SAMSUNG ELECTRONICS Co., Ltd.,
Regulatory Compliance Group
IT R&D Center
416 Maetan3-Dong,
Yeongtong-gu, Suwon city,
Gyeonggi-Do, Korea 443-742

FCC CFR47 PART 22 & 24 SUBPART CERTIFICATION REPORT

Model Tested	:	GT-S7562
FCC ID(Requested)	:	A3LGTS7562
Report No	:	FJ-167-R1
Job No	:	FJ-167
Date issued	:	July 2, 2012

- Abstract -

All measurement reported herein accordance with FCC Rules, 47CFR Part2, Part22, Part24.

Prepared By

HK LEE – Test Engineer

Authorized By

WT JANG – Technical Manager

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MEASUREMENT REPORT

1. FCC Certification Information

The following information is in accordance with FCC Rules, 47CFR Part2, Subpart J, Sections 2.1033 – 2.1055.

1.1. §2.1033 General Information

• Applicant Name	:	SAMSUNG ELECTRONICS CO., LTD.
• Address	:	416 Maetan3-Dong, Yeongtong-gu, Suwon City Gyeonggi-Do, Korea 443-742
• FCC ID	:	A3LGTS7562
• Model	:	GT-S7562
• Quantity	:	Quantity production is planned
• Emission Designators	:	248KGXW(GSM850) 248KGXW(GSM1900)
• Tx Freq. Range	:	824.2 - 848.8MHz (GSM850) 1850.2MHz - 1909.8MHz (GSM1900)
• Rx Freq. Range	:	869.2 - 893.8 MHz (GSM850) 1930.2MHz - 1989.8MHz (GSM1900)
• Max. Power Rating	:	0.278 W ERP GSM850 (24.44 dBm) 0.637 W EIRP GSM1900 (28.04 dBm)
• FCC Classification(s)	:	PCS Licensed Portable Tx Held to Ear (PCE)
• Equipment (EUT) Type	:	850/1900 GSM/GPRS Phone with Bluetooth, EDGE Rx only and WLAN
• Frequency Tolerance	:	±0.00025% (2.5ppm)
• FCC Rule Part(s)	:	§24(E), §22(H), §2.
• Dates of Test	:	June 13-14, 2012
• Place of Test	:	SAMSUNG Lab,
• Test Report S/N	:	FJ-167-R1

2. INTRODUCTION

2.1. General

These measurement test were conducted at **SAMSUNG ELECTRONICS CO., LTD(SUWON)**.
The site address is 416 Maetan3-Dong, Yeongtong-gu, Suwon City, Gyeonggi-Do, Korea 443-742
The site have 1 Fully-anechoic chamber and measurement facility.

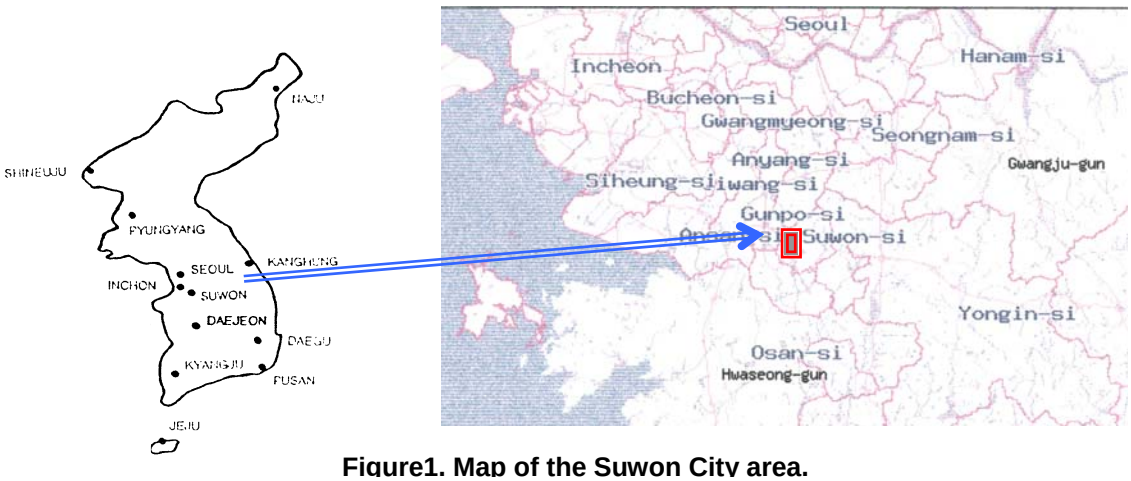


Figure1. Map of the Suwon City area.

Measurement Procedure

The radiated and spurious measurements were made Fully-anechoic chamber at a 3-meter test range (see Figure2). The equipment under testing was placed on a Non-conducted turntable 3-meters from the receive antenna. The receive antenna height and turntable rotations were adjusted for the highest reading on the receive spectrum analyzer. The substitution antenna will replace the EUT antenna it the same position and in vertical polarization. The frequency of the signal generator shall be set to the frequencies that were measured on the EUT. The test antenna shall be raised and lowered, if necessary, to ensure that the maximum signal is still being received. The signal generator, output level, shall be adjusted until an equal or a known related level to what was measured from the EUT is obtained in the spectrum analyzer. This level was recorded.
For readings above 1 GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic antenna are taken into consideration.

Figure2. Photograph of 3m Fully-Anechoic Chamber

3. MEASURING INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

4. TEST EQUIPMENT LIST

Name Of Equipment	Model	Serial No.	Due Date
Spectrum Analyzer	ESI26	836119/010	2012-10-25
	E4440A(3Hz~26.5GHz)	MY46187454	2013-03-14
	E4440A(3Hz~26.5GHz)	MY41000236	2013-04-26
Signal Generator	SMR20	835197/030	2012-12-01
Network Analyzer	8753E	JP38160590	2013-06-19
Pre-Amplifier	8449B	3008A00691	2012-12-09
Communication test set	8960	MY47510060	2013-03-05
	8960	GB42360886	2012-09-02
Controller	CO2000	CO2000/424	Not Required
Turn Unit	CT0800	CT0800/057	Not Required
Rotating Device	DE3600-RH-PR	DE3600-RH-PR/050	Not Required
Antenna Master	MA4000	MA4000/204	Not Required
Horn Antenna	HF906	100134	2013-09-05
	BBHA9120	9120D-636	2012-07-14
Dipole Antenna	UHA 9105	9105-2412	2013-09-09
	UHA 9105	9105-2413	2012-07-15
Receive Antenna	HL040	353255/019	2013-09-05
Power Supply	E3640A	MY40003594	2013-06-19
	E3640A	MY40003595	2013-05-16
	E3632A	MY40022438	2013-03-02
Divider	11636B	51946	2012-07-04
	11636B	51942	2012-07-05
	11636B	56918	2012-09-28
High Pass Filter	WHK/3.0/18G-10SS	492	2013-04-09
	WHK/3.5/18G-10SS	4	2013-04-09
Environmental Chamber	SH-241	92000549	2012-11-14
	SH-241	92000548	2012-11-14
Shielded Fully Anechoic Chamber	CHAMBER	ANT0001	Not Required

5. DESCRIPTION OF TESTS

5.1. Effective Radiated Power / Equivalent Isotropic Radiated Power

Test Set-up for the ERP/EIRP TEST

Effective Radiated Power Output and Equivalent Isotropic Radiated Power output Measurements by Substitution Method according to ANSI/TIA/EIA-603-C-2004

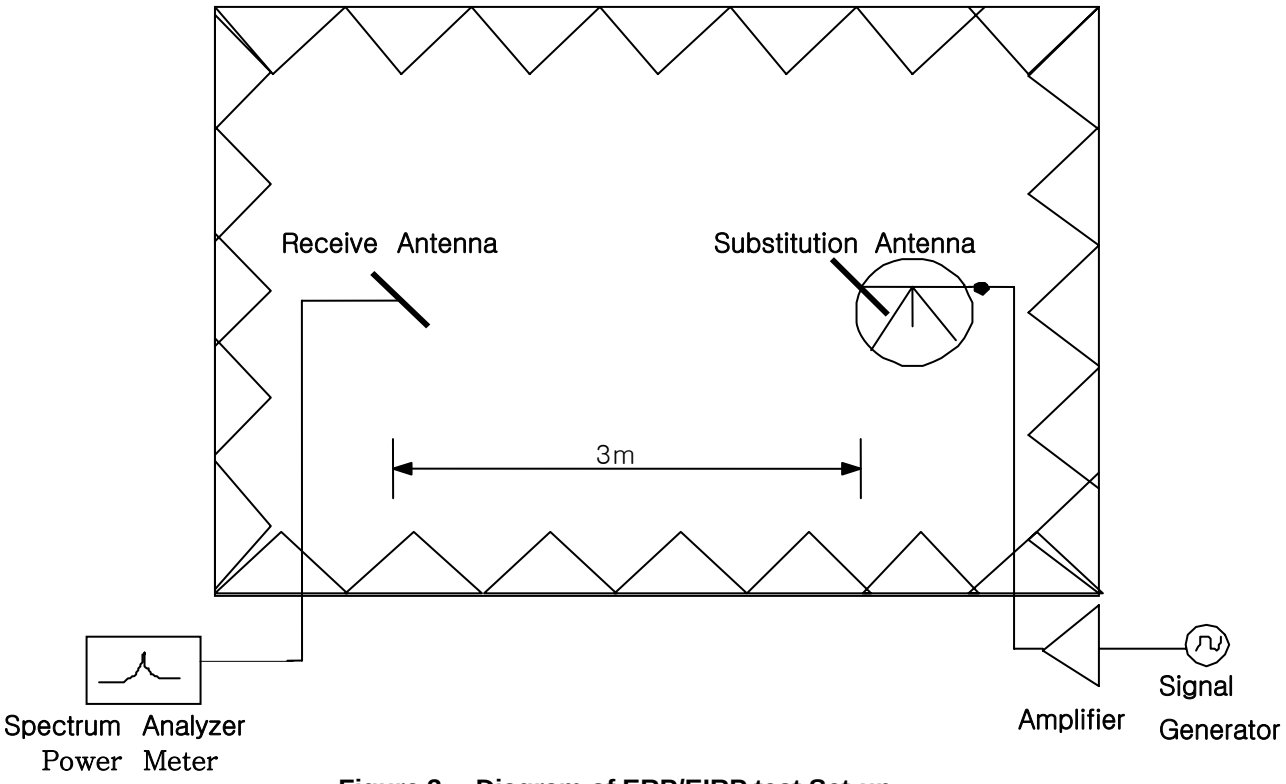


Figure 3. Diagram of ERP/EIRP test Set-up

The EUT was placed on the rotating device at 3-meters from the receive antenna and tested in 3 orthogonal planes. The turn unit and rotating device was adjusted for the highest reading on the receive spectrum analyzer. For GSM signals, an average detector is used, with RBW=VBW=3MHz, SPAN=10MHz. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same receive spectrum analyzer reading. The conducted power at the terminals of dipole is measured. The ERP and EIRP are recorded. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

5.2. Radiated Spurious & Harmonic Emission

Test Set-up for the Radiated Emission TEST

Radiated Spurious Emission Measurements by Substitution Method according to ANSI/TIA/EIA-603-C-2004

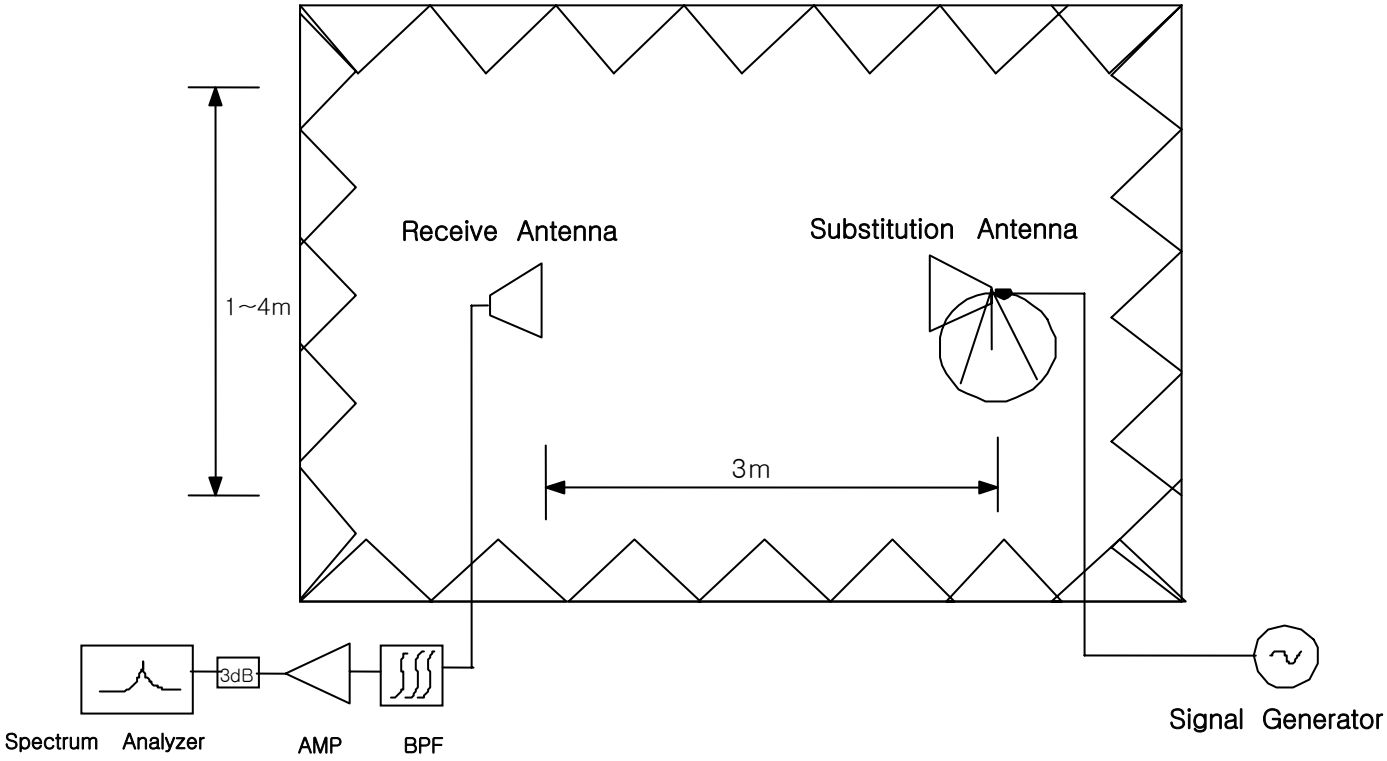


Figure 4. Diagram of Radiated Spurious & Harmonic test Set-up

The EUT was placed on the rotating device at 3-meters from the receive antenna and tested in 3 orthogonal planes. The turn unit and rotating device was adjusted for the highest reading on the receive spectrum analyzer. The Spectrum was investigated from 30MHz to the 10th Harmonic of the fundamental. A peak detector is used, with RBW=VBW=1MHz. The value that we could measure was only reported. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same receive spectrum analyzer reading. This spurious level is recorded. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

SAMPLE CALCULATION

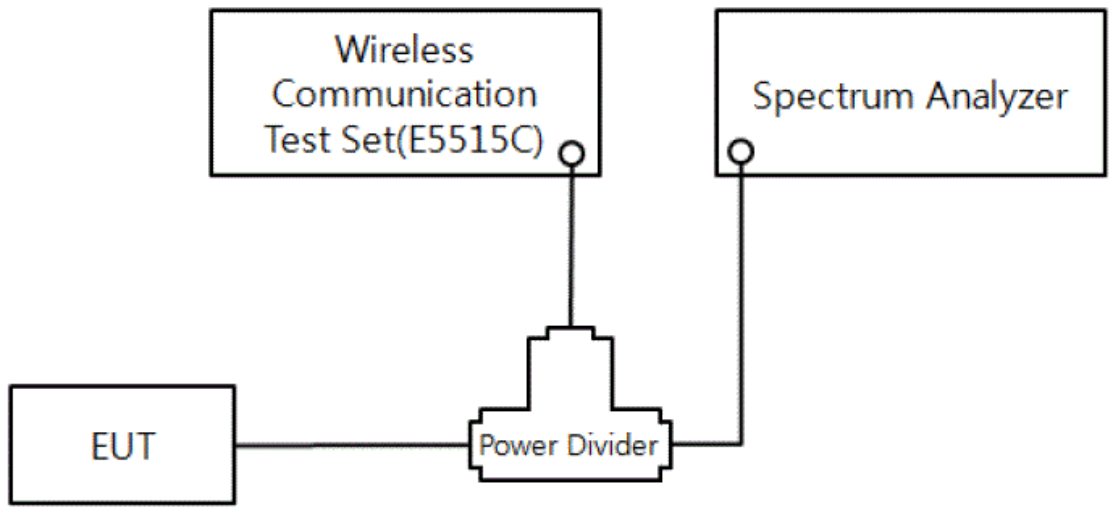
Example: Channel 661 , Second Harmonic(3760.00MHz)

The receive analyzer reading at 3meters with the EUT on the turntable was –81.0dBm. The gain of the substituted antenna is 8.1dBi. The signal generator connected to the substituted antenna terminals is adjusted to produce a reading of –81.0dBm of the receive analyzer. The loss of the cable between the signal generator and the terminals of the substituted antenna is 2.0dB at 3760.00MHz. So 6.1dB is added to the signal generator reading of –30.9dBm yielding –24.8dBm. The fundamental EIRP was 25.5dBm so this harmonic was 25.5dBm –(-24.8)= 50.3dBc .

5.3. Peak-Average Ratio

A peak to average ratio measurement is performed at the conducted port of the EUT. An average and a peak trace are used on a spectrum analyzer to determine the largest deviation between the average and the peak power of the EUT in a given bandwidth.

Test set-up



(Configuration of conducted Emission measurement)

5.4. Occupied Bandwidth

Test Procedure

The occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission shall be measured. The span of the analyzer shall be set to capture all products of the modulation process, including the emission skirts. The resolution and video bandwidth shall be set to as close to 1 percent of the selected span as is possible without being below 1 percent. Video averaging is not permitted. The trace data points are recovered and are directly summed in linear terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 percent of the total is reached and that frequency recorded. The process is repeated for the highest frequency data points. This frequency is recorded, The span between the two recorded frequencies is the occupied bandwidth. These measurements were performed on Agilent E4440A Spectrum Analyzer, and use analyzer's bandwidth measurement function.

5.5. Spurious and Harmonic Emission at Antenna Terminal

5.5.1. Occupied Bandwidth Emission Limits

Part 24

(a) On any frequency outside a licensee's frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least 43 + 10 log(P) dB.

(b) Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emission are attenuated at least 26 dB below the transmitter power.

(c) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the licensee's frequency block edges, both upper and lower, as the design permits.

Part 22

(a) Out of band emissions. The power of any emission outside of the author-ized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

(b) Measurement procedure. Compli-ance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution band-width of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution band-width is permitted in all cases to im-prove measurement accuracy provided the measured power is integrated over the full required measurement band-width (i.e. 100 kHz or 1 percent of emis-sion bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center fre-quency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

BLOCK	Freq. Range (MHz) Transmitter (Tx)	Freq. Range (MHz) Receiver (Rx)
A	1850 – 1865	1930 – 1945
B	1870 – 1885	1950 – 1965
C	1895 – 1910	1975 – 1990
D	1865 – 1870	1945 – 1950
E	1885 – 1890	1965 – 1970
F	1890 – 1895	1970 – 1975

Table 1. Broadband PCS Service Frequency Blocks

BLOCK	Freq. Range (MHz) Transmitter (Tx)	Freq. Range (MHz) Receiver (Rx)
A* Low + A	824 ~ 835	869 ~ 880
B	835 ~ 845	880 ~ 890
A* High	845 ~ 846.5	890 ~ 891.5
B*	846.5 ~ 849	891.5 ~ 894

Table 2. Cellular Service Frequency Blocks

5.5.2. Conducted Spurious Emission

Minimum standard:

On any frequency outside a license frequency block, the power of any emission shall be attenuated below the transmitter power(P) by at least 43+10log (P)dB. Limit equivalent to -13dBm, calculation shown below.

43 + 10log (0.278 W) = 37.44 dB
24.44 dBm – 37.44 dB = -13 dBm

Compliance with the out-of-band emissions requirement is based on test being performed with an analyzer resolution bandwidth of 1MHz. However in the 1MHz band immediately outside and adjacent to the frequency block a resolution bandwidth of at least 1% of the fundamental emissions bandwidth may be employed.

Example)
In case of GSM : 0.01 * 273KHz = 2.73KHz

A Resolution BW of 3KHz was used for measurement at the band edges.

Test Procedure:

The EUT was setup to maximum output power at its lowest channel. The Resolution BW of the analyzer is set to 1% of the emission bandwidth to show compliance with the -13dBm limit, in the 1MHz bands immediately outside and adjacent to the edge of the frequency block. The measurements are repeated for the EUT's highest channel. For the Out-of-Band measurements a 1MHz RBW was used to scan GSM850 Mode from 10MHz to 10GHz and GSM1900 Mode from 10MHz to 20GHz. A display line was placed at -13dBm to show compliance. The high, lowest and a middle channel were tested for out of band measurements.

Plots are shown herein.

5.6. Frequency Stability / Temperature Variation

The frequency stability of the transmitter is measured by:

a.) Temperature: The temperature is carried from -30°C to +50°C using an environmental chamber.
b.) Primary Supply Voltage: The primary supply voltage is varied from 85% to 115% of the voltage normally at the input to the device or at the power supply terminals if cables are not normally supplied.

Specification- The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within ±0.00025 (±2.5ppm) of the center frequency.

Time Period and Procedure:

1. The carrier frequency of the transmitter and the individual oscillators is measured at room temperature(25°C to 27°C to provide a reference).
2. The equipment is subjected to an overnight “soak” at -30°C without any power applied.
3. After the overnight “soak” at -30°C (Usually 14~16 hours), the equipment is turned on in a “standby” condition for one minute before applying power to the transmitter. Measurement of the carrier frequency of the transmitter and the individual oscillators is made within a three minute interval after applying to the transmitter.
4. Frequency measurements are made at 10°C interval up to room temperature. At least a period of one and one half-hour is provided to allow stabilization of the equipment at each temperature level.
5. Again the transmitter carrier frequency and the individual oscillators is measured at room temperature to begin measurement of the upper temperature levels.
6. Frequency measurements are at 10 intervals starting at -30°C up to +50°C allowing at least two hours at each temperature for stabilization. In all measurements the frequency is measured within three minutes after re-applying power to the transmitter.
7. The artificial load is mounted external to the temperature chamber.

NOTE : The EUT is tested down to the battery endpoint.

6. TEST DATA

6.1. Conducted Output Power

6.2. Effective Radiated Power (E.R.P.)

Supply Voltage : 3.7VDC
Modulation : GSM850

■**Result**

Frequency (MHz)	Tested level [dBm]	Substitute Level [dBm]	Antenna Gain [dBd]	Polarization [H/V]	ERP [dBm]	ERP [W]	Battery
824.20	-13.70	23.87	-1.95	H	21.92	0.156	Standard
836.60	-14.33	23.76	-1.72	H	22.04	0.160	Standard
848.80	-14.20	26.02	-1.58	H	24.44	0.278	Standard

NOTE : Standard batteries are the only battery options for this phone

- All modes of operation were investigated, and the worst-case results are reported.

Radiated measurements at 3 meters by Substitution Method

6.3. Equivalent Isotropic Radiated Power (E.I.R.P.)

Supply Voltage : 3.7VDC

Modulation : PCS 1900

■**Result**

Frequency (MHz)	Tested level [dBm]	Substitute Level [dBm]	Antenna Gain [dBi]	Polarization [H/V]	EIRP [dBm]	EIRP [W]	Battery
1850.20	-23.08	15.83	10.16	V	25.99	0.397	Standard
1880.00	-21.51	17.81	10.16	V	27.97	0.627	Standard
1909.80	-21.29	17.88	10.16	V	28.04	0.637	Standard

NOTE : Standard batteries are the only battery options for this phone

- All modes of operation were investigated, and the worst-case results are reported.

Radiated measurements at 3 meters by Substitution Method

6.4. GSM850 Radiated Spurious & Harmonic measurement

Operating Frequency : 824.20 MHz(Low), 836.60MHz(Middle), 848.80MHz(High)

Measured Output Power : 24.44 dBm = 0.278 W

Modulation Signal : GSM850

Limit : 43 + 10log$_{10}$(P) = 37.44 dBc

■Result

Channel	Harmonic	Frequency (MHz)	From EUT Tested level (dBm)	POL (H/V)	Result (dBc)
128	2	1648.40	-48.88	H	60.73
	3	2472.60	-60.61	H	67.22
	4	3296.80	-67.82	V	70.56
	5	4121.00	-	-	-
	6	4945.20	-	-	-
	7	5769.40	-	-	-
190	2	1673.20	-47.80	H	59.40
	3	2509.80	-63.91	H	70.31
	4	3346.40	-65.89	V	68.72
	5	4183.00	-	-	-
	6	5019.60	-	-	-
	7	5856.20	-	-	-
251	2	1697.60	-47.54	H	57.86
	3	2546.40	-67.86	V	74.59
	4	3395.20	-66.45	V	69.14
	5	4244.00	-	-	-
	6	5092.80	-	-	-
	7	5941.60	-	-	-

NOTE :

1. "-" Indicates the spurious emission could not be detected due to noise limitations or ambients.
2. The spectrum is measured from 30MHz to the 10th harmonic and All modes of operation were investigated, and the worst-case results are reported..

Radiated Spurious Emission measurements at 3 meters by Substitution Method

6.5. GSM1900 Radiated Spurious & Harmonic measurement

Operating Frequency : 1850.2 MHz(Low), 1880.00 MHz(Middle), 1909.80 MHz(High)

Measured Output Power : 28.04 dBm = 0.637 W

Modulation Signal : GSM1900

Limit : 43 + 10log$_{10}$(P) = 41.04 dBc

■Result

Channel	Harmonic	Frequency (MHz)	From EUT Tested level (dBm)	POL (H/V)	Result (dBc)
512	2	3700.40	-56.64	H	57.70
	3	5550.60	-54.93	H	52.57
	4	7400.80	-67.10	H	59.43
	5	9251.00	-	-	-
	6	11101.20	-	-	-
	7	12951.40	-	-	-
661	2	3760.00	-60.20	V	62.08
	3	5640.00	-54.63	H	51.93
	4	7520.00	-68.58	H	60.86
	5	9400.00	-	-	-
	6	11280.00	-	-	-
	7	13160.00	-	-	-
810	2	3819.60	-60.09	H	61.18
	3	5729.40	-56.14	H	52.98
	4	7639.20	-69.00	H	61.79
	5	9549.00	-	-	-
	6	11458.80	-	-	-
	7	13368.60	-	-	-

NOTE :

1. "-" Indicates the spurious emission could not be detected due to noise limitations or ambients.
2. The spectrum is measured from 30MHz to the 10th harmonic and All modes of operation were investigated, and the worst-case results are reported.

Radiated Spurious Emission measurements at 3 meters by Substitution Method

6.6. GSM850 Radiated Spurious & Harmonic Conversion Table

Date : June 14, 2012

Test Engineer : HK LEE

① Tx Cable loss
② Tx Horn Ant Gain
③ Tx Level to radiate -13dBm
④ ESI Level received from Tx with-13dBm
⑤ Tested Level from EUT
⑥ = ERP+ 2.15 - (-13 + ⑤ - ④)

CH	Har	Frequency (MHz)	① Tx C/L dB	②Tx Horn Gain dBi	③Tx Level dBm	④ ESI Level : H dBm	④ ESI Level : V dBm	⑤Tested EUT Level : H dBm	⑤Tested EUT Level : V dBm	⑥ Result EUT : H (dBc)	⑥ Result EUT : V (dBc)
128	2	1648.40	-8.77	9.40	-13.60	-27.73	-27.03	-48.88	-48.87	60.73	61.42
	3	2472.60	-11.12	10.60	-12.50	-32.97	-32.23	-60.61	-65.46	67.22	72.81
	4	3296.80	-12.19	12.00	-12.80	-36.08	-36.84	-67.82	-67.82	71.32	70.56
	5	4121.00	-13.85	12.60	-11.80	-39.75	-39.33	-	-	-	-
	6	4945.20	-15.03	12.70	-10.70	-42.44	-42.28	-	-	-	-
	7	5769.40	-17.11	13.10	-9.00	-44.12	-44.43	-	-	-	-
190	2	1673.20	-8.83	9.40	-13.60	-27.98	-27.21	-47.80	-47.67	59.40	60.04
	3	2509.80	-11.24	10.60	-12.40	-33.18	-32.42	-63.91	-67.69	70.31	74.85
	4	3346.40	-12.13	12.00	-12.90	-36.09	-36.75	-66.69	-65.89	70.18	68.72
	5	4183.00	-14.18	12.60	-11.40	-39.47	-39.56	-	-	-	-
	6	5019.60	-15.91	12.70	-9.80	-42.07	-42.44	-	-	-	-
	7	5856.20	-17.15	13.10	-9.00	-45.07	-44.94	-	-	-	-
251	2	1697.60	-8.88	9.40	-13.50	-29.26	-28.45	-47.54	-47.08	57.86	58.21
	3	2546.40	-11.22	10.60	-12.40	-32.63	-32.85	-67.89	-67.86	74.84	74.59
	4	3395.20	-12.28	12.00	-12.70	-36.60	-36.89	-66.59	-66.45	69.57	69.14
	5	4244.00	-14.15	12.60	-11.50	-39.36	-39.77	-	-	-	-
	6	5092.80	-16.16	12.70	-9.50	-42.73	-42.38	-	-	-	-
	7	5941.60	-17.34	13.10	-8.80	-45.37	-45.34	-	-	-	-

6.7. GSM1900 Radiated Spurious & Harmonic Conversion Table

Date : June 14, 2012

Test Engineer : HK LEE

① Tx Cable loss
② Tx Horn Ant Gain
③ Tx Level to radiate -13dBm
④ ESI Level received from Tx with-13dBm
⑤ Tested Level from EUT
⑥ = EIRP - (-13 + ⑤ - ④)

CH	Har	Frequency (MHz)	① Tx C/L dB	②Tx Horn Gain dBi	③Tx Level dBm	④ ESI Level : H dBm	④ ESI Level : V dBm	⑤Tested EUT Level : H dBm	⑤Tested EUT Level : V dBm	⑥ Result EUT : H (dBc)	⑥ Result EUT : V (dBc)
512	2	3700.40	-12.85	12.60	-12.80	-39.98	-39.03	-56.64	-57.96	57.70	59.97
	3	5550.60	-16.92	12.50	-8.60	-43.40	-42.99	-54.93	-54.75	52.57	52.80
	4	7400.80	-20.20	11.50	-4.30	-48.71	-48.56	-67.10	-67.53	59.43	60.01
	5	9251.00	-23.05	11.90	-1.90	-53.11	-52.12	-	-	-	-
	6	11101.20	-25.08	11.50	0.60	-57.75	-54.90	-	-	-	-
	7	12951.40	-28.10	14.42	0.70	-61.50	-58.01	-	-	-	-
661	2	3760.00	-13.35	12.60	-12.30	-39.89	-39.16	-61.92	-60.20	63.07	62.08
	3	5640.00	-17.07	12.50	-8.40	-43.74	-43.42	-54.63	-55.15	51.93	52.77
	4	7520.00	-20.60	11.50	-3.90	-48.76	-48.06	-68.58	-68.12	60.86	61.10
	5	9400.00	-23.50	11.90	-1.40	-52.65	-551.24	-	-	-	-
	6	11280.00	-26.24	11.50	1.70	-56.66	-54.54	-	-	-	-
	7	13160.00	-28.79	14.42	1.40	-61.01	-57.76	-	-	-	-
810	2	3819.60	-13.30	12.60	-12.30	-39.95	-39.55	-60.09	-60.75	61.18	62.24
	3	5729.40	-17.16	12.50	-8.30	-44.20	-43.35	-56.14	-55.58	52.98	53.27
	4	7639.20	-20.88	11.50	-3.60	-48.25	-47.92	-69.00	-69.27	61.79	62.39
	5	9549.00	-24.09	11.90	-0.80	-52.88	-51.48	-	-	-	-
	6	11458.80	-26.05	11.50	1.60	-57.49	-54.67	-	-	-	-
	7	13368.60	-28.74	14.42	1.30	-63.03	-59.49	-	-	-	-

6.8. Frequency Stability

6.8.1. GSM850 Frequency Stability Table

Operating Frequency : 836,600,000 Hz

Channel : 190

Reference Voltage : 3.7VDC

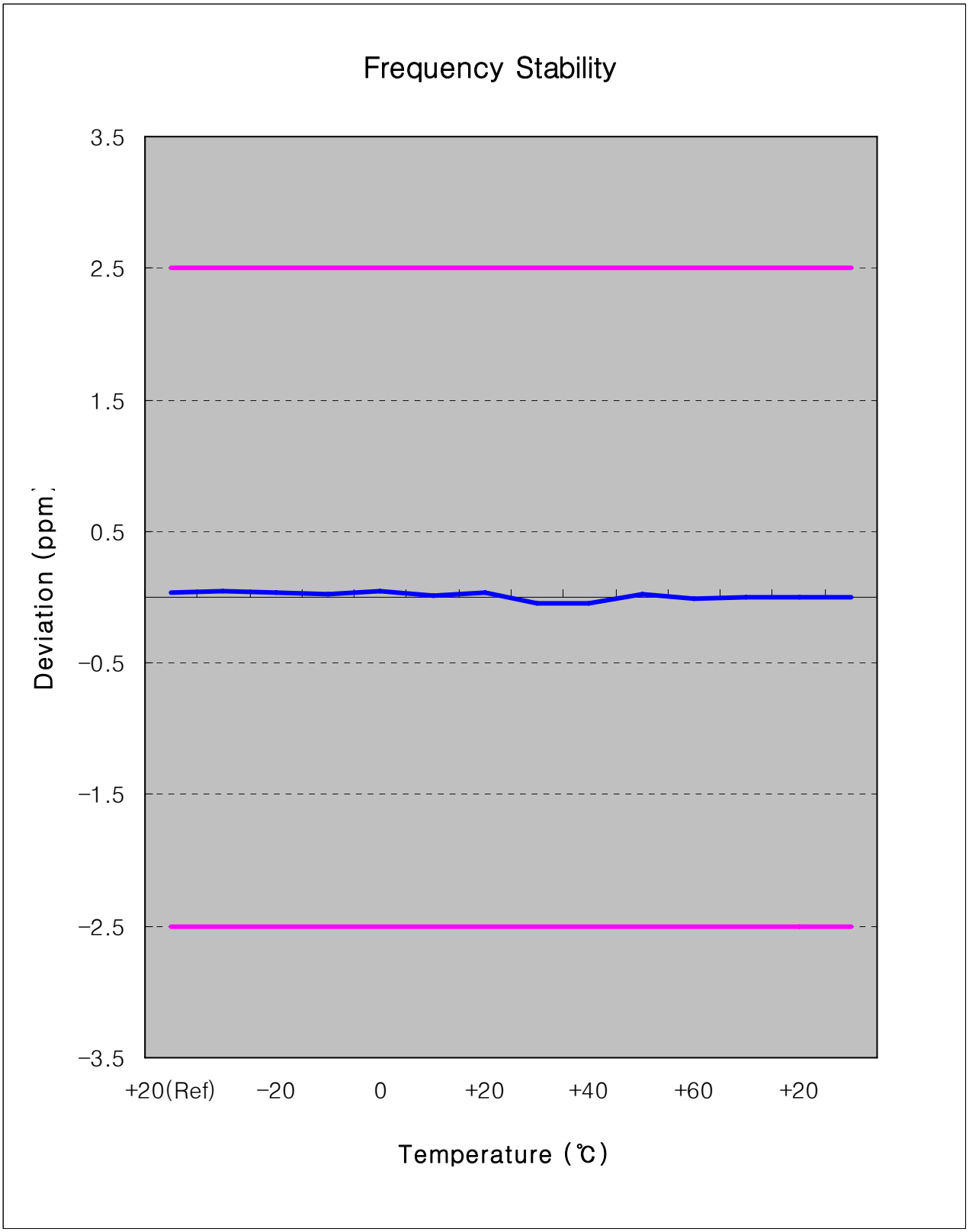
Deviation Limit : ±0.00025 % or 2.5ppm

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency Error (Hz)	Frequency (Hz)	Deviation (%)	ppm
100%	3.70	+20(Ref)	12.00	836,600,012	0.000001	0.014
100%		-30	-11.70	836,599,988	-0.000001	-0.014
100%		-20	-5.30	836,599,995	-0.000001	-0.006
100%		-10	-8.90	836,599,991	-0.000001	-0.011
100%		0	22.20	836,600,022	0.000003	0.027
100%		+10	20.70	836,600,021	0.000002	0.025
100%		+20	12.00	836,600,012	0.000001	0.014
100%		+30	19.50	836,600,020	0.000002	0.023
100%		+40	0.50	836,600,001	0.000000	0.001
100%		+50	-49.50	836,599,951	-0.000006	-0.059
115%	4.26	+20	-49.80	836,599,950	-0.000006	-0.060
Batt.Endpoint	3.35	+20	-38.60	836,599,961	-0.000005	-0.046

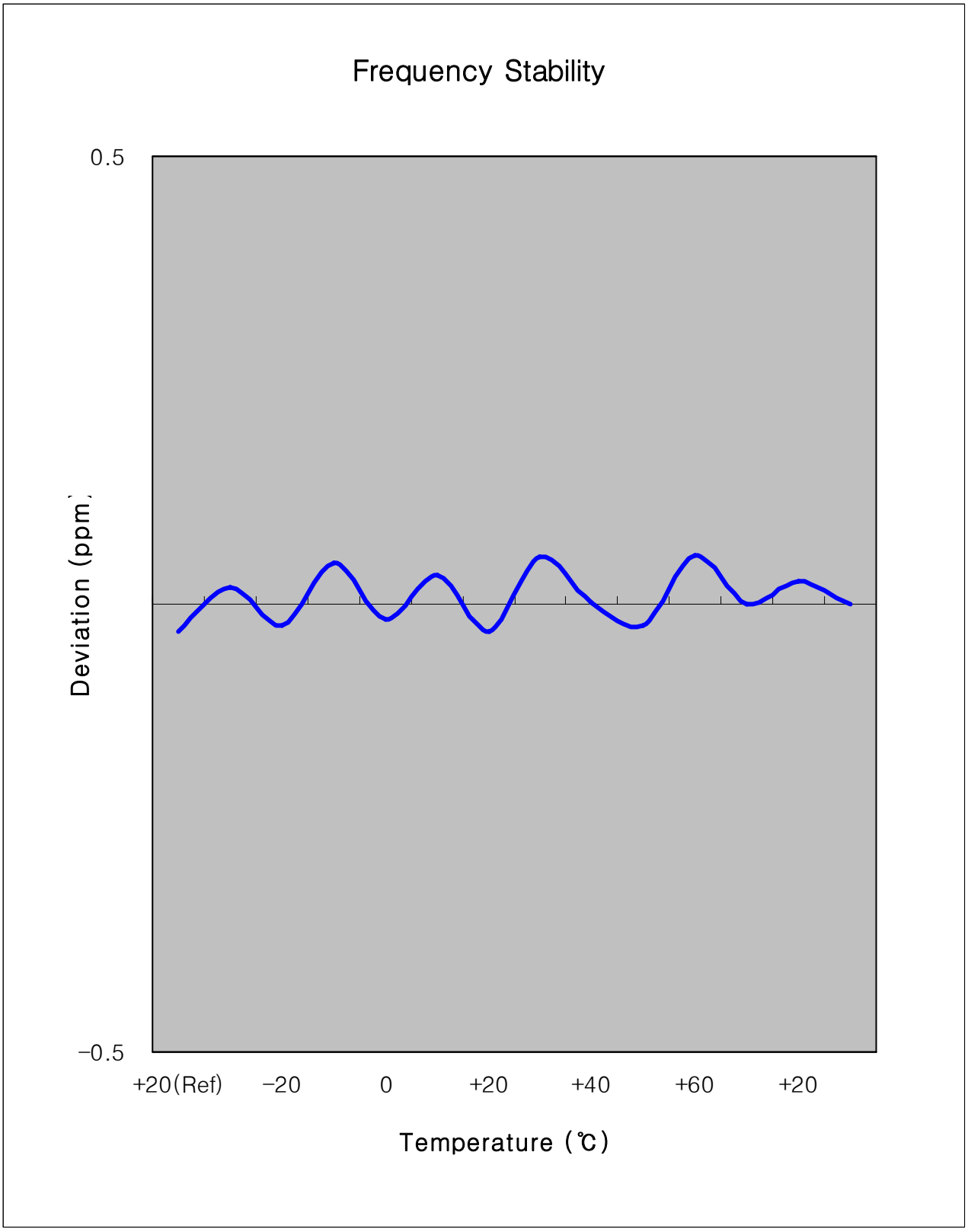
Note : The temperature is varied from -30 °C to +50 °C using an environmental chamber.

The EUT is tested down to the battery end point.

6.8.2. GSM850 Frequency Stability Graph



Zoom IN


Frequency Stability
0.5
−0.5
Deviation (ppm)
+20(Ref)
−20
0
+20
+40
+60
+20
Temperature (℃)

6.8.3. GSM1900 Frequency Stability Table

Operating Frequency : 1,880,000,000 Hz

Channel : 661

Reference Voltage : 3.7VDC

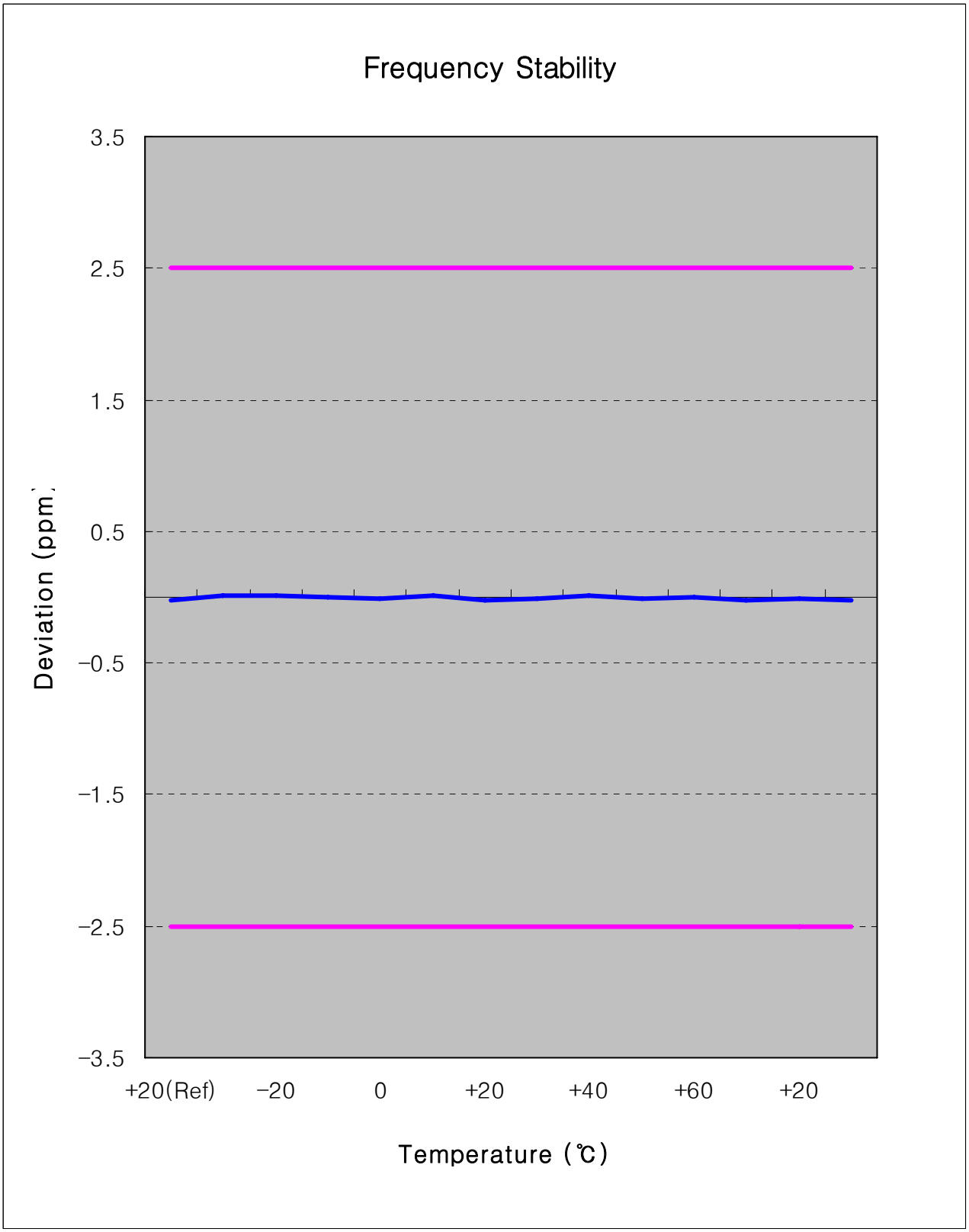
Deviation Limit : ±0.00025 % or 2.5ppm

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency Error (Hz)	Frequency (Hz)	Deviation (%)	ppm
100%	3.70	+20(Ref)	-21.20	1,879,999,979	-0.000001	-0.011
100%		-30	-2.60	1,879,999,997	0.000000	-0.001
100%		-20	-24.10	1,879,999,976	-0.000001	-0.013
100%		-10	-47.20	1,879,999,953	-0.000003	-0.025
100%		0	25.20	1,880,000,025	0.000001	0.013
100%		+10	47.50	1,880,000,048	0.000003	0.025
100%		+20	-21.20	1,879,999,979	-0.000001	-0.011
100%		+30	-42.70	1,879,999,957	-0.000002	-0.023
100%		+40	39.10	1,880,000,039	0.000002	0.021
100%		+50	-3.80	1,879,999,996	0.000000	-0.002
115%	4.26	+20	9.70	1,880,000,010	0.000001	0.005
Batt.Endpoint	3.35	+20	-3.50	1,879,999,997	0.000000	-0.002

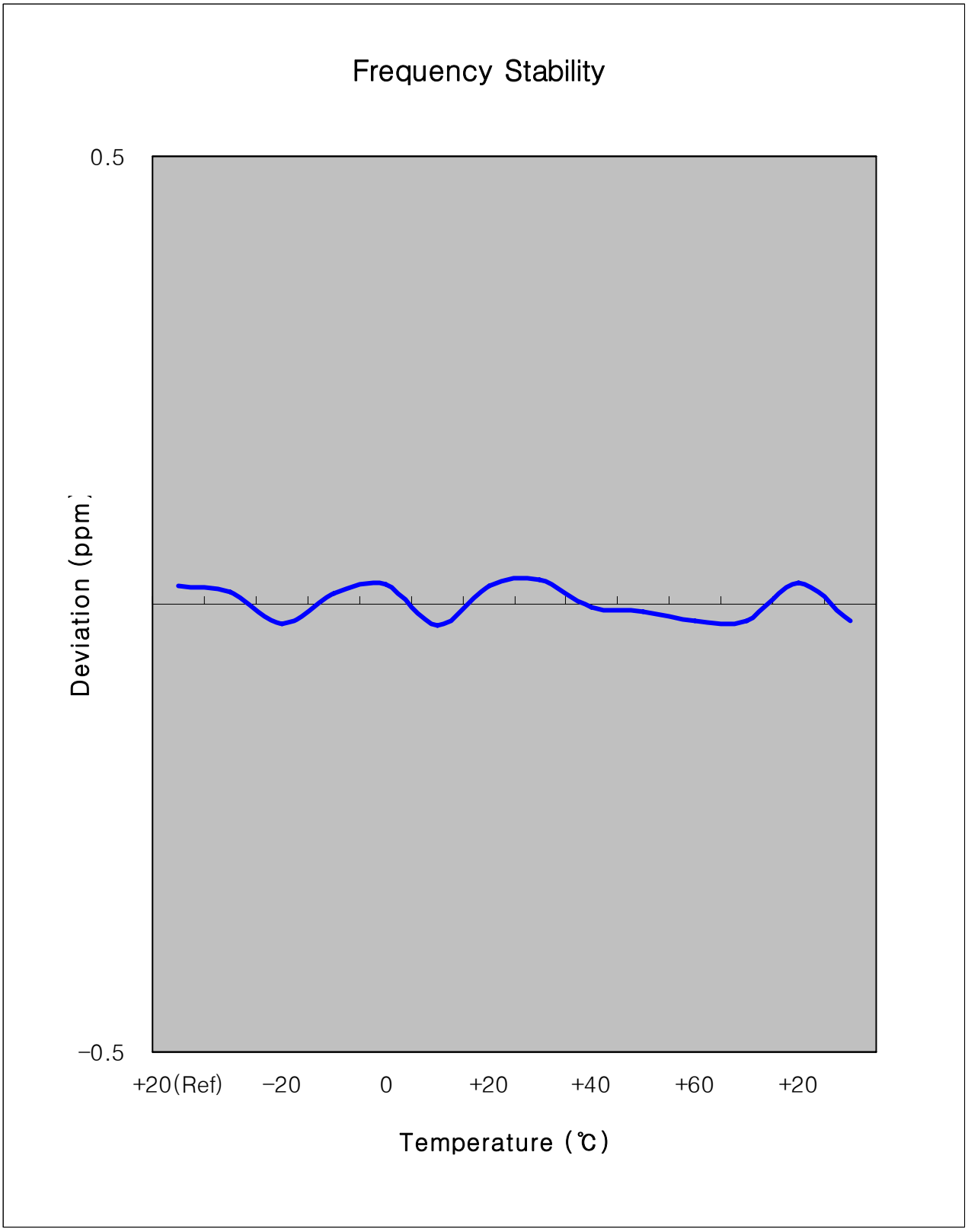
Note : The temperature is varied from -30 °C to +50 °C using an environmental chamber.

The EUT is tested down to the battery end point.

6.8.4. GSM1900 Frequency Stability Graph



Zoom IN


Frequency Stability
0.5
−0.5
Deviation (ppm)
+20(Ref)
−20
0
+20
+40
+60
+20
Temperature (℃)

7. CONCLUSION

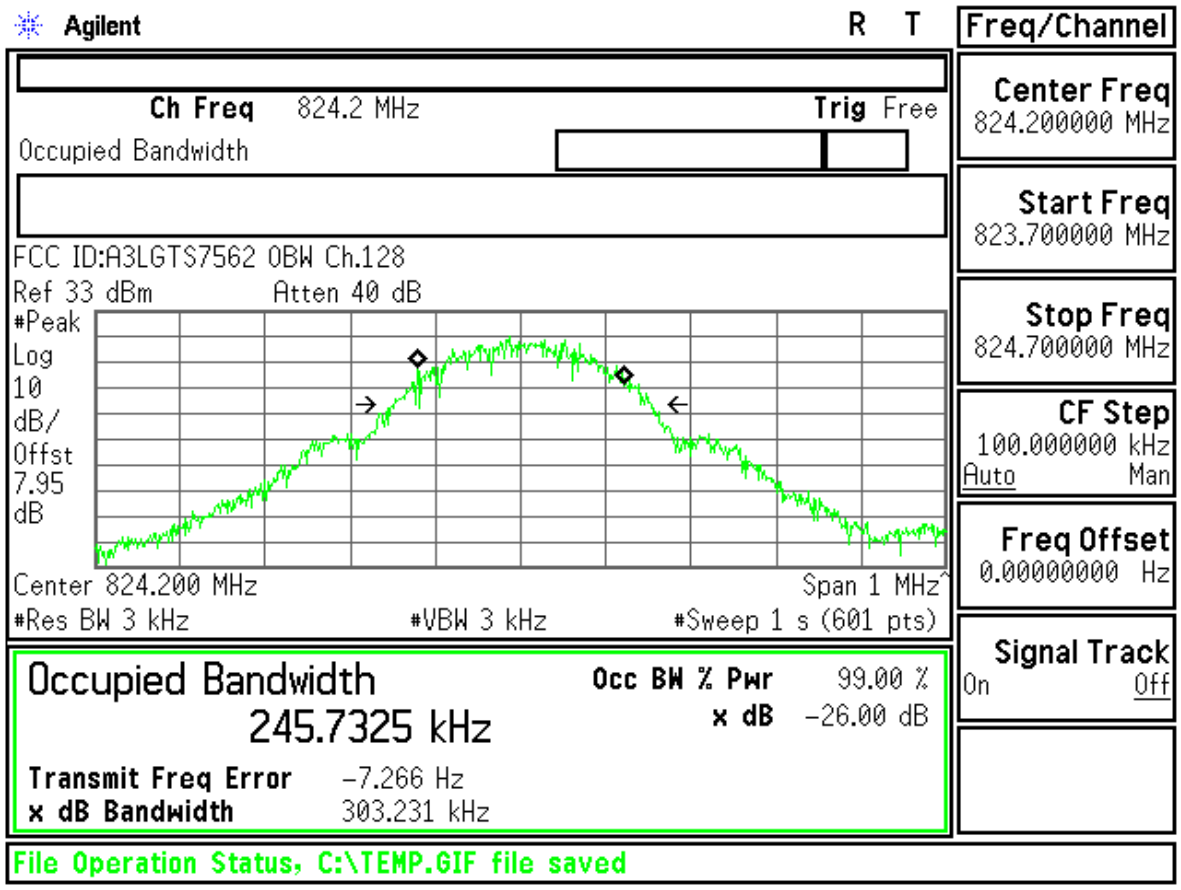
The data collected shows that the SAMSUNG 850/1900 GSM/GPRS Phone with Bluetooth, EDGE Rx only and WLAN.
FCC ID : A3LGTS7562 complies with all the requirements of Parts 2,22,24 of the FCC Rules.

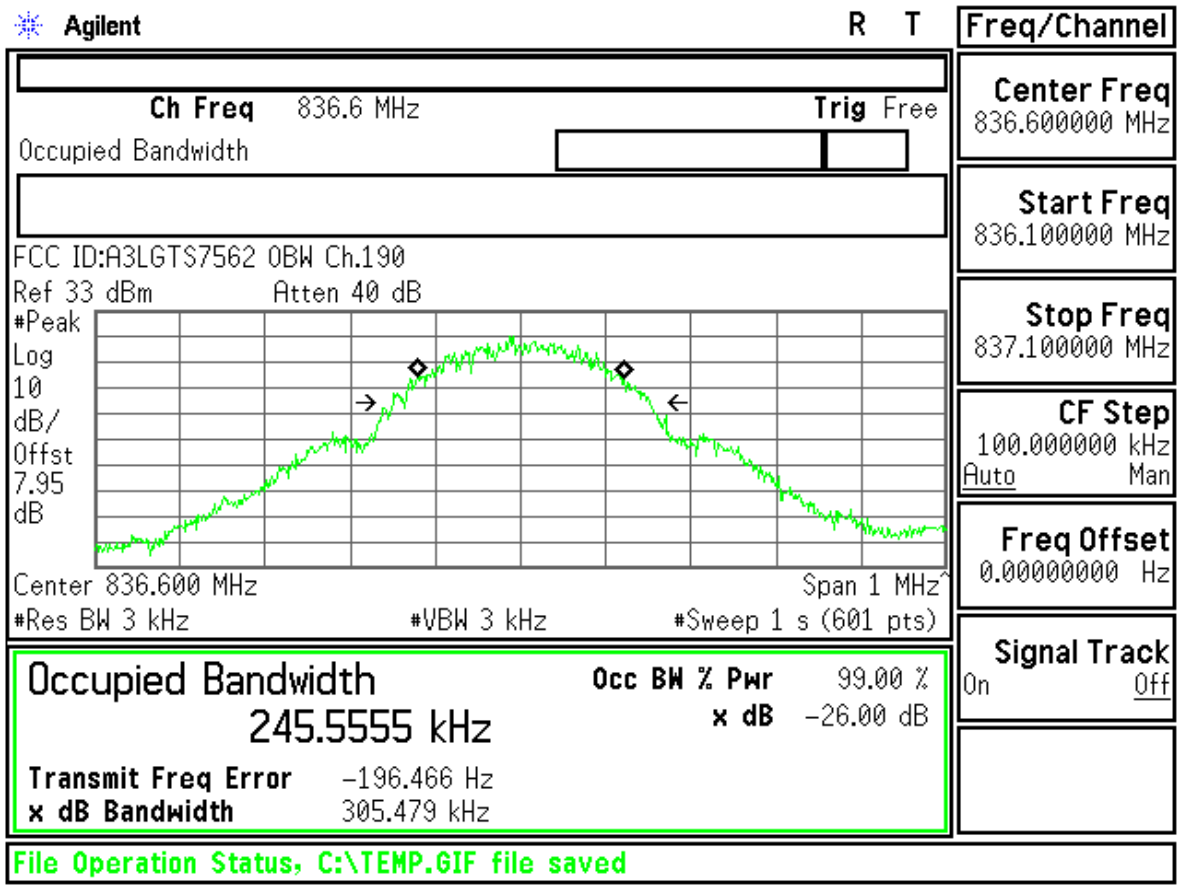
8. TEST PLOTS

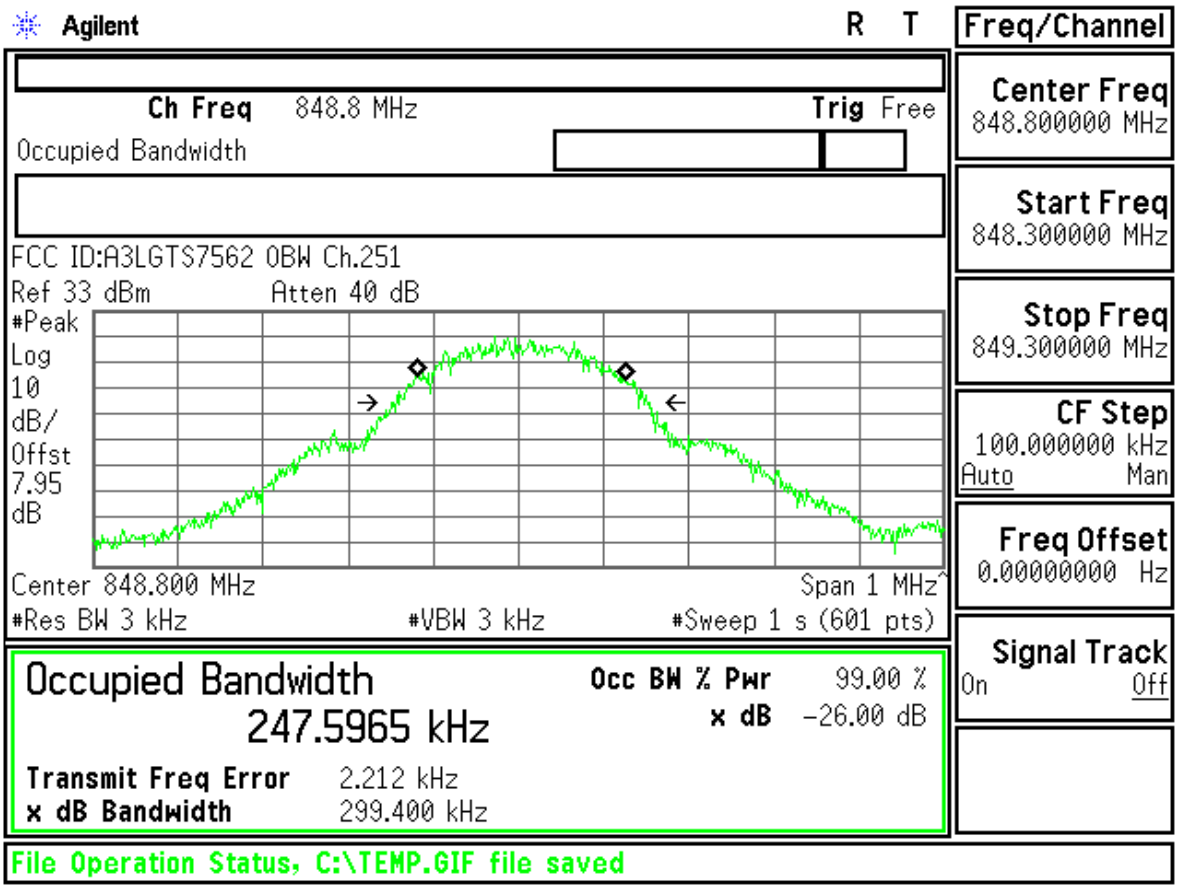
※ For above 5GHz, we measure Ref. offset every 1GHz. And we tested the plots with worst offset of all offset.

1. Spectrum Offset(dB) = Cable loss(dB) + Power divider(dB)
2. Ref Offset at 1880 MHz = 8.83dBm

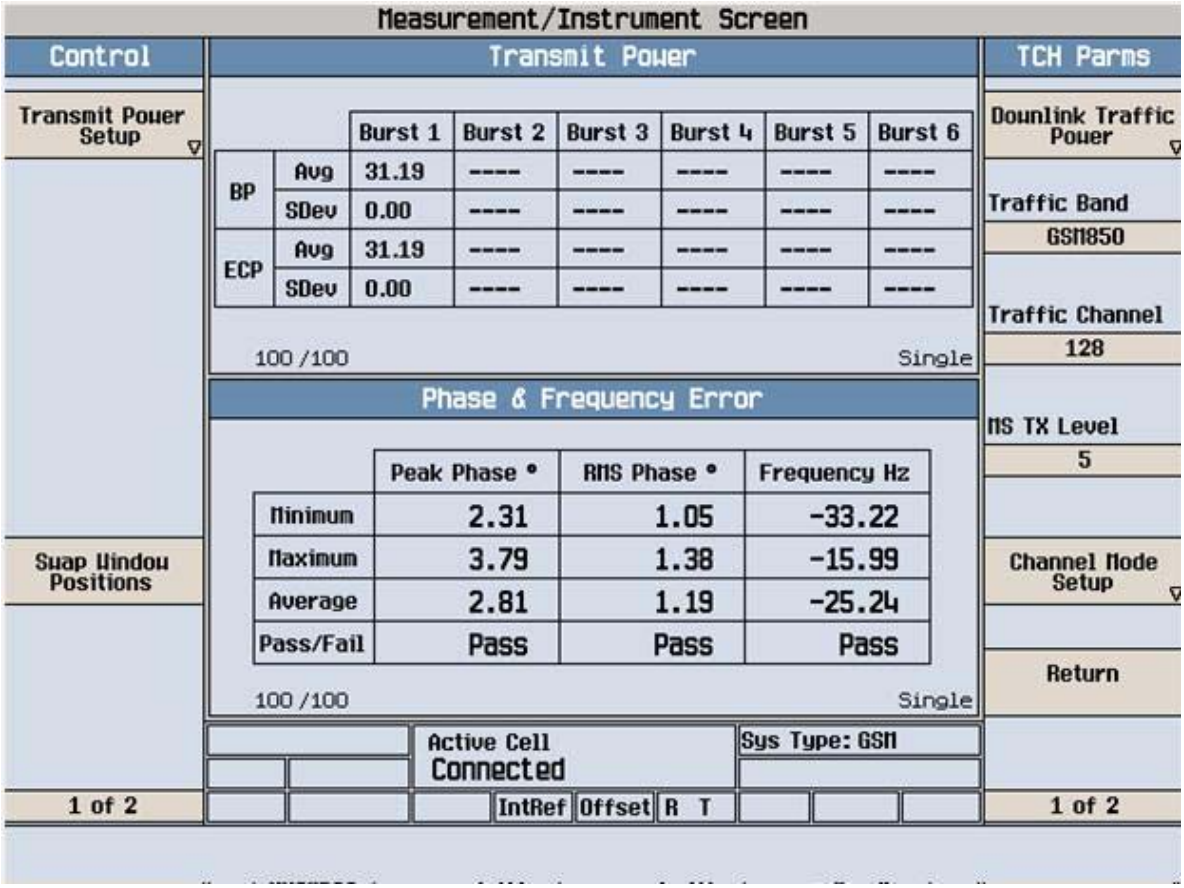
GSM850


Agilent
R T
Freq/Channel
Ch Freq 824.2 MHz
Trig Free
Occupied Bandwidth
FCC ID:A3LGTS7562 OBW Ch.128
Ref 33 dBm
Atten 40 dB
#Peak
Log
10
dB/
Offst
7.95
dB
Center 824.200 MHz
Span 1 MHz
#Res BW 3 kHz
#VBW 3 kHz
#Sweep 1 s (601 pts)
Occupied Bandwidth
245.7325 kHz
Occ BW % Pwr 99.00 %
x dB -26.00 dB
Transmit Freq Error -7.266 Hz
x dB Bandwidth 303.231 kHz
Center Freq
824.200000 MHz
Start Freq
823.700000 MHz
Stop Freq
824.700000 MHz
CF Step
100.000000 kHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
File Operation Status, C:\TEMP.GIF file saved

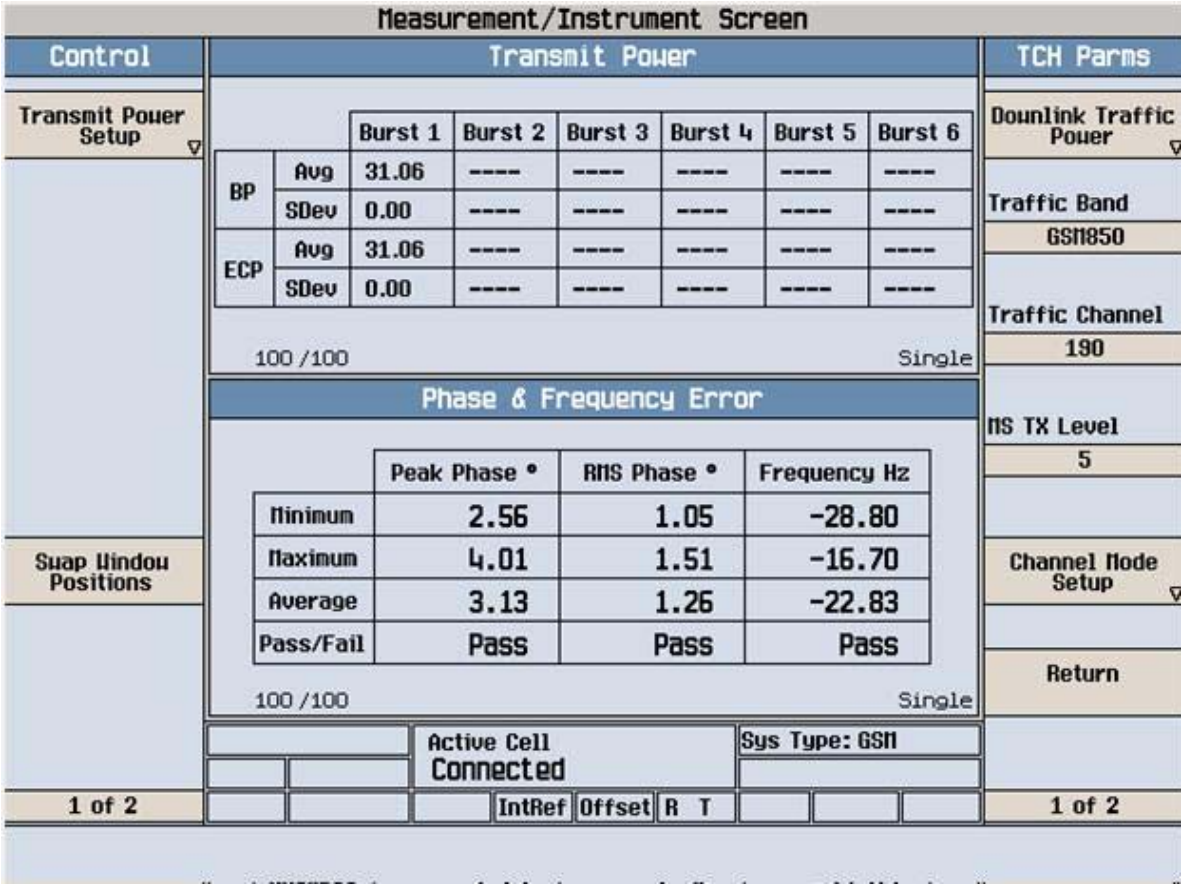

Agilent
R T
Freq/Channel
Ch Freq 836.6 MHz
Trig Free
Occupied Bandwidth
FCC ID:A3LGTS7562 OBW Ch.190
Ref 33 dBm
Atten 40 dB
#Peak
Log
10
dB/
Offst
7.95
dB
Center 836.600 MHz
Span 1 MHz
#Res BW 3 kHz
#VBW 3 kHz
#Sweep 1 s (601 pts)
Occupied Bandwidth
245.5555 kHz
Occ BW % Pwr 99.00 %
x dB -26.00 dB
Transmit Freq Error -196.466 Hz
x dB Bandwidth 305.479 kHz
Center Freq
836.600000 MHz
Start Freq
836.100000 MHz
Stop Freq
837.100000 MHz
CF Step
100.000000 kHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
File Operation Status, C:\TEMP.GIF file saved


Agilent
R T
Freq/Channel
Ch Freq 848.8 MHz
Trig Free
Occupied Bandwidth
FCC ID:A3LGTS7562 OBW Ch.251
Ref 33 dBm
Atten 40 dB
#Peak
Log
10
dB/
Offst
7.95
dB
Center 848.800 MHz
Span 1 MHz
#Res BW 3 kHz
#VBW 3 kHz
#Sweep 1 s (601 pts)
Occupied Bandwidth
247.5965 kHz
Occ BW % Pwr 99.00 %
x dB -26.00 dB
Transmit Freq Error 2.212 kHz
x dB Bandwidth 299.400 kHz
File Operation Status, C:\TEMP.GIF file saved
Center Freq
848.800000 MHz
Start Freq
848.300000 MHz
Stop Freq
849.300000 MHz
CF Step
100.000000 kHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off

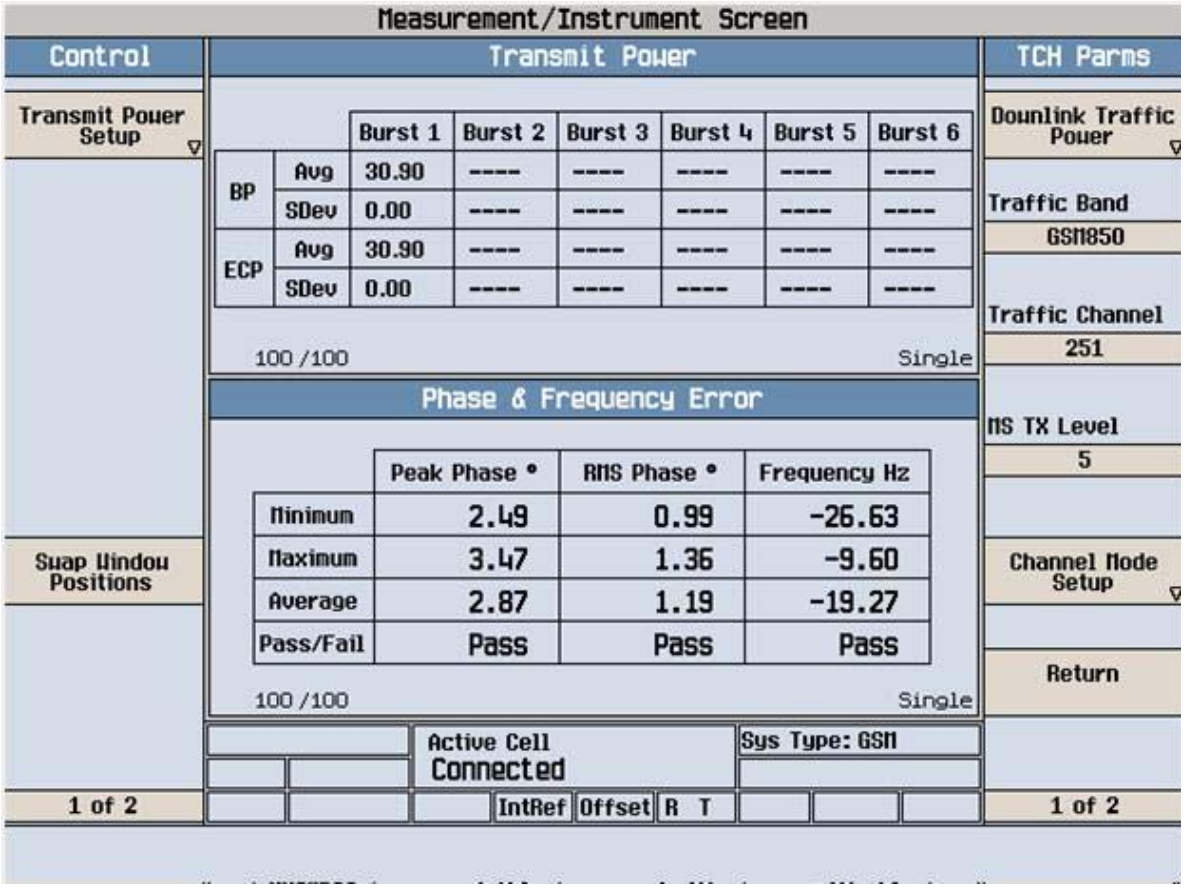
FCC ID : A3LGTS7562 Transmit Power 128CH



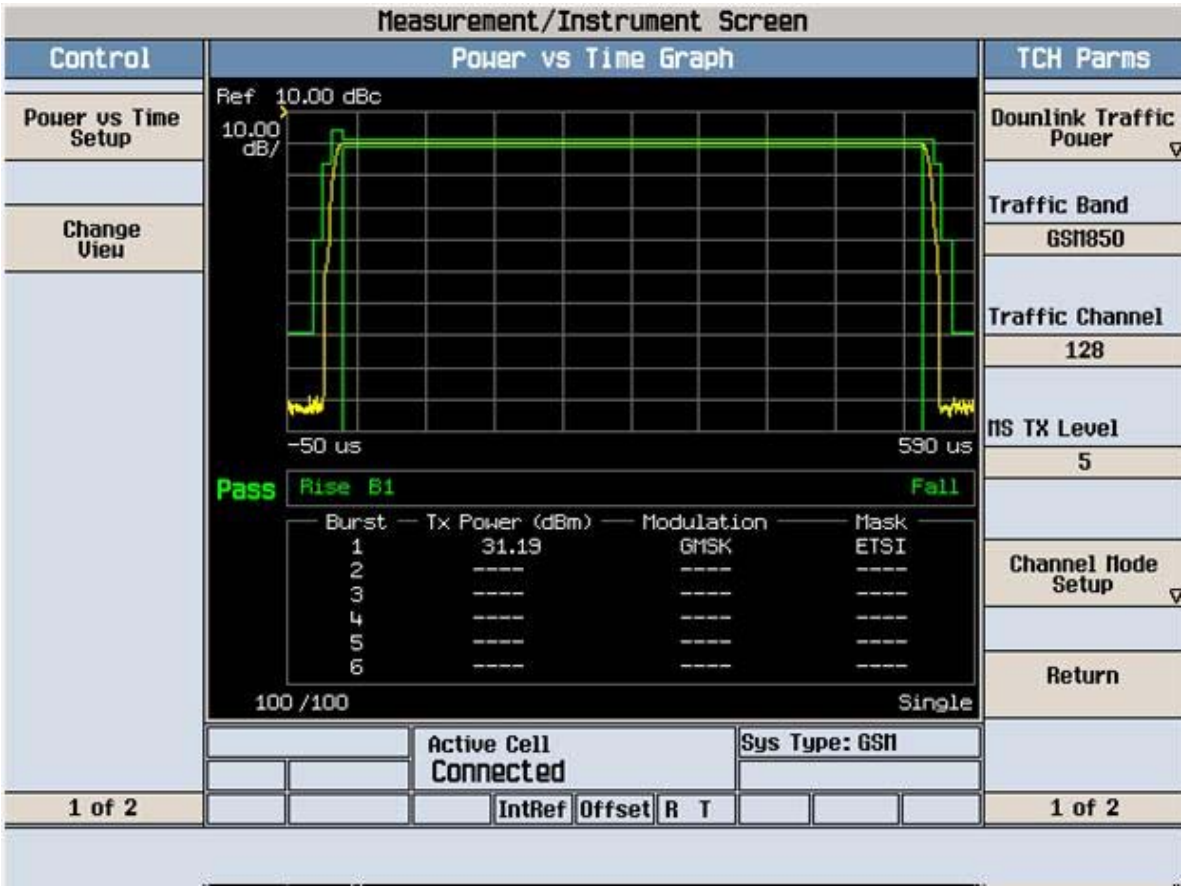
FCC ID : A3LGTS7562 Transmit Power 190CH



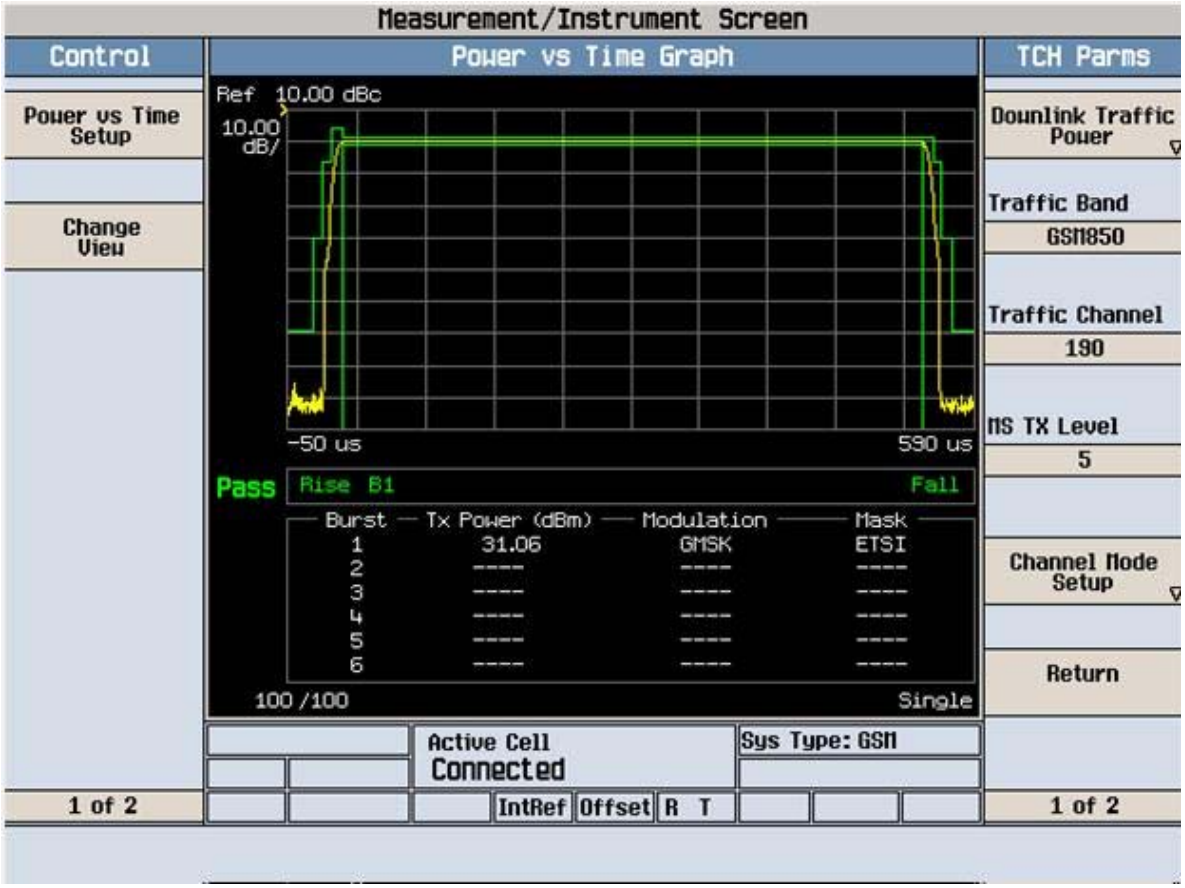
FCC ID : A3LGTS7562 Transmit Power 251CH



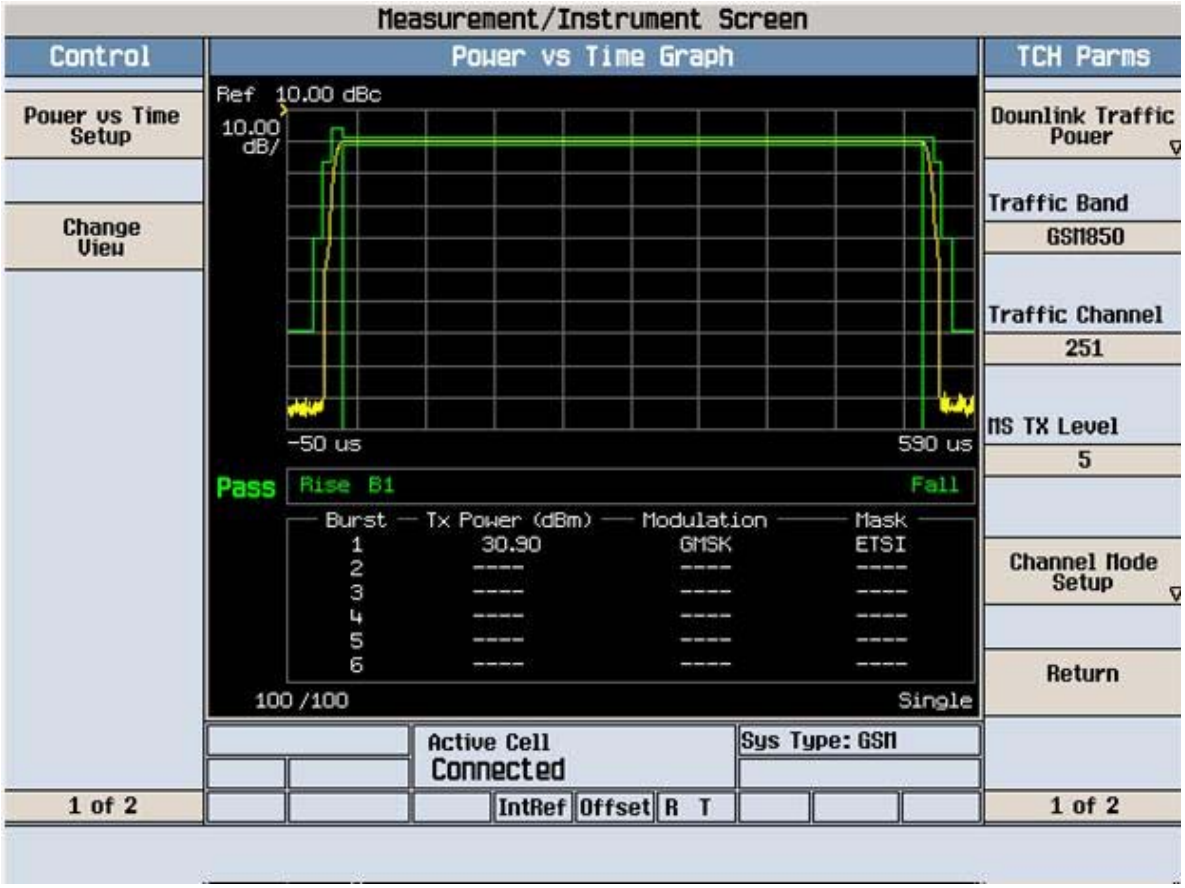
FCC ID : A3LGTS7562 GMSK Power vs Time 128CH



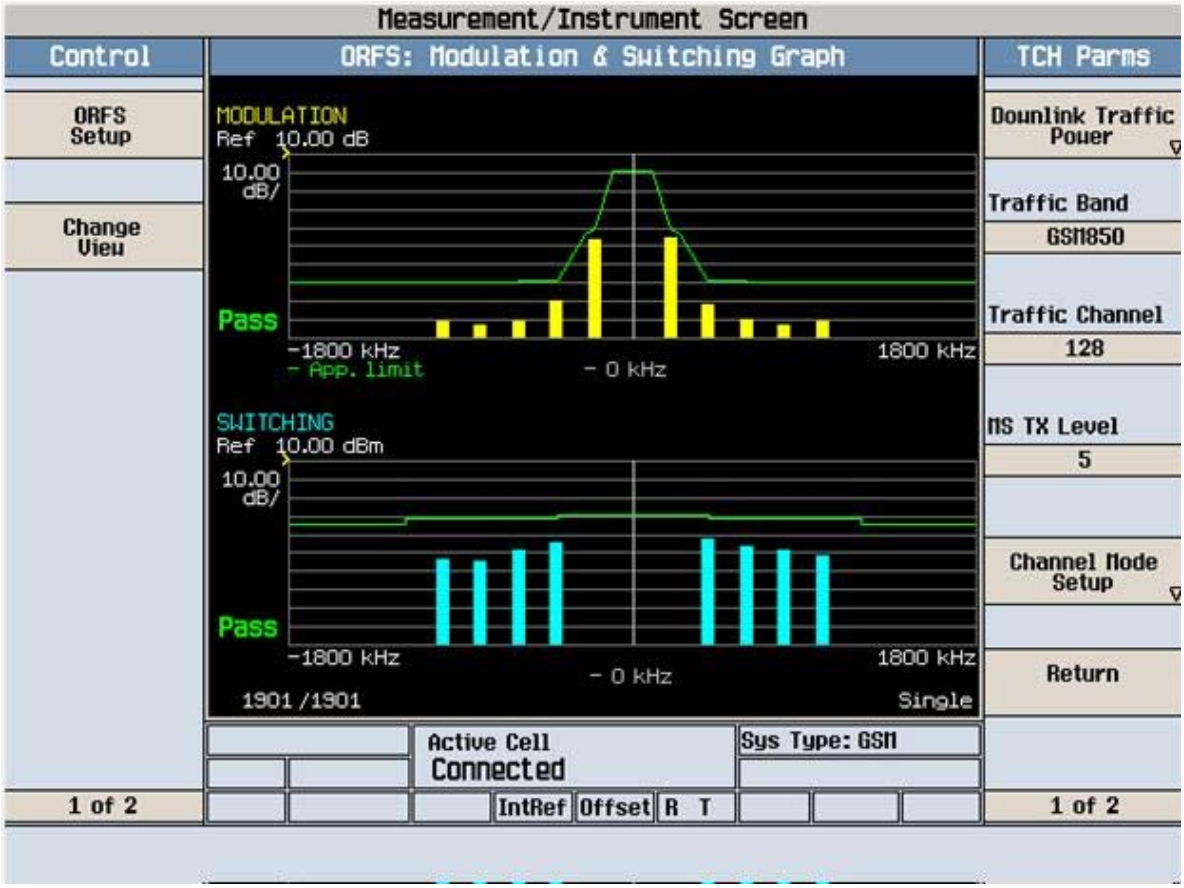
FCC ID : A3LGTS7562 GMSK Power vs Time 190CH



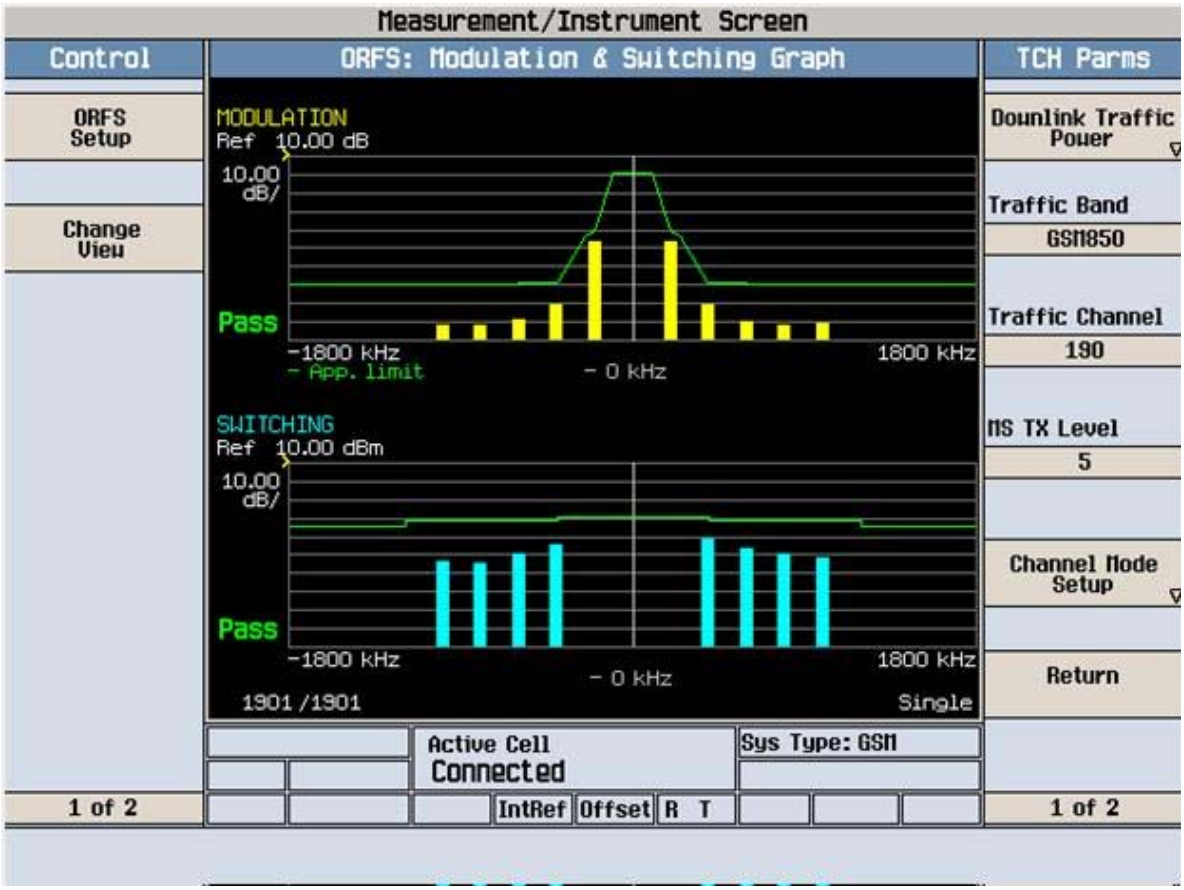
FCC ID : A3LGTS7562 GMSK Power vs Time 251CH

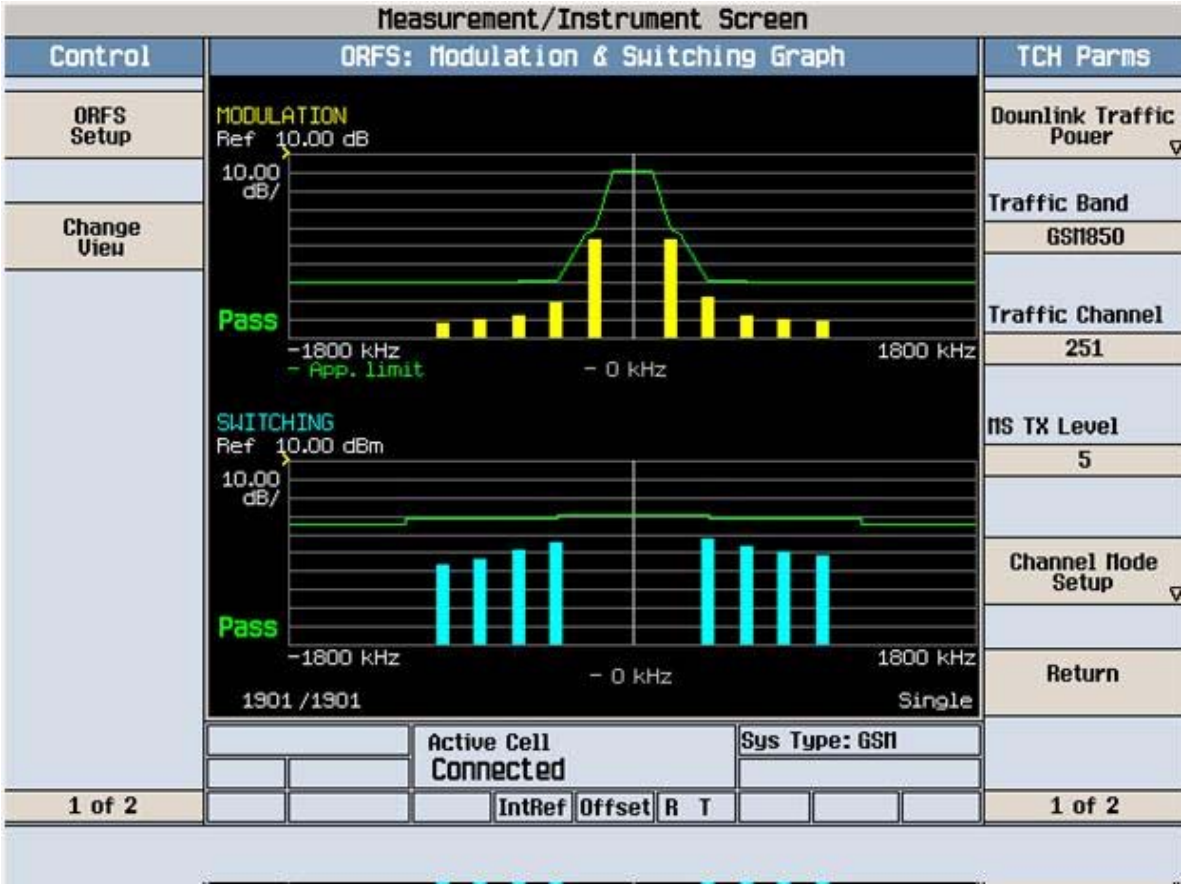


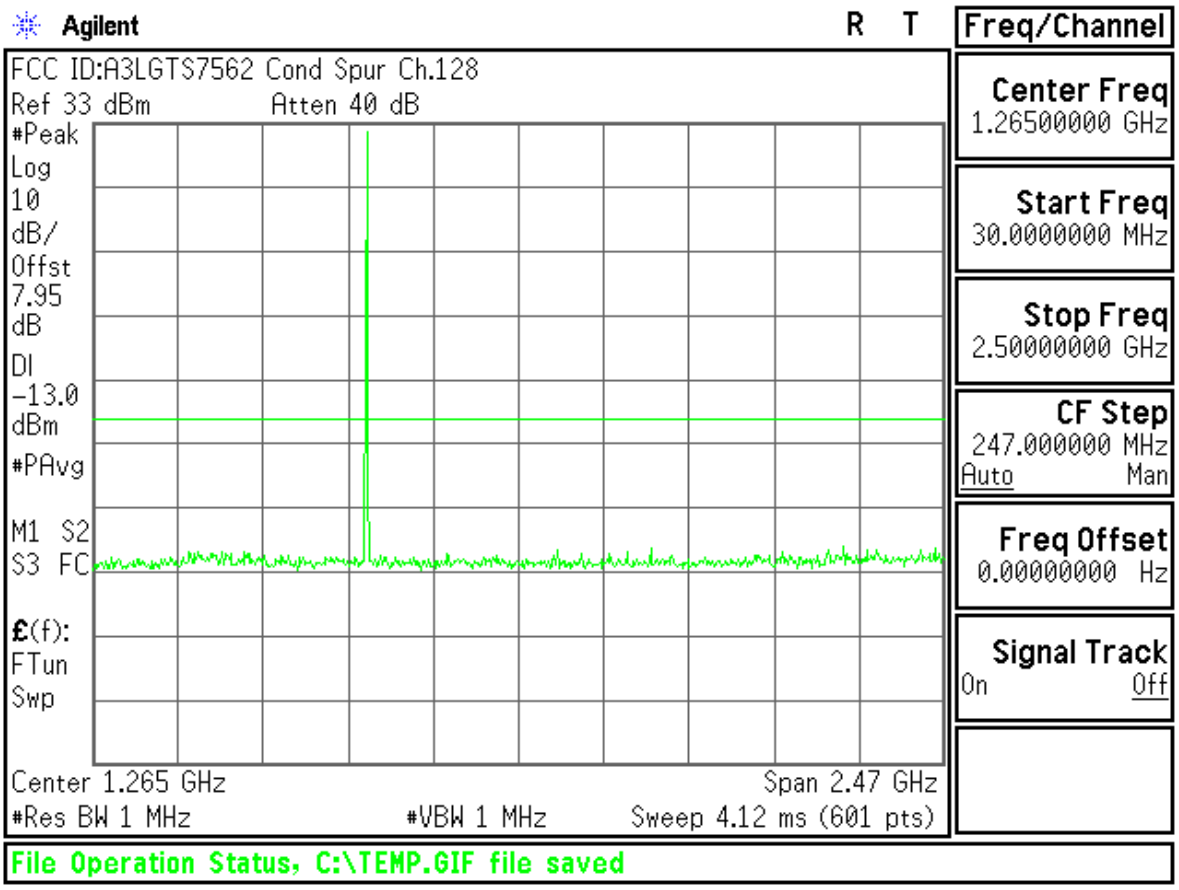
FCC ID : A3LGTS7562 Modulation & Switching 128CH

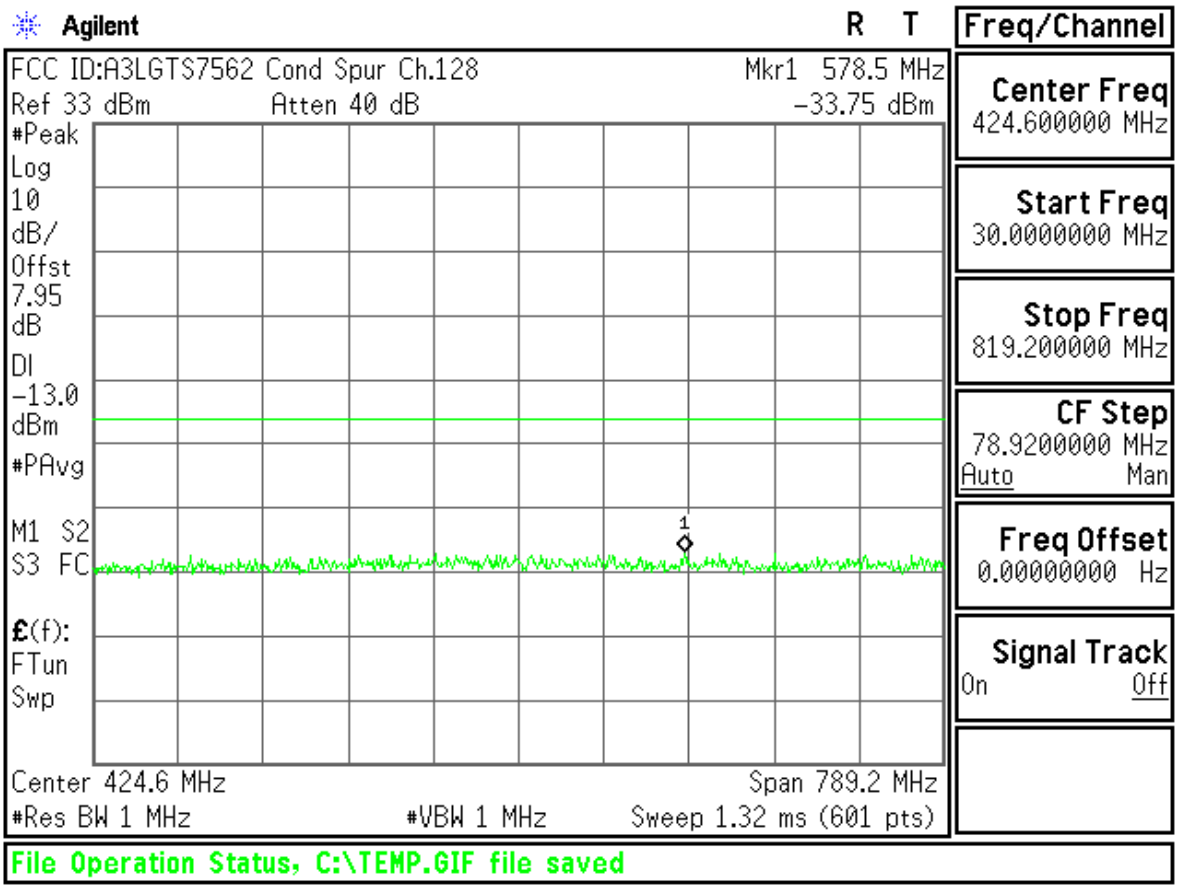


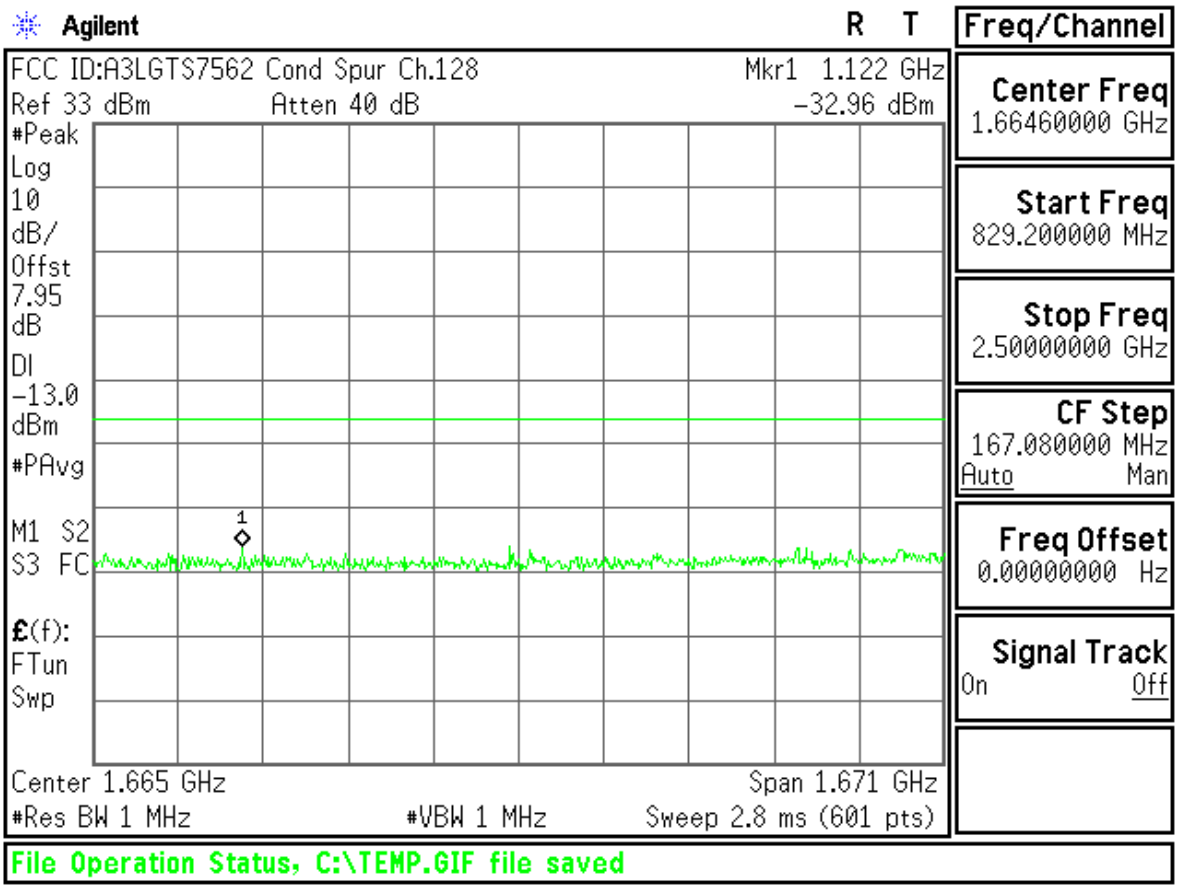
FCC ID : A3LGTS7562 Modulation & Switching 190CH

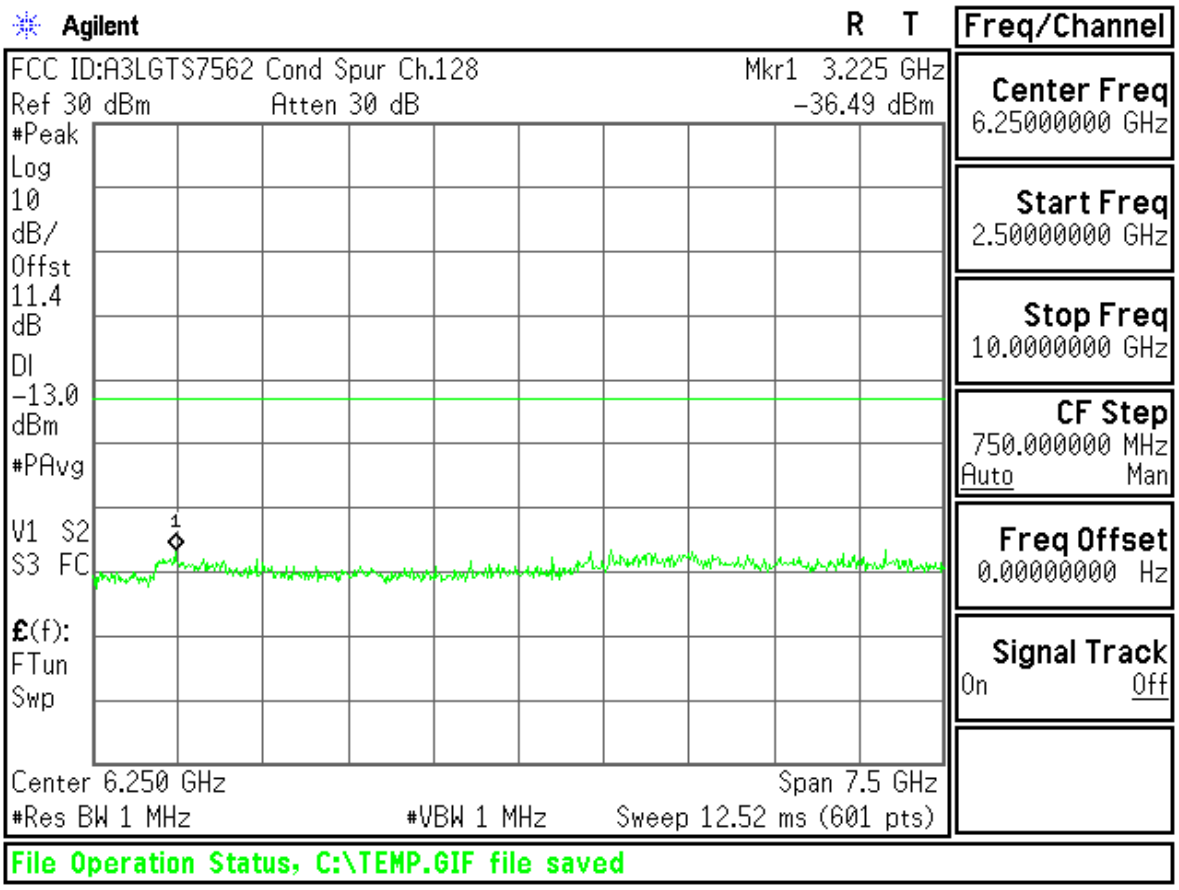


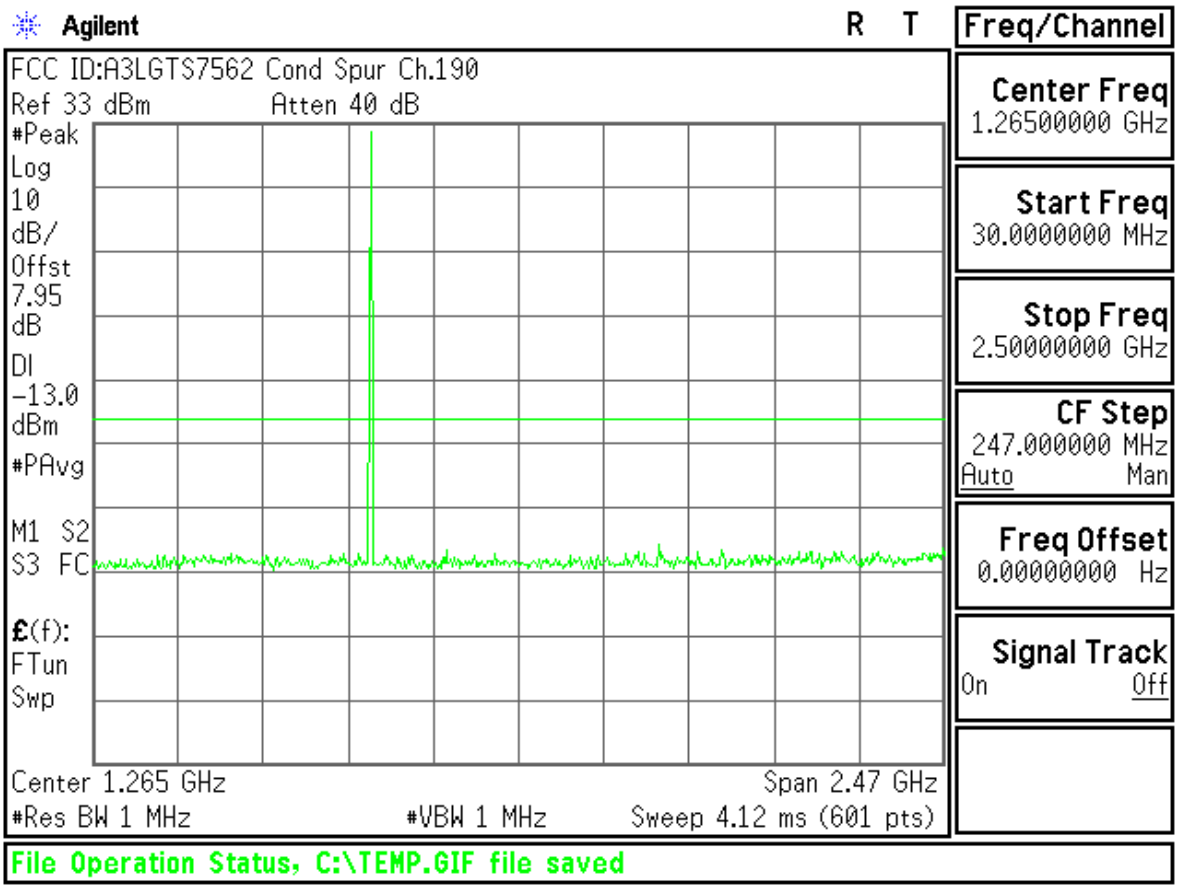

Measurement/Instrument Screen
Control
ORFS: Modulation & Switching Graph
TCH Parms
ORFS Setup
Change View
MODULATION
Ref 10.00 dB
10.00 dB/
Pass
-1800 kHz
- App. limit
- 0 kHz
1800 kHz
SWITCHING
Ref 10.00 dBm
10.00 dB/
Pass
-1800 kHz
- 0 kHz
1800 kHz
1901 /1901
Single
Dounlink Traffic Power
Traffic Band
GSM850
Traffic Channel
251
MS TX Level
5
Channel Mode Setup
Return
Active Cell
Connected
Sys Type: GSM
IntRef
Offset
R T
1 of 2
1 of 2

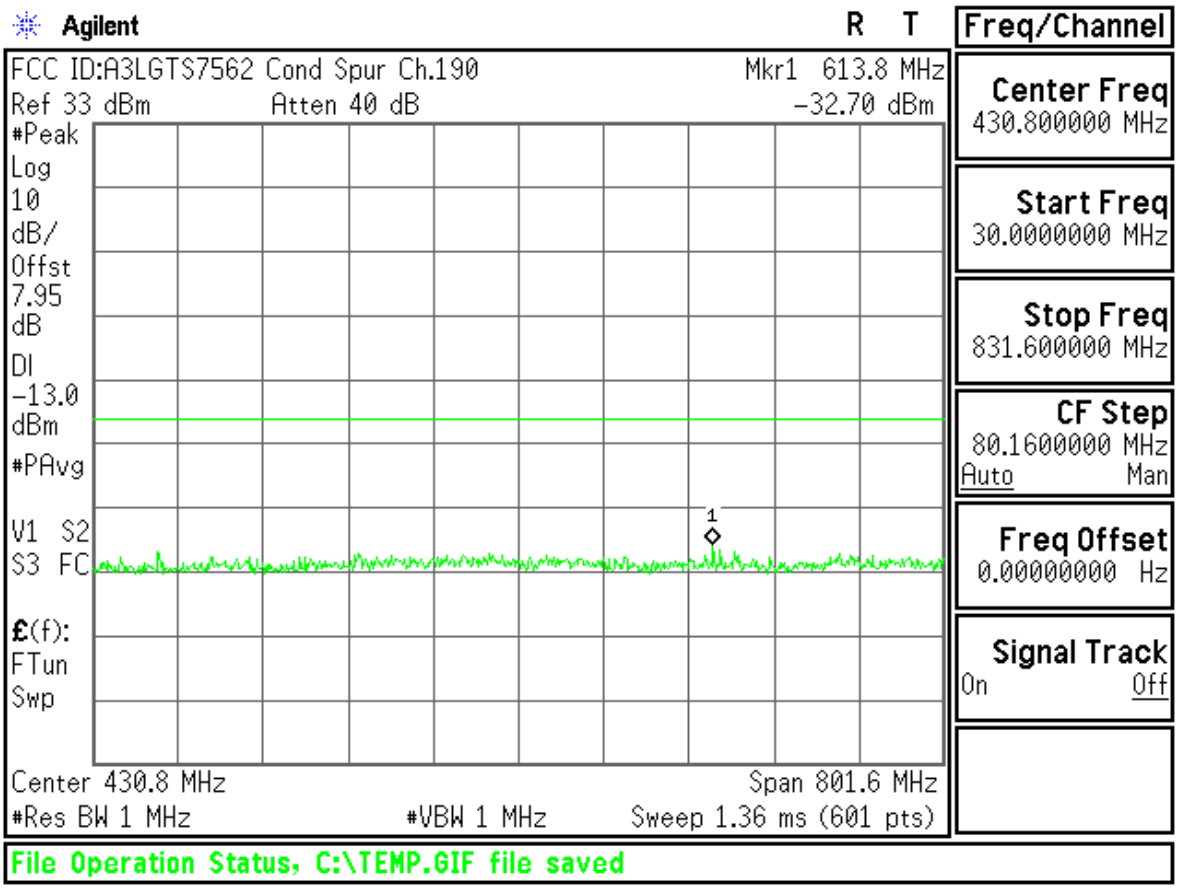

Agilent
R T
Freq/Channel
FCC ID:A3LGTS7562 Cond Spur Ch.128
Ref 33 dBm
Atten 40 dB
#Peak
Log
10
dB/
Offst
7.95
dB
Dl
-13.0
dBm
#PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 1.265 GHz
Span 2.47 GHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 4.12 ms (601 pts)
Center Freq
1.26500000 GHz
Start Freq
30.0000000 MHz
Stop Freq
2.50000000 GHz
CF Step
247.000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:\TEMP.GIF file saved

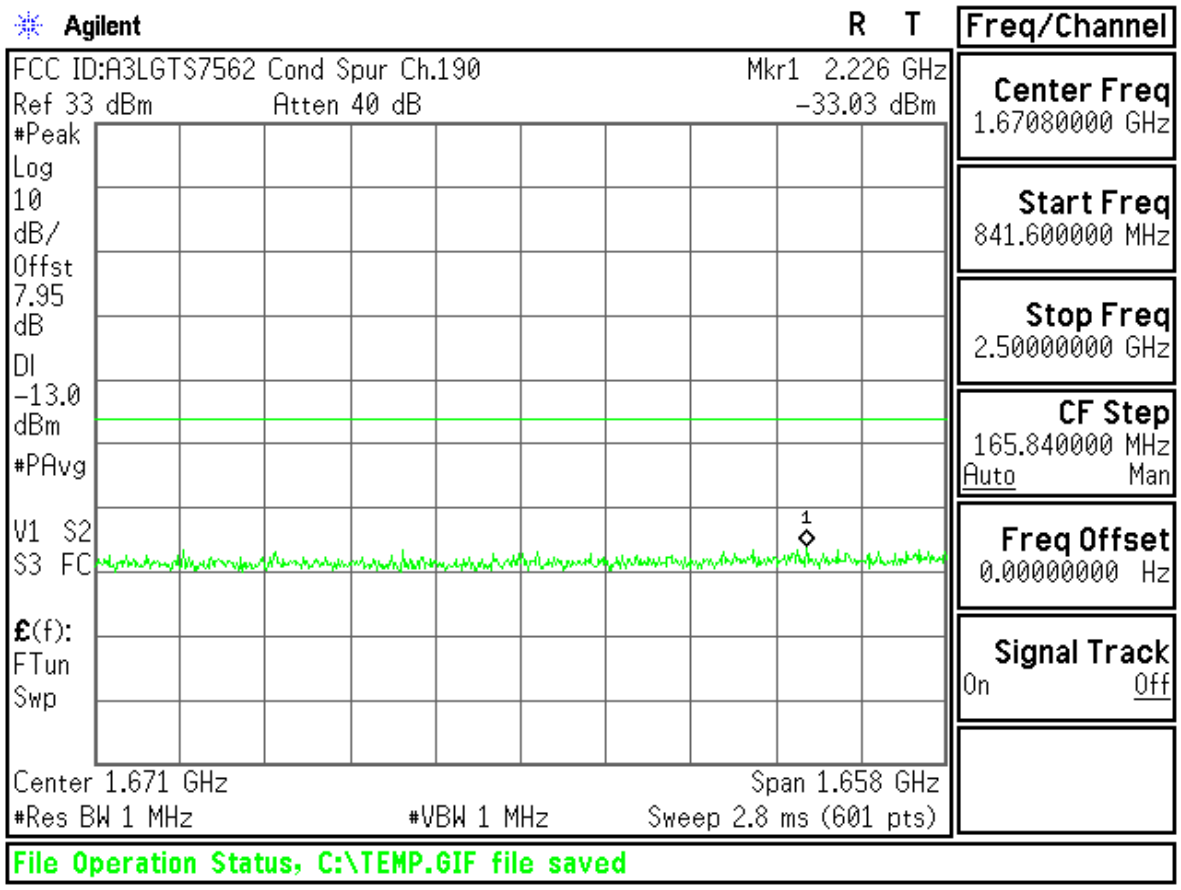

Agilent
R T
Freq/Channel
FCC ID:A3LGTS7562 Cond Spur Ch.128
Mkr1 578.5 MHz
Ref 33 dBm
Atten 40 dB
-33.75 dBm
#Peak
Log
10
dB/
Offst
7.95
dB
Dl
-13.0
dBm
#PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 424.6 MHz
Span 789.2 MHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 1.32 ms (601 pts)
Center Freq
424.600000 MHz
Start Freq
30.0000000 MHz
Stop Freq
819.200000 MHz
CF Step
78.9200000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:\TEMP.GIF file saved

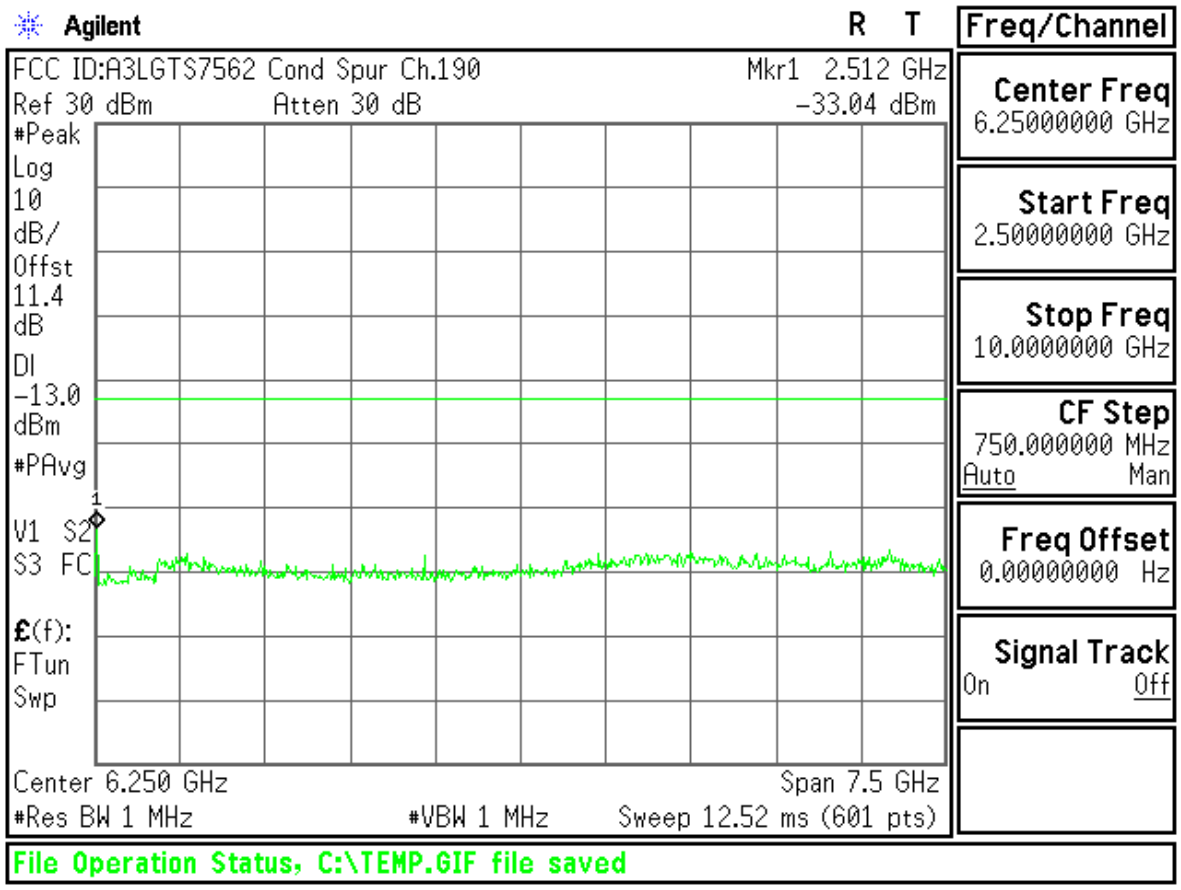

Agilent
R T
FCC ID:A3LGTS7562 Cond Spur Ch.128
Mkr1 1.122 GHz
Ref 33 dBm
Atten 40 dB
-32.96 dBm
#Peak
Log
10
dB/
Offst
7.95
dB
Dl
-13.0
dBm
#PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 1.665 GHz
Span 1.671 GHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 2.8 ms (601 pts)
Freq/Channel
Center Freq
1.66460000 GHz
Start Freq
829.200000 MHz
Stop Freq
2.50000000 GHz
CF Step
167.080000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
File Operation Status, C:\TEMP.GIF file saved

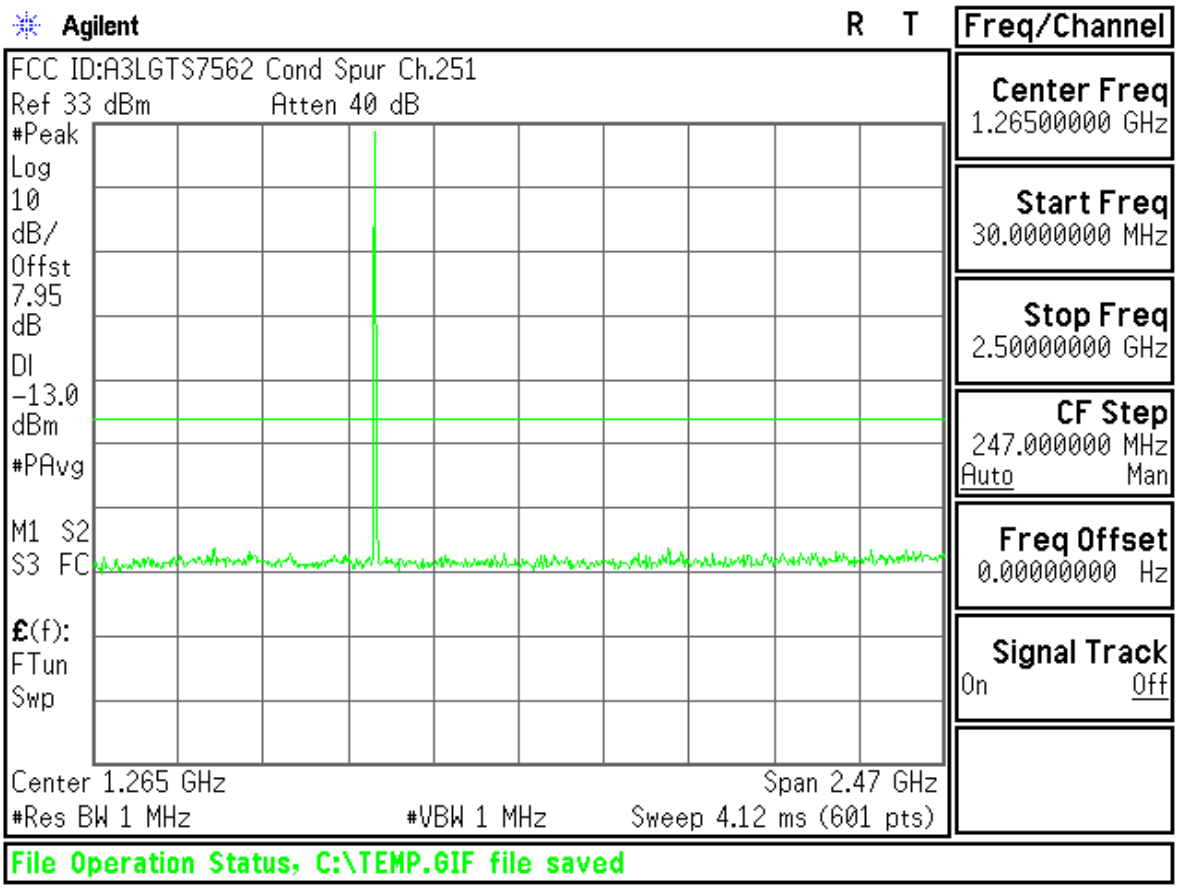

Agilent
R T
FCC ID:A3LGTS7562 Cond Spur Ch.128
Mkr1 3.225 GHz
Ref 30 dBm
Atten 30 dB
-36.49 dBm
#Peak
Log
10
dB/
Offst
11.4
dB
Dl
-13.0
dBm
#PAvg
V1 S2
S3 FC
£(f):
FTun
Swp
Center 6.250 GHz
Span 7.5 GHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 12.52 ms (601 pts)
Freq/Channel
Center Freq
6.25000000 GHz
Start Freq
2.50000000 GHz
Stop Freq
10.0000000 GHz
CF Step
750.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
File Operation Status, C:\TEMP.GIF file saved

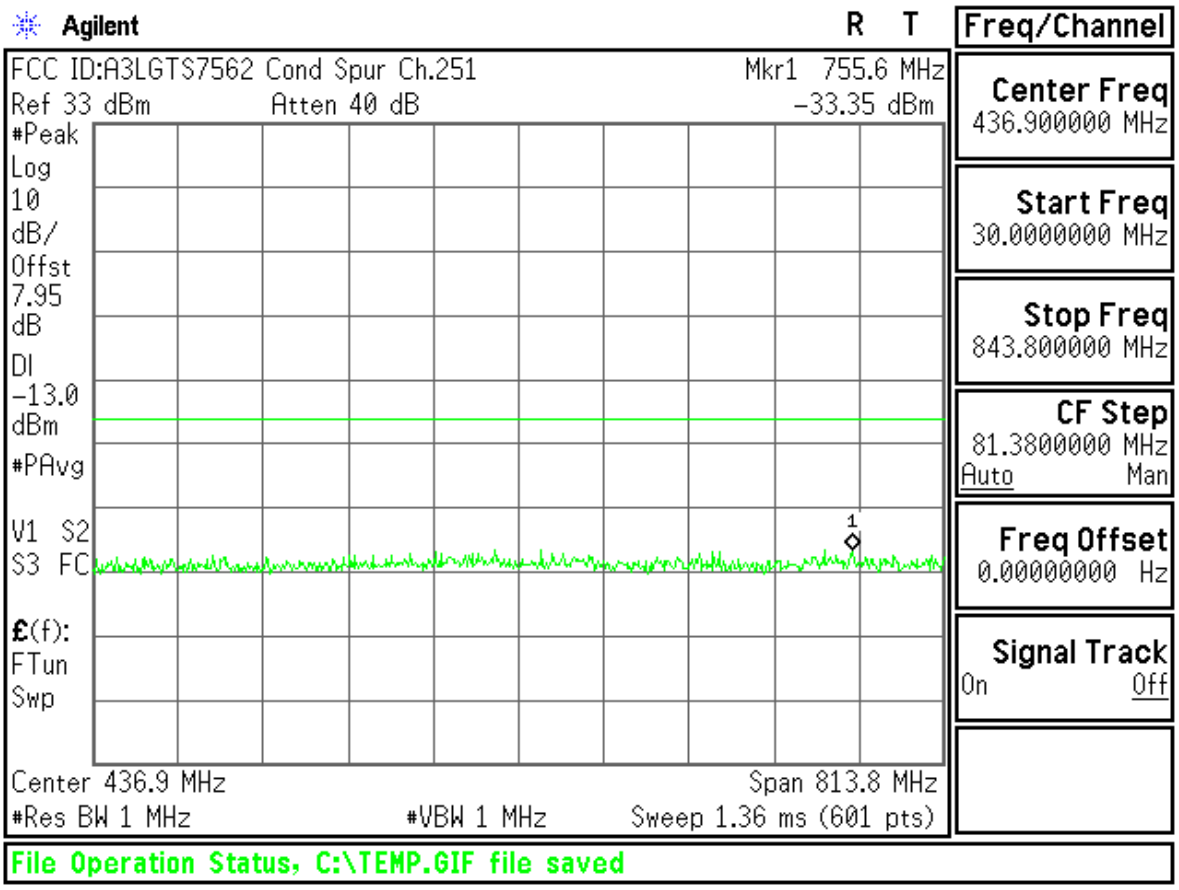

Agilent
R T
Freq/Channel
FCC ID:A3LGTS7562 Cond Spur Ch.190
Ref 33 dBm
Atten 40 dB
#Peak
Log
10
dB/
Offst
7.95
dB
Dl
-13.0
dBm
#PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 1.265 GHz
Span 2.47 GHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 4.12 ms (601 pts)
Center Freq
1.26500000 GHz
Start Freq
30.0000000 MHz
Stop Freq
2.50000000 GHz
CF Step
247.000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:\TEMP.GIF file saved

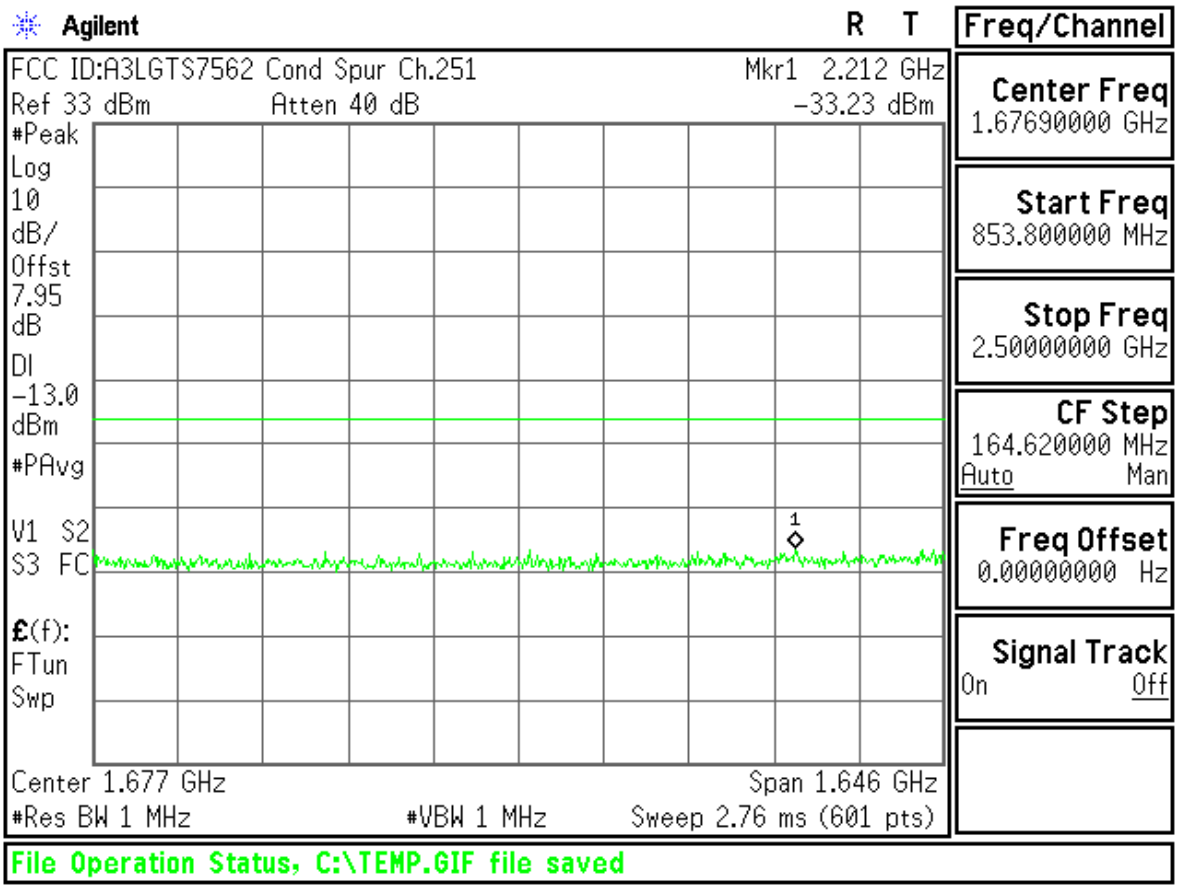

Agilent
R T
Freq/Channel
FCC ID:A3LGTS7562 Cond Spur Ch.190
Mkr1 613.8 MHz
Ref 33 dBm
Atten 40 dB
-32.70 dBm
#Peak
Log
10
dB/
Offst
7.95
dB
Dl
-13.0
dBm
#PAvg
V1 S2
S3 FC
£(f):
FTun
Swp
Center 430.8 MHz
Span 801.6 MHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 1.36 ms (601 pts)
Center Freq
430.800000 MHz
Start Freq
30.0000000 MHz
Stop Freq
831.600000 MHz
CF Step
80.1600000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:\TEMP.GIF file saved

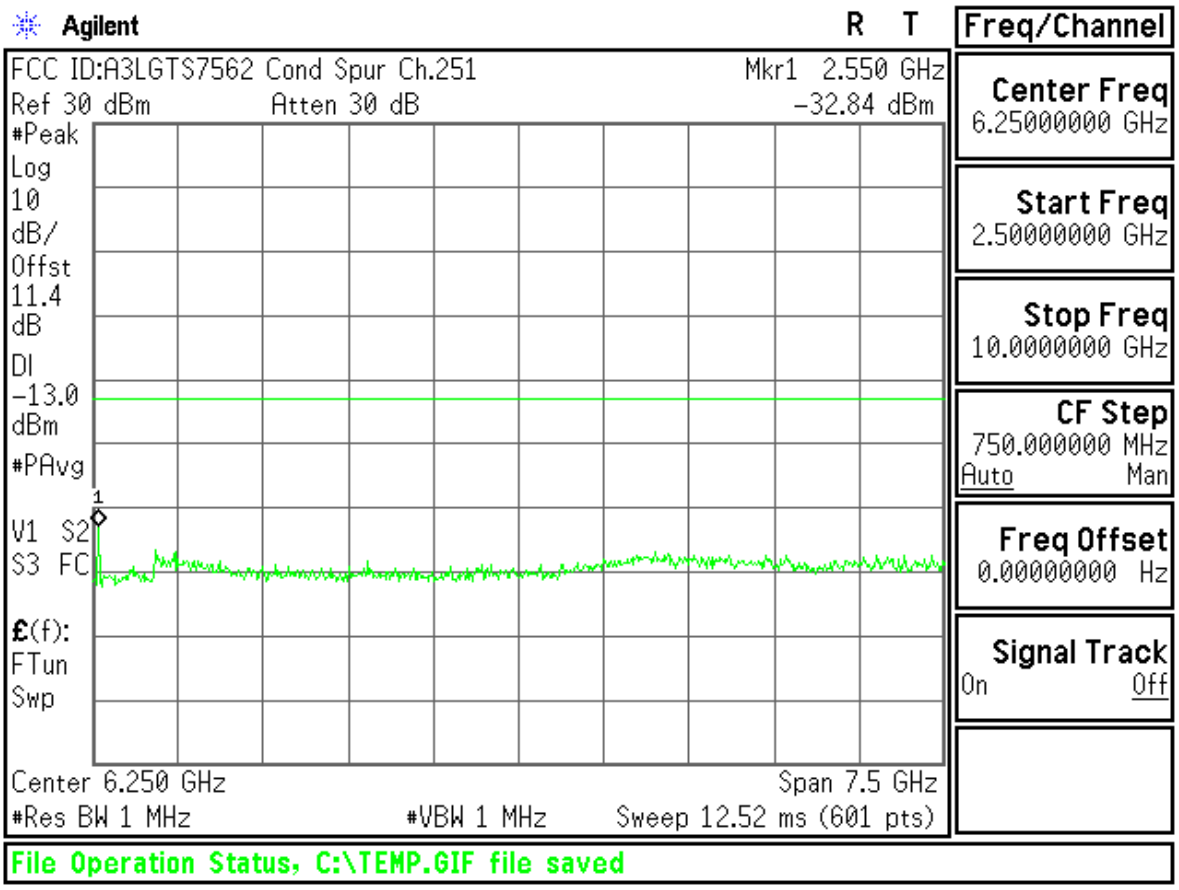

Agilent
R T
Freq/Channel
FCC ID:A3LGTS7562 Cond Spur Ch.190
Mkr1 2.226 GHz
Ref 33 dBm
Atten 40 dB
-33.03 dBm
#Peak
Log
10
dB/
Offst
7.95
dB
Dl
-13.0
dBm
#PAvg
V1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
1.67080000 GHz
Start Freq
841.600000 MHz
Stop Freq
2.50000000 GHz
CF Step
165.840000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 1.671 GHz
Span 1.658 GHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 2.8 ms (601 pts)
File Operation Status, C:\TEMP.GIF file saved

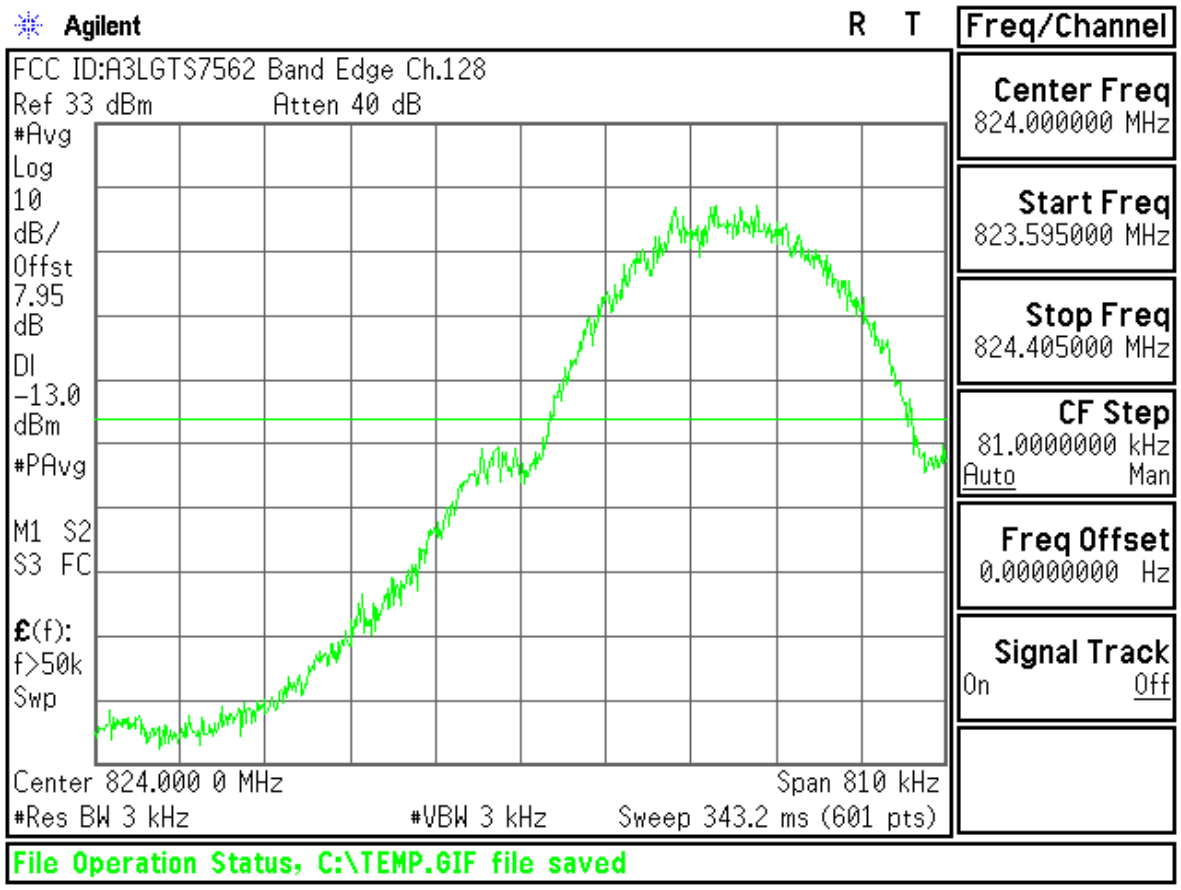

Agilent
R T
Freq/Channel
FCC ID:A3LGTS7562 Cond Spur Ch.190
Mkr1 2.512 GHz
Ref 30 dBm
Atten 30 dB
-33.04 dBm
#Peak
Log
10
dB/
Offst
11.4
dB
Dl
-13.0
dBm
#PAvg
V1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
6.25000000 GHz
Start Freq
2.50000000 GHz
Stop Freq
10.0000000 GHz
CF Step
750.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 6.250 GHz
Span 7.5 GHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 12.52 ms (601 pts)
File Operation Status, C:\TEMP.GIF file saved

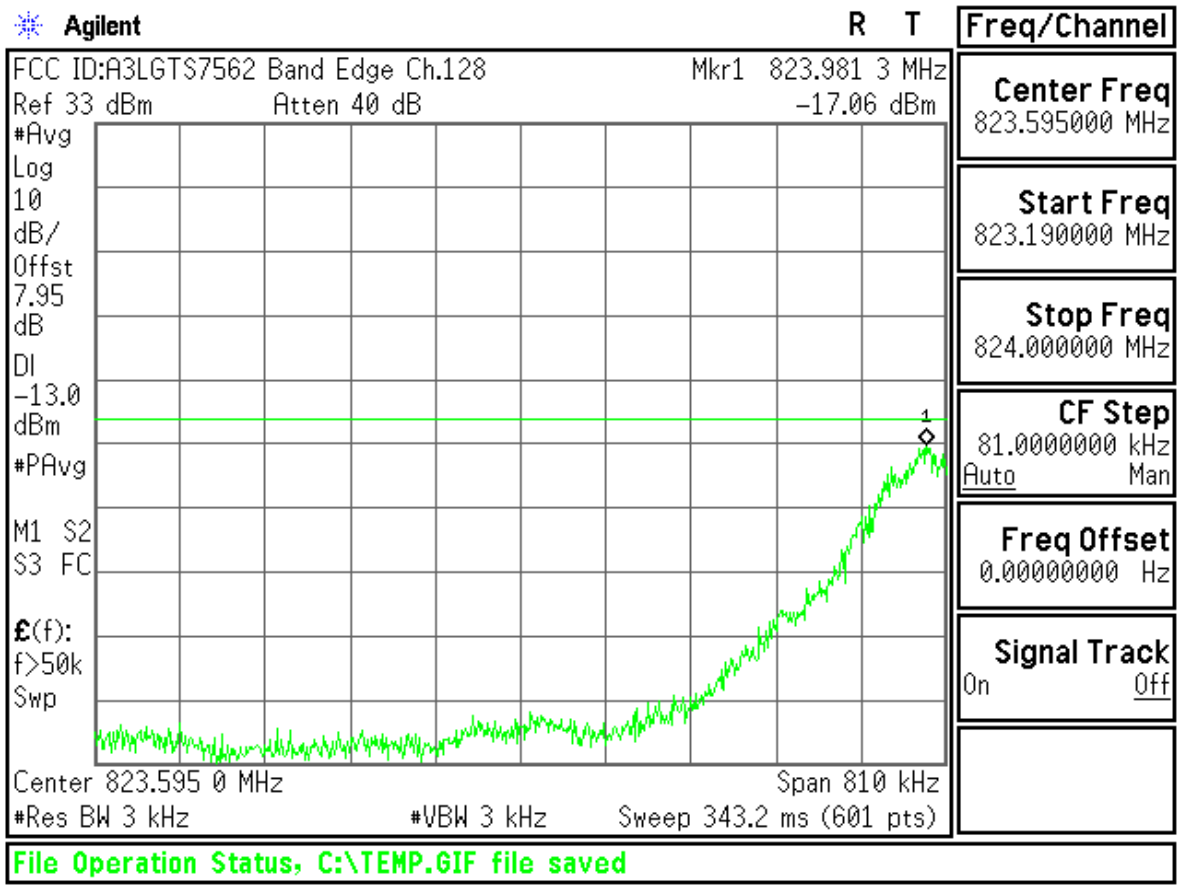

Agilent
R T
Freq/Channel
FCC ID:A3LGTS7562 Cond Spur Ch.251
Ref 33 dBm
Atten 40 dB
#Peak
Log
10
dB/
Offst
7.95
dB
Dl
-13.0
dBm
#PAvg
M1 S2
S3 FC
£(f):
FTun
Swp
Center 1.265 GHz
Span 2.47 GHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 4.12 ms (601 pts)
Center Freq
1.26500000 GHz
Start Freq
30.0000000 MHz
Stop Freq
2.50000000 GHz
CF Step
247.000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:\TEMP.GIF file saved

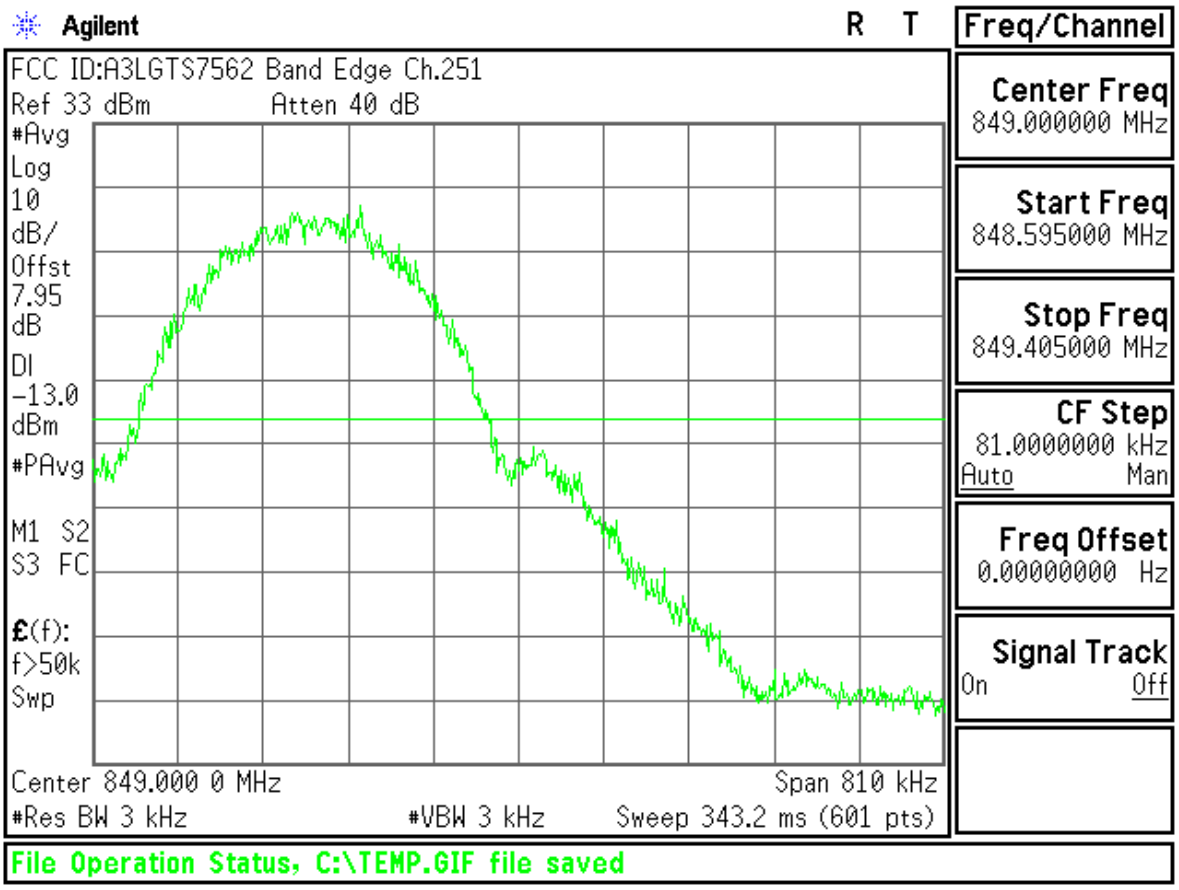

Agilent
R T
Freq/Channel
FCC ID:A3LGTS7562 Cond Spur Ch.251
Mkr1 755.6 MHz
Ref 33 dBm
Atten 40 dB
-33.35 dBm
#Peak
Log
10
dB/
Offst
7.95
dB
Dl
-13.0
dBm
#PAvg
V1 S2
S3 FC
£(f):
FTun
Swp
Center 436.9 MHz
Span 813.8 MHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 1.36 ms (601 pts)
Center Freq
436.900000 MHz
Start Freq
30.0000000 MHz
Stop Freq
843.800000 MHz
CF Step
81.3800000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:\TEMP.GIF file saved

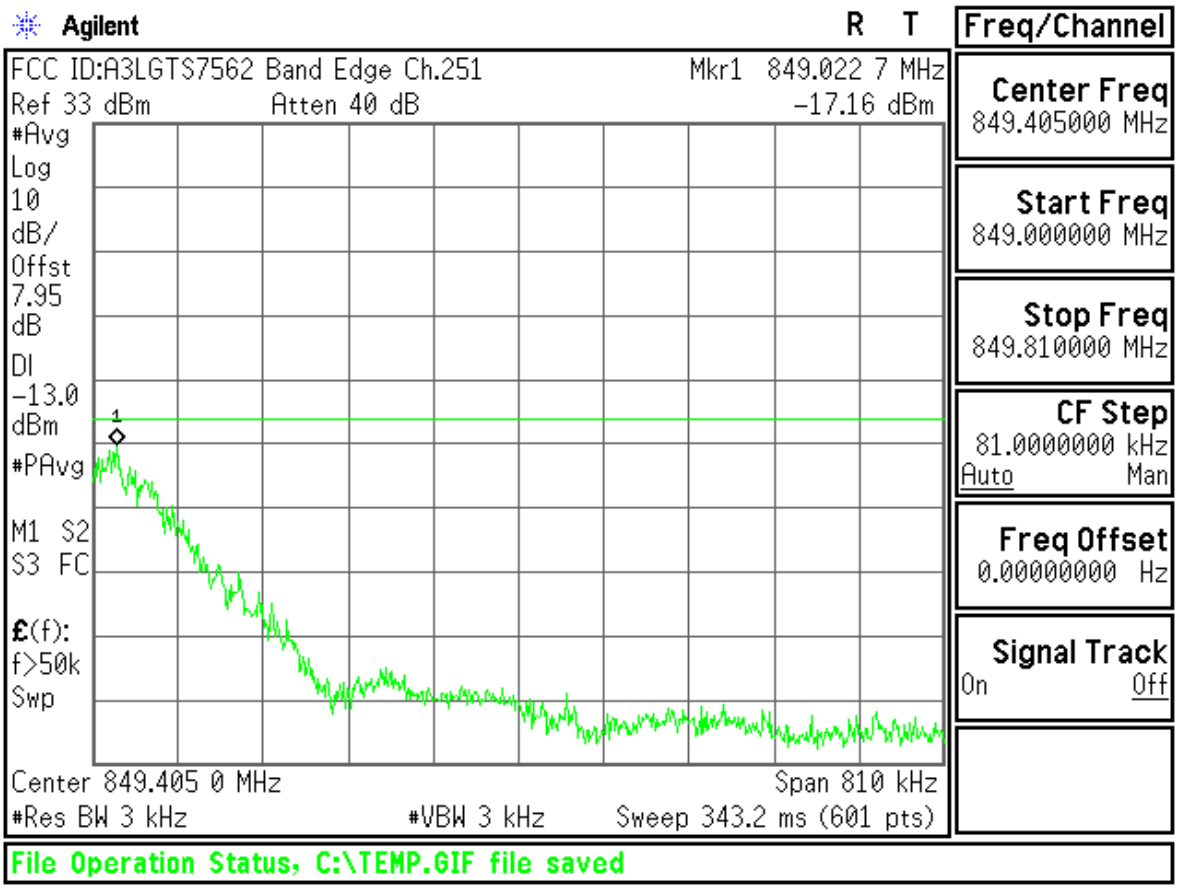

Agilent
R T
Freq/Channel
FCC ID:A3LGTS7562 Cond Spur Ch.251
Mkr1 2.212 GHz
Ref 33 dBm
Atten 40 dB
-33.23 dBm
#Peak
Log
10
dB/
Offst
7.95
dB
Dl
-13.0
dBm
#PAvg
V1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
1.67690000 GHz
Start Freq
853.800000 MHz
Stop Freq
2.50000000 GHz
CF Step
164.620000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 1.677 GHz
Span 1.646 GHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 2.76 ms (601 pts)
File Operation Status, C:\TEMP.GIF file saved


Agilent
R T
Freq/Channel
FCC ID:A3LGTS7562 Cond Spur Ch.251
Mkr1 2.550 GHz
Ref 30 dBm
Atten 30 dB
-32.84 dBm
#Peak
Log
10
dB/
Offst
11.4
dB
Dl
-13.0
dBm
#PAvg
V1 S2
S3 FC
£(f):
FTun
Swp
Center Freq
6.25000000 GHz
Start Freq
2.50000000 GHz
Stop Freq
10.0000000 GHz
CF Step
750.000000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 6.250 GHz
Span 7.5 GHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 12.52 ms (601 pts)
File Operation Status, C:\TEMP.GIF file saved

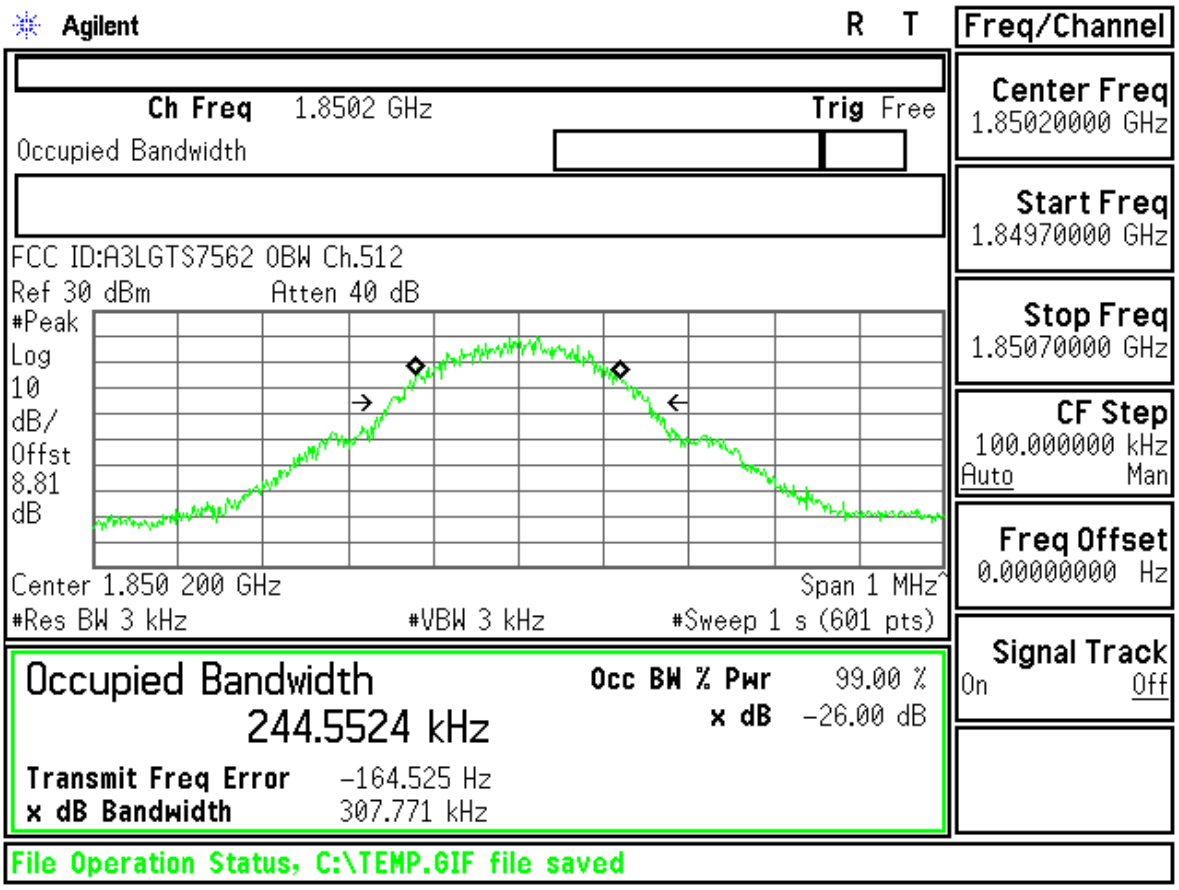

Agilent
R T
FCC ID:A3LGTS7562 Band Edge Ch.128
Ref 33 dBm
Atten 40 dB
#Avg
Log
10
dB/
Offst
7.95
dB
Dl
-13.0
dBm
#PAvg
M1 S2
S3 FC
£(f):
f>50k
Swp
Center 824.000 0 MHz
Span 810 kHz
#Res BW 3 kHz
#VBW 3 kHz
Sweep 343.2 ms (601 pts)
Freq/Channel
Center Freq
824.000000 MHz
Start Freq
823.595000 MHz
Stop Freq
824.405000 MHz
CF Step
81.0000000 kHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:\TEMP.GIF file saved

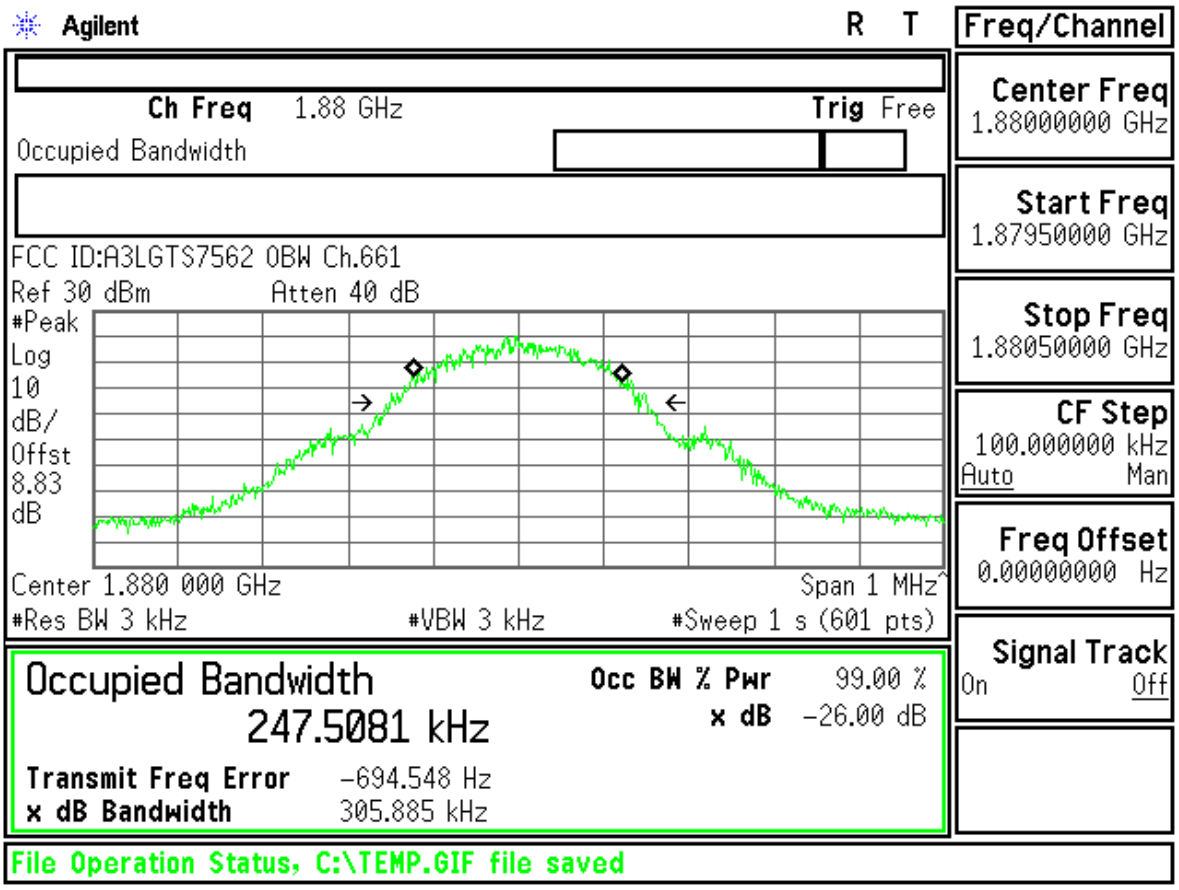

Agilent
R T
FCC ID:A3LGTS7562 Band Edge Ch.128
Mkr1 823.981 3 MHz
Ref 33 dBm
Atten 40 dB
-17.06 dBm
#Avg
Log
10
dB/
Offst
7.95
dB
Dl
-13.0
dBm
#PAvg
M1 S2
S3 FC
£(f):
f>50k
Swp
Center 823.595 0 MHz
Span 810 kHz
#Res BW 3 kHz
#VBW 3 kHz
Sweep 343.2 ms (601 pts)
Freq/Channel
Center Freq
823.595000 MHz
Start Freq
823.190000 MHz
Stop Freq
824.000000 MHz
CF Step
81.0000000 kHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:\TEMP.GIF file saved

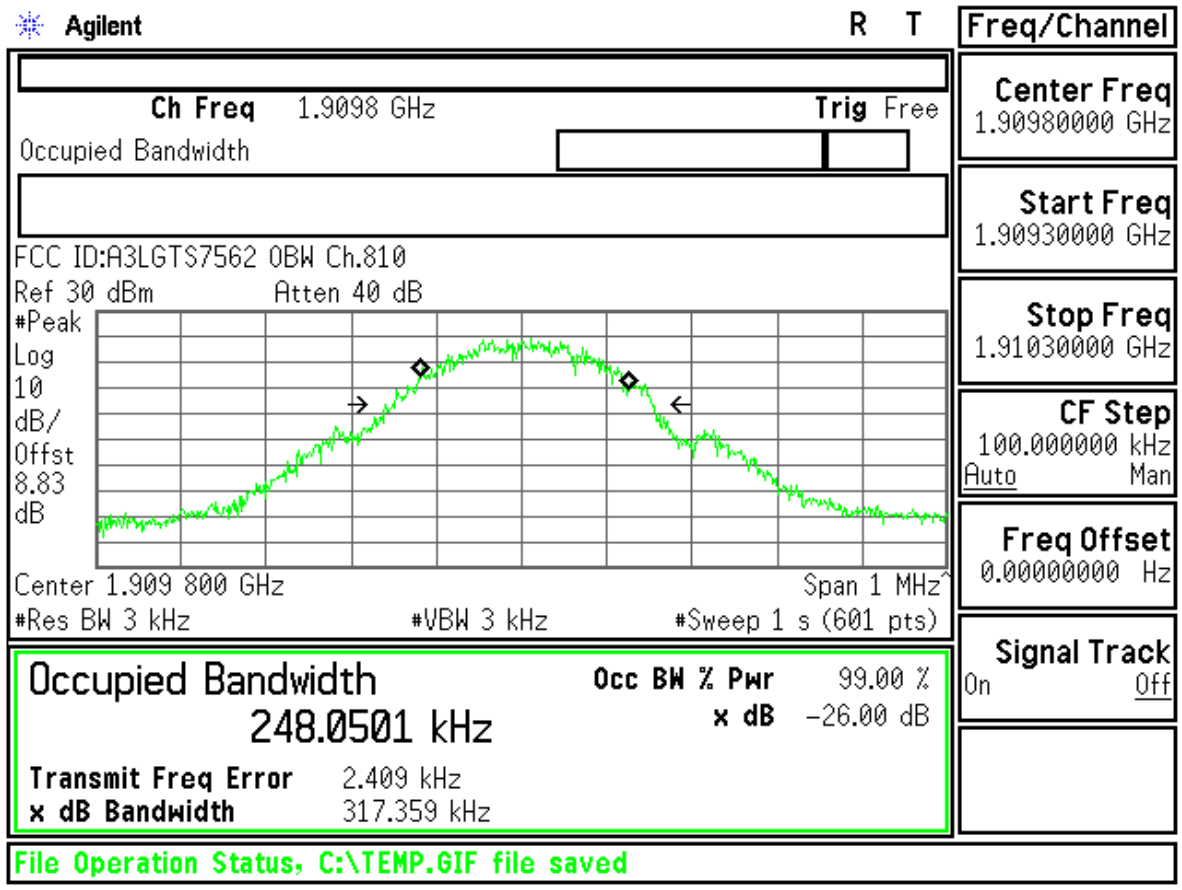

Agilent
R T
Freq/Channel
FCC ID:A3LGTS7562 Band Edge Ch.251
Ref 33 dBm
Atten 40 dB
#Avg
Log
10
dB/
Offst
7.95
dB
Dl
-13.0
dBm
#PAvg
M1 S2
S3 FC
£(f):
f>50k
Swp
Center 849.000 0 MHz
Span 810 kHz
#Res BW 3 kHz
#VBW 3 kHz
Sweep 343.2 ms (601 pts)
Center Freq
849.000000 MHz
Start Freq
848.595000 MHz
Stop Freq
849.405000 MHz
CF Step
81.0000000 kHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:\TEMP.GIF file saved


Agilent
R T
Freq/Channel
FCC ID:A3LGTS7562 Band Edge Ch.251
Mkr1 849.022 7 MHz
Ref 33 dBm
Atten 40 dB
-17.16 dBm
#Avg
Log
10
dB/
Offst
7.95
dB
Dl
-13.0
dBm
#PAvg
M1 S2
S3 FC
£(f):
f>50k
Swp
Center 849.405 0 MHz
Span 810 kHz
#Res BW 3 kHz
#VBW 3 kHz
Sweep 343.2 ms (601 pts)
Center Freq
849.405000 MHz
Start Freq
849.000000 MHz
Stop Freq
849.810000 MHz
CF Step
81.0000000 kHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:\TEMP.GIF file saved

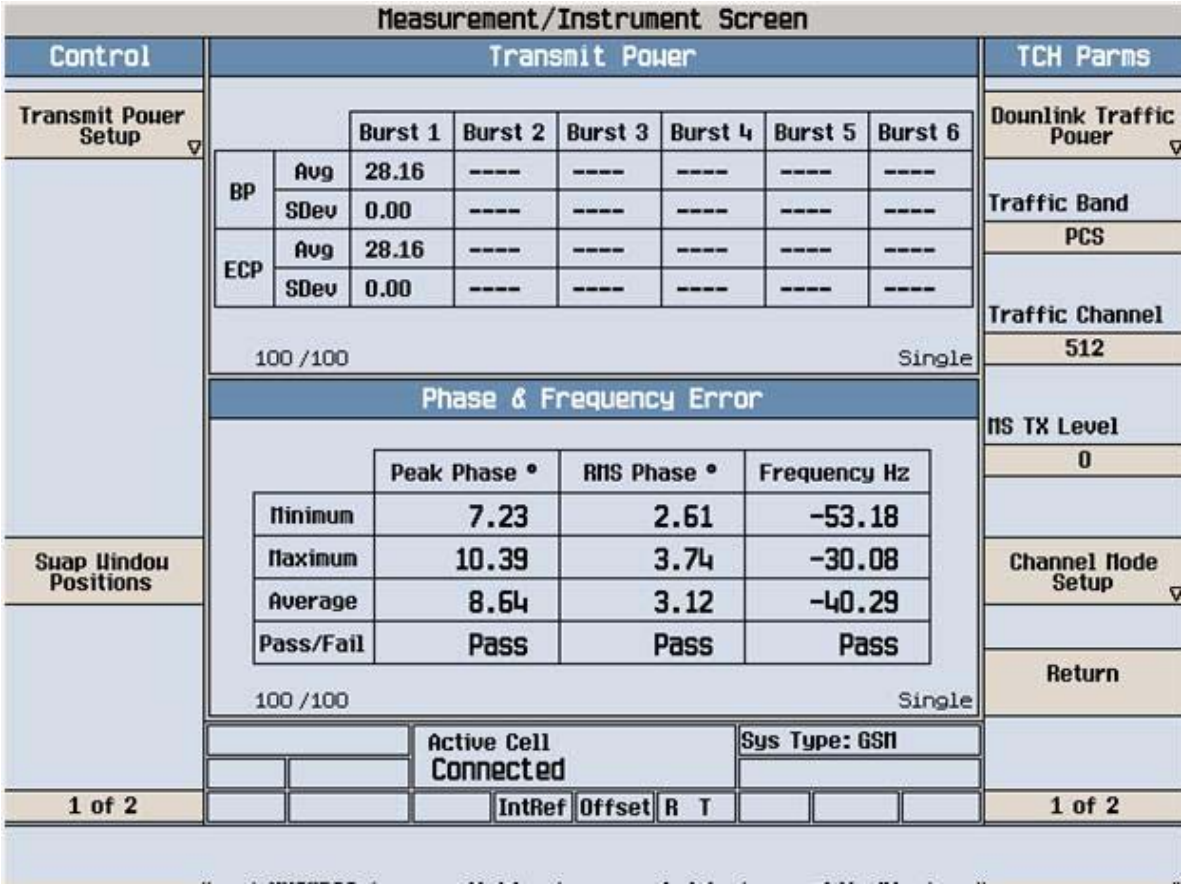
GSM1900


Agilent
R T
Freq/Channel
Ch Freq 1.8502 GHz
Trig Free
Occupied Bandwidth
FCC ID:A3LGTS7562 OBW Ch.512
Ref 30 dBm
Atten 40 dB
#Peak
Log
10
dB/
Offst
8.81
dB
Center 1.850 200 GHz
Span 1 MHz
#Res BW 3 kHz
#VBW 3 kHz
#Sweep 1 s (601 pts)
Occupied Bandwidth
244.5524 kHz
Occ BW % Pwr 99.00 %
x dB -26.00 dB
Transmit Freq Error -164.525 Hz
x dB Bandwidth 307.771 kHz
Center Freq
1.85020000 GHz
Start Freq
1.84970000 GHz
Stop Freq
1.85070000 GHz
CF Step
100.000000 kHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
File Operation Status, C:\TEMP.GIF file saved

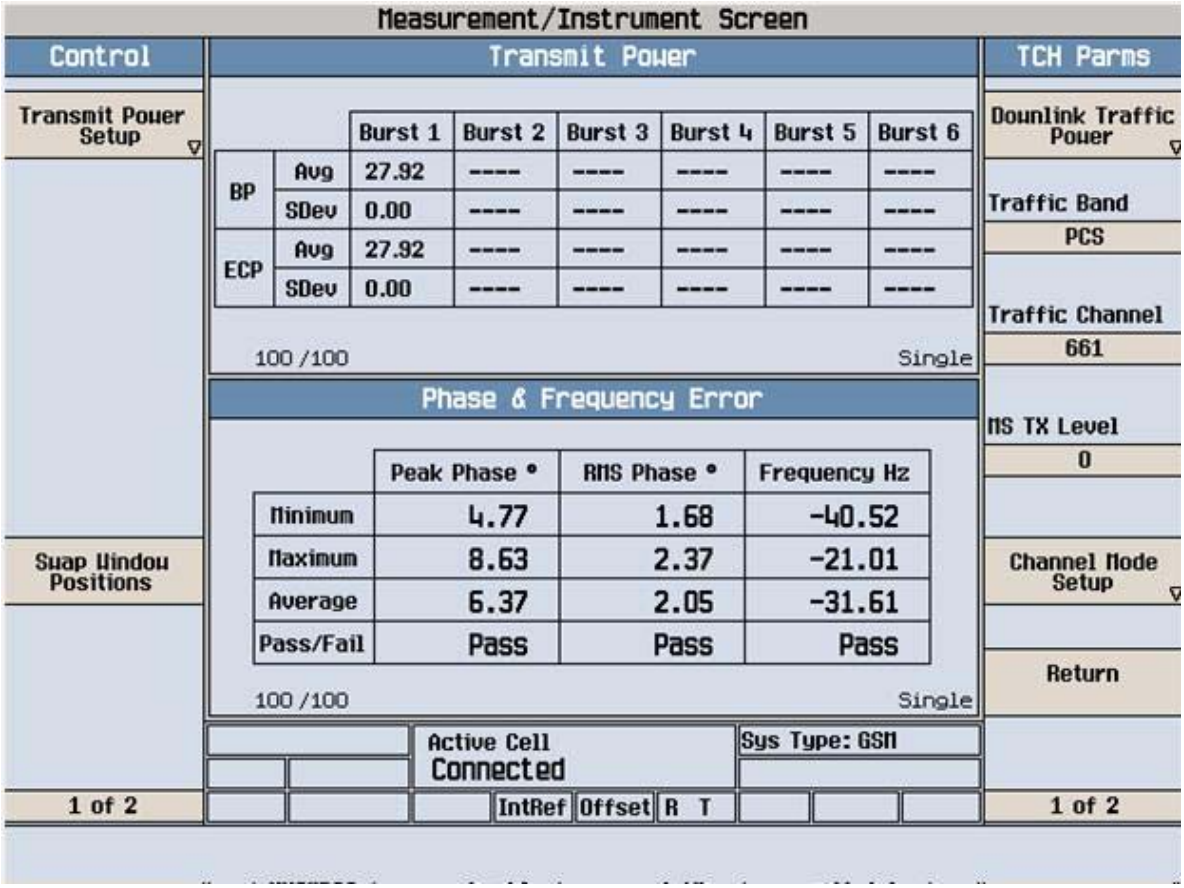

Agilent
R T
Freq/Channel
Ch Freq 1.88 GHz
Trig Free
Occupied Bandwidth
FCC ID:A3LGTS7562 OBW Ch.661
Ref 30 dBm
Atten 40 dB
#Peak
Log
10
dB/
Offst
8.83
dB
Center 1.880 000 GHz
Span 1 MHz
#Res BW 3 kHz
#VBW 3 kHz
#Sweep 1 s (601 pts)
Occupied Bandwidth
247.5081 kHz
Occ BW % Pwr 99.00 %
x dB -26.00 dB
Transmit Freq Error -694.548 Hz
x dB Bandwidth 305.885 kHz
Center Freq
1.88000000 GHz
Start Freq
1.87950000 GHz
Stop Freq
1.88050000 GHz
CF Step
100.000000 kHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
File Operation Status, C:\TEMP.GIF file saved



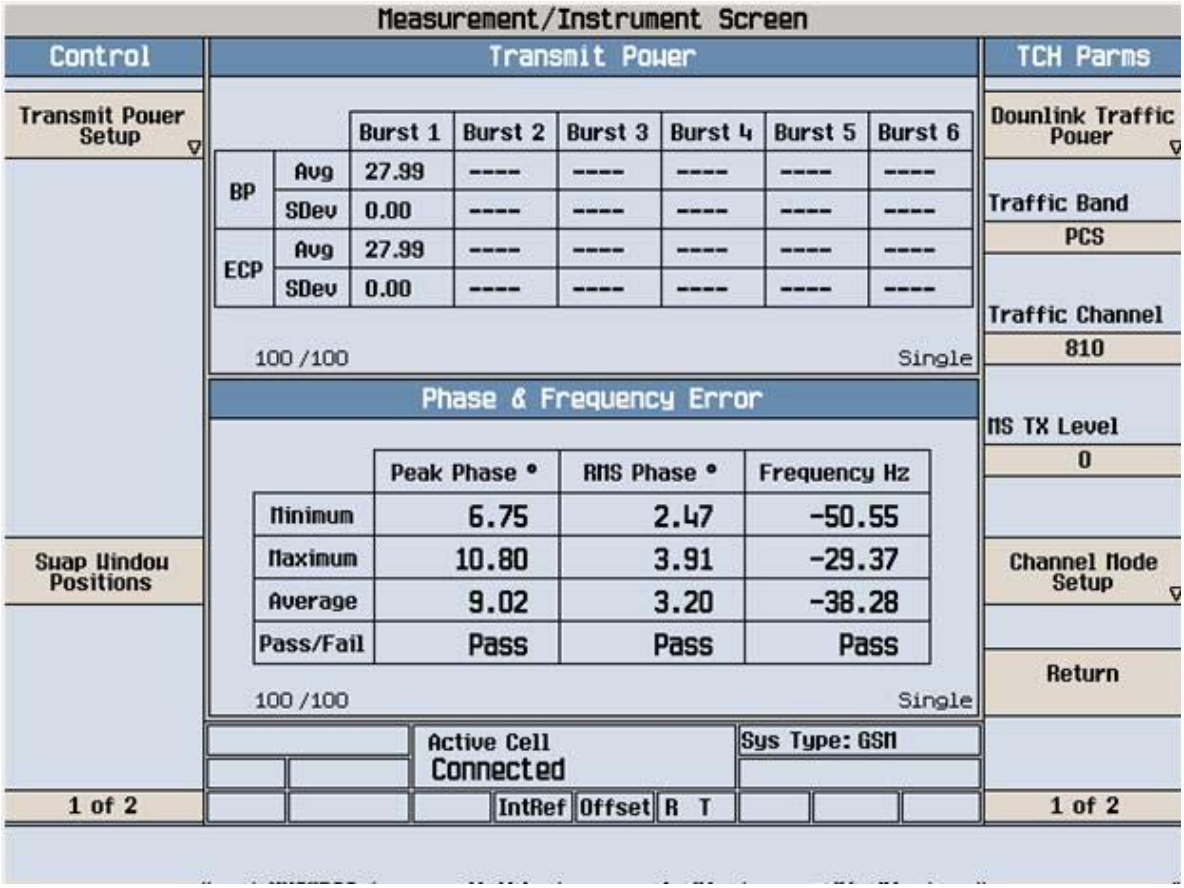
FCC ID : A3LGTS7562 Transmit Power 512CH



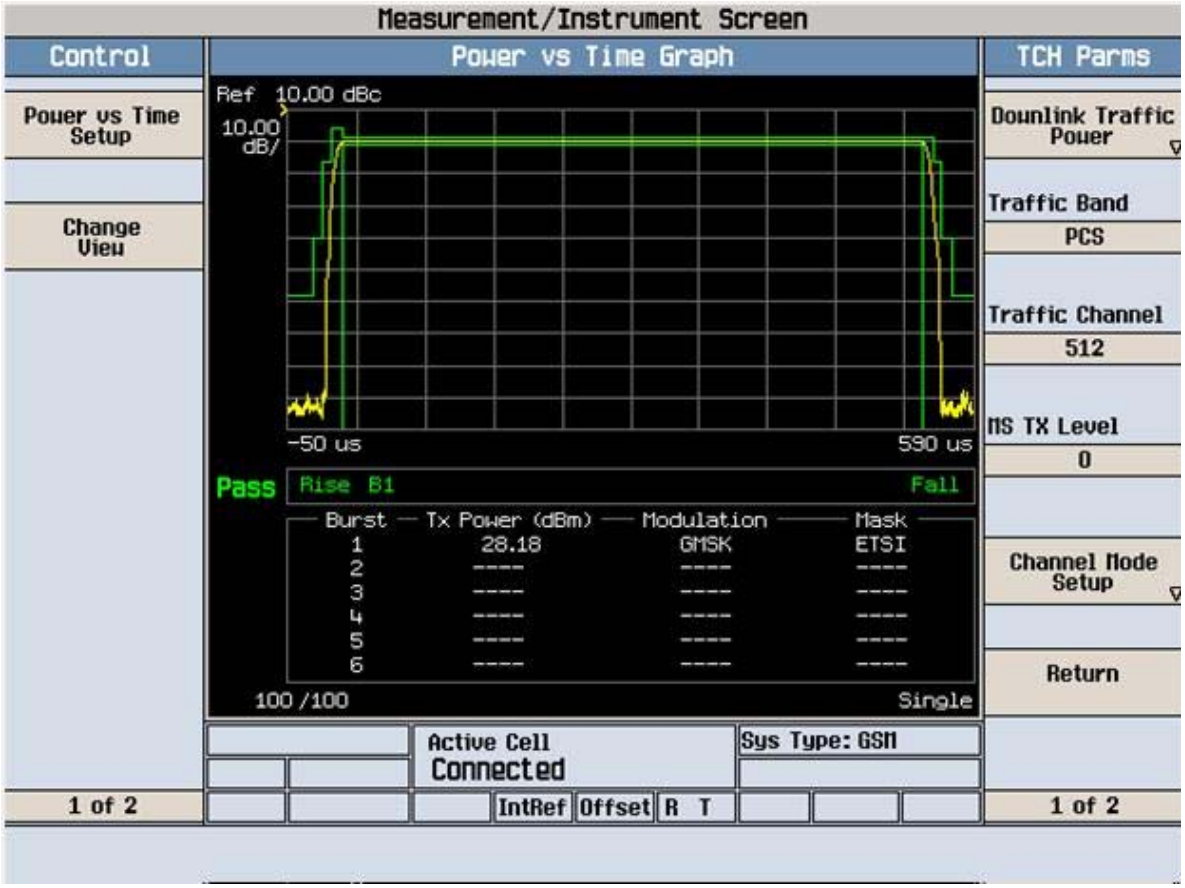
FCC ID : A3LGTS7562 Transmit Power 661CH



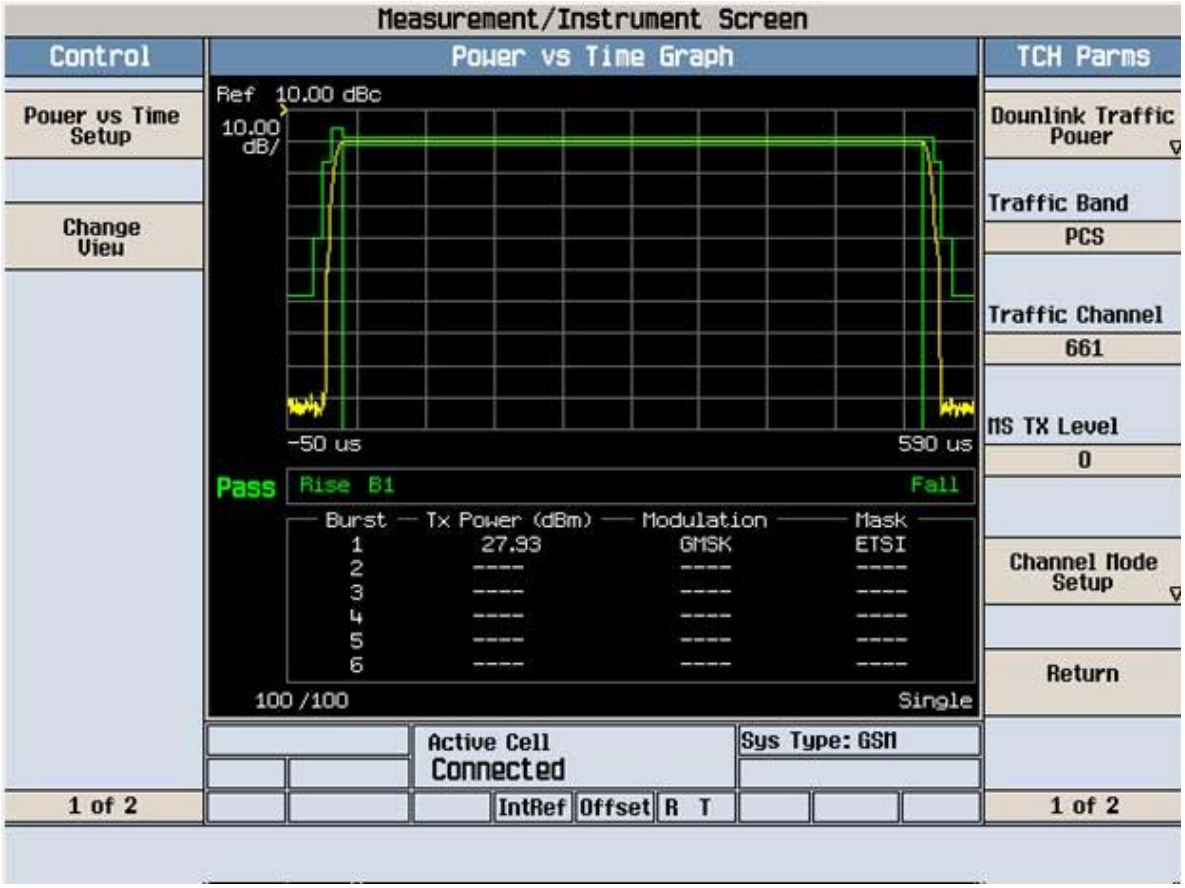
FCC ID : A3LGTS7562 Transmit Power 810CH



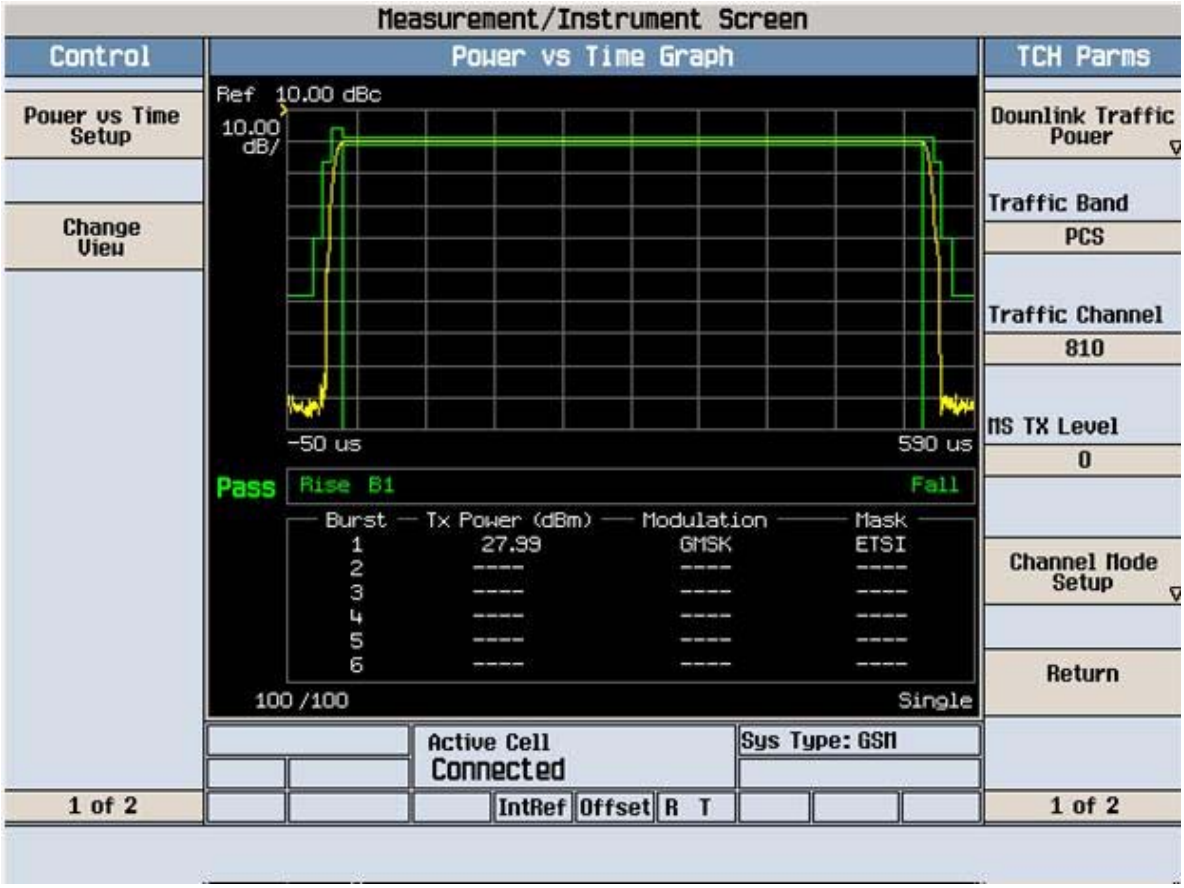
FCC ID : A3LGTS7562 GMSK Power vs Time 512CH



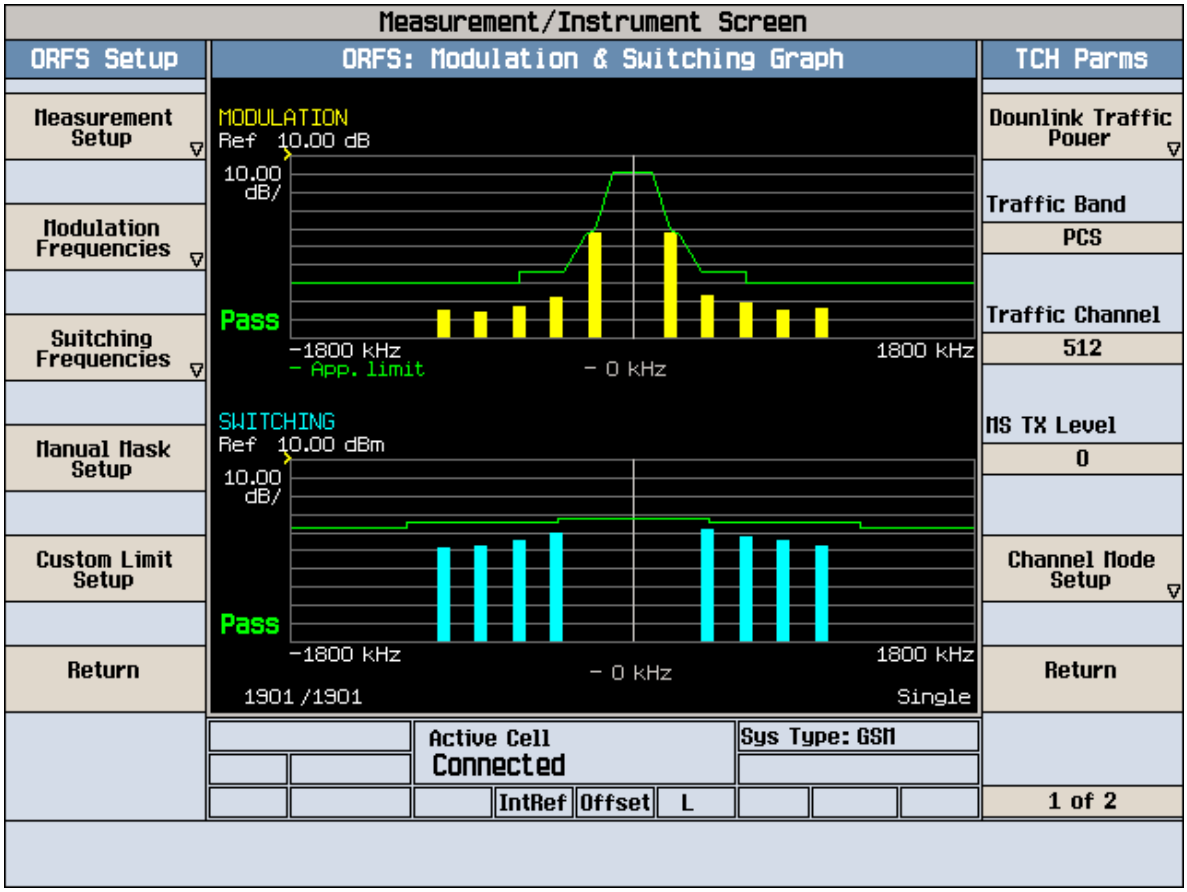
FCC ID : A3LGTS7562 GMSK Power vs Time 661CH



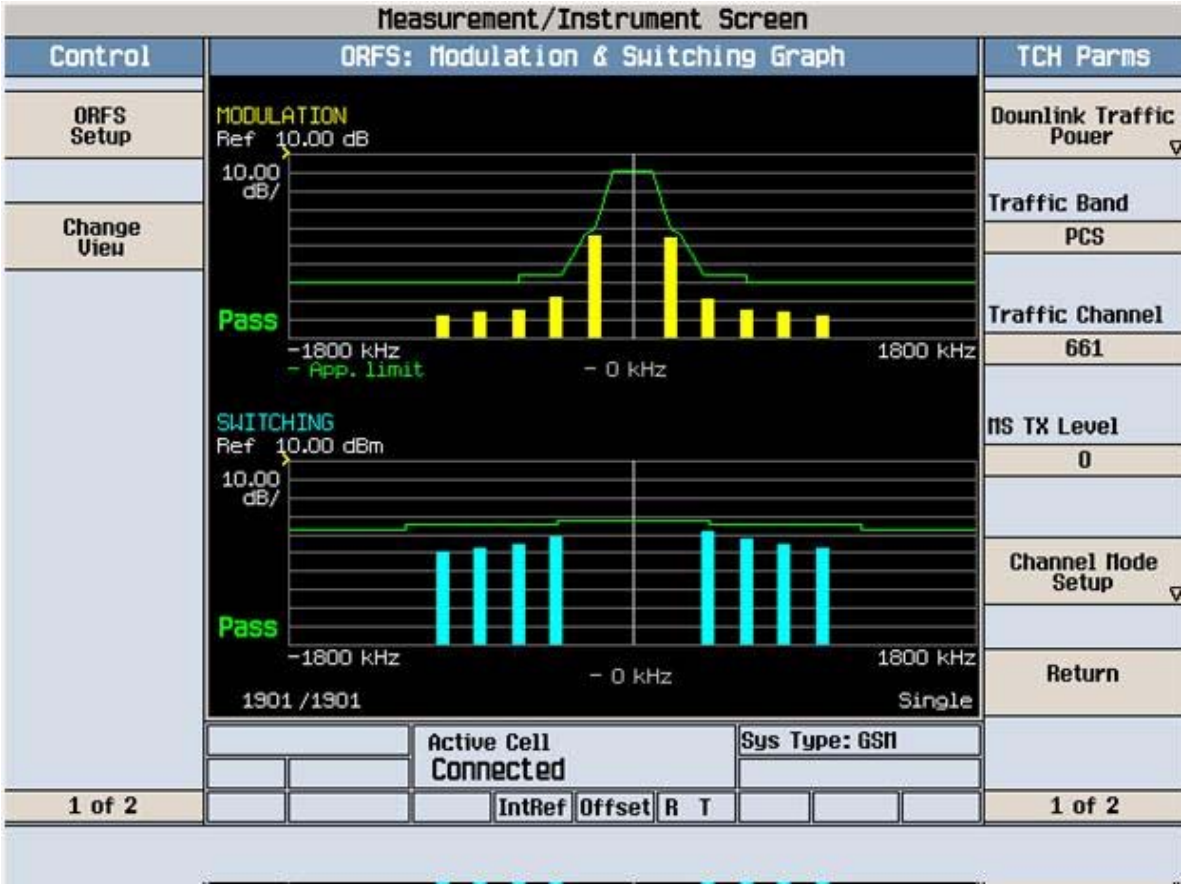
FCC ID : A3LGTS7562 GMSK Power vs Time 810CH



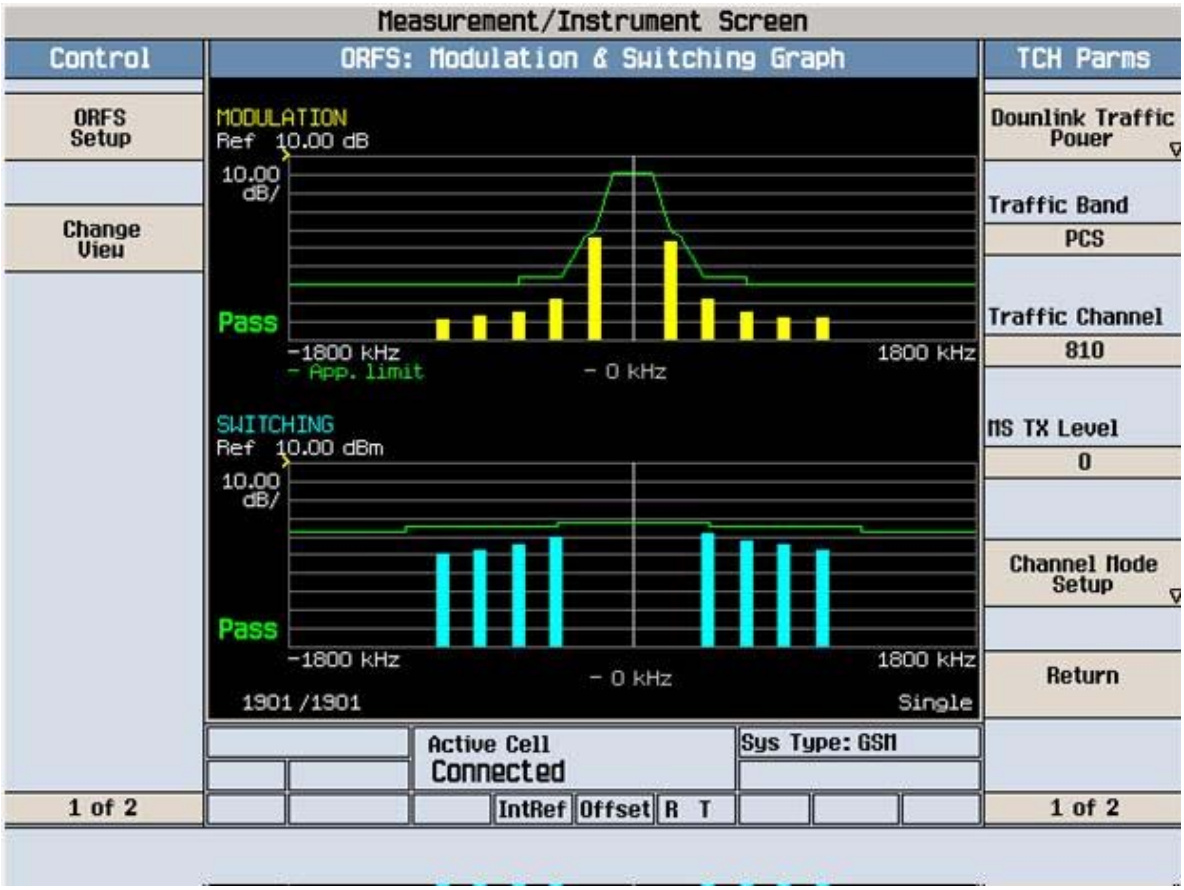
FCC ID : A3LGTS7562 Modulation & Switching 512CH

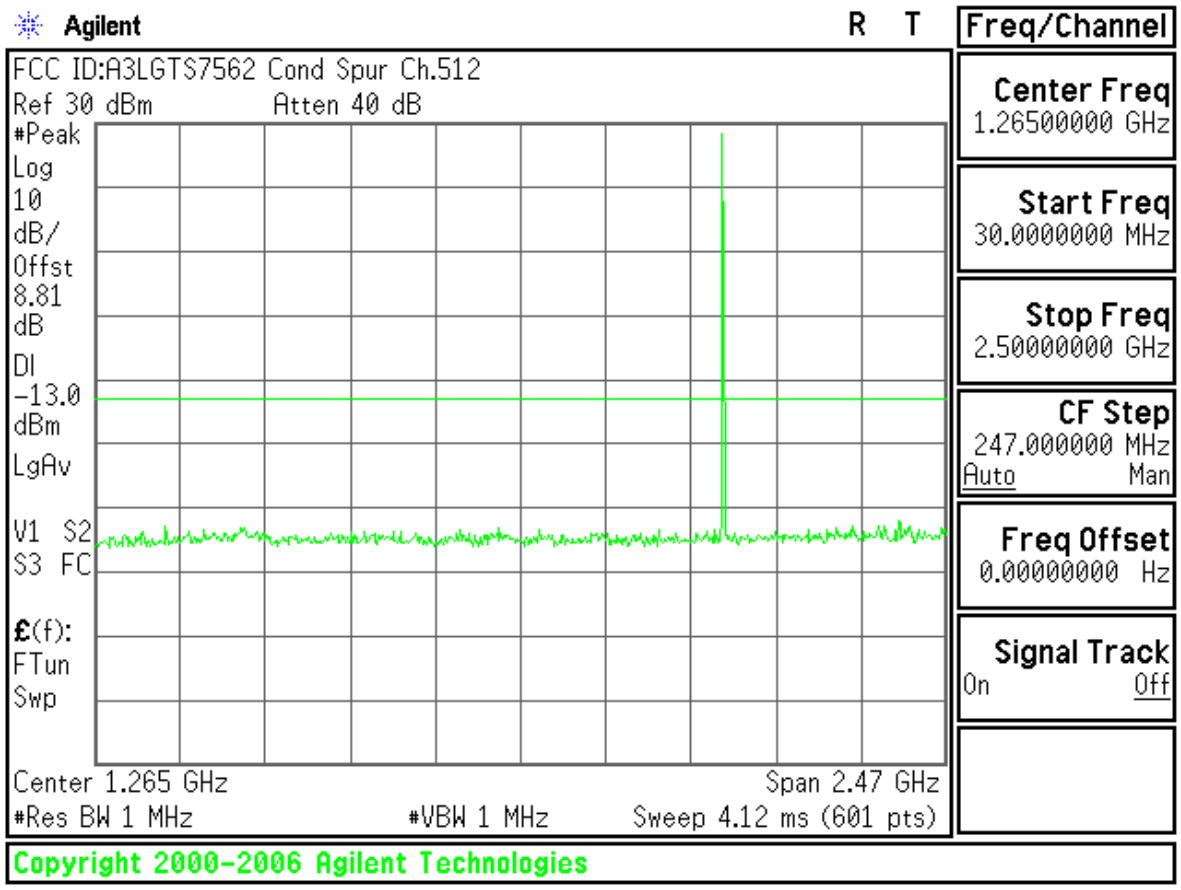


FCC ID : A3LGTS7562 Modulation & Switching 661CH



FCC ID : A3LGTS7562 Modulation & Switching 810CH




Agilent
R T
Freq/Channel
FCC ID:A3LGTS7562 Cond Spur Ch.512
Ref 30 dBm
Atten 40 dB
#Peak
Log
10
dB/
Offst
8.81
dB
Dl
-13.0
dBm
LgAv
V1 S2
S3 FC
£(f):
FTun
Swp
Center 1.265 GHz
Span 2.47 GHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 4.12 ms (601 pts)
Center Freq
1.26500000 GHz
Start Freq
30.0000000 MHz
Stop Freq
2.50000000 GHz
CF Step
247.000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
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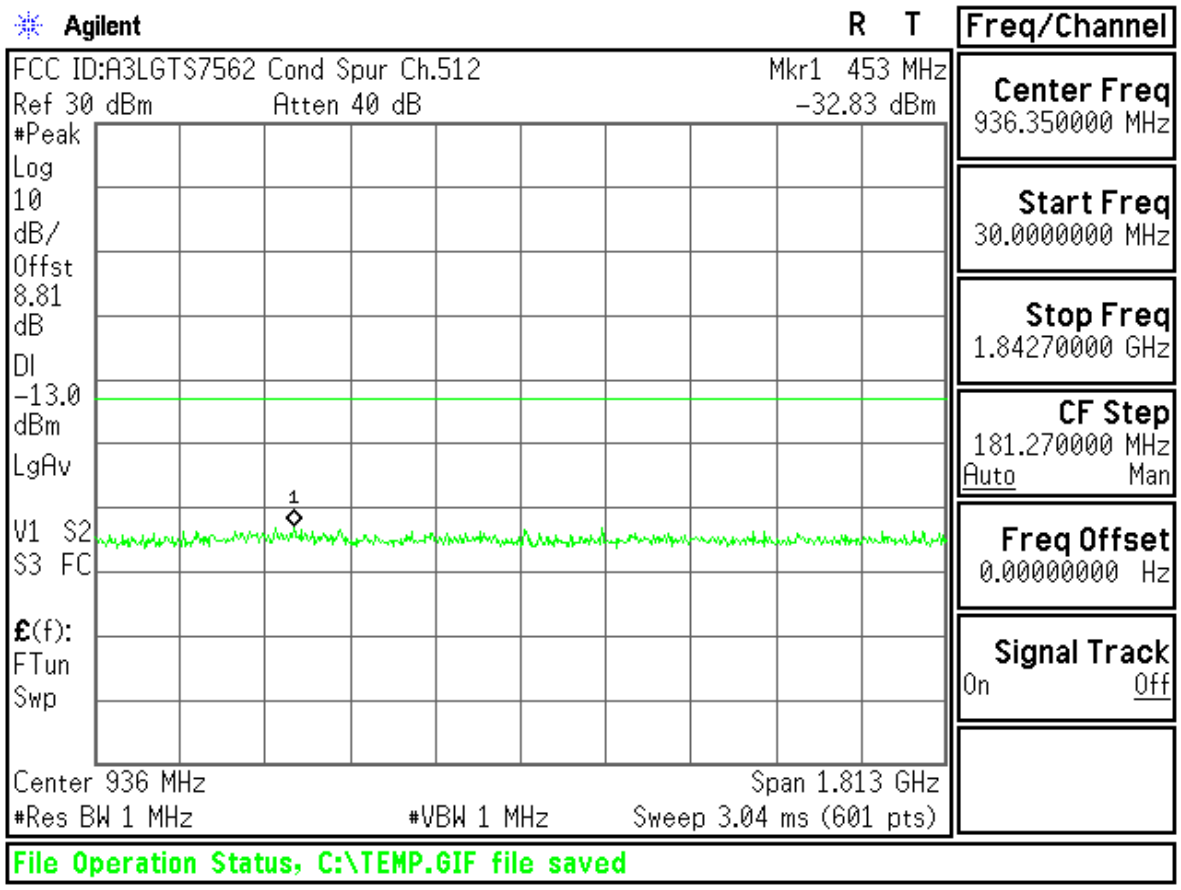
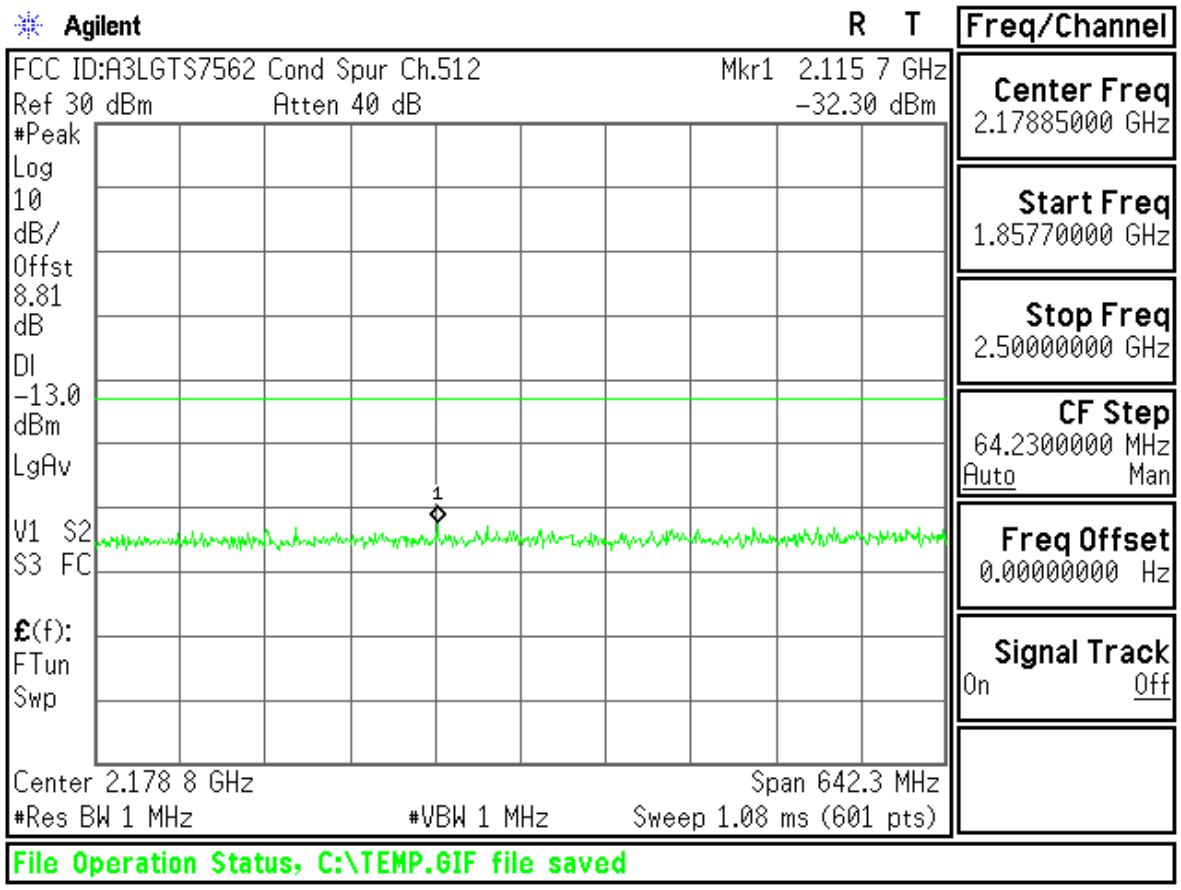
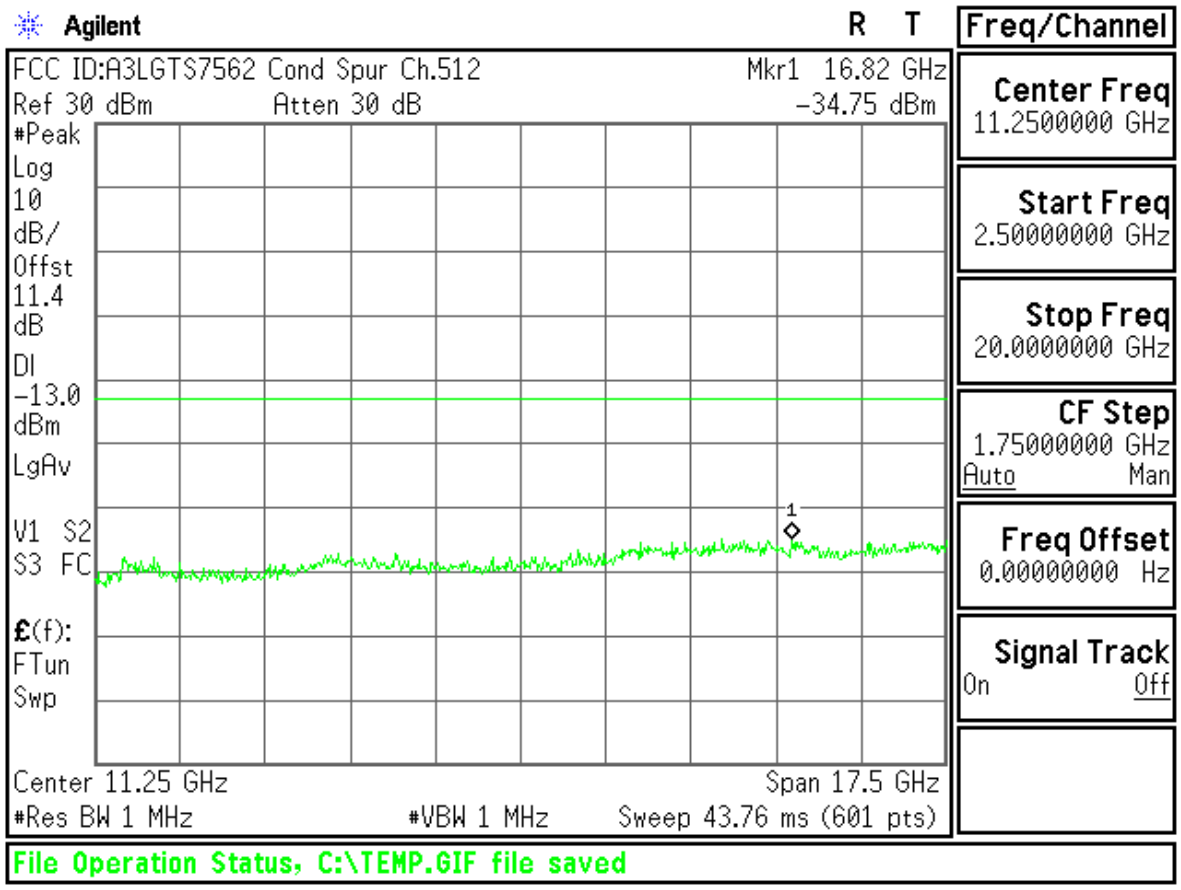
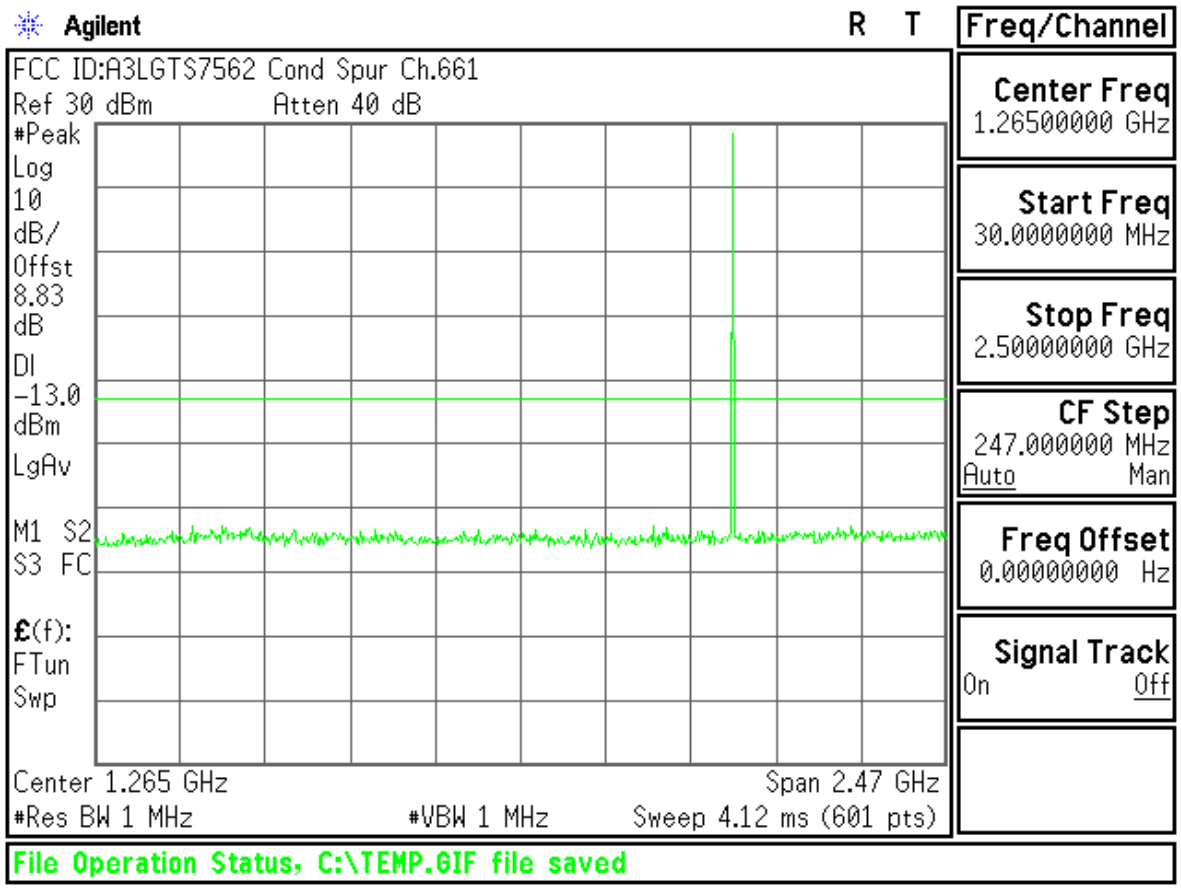
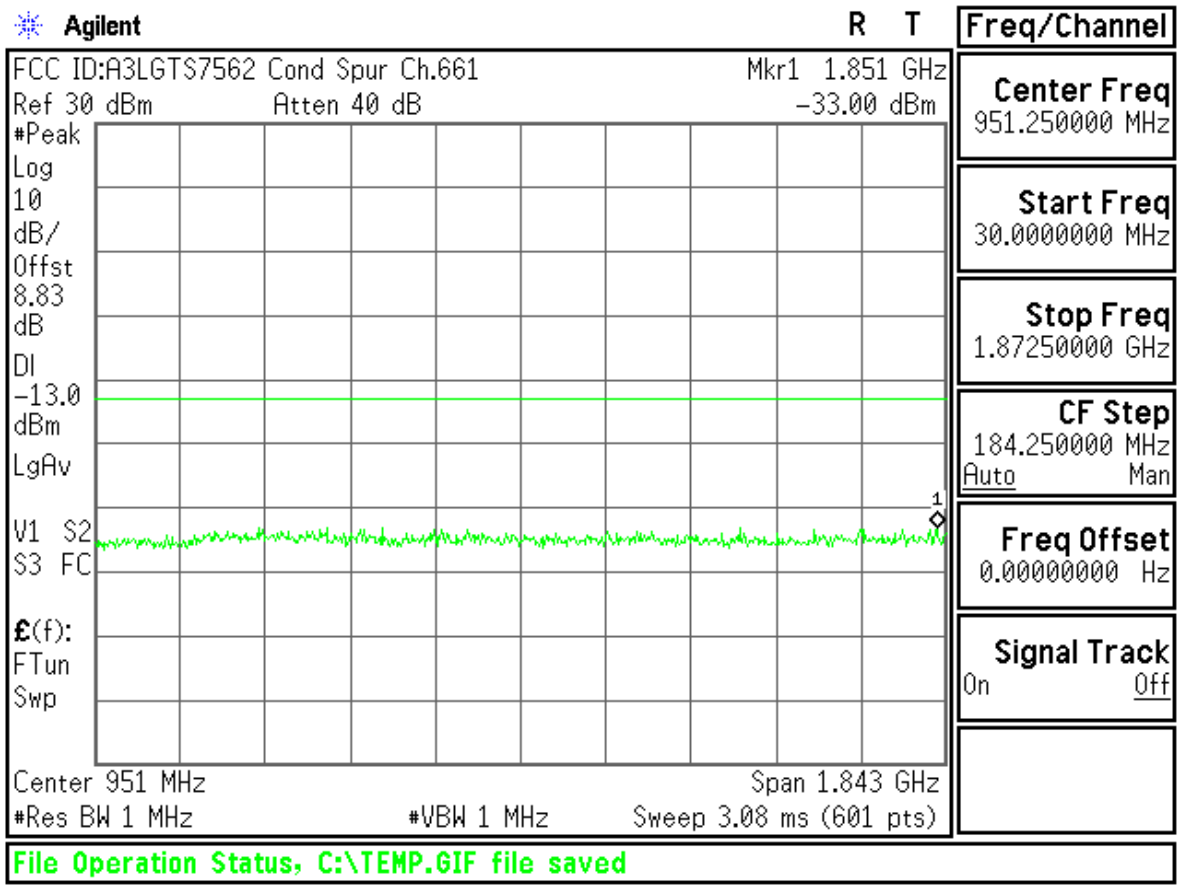
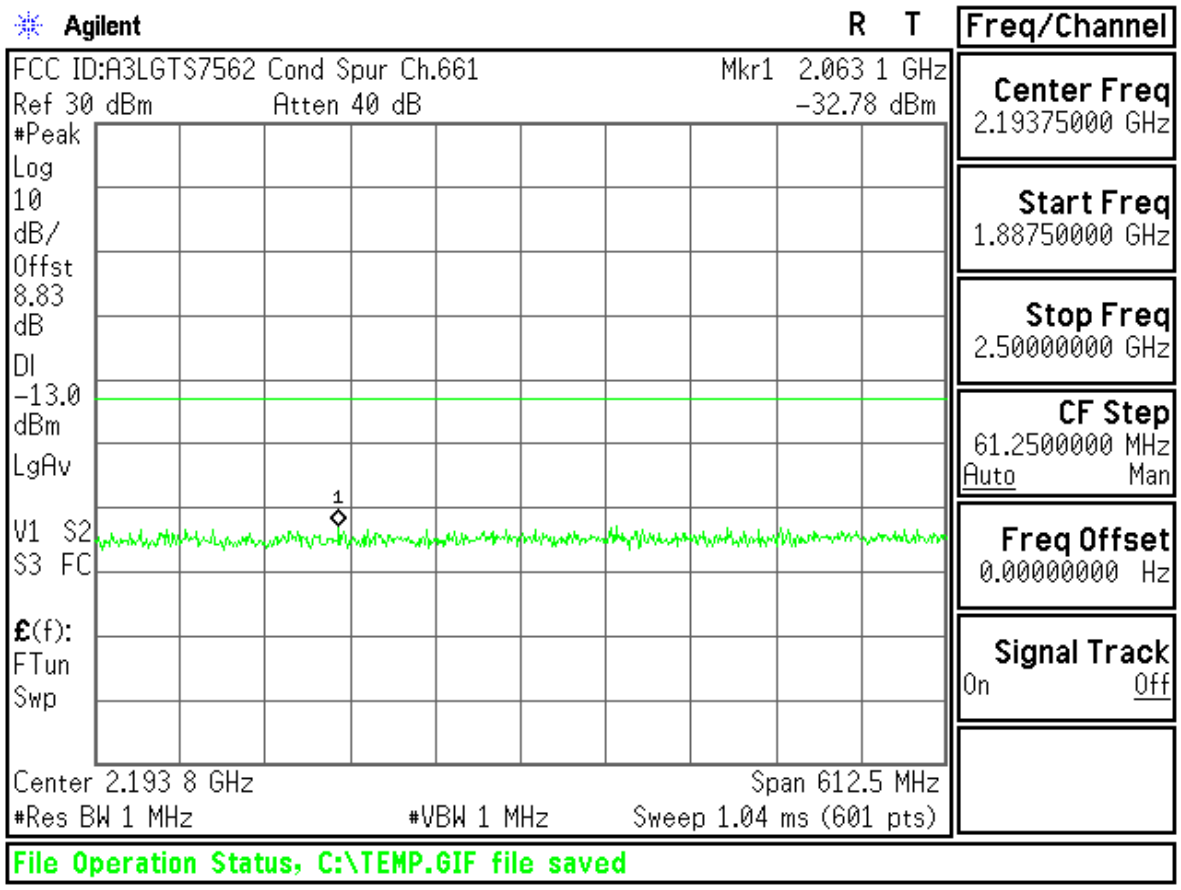

Agilent
R T
Freq/Channel
FCC ID:A3LGTS7562 Cond Spur Ch.512
Mkr1 453 MHz
Ref 30 dBm
Atten 40 dB
-32.83 dBm
#Peak
Log
10
dB/
Offst
8.81
dB
Dl
-13.0
dBm
LgAv
1
V1 S2
S3 FC
£(f):
FTun
Swp
Center 936 MHz
Span 1.813 GHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 3.04 ms (601 pts)
Center Freq
936.350000 MHz
Start Freq
30.0000000 MHz
Stop Freq
1.84270000 GHz
CF Step
181.270000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:\TEMP.GIF file saved

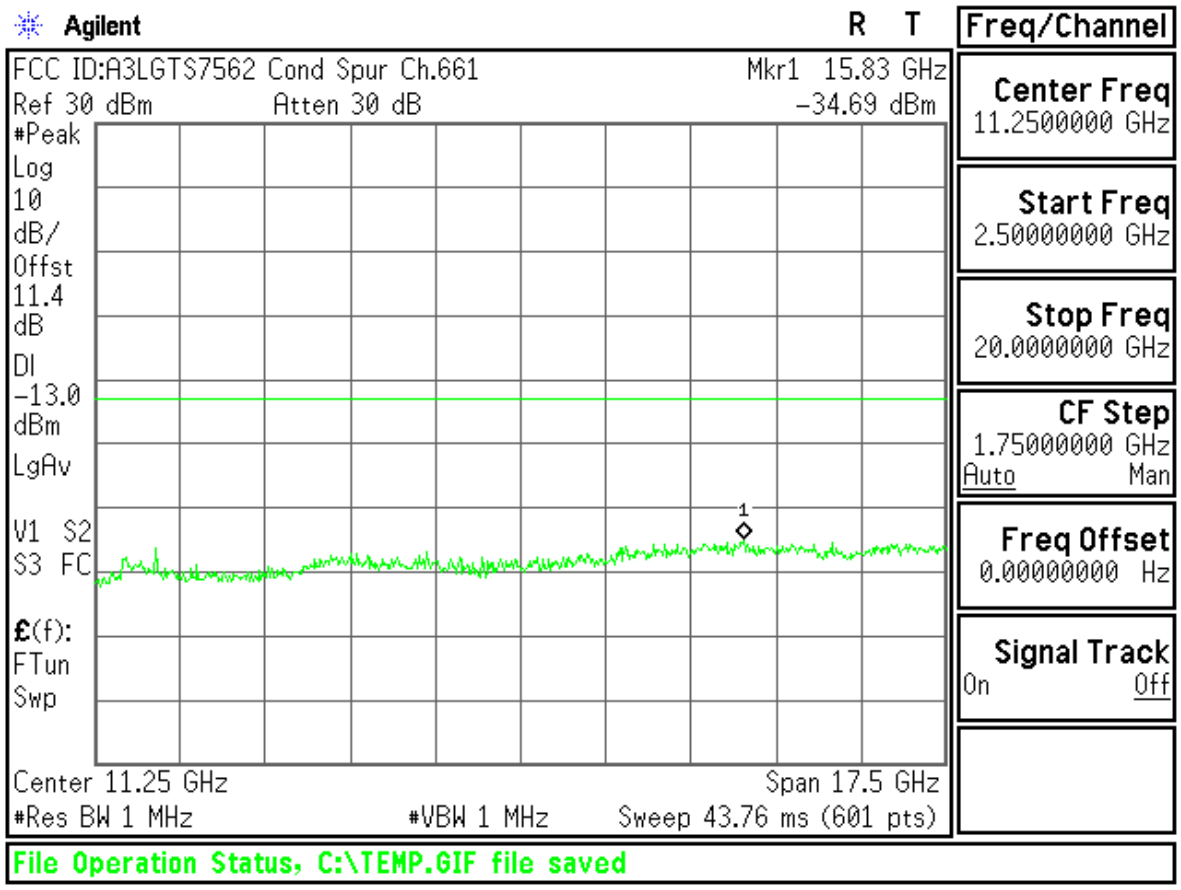

Agilent
R T
FCC ID:A3LGTS7562 Cond Spur Ch.512
Mkr1 2.115 7 GHz
Ref 30 dBm
Atten 40 dB
-32.30 dBm
#Peak
Log
10
dB/
Offst
8.81
dB
Dl
-13.0
dBm
LgAv
V1 S2
S3 FC
£(f):
FTun
Swp
Center 2.178 8 GHz
Span 642.3 MHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 1.08 ms (601 pts)
Freq/Channel
Center Freq
2.17885000 GHz
Start Freq
1.85770000 GHz
Stop Freq
2.50000000 GHz
CF Step
64.2300000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:\TEMP.GIF file saved

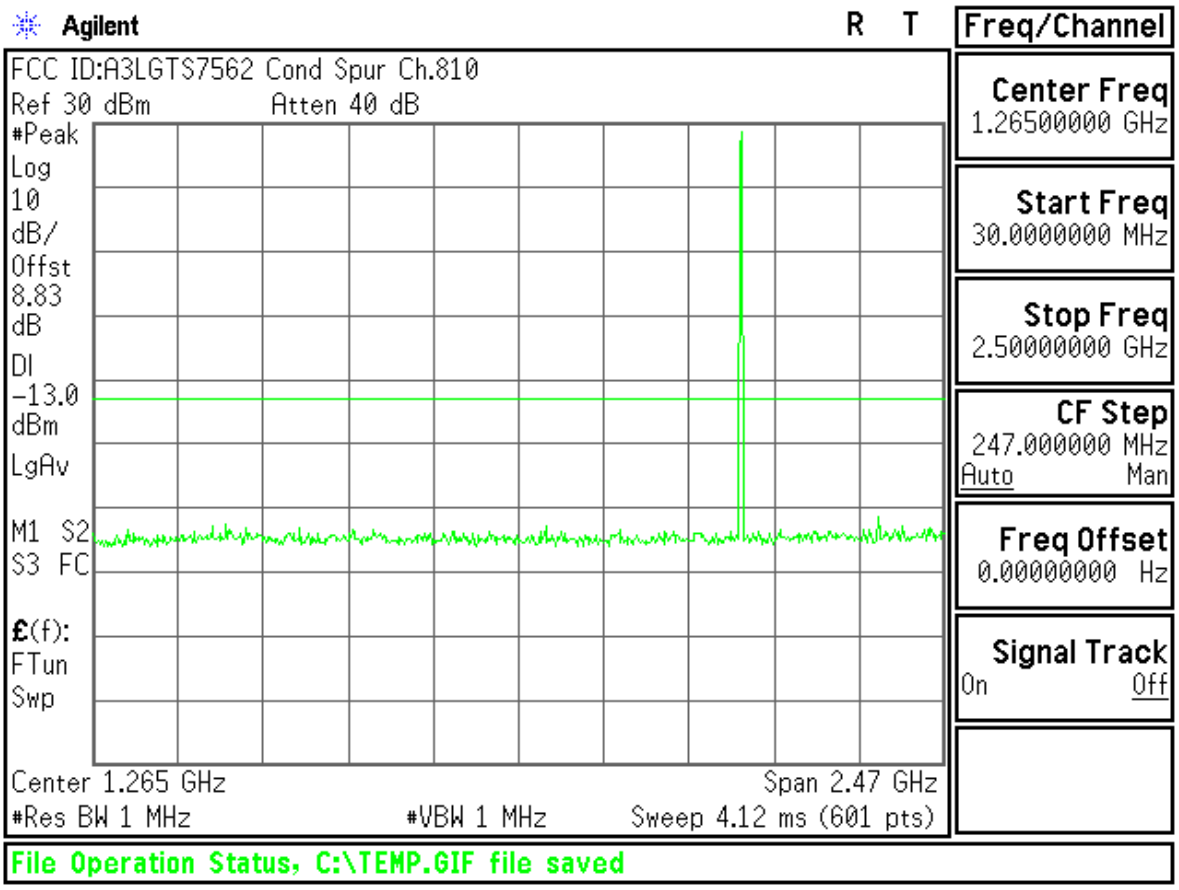

Agilent
R T
FCC ID:A3LGTS7562 Cond Spur Ch.512
Mkr1 16.82 GHz
Ref 30 dBm
Atten 30 dB
-34.75 dBm
#Peak
Log
10
dB/
Offst
11.4
dB
Dl
-13.0
dBm
LgAv
V1 S2
S3 FC
£(f):
FTun
Swp
Center 11.25 GHz
Span 17.5 GHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 43.76 ms (601 pts)
Freq/Channel
Center Freq
11.2500000 GHz
Start Freq
2.50000000 GHz
Stop Freq
20.0000000 GHz
CF Step
1.75000000 GHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:\TEMP.GIF file saved

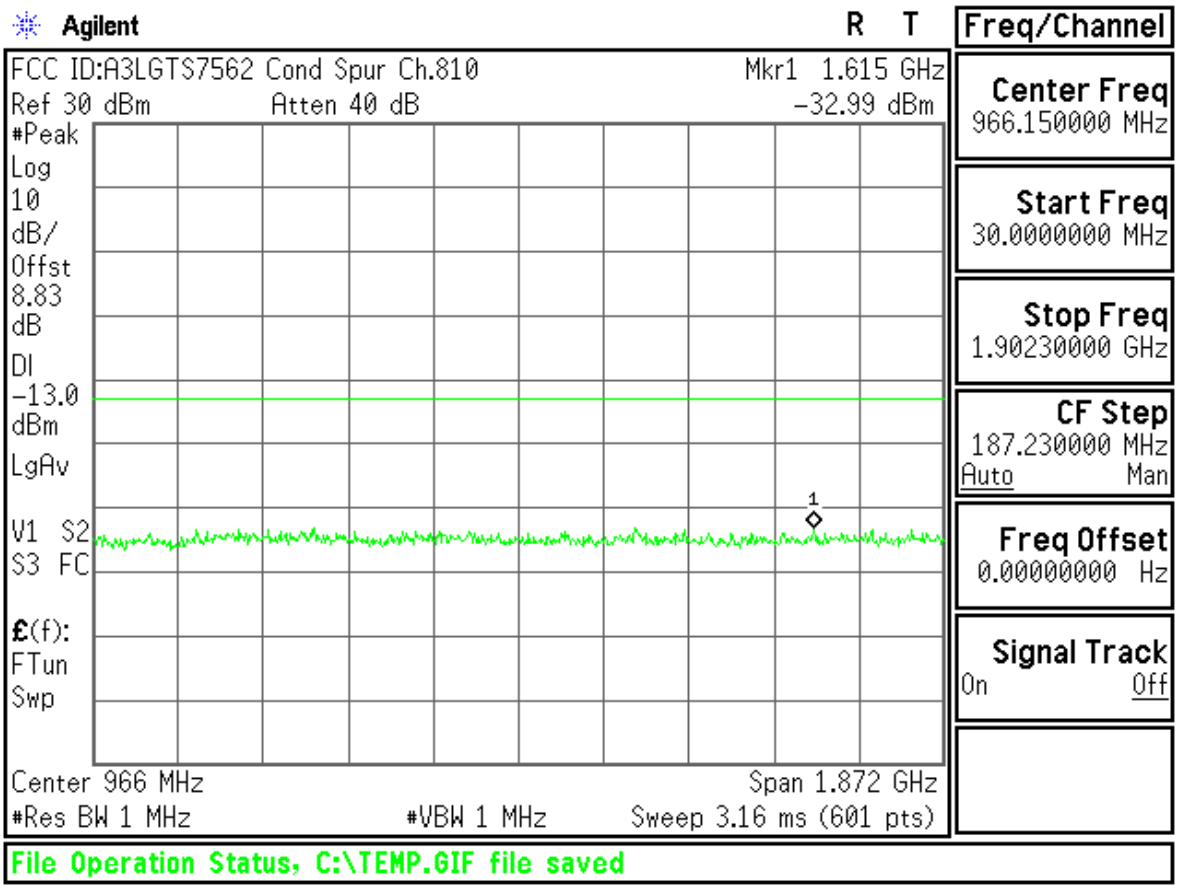

Agilent
R T
FCC ID:A3LGTS7562 Cond Spur Ch.661
Ref 30 dBm
Atten 40 dB
#Peak
Log
10
dB/
Offst
8.83
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center 1.265 GHz
Span 2.47 GHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 4.12 ms (601 pts)
Freq/Channel
Center Freq
1.26500000 GHz
Start Freq
30.0000000 MHz
Stop Freq
2.50000000 GHz
CF Step
247.000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:\TEMP.GIF file saved

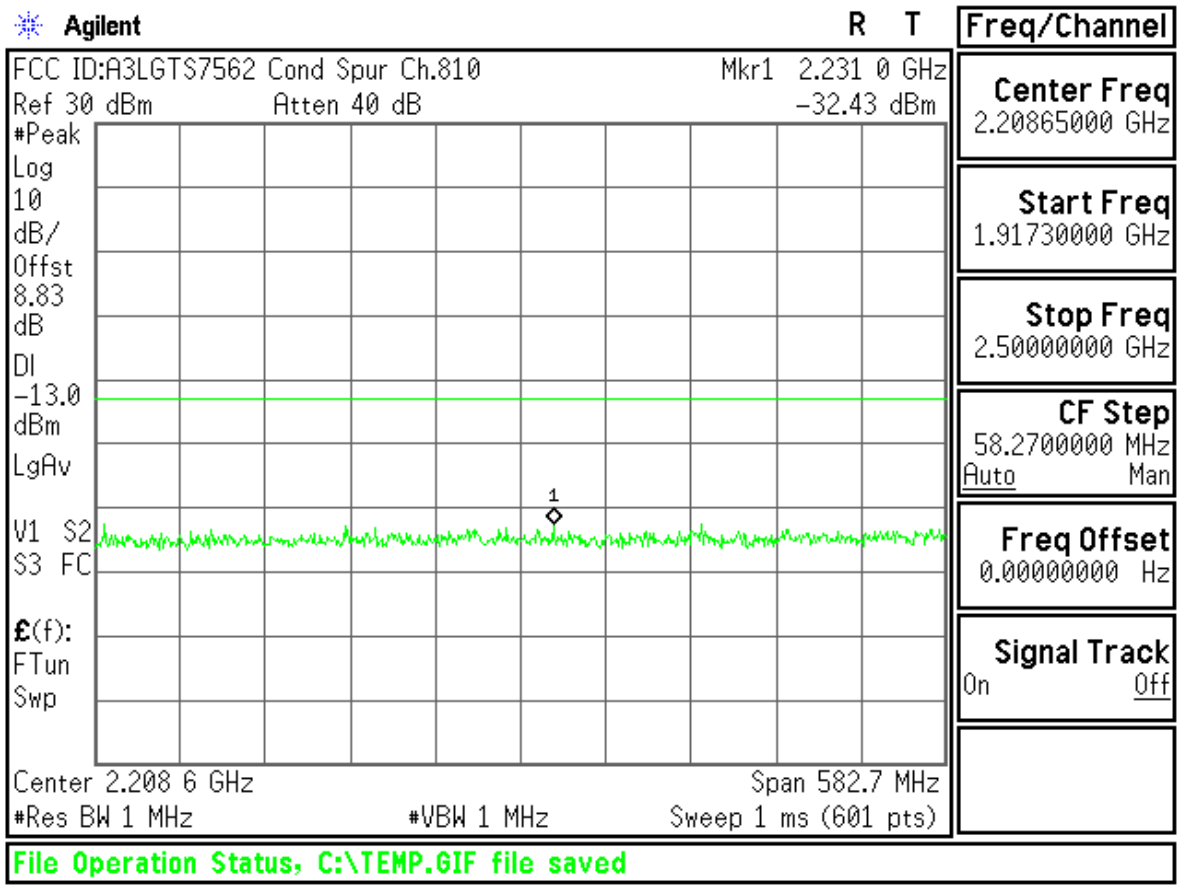

Agilent
R T
FCC ID:A3LGTS7562 Cond Spur Ch.661
Mkr1 1.851 GHz
Ref 30 dBm
Atten 40 dB
-33.00 dBm
#Peak
Log
10
dB/
Offst
8.83
dB
Dl
-13.0
dBm
LgAv
V1 S2
S3 FC
£(f):
FTun
Swp
Center 951 MHz
Span 1.843 GHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 3.08 ms (601 pts)
Freq/Channel
Center Freq
951.250000 MHz
Start Freq
30.0000000 MHz
Stop Freq
1.87250000 GHz
CF Step
184.250000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:\TEMP.GIF file saved

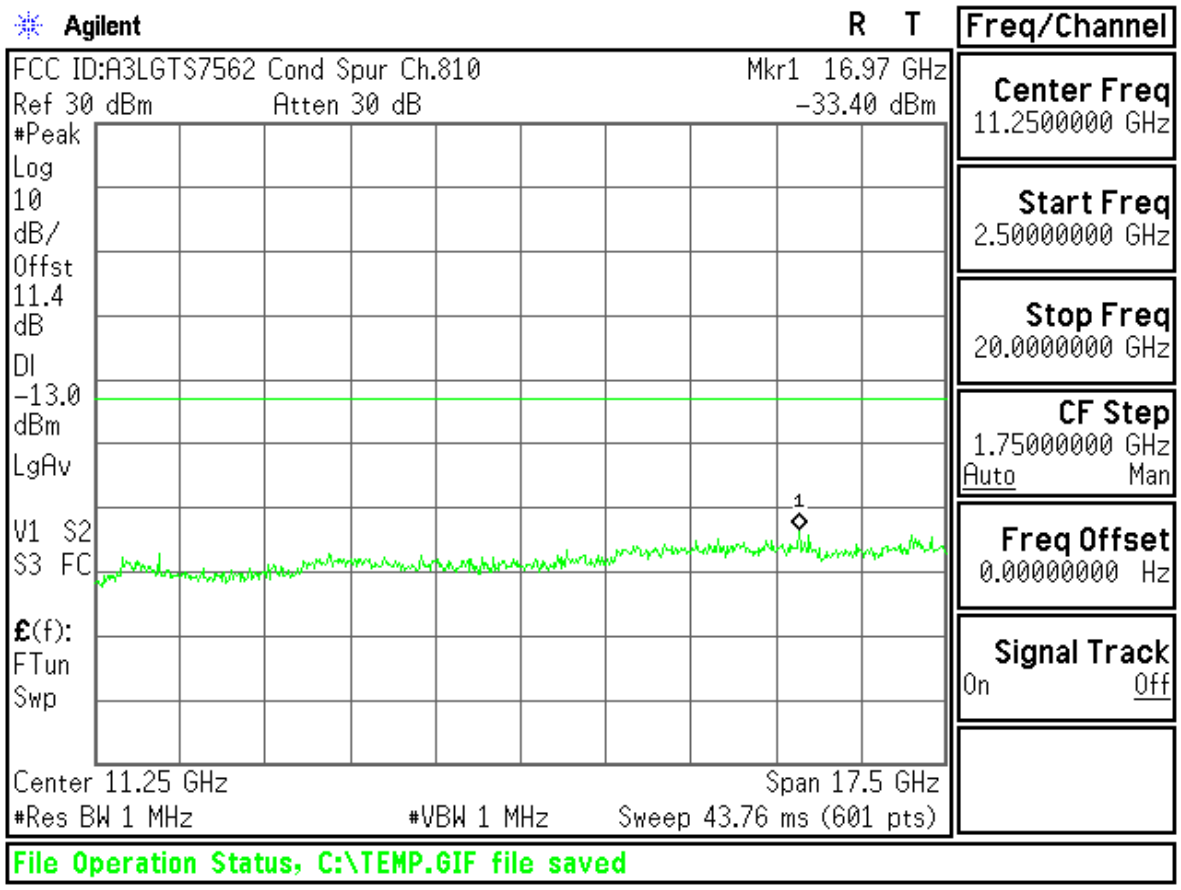

Agilent
R T
FCC ID:A3LGTS7562 Cond Spur Ch.661
Mkr1 2.063 1 GHz
Ref 30 dBm
Atten 40 dB
-32.78 dBm
#Peak
Log
10
dB/
Offst
8.83
dB
Dl
-13.0
dBm
LgAv
V1 S2
S3 FC
£(f):
FTun
Swp
Center 2.193 8 GHz
Span 612.5 MHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 1.04 ms (601 pts)
Freq/Channel
Center Freq
2.19375000 GHz
Start Freq
1.88750000 GHz
Stop Freq
2.50000000 GHz
CF Step
61.2500000 MHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
File Operation Status, C:\TEMP.GIF file saved

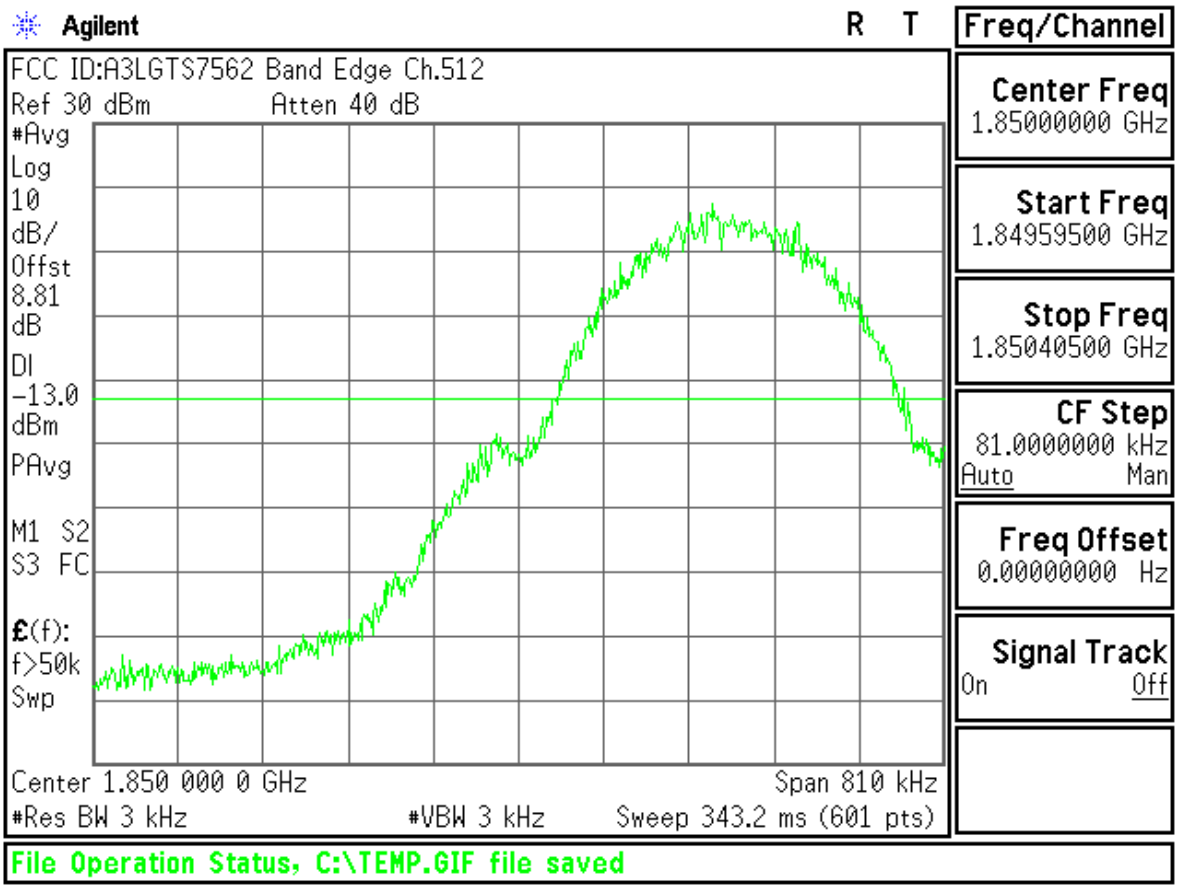

Agilent
R T
FCC ID:A3LGTS7562 Cond Spur Ch.661
Mkr1 15.83 GHz
Ref 30 dBm
Atten 30 dB
-34.69 dBm
#Peak
Log
10
dB/
Offst
11.4
dB
Dl
-13.0
dBm
LgAv
V1 S2
S3 FC
£(f):
FTun
Swp
Center 11.25 GHz
Span 17.5 GHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 43.76 ms (601 pts)
Freq/Channel
Center Freq
11.2500000 GHz
Start Freq
2.50000000 GHz
Stop Freq
20.0000000 GHz
CF Step
1.75000000 GHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
File Operation Status, C:\TEMP.GIF file saved

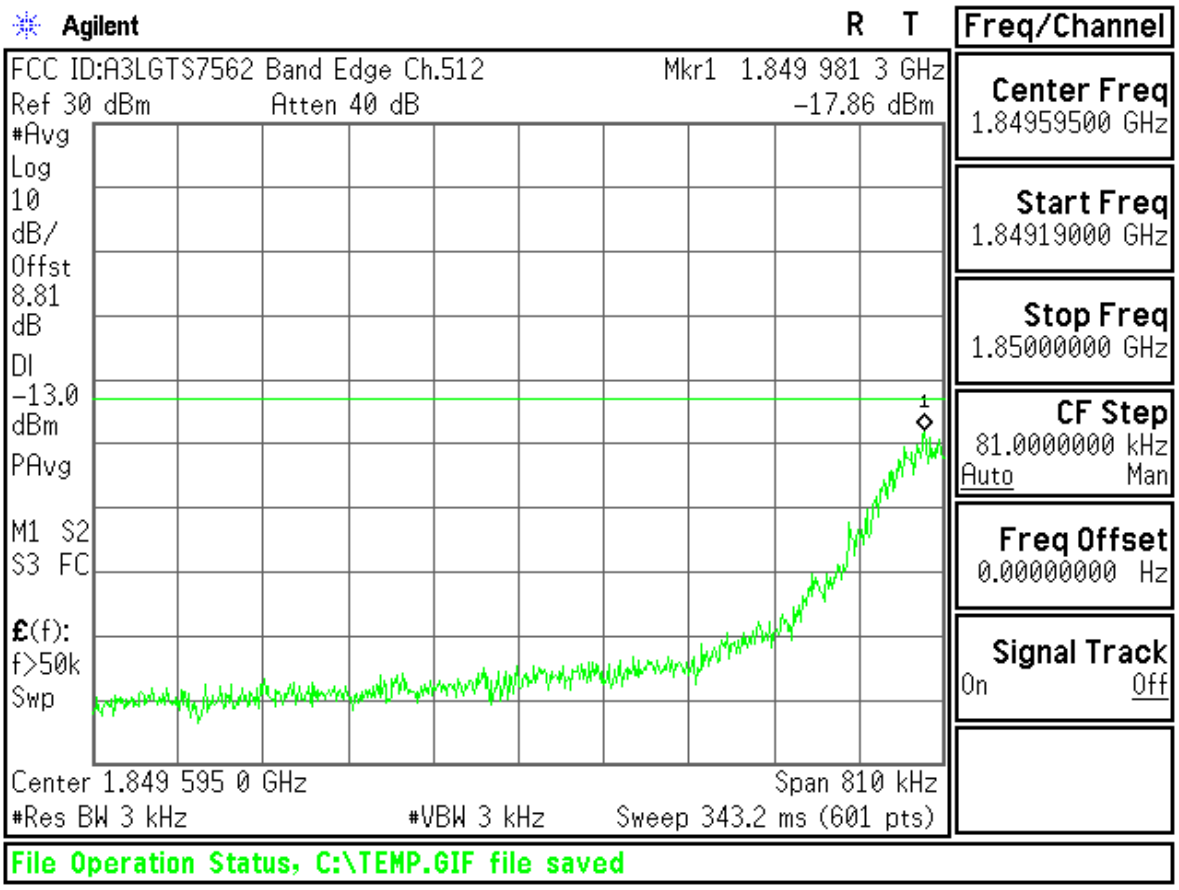

Agilent
R T
Freq/Channel
FCC ID:A3LGTS7562 Cond Spur Ch.810
Ref 30 dBm
Atten 40 dB
#Peak
Log
10
dB/
Offst
8.83
dB
Dl
-13.0
dBm
LgAv
M1 S2
S3 FC
£(f):
FTun
Swp
Center 1.265 GHz
Span 2.47 GHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 4.12 ms (601 pts)
Center Freq
1.26500000 GHz
Start Freq
30.0000000 MHz
Stop Freq
2.50000000 GHz
CF Step
247.000000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:\TEMP.GIF file saved

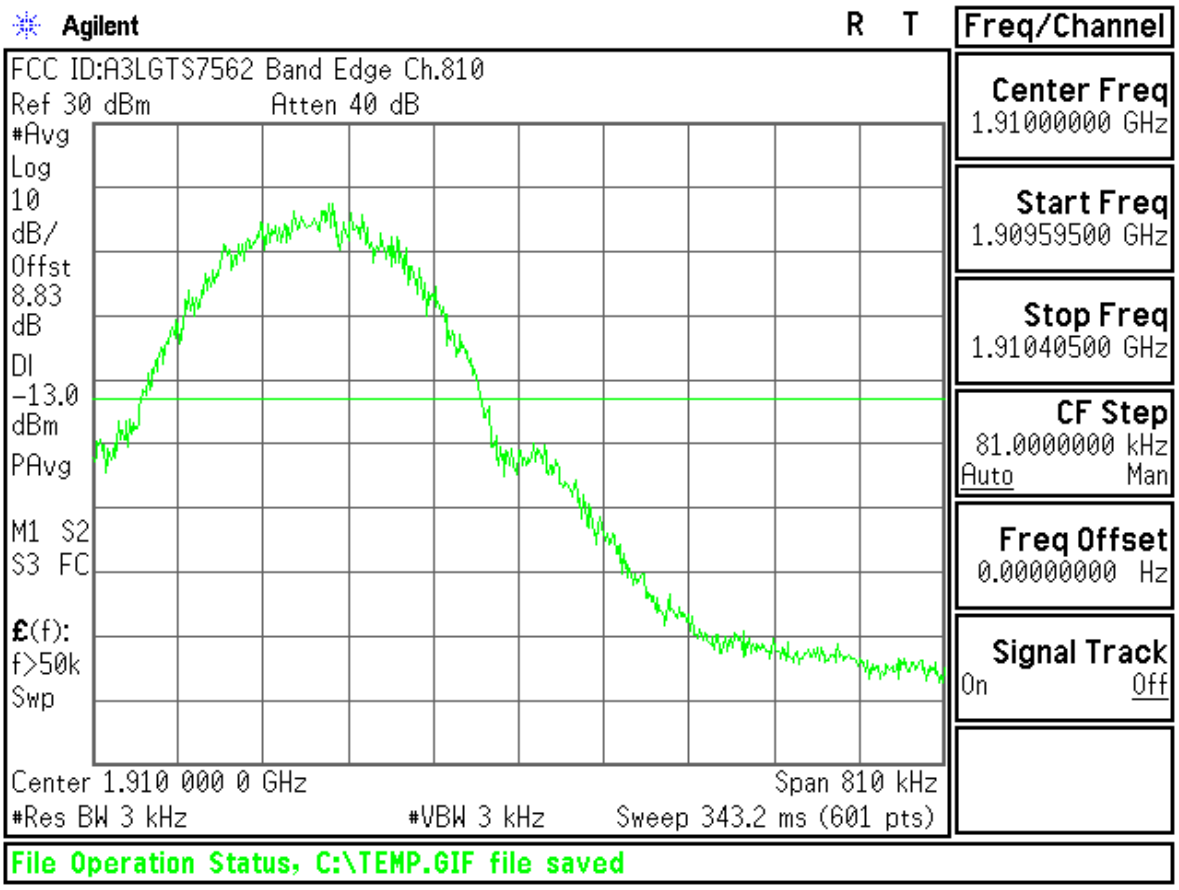

Agilent
R T
Freq/Channel
FCC ID:A3LGTS7562 Cond Spur Ch.810
Mkr1 1.615 GHz
Ref 30 dBm
Atten 40 dB
-32.99 dBm
#Peak
Log
10
dB/
Offst
8.83
dB
Dl
-13.0
dBm
LgAv
V1 S2
S3 FC
£(f):
FTun
Swp
Center 966 MHz
Span 1.872 GHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 3.16 ms (601 pts)
Center Freq
966.150000 MHz
Start Freq
30.0000000 MHz
Stop Freq
1.90230000 GHz
CF Step
187.230000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:\TEMP.GIF file saved

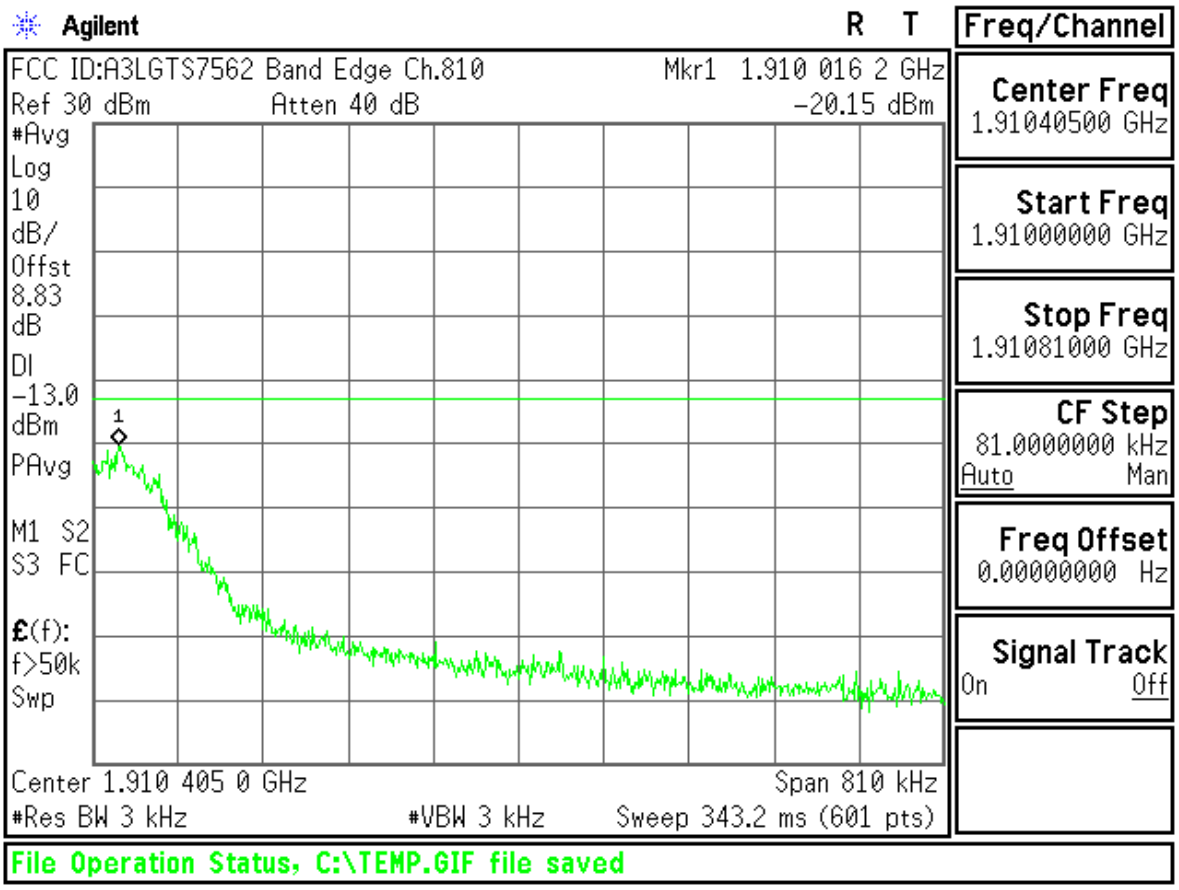

Agilent
R T
Freq/Channel
FCC ID:A3LGTS7562 Cond Spur Ch.810
Mkr1 2.231 0 GHz
Ref 30 dBm
Atten 40 dB
-32.43 dBm
#Peak
Log
10
dB/
Offst
8.83
dB
Dl
-13.0
dBm
LgAv
V1 S2
S3 FC
£(f):
FTun
Swp
Center 2.208 6 GHz
Span 582.7 MHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 1 ms (601 pts)
Center Freq
2.20865000 GHz
Start Freq
1.91730000 GHz
Stop Freq
2.50000000 GHz
CF Step
58.2700000 MHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:\TEMP.GIF file saved

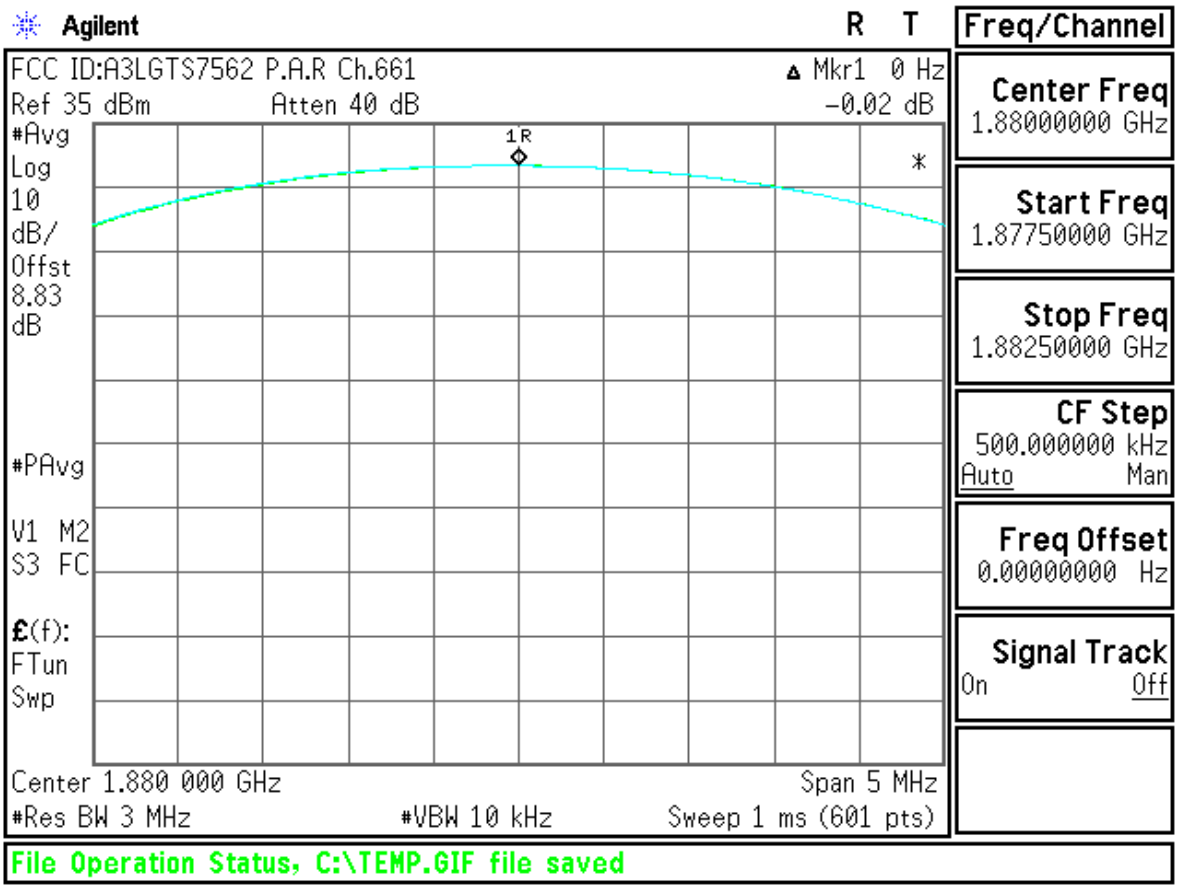

Agilent
R T
Freq/Channel
FCC ID:A3LGTS7562 Cond Spur Ch.810
Mkr1 16.97 GHz
Ref 30 dBm
Atten 30 dB
-33.40 dBm
#Peak
Log
10
dB/
Offst
11.4
dB
Dl
-13.0
dBm
LgAv
V1 S2
S3 FC
£(f):
FTun
Swp
Center 11.25 GHz
Span 17.5 GHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 43.76 ms (601 pts)
Center Freq
11.2500000 GHz
Start Freq
2.50000000 GHz
Stop Freq
20.0000000 GHz
CF Step
1.75000000 GHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:\TEMP.GIF file saved


Agilent
R T
FCC ID:A3LGTS7562 Band Edge Ch.512
Ref 30 dBm
Atten 40 dB
#Avg
Log
10
dB/
Offst
8.81
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
f>50k
Swp
Center 1.850 000 0 GHz
Span 810 kHz
#Res BW 3 kHz
#VBW 3 kHz
Sweep 343.2 ms (601 pts)
Freq/Channel
Center Freq
1.85000000 GHz
Start Freq
1.84959500 GHz
Stop Freq
1.85040500 GHz
CF Step
81.0000000 kHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:\TEMP.GIF file saved


Agilent
R T
FCC ID:A3LGTS7562 Band Edge Ch.512
Mkr1 1.849 981 3 GHz
Ref 30 dBm
Atten 40 dB
-17.86 dBm
#Avg
Log
10
dB/
Offst
8.81
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
f>50k
Swp
Center 1.849 595 0 GHz
Span 810 kHz
#Res BW 3 kHz
#VBW 3 kHz
Sweep 343.2 ms (601 pts)
Freq/Channel
Center Freq
1.84959500 GHz
Start Freq
1.84919000 GHz
Stop Freq
1.85000000 GHz
CF Step
81.0000000 kHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:\TEMP.GIF file saved


Agilent
R T
Freq/Channel
FCC ID:A3LGTS7562 Band Edge Ch.810
Ref 30 dBm
Atten 40 dB
#Avg
Log
10
dB/
Offst
8.83
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
f>50k
Swp
Center 1.910 000 0 GHz
Span 810 kHz
#Res BW 3 kHz
#VBW 3 kHz
Sweep 343.2 ms (601 pts)
Center Freq
1.91000000 GHz
Start Freq
1.90959500 GHz
Stop Freq
1.91040500 GHz
CF Step
81.0000000 kHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:\TEMP.GIF file saved


Agilent
R T
Freq/Channel
FCC ID:A3LGTS7562 Band Edge Ch.810
Mkr1 1.910 016 2 GHz
Ref 30 dBm
Atten 40 dB
-20.15 dBm
#Avg
Log
10
dB/
Offst
8.83
dB
Dl
-13.0
dBm
PAvg
M1 S2
S3 FC
£(f):
f>50k
Swp
Center 1.910 405 0 GHz
Span 810 kHz
#Res BW 3 kHz
#VBW 3 kHz
Sweep 343.2 ms (601 pts)
Center Freq
1.91040500 GHz
Start Freq
1.91000000 GHz
Stop Freq
1.91081000 GHz
CF Step
81.0000000 kHz
Auto
Man
Freq Offset
0.00000000 Hz
Signal Track
On
Off
File Operation Status, C:\TEMP.GIF file saved


Agilent
R T
Freq/Channel
FCC ID:A3LGTS7562 P.A.R Ch.661
Mkr1 0 Hz
Ref 35 dBm
Atten 40 dB
-0.02 dB
#Avg
Log
10
dB/
Offst
8.83
dB
1R
#PAvg
V1 M2
S3 FC
£(f):
FTun
Swp
Center Freq
1.88000000 GHz
Start Freq
1.87750000 GHz
Stop Freq
1.88250000 GHz
CF Step
500.000000 kHz
Auto Man
Freq Offset
0.00000000 Hz
Signal Track
On Off
Center 1.880 000 GHz
Span 5 MHz
#Res BW 3 MHz
#VBW 10 kHz
Sweep 1 ms (601 pts)
File Operation Status, C:\TEMP.GIF file saved