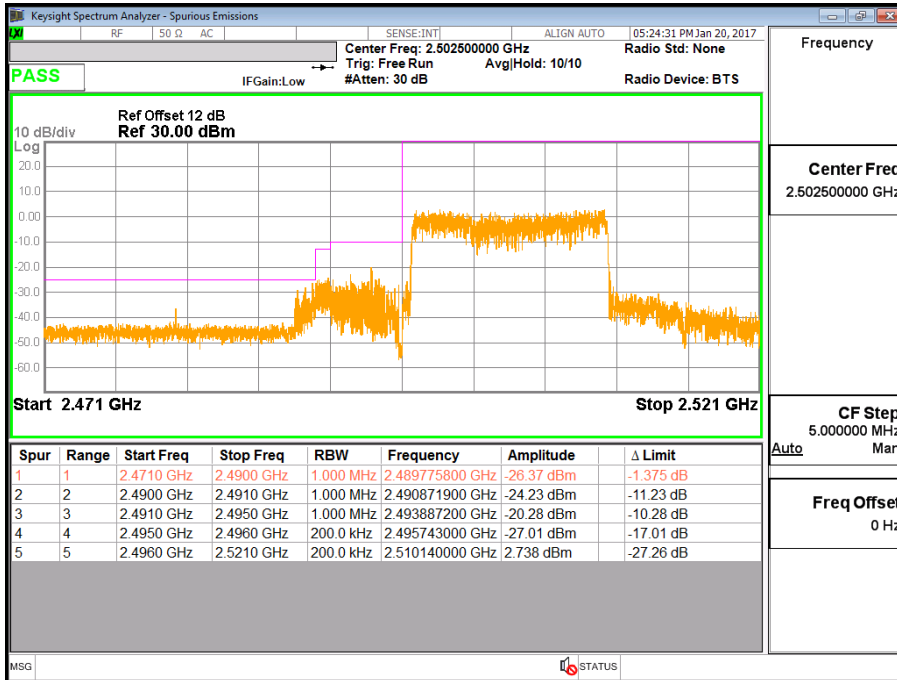
Band 41 (15M) 16QAM(1,0) Lower Channel 39725 (2503.5MHz)



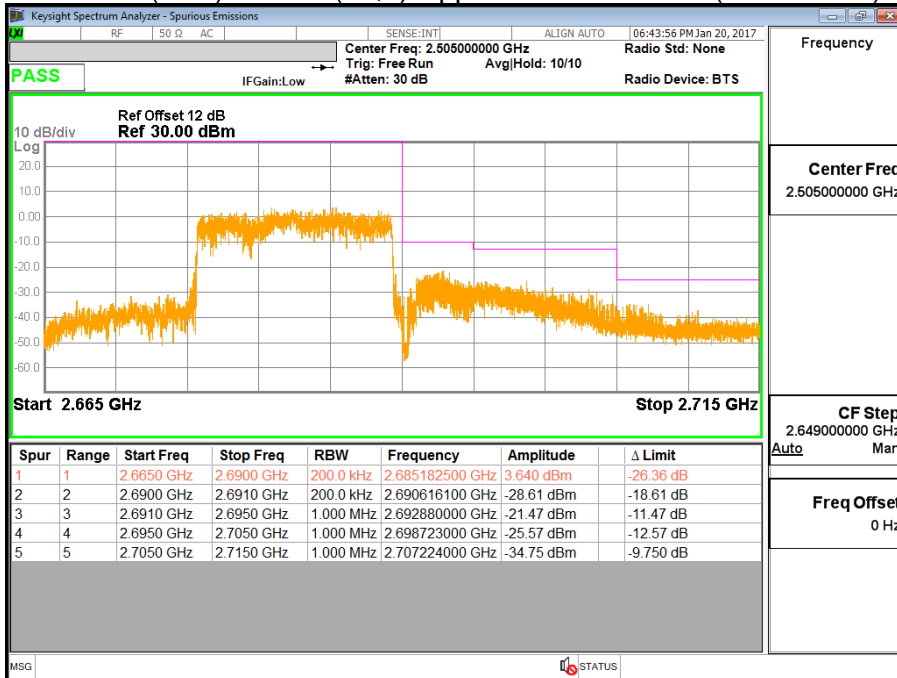
Band 41 (15M) 16QAM(1,74) Upper Channel 41515 (2682.5MHz)



Band 41 (15M) 16QAM(75,0) Lower Channel 39725 (2503.5MHz)

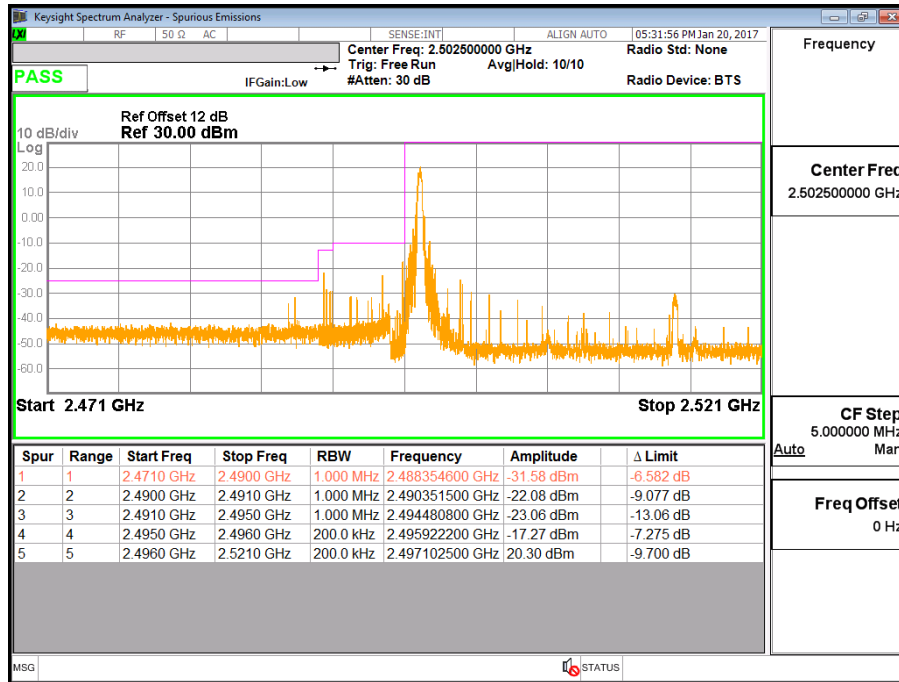


Band 41 (15M) 16QAM(75,0) Upper Channel 41515 (2682.5MHz)

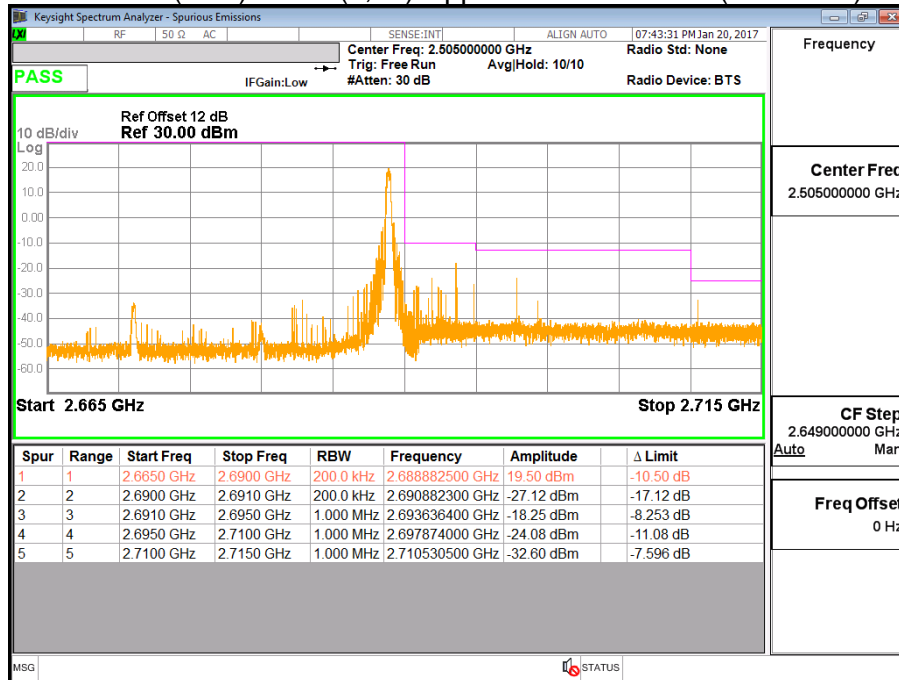


Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Mode	Spurious Emission At Antenna Terminals (+/-1MHz)		
Date of Test	2017/01/20	Test Site	CTR
Test Condition	Block Edge Test (Band 41 (20M))		

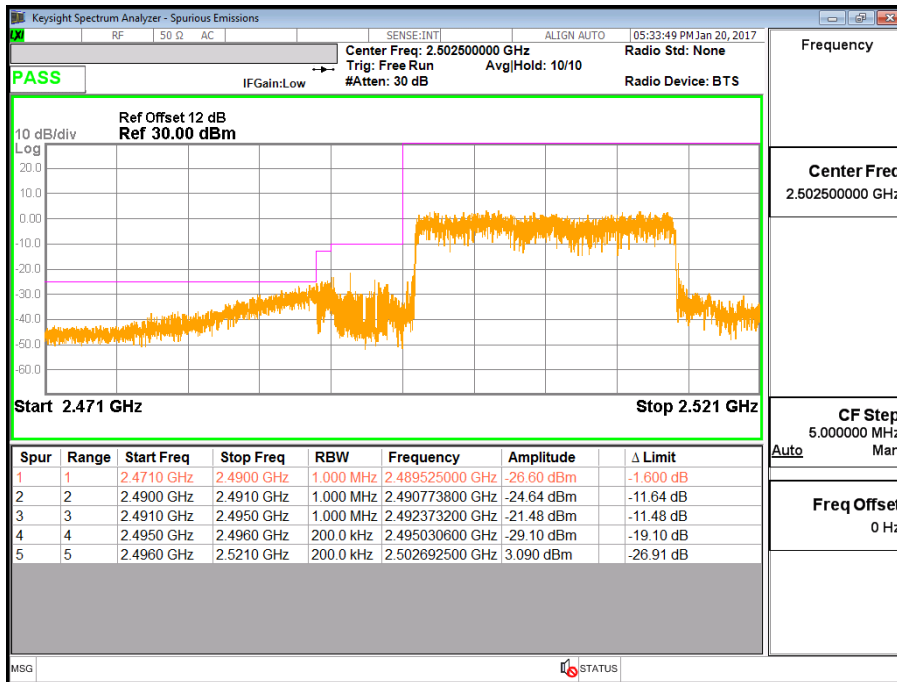
Band 41 (20M)QPSK(1,0) Lower Channel 39750 (2506MHz)



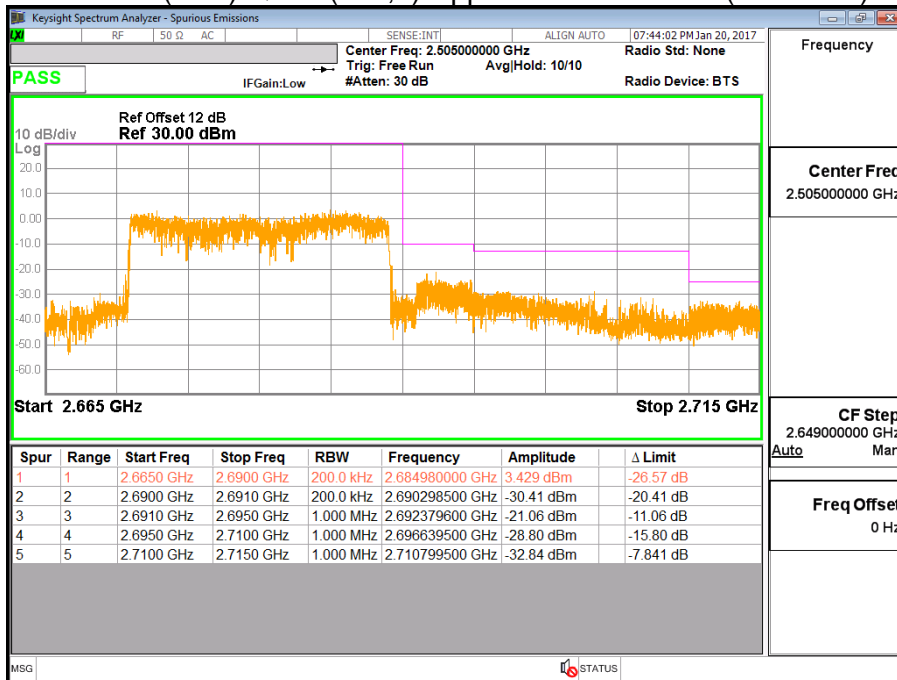
Band 41 (20M) QPSK(1,99) Upper Channel 41490 (2680MHz)



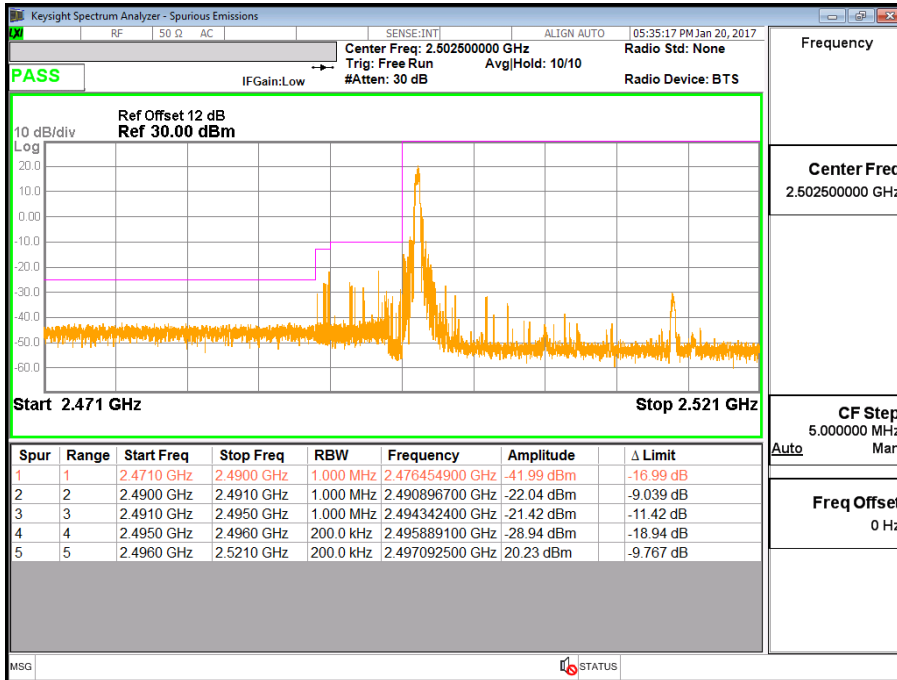
Band 41 (20M) QPSK(100,0) Lower Channel 39750 (2506MHz)



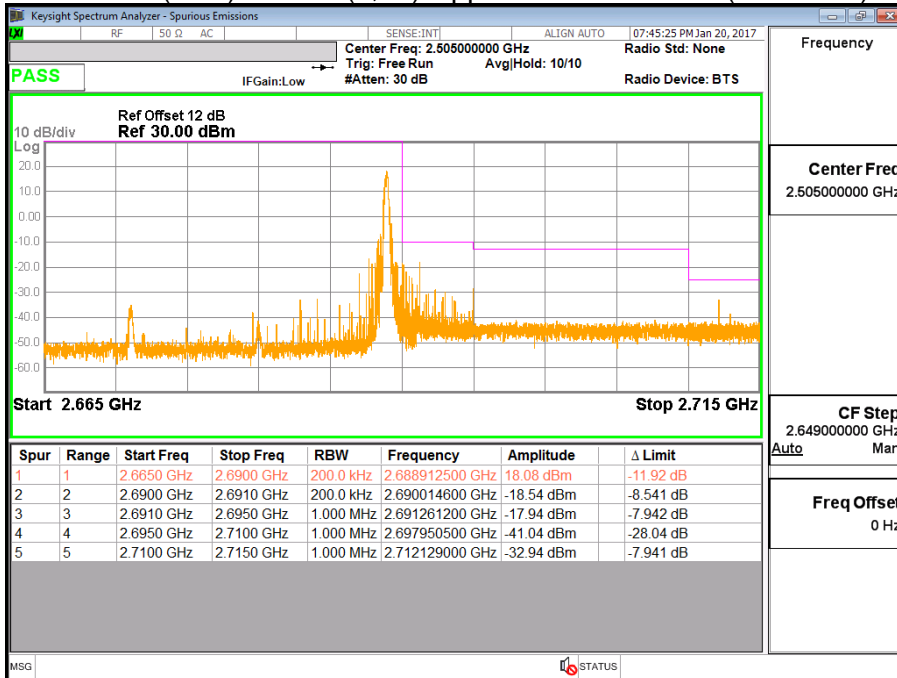
Band 41 (20M) QPSK(100,0) Upper Channel 41490 (2680MHz)



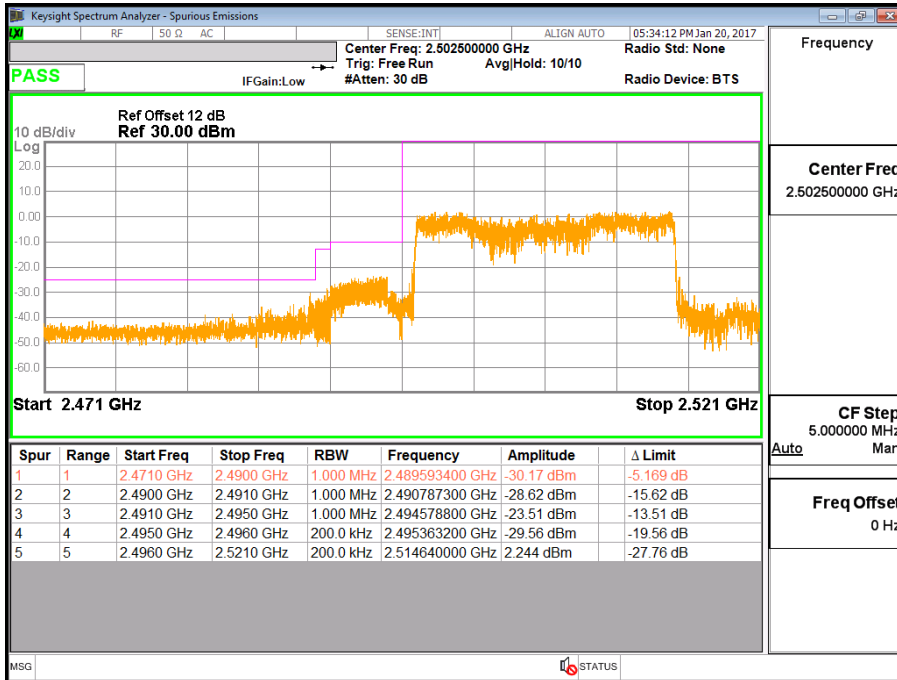
Band 41 (20M) 16QAM(1,0) Lower Channel 39750 (2506MHz)



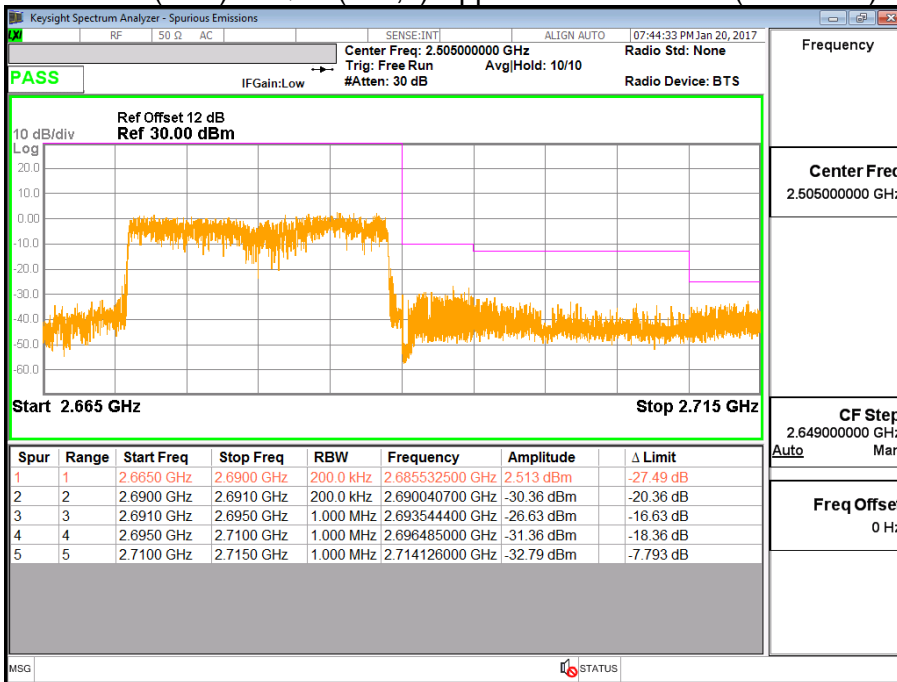
Band 41 (20M) 16QAM(1,99) Upper Channel 41490 (2680MHz)



Band 41 (20M) 16QAM(100,0) Lower Channel 39750 (2506MHz)



Band 41 (20M) 16QAM(100,0) Upper Channel 41490 (2680MHz)



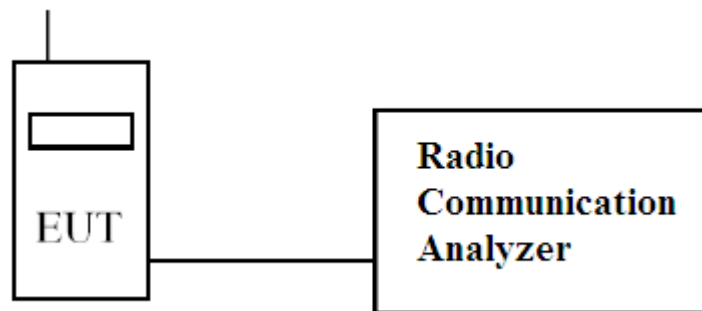
6. Spurious Emission

6.1. Test Specification

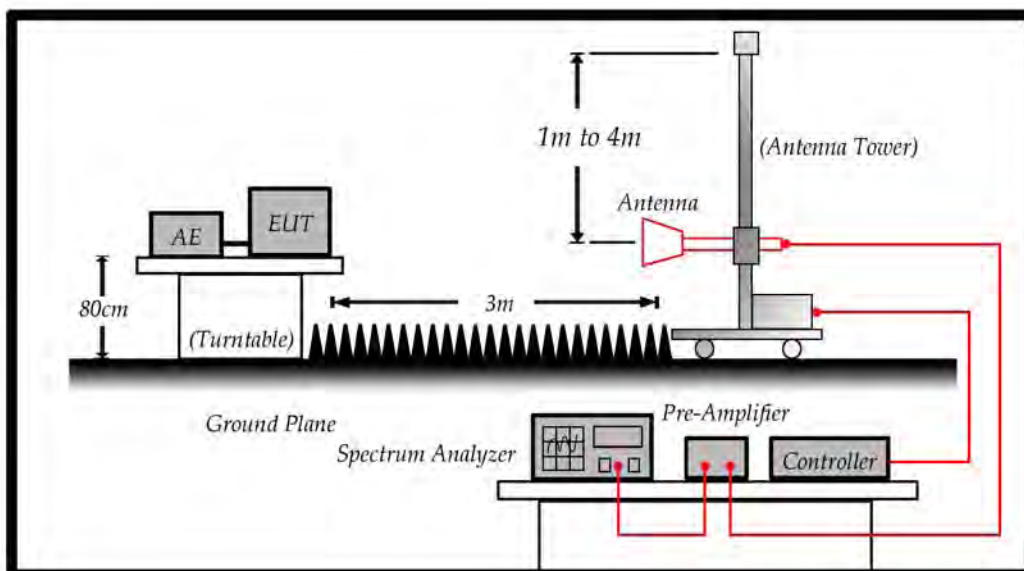
According to Part 2.1051, 2.1053, 22.917, 24.238, 27.53

6.2. Test Setup

6.2.1 Spurious emissions at antenna terminals.



6.2.2 Field strength of spurious radiation.



Note: The Worst case Mode is QPSK Mode for Radiated spurious emissions.

6.3. Limits

Limit	<-13dBm
--------------	-------------------

$43 + 10\text{Log}(P)$ down on the carrier where P is the power in Watts.

For LTE Band 7:

Limit	<-25dBm
--------------	-------------------

$55 + 10\text{Log}(P)$ down on the carrier where P is the power in Watts.

6.4. Test Procedure

In accordance with Part 2.1051, 2.1053, 22.917, 24.238, 27.53, the spurious emissions from the antenna terminal were measured. The transmitter output power was attenuated using a combination of filters and attenuators and the frequency spectrum investigated from 30MHz to 20GHz. The EUT was set to transmit on full power. The EUT was tested on Low, middle and High channels for both power levels. The resolution and video bandwidth was set to 1MHz/3MHz in accordance with Part 2.1051, 2.1053, 22.917, 24.238, 27.53. The spectrum analyzer detector was set to Max Hold. In addition, measurements were made up to the 10th harmonic of the fundamental. The device was then replaced with a substitution antenna, which input signal was adjusted until the received level matched that of the previously detected emission.

- (1) The EUT is tested with maximum rated TX power via the Base Station simulator.
- (2) The EUT is tested in three orthogonal planes, The worst case was showing in this report.

The EUT is placed on a turn table which is 1.5 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

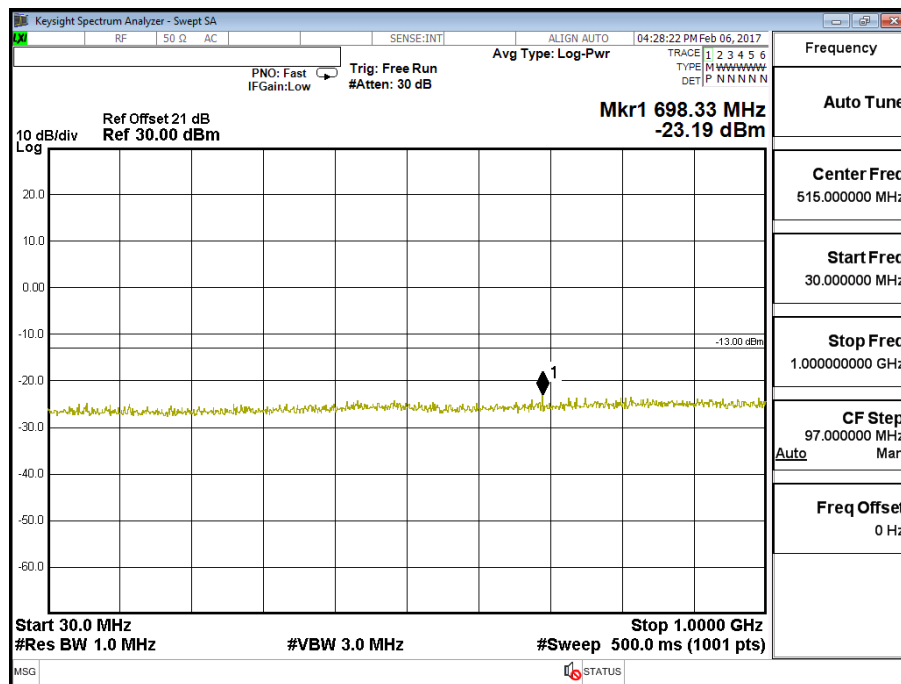
Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to TIA/EIA 603-D on radiated measurement.

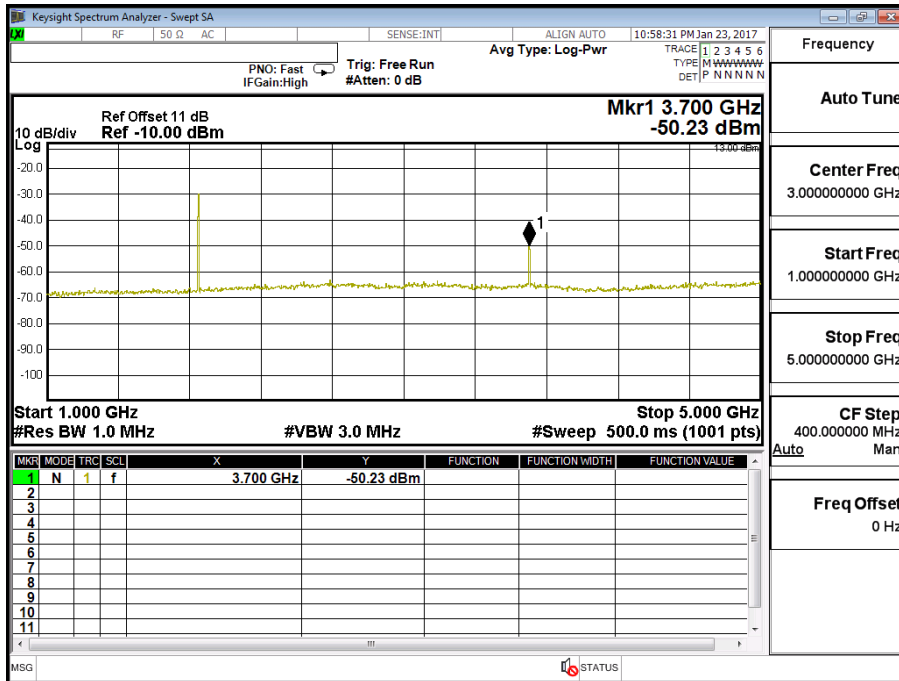
6.5. Test Result of Spurious Emission

Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/06	Test Site	CTR
Test Condition	LTE-Band 25 (1.4M)	Test Range	30MHz~20GHz

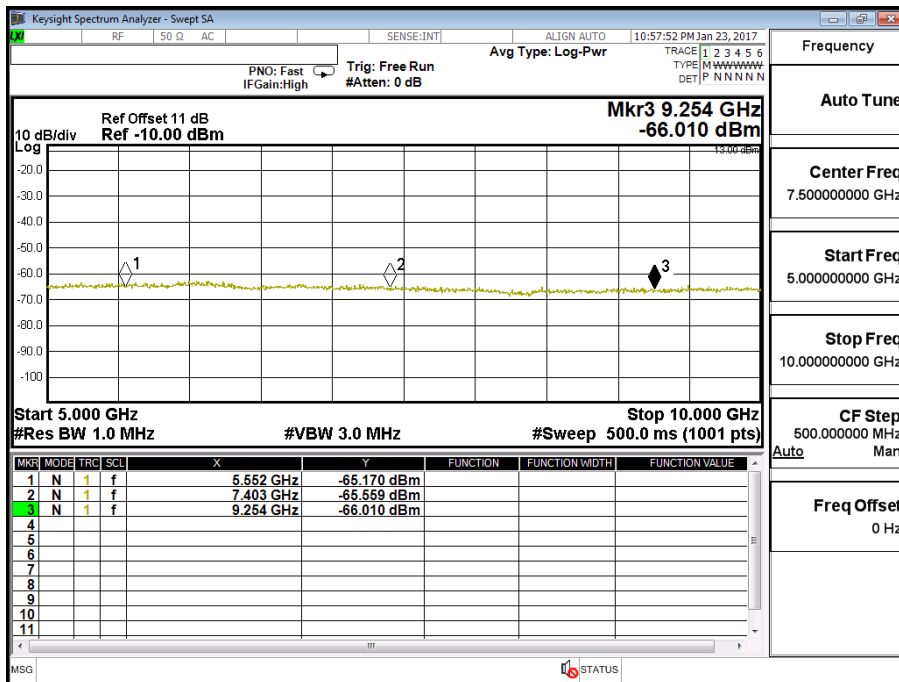
LTE-Band 25 (1.4M) QPSK(1,3) CH26047 (1850.7MHz)

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
3700	-50.230	1.1	-49.130	-13
5552	-65.170	1.23	-63.940	-13
7403	-65.559	1.59	-63.969	-13
9254	-66.010	1.89	-64.120	-13
11104	-63.948	2.07	-61.878	-13
12955	-61.202	2.26	-58.942	-13
14806	-62.555	2.64	-59.915	-13
16656	-60.575	3.5	-57.075	-13
18507	-61.326	3.7	-57.626	-13

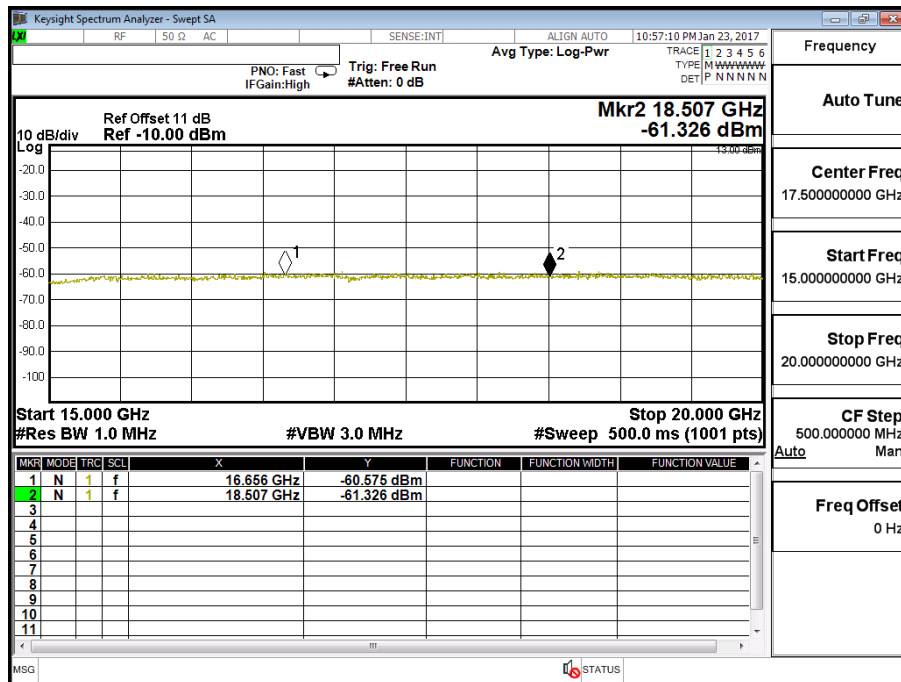
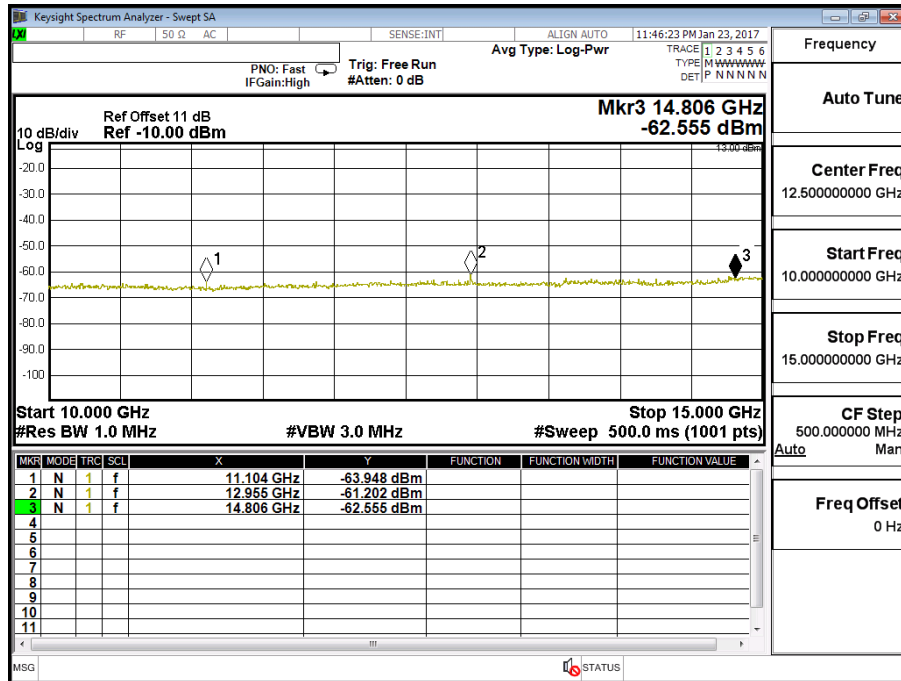




Frequency	Auto Tune
Center Freq	3.000000000 GHz
Start Freq	1.000000000 GHz
Stop Freq	5.000000000 GHz
CF Step	400.000000 MHz
	Auto Man
Freq Offset	0 Hz



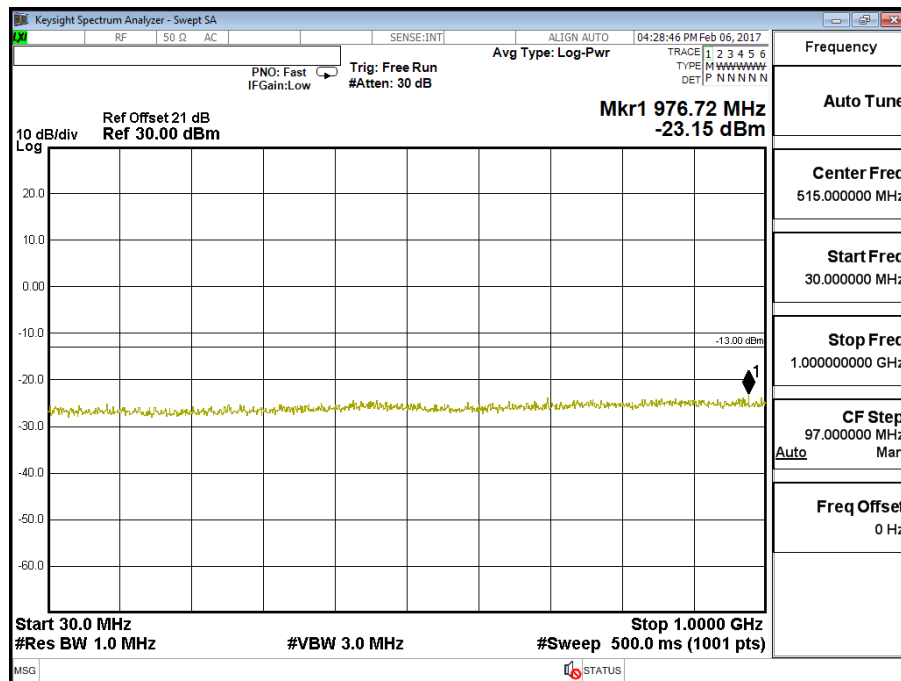
Frequency	Auto Tune
Center Freq	7.500000000 GHz
Start Freq	5.000000000 GHz
Stop Freq	10.000000000 GHz
CF Step	500.000000 MHz
	Auto Man
Freq Offset	0 Hz

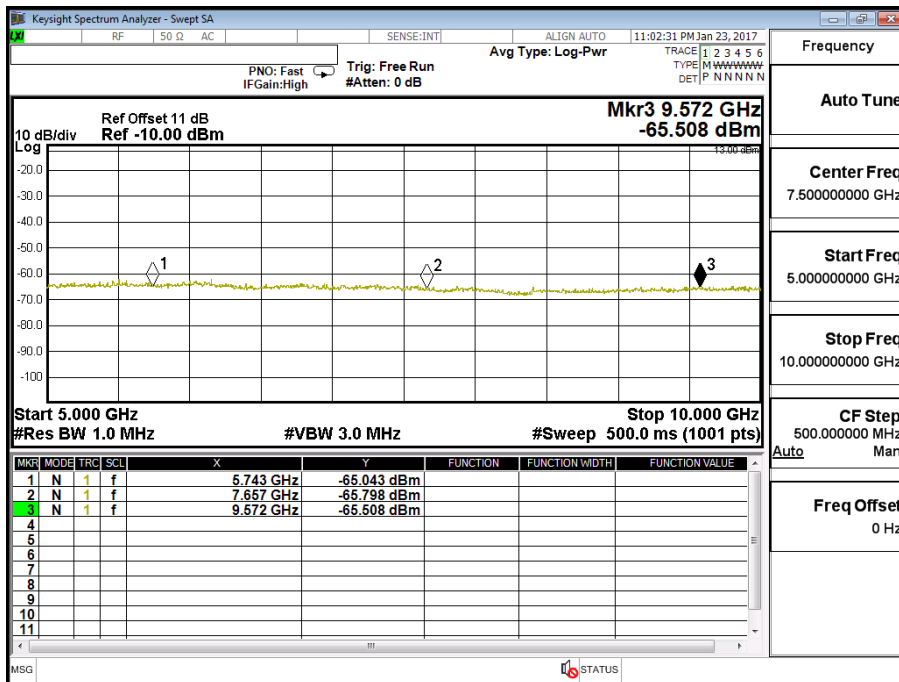
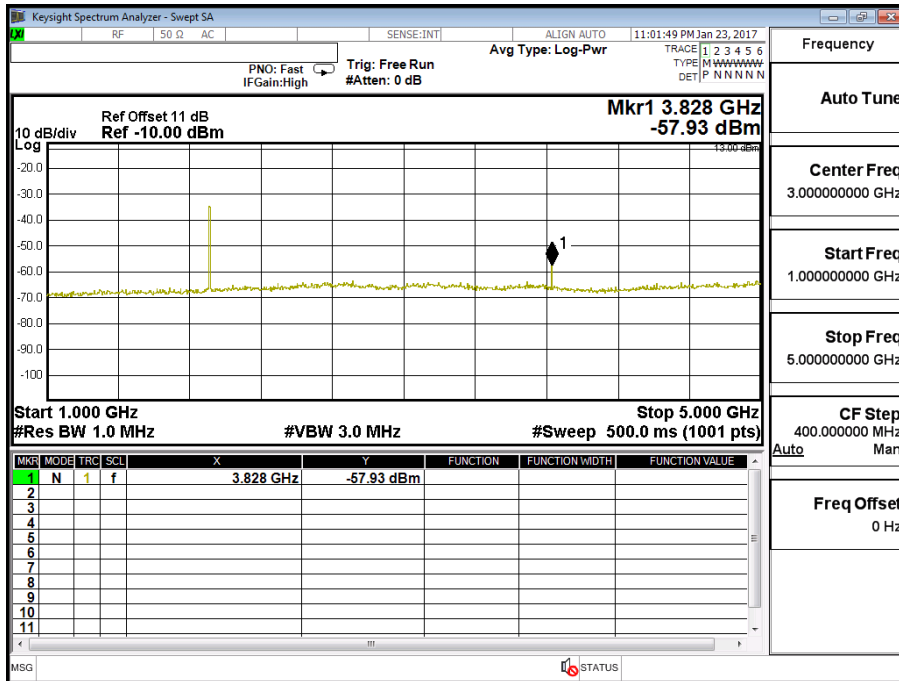


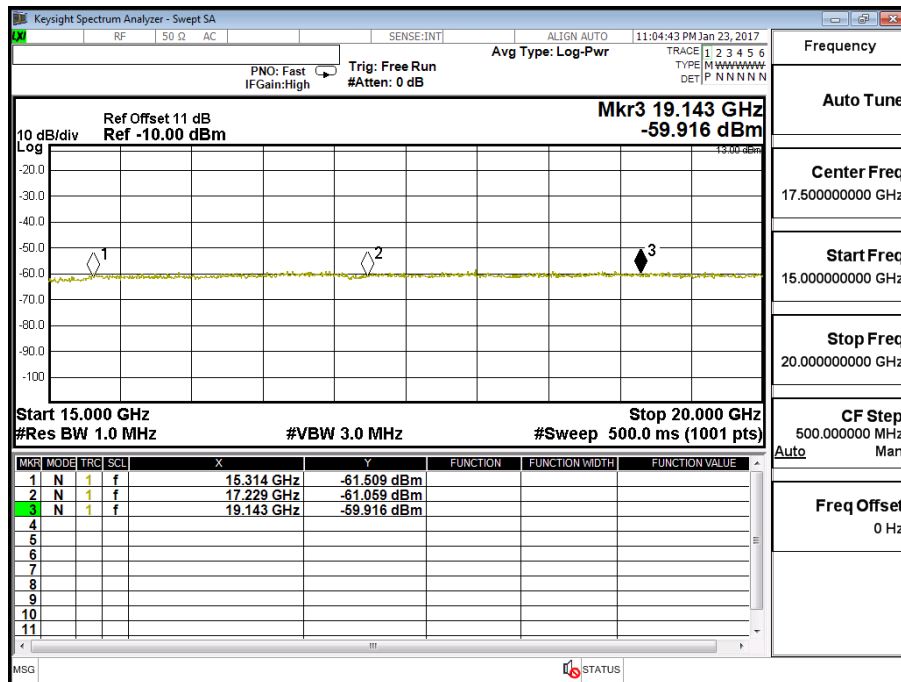
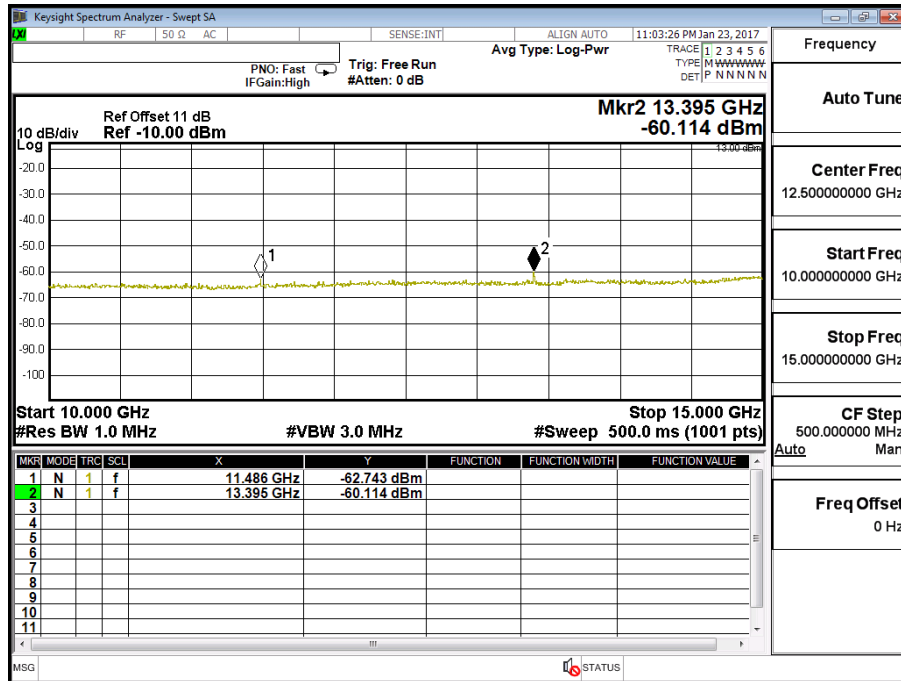
Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/06	Test Site	CTR
Test Condition	LTE-Band 25 (1.4M)	Test Range	30MHz~20GHz

LTE-Band 25 (1.4M) 16QAM(1,0) CH26683 (1914.3MHz)

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
3828	-57.930	1.1	-56.830	-13
5743	-65.043	1.23	-63.813	-13
7657	-65.798	1.59	-64.208	-13
9572	-65.508	1.89	-63.618	-13
11486	-62.743	2.07	-60.673	-13
13395	-60.114	2.26	-57.854	-13
15314	-61.509	2.64	-58.869	-13
17229	-61.059	3.5	-57.559	-13
19143	-59.916	3.7	-56.216	-13



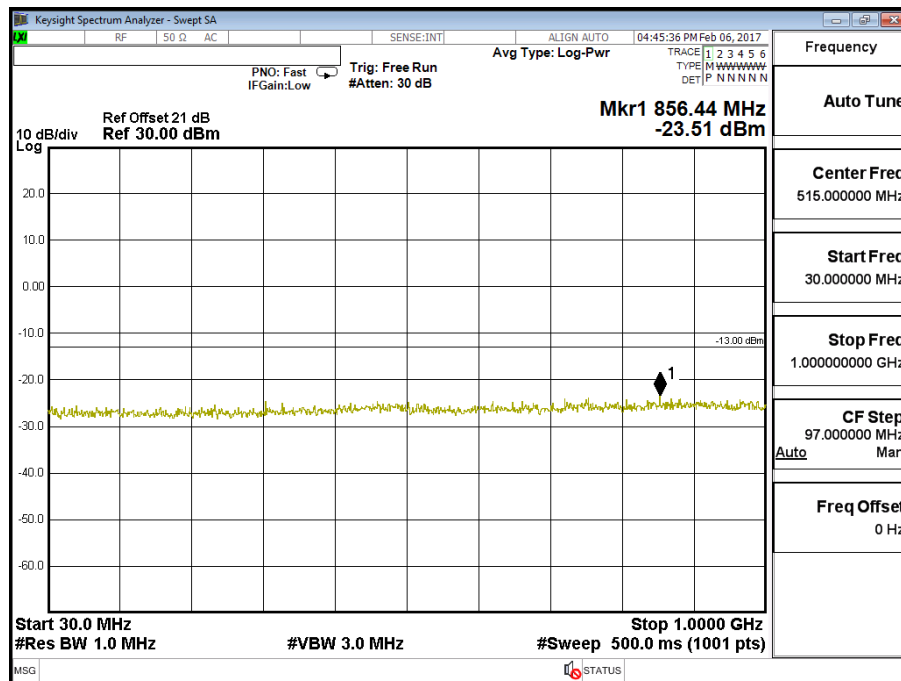


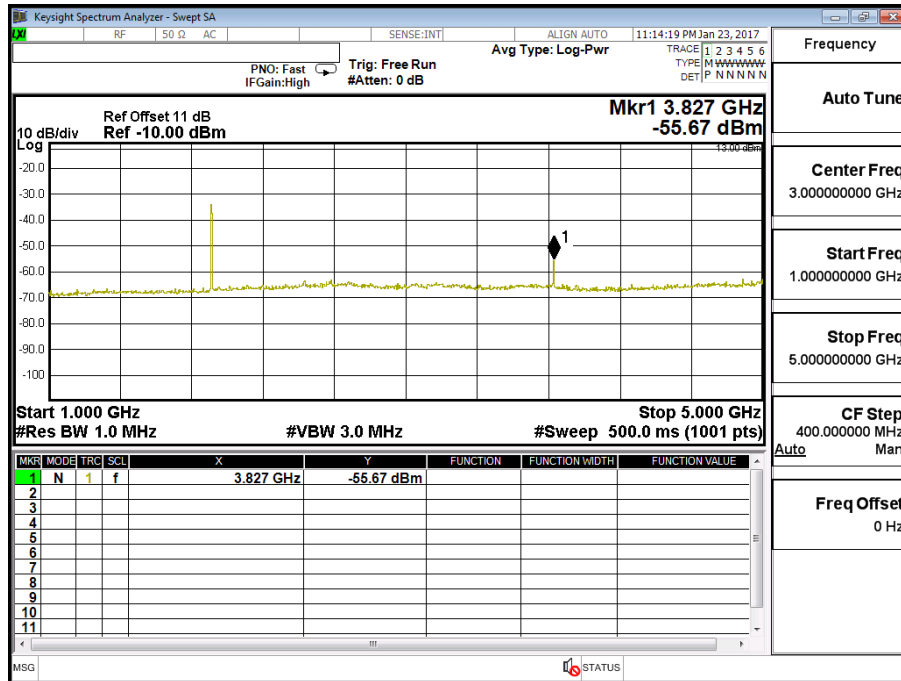


Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/06	Test Site	CTR
Test Condition	LTE-Band 25 (3M)	Test Range	30MHz~20GHz

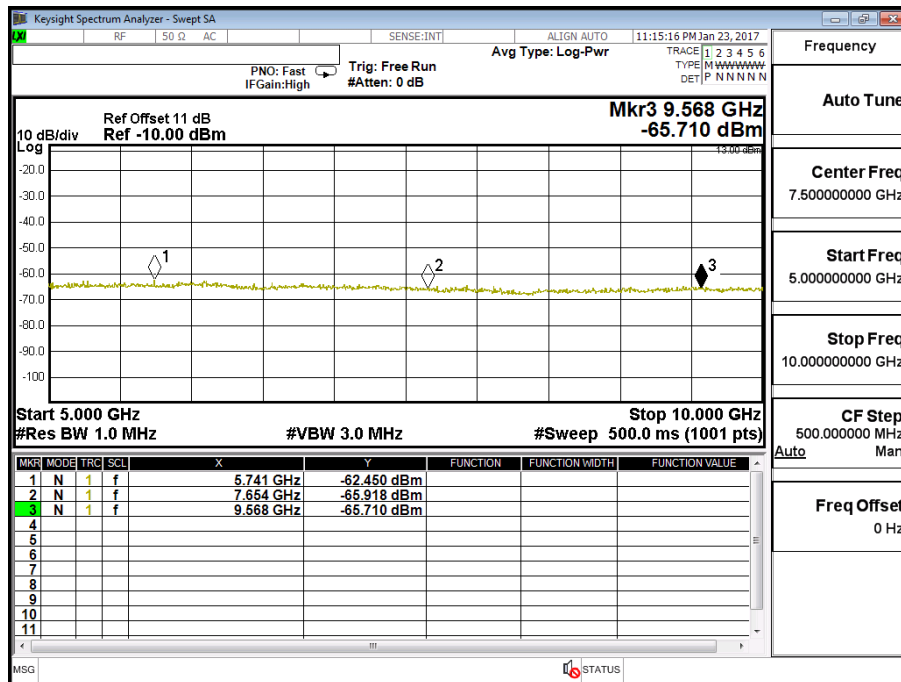
LTE-Band 25 (3M) QPSK(1,7) CH26675 (1913.5MHz)

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
3827	-55.670	1.1	-54.570	-13
5741	-62.450	1.23	-61.220	-13
7654	-65.918	1.59	-64.328	-13
9568	-65.710	1.89	-63.820	-13
11481	-62.490	2.07	-60.420	-13
13395	-59.763	2.26	-57.503	-13
15308	-59.845	2.64	-57.205	-13
17222	-59.613	3.5	-56.113	-13
19135	-59.757	3.7	-56.057	-13

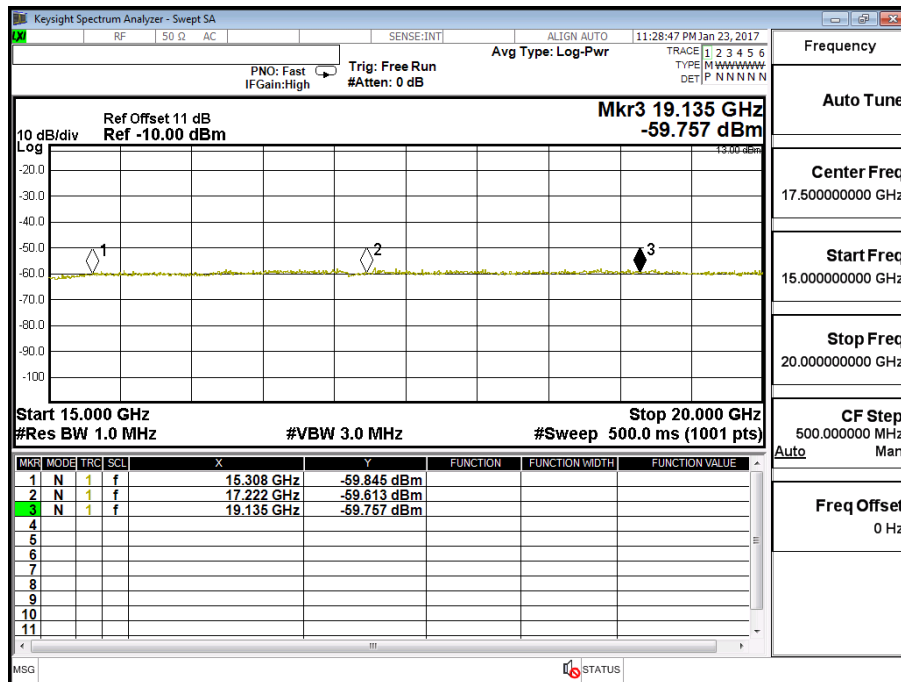
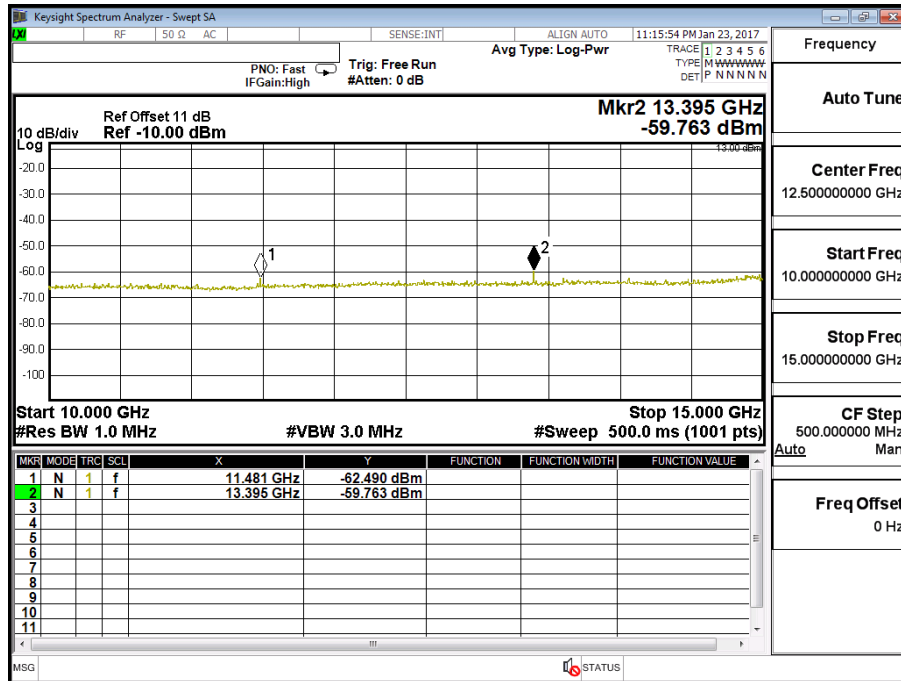




Frequency	Auto Tune
Center Freq	3.000000000 GHz
Start Freq	1.000000000 GHz
Stop Freq	5.000000000 GHz
CF Step	400.0000000 MHz
Auto	Man
Freq Offset	0 Hz



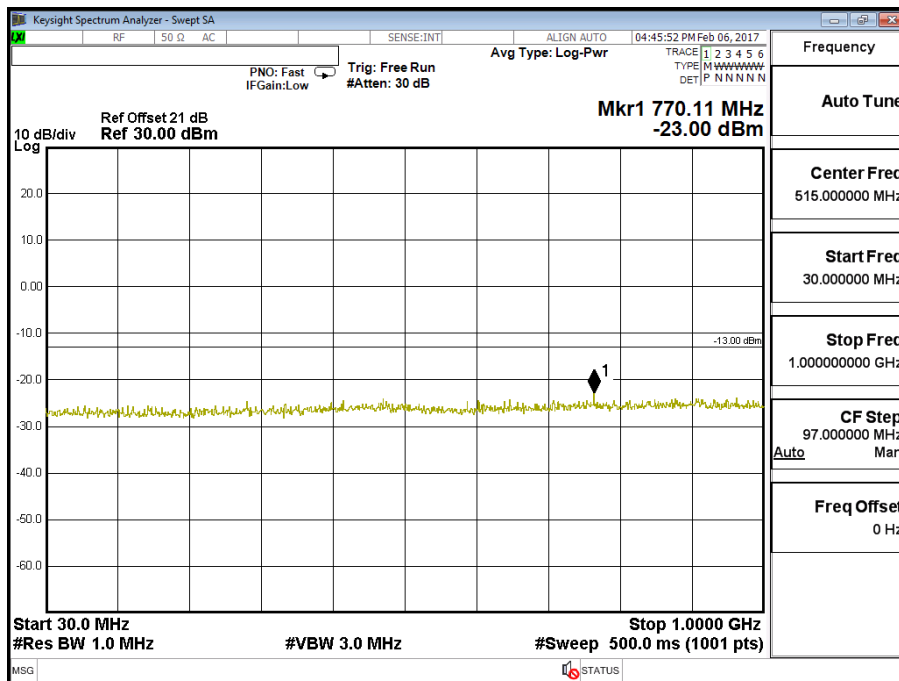
Frequency	Auto Tune
Center Freq	7.500000000 GHz
Start Freq	5.000000000 GHz
Stop Freq	10.000000000 GHz
CF Step	500.0000000 MHz
Auto	Man
Freq Offset	0 Hz

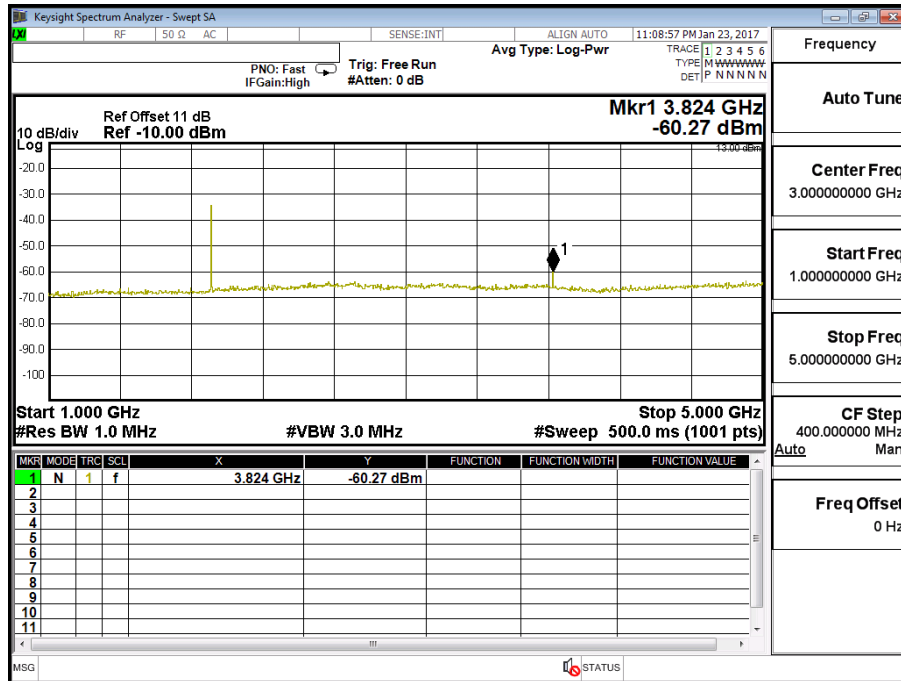


Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/06	Test Site	CTR
Test Condition	LTE-Band 25 (3M)	Test Range	30MHz~20GHz

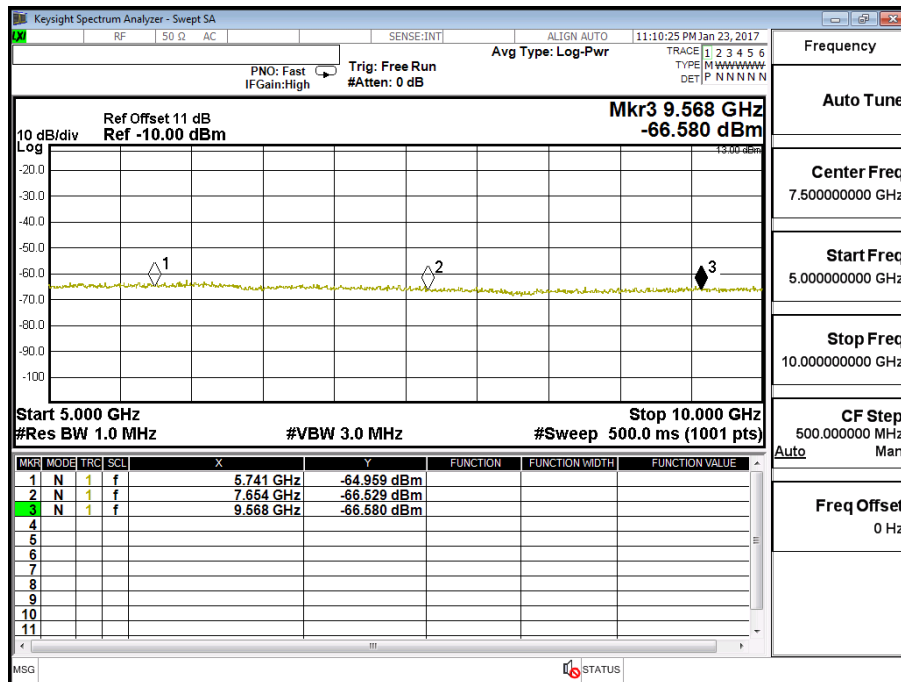
LTE-Band 25 (3M) 16QAM(1,0) CH26675 (1913.5MHz)

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
3824	-60.270	1.1	-59.170	-13
5741	-64.959	1.23	-63.729	-13
7654	-66.529	1.59	-64.939	-13
9568	-66.580	1.89	-64.690	-13
11475	-62.520	2.07	-60.450	-13
13385	-60.446	2.26	-58.186	-13
15308	-60.276	2.64	-57.636	-13
17222	-61.556	3.5	-58.056	-13
19135	-60.394	3.7	-56.694	-13

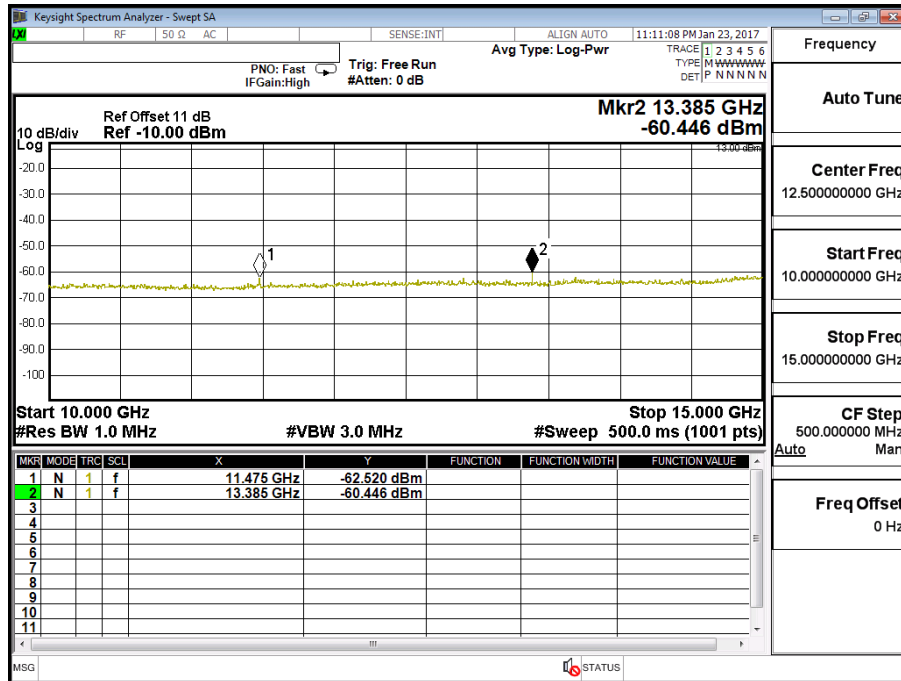




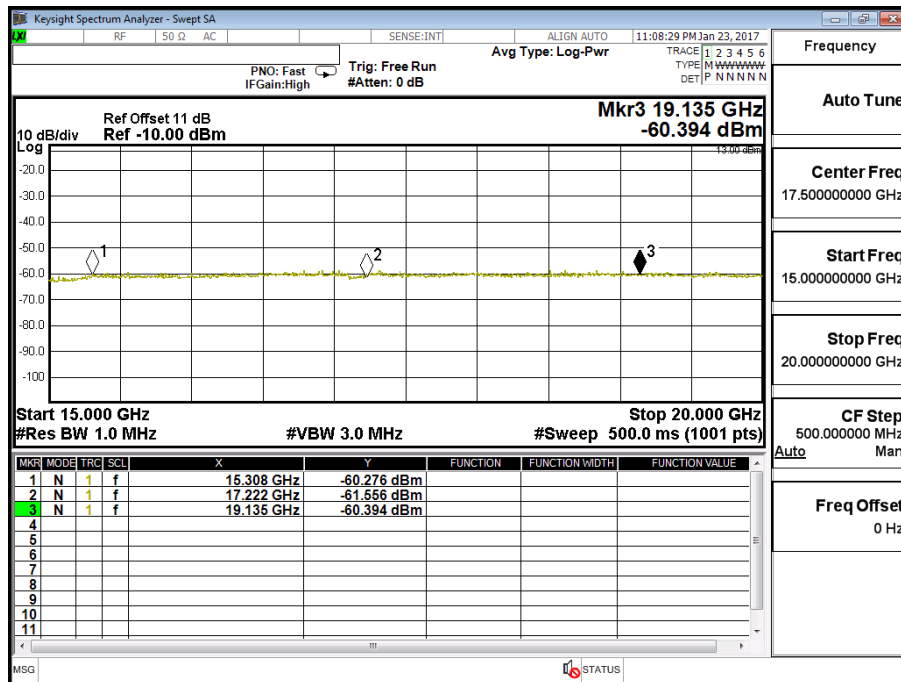
Frequency	Auto Tune
Center Freq	3.000000000 GHz
Start Freq	1.000000000 GHz
Stop Freq	5.000000000 GHz
CF Step	400.0000000 MHz Auto Man
Freq Offset	0 Hz



Frequency	Auto Tune
Center Freq	7.500000000 GHz
Start Freq	5.000000000 GHz
Stop Freq	10.000000000 GHz
CF Step	500.0000000 MHz Auto Man
Freq Offset	0 Hz



Frequency	Auto Tune
Center Freq	12.500000000 GHz
Start Freq	10.000000000 GHz
Stop Freq	15.000000000 GHz
CF Step	500.000000 MHz
	Auto Man
Freq Offset	0 Hz

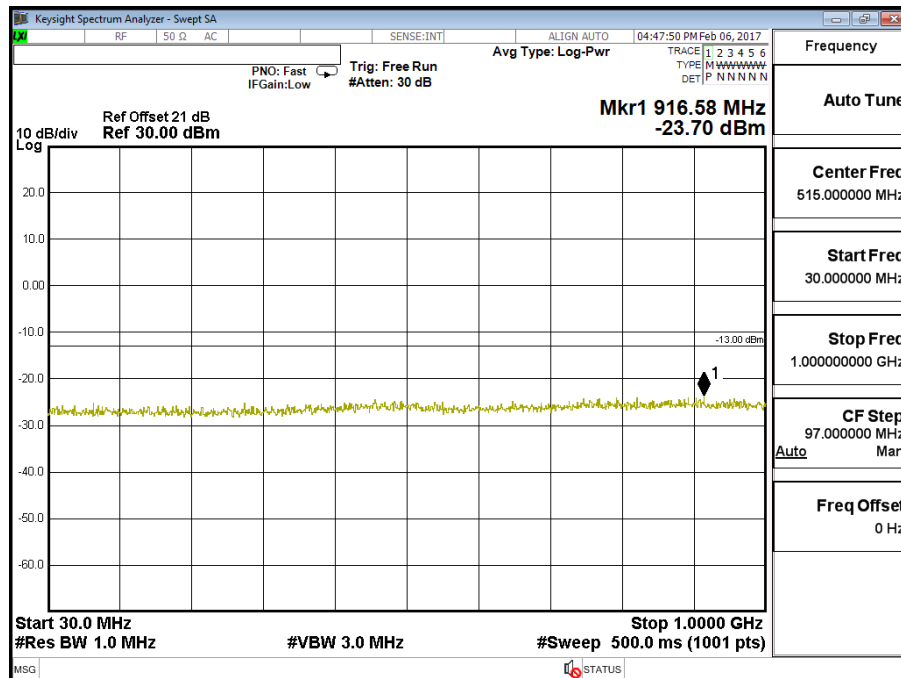


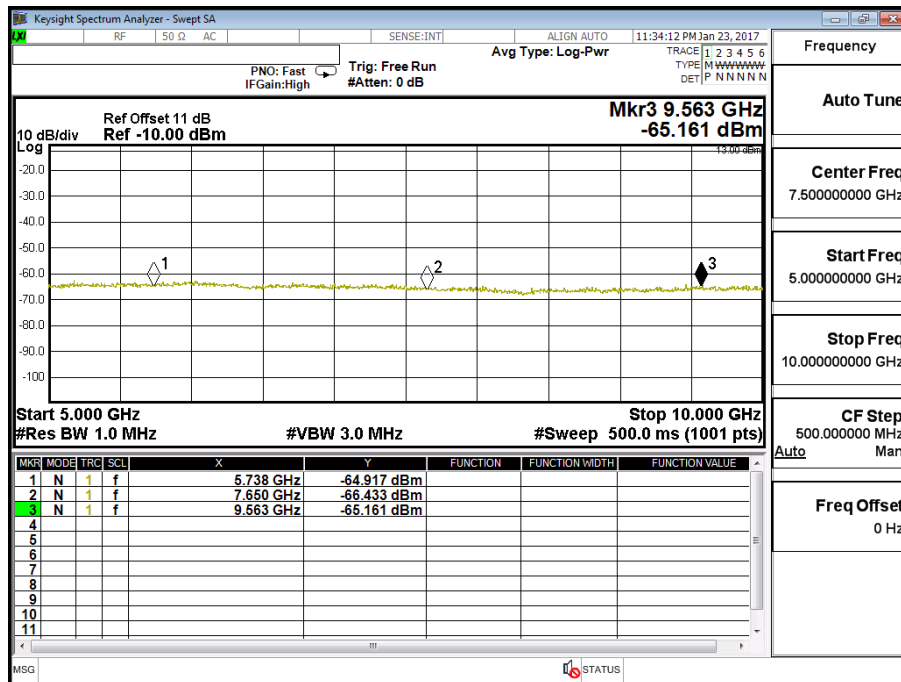
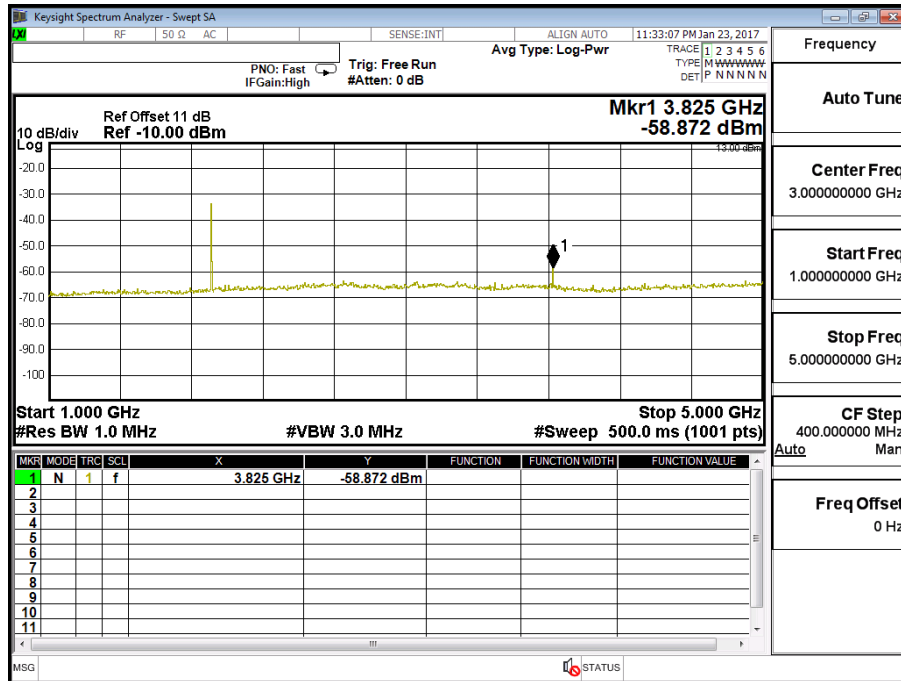
Frequency	Auto Tune
Center Freq	17.500000000 GHz
Start Freq	15.000000000 GHz
Stop Freq	20.000000000 GHz
CF Step	500.000000 MHz
	Auto Man
Freq Offset	0 Hz

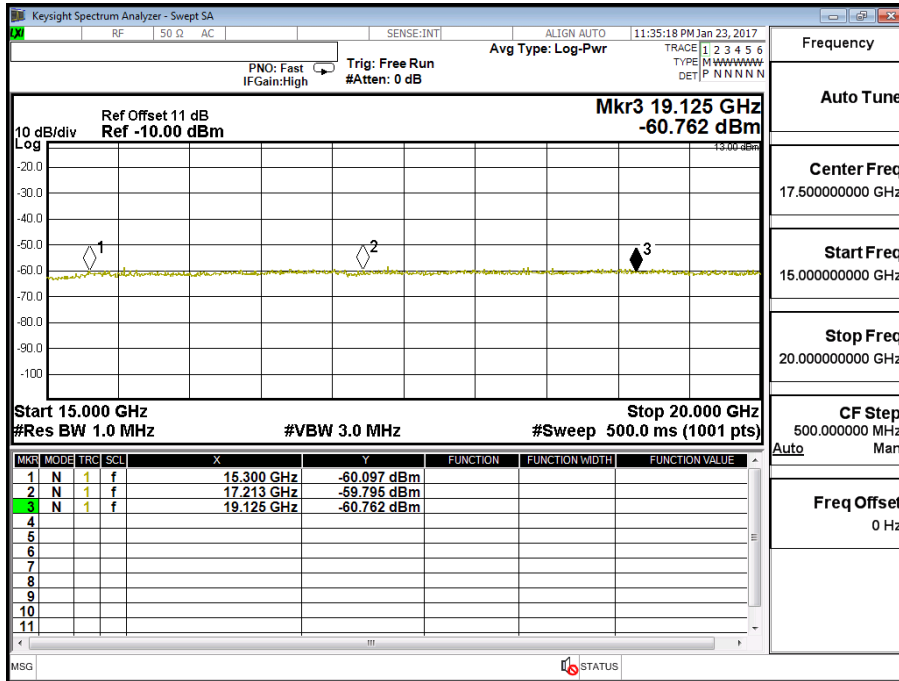
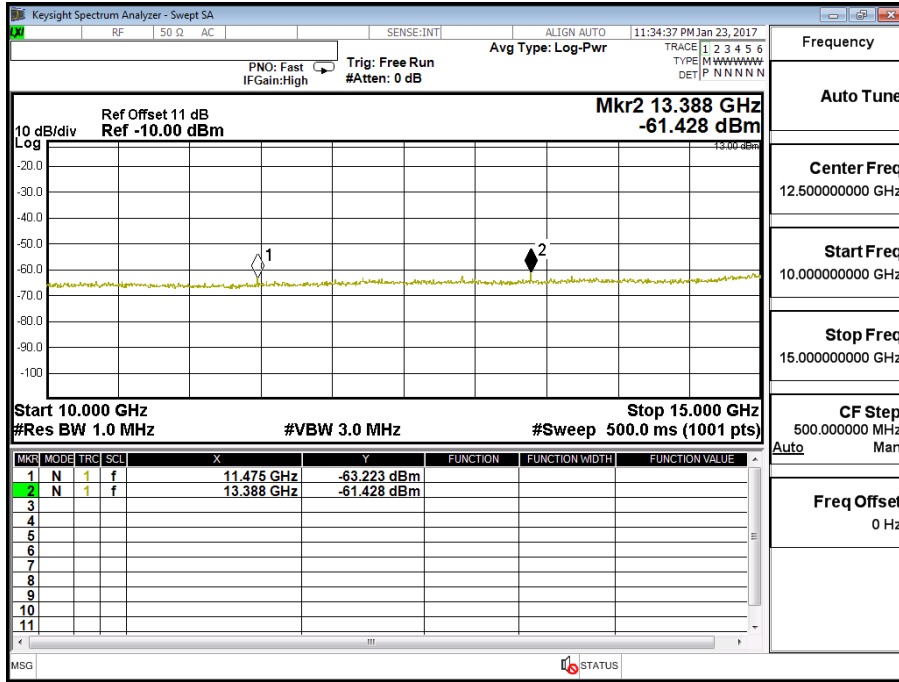
Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/06	Test Site	CTR
Test Condition	LTE-Band 25 (5M)	Test Range	30MHz~20GHz

LTE-Band 25 (5M) QPSK(1,12) CH26665 (1912.5MHz)

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
3825	-58.872	1.1	-57.772	-13
5738	-64.917	1.23	-63.687	-13
7650	-66.433	1.59	-64.843	-13
9563	-65.161	1.89	-63.271	-13
11475	-63.223	2.07	-61.153	-13
13388	-61.428	2.26	-59.168	-13
15300	-60.097	2.64	-57.457	-13
17213	-59.795	3.5	-56.295	-13
19125	-60.762	3.7	-57.062	-13



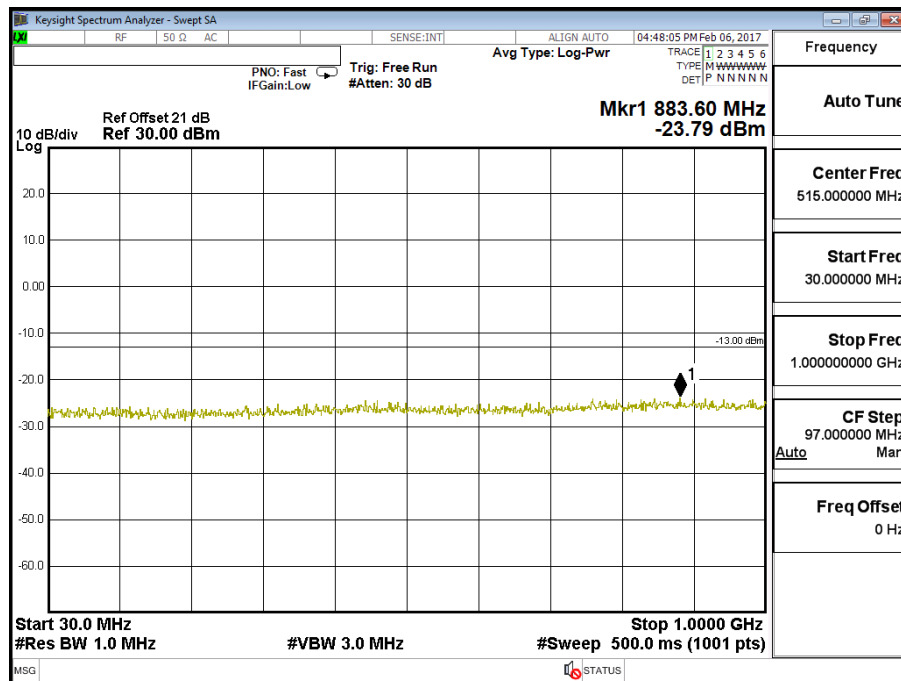


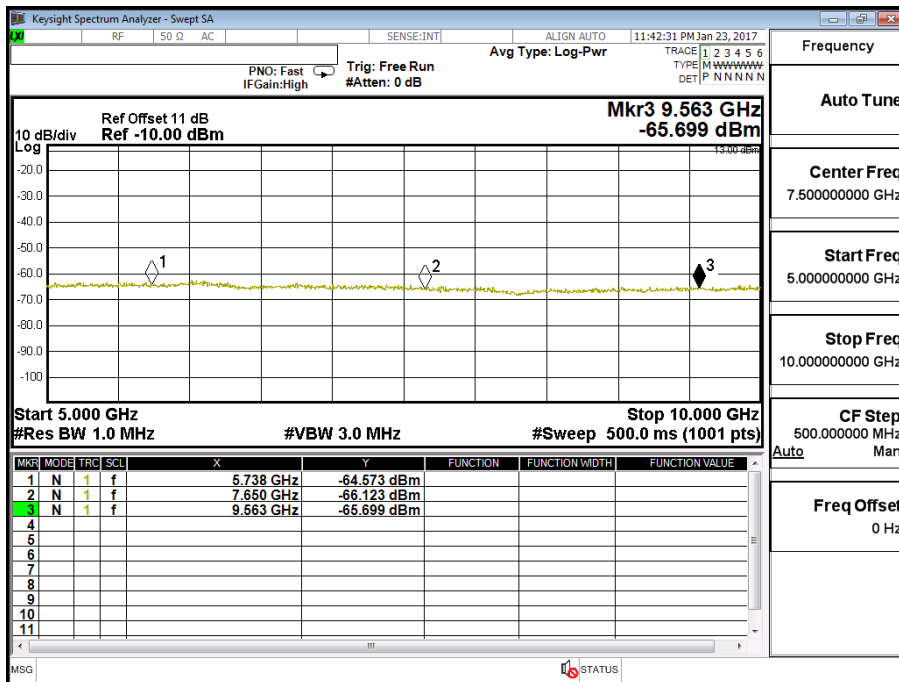
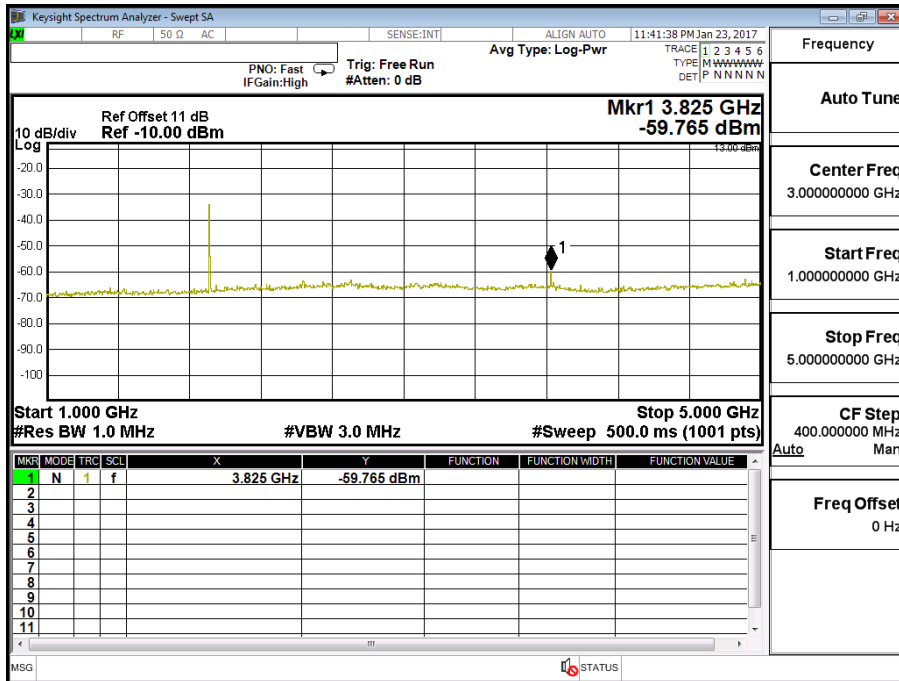


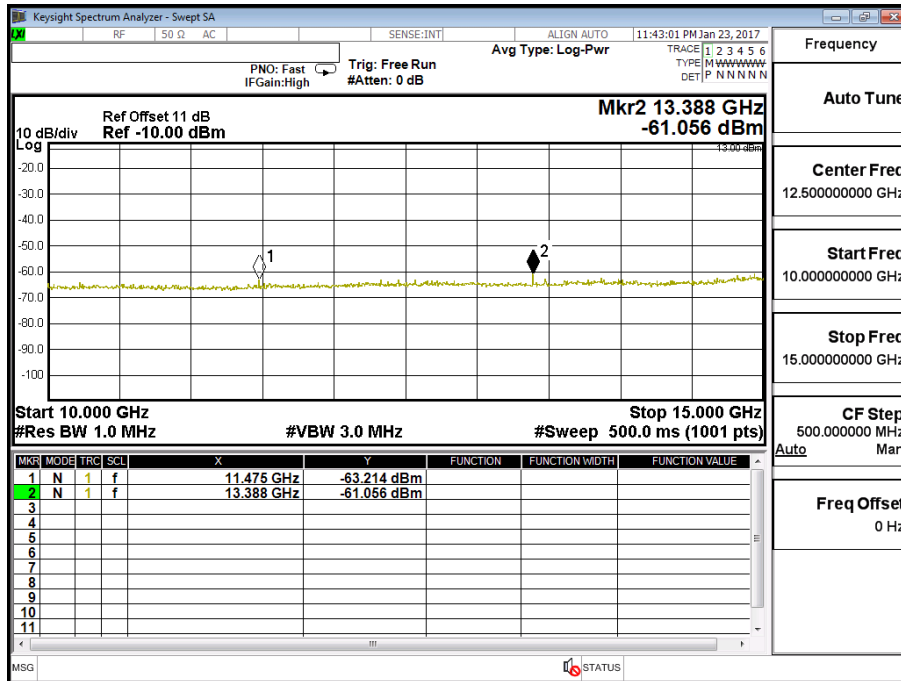
Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/06	Test Site	CTR
Test Condition	LTE-Band 25 (5M)	Test Range	30MHz~20GHz

LTE- Band 25 (5M) 16QAM(1,12) CH26665 (1912.5MHz)

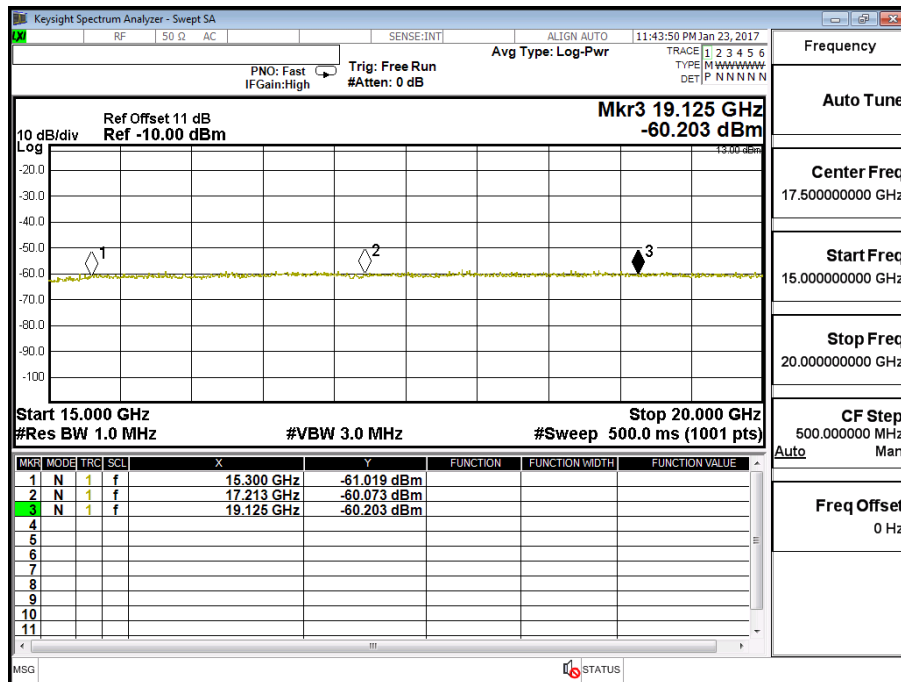
Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
3825	-59.765	1.1	-58.665	-13
5738	-64.573	1.23	-63.343	-13
7650	-66.123	1.59	-64.533	-13
9563	-65.699	1.89	-63.809	-13
11475	-63.214	2.07	-61.144	-13
13388	-61.056	2.26	-58.796	-13
15300	-61.019	2.64	-58.379	-13
17213	-60.073	3.5	-56.573	-13
19125	-60.203	3.7	-56.503	-13







Frequency	Auto Tune
Center Freq	12.500000000 GHz
Start Freq	10.000000000 GHz
Stop Freq	15.000000000 GHz
CF Step	500.000000 MHz
	Auto Man
Freq Offset	0 Hz

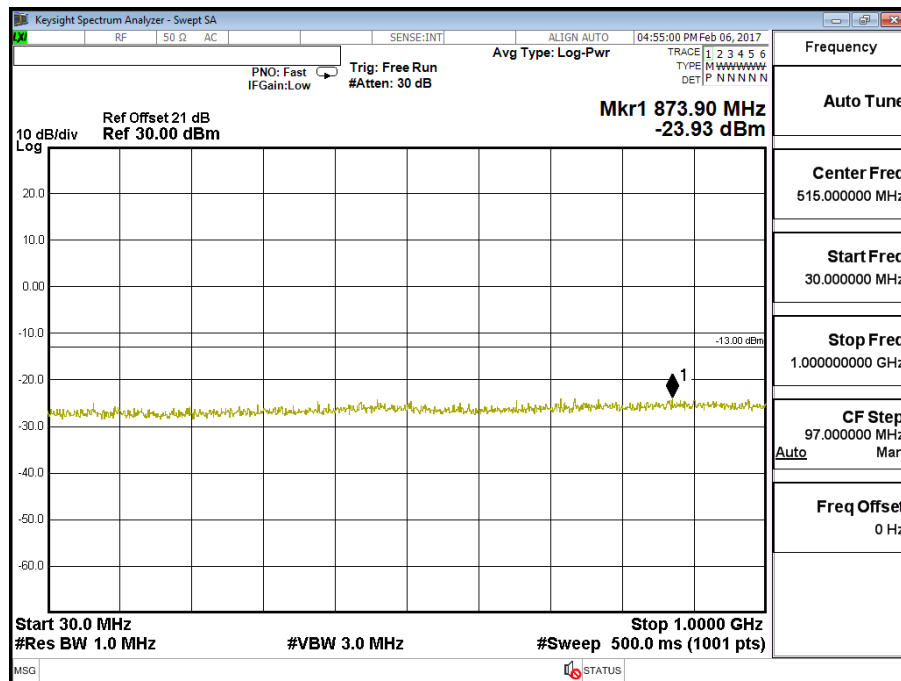


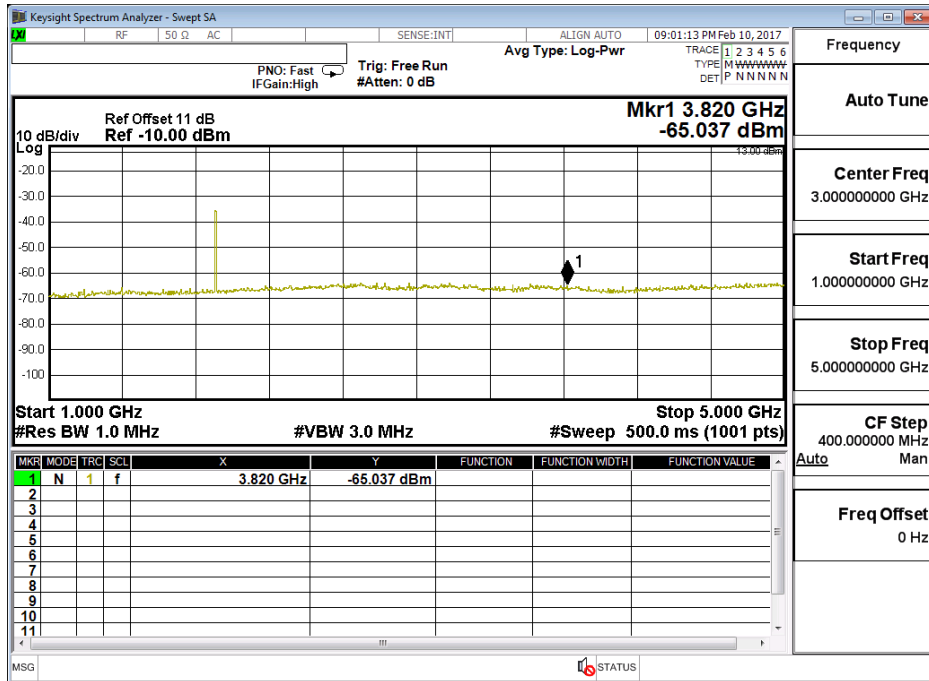
Frequency	Auto Tune
Center Freq	17.500000000 GHz
Start Freq	15.000000000 GHz
Stop Freq	20.000000000 GHz
CF Step	500.000000 MHz
	Auto Man
Freq Offset	0 Hz

Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/06	Test Site	CTR
Test Condition	LTE-Band 25 (10M)	Test Range	30MHz~20GHz

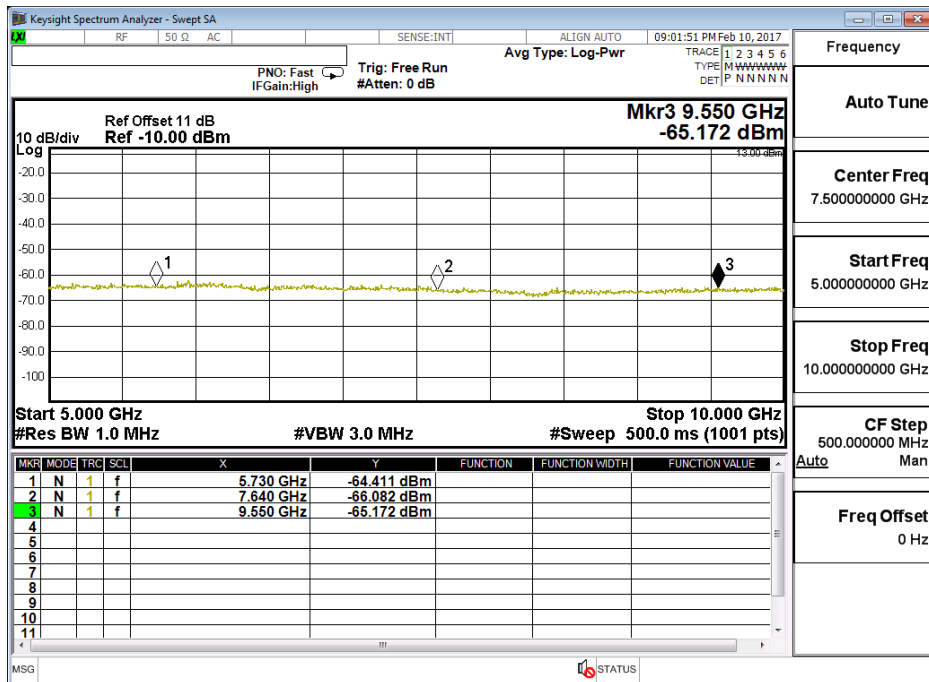
LTE- Band 25 (10M) QPSK(1,24) CH26640 (1910MHz)

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
3820	-65.037	1.1	-63.937	-13
5730	-64.411	1.23	-63.181	-13
7640	-66.082	1.59	-64.492	-13
9550	-65.172	1.89	-63.282	-13
11460	-61.099	2.07	-59.029	-13
13370	-61.966	2.26	-59.706	-13
15280	-61.061	2.64	-58.421	-13
17190	-61.040	3.5	-57.540	-13
19100	-60.343	3.7	-56.643	-13

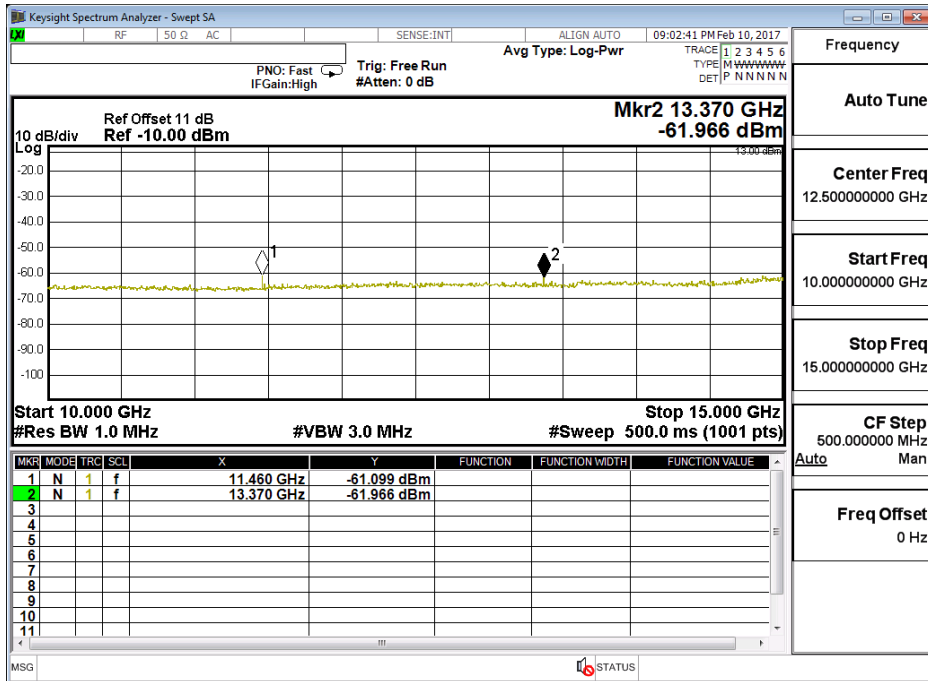




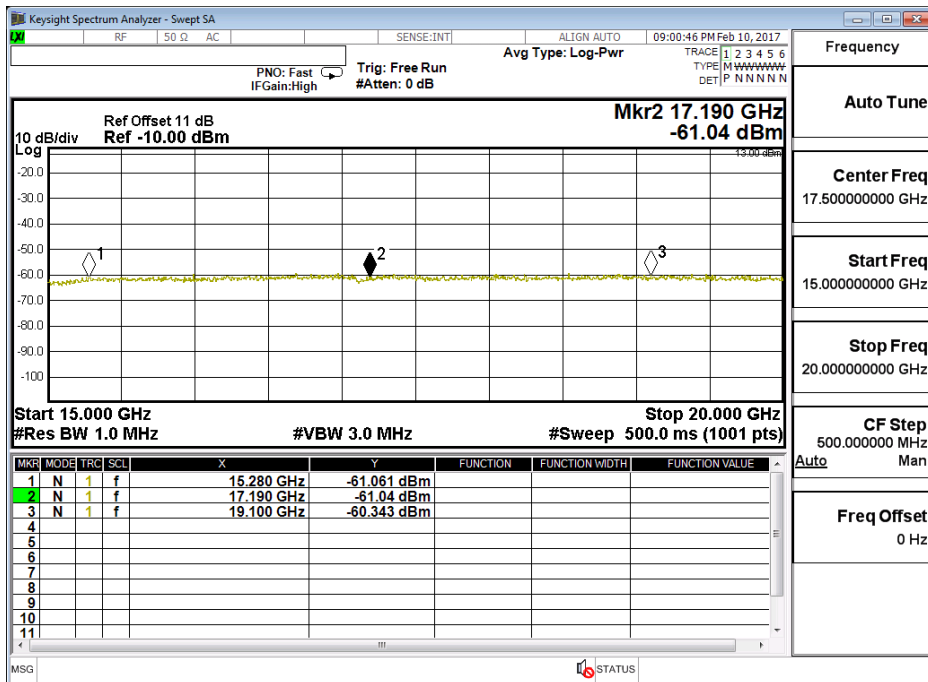
Frequency
Auto Tune
Center Freq 3.000000000 GHz
Start Freq 1.000000000 GHz
Stop Freq 5.000000000 GHz
CF Step 400.0000000 MHz
Auto Man
Freq Offset 0 Hz



Frequency
Auto Tune
Center Freq 7.500000000 GHz
Start Freq 5.000000000 GHz
Stop Freq 10.000000000 GHz
CF Step 500.0000000 MHz
Auto Man
Freq Offset 0 Hz



Frequency
Auto Tune
Center Freq 12.500000000 GHz
Start Freq 10.000000000 GHz
Stop Freq 15.000000000 GHz
CF Step 500.000000 MHz
Auto Man
Freq Offset 0 Hz

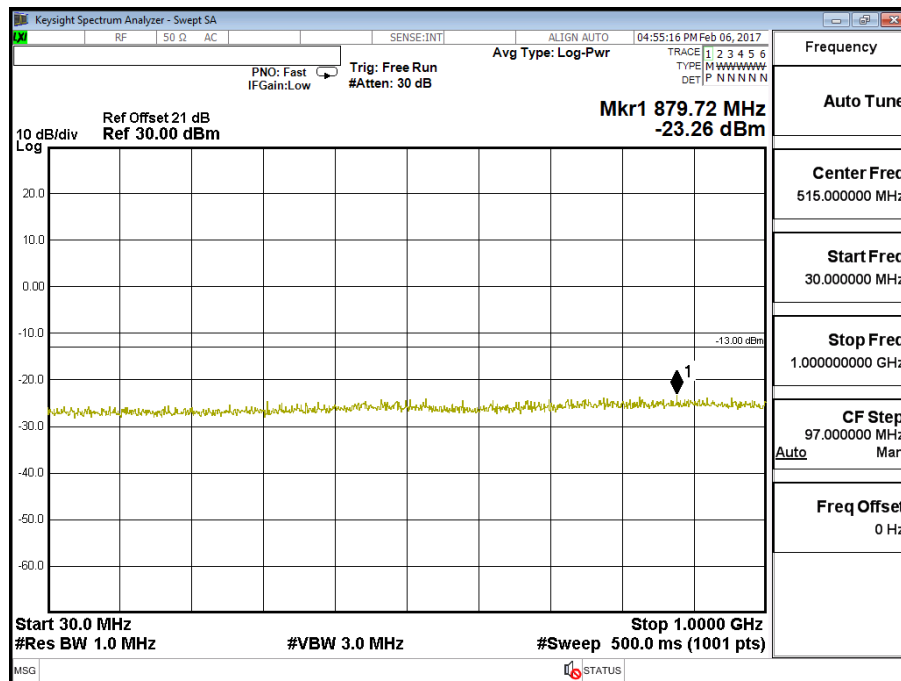


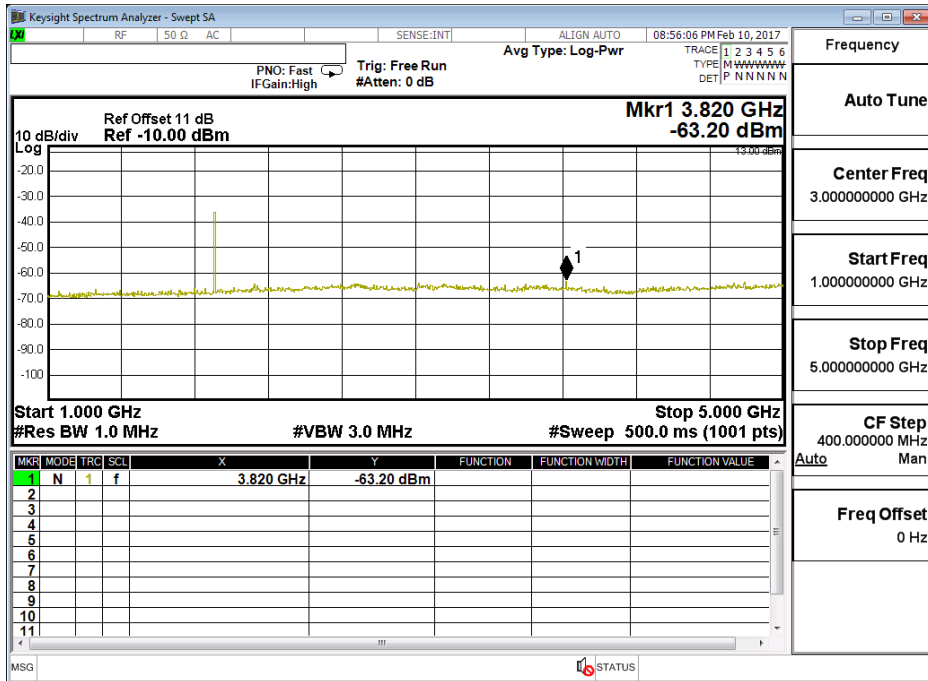
Frequency
Auto Tune
Center Freq 17.500000000 GHz
Start Freq 15.000000000 GHz
Stop Freq 20.000000000 GHz
CF Step 500.000000 MHz
Auto Man
Freq Offset 0 Hz

Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/06	Test Site	CTR
Test Condition	LTE-Band 25 (10M)	Test Range	30MHz~20GHz

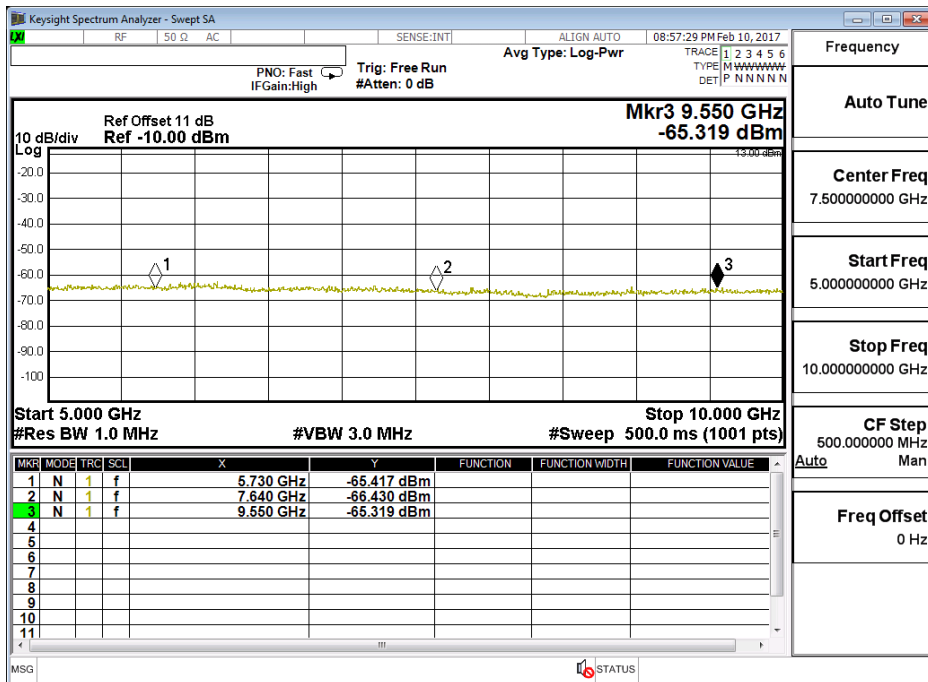
LTE- Band 25 10M 16QAM(1,12) CH26640 (1910MHz)

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
3820	-63.200	1.1	-62.100	-13
5730	-65.417	1.23	-64.187	-13
7640	-66.430	1.59	-64.840	-13
9550	-65.319	1.89	-63.429	-13
11460	-61.399	2.07	-59.329	-13
13370	-62.263	2.26	-60.003	-13
15280	-61.056	2.64	-58.416	-13
17190	-60.096	3.5	-56.596	-13
19100	-59.910	3.7	-56.210	-13

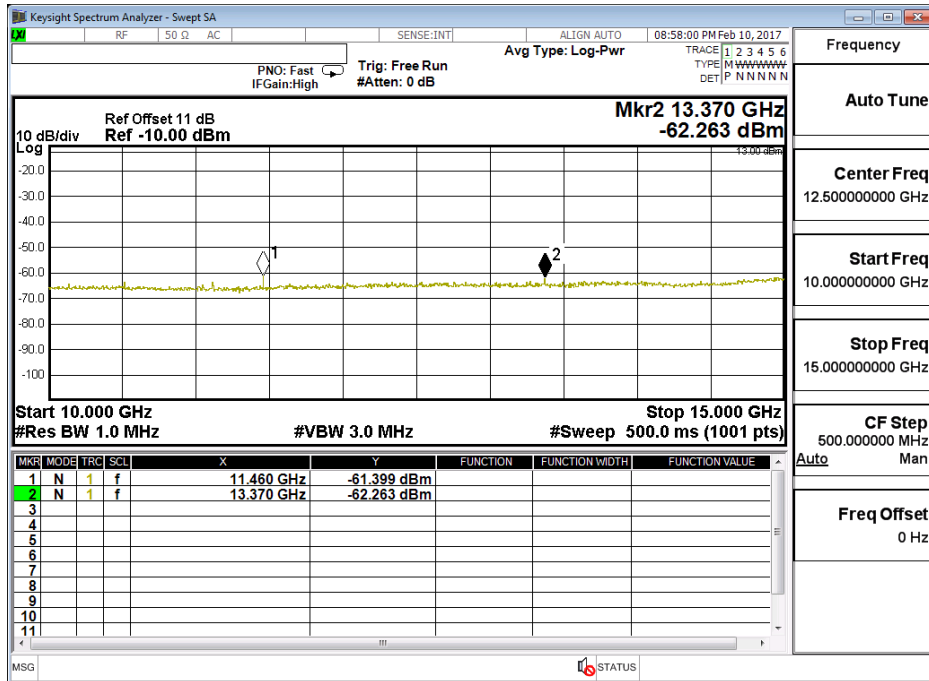




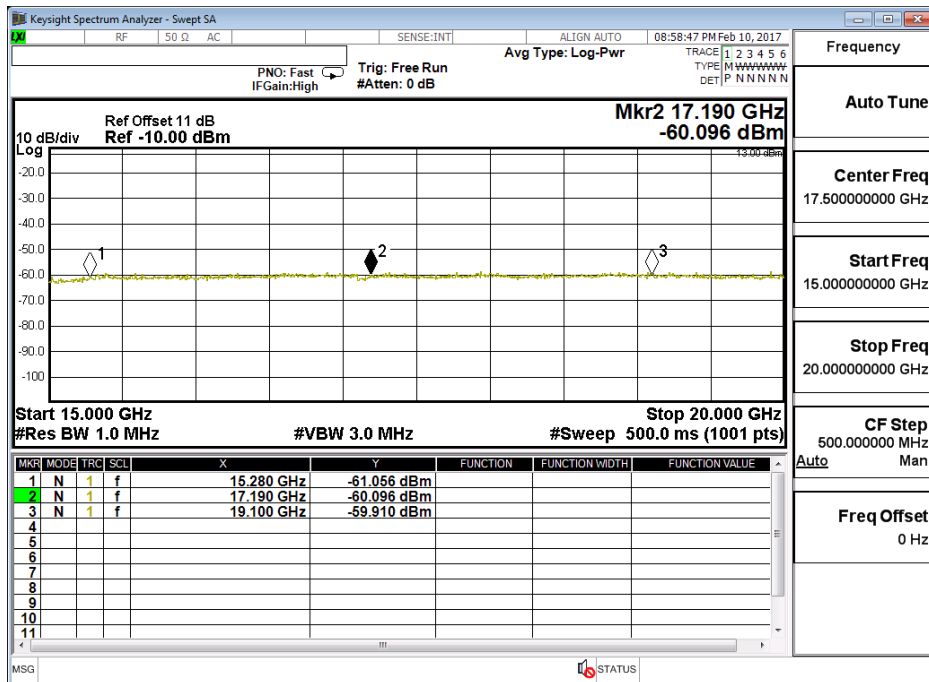
Frequency
Auto Tune
Center Freq 3.000000000 GHz
Start Freq 1.000000000 GHz
Stop Freq 5.000000000 GHz
CF Step 400.0000000 MHz
Auto Man
Freq Offset 0 Hz



Frequency
Auto Tune
Center Freq 7.500000000 GHz
Start Freq 5.000000000 GHz
Stop Freq 10.000000000 GHz
CF Step 500.0000000 MHz
Auto Man
Freq Offset 0 Hz



Frequency
Auto Tune
Center Freq 12.500000000 GHz
Start Freq 10.000000000 GHz
Stop Freq 15.000000000 GHz
CF Step 500.000000 MHz
Auto Man
Freq Offset 0 Hz

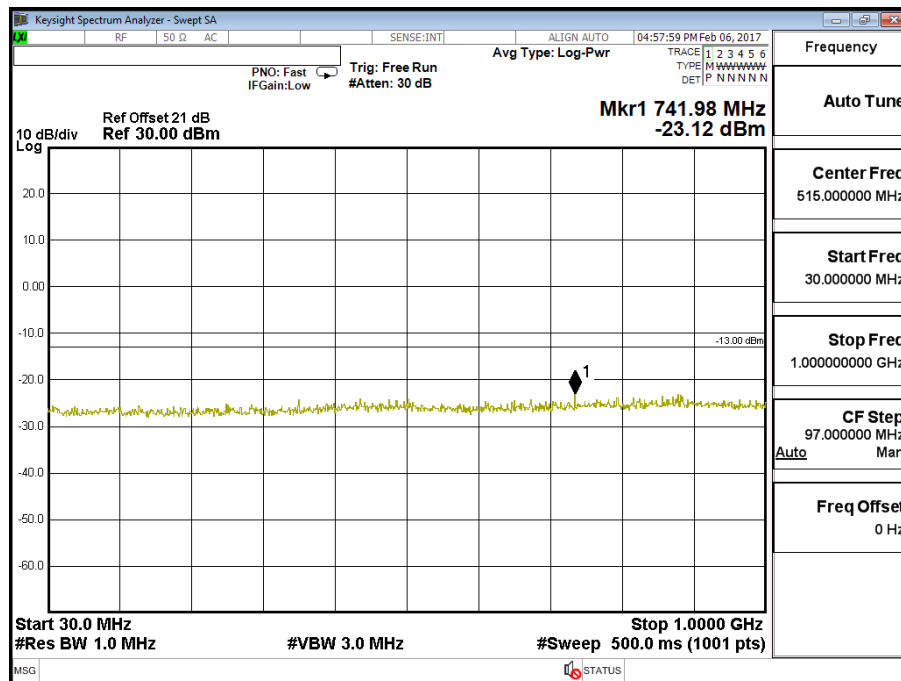


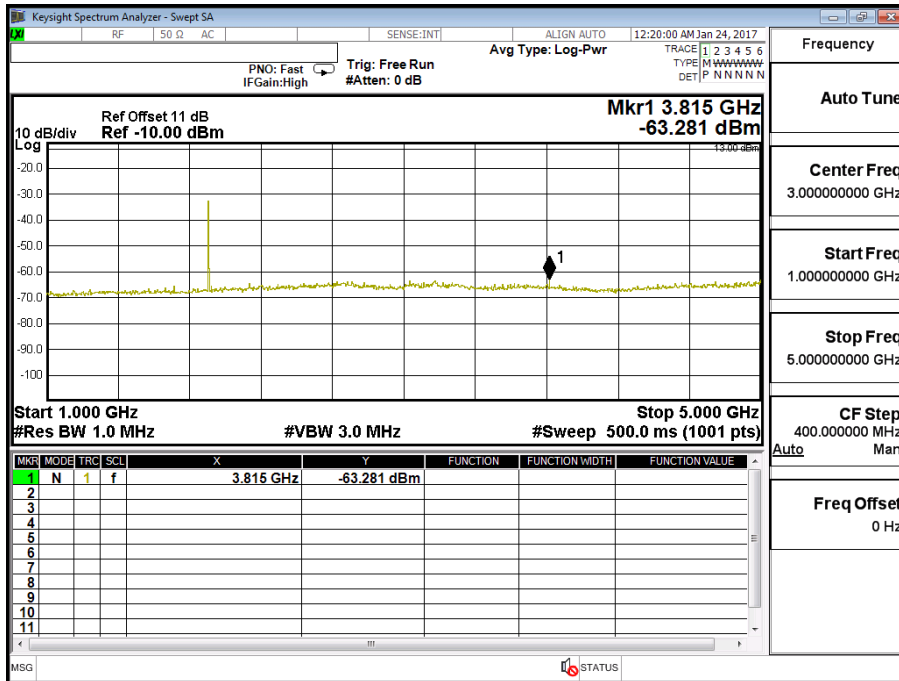
Frequency
Auto Tune
Center Freq 17.500000000 GHz
Start Freq 15.000000000 GHz
Stop Freq 20.000000000 GHz
CF Step 500.000000 MHz
Auto Man
Freq Offset 0 Hz

Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/06	Test Site	CTR
Test Condition	LTE-Band 25 15M	Test Range	30MHz~20GHz

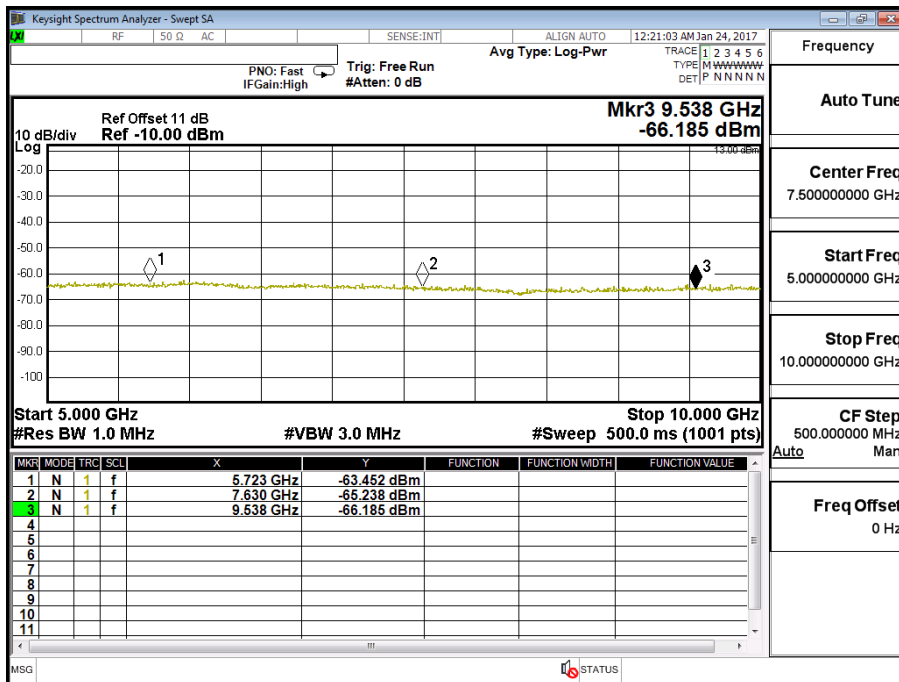
LTE-Band 25 15M QPSK(1,37) CH26615 (1907.5MHz)

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
3815	-63.281	1.1	-62.181	-13
5723	-63.452	1.23	-62.222	-13
7630	-65.238	1.59	-63.648	-13
9538	-66.185	1.89	-64.295	-13
11445	-61.653	2.07	-59.583	-13
13353	-61.038	2.26	-58.778	-13
15260	-60.013	2.64	-57.373	-13
17168	-60.853	3.5	-57.353	-13
19075	-60.185	3.7	-56.485	-13

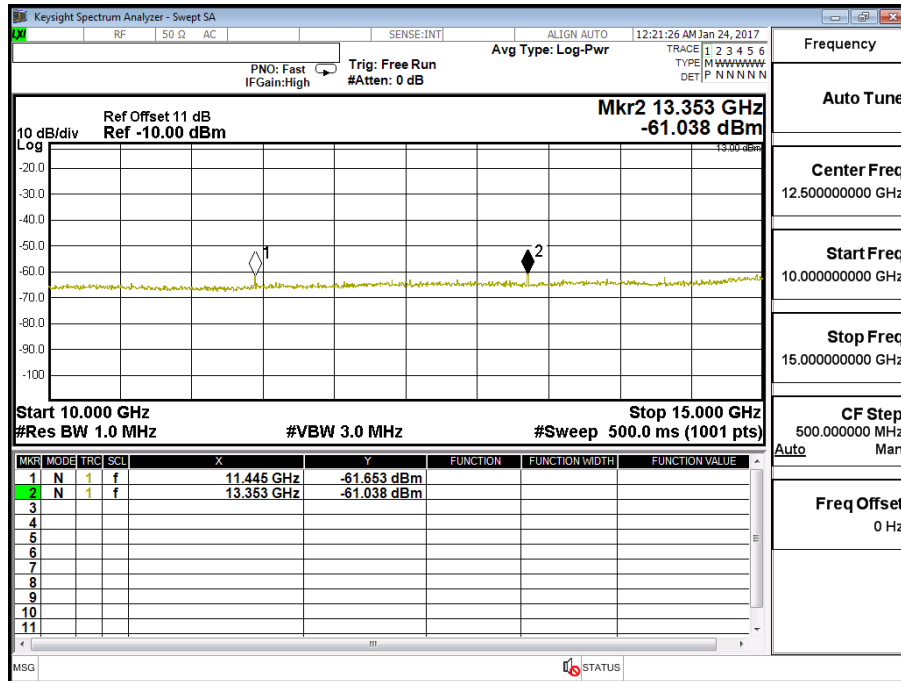




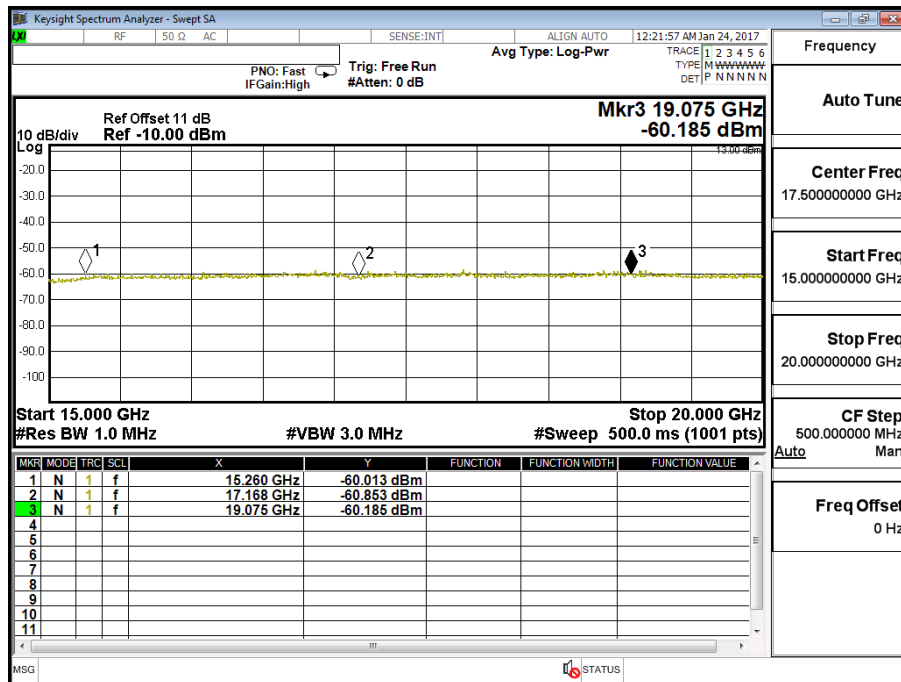
Frequency	Auto Tune
Center Freq	3.000000000 GHz
Start Freq	1.000000000 GHz
Stop Freq	5.000000000 GHz
CF Step	400.000000 MHz Auto Man
Freq Offset	0 Hz



Frequency	Auto Tune
Center Freq	7.500000000 GHz
Start Freq	5.000000000 GHz
Stop Freq	10.000000000 GHz
CF Step	500.000000 MHz Auto Man
Freq Offset	0 Hz



Frequency	Auto Tune
Center Freq	12.500000000 GHz
Start Freq	10.000000000 GHz
Stop Freq	15.000000000 GHz
CF Step	500.000000 MHz Auto Man
Freq Offset	0 Hz

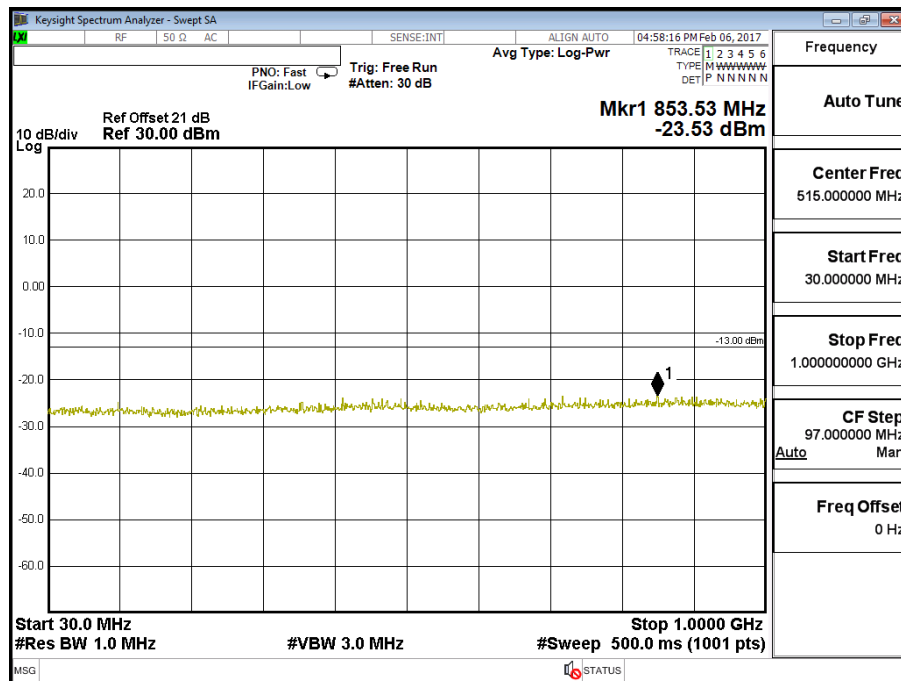


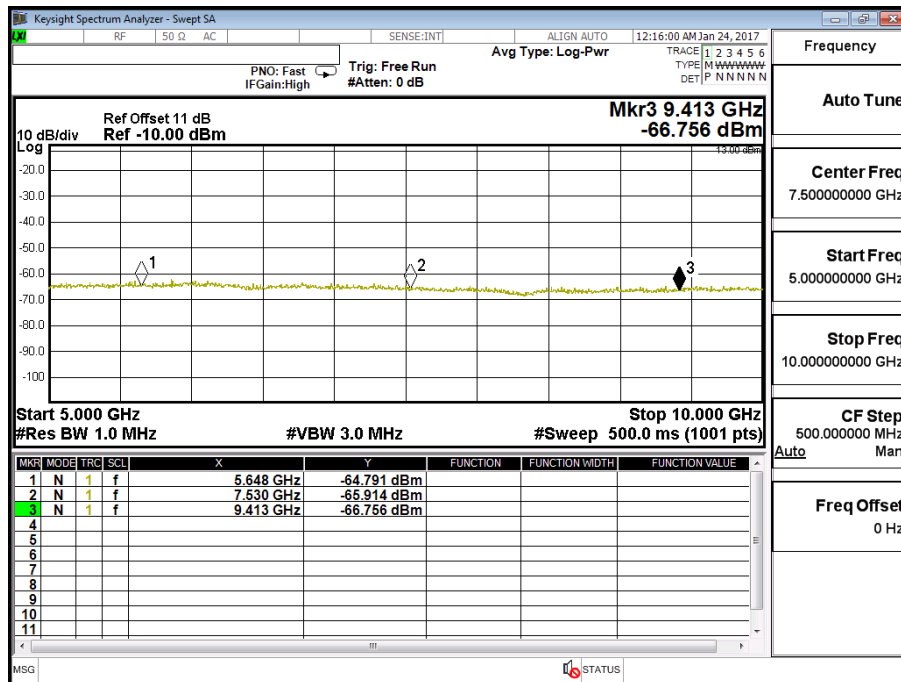
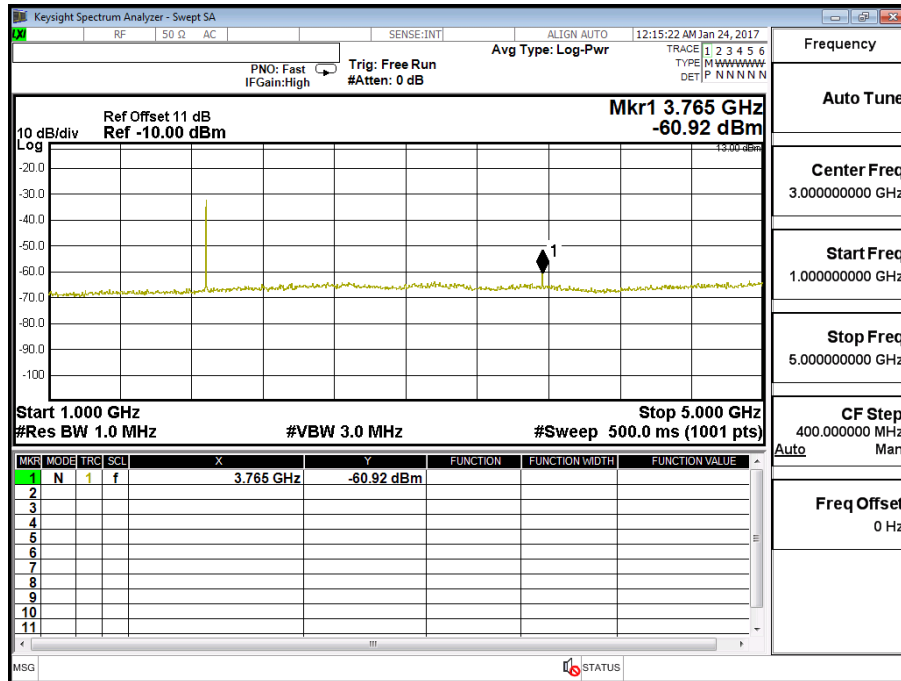
Frequency	Auto Tune
Center Freq	17.500000000 GHz
Start Freq	15.000000000 GHz
Stop Freq	20.000000000 GHz
CF Step	500.000000 MHz Auto Man
Freq Offset	0 Hz

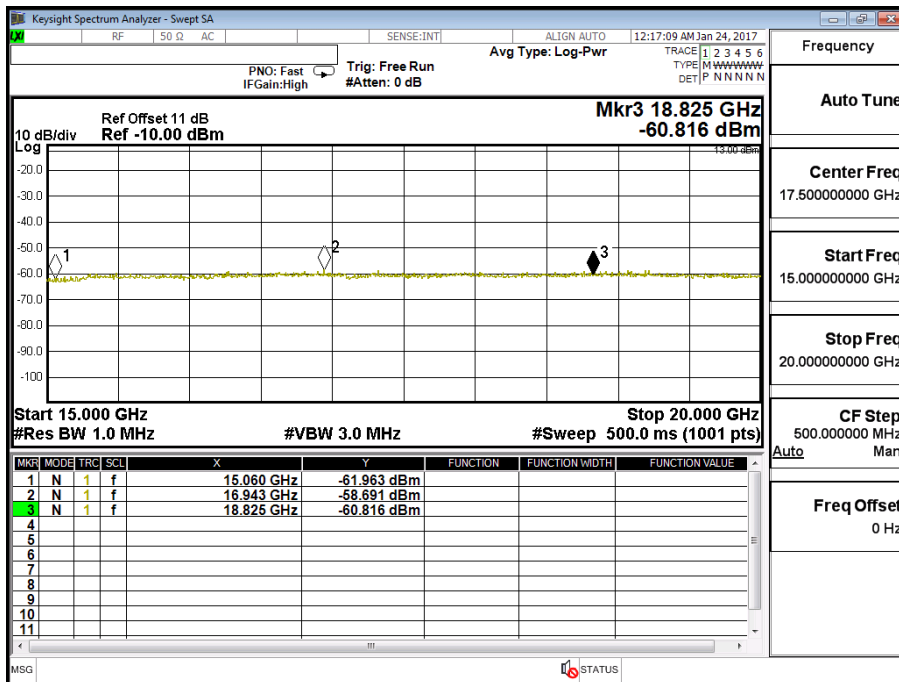
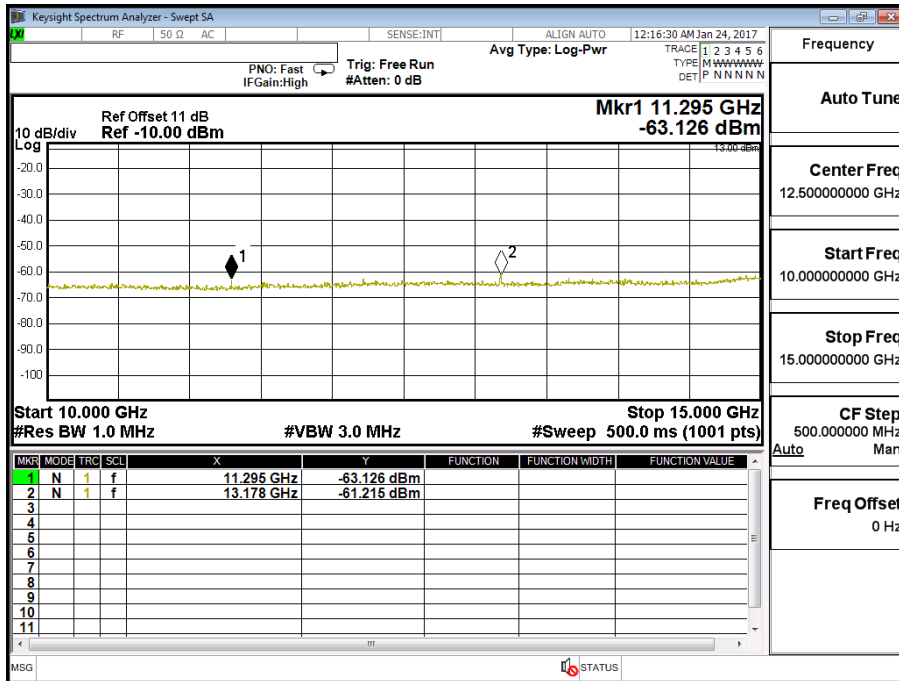
Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/06	Test Site	CTR
Test Condition	LTE-Band 25 (15M)	Test Range	30MHz~20GHz

LTE-Band 25 (15M) 16QAM(1,37) CH26365 (1882.5MHz)

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
3765	-60.920	1.1	-59.820	-13
5648	-64.791	1.23	-63.561	-13
7530	-65.914	1.59	-64.324	-13
9413	-66.756	1.89	-64.866	-13
11295	-63.126	2.07	-61.056	-13
13178	-61.215	2.26	-58.955	-13
15060	-61.963	2.64	-59.323	-13
16943	-58.691	3.5	-55.191	-13
18825	-60.816	3.7	-57.116	-13



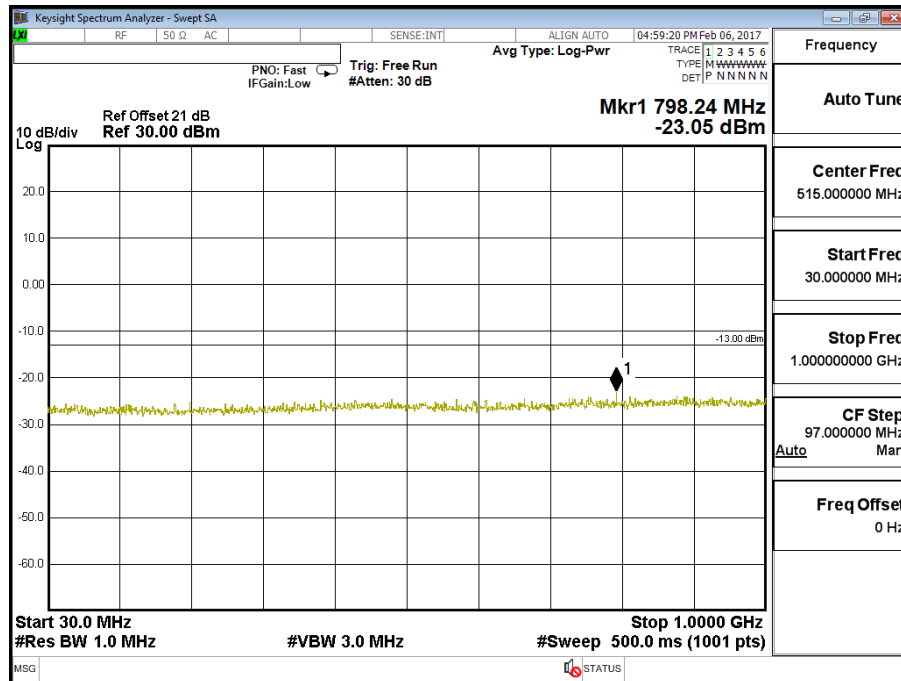


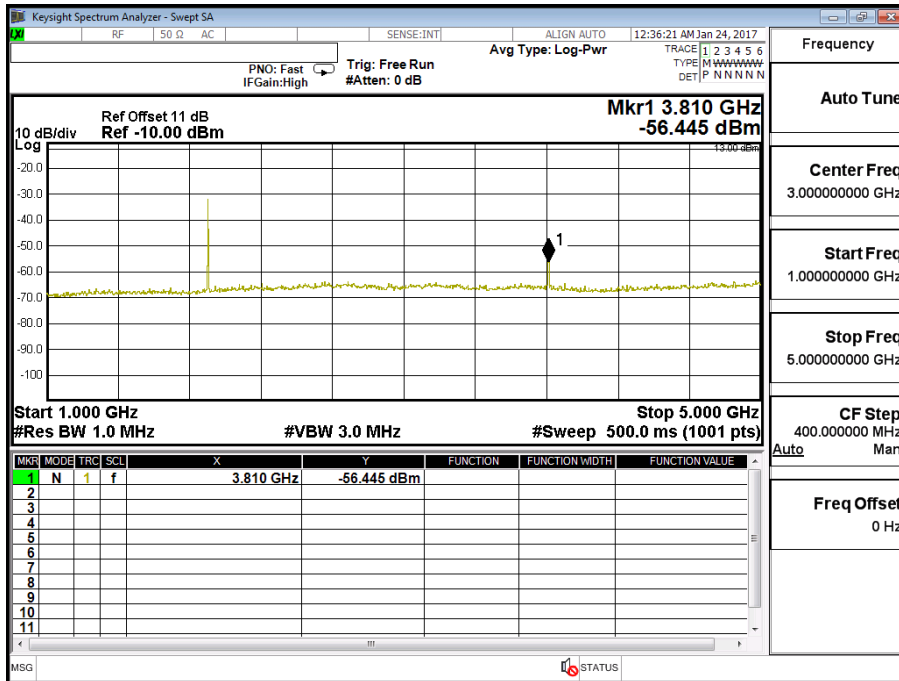


Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/06	Test Site	CTR
Test Condition	LTE-Band 25 (20M)	Test Range	30MHz~20GHz

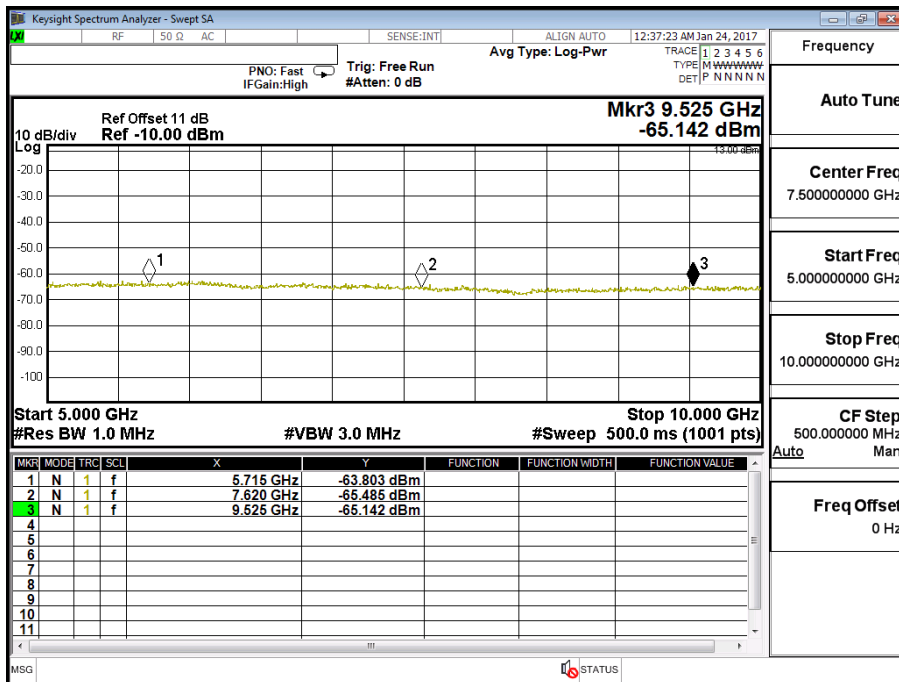
LTE-Band 25 (20M) QPSK(1,49) CH26590 (1905MHz)

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
3810	-56.445	1.1	-55.345	-13
5715	-63.803	1.23	-62.573	-13
7620	-65.485	1.59	-63.895	-13
9525	-65.142	1.89	-63.252	-13
11430	-62.642	2.07	-60.572	-13
13335	-63.182	2.26	-60.922	-13
15240	-60.816	2.64	-58.176	-13
17145	-60.899	3.5	-57.399	-13
19050	-60.158	3.7	-56.458	-13

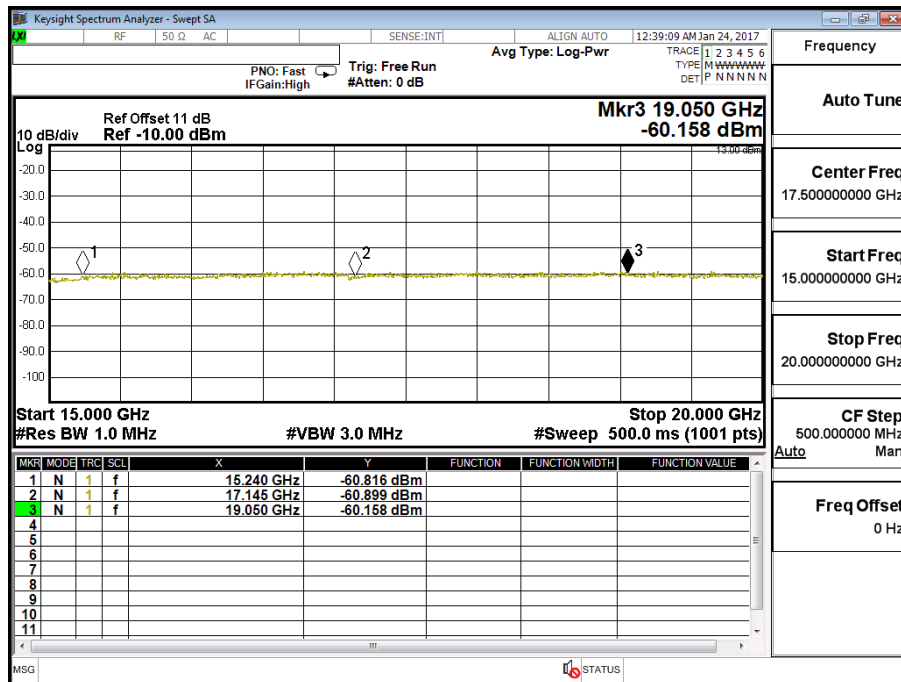
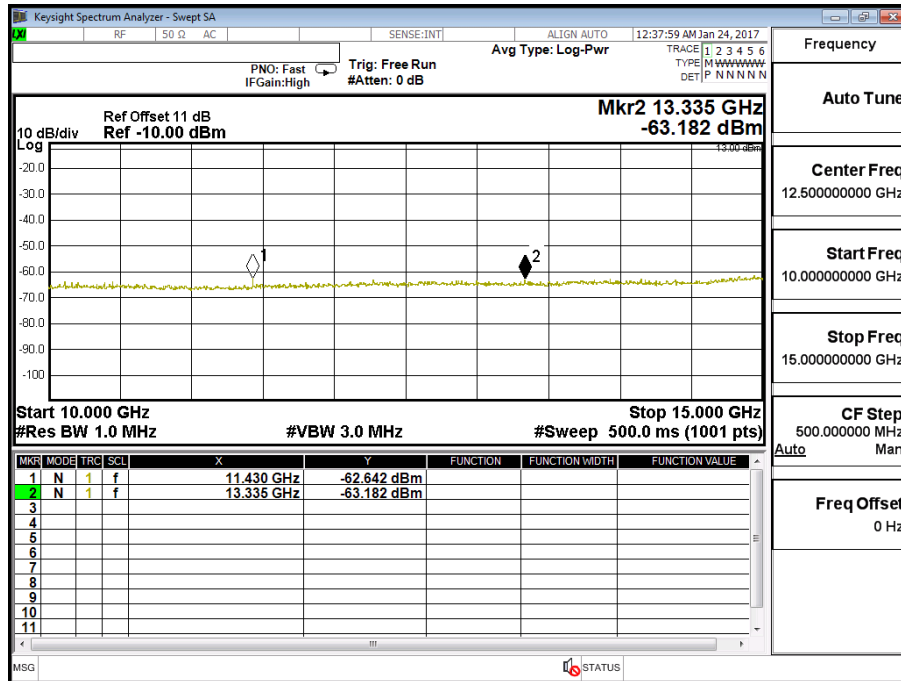




Frequency	Auto Tune
Center Freq	3.000000000 GHz
Start Freq	1.000000000 GHz
Stop Freq	5.000000000 GHz
CF Step	400.000000 MHz
	Auto Man
Freq Offset	0 Hz



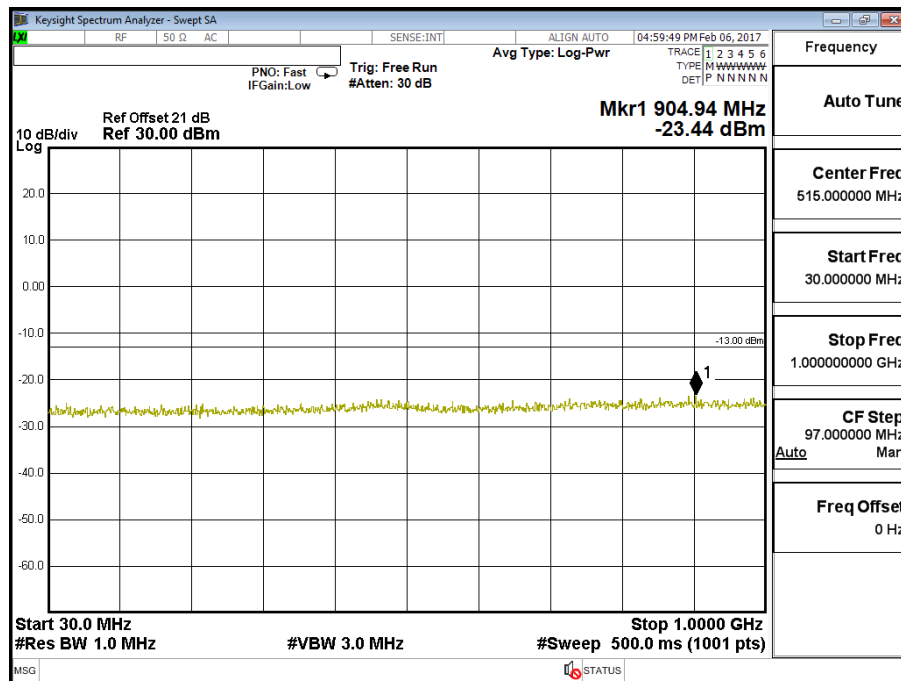
Frequency	Auto Tune
Center Freq	7.500000000 GHz
Start Freq	5.000000000 GHz
Stop Freq	10.000000000 GHz
CF Step	500.000000 MHz
	Auto Man
Freq Offset	0 Hz

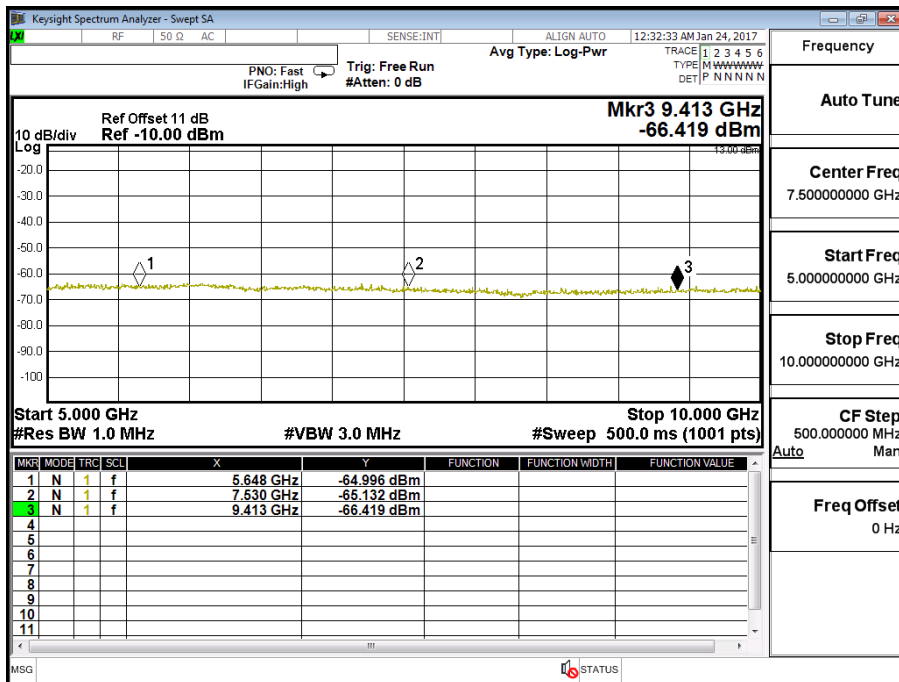
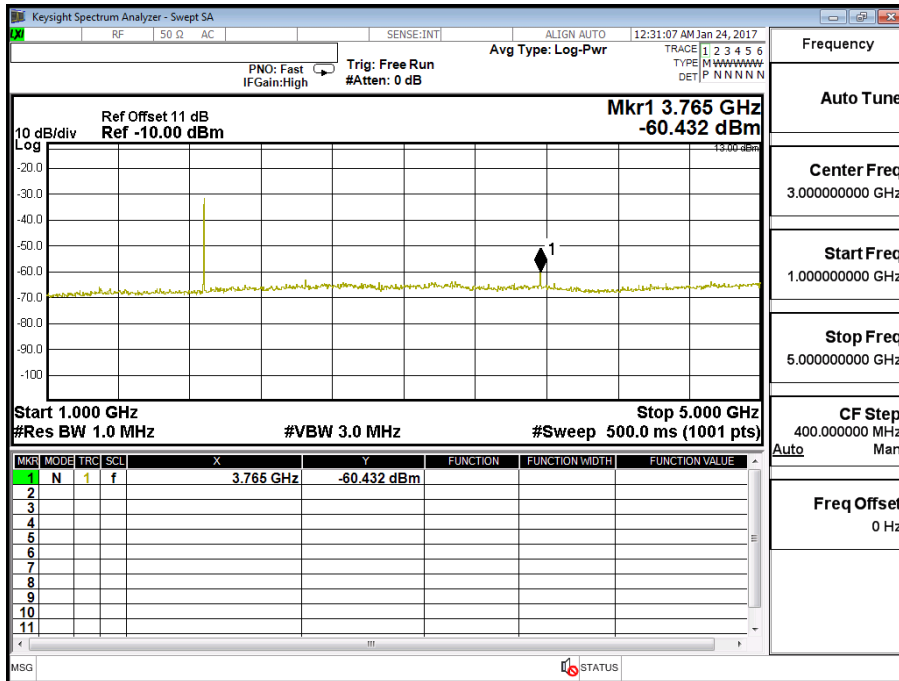


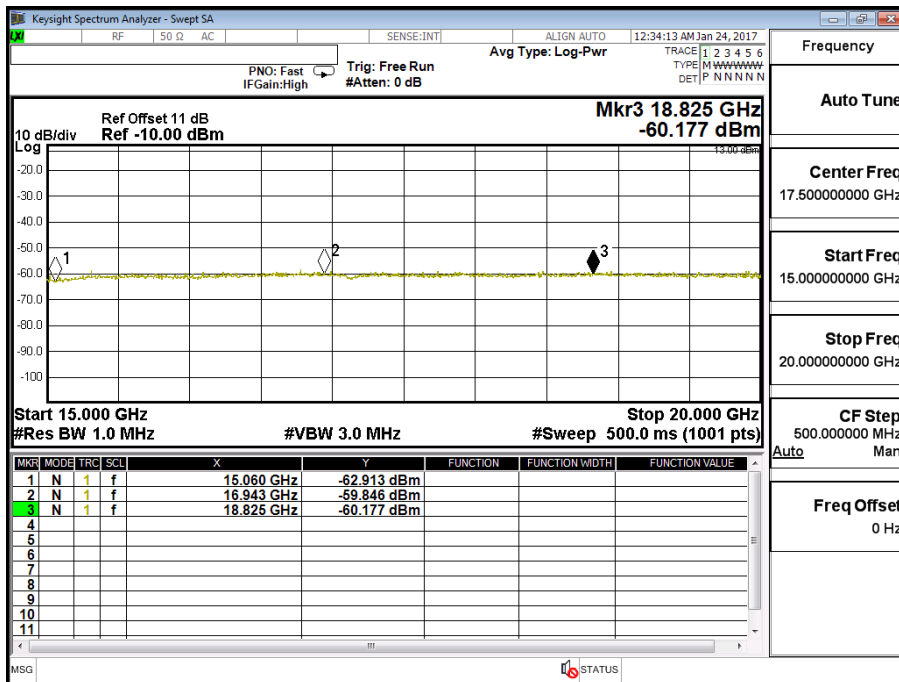
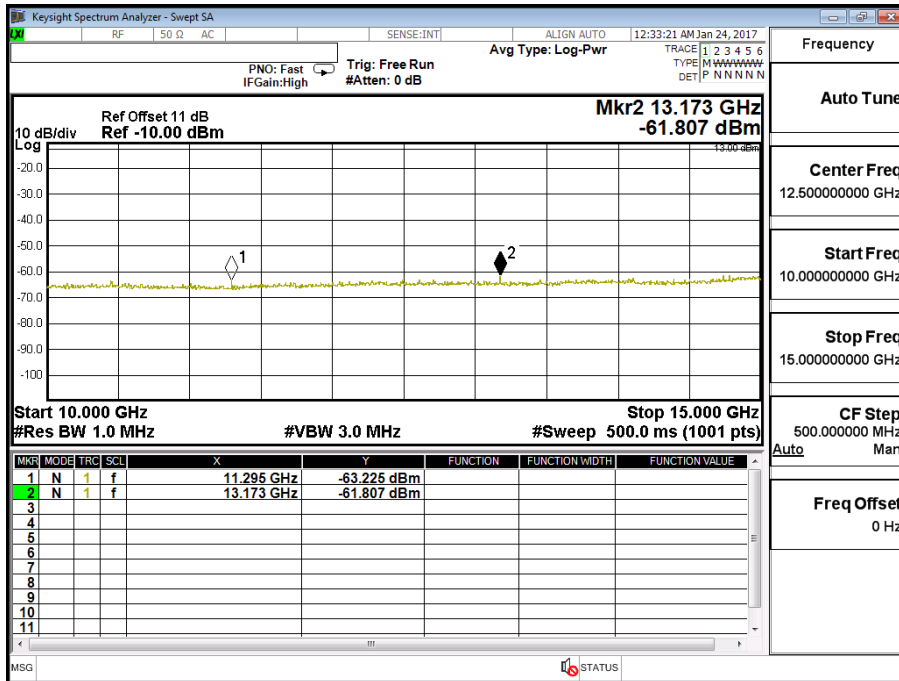
Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/06	Test Site	CTR
Test Condition	LTE-Band 25 (20M)	Test Range	30MHz~20GHz

LTE-Band 25 (20M) 16QAM(1,49) CH26365 (1882.5MHz)

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
3765	-60.432	1.1	-59.332	-13
5648	-64.996	1.23	-63.766	-13
7530	-65.132	1.59	-63.542	-13
9413	-66.419	1.89	-64.529	-13
11295	-63.225	2.07	-61.155	-13
13173	-61.807	2.26	-59.547	-13
15060	-62.913	2.64	-60.273	-13
16943	-59.846	3.5	-56.346	-13
18825	-60.177	3.7	-56.477	-13



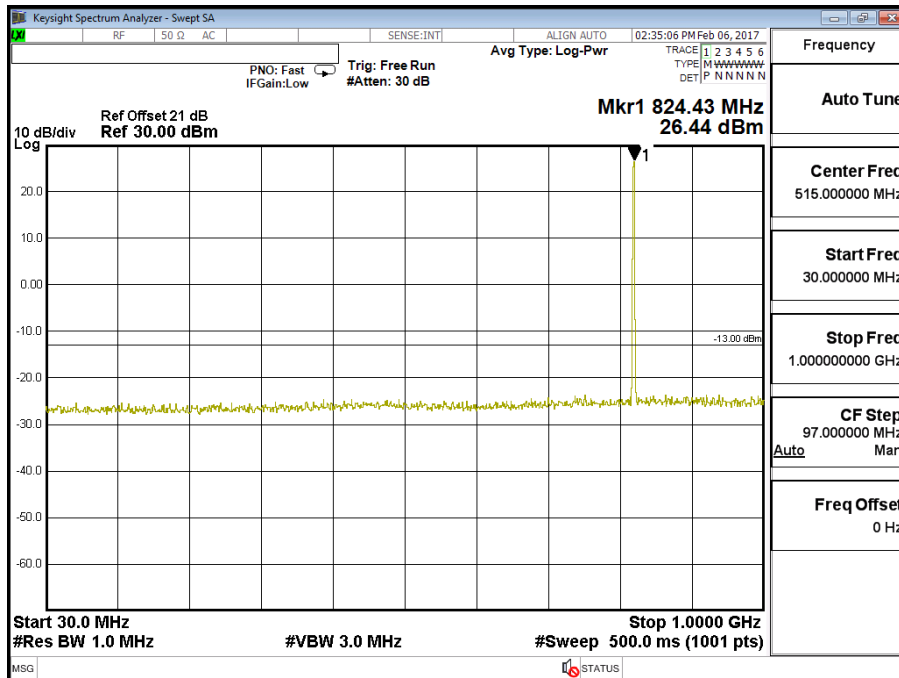


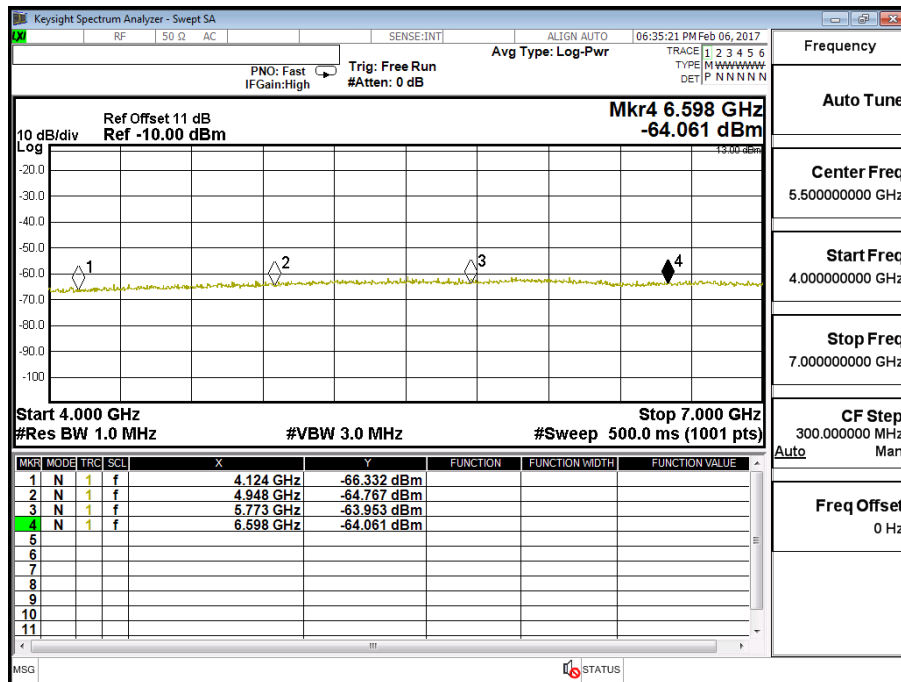
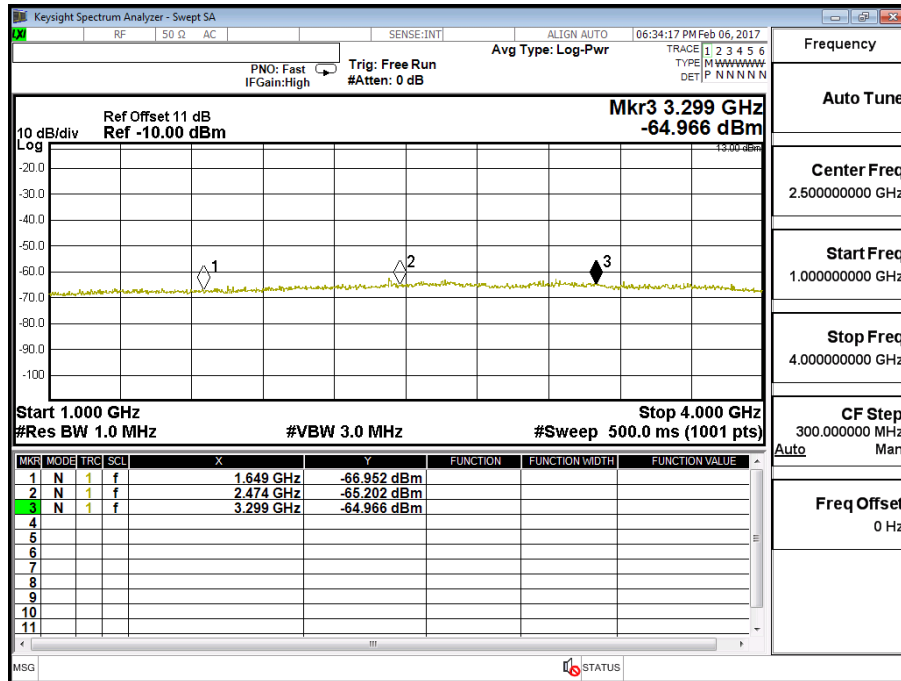


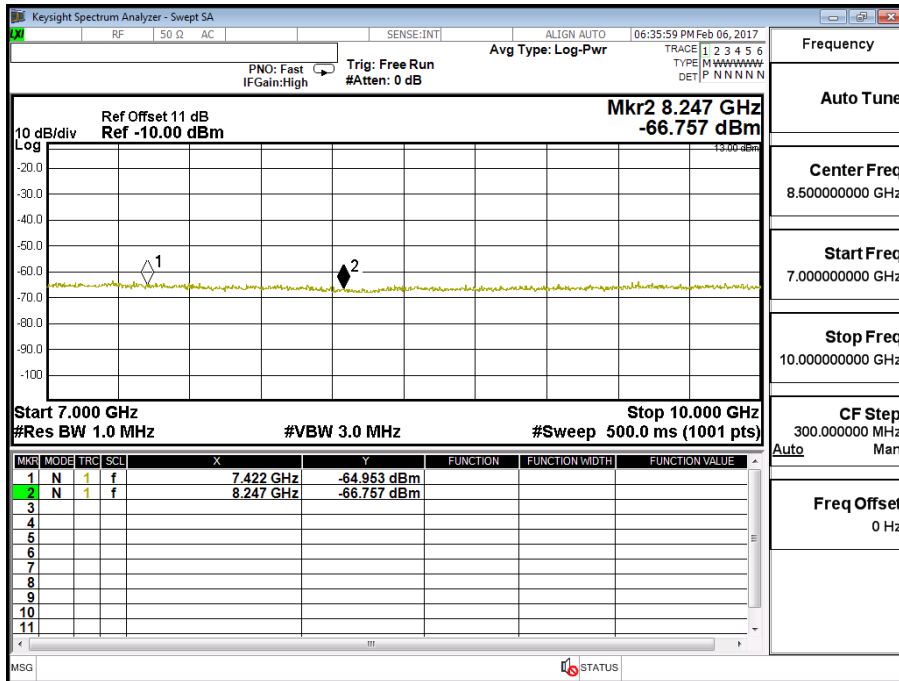
Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/06	Test Site	CTR
Test Condition	LTE-Band 26 (1.4M)	Test Range	30MHz~10GHz

LTE-Band 26 (1.4M) QPSK(1,0) CH26797 (824.7MHz)

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
1649	-66.952	0.58	-66.372	-13
2474	-65.202	0.7	-64.502	-13
3299	-64.966	1.01	-63.956	-13
4124	-66.332	1.18	-65.152	-13
4948	-64.767	1.23	-63.537	-13
5773	-63.953	1.45	-62.503	-13
6598	-64.061	1.56	-62.501	-13
7422	-64.953	1.59	-63.363	-13
8247	-66.757	1.82	-64.937	-13



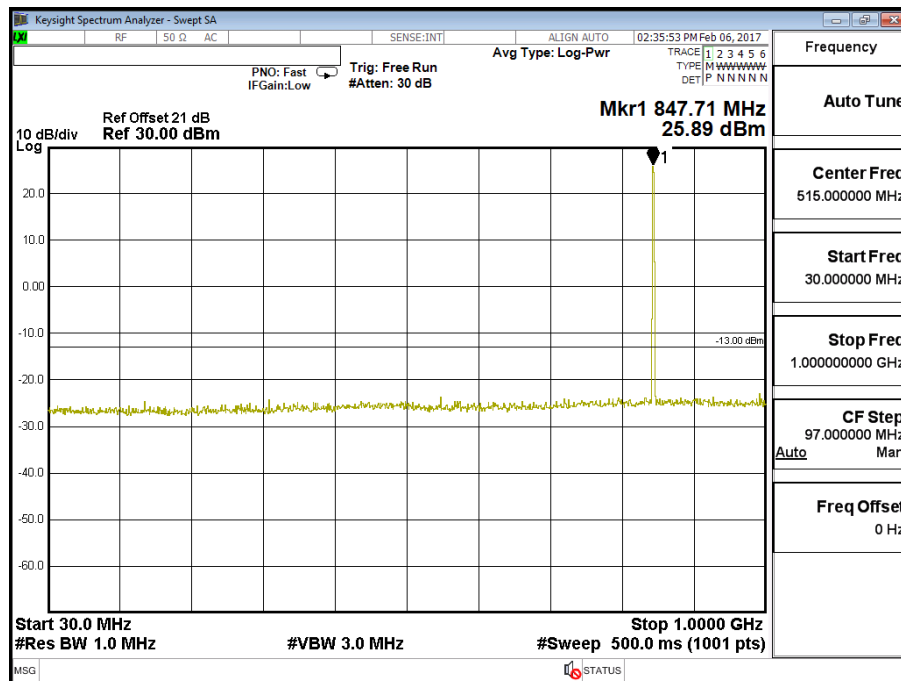


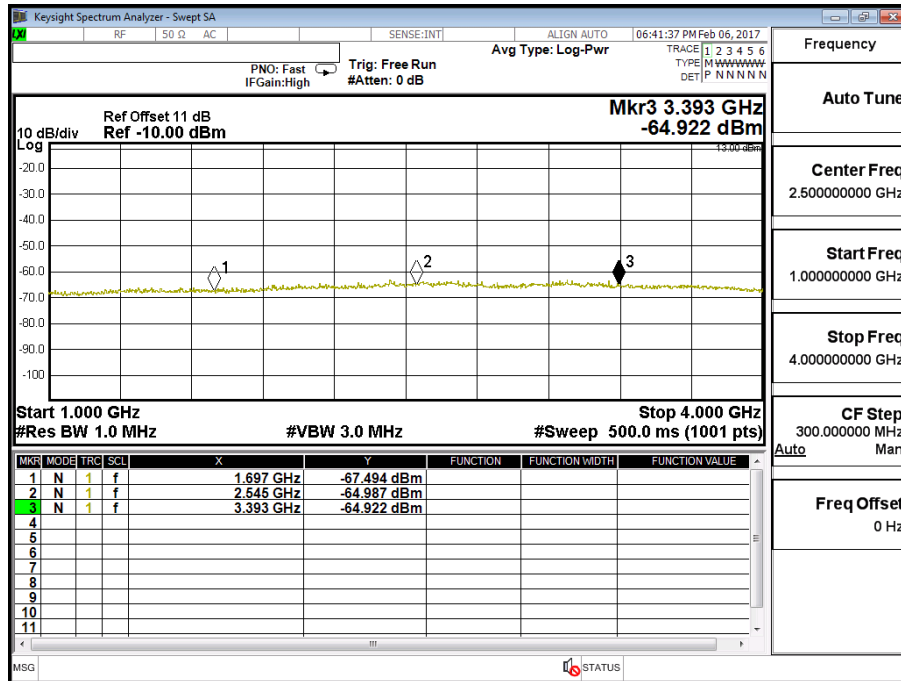


Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/06	Test Site	CTR
Test Condition	LTE-Band 26 (1.4M)	Test Range	30MHz~10GHz

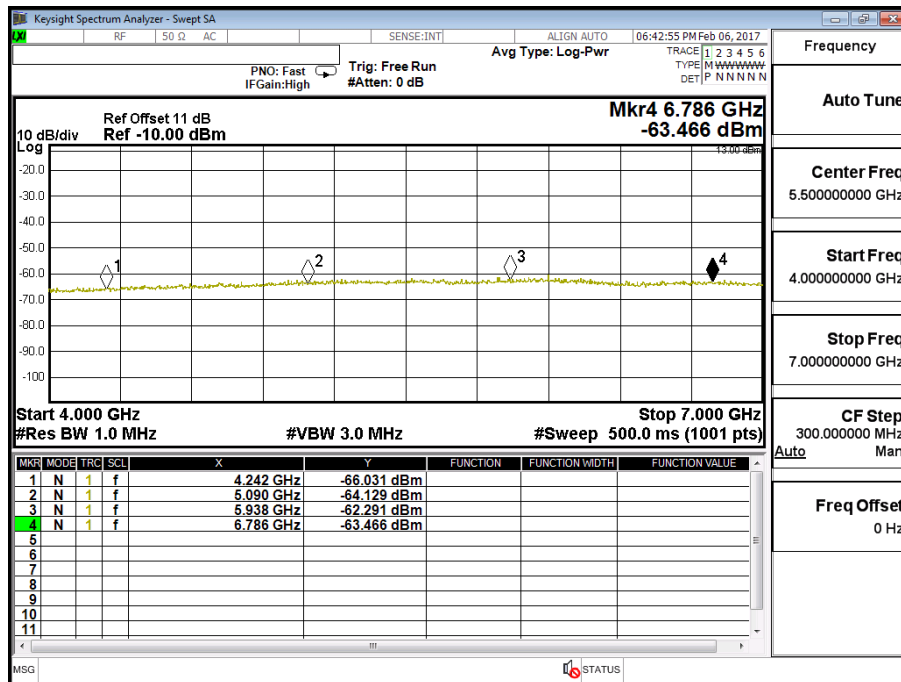
LTE-Band 26 (1.4M) 16QAM(1,0) CH27033 (848.3MHz)

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
1697	-67.494	0.58	-66.914	-13
2545	-64.987	0.7	-64.287	-13
3393	-64.922	1.01	-63.912	-13
4242	-66.031	1.18	-64.851	-13
5090	-64.129	1.23	-62.899	-13
5938	-62.291	1.45	-60.841	-13
6786	-63.466	1.56	-61.906	-13
7629	-64.073	1.59	-62.483	-13
8483	-65.908	1.82	-64.088	-13

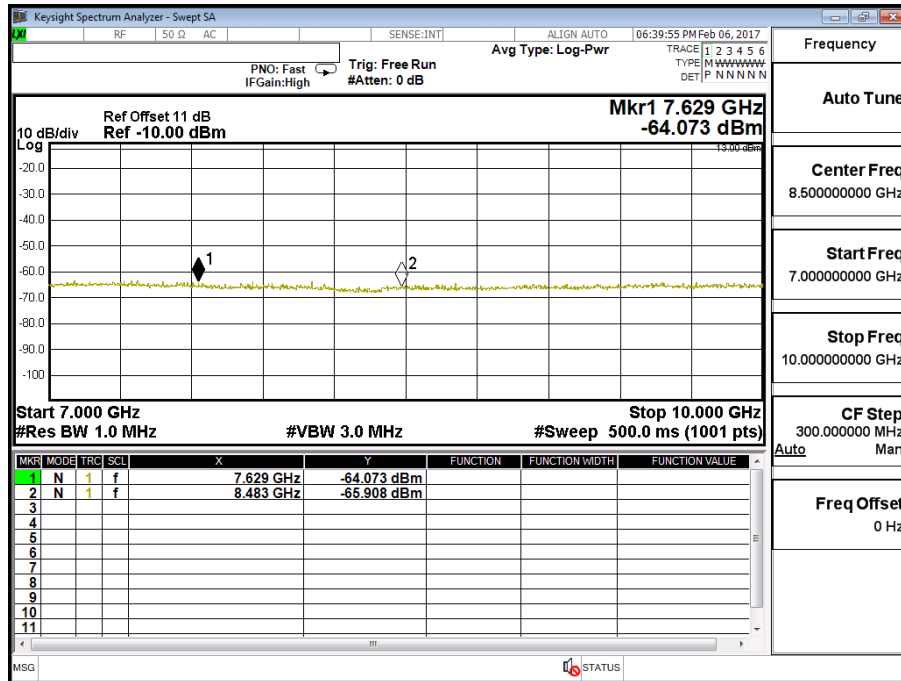




Frequency	Auto Tune
Center Freq	2.500000000 GHz
Start Freq	1.000000000 GHz
Stop Freq	4.000000000 GHz
CF Step	300.000000 MHz
	Auto Man
Freq Offset	0 Hz



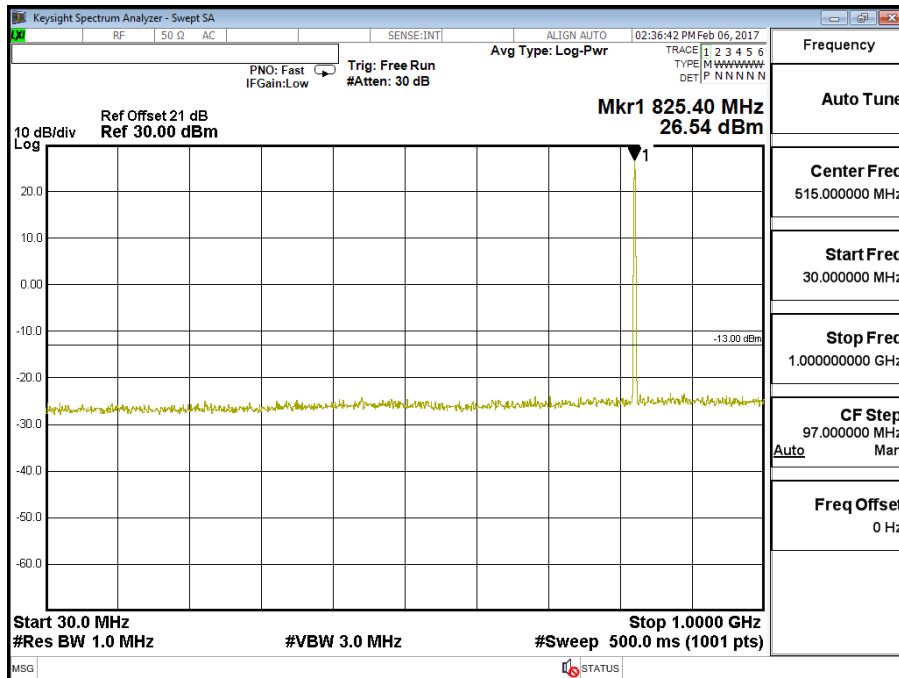
Frequency	Auto Tune
Center Freq	5.500000000 GHz
Start Freq	4.000000000 GHz
Stop Freq	7.000000000 GHz
CF Step	300.000000 MHz
	Auto Man
Freq Offset	0 Hz

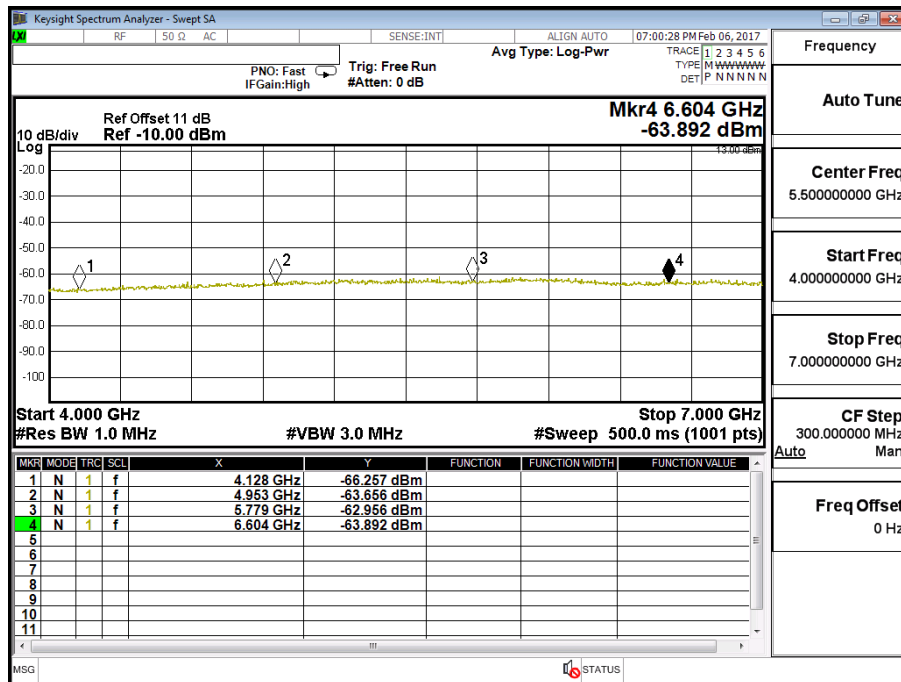
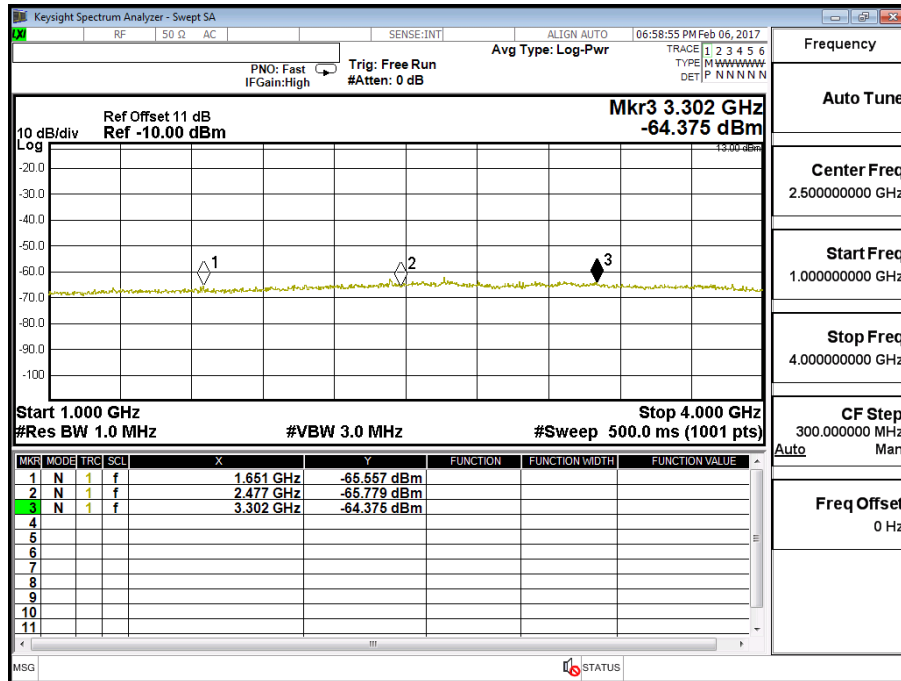


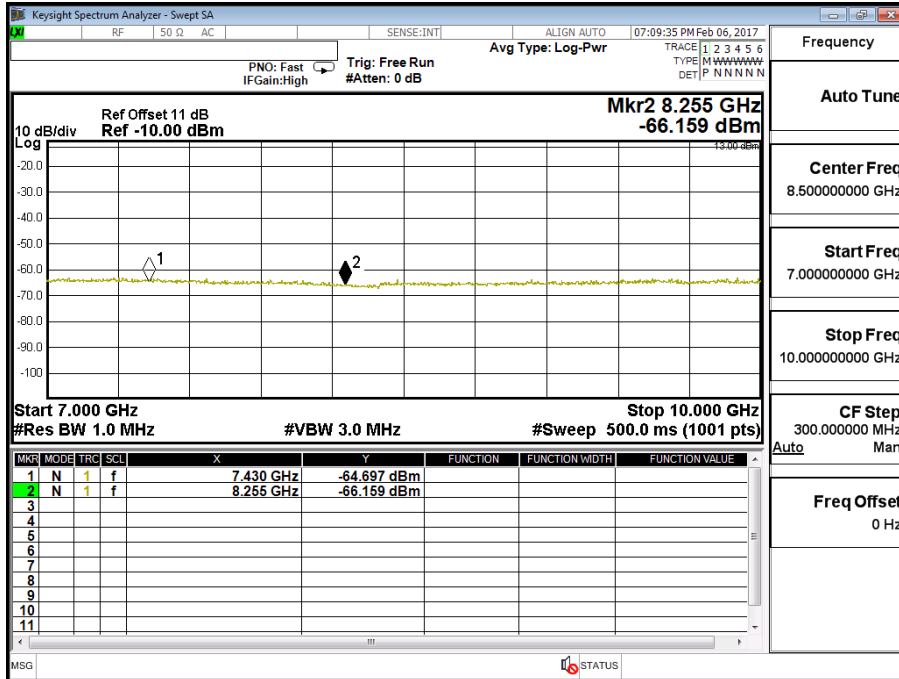
Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/06	Test Site	CTR
Test Condition	LTE-Band 26 (3M)	Test Range	30MHz~10GHz

LTE-Band 26 (3M) QPSK(1,7) CH26805 (825.5MHz)

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
1651	-65.557	0.58	-64.977	-13
2477	-65.779	0.7	-65.079	-13
3302	-64.375	1.01	-63.365	-13
4128	-66.257	1.18	-65.077	-13
4953	-63.656	1.23	-62.426	-13
5779	-62.956	1.45	-61.506	-13
6604	-63.892	1.56	-62.332	-13
7430	-64.697	1.59	-63.107	-13
8255	-66.159	1.82	-64.339	-13



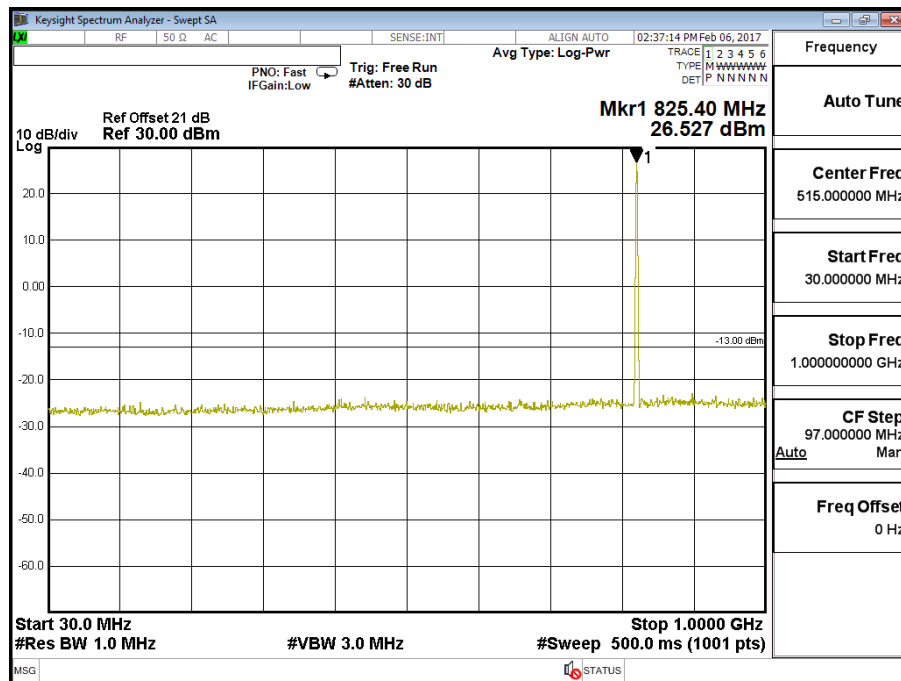


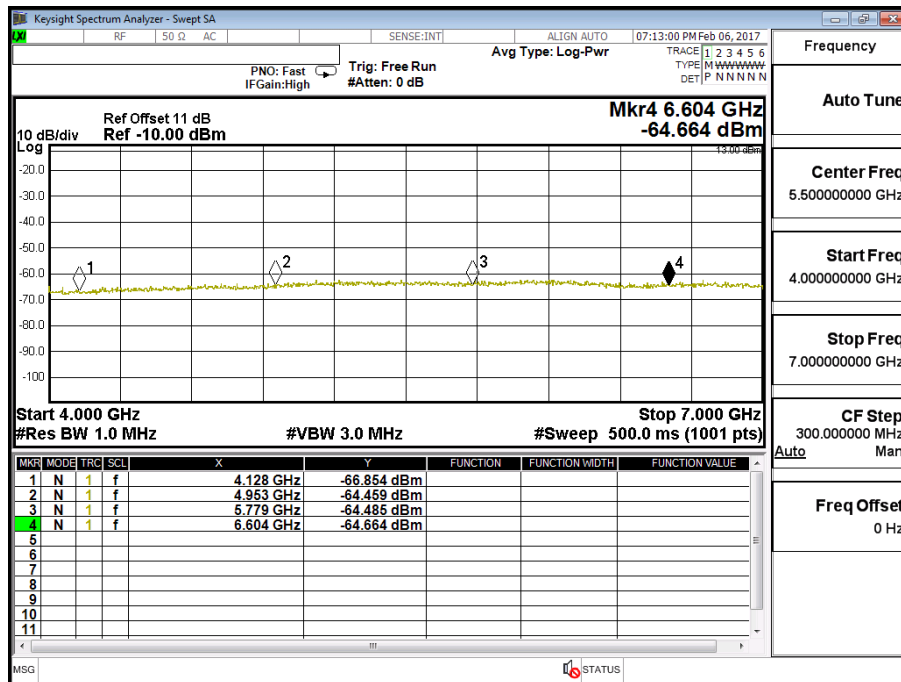
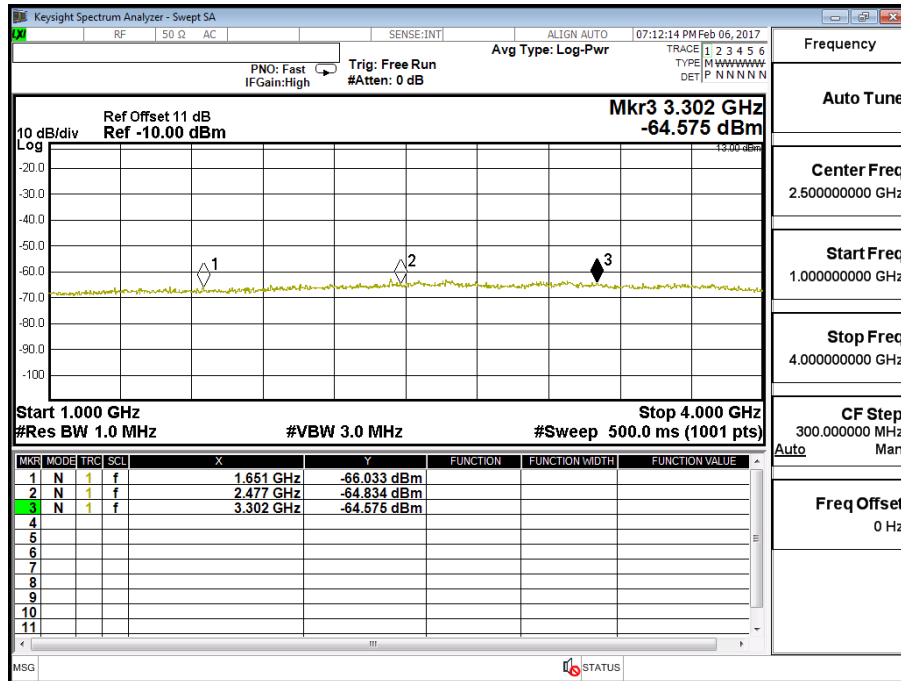


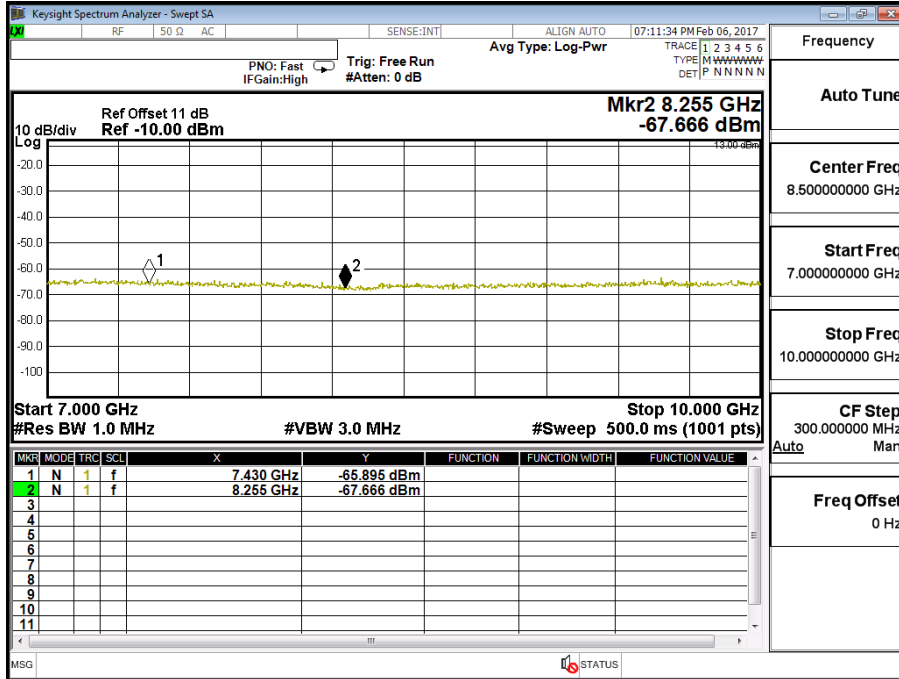
Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/06	Test Site	CTR
Test Condition	LTE-Band 26 (3M)	Test Range	30MHz~10GHz

LTE-Band 26 (3M) 16QAM(1,7) CH20805 (825.5MHz)

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
1651	-66.033	0.58	-65.453	-13
2477	-64.834	0.7	-64.134	-13
3302	-64.575	1.01	-63.565	-13
4128	-66.854	1.18	-65.674	-13
4953	-64.459	1.23	-63.229	-13
5779	-64.485	1.45	-63.035	-13
6604	-64.664	1.56	-63.104	-13
7430	-65.895	1.59	-64.305	-13
8255	-67.666	1.82	-65.846	-13



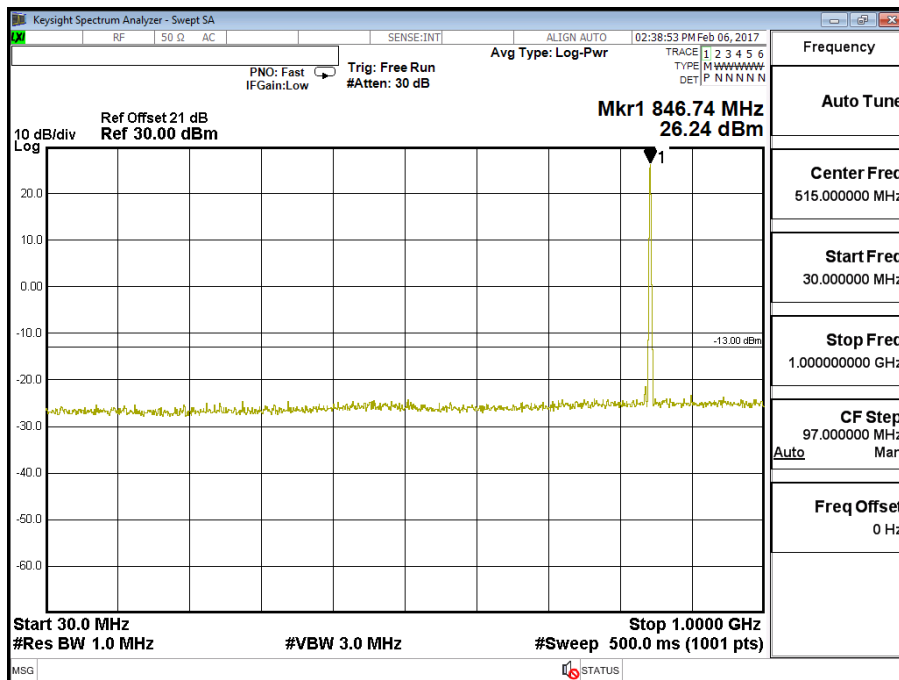


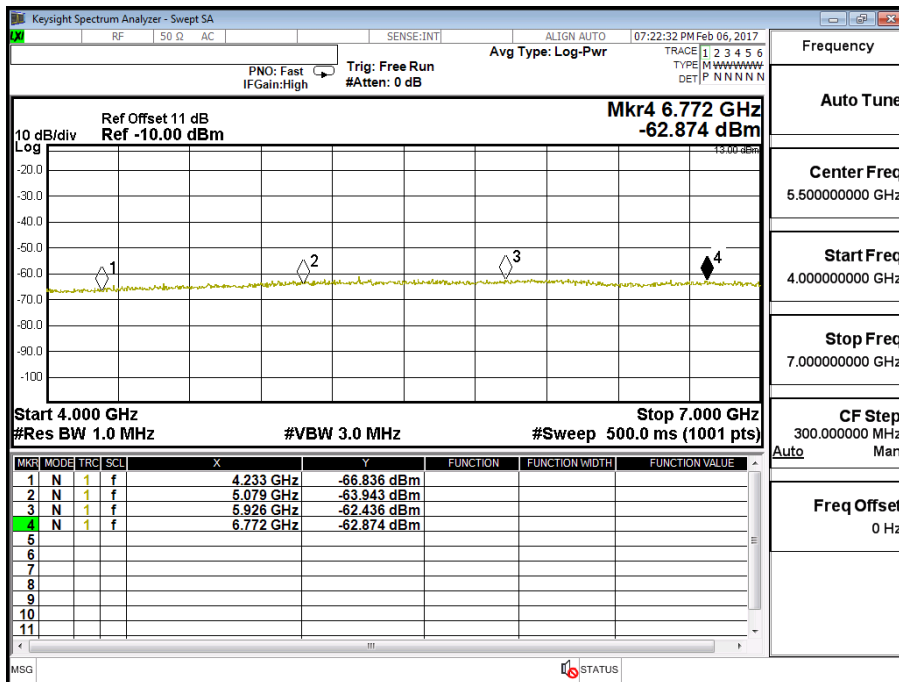
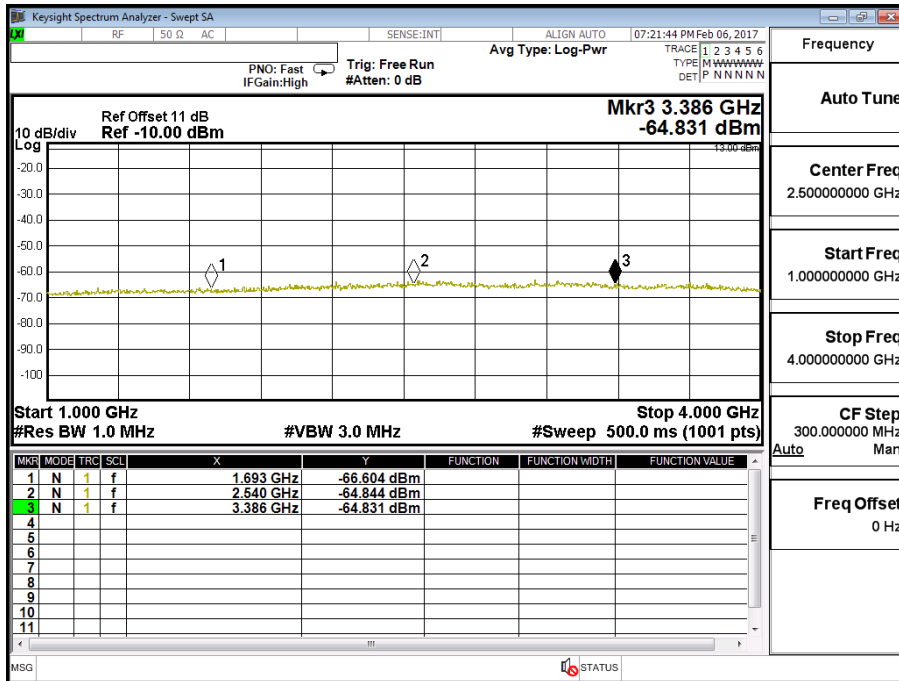


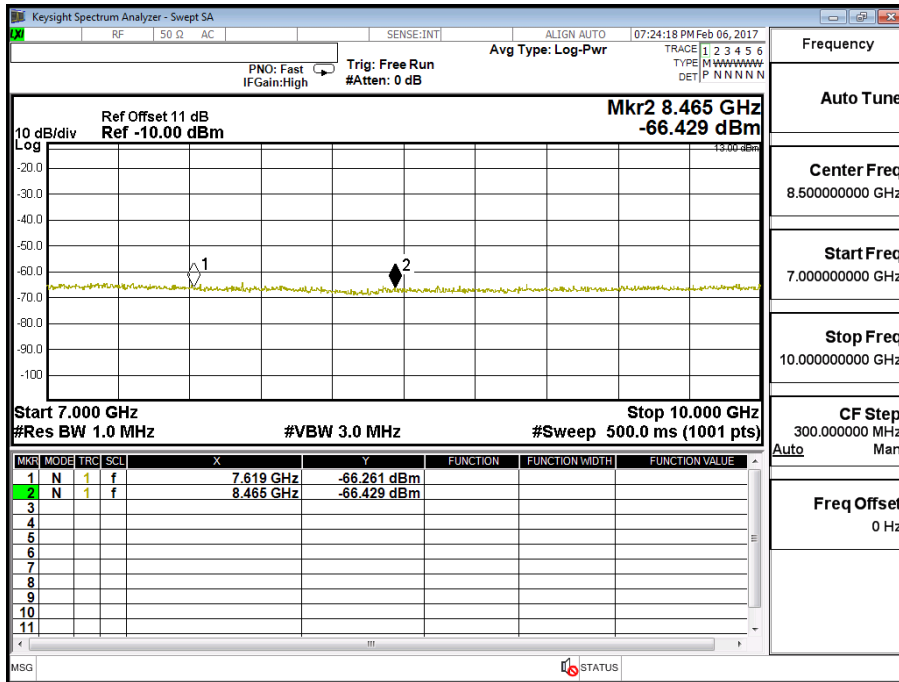
Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/06	Test Site	CTR
Test Condition	LTE-Band 26 (5M)	Test Range	30MHz~10GHz

LTE-Band 26 (5M) QPSK(1,12) CH27015 (846.5MHz)

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
1693	-66.604	0.58	-66.024	-13
2540	-64.844	0.7	-64.144	-13
3386	-64.831	1.01	-63.821	-13
4233	-66.836	1.18	-65.656	-13
5079	-63.943	1.23	-62.713	-13
5926	-62.436	1.45	-60.986	-13
6772	-62.874	1.56	-61.314	-13
7619	-66.261	1.59	-64.671	-13
8465	-66.429	1.82	-64.609	-13



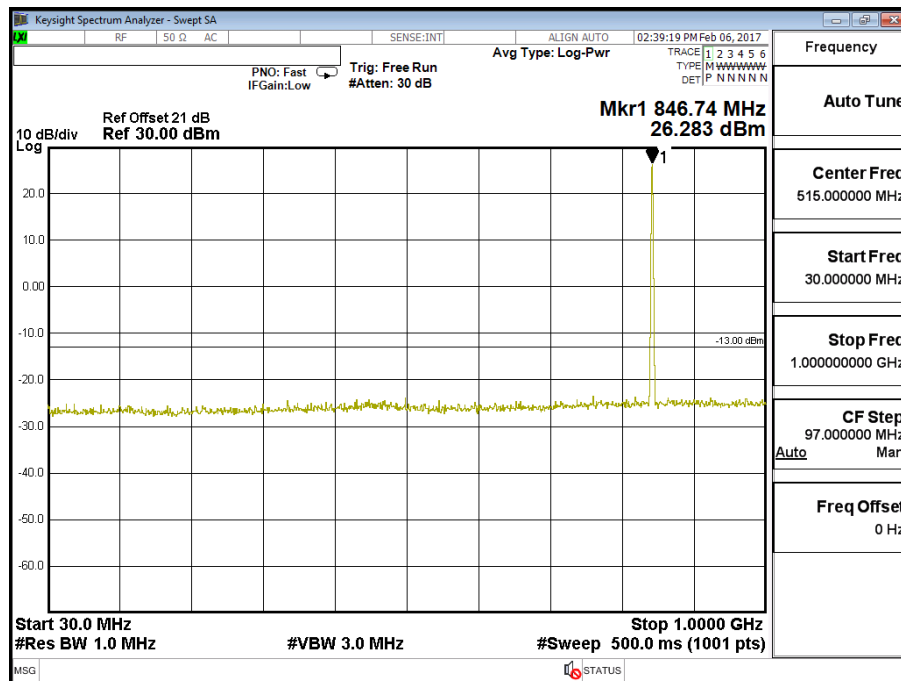


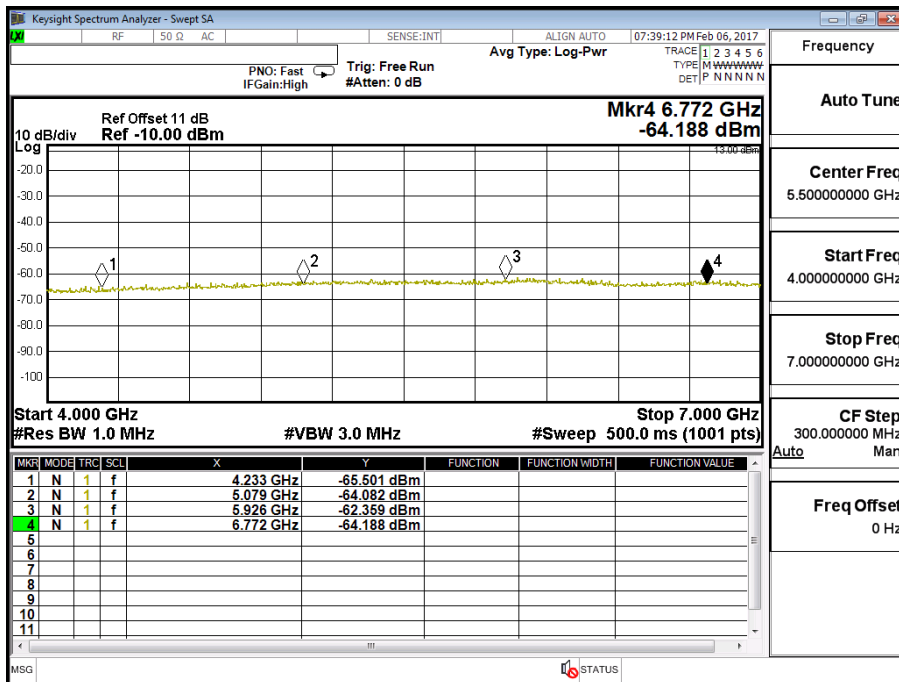
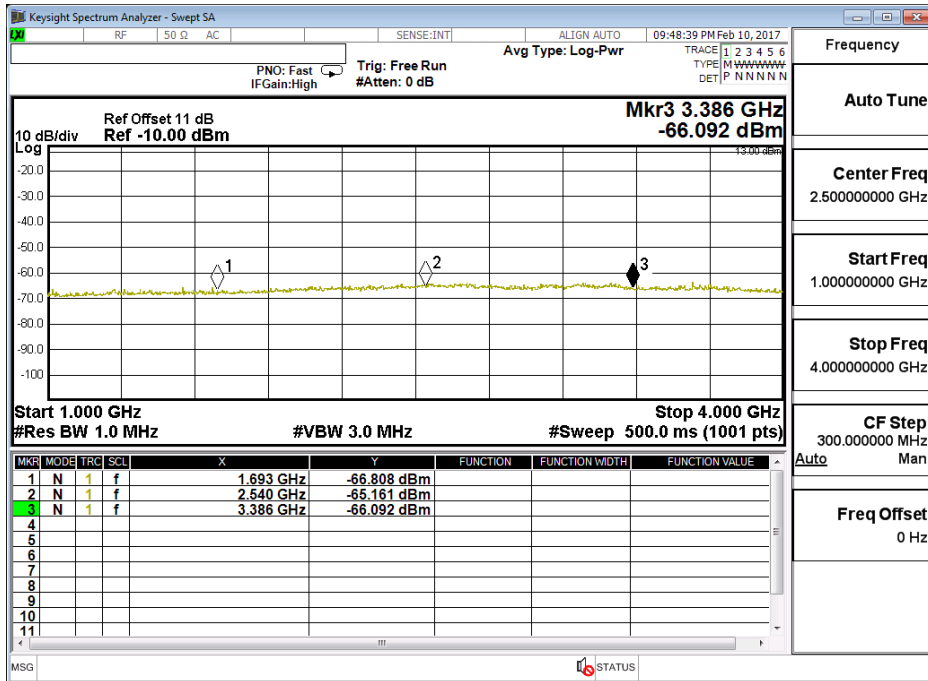


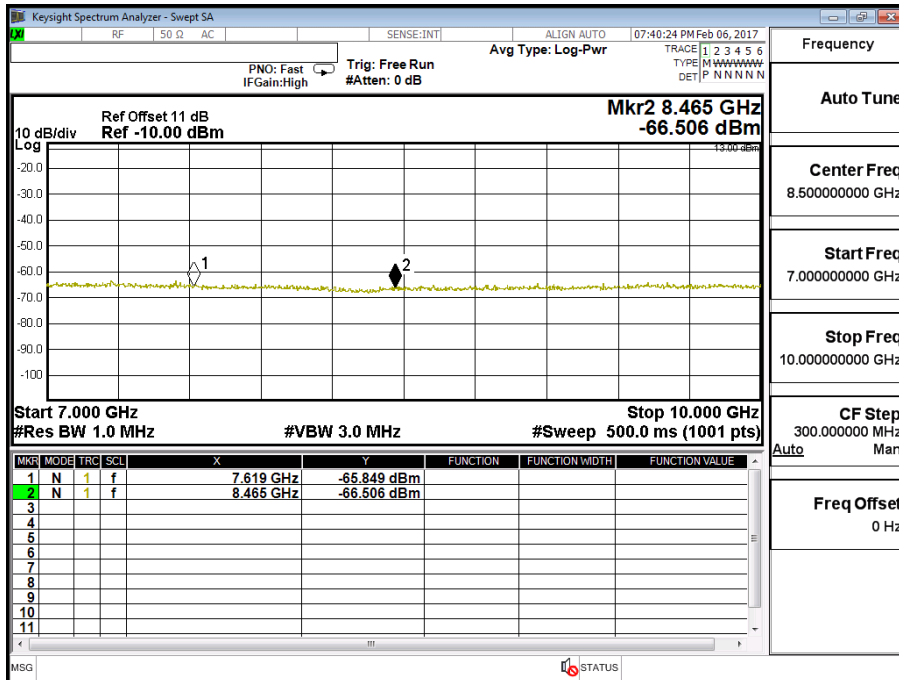
Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/06	Test Site	CTR
Test Condition	LTE-Band 26 (5M)	Test Range	30MHz~10GHz

LTE-Band 26 (5M) 16QAM(1,12) CH27015 (846.5MHz)

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
1693	-66.808	0.58	-66.228	-13
2540	-65.161	0.7	-64.461	-13
3386	-66.092	1.01	-65.082	-13
4233	-65.501	1.18	-64.321	-13
5079	-64.082	1.23	-62.852	-13
5926	-62.359	1.45	-60.909	-13
6772	-64.188	1.56	-62.628	-13
7619	-65.849	1.59	-64.259	-13
8465	-66.506	1.82	-64.686	-13



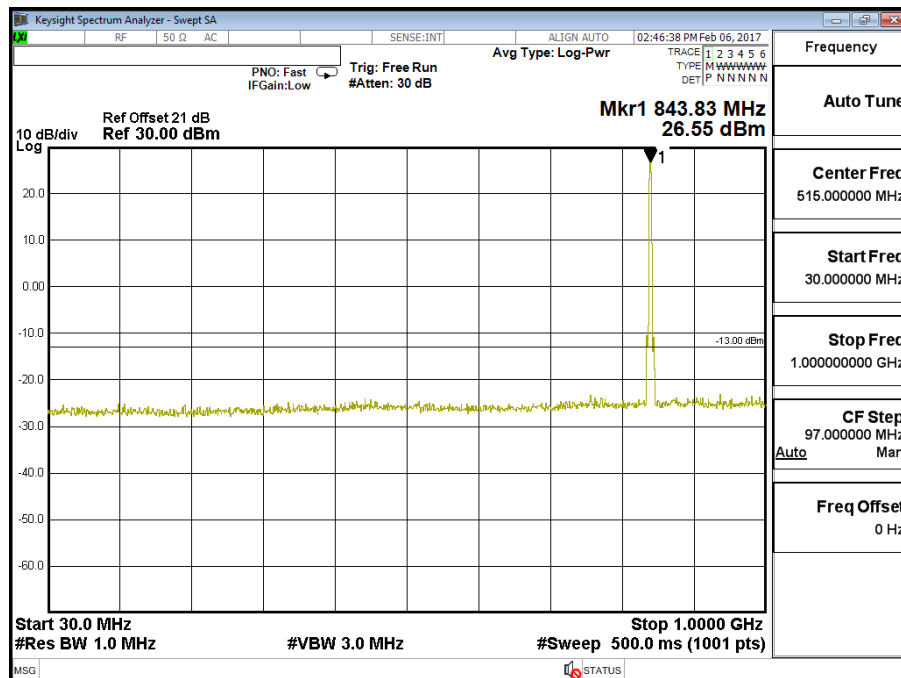


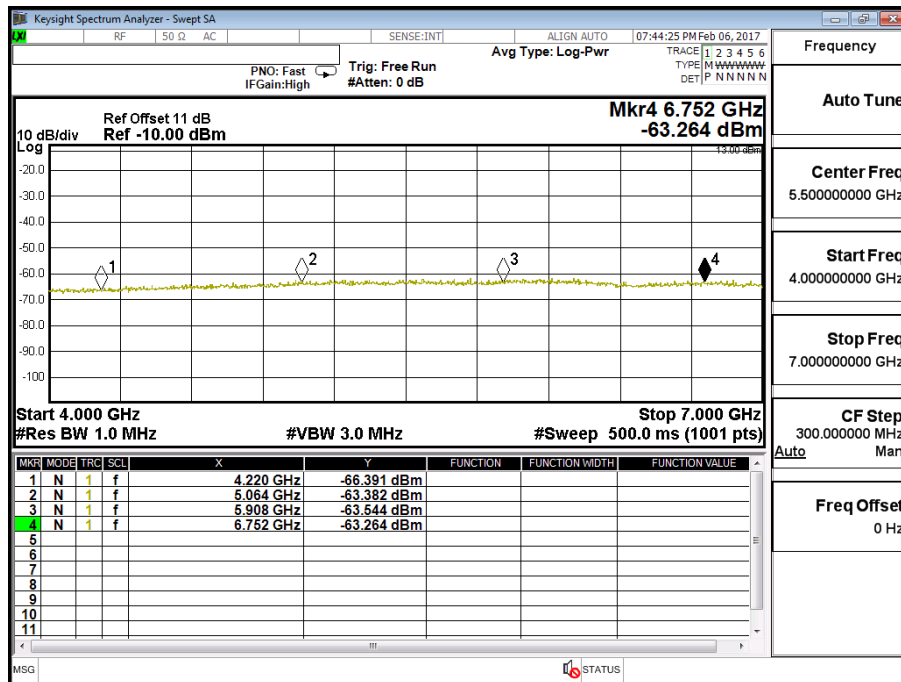
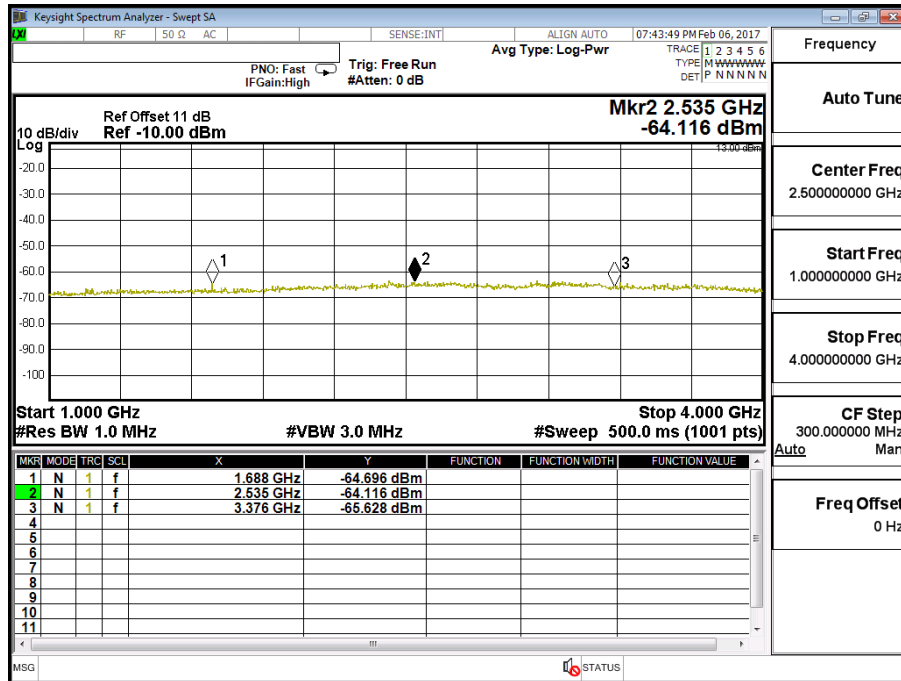


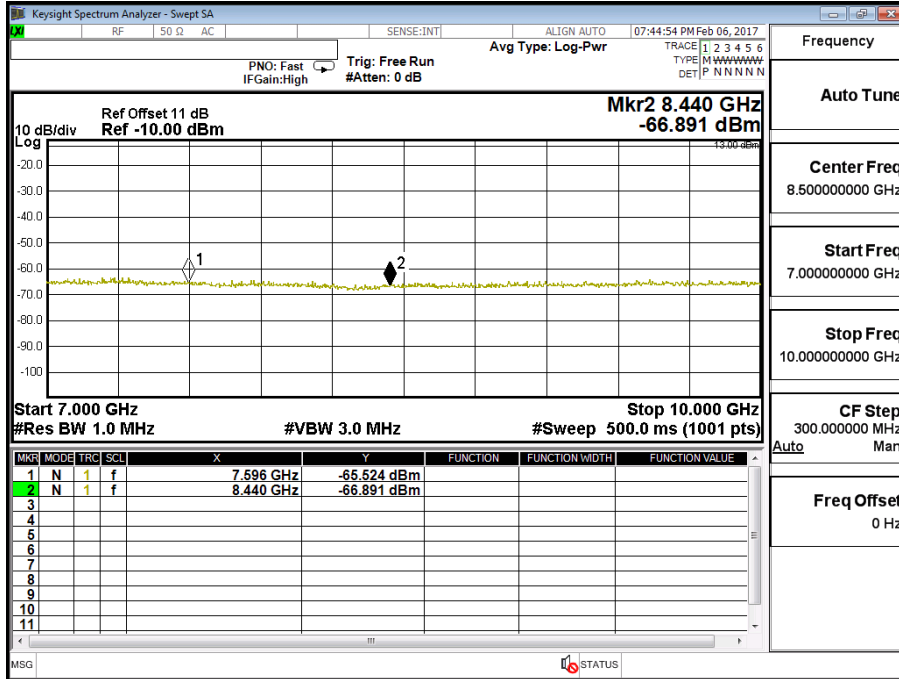
Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/06	Test Site	CTR
Test Condition	LTE-Band 26 (10M)	Test Range	30MHz~10GHz

LTE-Band 26 (10M) QPSK(1,24) CH26990 (844MHz)

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
1688	-64.696	0.58	-64.116	-13
2535	-64.116	0.7	-63.416	-13
3376	-65.628	1.01	-64.618	-13
4220	-66.391	1.18	-65.211	-13
5064	-63.382	1.23	-62.152	-13
5908	-63.544	1.45	-62.094	-13
6752	-63.264	1.56	-61.704	-13
7596	-65.524	1.59	-63.934	-13
8440	-66.891	1.82	-65.071	-13



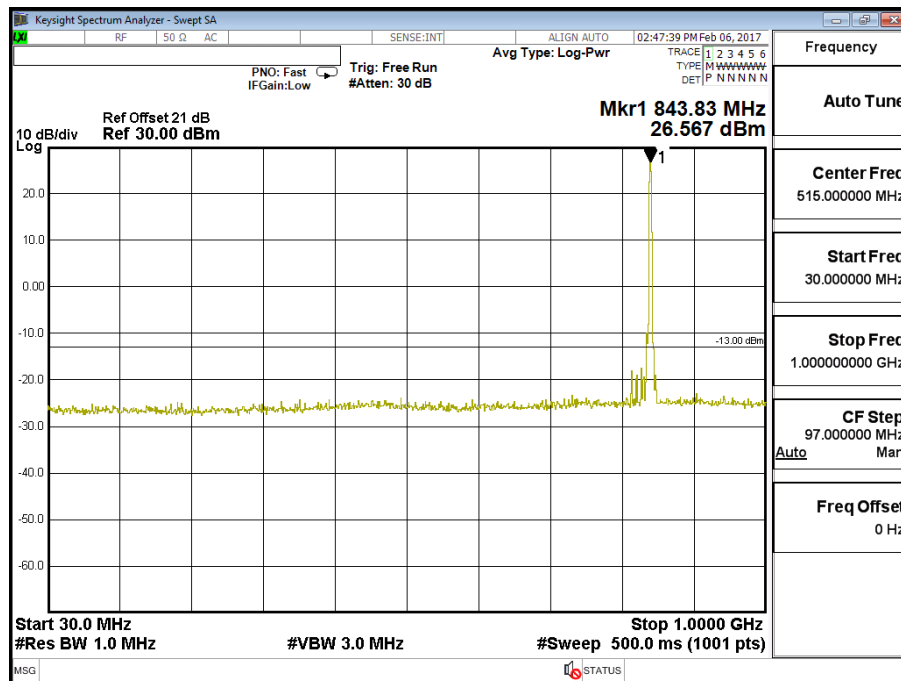


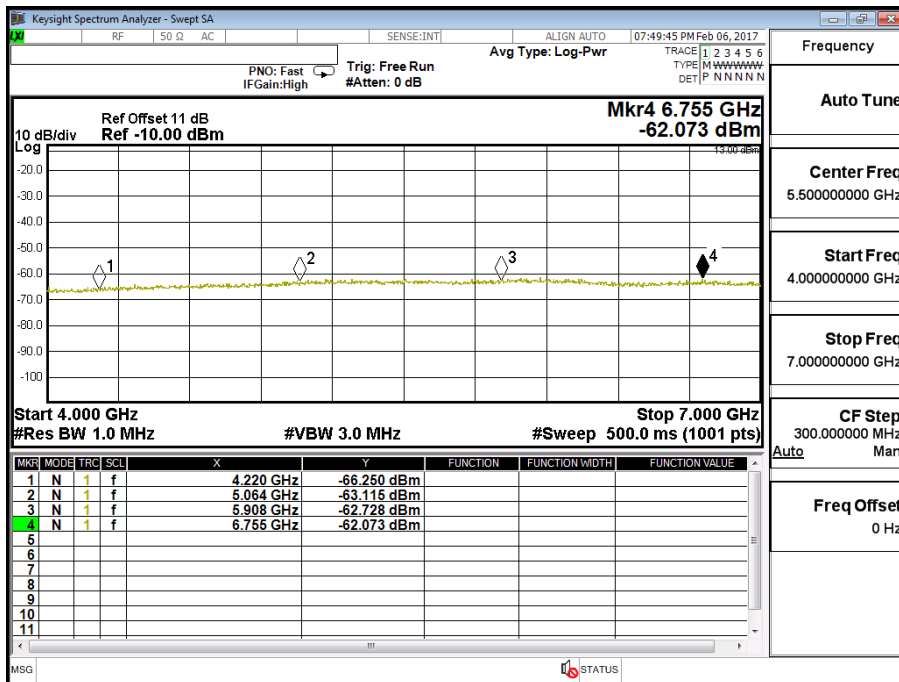
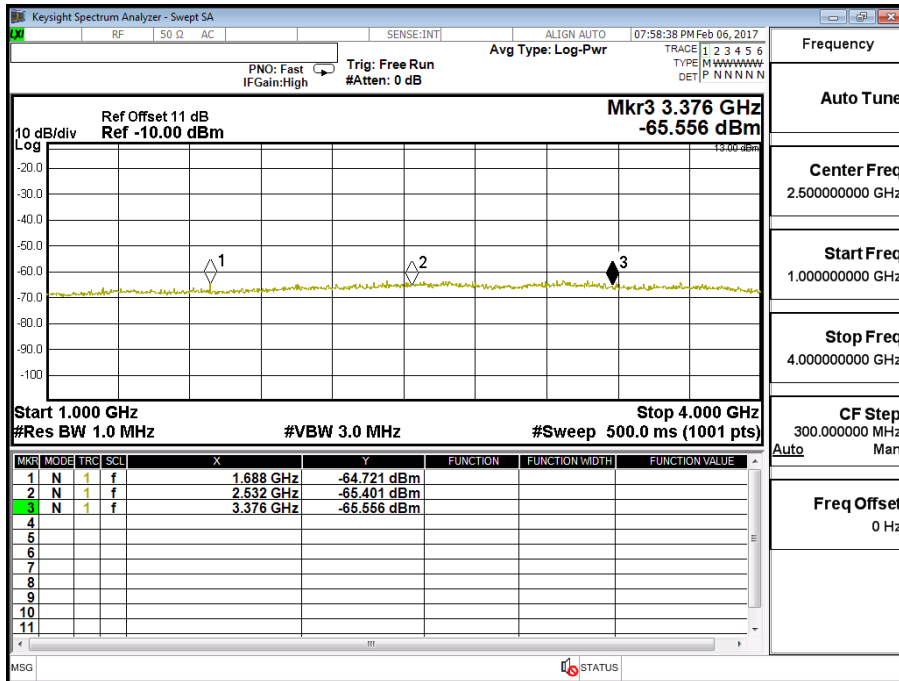


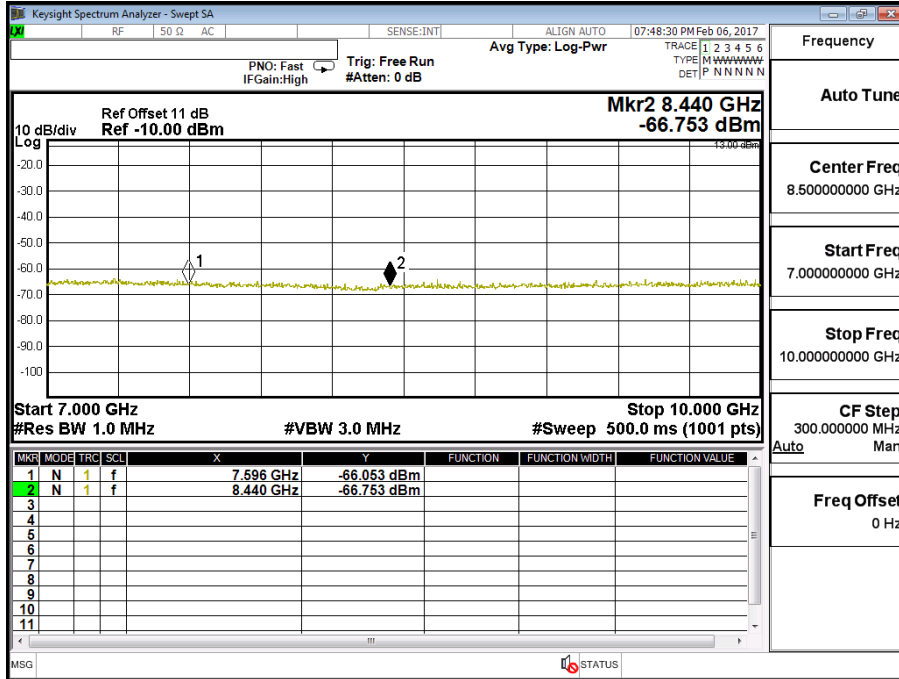
Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/06	Test Site	CTR
Test Condition	LTE-Band 26 (10M)	Test Range	30MHz~10GHz

LTE-Band 26 (10M) 16QAM(1,24) CH26990 (844MHz)

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
1688	-64.721	0.58	-64.141	-13
2532	-65.401	0.7	-64.701	-13
3376	-65.556	1.01	-64.546	-13
4220	-66.250	1.18	-65.070	-13
5064	-63.115	1.23	-61.885	-13
5908	-62.728	1.45	-61.278	-13
6755	-62.073	1.56	-60.513	-13
7596	-66.053	1.59	-64.463	-13
8440	-66.753	1.82	-64.933	-13



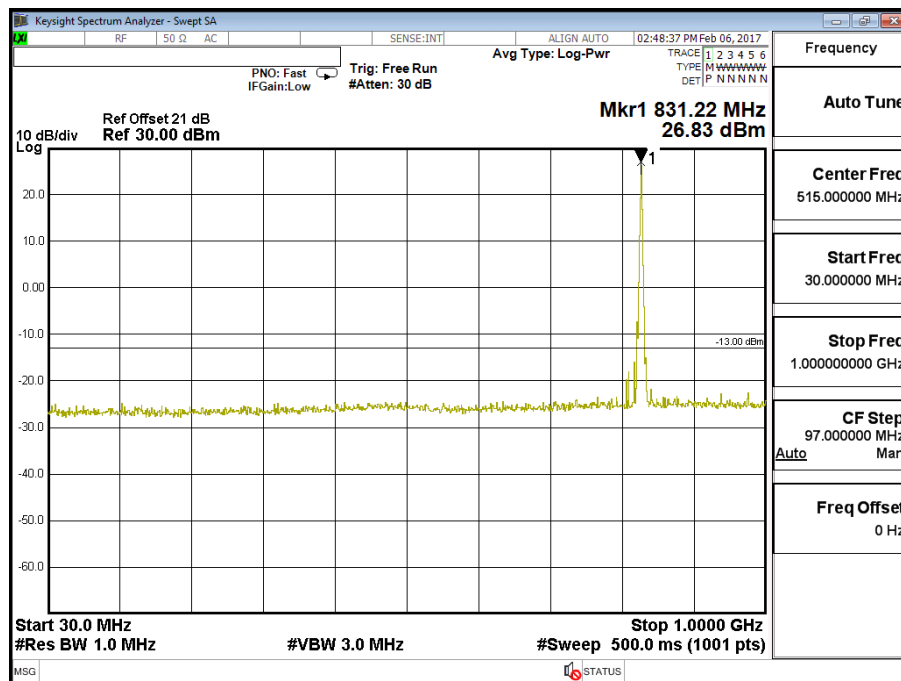


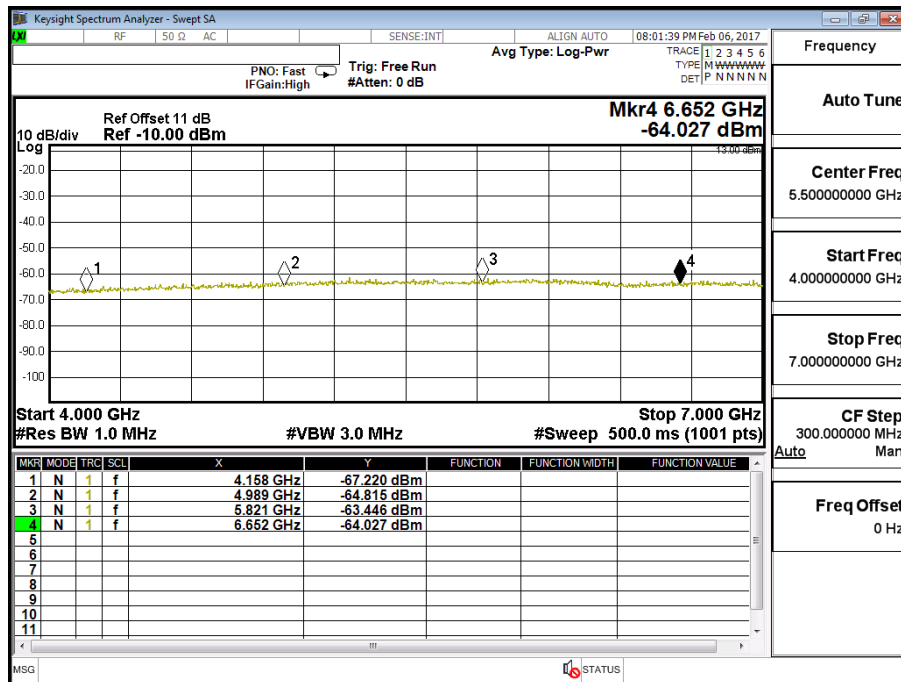
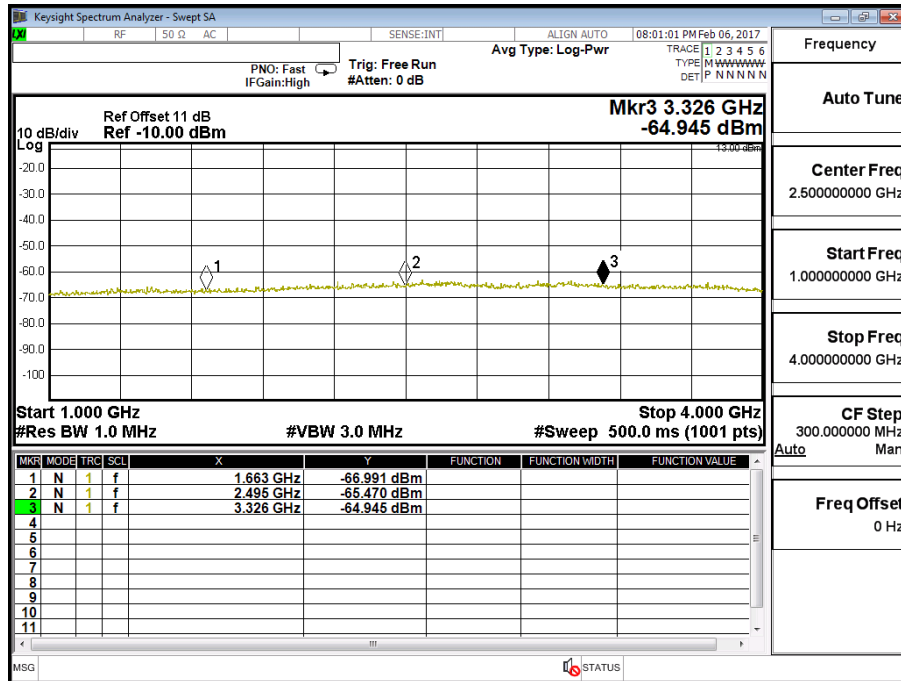


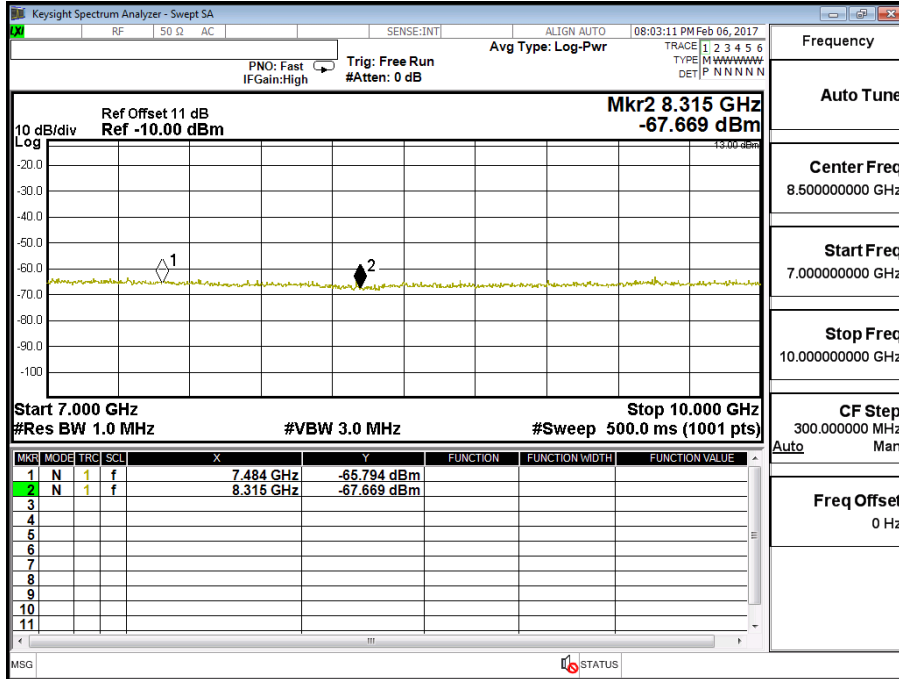
Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/06	Test Site	CTR
Test Condition	LTE-Band 26 (15M)	Test Range	30MHz~10GHz

LTE-Band 26 (15M) QPSK(1,37) CH26865 (831.5MHz)

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
1663	-66.991	0.58	-66.411	-13
2495	-65.470	0.7	-64.770	-13
3326	-64.945	1.01	-63.935	-13
4158	-67.220	1.18	-66.040	-13
4989	-64.815	1.23	-63.585	-13
5821	-63.446	1.45	-61.996	-13
6652	-64.027	1.56	-62.467	-13
7484	-65.794	1.59	-64.204	-13
8315	-67.669	1.82	-65.849	-13



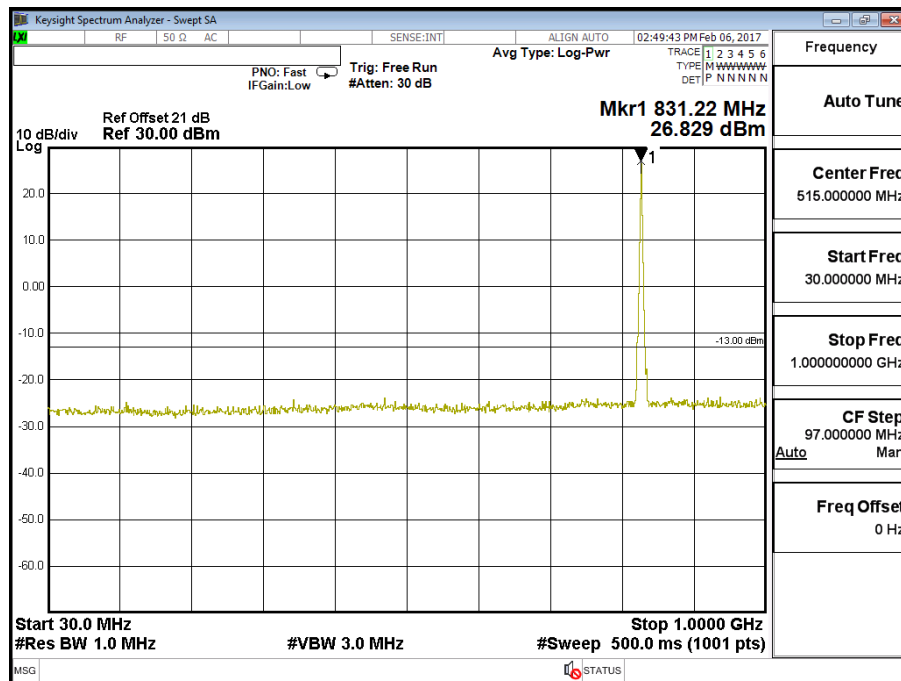


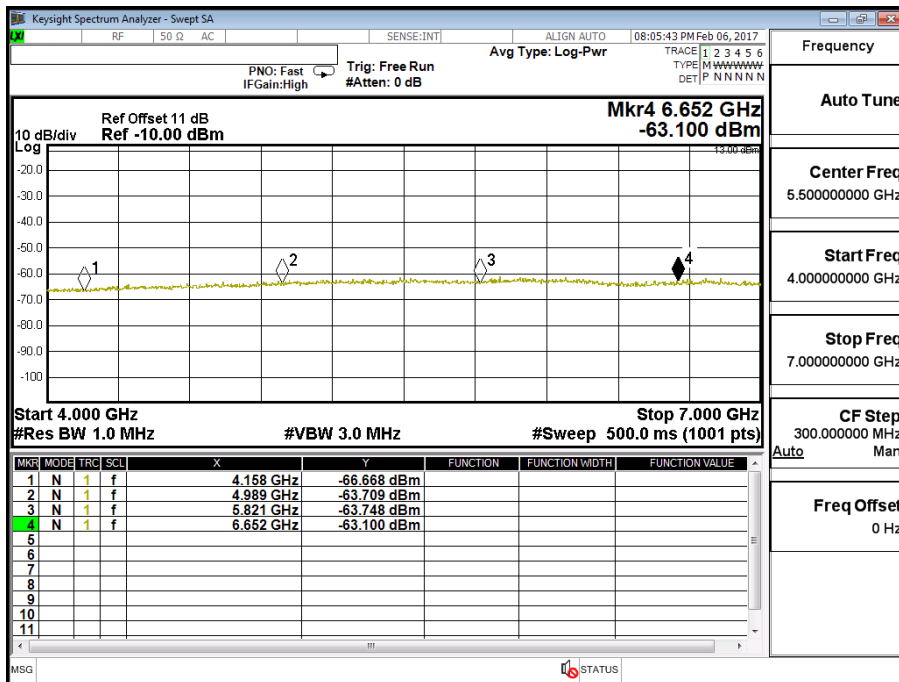
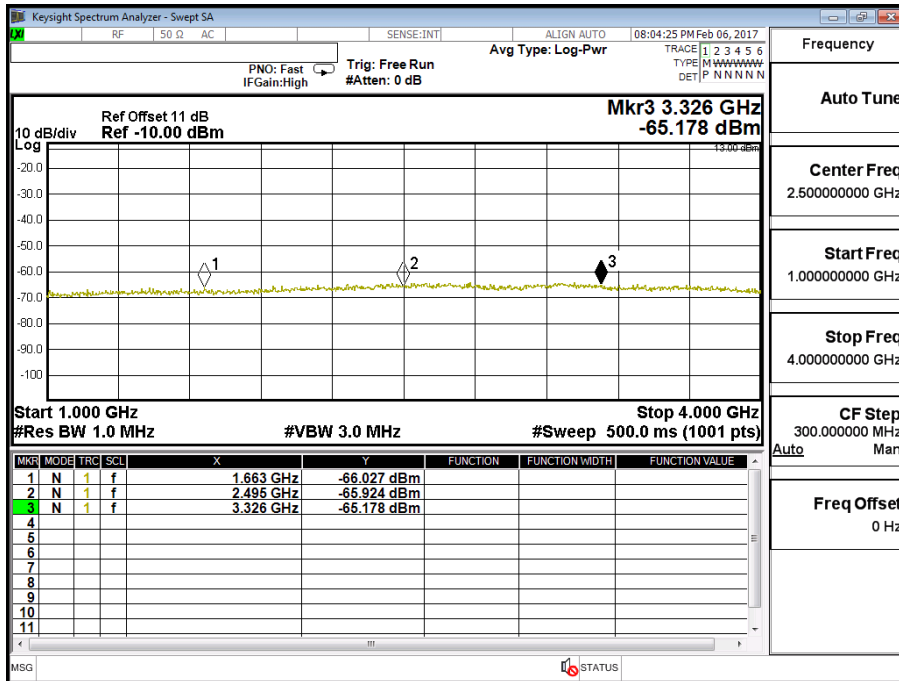


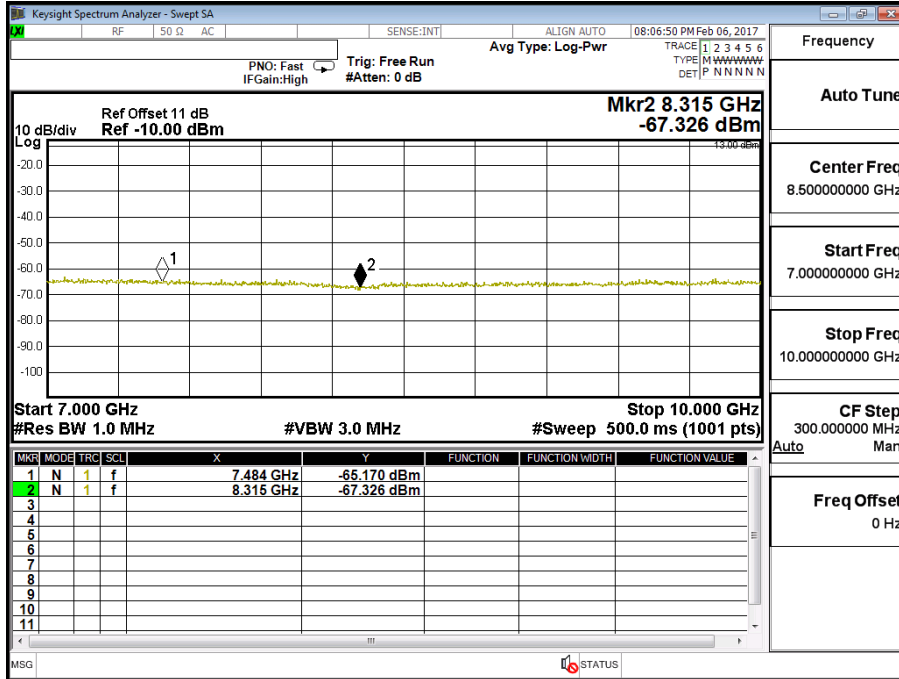
Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/06	Test Site	CTR
Test Condition	LTE-Band 26 (15M)	Test Range	30MHz~10GHz

LTE-Band 26 (15M) 16QAM(1,37) CH26865 (831.5MHz)

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
1663	-66.027	0.58	-65.447	-13
2495	-65.924	0.7	-65.224	-13
3326	-65.178	1.01	-64.168	-13
4158	-66.668	1.18	-65.488	-13
4989	-63.709	1.23	-62.479	-13
5821	-63.748	1.45	-62.298	-13
6652	-63.100	1.56	-61.540	-13
7484	-65.170	1.59	-63.580	-13
8315	-67.326	1.82	-65.506	-13



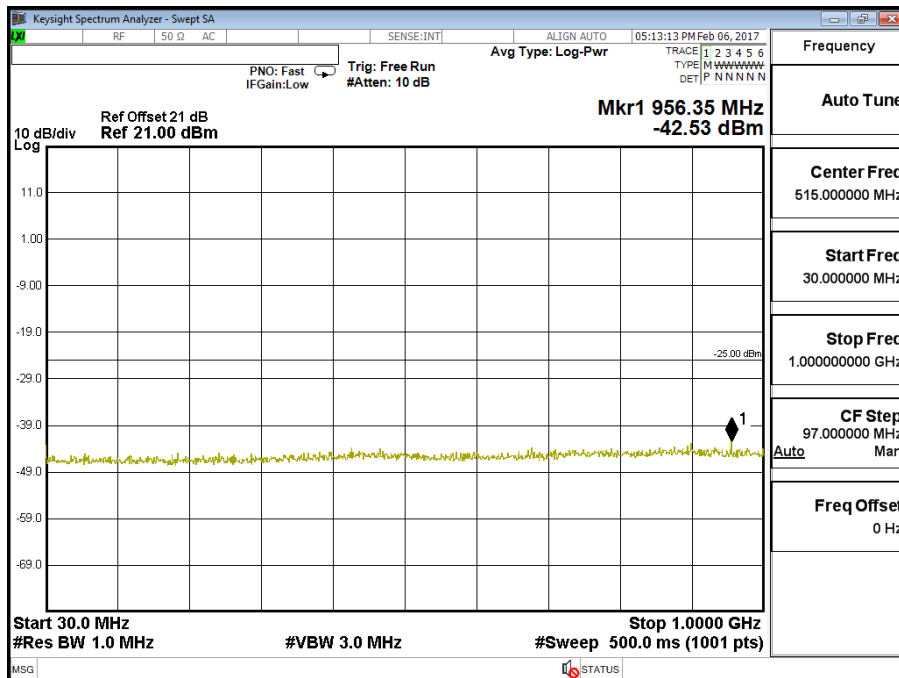


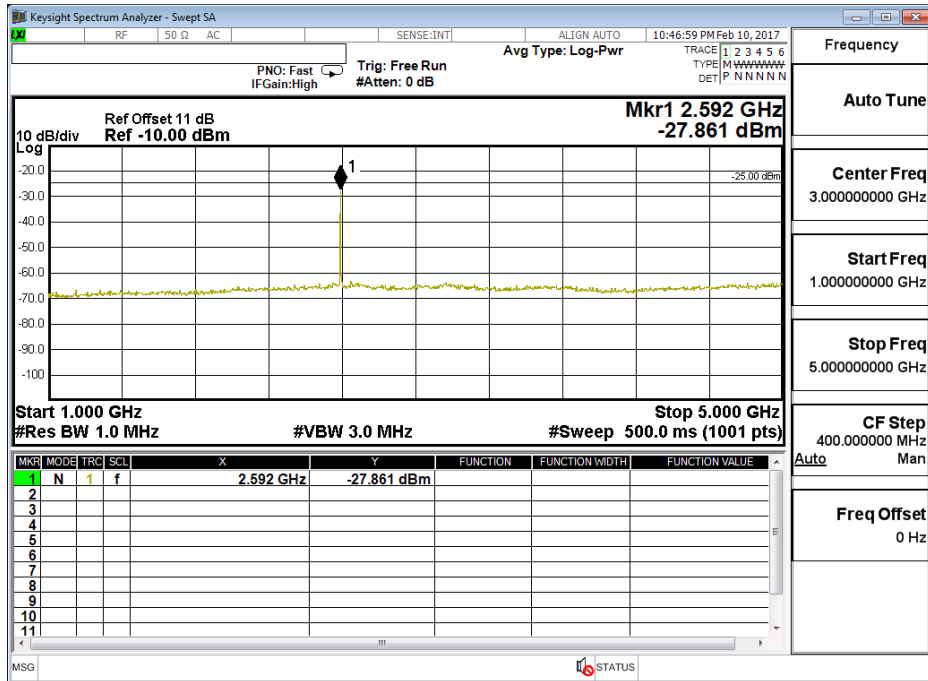


Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Mode	Spurious Emission (Conducted)		
Date of Test	2017/02/06	Test Site	CTR
Test Condition	LTE-Band 41 (5M)	Test Range	30MHz~26GHz

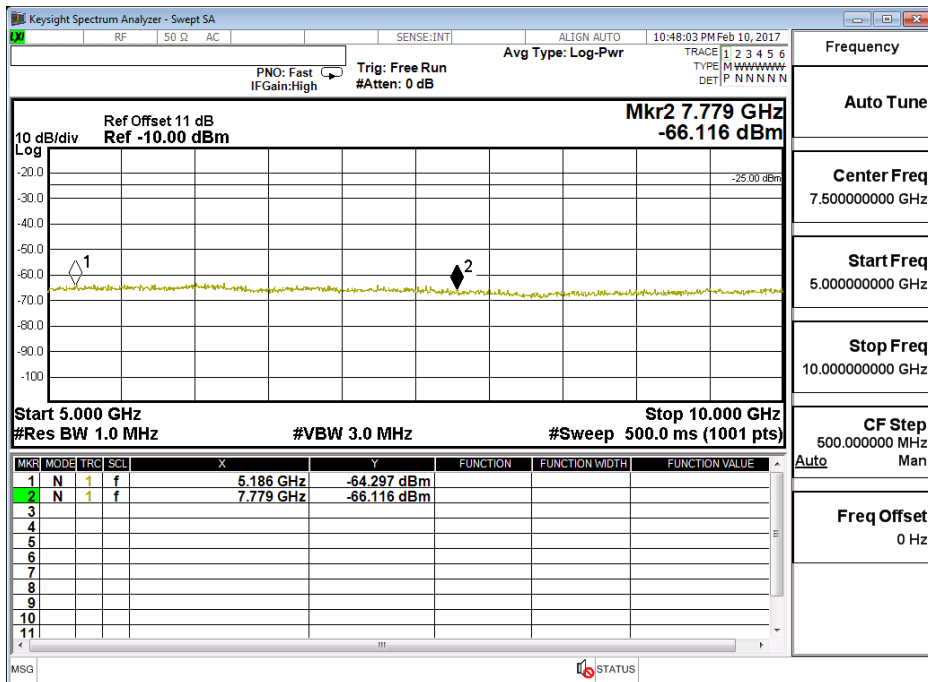
LTE-Band 41 (5M) QPSK(1,0) CH40620 (2593MHz)

Frequency (MHz)	Reading Level (dBm)	Path Loss (dB)	Emission Level (dBm)	Limit (dBm)
5186	-64.297	1.23	-63.067	-25
7779	-66.116	1.59	-64.526	-25
10372	-66.764	2.07	-64.694	-25
12965	-64.803	2.26	-62.543	-25
15558	-61.527	3.5	-58.027	-25
18151	-60.733	3.7	-57.033	-25
20744	-59.631	4.59	-55.041	-25
23337	-56.747	5.31	-51.437	-25
25930	-52.812	6.03	-46.782	-25

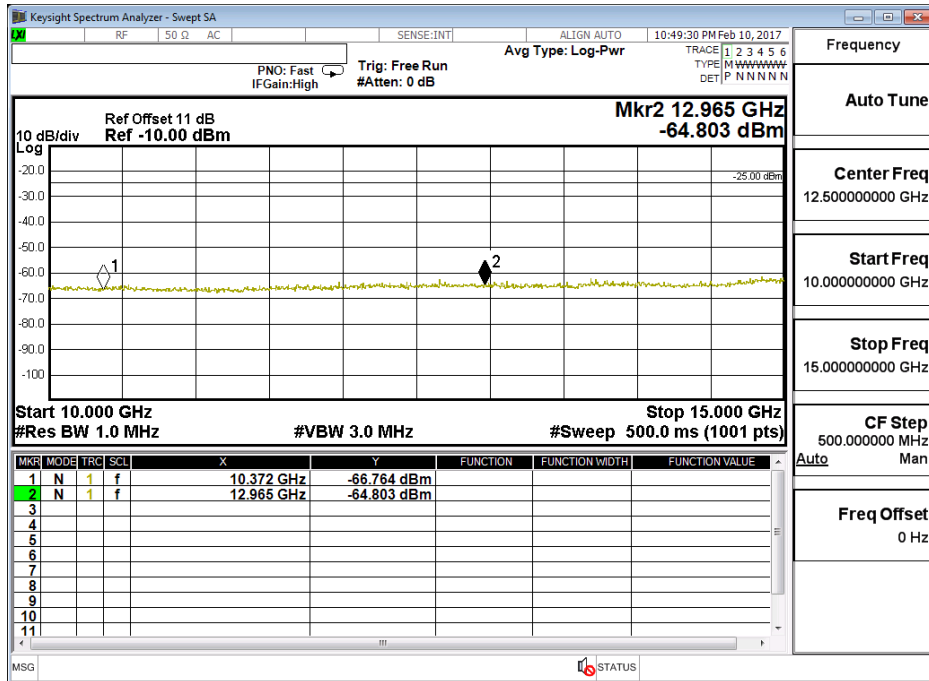




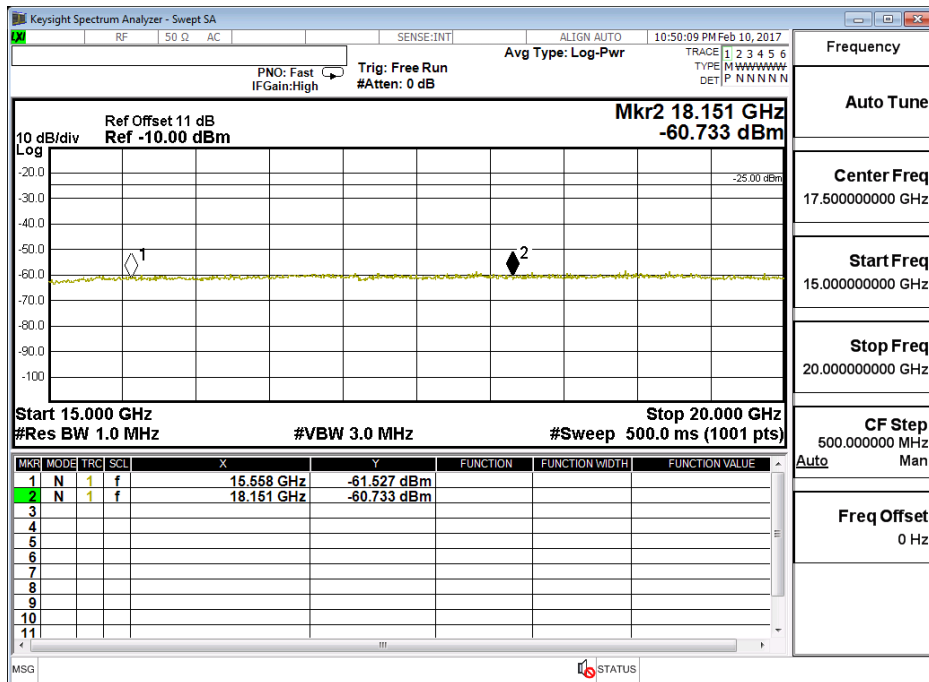
Frequency
Auto Tune
Center Freq 3.000000000 GHz
Start Freq 1.000000000 GHz
Stop Freq 5.000000000 GHz
CF Step 400.0000000 MHz
Auto Man
Freq Offset 0 Hz



Frequency
Auto Tune
Center Freq 7.500000000 GHz
Start Freq 5.000000000 GHz
Stop Freq 10.000000000 GHz
CF Step 500.0000000 MHz
Auto Man
Freq Offset 0 Hz



Frequency
Auto Tune
Center Freq 12.500000000 GHz
Start Freq 10.000000000 GHz
Stop Freq 15.000000000 GHz
CF Step 500.000000 MHz
Auto Man
Freq Offset 0 Hz



Frequency
Auto Tune
Center Freq 17.500000000 GHz
Start Freq 15.000000000 GHz
Stop Freq 20.000000000 GHz
CF Step 500.000000 MHz
Auto Man
Freq Offset 0 Hz

