



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-S8300T  
FCC ID(Requested) : A3LGTS8300T  
Report No : FG-040-R1  
Job No : FG-040  
Date issued : March 2, 2009

- Abstract -

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

Prepared By

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KJ KWON – Test Engineer

Authorized By

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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
- Attention : SungJoo KIM, Engineering Manager (QA Lab)
- FCC ID : A3LGTS8300T
- Model : GT-S8300T
- Quantity : Quantity production is planned
- Emission Designators : 249KGXW(GSM850), 244KG7W(GSM850 EDGE)  
247KGXW(GSM1900), 247KG7W(GSM1900 EDGE)
- 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 : 0.953 W ERP GSM850 (29.79 dBm)  
0.760 W EIRP GSM1900 (28.81 dBm)  
0.299 W ERP GSM850 EDGE(24.75dBm)  
0.512 W EIRP GSM1900 EDGE(27.09dBm)
- FCC Classification(s) : PCS Licensed Portable Tx Held to Ear (PCE)
- Equipment (EUT) Type : 850/1900 GSM/EDGE and 850 WCDMA Phone with  
Bluetooth
- Frequency Tolerance :  $\pm 0.00025\%$  (2.5ppm)
- FCC Rule Part(s) : §24(E), §22(H), §2.
- Dates of Test : February 26-27, 2009
- Place of Test : SAMSUNG Lab,
- Test Report S/N : FG-040-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.

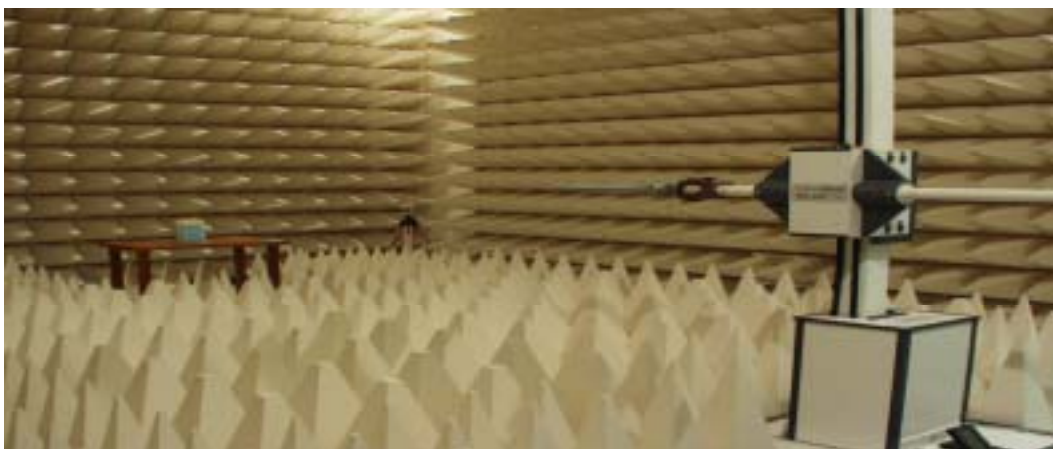


**Figure1. Map of the Suwon City area.**

### **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	2009-10-21
	E4440A(3Hz~26.5GHz)	MY46187454	2009-03-03
	E4440A(3Hz~26.5GHz)	MY41000236	2009-04-15
Signal Generator	SMR20	835197/030	2009-12-05
Network Analyzer	8753E	JP38160590	2009-06-20
Power Sensor	E9300H	MY41495838	2009-09-12
	8481B	3318A10325	2009-09-28
Power Meter	E4417A	MY45101042	2009-09-12
	E4419B	GB41293846	2009-09-12
Pre-Amplifier	8449B	3008A00691	2009-12-15
Communication test set	8960	MY47510060	2009-03-03
	8960	GB42230535	2009-12-18
Controller Turn Unit	CO2000	CO2000/424	Not Required
	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	2009-10-24
	HF906	360306/011	2010-06-13
	BBHA9120	9120D-637	2009-10-24
Dipole Antenna	UHA 9105	9105-2412	2009-11-07
	UHA 9105	9105-2413	2010-06-13
	3121C-DB4	9007-587	2009-04-16
Communication test set	CMU200	109162	2009-10-17
	HL040	353255/019	2009-10-29
Receive Antenna	HL040	353255/020	2010-06-13
	E3640A	MY40003594	2009-06-20
Power Supply	E3640A	MY40003595	2009-05-22
	E3632A	MY40022438	2009-03-03
Divider	11636B	51946	Not Required
	11636B	51942	Not Required
	11636B	56913	Not Required
	11636B	56918	Not Required
High Pass Filter	WHK1.0/15G-10SS	1	Not Required
	WHK/3.0/18G-10SS	492	Not Required
	WHK/3.5/18G-10SS	4	Not Required
Environmental Chamber	SH-241	92000549	2009-11-14
	SH-241	92000548	2009-11-14
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

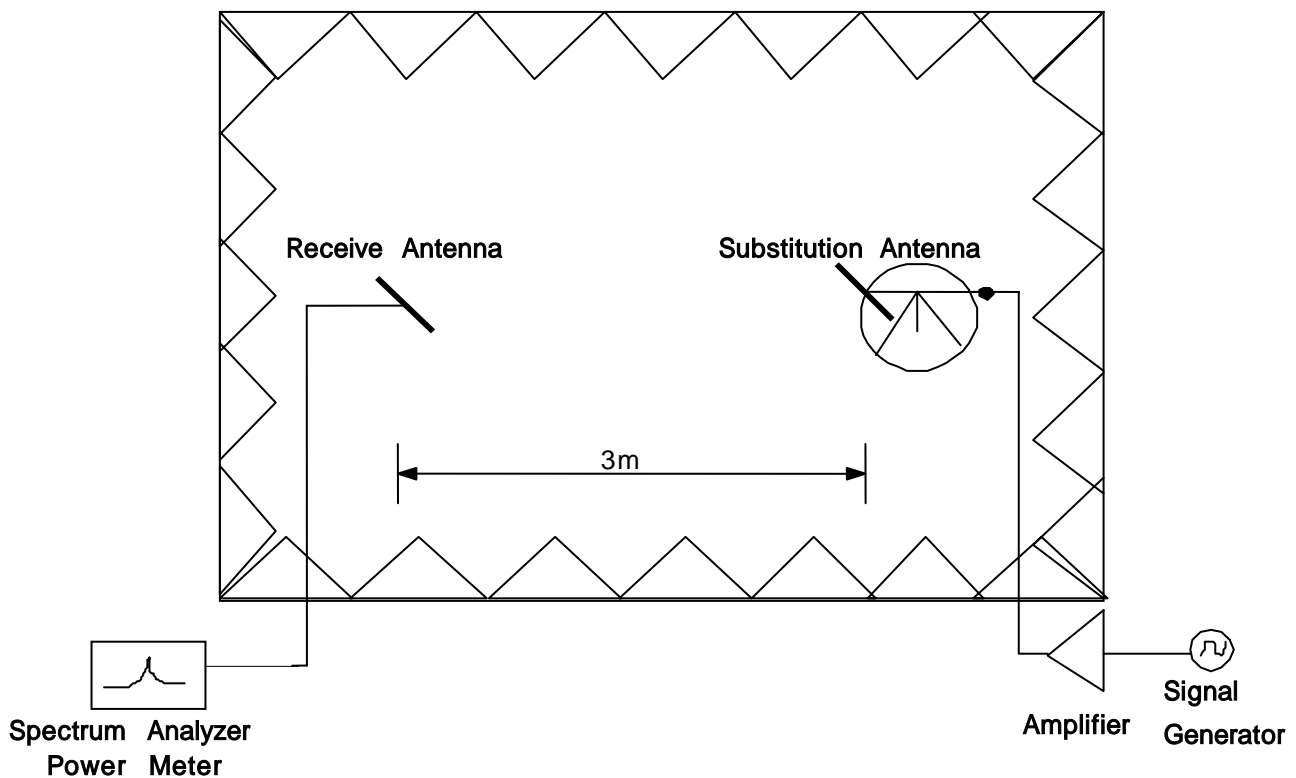


Figure 3. Diagram of ERP/EIRP test Set-up

The EUT was placed on the rotating device at 3-meters from the receive antenna. 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

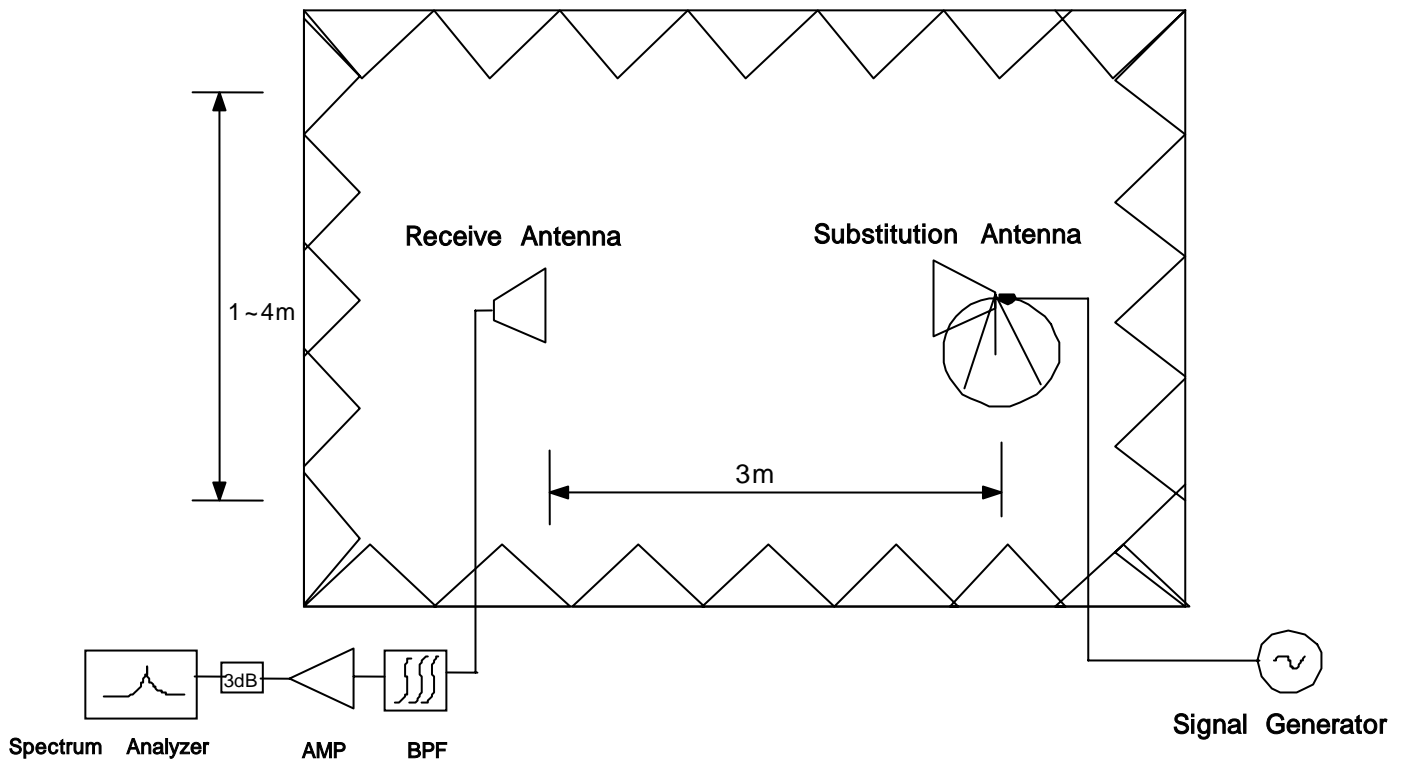


Figure 4. Diagram of Radiated Spurious & Harmonic test Set-up

The EUT was placed on the rotating device at 3-meters from the receive antenna. 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 10<sup>th</sup> 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  $-81.0\text{dBm}$ . The gain of the substituted antenna is  $8.1\text{dBi}$ . The signal generator connected to the substituted antenna terminals is adjusted to produce a reading of  $-81.0\text{dBm}$  of the receive analyzer. The loss of the cable between the signal generator and the terminals of the substituted antenna is  $2.0\text{dB}$  at  $3760.00\text{MHz}$ . So  $6.1\text{dB}$  is added to the signal generator reading of  $-30.9\text{dBm}$  yielding  $-24.8\text{dBm}$ . The fundamental EIRP was  $25.5\text{dBm}$  so this harmonic was  $25.5\text{dBm} - (-24.8) = 50.3\text{dBc}$  .

### **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.

## 5.4. Occupied Bandwidth

### **Test Procedure**

The EUT was setup to maximum output power at its lowest channel. The occupied bandwidth was measured using a spectrum analyzer. The measurements are repeated for the highest and a middle channel. The EUT's occupied bandwidth is measured as the width of the signal between two points, one below the carrier center frequency and one above the carrier frequency, outside of which all emissions are attenuated at least 26dB below the transmitter power.

Plots of the EUT's occupied bandwidth are shown herein.

## 5.5. Spurious and Harmonic Emission at Antenna Terminal

### 5.5.1. Occupied Bandwidth Emission Limits

- (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.
- (d) The measurement of emission power can be expressed in peak or average values, provided they are expressed in the same parameters as the transmitter power.



<b>BLOCK</b>	<b>Freq. Range (MHz) Transmitter (Tx)</b>	<b>Freq. Range (MHz) Receiver (Rx)</b>
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**

<b>BLOCK</b>	<b>Freq. Range (MHz) Transmitter (Tx)</b>	<b>Freq. Range (MHz) Receiver (Rx)</b>
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  $43+10\log(P)$ dB. Limit equivalent to -13dBm, calculation shown below.

$$43 + 10\log ( 0.953 \text{ W} ) = 42.79 \text{ dB}$$

$$29.79 \text{ dBm} - 42.79 \text{ dB} = -13 \text{ dBm}$$

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.

In case of GSM :  $0.01 * 273\text{KHz} = 2.73\text{KHz}$   
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 from 10MHz to 10GHz. (GSM1900 Mode : 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 +60°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  $\pm 0.00025$  ( $\pm 2.5$ ppm) 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 +60°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. Effective Radiated Power (E.R.P.)

Supply Voltage : 3.7VDC

Modulation : GSM850

#### Reference level

Frequency (MHz)	Output (dBm)	Polarization (H/V)	S/A (dBm)	Ant gain (dBd)	Ref level (dBm)
824.20	29.00	H	-8.28	-0.67	-7.61
		V	-8.47	-0.67	-7.80
836.60	29.00	H	-9.21	-0.73	-8.48
		V	-8.37	-0.73	-7.64
848.80	30.00	H	-10.31	-0.79	-9.52
		V	-8.58	-0.79	-7.79

#### Result

Frequency (MHz)	Tested level (dBm)	Polarization (H/V)	Azimuth (angle)	ERP (dBm)	ERP (W)	Battery
824.20	-7.83	H	72/100	28.78	0.755	Standard
836.60	-8.04	H	71/80	29.44	0.879	Standard
848.80	-9.73	H	75/80	29.79	0.953	Standard

#### EDGE Result

Frequency (MHz)	Tested level (dBm)	Polarization (H/V)	Azimuth (angle)	ERP (dBm)	ERP (W)	Battery
848.80	-14.86	H	75/80	24.75	0.299	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



## 6.2. Equivalent Isotropic Radiated Power (E.I.R.P.)

Supply Voltage : 3.7VDC

Modulation : PCS 1900

### Reference level

Frequency (MHz)	Output (dBm)	Polarization (H/V)	S/A (dBm)	Ant gain (dBi)	Ref level (dBm)
1850.20	27.00	H	-12.02	9.70	-21.72
		V	-12.14	9.70	-21.84
1880.00	29.00	H	-10.56	9.70	-20.26
		V	-10.49	9.70	-20.19
1909.80	29.00	H	-10.41	9.70	-20.11
		V	-10.45	9.70	-20.15

### Result

Frequency (MHz)	Tested level (dBm)	Polarization (H/V)	Azimuth (angle)	EIRP (dBm)	EIRP (W)	Battery
1850.20	-21.44	V	142/100	27.40	0.550	Standard
1880.00	-20.38	V	317/100	28.81	0.760	Standard
1909.80	-20.63	V	326/110	28.52	0.711	Standard

### EDGE Result

Frequency (MHz)	Tested level (dBm)	Polarization (H/V)	Azimuth (angle)	EIRP (dBm)	EIRP (W)	Battery
1880.00	-22.10	V	317/100	27.09	0.512	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. GSM850 Radiated Spurious & Harmonic measurement

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

Measured Output Power : 29.79 dBm = 0.953 W

Modulation Signal : GSM850

Limit :  $43 + 10\log_{10}(P) = 42.79$  dBc

#### Result

Channel	Harmonic	Frequency (MHz)	From EUT Tested level (dBm)	POL (H/V)	Result (dBc)
128	2	1648.40	-57.89	V	75.72
	3	2472.60	-67.54	H	80.33
	4	3296.80	-65.91	H	75.50
	5	4121.00	-	-	-
	6	4945.20	-	-	-
	7	5769.40	-	-	-
190	2	1673.20	-59.66	V	75.96
	3	2509.80	-66.99	H	79.52
	4	3346.40	-65.46	H	74.66
	5	4183.00	-	-	-
	6	5019.60	-	-	-
	7	5856.20	-	-	-
251	2	1697.60	-60.23	H	76.33
	3	2546.40	-67.11	H	79.61
	4	3395.20	-65.82	H	74.81
	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 10<sup>th</sup> 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



## 6.4. GSM1900 Radiated Spurious & Harmonic measurement

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

Measured Output Power : 28.81 dBm = 0.760 W

Modulation Signal : GSM1900

Limit :  $43 + 10\log_{10}(P) = 41.81$  dBc

### Result

Channel	Harmonic	Frequency (MHz)	From EUT Tested level (dBm)	POL (H/V)	Result (dBc)
512	2	3700.40	-67.77	V	71.86
	3	5550.60	-67.11	V	65.92
	4	7400.80	-68.20	V	62.62
	5	9251.00	-	-	-
	6	11101.20	-	-	-
	7	12951.40	-	-	-
661	2	3760.00	-67.54	V	71.20
	3	5640.00	-67.30	V	65.81
	4	7520.00	-68.48	V	62.70
	5	9400.00	-	-	-
	6	11280.00	-	-	-
	7	13160.00	-	-	-
810	2	3819.60	-67.35	V	70.97
	3	5729.40	-67.78	V	65.97
	4	7639.20	-68.70	V	62.68
	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 10<sup>th</sup> 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. GSM850 Radiated Spurious & Harmonic Conversion Table

Date : 2009. 02. 27

Test Engineer : KJ KWON

Tx Cable loss  
 Tx Horn Ant Gain  
 Tx Level to radiate - 13dBm  
 ESI Level received from Tx with - 13dBm  
 Tested Level from EUT  
 = ERP+2.14 - ( -13 + - )

CH	Har	Frequency (MHz)	Tx C/L dB	Tx Horn Gain dBi	Tx Level dBm	ESI Level : H dBm	ESI Level : V dBm	Tested EUT Level : H dBm	Tested EUT Level : V dBm	Result EUT : H (dBc)	Result EUT : V (dBc)
128	2	1648.40	-9.02	9.50	-13.50	-25.78	-25.24	-60.34	-57.89	78.59	75.72
	3	2472.60	-11.25	10.70	-12.50	-30.65	-30.96	-67.54	-68.25	80.33	81.73
	4	3296.80	-13.26	12.30	-12.00	-34.30	-34.88	-65.91	-66.00	75.53	75.50
	5	4121.00	-14.79	12.50	-10.70	-37.37	-37.16	-	-	-	-
	6	4945.20	-16.60	12.70	-9.10	-39.95	-40.17	-	-	-	-
	7	5769.40	-18.02	12.90	-7.90	-42.25	-42.16	-	-	-	-
	190	2	1673.20	-9.05	9.50	-13.50	-26.45	-26.15	-60.26	-59.66	77.19
3		2509.80	-11.31	10.70	-12.40	-30.90	-30.96	-66.99	-67.61	79.52	80.90
4		3346.40	-13.33	12.30	-12.00	-34.28	-34.36	-65.46	-66.55	74.66	75.88
5		4183.00	-15.01	12.50	-10.50	-36.90	-37.13	-	-	-	-
6		5019.60	-16.84	12.70	-8.90	-40.04	-40.64	-	-	-	-
7		5856.20	-18.26	12.90	-7.60	-42.75	-42.94	-	-	-	-
251		2	1697.60	-9.07	9.50	-13.40	-26.64	-26.78	-60.23	-64.57	76.33
	3	2546.40	-11.35	10.70	-12.40	-30.32	-30.81	-67.11	-67.62	79.66	79.61
	4	3395.20	-13.26	12.30	-12.00	-34.25	-34.55	-65.82	-66.65	74.81	76.12
	5	4244.00	-15.20	12.50	-10.30	-37.07	-37.26	-	-	-	-
	6	5092.80	-16.99	12.70	-8.70	-40.12	-40.75	-	-	-	-
	7	5941.60	-18.38	12.90	-7.50	-43.10	-42.67	-	-	-	-



## 6.6. GSM1900 Radiated Spurious & Harmonic Conversion Table

Date : 2009. 02. 27

Test Engineer : KJ KWON

Tx Cable loss  
 Tx Horn Ant Gain  
 Tx Level to radiate - 13dBm  
 ESI Level received from Tx with - 13dBm  
 Tested Level from EUT  
 = EIRP - (-13 + - )

CH	Har	Frequency (MHz)	Tx C/L dB	Tx Horn Gain dBi	Tx Level dBm	ESI Level : H dBm	ESI Level : V dBm	Tested EUT Level : H dBm	Tested EUT Level : V dBm	Result EUT : H (dBc)	Result EUT : V (dBc)
512	2	3700.40	-14.02	12.40	-11.40	-37.72	-37.72	-67.88	-67.77	71.97	71.86
	3	5550.60	-17.68	12.90	-8.20	-42.81	-43.00	-67.39	-67.11	66.39	65.92
	4	7400.80	-20.47	10.50	-3.00	-47.41	-47.39	-69.24	-68.20	63.64	62.62
	5	9251.00	-23.65	11.20	-0.50	-50.87	-51.74	-	-	-	-
	6	11101.20	-26.73	11.60	2.10	-55.94	-55.98	-	-	-	-
	7	12951.40	-28.60	12.90	2.70	-59.18	-59.44	-	-	-	-
	661	2	3760.00	-14.17	12.40	-11.20	-38.11	-38.15	-68.09	-67.54	71.79
3		5640.00	-17.83	12.90	-8.10	-42.84	-43.30	-67.46	-67.30	66.43	65.81
4		7520.00	-20.58	10.60	-3.00	-47.63	-47.25	-68.52	-68.48	62.70	63.04
5		9400.00	-23.19	11.60	-1.40	-51.86	-52.85	-	-	-	-
6		11280.00	-26.31	12.10	1.20	-56.33	-56.80	-	-	-	-
7		13160.00	-28.22	12.80	2.40	-59.42	-59.52	-	-	-	-
810		2	3819.60	-14.18	12.40	-11.20	-38.30	-38.19	-67.55	-67.35	71.06
	3	5729.40	-17.92	13.00	-8.10	-43.67	-43.62	-68.06	-67.78	66.20	65.97
	4	7639.20	-20.95	11.20	-3.30	-47.83	-48.14	-68.70	-69.51	62.68	63.18
	5	9549.00	-23.60	11.70	-1.10	-52.43	-52.81	-	-	-	-
	6	11458.80	-26.67	11.70	2.00	-56.85	-56.63	-	-	-	-
	7	13368.60	-28.41	12.30	3.10	-60.50	-59.87	-	-	-	-

## 6.7. Frequency Stability

### 6.7.1. GSM850 Frequency Stability Table

Operating Frequency : 836,600,000 Hz

Channel : 190

Reference Voltage : 3.7VDC

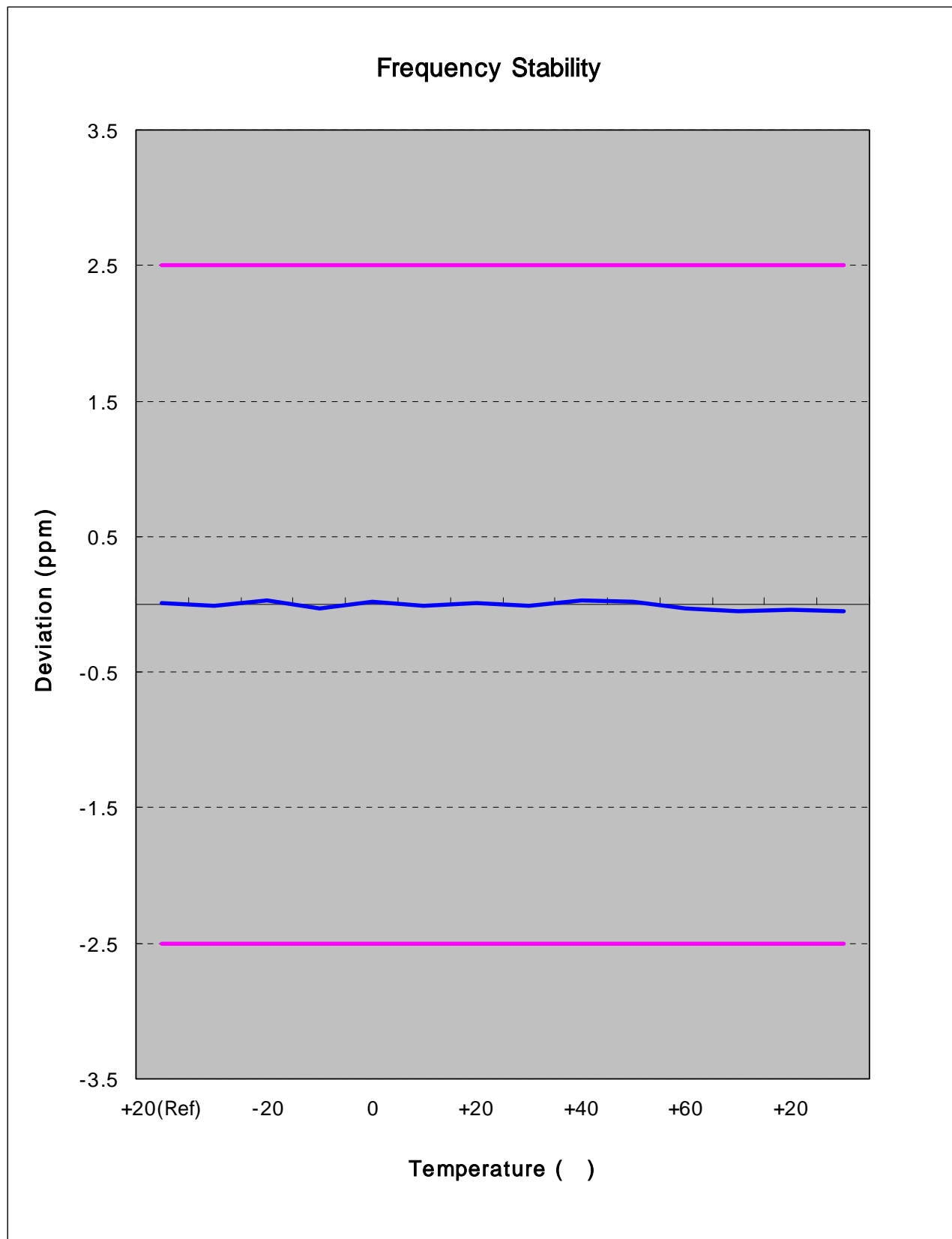
Deviation Limit :  $\pm 0.00025\%$  or 2.5ppm

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency Error (Hz)	Frequency (Hz)	Deviation (%)	ppm
100%	3.70	+20(Ref)	10.30	836,600,010	0.000001	0.012
100%		-30	-8.20	836,599,992	-0.000001	-0.010
100%		-20	22.00	836,600,022	0.000003	0.026
100%		-10	-24.70	836,599,975	-0.000003	-0.030
100%		0	20.40	836,600,020	0.000002	0.024
100%		+10	-6.60	836,599,993	-0.000001	-0.008
100%		+20	10.30	836,600,010	0.000001	0.012
100%		+30	-11.30	836,599,989	-0.000001	-0.014
100%		+40	25.50	836,600,026	0.000003	0.030
100%		+50	12.90	836,600,013	0.000002	0.015
100%		+60	-23.40	836,599,977	-0.000003	-0.028
85%		3.35	+20	-37.80	836,599,962	-0.000005
115%	4.26	+20	-30.70	836,599,969	-0.000004	-0.037
Batt.Endpoint	3.35	+20	-37.80	836,599,962	-0.000005	-0.045

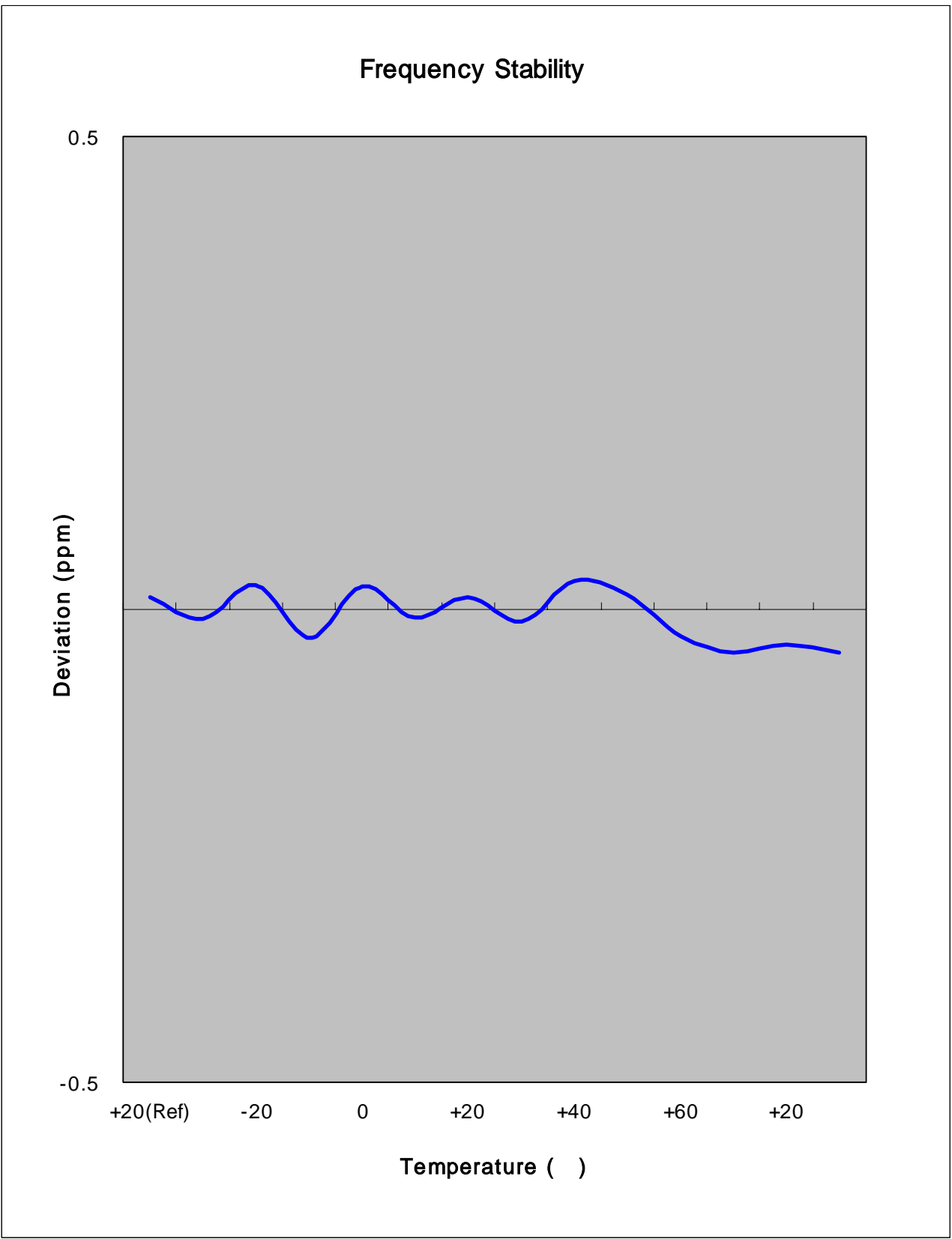
Note : The temperature is varied from -30 °C to +60 °C using an environmental chamber.

The EUT is tested down to the battery end point.

### 6.7.2. GSM850 Frequency Stability Graph



**Zoom IN**





### 6.7.3. GSM1900 Frequency Stability Table

Operating Frequency : 1,880,000,000 Hz

Channel : 661

Reference Voltage : 3.7VDC

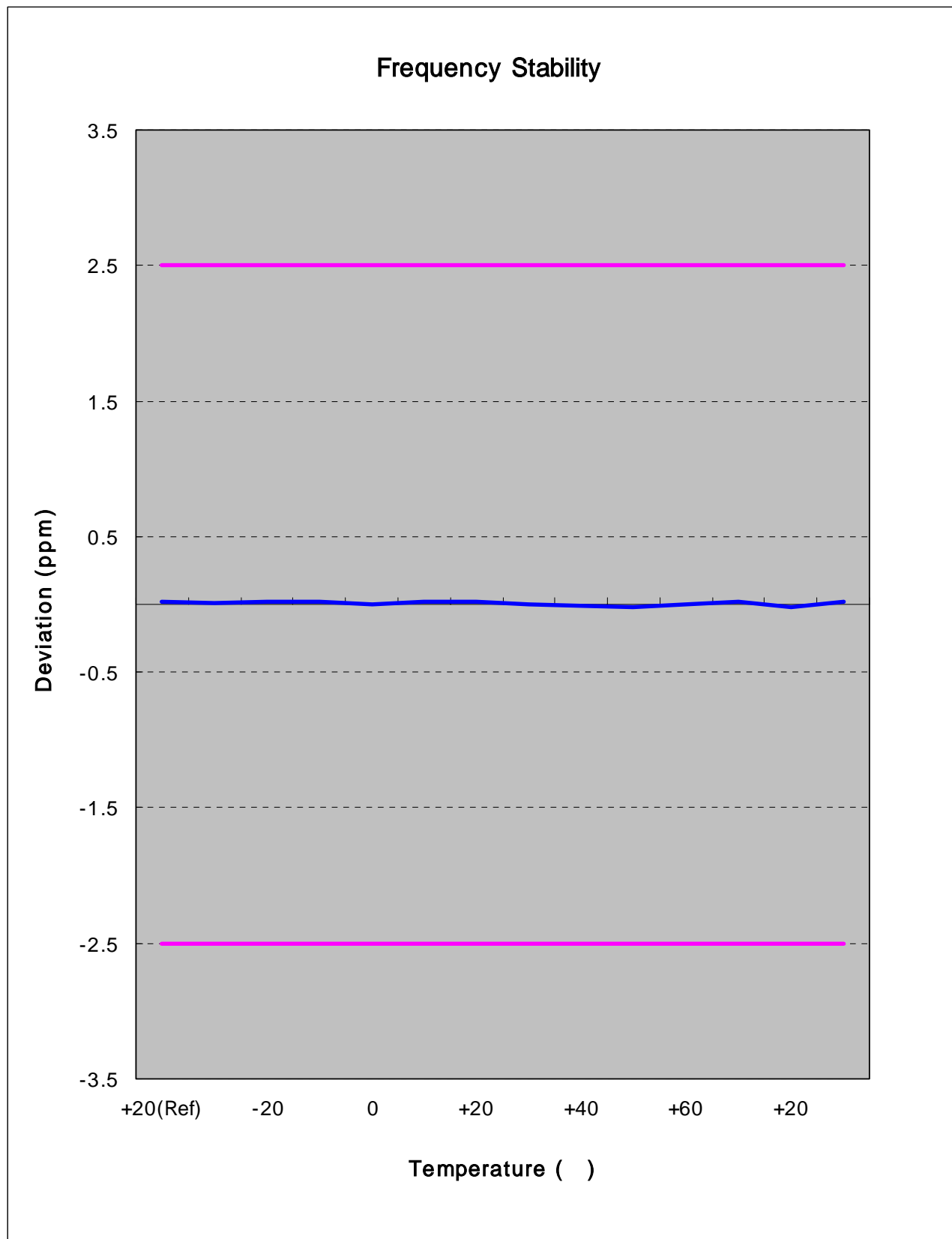
**Deviation Limit :  $\pm 0.00025$  % or 2.5ppm**

Voltage (%)	Power (VDC)	Temp. (°C)	Frequency Error (Hz)	Frequency (Hz)	Deviation (%)	ppm
100%	3.70	+20(Ref)	31.80	1,880,000,032	0.000002	0.017
100%		-30	11.80	1,880,000,012	0.000001	0.006
100%		-20	39.70	1,880,000,040	0.000002	0.021
100%		-10	33.60	1,880,000,034	0.000002	0.018
100%		0	7.20	1,880,000,007	0.000000	0.004
100%		+10	37.70	1,880,000,038	0.000002	0.020
100%		+20	31.80	1,880,000,032	0.000002	0.017
100%		+30	7.80	1,880,000,008	0.000000	0.004
100%		+40	-14.30	1,879,999,986	-0.000001	-0.008
100%		+50	-38.60	1,879,999,961	-0.000002	-0.021
100%		+60	-4.20	1,879,999,996	0.000000	-0.002
85%		3.35	+20	38.50	1,880,000,039	0.000002
115%	4.26	+20	-30.90	1,879,999,969	-0.000002	-0.016
Batt.Endpoint	3.35	+20	38.50	1,880,000,039	0.000002	0.020

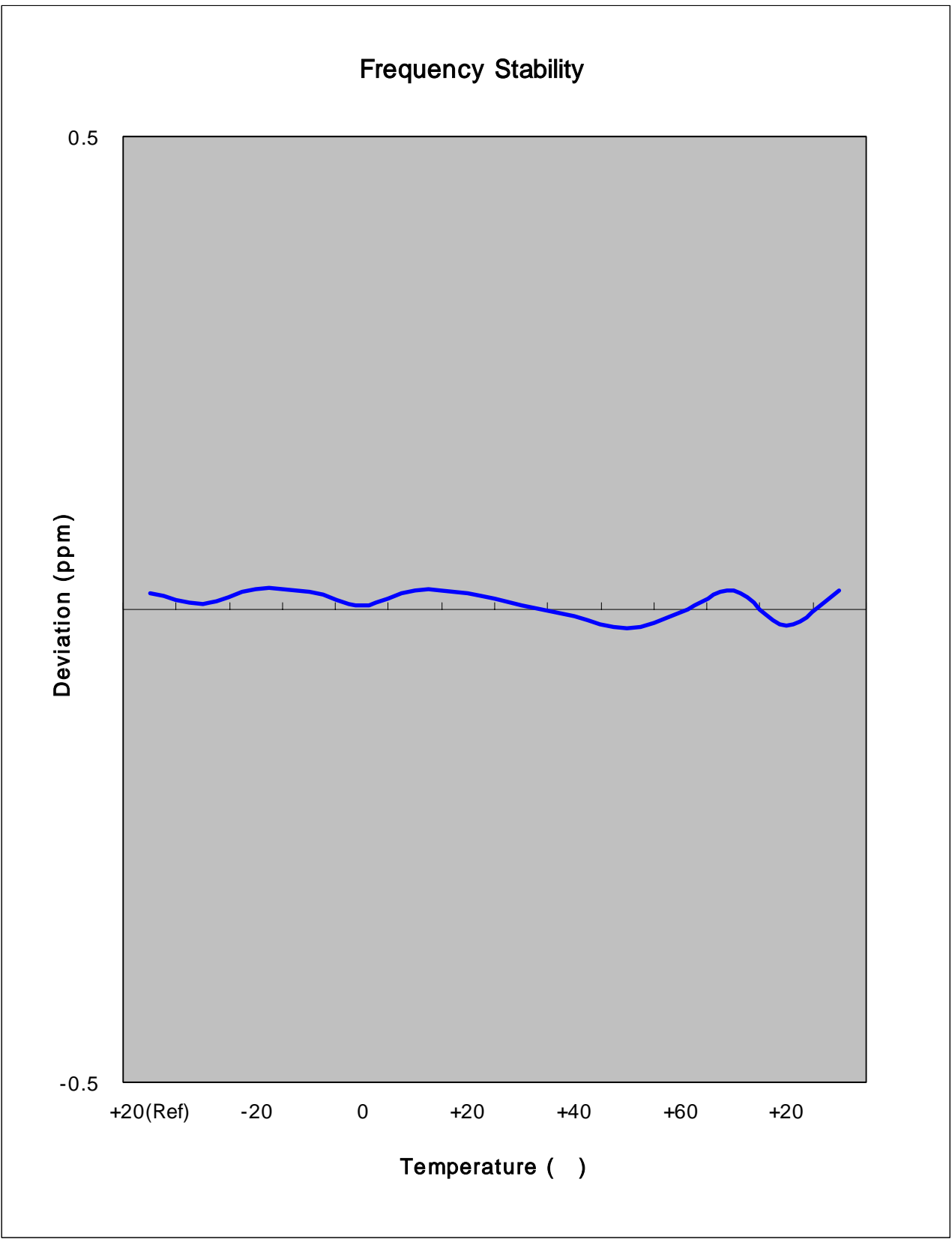
**Note : The temperature is varied from -30 °C to +60 °C using an environmental chamber.**

**The EUT is tested down to the battery end point.**

### 6.7.4. GSM1900 Frequency Stability Graph



**Zoom IN**





## 7. CONCLUSION

The data collected shows that the SAMSUNG 850/1900 GSM/EDGE and 850 WCDMA Phone with Bluetooth.

FCC ID : A3LGTS8300T complies with all the requirements of Parts 2,22,24 of the FCC Rules.



## 8. TEST PLOTS

GSM850

Agilent

R T

Ch Freq 824.2 MHz Trig Free

Occupied Bandwidth

FCC ID:A3LGTS8300T 0BW Ch.128  
Ref 33 dBm Atten 40 dB

Center 824.200 MHz Span 1 MHz  
#Res BW 3 kHz #VBW 3 kHz Sweep 134 ms (601 pts)

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
248.8262 kHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	-600.203 Hz	
<b>x dB Bandwidth</b>	314.653 kHz	

**Freq/Channel**

**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

Ch Freq 836.6 MHz Trig Free

Occupied Bandwidth

FCC ID:A3LGTS8300T 0BW Ch.190  
Ref 33 dBm Atten 40 dB

Center 836.600 MHz Span 1 MHz  
#Res BW 3 kHz #VBW 3 kHz Sweep 134 ms (601 pts)

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
243.4622 kHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	-1.874 kHz	
<b>x dB Bandwidth</b>	310.367 kHz	

**Freq/Channel**

**Center Freq**  
836.600000 MHz

**Start Freq**  
836.100000 MHz

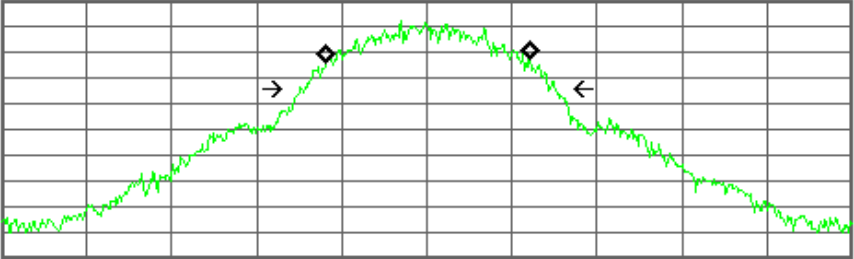
**Stop Freq**  
837.100000 MHz

**CF Step**  
100.000000 kHz  
Auto Man

**Freq Offset**  
0.00000000 Hz

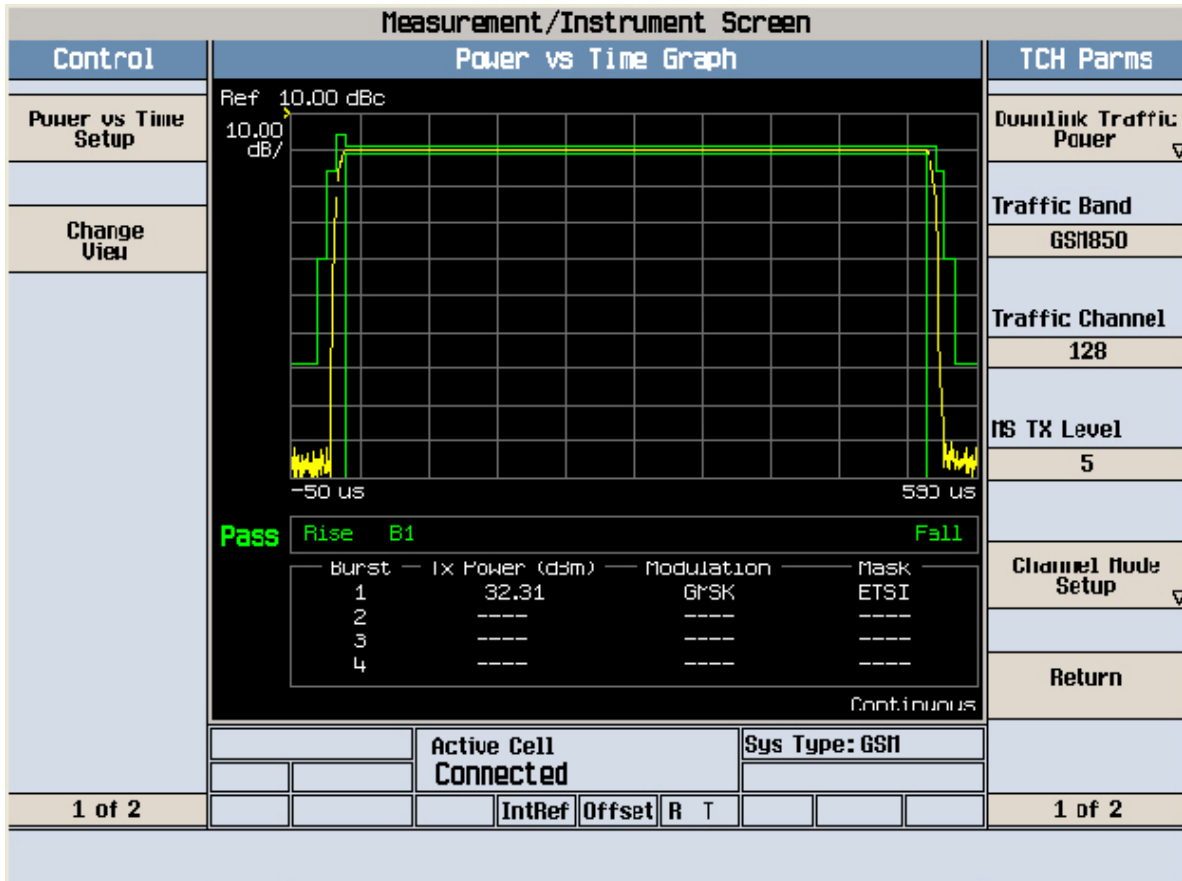
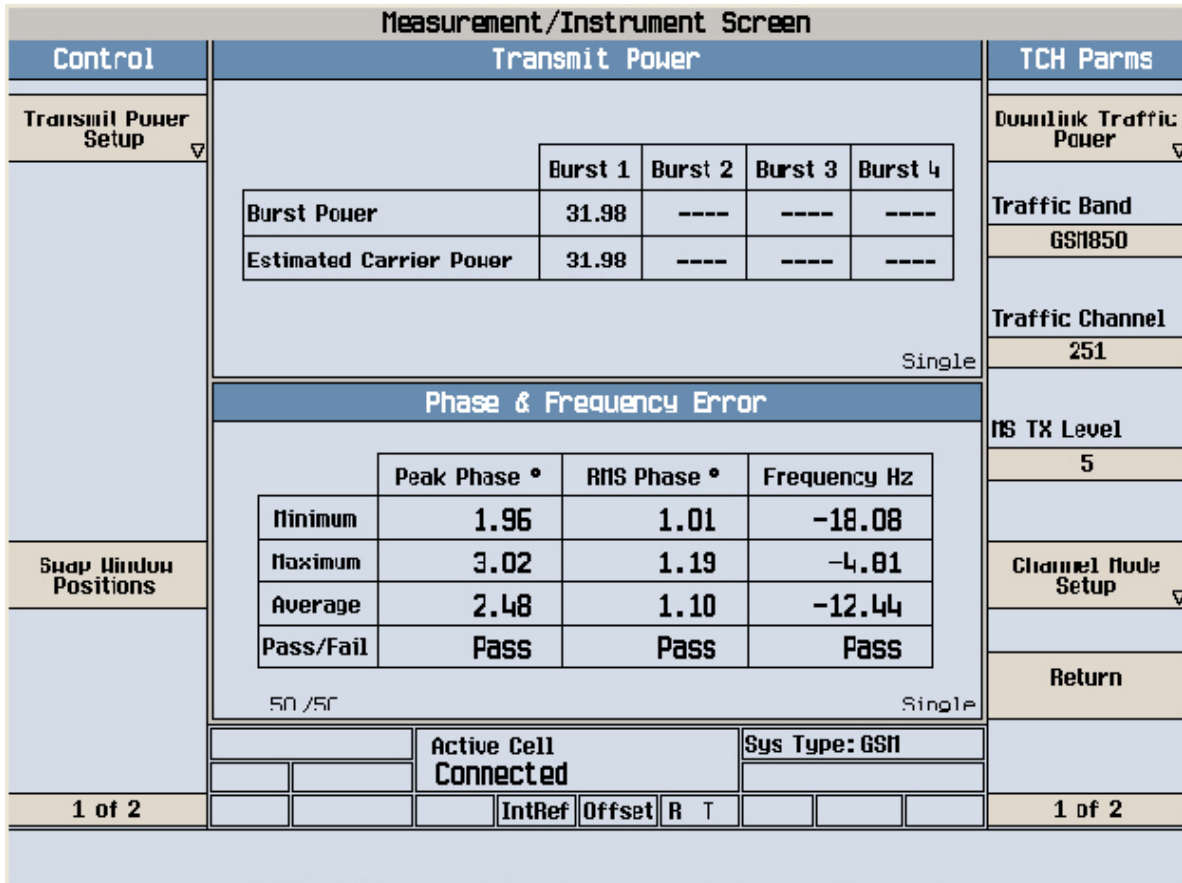
**Signal Track**  
On Off

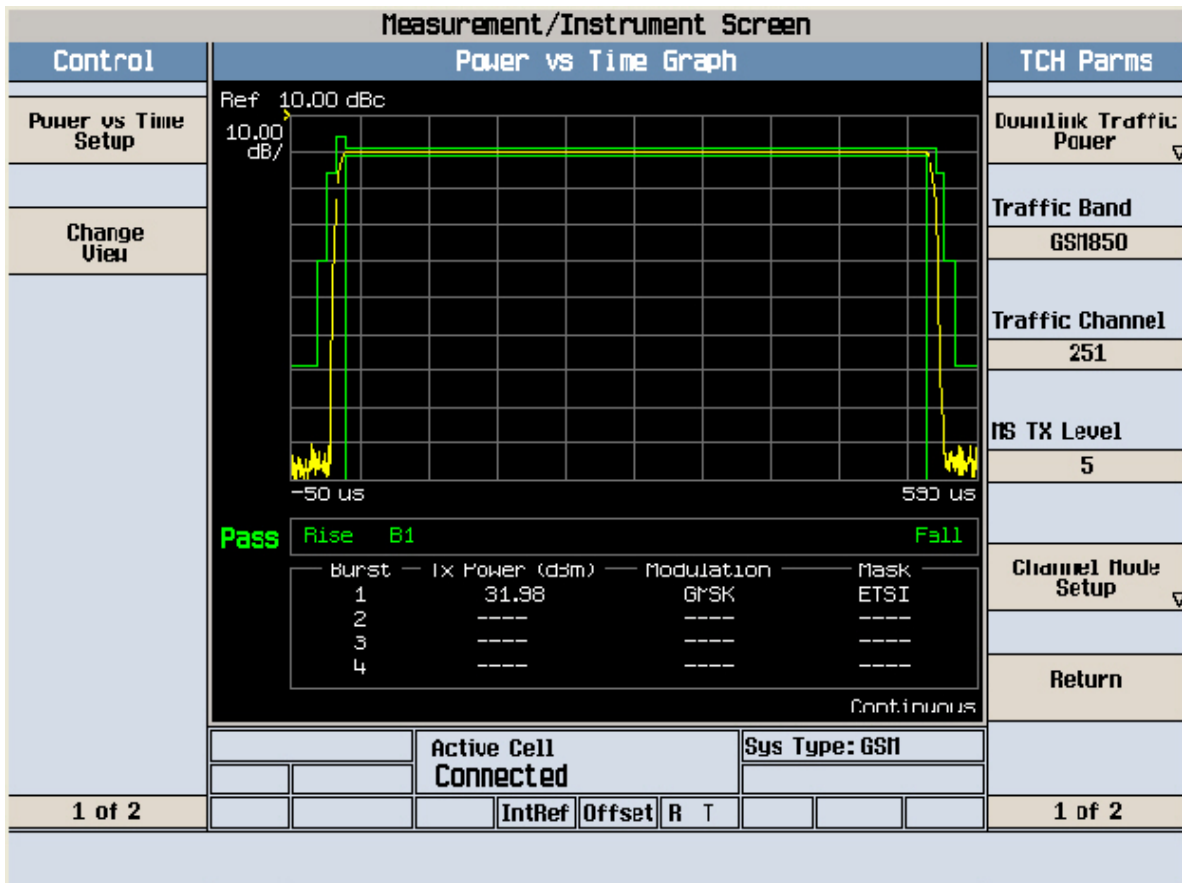
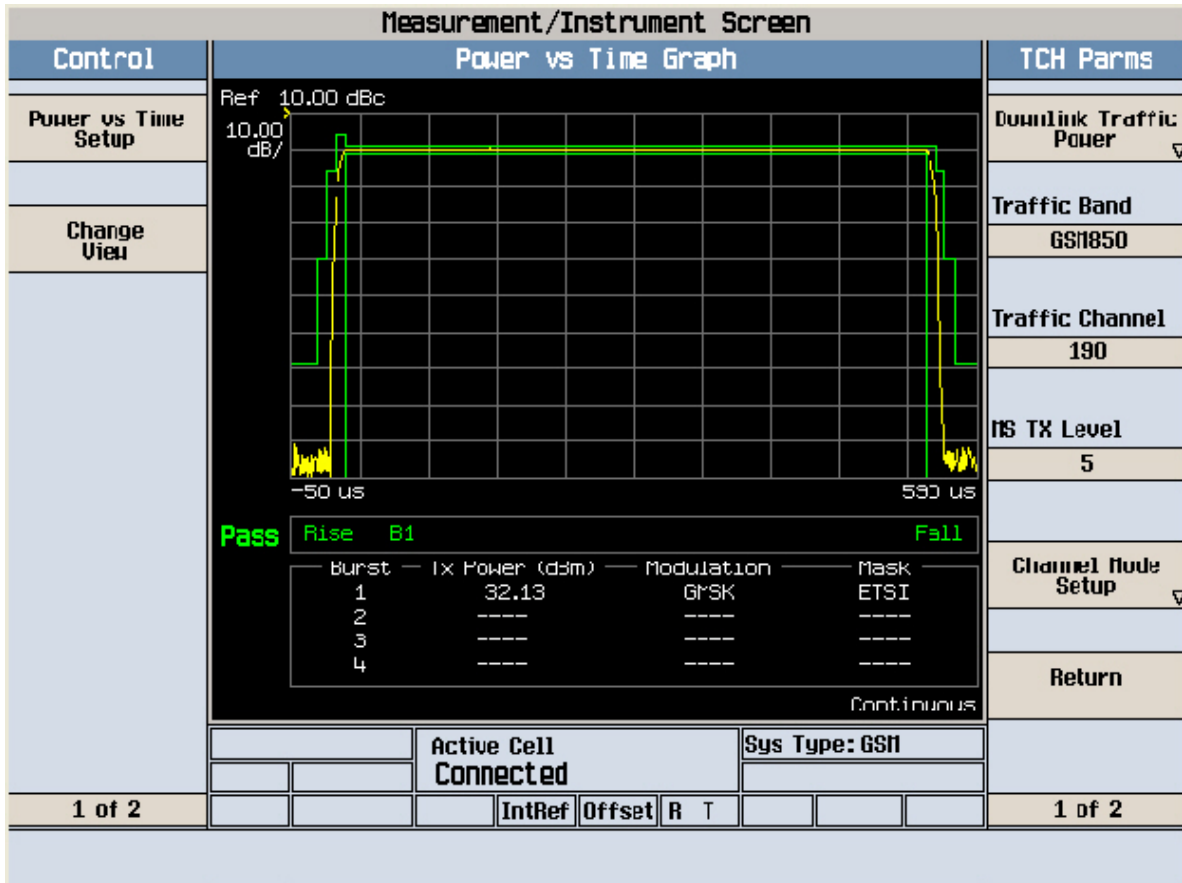
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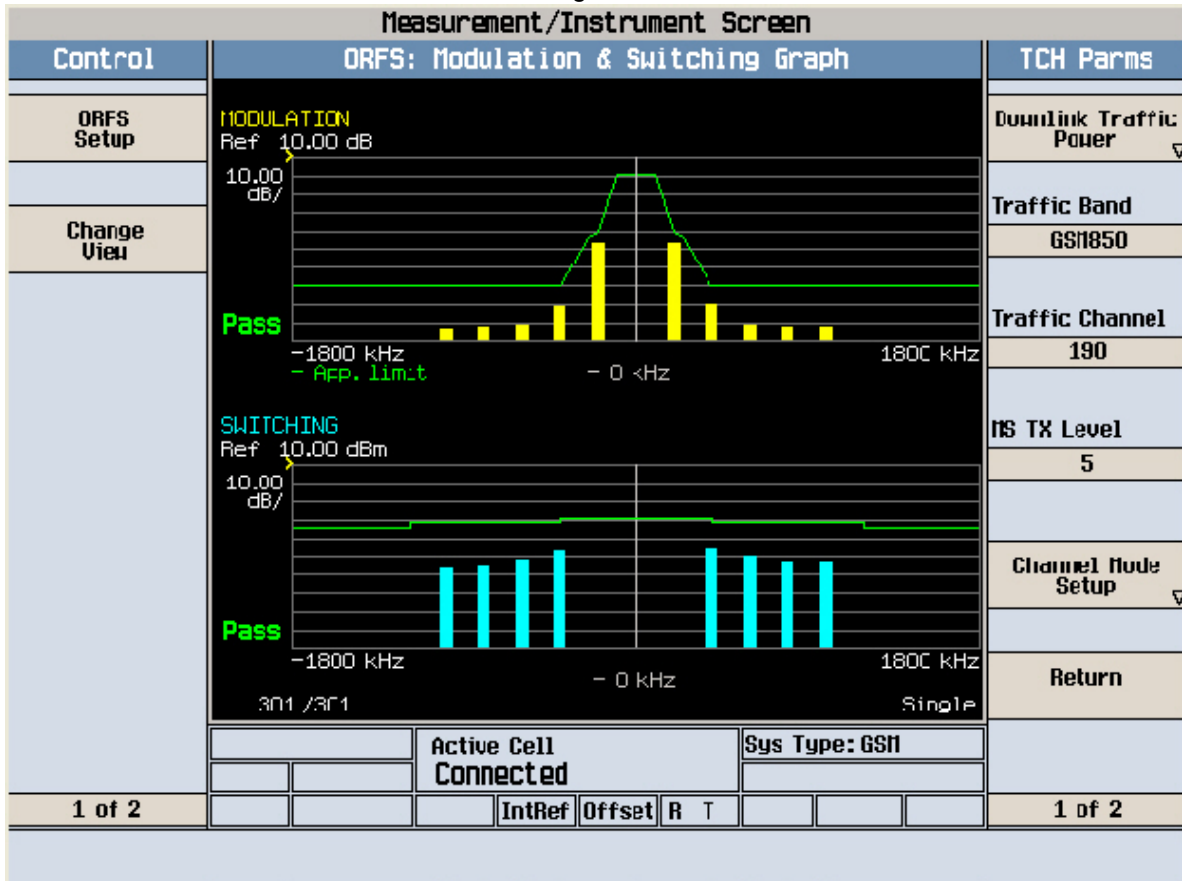
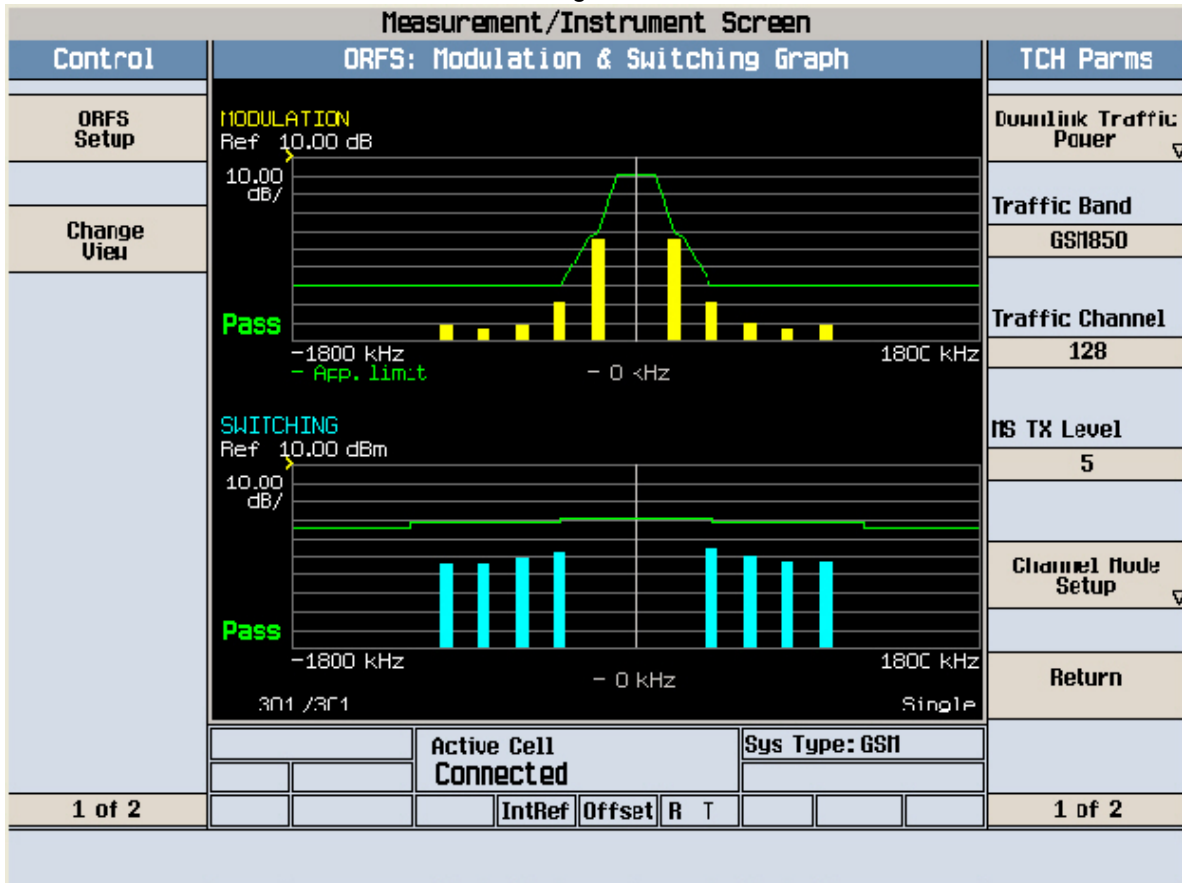
<b>Ch Freq</b> 848.8 MHz <span style="float: right;"><b>Trig</b> Free</span>		<b>Freq/Channel</b>								
Occupied Bandwidth <span style="float: right;">[ ] [ ]</span>		<b>Center Freq</b> 848.800000 MHz								
FCC ID: A3LGTS8300T 0BW Ch.251 Ref 33 dBm      Atten 40 dB		<b>Start Freq</b> 848.300000 MHz								
<div style="display: flex; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small; margin-right: 5px;">           #Peak Log 10 dB/ Offst 7.75 dB         </div>  </div>		<b>Stop Freq</b> 848.300000 MHz								
		<b>CF Step</b> 100.000000 kHz Auto      Man								
Center 848.800 MHz <span style="float: right;">Span 1 MHz</span> #Res BW 3 kHz      #VBW 3 kHz      Sweep 134 ms (601 pts)		<b>Freq Offset</b> 0.00000000 Hz								
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"><b>Occupied Bandwidth</b></td> <td style="width: 50%;"><b>Occ BW % Pwr</b> 99.00 %</td> </tr> <tr> <td style="text-align: center;">243.8810 kHz</td> <td style="text-align: center;"><b>x dB</b> -26.00 dB</td> </tr> <tr> <td><b>Transmit Freq Error</b> 1.636 kHz</td> <td></td> </tr> <tr> <td><b>x dB Bandwidth</b> 304.857 kHz</td> <td></td> </tr> </table>		<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b> 99.00 %	243.8810 kHz	<b>x dB</b> -26.00 dB	<b>Transmit Freq Error</b> 1.636 kHz		<b>x dB Bandwidth</b> 304.857 kHz		<b>Signal Track</b> On      Off
<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b> 99.00 %									
243.8810 kHz	<b>x dB</b> -26.00 dB									
<b>Transmit Freq Error</b> 1.636 kHz										
<b>x dB Bandwidth</b> 304.857 kHz										
<b>File Operation Status, C:\TEMP.GIF file saved</b>										

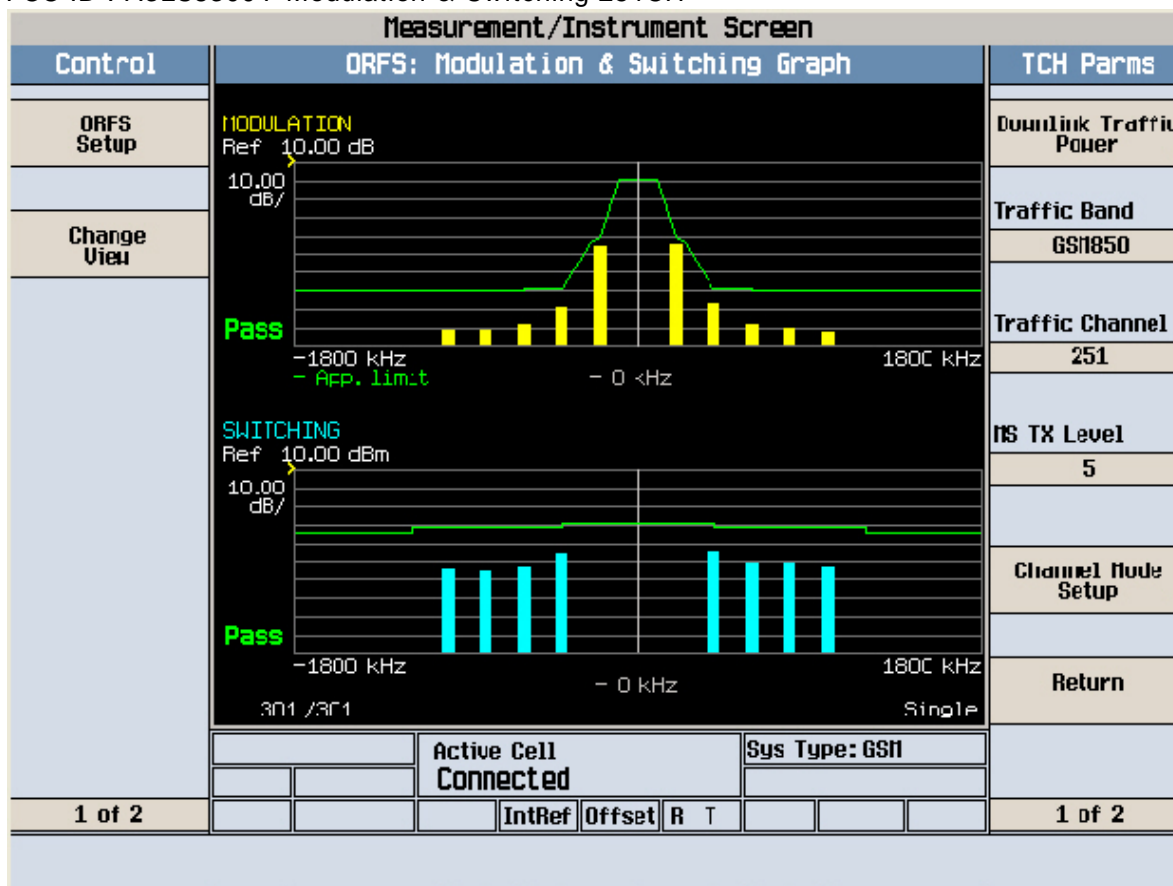
Measurement/Instrument Screen										
Control	Transmit Power							TCH Parms		
Transmit Power Setup					Burst 1	Burst 2	Burst 3	Burst 4	Downlink Traffic Power	
	Burst Power				32.32	----	----	----	Traffic Band	GSM850
Swap Window Positions	Estimated Carrier Power				32.32	----	----	----	Traffic Channel	128
	Single									
	Phase & Frequency Error									
			Peak Phase °	RMS Phase °	Frequency Hz					
	Minimum		2.03	0.99	-20.07		MS TX Level			
Maximum		3.19	1.24	-3.11		5				
Average		2.60	1.11	-12.26		Channel Mode Setup				
Pass/Fail		Pass	Pass	Pass		Return				
50 / 50 Single										
			Active Cell Connected			Sys Type: GSM				
1 of 2				IntRef	Offset	R	T			1 of 2

Measurement/Instrument Screen										
Control	Transmit Power							TCH Parms		
Transmit Power Setup					Burst 1	Burst 2	Burst 3	Burst 4	Downlink Traffic Power	
	Burst Power				32.13	----	----	----	Traffic Band	GSM850
Swap Window Positions	Estimated Carrier Power				32.13	----	----	----	Traffic Channel	190
	Single									
	Phase & Frequency Error									
			Peak Phase °	RMS Phase °	Frequency Hz					
	Minimum		2.13	1.02	-17.72		MS TX Level			
Maximum		2.87	1.23	-6.23		5				
Average		2.43	1.11	-11.64		Channel Mode Setup				
Pass/Fail		Pass	Pass	Pass		Return				
50 / 50 Single										
			Active Cell Connected			Sys Type: GSM				
1 of 2				IntRef	Offset	R	T			1 of 2









Agilent

R T

Freq/Channel

FCC ID:A3LGTS8300T Cond Spur Ch.128

Ref 33 dBm

Atten 40 dB

#Peak

Log

10

dB/

Offst

7.75

dB

DI

-13.0

dBm

LgAv

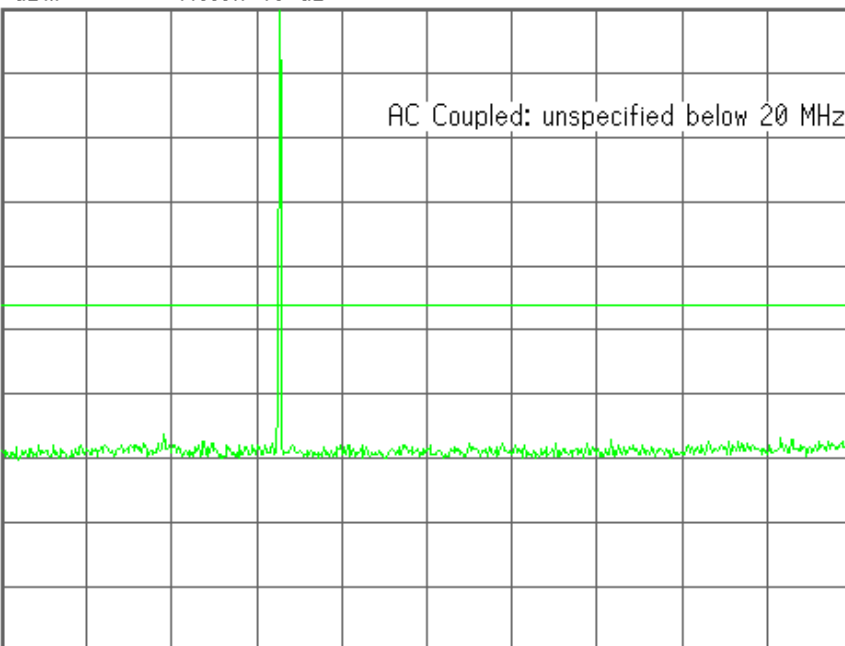
M1 S2

S3 FC

£(f):

FTun

Swp



Center 1.255 GHz

Span 2.49 GHz

#Res BW 1 MHz

#VBW 1 MHz

Sweep 4.16 ms (601 pts)

Center Freq  
1.25500000 GHz

Start Freq  
10.0000000 MHz

Stop Freq  
2.50000000 GHz

CF Step  
249.000000 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:A3LGTS8300T Cond Spur Ch.128

Mkr1 399.8 MHz

Ref 33 dBm

Atten 40 dB

-32.70 dBm

#Peak

Log

10

dB/

Offst

7.75

dB

DI

-13.0

dBm

LgAv

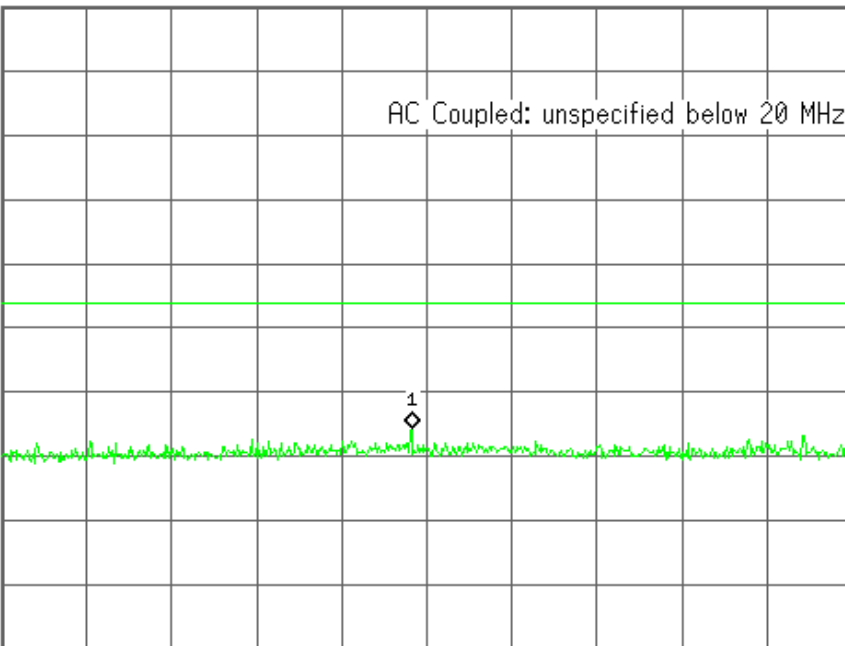
M1 S2

S3 FC

£(f):

FTun

Swp



Center 414.6 MHz

Span 809.2 MHz

#Res BW 1 MHz

#VBW 1 MHz

Sweep 1.36 ms (601 pts)

Center Freq  
414.600000 MHz

Start Freq  
10.0000000 MHz

Stop Freq  
819.200000 MHz

CF Step  
80.9200000 MHz  
Auto Man

Freq Offset  
0.00000000 Hz

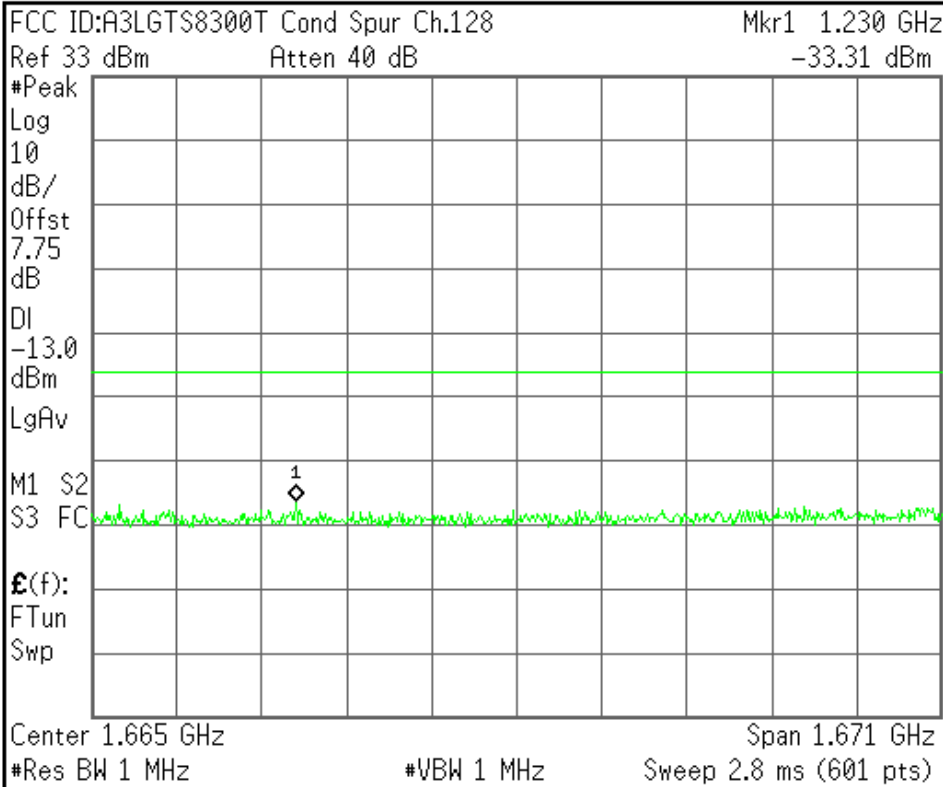
Signal Track  
On Off

File Operation Status, C:\TEMP.GIF file saved

Agilent

R T

Freq/Channel



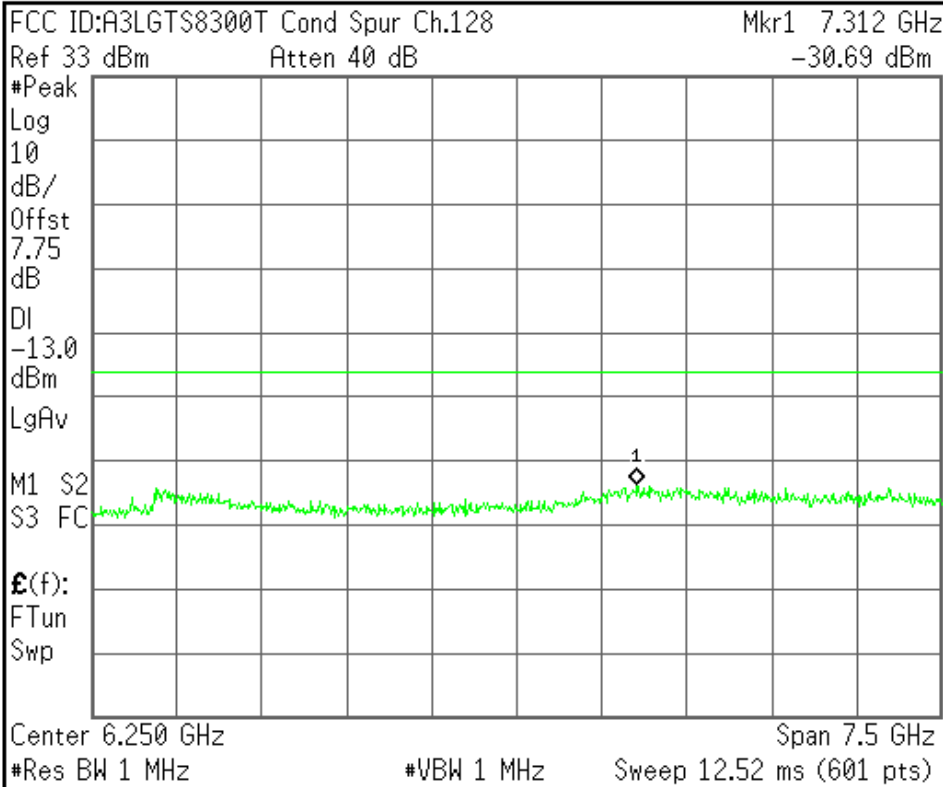
<b>Center Freq</b> 1.66460000 GHz
<b>Start Freq</b> 829.200000 MHz
<b>Stop Freq</b> 2.50000000 GHz
<b>CF Step</b> 167.080000 MHz Auto Man
<b>Freq Offset</b> 0.00000000 Hz
<b>Signal Track</b> On Off

File Operation Status, C:\TEMP.GIF file saved

Agilent

R T

Freq/Channel



<b>Center Freq</b> 6.25000000 GHz
<b>Start Freq</b> 2.50000000 GHz
<b>Stop Freq</b> 10.00000000 GHz
<b>CF Step</b> 750.000000 MHz Auto Man
<b>Freq Offset</b> 0.00000000 Hz
<b>Signal Track</b> On Off

File Operation Status, C:\TEMP.GIF file saved

Agilent

R T

Freq/Channel

FCC ID:A3LGTS8300T Cond Spur Ch.190

Ref 33 dBm

Atten 40 dB

#Peak

Log

10

dB/

Offst

7.75

dB

DI

-13.0

dBm

LgAv

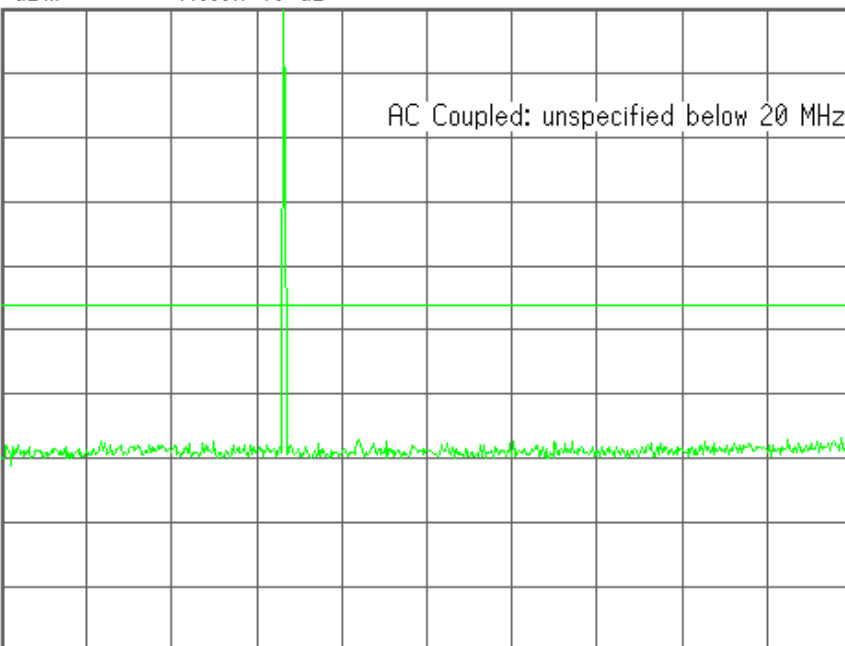
M1 S2

S3 FC

£(f):

FTun

Swp



Center 1.255 GHz

Span 2.49 GHz

#Res BW 1 MHz

#VBW 1 MHz

Sweep 4.16 ms (601 pts)

Center Freq  
1.25500000 GHz

Start Freq  
10.0000000 MHz

Stop Freq  
2.50000000 GHz

CF Step  
249.000000 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:A3LGTS8300T Cond Spur Ch.190

Mkr1 811.1 MHz

Ref 33 dBm

Atten 40 dB

-33.53 dBm

#Peak

Log

10

dB/

Offst

7.75

dB

DI

-13.0

dBm

LgAv

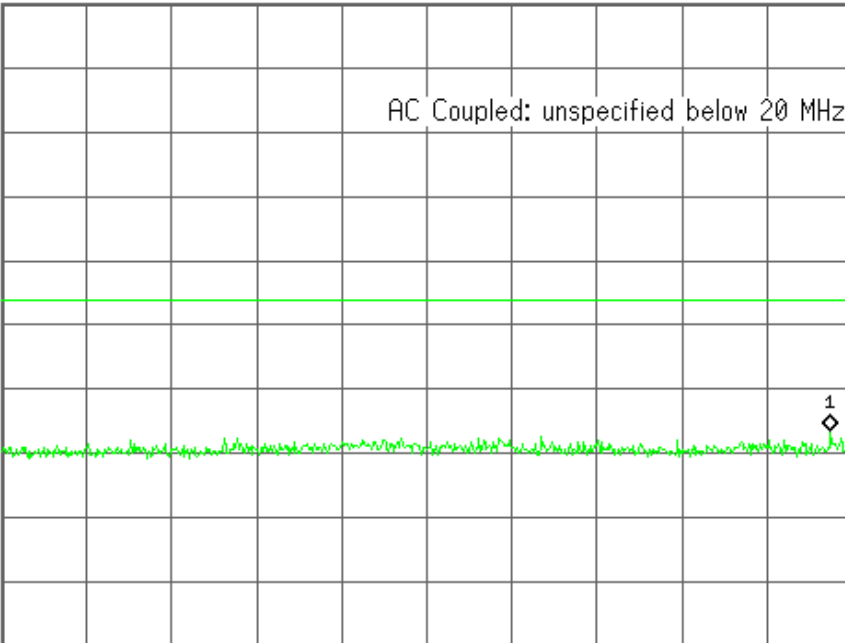
M1 S2

S3 FC

£(f):

FTun

Swp



Center 420.8 MHz

Span 821.6 MHz

#Res BW 1 MHz

#VBW 1 MHz

Sweep 1.4 ms (601 pts)

Center Freq  
420.800000 MHz

Start Freq  
10.0000000 MHz

Stop Freq  
831.600000 MHz

CF Step  
82.1600000 MHz  
Auto Man

Freq Offset  
0.00000000 Hz

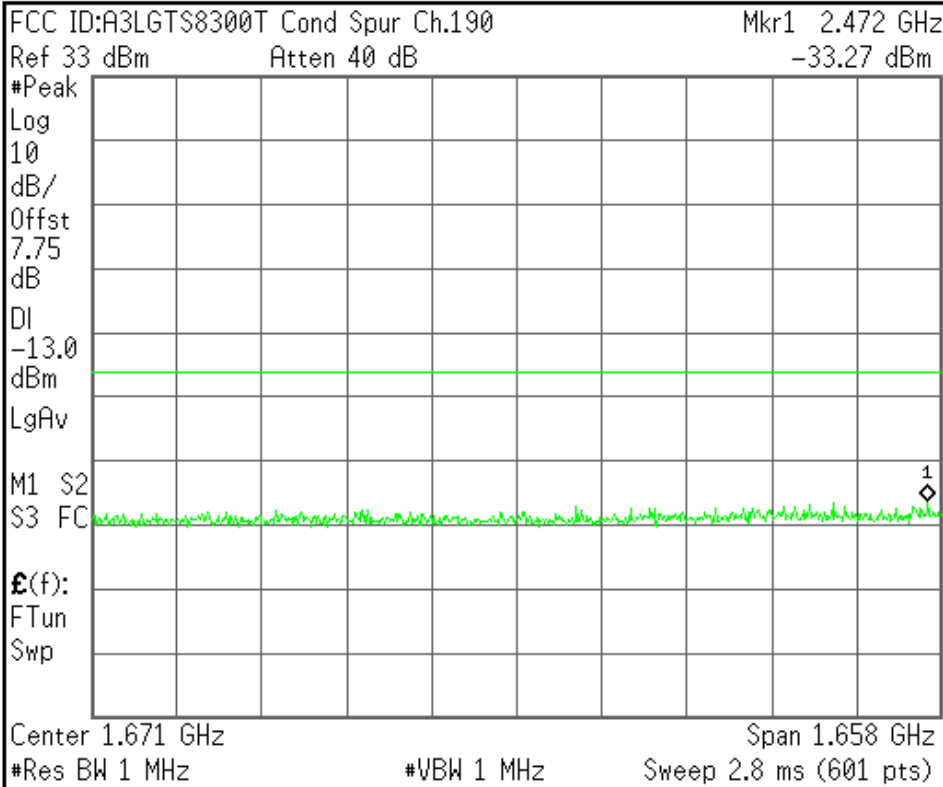
Signal Track  
On Off

File Operation Status, C:\TEMP.GIF file saved

Agilent

R T

Freq/Channel



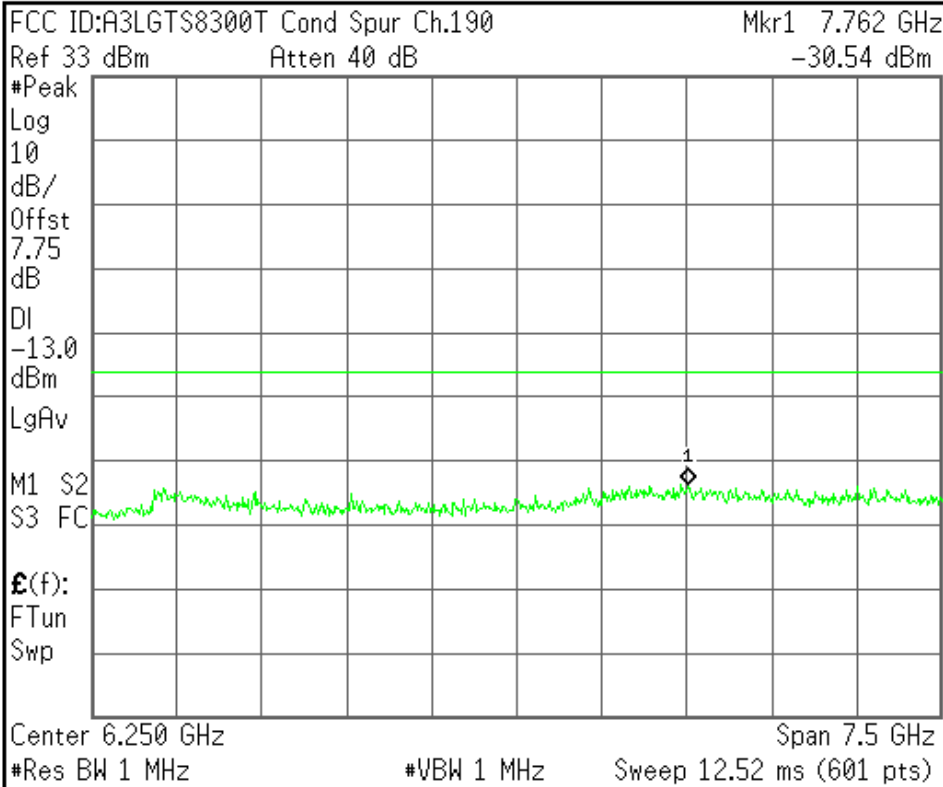
<b>Center Freq</b> 1.67080000 GHz
<b>Start Freq</b> 841.600000 MHz
<b>Stop Freq</b> 2.50000000 GHz
<b>CF Step</b> 165.840000 MHz Auto Man
<b>Freq Offset</b> 0.00000000 Hz
<b>Signal Track</b> On Off

File Operation Status, C:\TEMP.GIF file saved

Agilent

R T

Freq/Channel



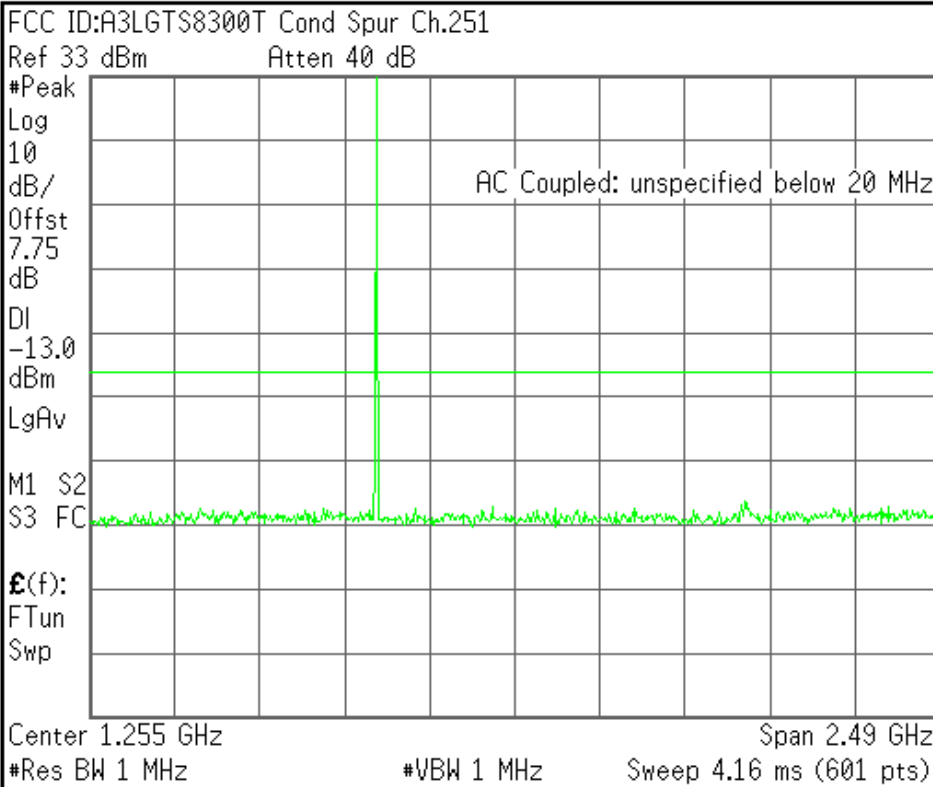
<b>Center Freq</b> 6.25000000 GHz
<b>Start Freq</b> 2.50000000 GHz
<b>Stop Freq</b> 10.00000000 GHz
<b>CF Step</b> 750.000000 MHz Auto Man
<b>Freq Offset</b> 0.00000000 Hz
<b>Signal Track</b> On Off

File Operation Status, C:\TEMP.GIF file saved

Agilent

R T

Freq/Channel



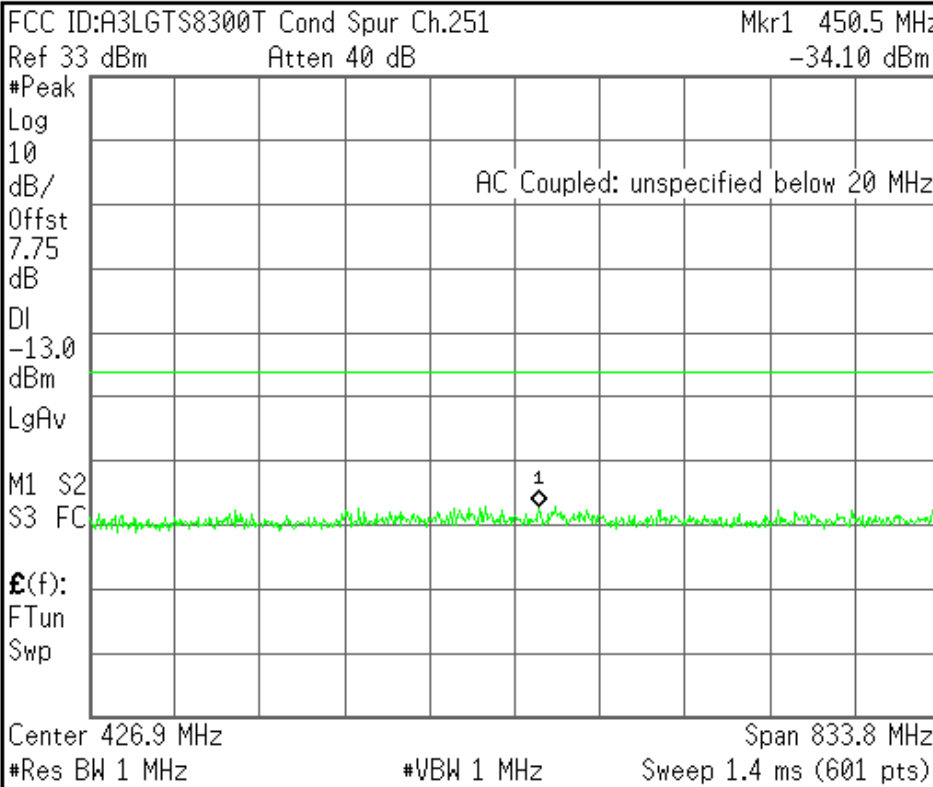
<b>Center Freq</b>	1.25500000 GHz
<b>Start Freq</b>	10.0000000 MHz
<b>Stop Freq</b>	2.50000000 GHz
<b>CF Step</b>	249.000000 MHz Auto Man
<b>Freq Offset</b>	0.00000000 Hz
<b>Signal Track</b>	On Off

File Operation Status, C:\TEMP.GIF file saved

Agilent

R T

Freq/Channel



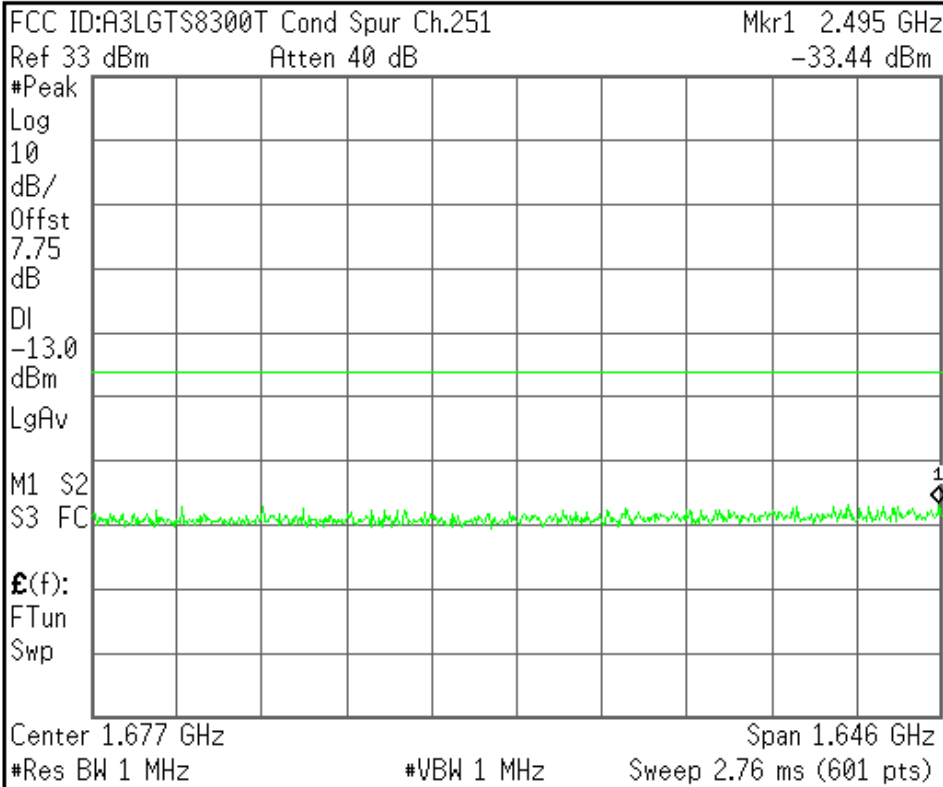
<b>Center Freq</b>	426.900000 MHz
<b>Start Freq</b>	10.0000000 MHz
<b>Stop Freq</b>	843.800000 MHz
<b>CF Step</b>	83.3800000 MHz Auto Man
<b>Freq Offset</b>	0.00000000 Hz
<b>Signal Track</b>	On Off

File Operation Status, C:\TEMP.GIF file saved

Agilent

R T

Freq/Channel



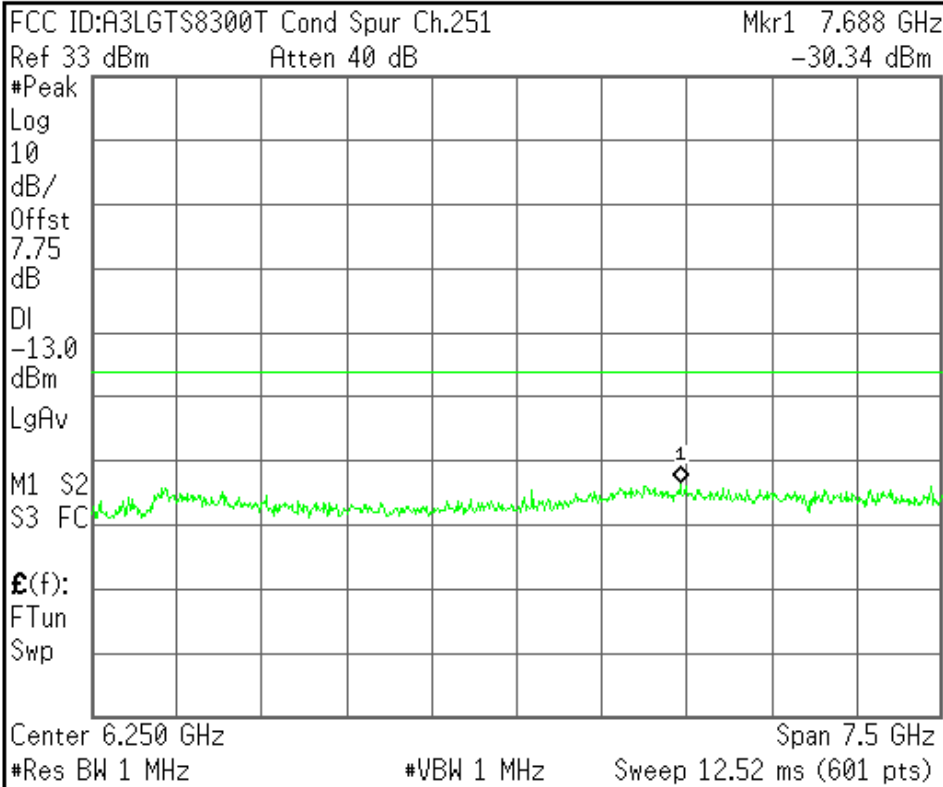
<b>Center Freq</b>	1.67690000 GHz
<b>Start Freq</b>	853.800000 MHz
<b>Stop Freq</b>	2.50000000 GHz
<b>CF Step</b>	164.620000 MHz Auto Man
<b>Freq Offset</b>	0.00000000 Hz
<b>Signal Track</b>	On Off

File Operation Status, C:\TEMP.GIF file saved

Agilent

R T

Freq/Channel



<b>Center Freq</b>	6.25000000 GHz
<b>Start Freq</b>	2.50000000 GHz
<b>Stop Freq</b>	10.00000000 GHz
<b>CF Step</b>	750.000000 MHz Auto Man
<b>Freq Offset</b>	0.00000000 Hz
<b>Signal Track</b>	On Off

File Operation Status, C:\TEMP.GIF file saved

Agilent

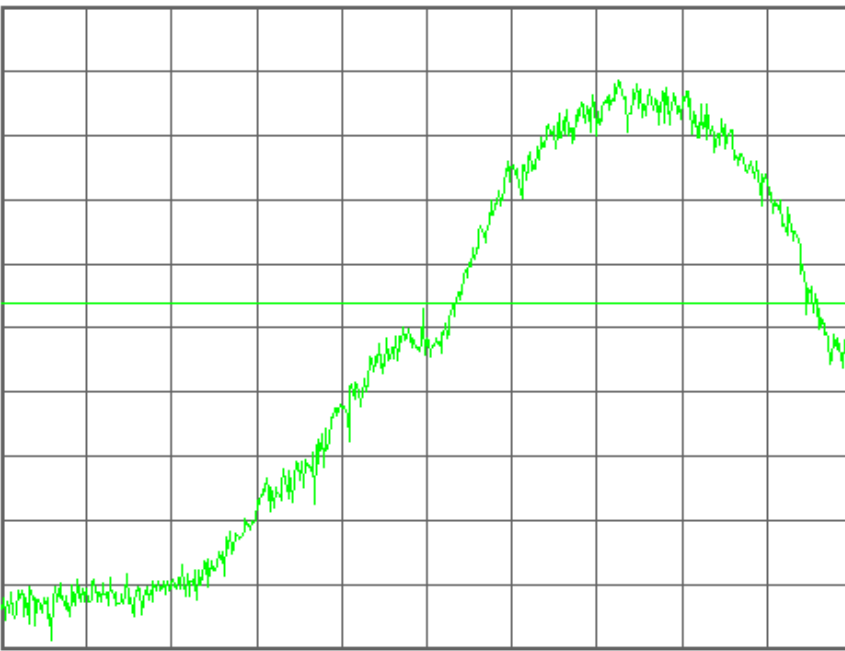
R T

Freq/Channel

FCC ID:A3LGTS8300T Band Edge Ch.128

Ref 33 dBm Atten 40 dB

#Avg  
Log  
10  
dB/  
Offst  
7.75  
dB  
DI  
-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)

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

Freq/Channel

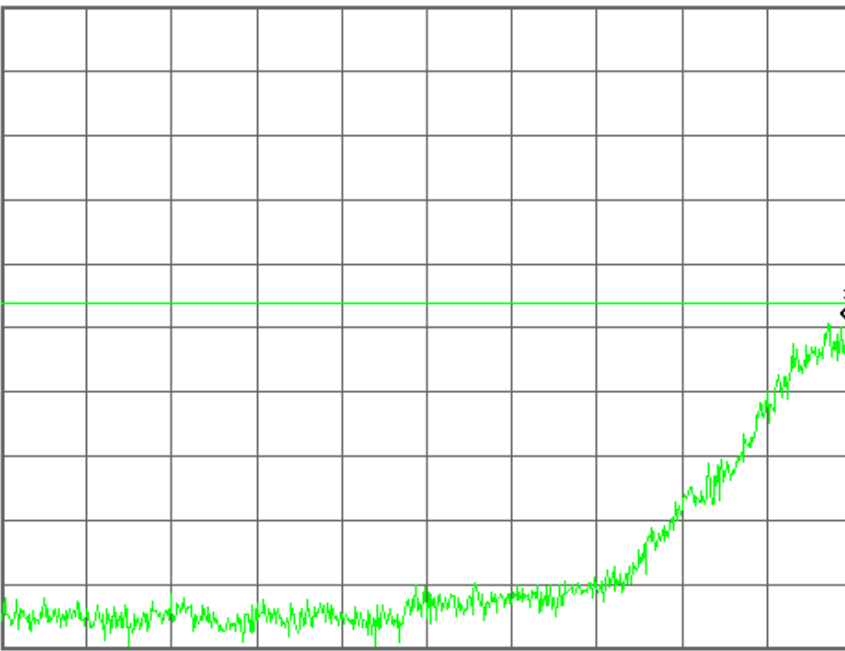
FCC ID:A3LGTS8300T Band Edge Ch.128

Mkr1 823.997 3 MHz

Ref 33 dBm Atten 40 dB

-16.03 dBm

#Avg  
Log  
10  
dB/  
Offst  
7.75  
dB  
DI  
-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)

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:A3LGT8300T Band Edge Ch.251

Ref 33 dBm Atten 40 dB

#Avg

Log

10

dB/

Offst

7.75

dB

DI

-13.0

dBm

PAvg

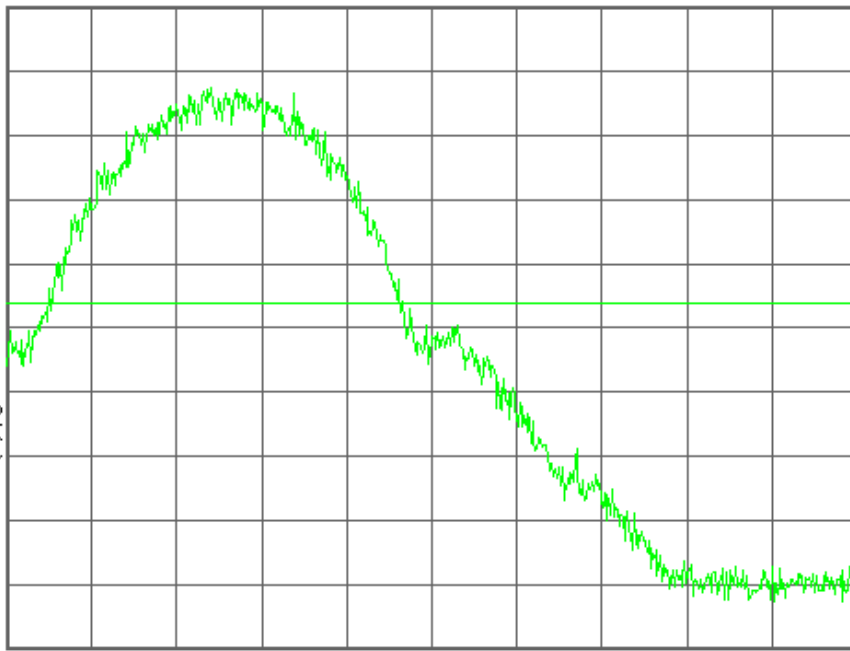
M1 S2

S3 FC

$\mathcal{E}(f)$ :

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:A3LGT8300T Band Edge Ch.251

Mkr1 849.014 7 MHz

Ref 33 dBm Atten 40 dB

-16.41 dBm

#Avg

Log

10

dB/

Offst

7.75

dB

DI

-13.0

dBm

PAvg

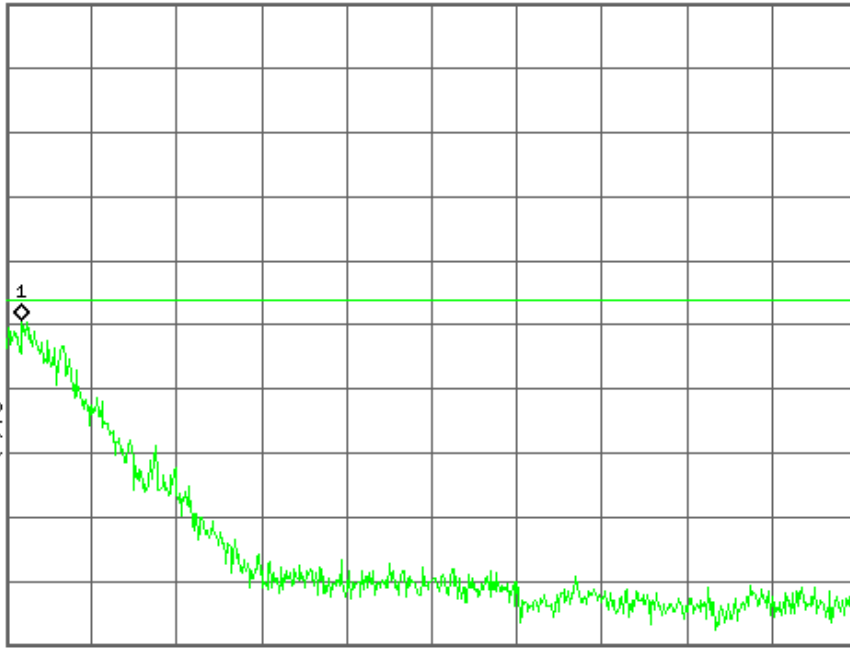
M1 S2

S3 FC

$\mathcal{E}(f)$ :

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

Ch Freq 1.8502 GHz Trig Free

Occupied Bandwidth

FCC ID:A3LGTS8300T 0BW Ch.512  
Ref 30 dBm Atten 40 dB

Center 1.850 200 GHz Span 1 MHz  
#Res BW 3 kHz #VBW 3 kHz Sweep 134 ms (601 pts)

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
245.8955 kHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>		-250.064 Hz
<b>x dB Bandwidth</b>		310.175 kHz

**Freq/Channel**

**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

Ch Freq 1.88 GHz Trig Free

Occupied Bandwidth

FCC ID:A3LGTS8300T 0BW Ch.661  
Ref 30 dBm Atten 40 dB

Center 1.880 000 GHz Span 1 MHz  
#Res BW 3 kHz #VBW 3 kHz Sweep 134 ms (601 pts)

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
242.8170 kHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>		-196.701 Hz
<b>x dB Bandwidth</b>		304.020 kHz

**Freq/Channel**

**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

<b>Ch Freq</b> 1.9098 GHz		<b>Trig</b> Free
Occupied Bandwidth		
FCC ID:A3LGTS8300T 0BW Ch.810 Ref 30 dBm Atten 40 dB		
Center 1.909 800 GHz		Span 1 MHz
#Res BW 3 kHz		#VBW 3 kHz Sweep 134 ms (601 pts)
<b>Occupied Bandwidth</b> 246.9630 kHz		<b>Occ BW % Pwr</b> 99.00 % <b>x dB</b> -26.00 dB
<b>Transmit Freq Error</b> 774.310 Hz <b>x dB Bandwidth</b> 307.473 kHz		
File Operation Status, C:\TEMP.GIF file saved		

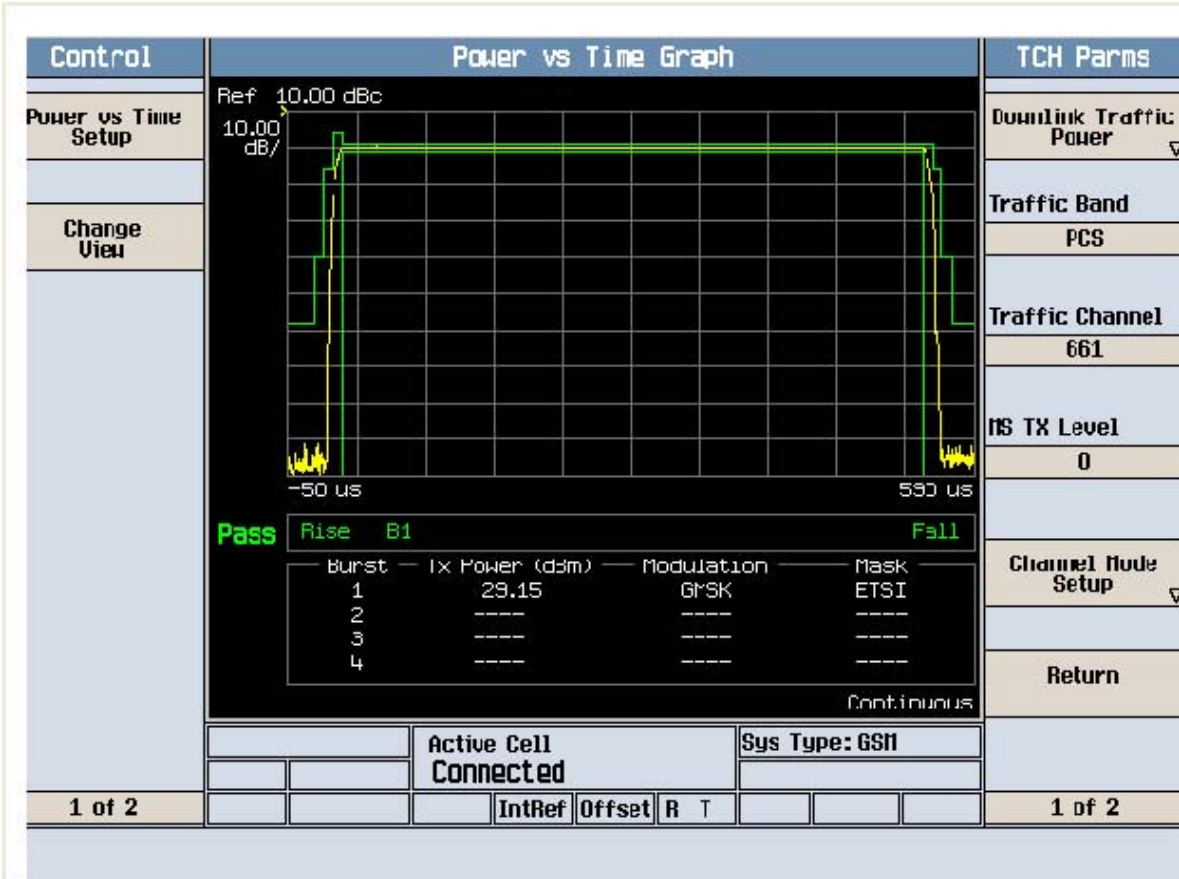
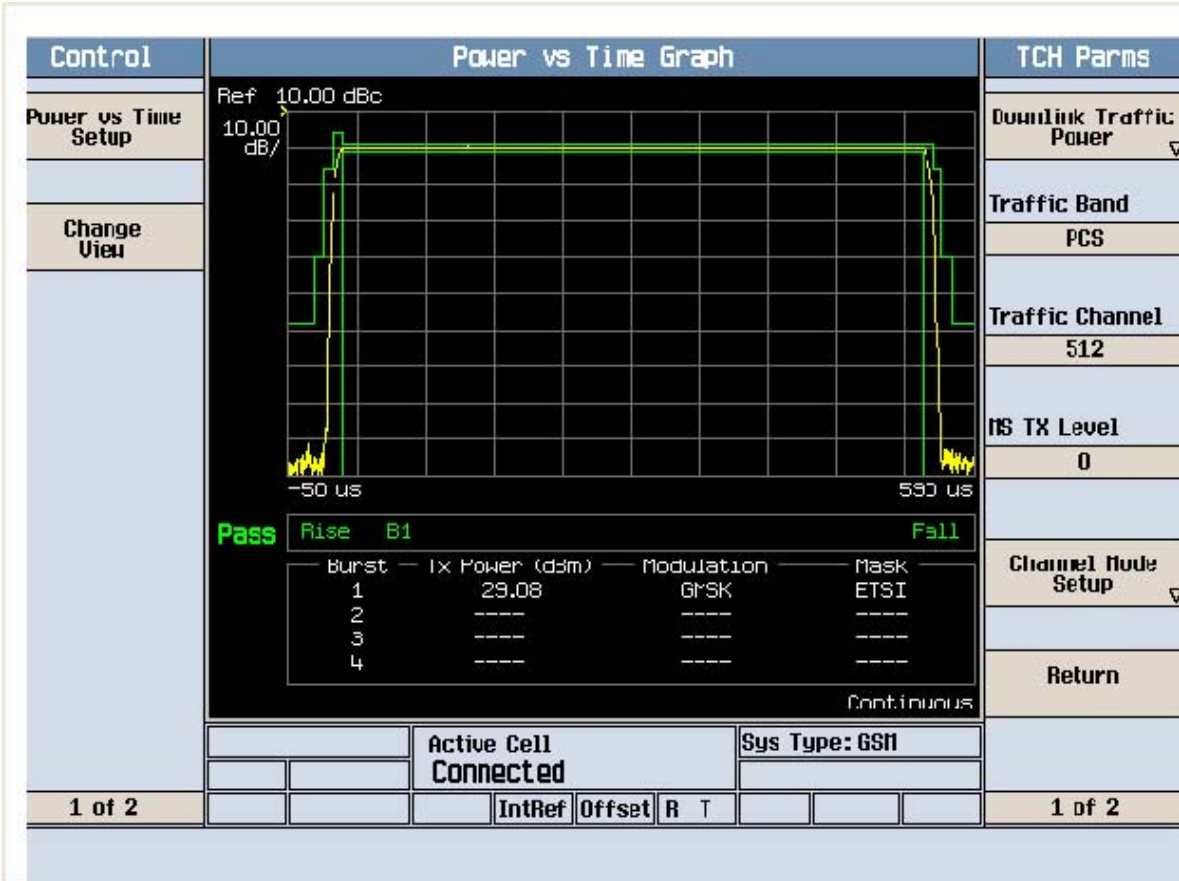
<b>Freq/Channel</b>
<b>Center Freq</b> 1.90980000 GHz
<b>Start Freq</b> 1.90930000 GHz
<b>Stop Freq</b> 1.91030000 GHz
<b>CF Step</b> 100.000000 kHz Auto Man
<b>Freq Offset</b> 0.00000000 Hz
<b>Signal Track</b> On Off

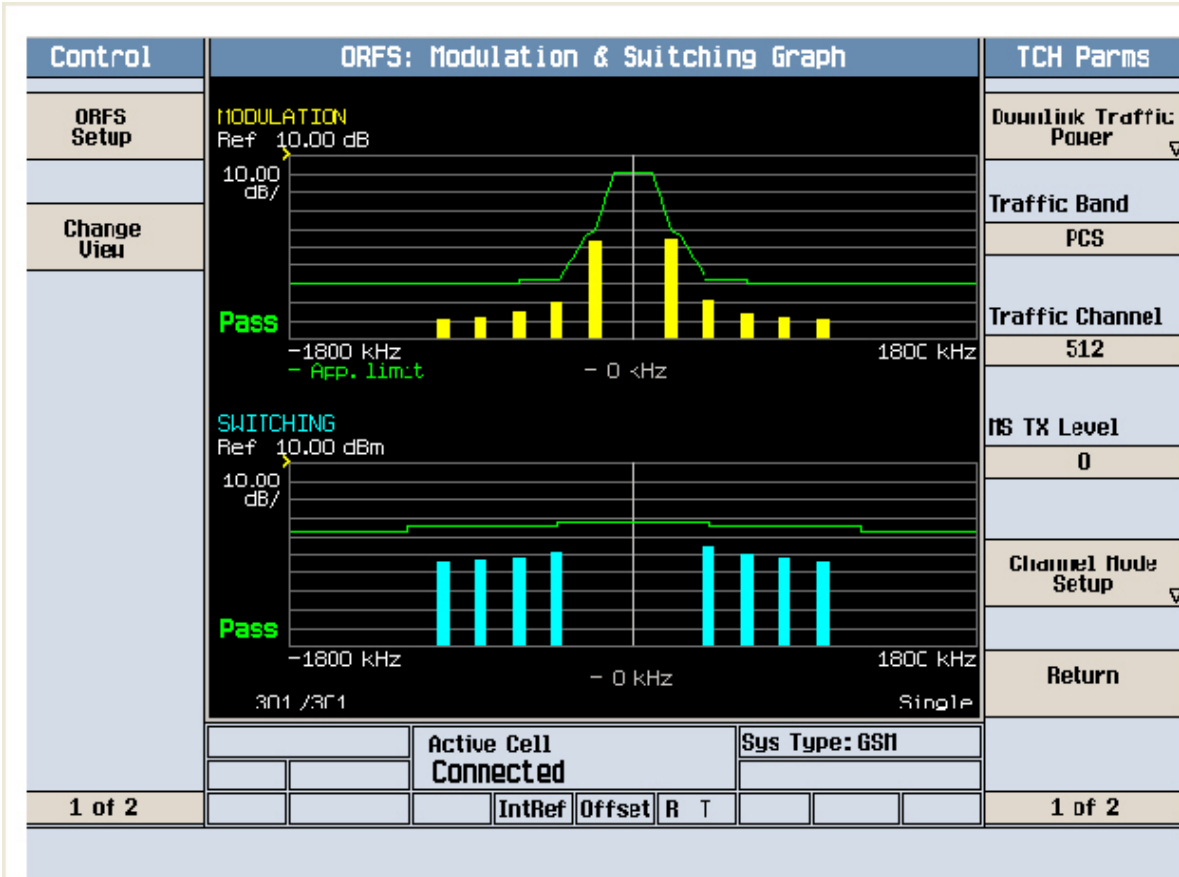
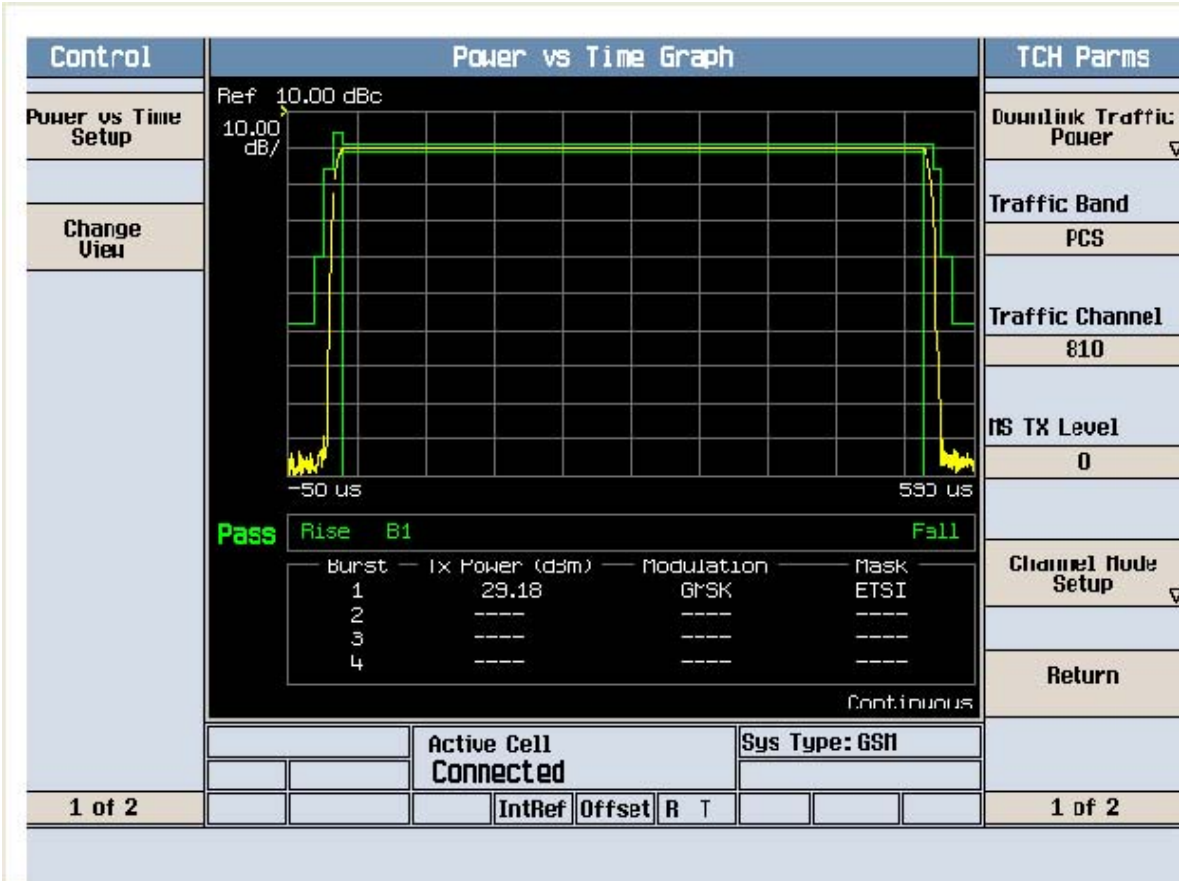
FCC ID : A3LS8300T Transmit Power 512CH

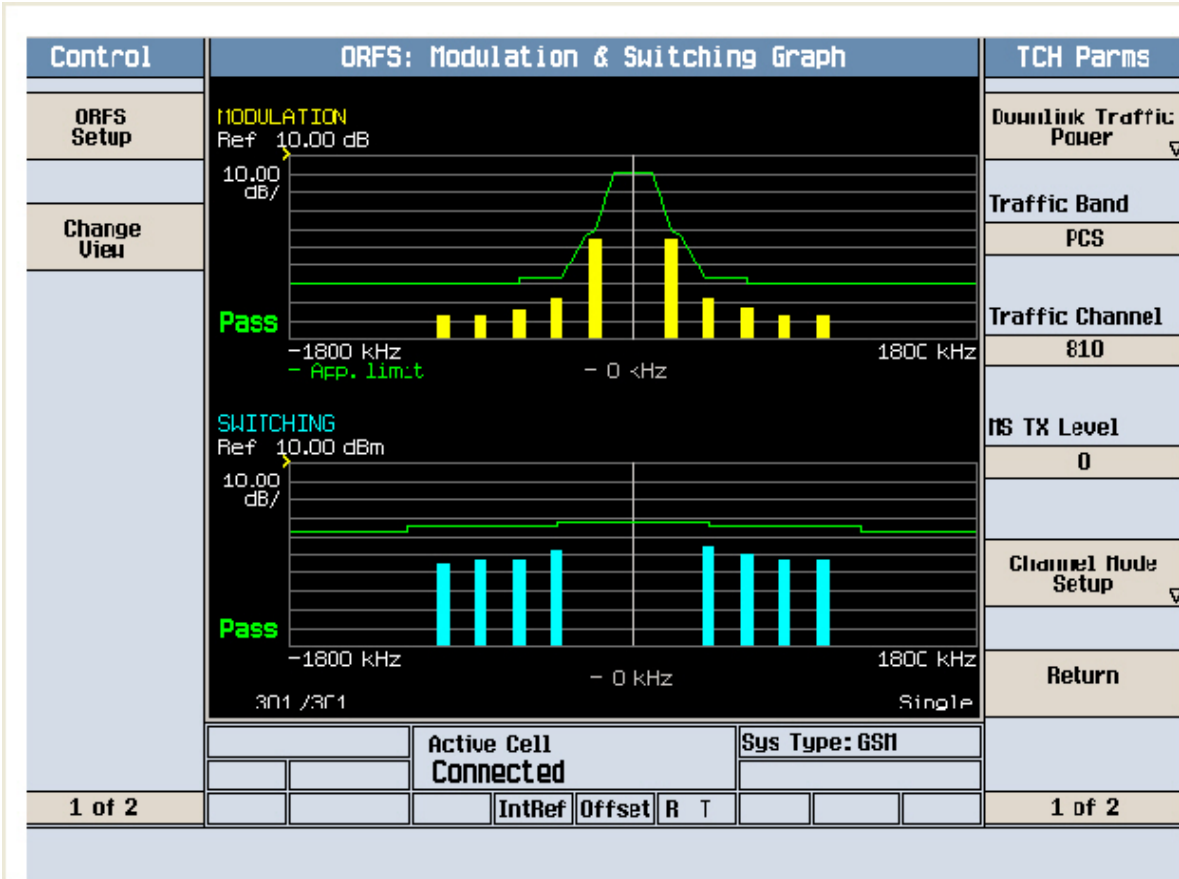
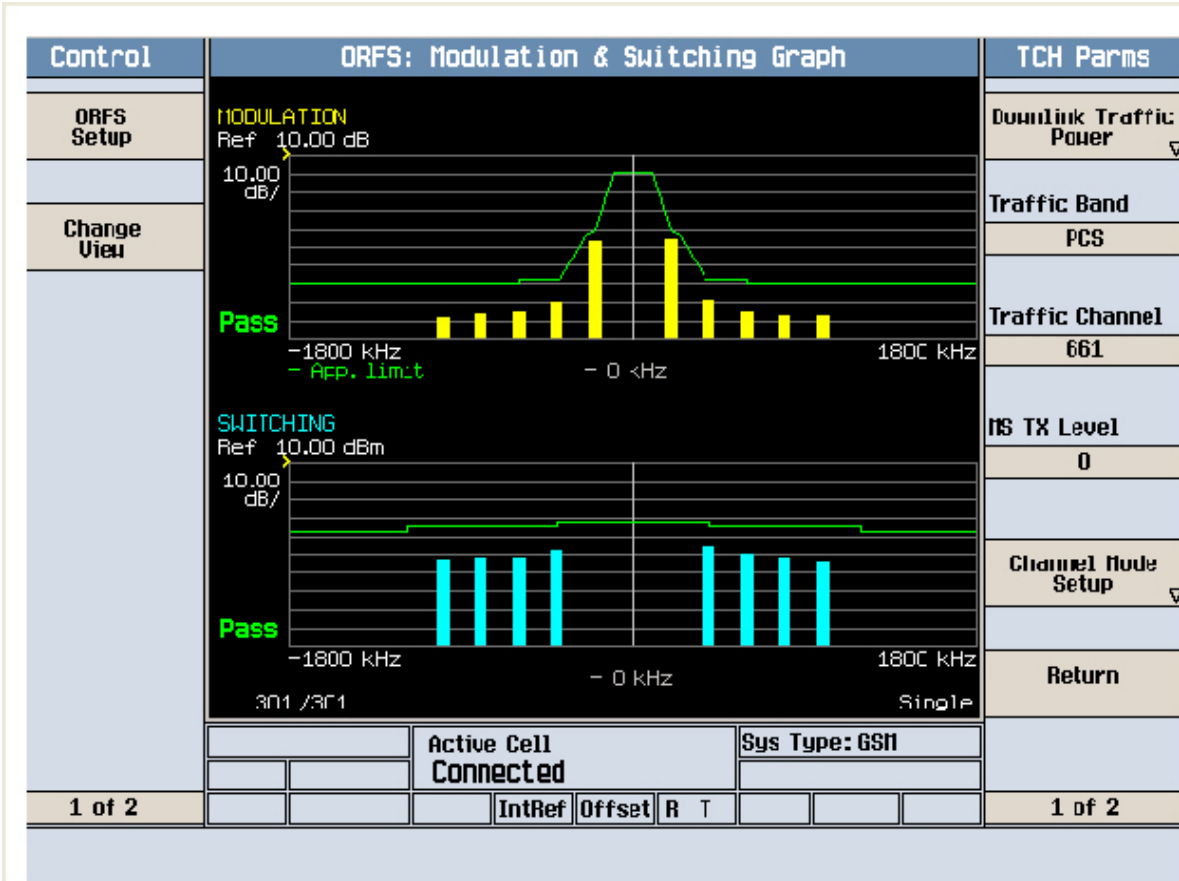
Measurement/Instrument Screen										
Control	Transmit Power						TCH Parms			
Transmit Power Setup Setup Window Positions					Burst 1	Burst 2	Burst 3	Burst 4	Downlink Traffic Power Traffic Band PCS Traffic Channel 512 MS TX Level 0 Channel Mode Setup Return	
	<b>Burst Power</b>				29.09	----	----	----		
	<b>Estimated Carrier Power</b>				29.09	----	----	----		
					Single					
<b>Phase &amp; Frequency Error</b>										
		Peak Phase °		RMS Phase °		Frequency Hz				
Minimum		2.20	0.91	-40.61						
Maximum		4.17	1.32	-19.40						
Average		3.08	1.11	-30.19						
Pass/Fail		Pass		Pass		Pass				
		50 / 50				Single				
		Active Cell Connected				Sys Type: GSM				
1 of 2		IntRef	Offset	R T						1 of 2

Control	Transmit Power								TCH Parms		
Transmit Power Setup					Burst 1	Burst 2	Burst 3	Burst 4	Downlink Traffic Power		
	Burst Power				29.16	----	----	----	Traffic Band		
Swap Window Positions	Estimated Carrier Power				29.16	----	----	----	PCS		
									Traffic Channel		
									661		
									MS TX Level		
									0		
								Channel Mode Setup			
								Return			
								50 / 50			
								Single			
				Active Cell Connected				Sys Type: GSM			
				IntRef	Offset	R	T				
1 of 2								1 of 2			

Control	Transmit Power								TCH Parms		
Transmit Power Setup					Burst 1	Burst 2	Burst 3	Burst 4	Downlink Traffic Power		
	Burst Power				29.20	----	----	----	Traffic Band		
Swap Window Positions	Estimated Carrier Power				29.20	----	----	----	PCS		
									Traffic Channel		
									810		
									MS TX Level		
									0		
								Channel Mode Setup			
								Return			
								50 / 50			
								Single			
				Active Cell Connected				Sys Type: GSM			
				IntRef	Offset	R	T				
1 of 2								1 of 2			







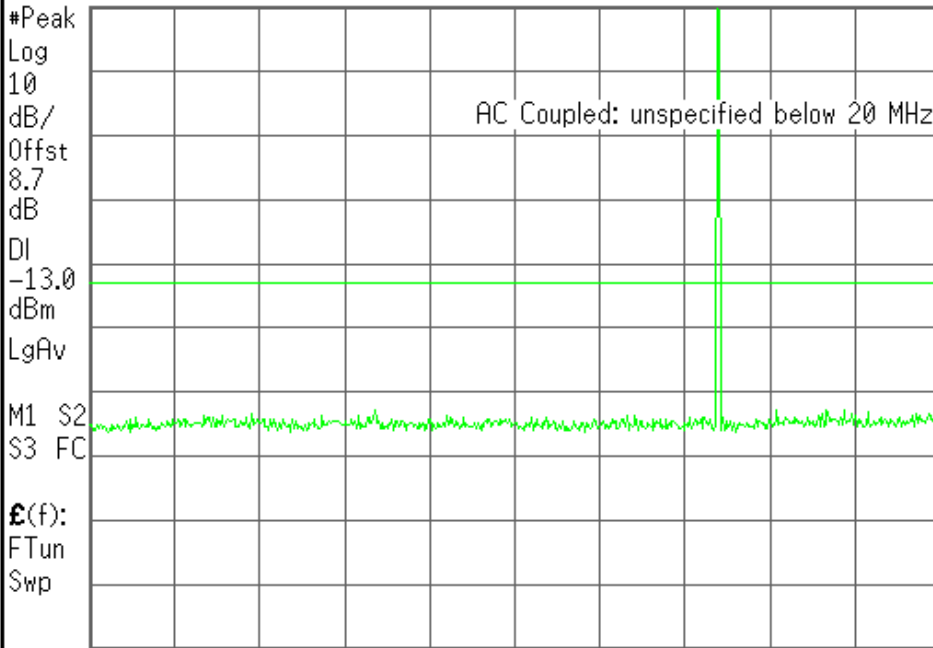
Agilent

R T

Freq/Channel

FCC ID:A3LGTS8300T Cond Spur Ch.512

Ref 30 dBm Atten 40 dB



Center Freq  
1.25500000 GHz

Start Freq  
10.0000000 MHz

Stop Freq  
2.50000000 GHz

CF Step  
249.000000 MHz  
Auto Man

Freq Offset  
0.00000000 Hz

Signal Track  
On Off

Center 1.255 GHz Span 2.49 GHz  
#Res BW 1 MHz #VBW 1 MHz Sweep 4.16 ms (601 pts)

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Agilent

R T

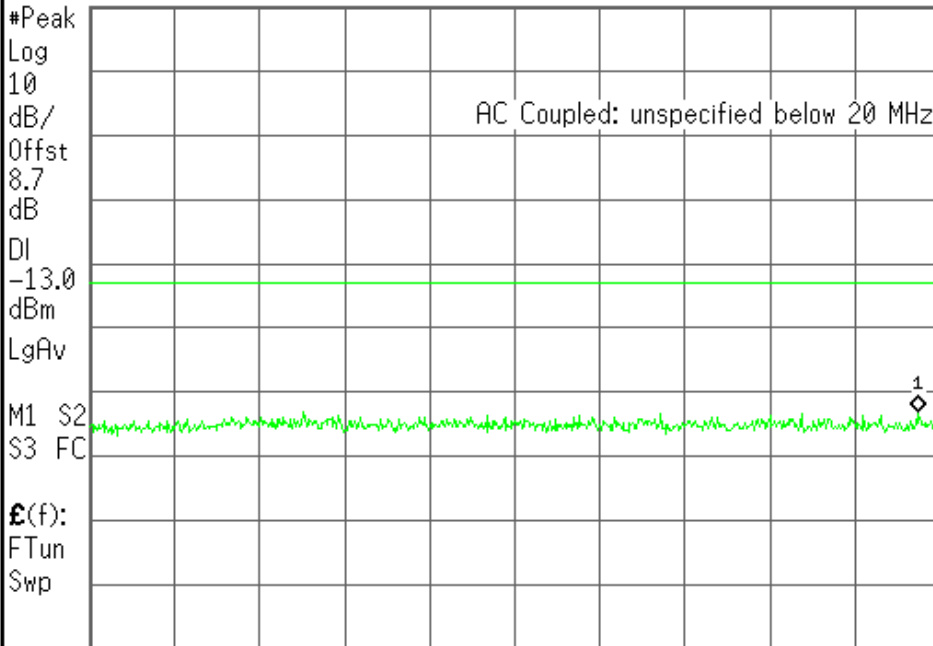
Freq/Channel

FCC ID:A3LGTS8300T Cond Spur Ch.512

Mkr1 1.794 GHz

Ref 30 dBm Atten 40 dB

-33.12 dBm



Center Freq  
926.350000 MHz

Start Freq  
10.0000000 MHz

Stop Freq  
1.84270000 GHz

CF Step  
183.270000 MHz  
Auto Man

Freq Offset  
0.00000000 Hz

Signal Track  
On Off

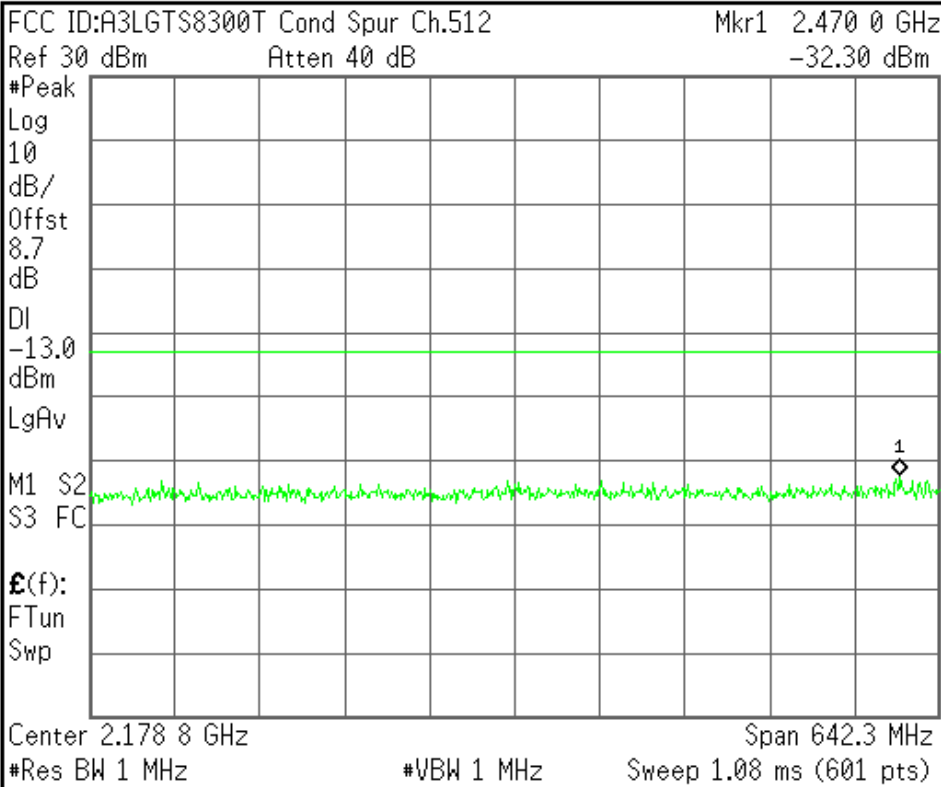
Center 926 MHz Span 1.833 GHz  
#Res BW 1 MHz #VBW 1 MHz Sweep 3.08 ms (601 pts)

File Operation Status, C:\TEMP.GIF file saved

Agilent

R T

Freq/Channel



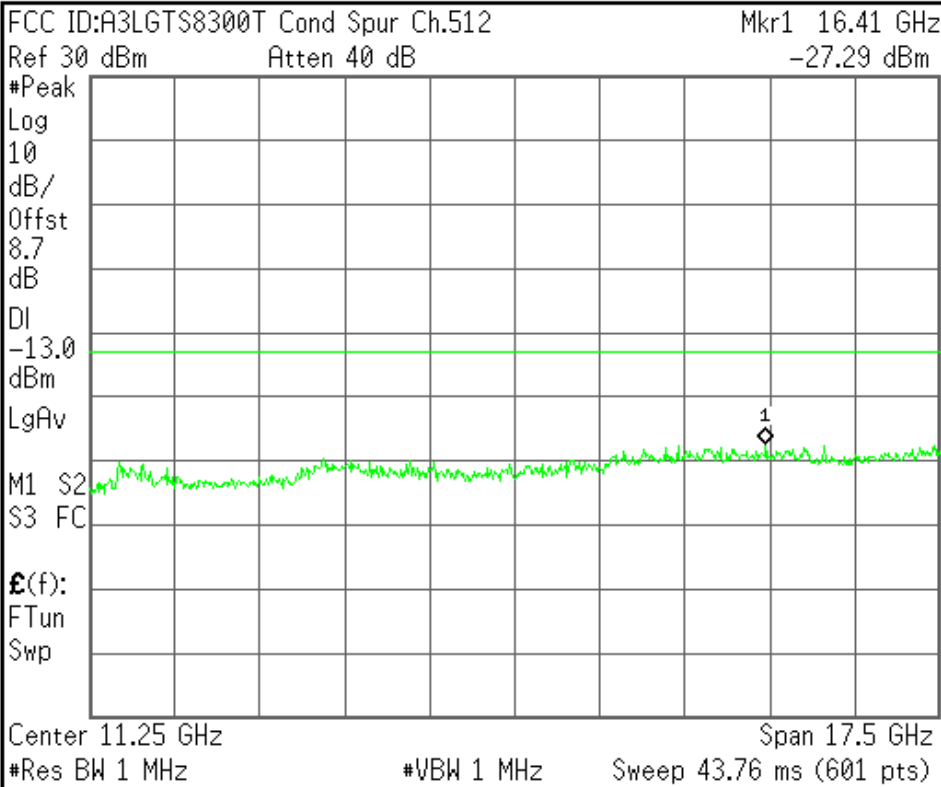
<b>Center Freq</b> 2.17885000 GHz
<b>Start Freq</b> 1.85770000 GHz
<b>Stop Freq</b> 2.50000000 GHz
<b>CF Step</b> 64.2300000 MHz Auto Man
<b>Freq Offset</b> 0.00000000 Hz
<b>Signal Track</b> On Off

File Operation Status, C:\TEMP.GIF file saved

Agilent

R T

Freq/Channel



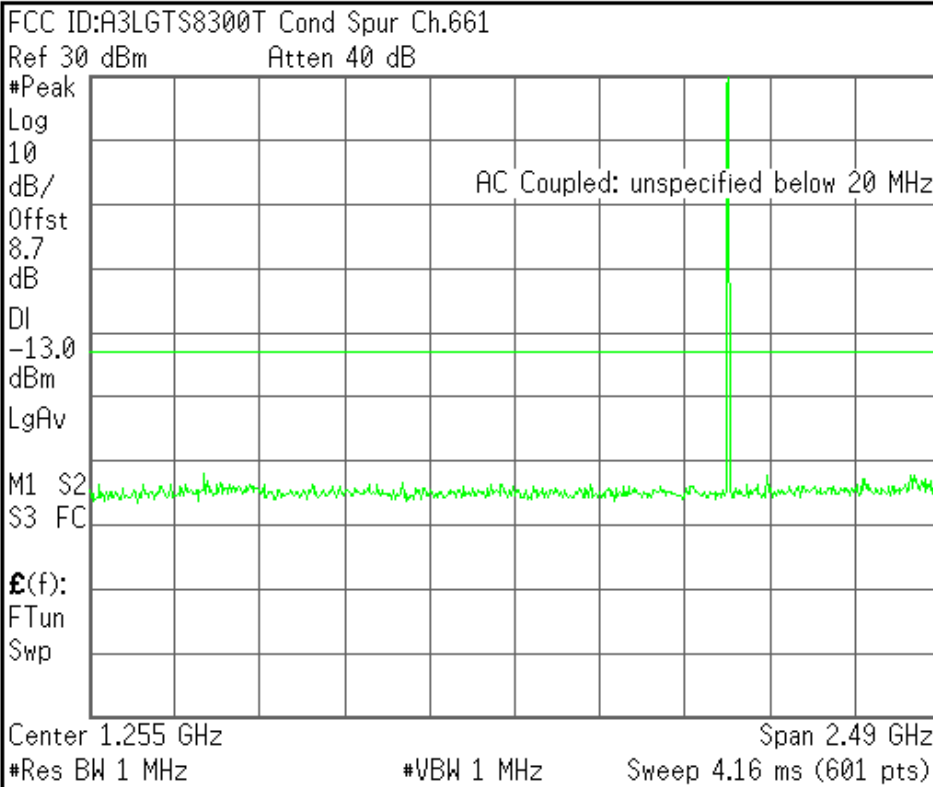
<b>Center Freq</b> 11.2500000 GHz
<b>Start Freq</b> 2.50000000 GHz
<b>Stop Freq</b> 20.0000000 GHz
<b>CF Step</b> 1.75000000 GHz Auto Man
<b>Freq Offset</b> 0.00000000 Hz
<b>Signal Track</b> On Off

File Operation Status, C:\TEMP.GIF file saved

Agilent

R T

Freq/Channel



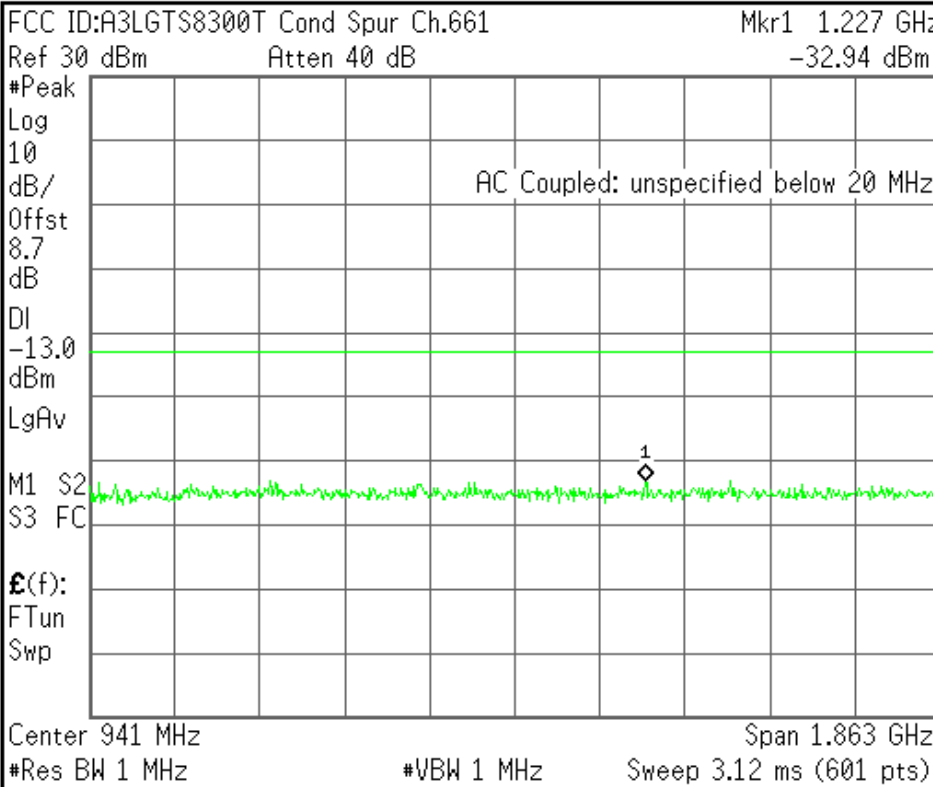
<b>Center Freq</b> 1.25500000 GHz
<b>Start Freq</b> 10.0000000 MHz
<b>Stop Freq</b> 2.50000000 GHz
<b>CF Step</b> 249.000000 MHz Auto Man
<b>Freq Offset</b> 0.00000000 Hz
<b>Signal Track</b> On Off

File Operation Status, C:\TEMP.GIF file saved

Agilent

R T

Freq/Channel



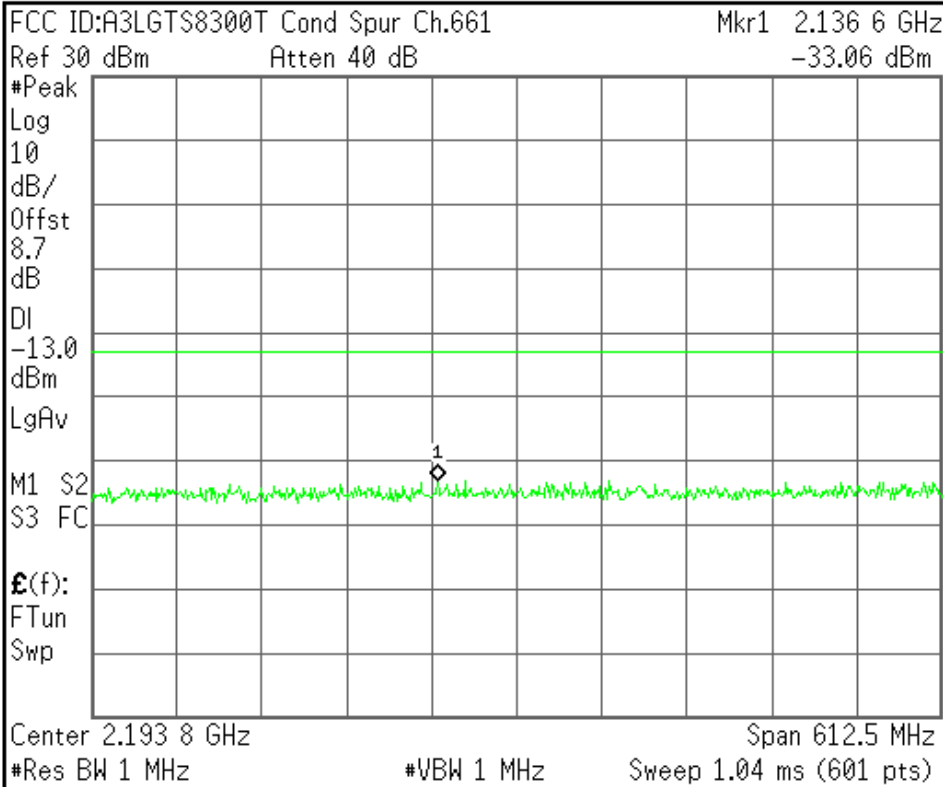
<b>Center Freq</b> 941.250000 MHz
<b>Start Freq</b> 10.0000000 MHz
<b>Stop Freq</b> 1.87250000 GHz
<b>CF Step</b> 186.250000 MHz Auto Man
<b>Freq Offset</b> 0.00000000 Hz
<b>Signal Track</b> On Off

File Operation Status, C:\TEMP.GIF file saved

Agilent

R T

Freq/Channel



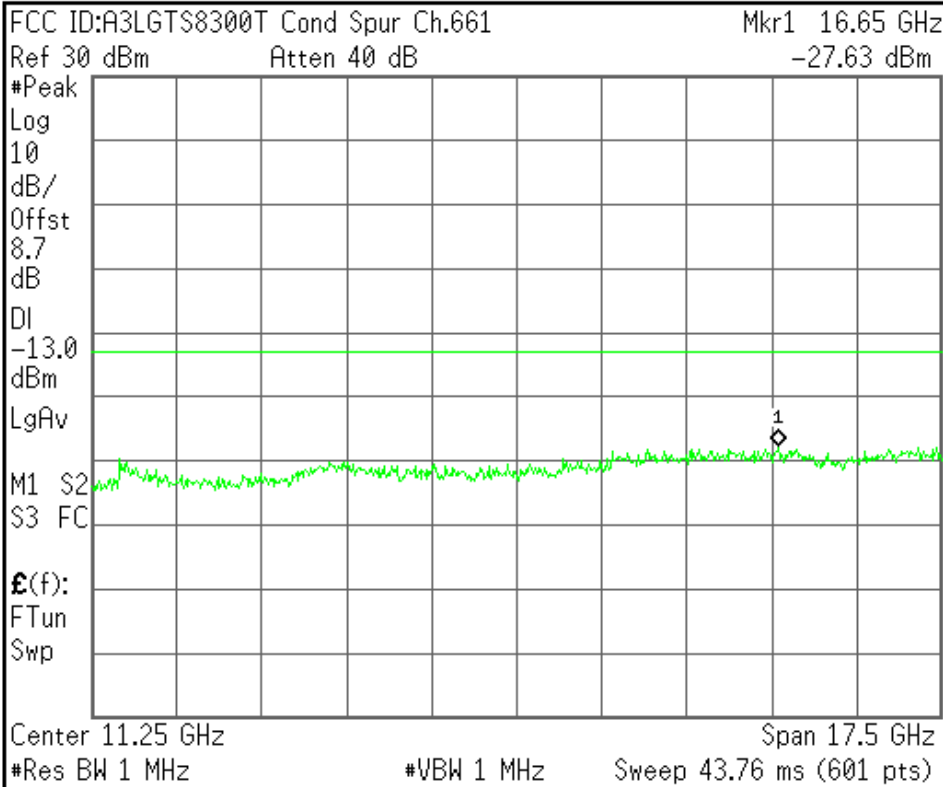
<b>Center Freq</b> 2.19375000 GHz
<b>Start Freq</b> 1.88750000 GHz
<b>Stop Freq</b> 2.50000000 GHz
<b>CF Step</b> 61.2500000 MHz Auto Man
<b>Freq Offset</b> 0.00000000 Hz
<b>Signal Track</b> On Off

File Operation Status, C:\TEMP.GIF file saved

Agilent

R T

Freq/Channel



<b>Center Freq</b> 11.2500000 GHz
<b>Start Freq</b> 2.50000000 GHz
<b>Stop Freq</b> 20.0000000 GHz
<b>CF Step</b> 1.75000000 GHz Auto Man
<b>Freq Offset</b> 0.00000000 Hz
<b>Signal Track</b> On Off

File Operation Status, C:\TEMP.GIF file saved

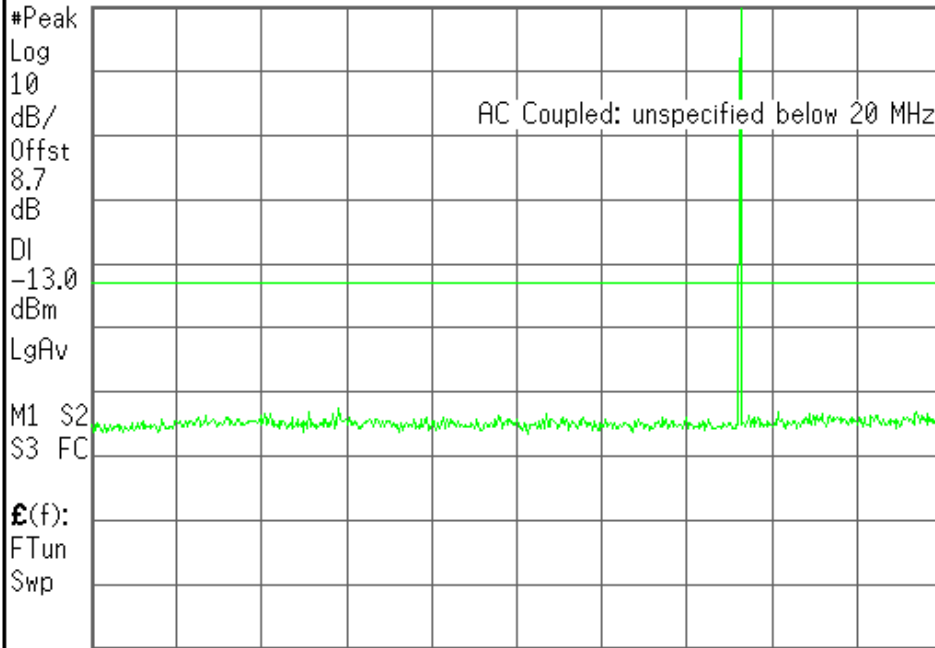
Agilent

R T

Freq/Channel

FCC ID:A3LGTS8300T Cond Spur Ch.810

Ref 30 dBm Atten 40 dB



Center Freq  
1.25500000 GHz

Start Freq  
10.0000000 MHz

Stop Freq  
2.50000000 GHz

CF Step  
249.000000 MHz  
Auto Man

Freq Offset  
0.00000000 Hz

Signal Track  
On Off

Center 1.255 GHz Span 2.49 GHz  
#Res BW 1 MHz #VBW 1 MHz Sweep 4.16 ms (601 pts)

File Operation Status, C:\TEMP.GIF file saved

Agilent

R T

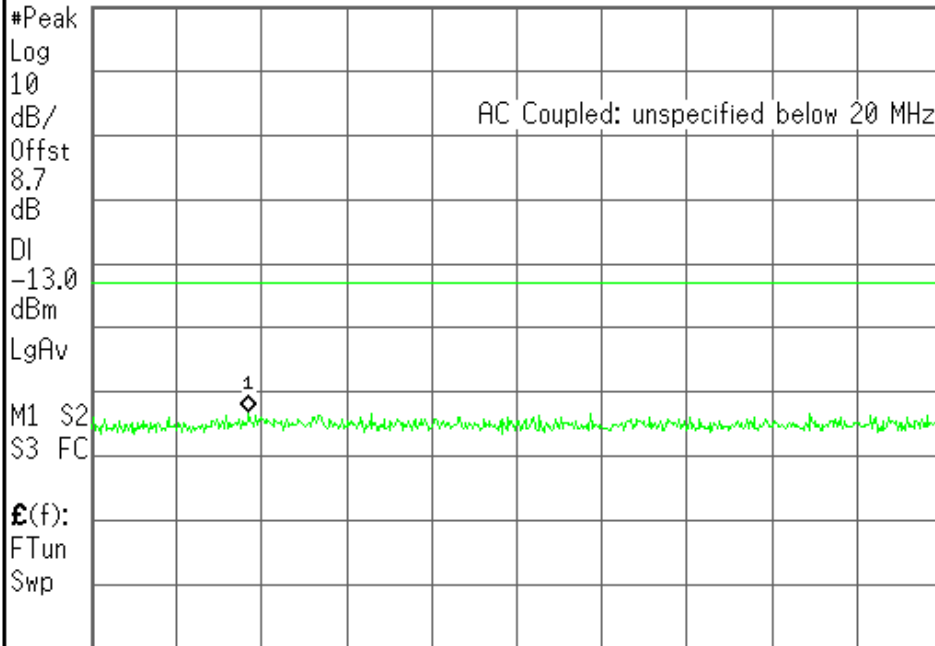
Freq/Channel

FCC ID:A3LGTS8300T Cond Spur Ch.810

Ref 30 dBm Atten 40 dB

Mkr1 360 MHz

-33.06 dBm



Center Freq  
956.150000 MHz

Start Freq  
10.0000000 MHz

Stop Freq  
1.90230000 GHz

CF Step  
189.230000 MHz  
Auto Man

Freq Offset  
0.00000000 Hz

Signal Track  
On Off

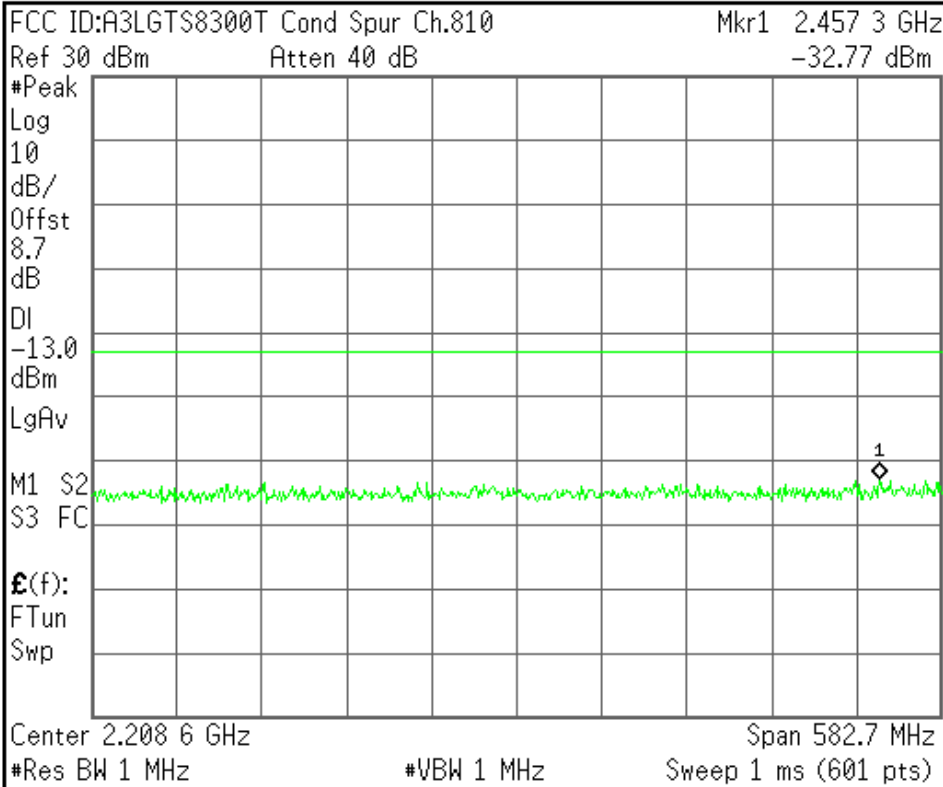
Center 956 MHz Span 1.892 GHz  
#Res BW 1 MHz #VBW 1 MHz Sweep 3.16 ms (601 pts)

File Operation Status, C:\TEMP.GIF file saved

Agilent

R T

Freq/Channel



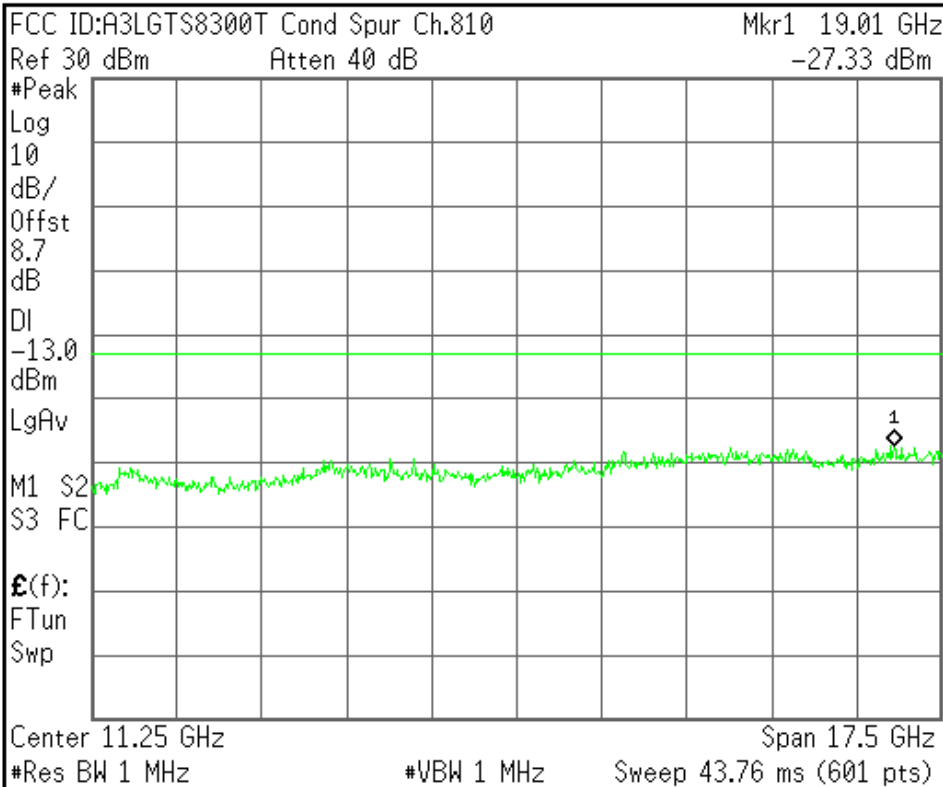
<b>Center Freq</b> 2.20865000 GHz
<b>Start Freq</b> 1.91730000 GHz
<b>Stop Freq</b> 2.50000000 GHz
<b>CF Step</b> 58.2700000 MHz Auto Man
<b>Freq Offset</b> 0.00000000 Hz
<b>Signal Track</b> On Off

File Operation Status, C:\TEMP.GIF file saved

Agilent

R T

Freq/Channel



<b>Center Freq</b> 11.2500000 GHz
<b>Start Freq</b> 2.50000000 GHz
<b>Stop Freq</b> 20.0000000 GHz
<b>CF Step</b> 1.75000000 GHz Auto Man
<b>Freq Offset</b> 0.00000000 Hz
<b>Signal Track</b> On Off

File Operation Status, C:\TEMP.GIF file saved

Agilent

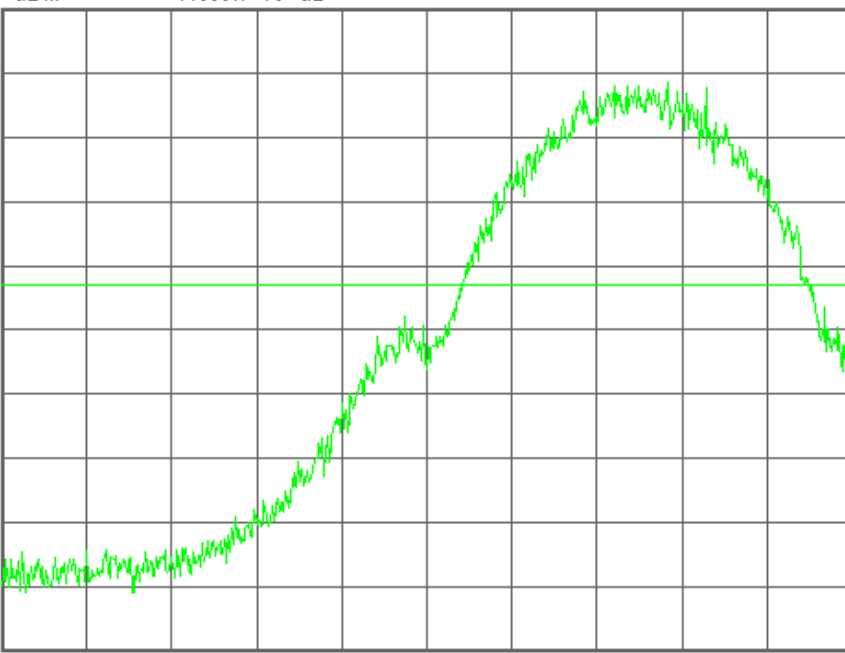
R T

Freq/Channel

FCC ID:A3LGTS8300T Band Edge Ch.512

Ref 30 dBm Atten 40 dB

#Avg  
Log  
10  
dB/  
Offst  
8.7  
dB  
DI  
-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)

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

Freq/Channel

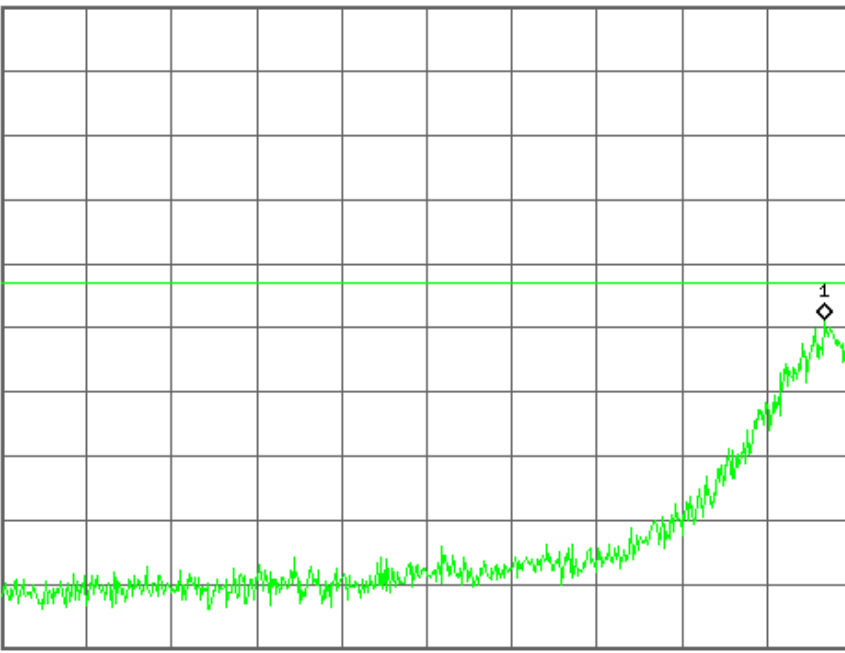
FCC ID:A3LGTS8300T Band Edge Ch.512

Mkr1 1.849 973 3 GHz

Ref 30 dBm Atten 40 dB

-18.65 dBm

#Avg  
Log  
10  
dB/  
Offst  
8.7  
dB  
DI  
-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)

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:A3LGTS8300T Band Edge Ch.810

Ref 30 dBm Atten 40 dB

#Avg

Log

10

dB/

Offst

8.7

dB

DI

-13.0

dBm

PAvg

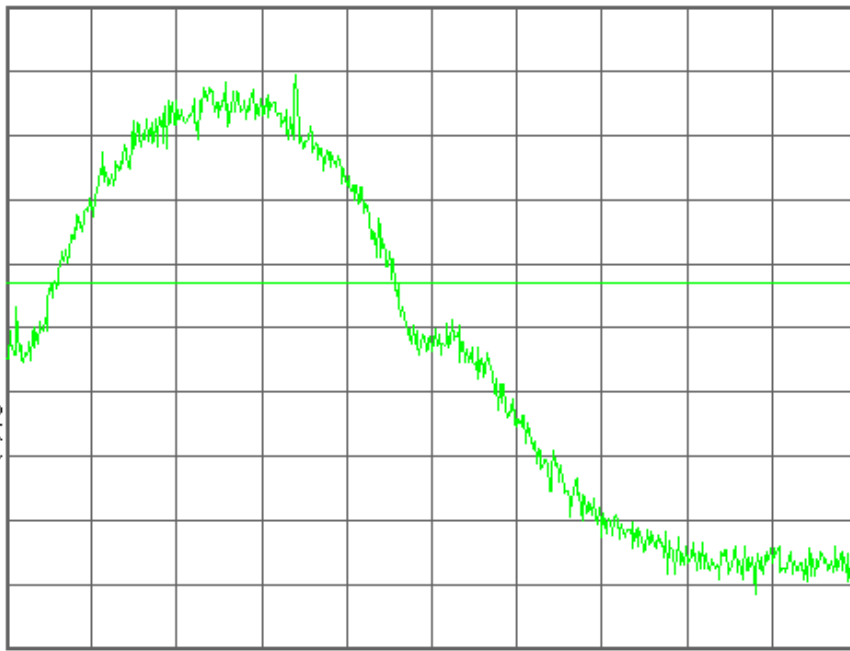
M1 S2

S3 FC

$\mathcal{E}(f)$ :

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:A3LGTS8300T Band Edge Ch.810

Mkr1 1.910 017 6 GHz

Ref 30 dBm Atten 40 dB

-19.22 dBm

#Avg

Log

10

dB/

Offst

8.7

dB

DI

-13.0

dBm

PAvg

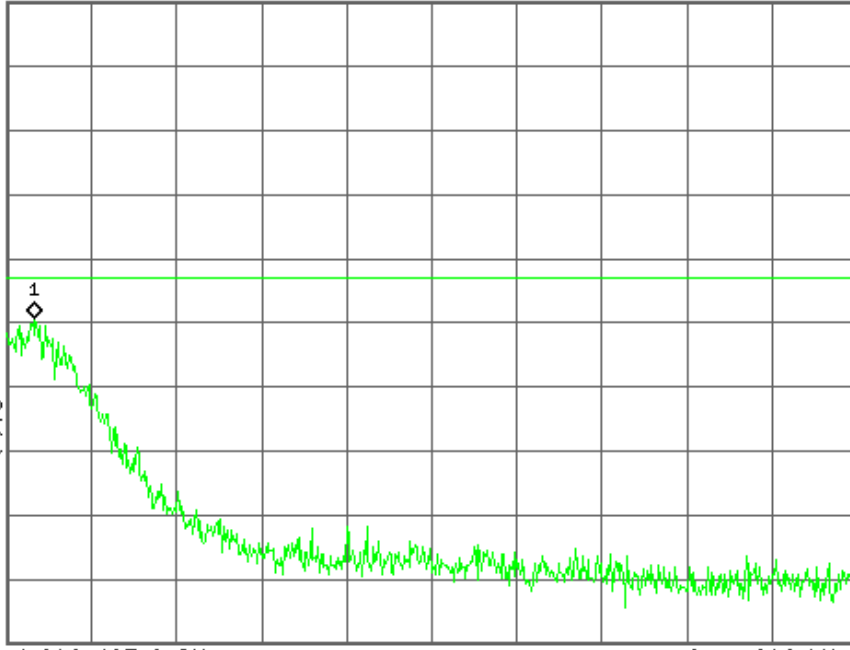
M1 S2

S3 FC

$\mathcal{E}(f)$ :

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:A3LGTS8300T P.A.R Ch.661

Mkr1 0 Hz

Ref 36 dBm

Atten 40 dB

-0.02 dB

#Avg

Log

10

dB/

Offst

8.7

dB

PAvg

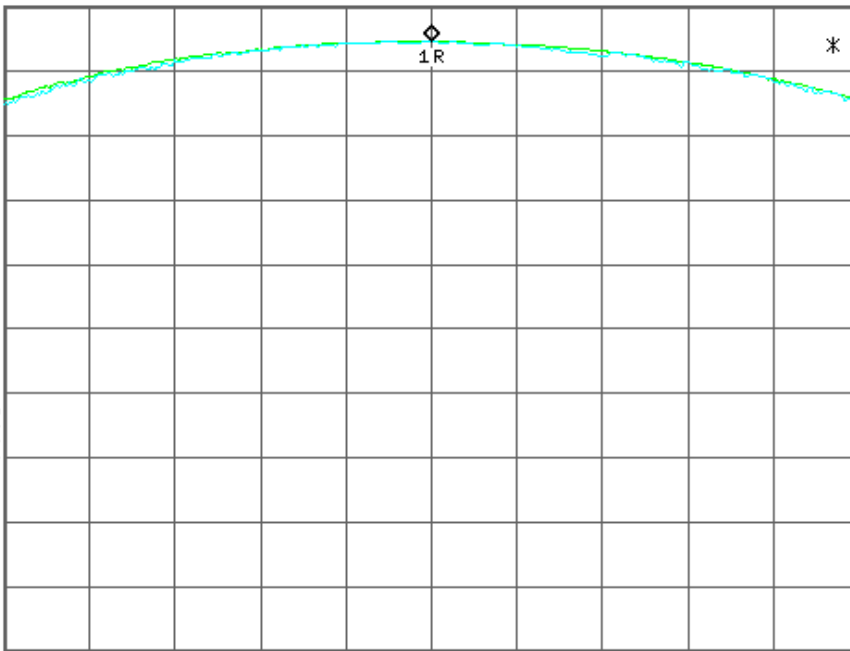
V1 V2

S3 FC

$\mathcal{E}(f)$ :

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 3 MHz

Sweep 1 ms (601 pts)

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EDGE850

Agilent

R T

<b>Ch Freq</b> 824.2 MHz		<b>Trig</b> Free	
Occupied Bandwidth			
FCC ID:A3LGTS8300T 0BW Ch.128 EDGE Ref 27 dBm Atten 30 dB			
#Peak			
Center	824.200 MHz	Span	1 MHz
#Res BW	3 kHz	#VBW	3 kHz
		Sweep	134 ms (601 pts)
<b>Occupied Bandwidth</b>		<b>Occ BW % Pwr</b>	99.00 %
242.5352 kHz		<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	1.159 kHz		
<b>x dB Bandwidth</b>	312.789 kHz		

<b>Center Freq</b>	824.200000 MHz
<b>Start Freq</b>	823.700000 MHz
<b>Stop Freq</b>	824.700000 MHz
<b>CF Step</b>	100.000000 kHz
	Auto Man
<b>Freq Offset</b>	0.00000000 Hz
<b>Signal Track</b>	On Off

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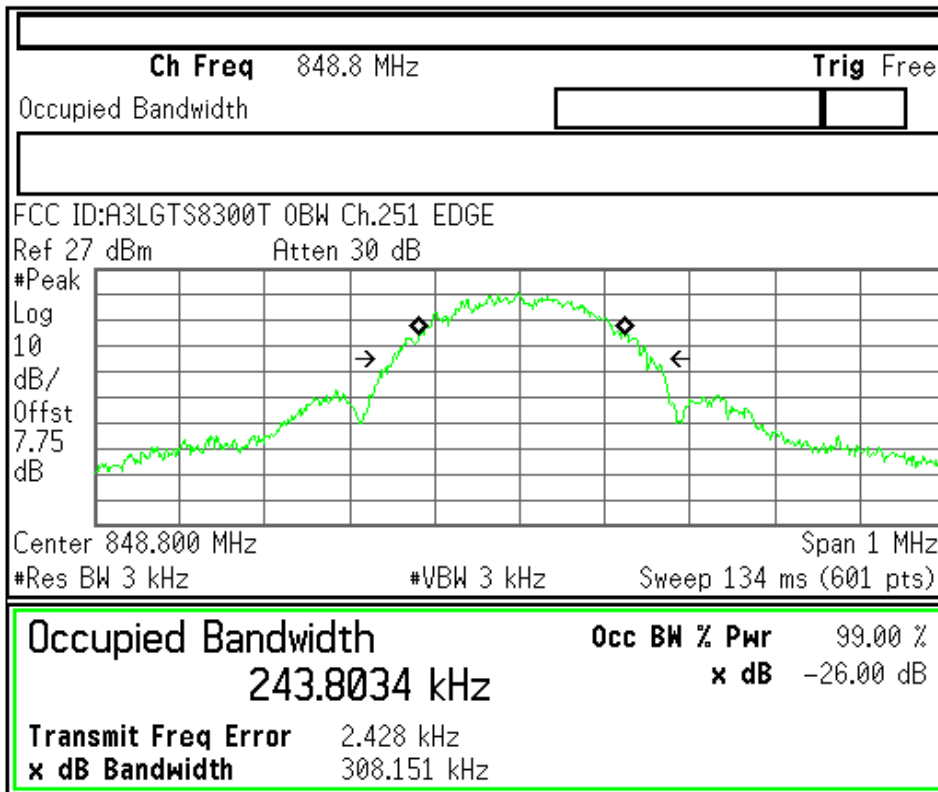
Agilent

R T

<b>Ch Freq</b> 836.6 MHz		<b>Trig</b> Free	
Occupied Bandwidth			
FCC ID:A3LGTS8300T 0BW Ch.190 EDGE Ref 27 dBm Atten 30 dB			
#Peak			
Center	836.600 MHz	Span	1 MHz
#Res BW	3 kHz	#VBW	3 kHz
		Sweep	134 ms (601 pts)
<b>Occupied Bandwidth</b>		<b>Occ BW % Pwr</b>	99.00 %
239.7404 kHz		<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	625.898 Hz		
<b>x dB Bandwidth</b>	306.134 kHz		

<b>Center Freq</b>	836.600000 MHz
<b>Start Freq</b>	836.100000 MHz
<b>Stop Freq</b>	837.100000 MHz
<b>CF Step</b>	100.000000 kHz
	Auto Man
<b>Freq Offset</b>	0.00000000 Hz
<b>Signal Track</b>	On Off

File Operation Status, C:\TEMP.GIF file saved



<b>Freq/Channel</b>
<b>Center Freq</b> 848.800000 MHz
<b>Start Freq</b> 848.300000 MHz
<b>Stop Freq</b> 849.300000 MHz
<b>CF Step</b> 100.000000 kHz Auto Man
<b>Freq Offset</b> 0.00000000 Hz
<b>Signal Track</b> On Off

File Operation Status, C:\TEMP.GIF file saved

FCC ID : A3LS8300T Transmit Power 128CH EDGE

Measurement/Instrument Screen									
Control		EGPRS Transmit Power						PDCH Parms	
EGPRS Transmit Power Setup	EPSSK Burst Power			EPSSK Est Carrier Power			Downlink Traffic Power		
	Minimum	Maximum		Minimum	Maximum		Traffic Band		
	24.75 dBm	26.20 dBm		25.51 dBm	25.63 dBm		GSM850		
	Average	Std Dev		Average	Std Dev		Traffic Channel		
	25.55 dBm	0.23 dBm		25.52 dBm	0.00 dBm		128		
	200 /200			Single			HS TX Level		
							Modulation Coding Scheme		
							Return		
				Active Cell Transferring			Sys Type: EGPRS		
1 of 2				IntRef	Offset	R T			1 of 2

Measurement/Instrument Screen									
Control	EGPRS Transmit Power							PDCH Parms	
EGPRS Transmit Power Setup ▾	EPK Burst Power			EPK Est Carrier Power				Downlink Traffic Power ▾	
	Minimum	Maximum		Minimum	Maximum			Traffic Band	
	24.98 dBm	26.11 dBm		25.49 dBm	25.52 dBm			GS1850	
	Average	Std Dev		Average	Std Dev			Traffic Channel	
25.46 dBm	0.22 dBm		25.50 dBm	0.00 dBm			190		
	200 /200							Single	
								HS TX Level ▾	
								Modulation Coding Scheme ▾	
								Return	
				Active Cell Transferring			Sys Type: EGPRS		
1 of 2				IntRef	Offset	R T			1 of 2

Measurement/Instrument Screen									
Control	EGPRS Transmit Power							PDCH Parms	
EGPRS Transmit Power Setup ▾	EPK Burst Power			EPK Est Carrier Power				Downlink Traffic Power ▾	
	Minimum	Maximum		Minimum	Maximum			Traffic Band	
	24.83 dBm	26.03 dBm		25.39 dBm	25.41 dBm			GS1850	
	Average	Std Dev		Average	Std Dev			Traffic Channel	
25.39 dBm	0.21 dBm		25.40 dBm	0.00 dBm			251		
	200 /200							Single	
								HS TX Level ▾	
								Modulation Coding Scheme ▾	
								Return	
				Active Cell Transferring			Sys Type: EGPRS		
1 of 2				IntRef	Offset	R T			1 of 2

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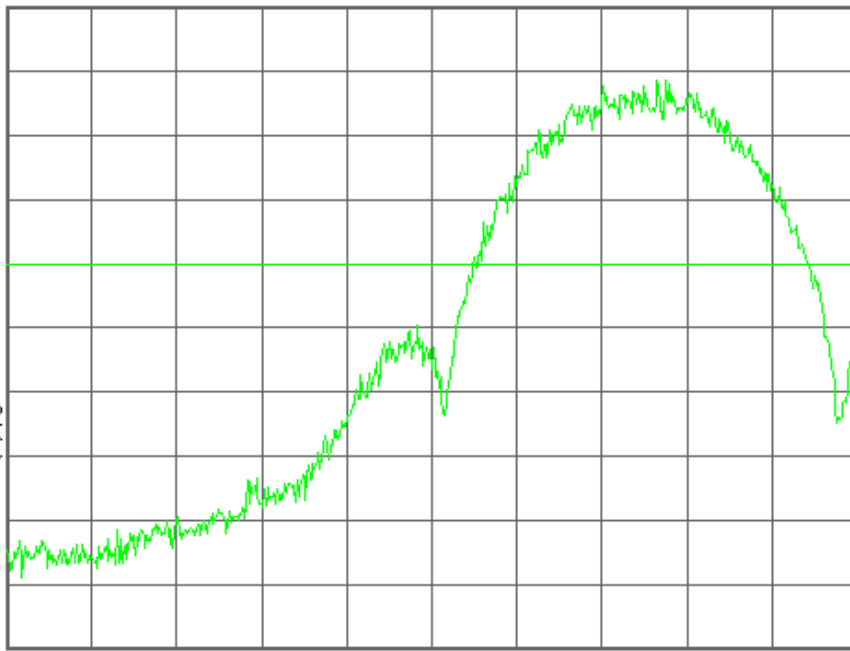
R T

Freq/Channel

FCC ID:A3LGT8300T Band Edge Ch.128 EDGE

Ref 27 dBm Atten 30 dB

#Avg  
Log  
10  
dB/  
Offst  
7.75  
dB  
DI  
-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)

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

Freq/Channel

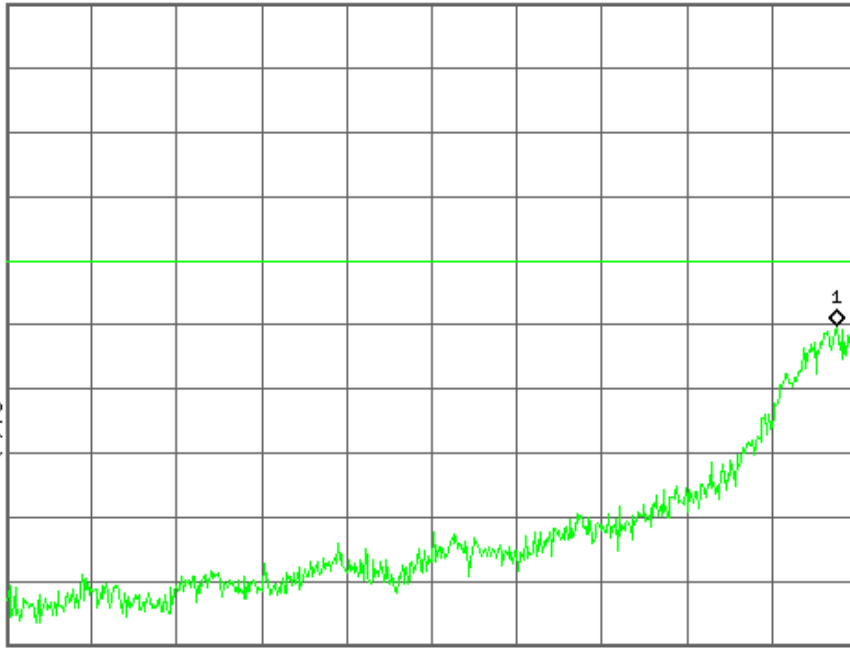
FCC ID:A3LGT8300T Band Edge Ch.128 EDGE

Mkr1 823.981 3 MHz

Ref 27 dBm Atten 30 dB

-23.01 dBm

#Avg  
Log  
10  
dB/  
Offst  
7.75  
dB  
DI  
-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)

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

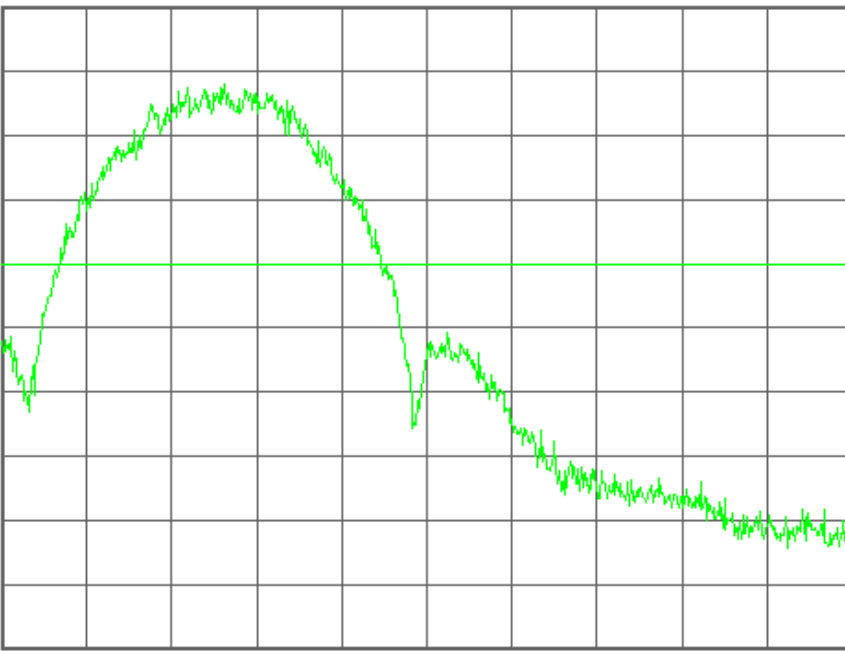
R T

Freq/Channel

FCC ID:A3LGT\$8300T Band Edge Ch.251 EDGE

Ref 27 dBm Atten 30 dB

#Avg  
Log  
10  
dB/  
Offst  
7.75  
dB  
DI  
-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

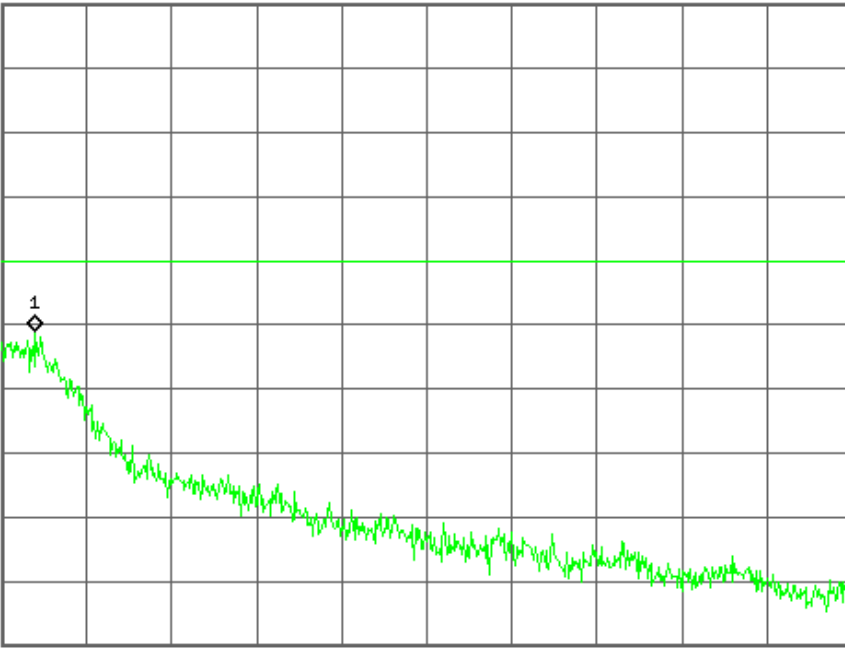
FCC ID:A3LGT\$8300T Band Edge Ch.251 EDGE

Mkr1 849.032 1 MHz

Ref 27 dBm Atten 30 dB

-24.15 dBm

#Avg  
Log  
10  
dB/  
Offst  
7.75  
dB  
DI  
-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

EDGE1900

Agilent

R T

Ch Freq 1.8502 GHz Trig Free

Occupied Bandwidth

FCC ID:A3LGTS8300T 0BW Ch.512 EDGE  
Ref 26 dBm Atten 30 dB

Center 1.850 200 GHz Span 1 MHz  
#Res BW 3 kHz #VBW 3 kHz Sweep 134 ms (601 pts)

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
246.3115 kHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	1.727 kHz	
<b>x dB Bandwidth</b>	301.095 kHz	

**Freq/Channel**

**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

Ch Freq 1.88 GHz Trig Free

Occupied Bandwidth

FCC ID:A3LGTS8300T 0BW Ch.661 EDGE  
Ref 26 dBm Atten 30 dB

Center 1.880 000 GHz Span 1 MHz  
#Res BW 3 kHz #VBW 3 kHz Sweep 134 ms (601 pts)

<b>Occupied Bandwidth</b>	<b>Occ BW % Pwr</b>	99.00 %
247.1676 kHz	<b>x dB</b>	-26.00 dB
<b>Transmit Freq Error</b>	-273.003 Hz	
<b>x dB Bandwidth</b>	305.652 kHz	

**Freq/Channel**

**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

<b>Ch Freq</b> 1.9098 GHz		<b>Trig</b> Free	
Occupied Bandwidth			
FCC ID:A3LGT8300T 0BW Ch.810 EDGE Ref 26 dBm Atten 30 dB			
Center 1.909 800 GHz		Span 1 MHz	
#Res BW 3 kHz		#VBW 3 kHz Sweep 134 ms (601 pts)	
<b>Occupied Bandwidth</b>		<b>Occ BW % Pwr</b> 99.00 %	
247.2848 kHz		<b>x dB</b> -26.00 dB	
<b>Transmit Freq Error</b> 376.149 Hz			
<b>x dB Bandwidth</b> 311.240 kHz			
<b>File Operation Status, C:\TEMP.GIF file saved</b>			

<b>Freq/Channel</b>
<b>Center Freq</b> 1.90980000 GHz
<b>Start Freq</b> 1.90930000 GHz
<b>Stop Freq</b> 1.91030000 GHz
<b>CF Step</b> 100.000000 kHz Auto Man
<b>Freq Offset</b> 0.00000000 Hz
<b>Signal Track</b> On Off

FCC ID : A3LS8300T Transmit Power 512CH EDGE

Measurement/Instrument Screen						
Control	EGPRS Transmit Power				PDTCB Parms	
EGPRS Transmit Power Setup	EPK Burst Power		EPK Est Carrier Power		Downlink Traffic Power	
	Minimum	Maximum	Minimum	Maximum	Traffic Band	
	24.44 dBm	26.11 dBm	25.54 dBm	25.57 dBm	PCS	
	Average	Std Dev	Average	Std Dev	Traffic Channel	
	25.50 dBm	0.24 dBm	25.56 dBm	0.01 dBm	512	
	200 /200		Single		HS TX Level	
					Modulation Coding Scheme	
					Return	
	Active Cell Transferring			Sys Type: EGPRS		
1 of 2			IntRef	Offset	R T	1 of 2

Measurement/Instrument Screen									
Control	EGPRS Transmit Power							PDCH Parms	
EGPRS Transmit Power Setup ▾	EPSK Burst Power			EPSK Est Carrier Power				Downlink Traffic Power ▾	
	Minimum	Maximum		Minimum	Maximum			Traffic Band	
	24.83 dBm	26.35 dBm		25.64 dBm	25.67 dBm			PCS	
	Average	Std Dev		Average	Std Dev			Traffic Channel	
25.59 dBm	0.26 dBm		25.66 dBm	0.01 dBm			661		
	200 /200						Single		
								HS TX Level ▾	
								Modulation Coding Scheme ▾	
								Return	
				Active Cell Transferring			Sys Type: EGPRS		
1 of 2				IntRef	Offset	R T			1 of 2

Measurement/Instrument Screen									
Control	EGPRS Transmit Power							PDCH Parms	
EGPRS Transmit Power Setup ▾	EPSK Burst Power			EPSK Est Carrier Power				Downlink Traffic Power ▾	
	Minimum	Maximum		Minimum	Maximum			Traffic Band	
	25.11 dBm	26.34 dBm		25.68 dBm	25.70 dBm			PCS	
	Average	Std Dev		Average	Std Dev			Traffic Channel	
25.67 dBm	0.21 dBm		25.69 dBm	0.00 dBm			810		
	200 /200						Single		
								HS TX Level ▾	
								Modulation Coding Scheme ▾	
								Return	
				Active Cell Transferring			Sys Type: EGPRS		
1 of 2				IntRef	Offset	R T			1 of 2

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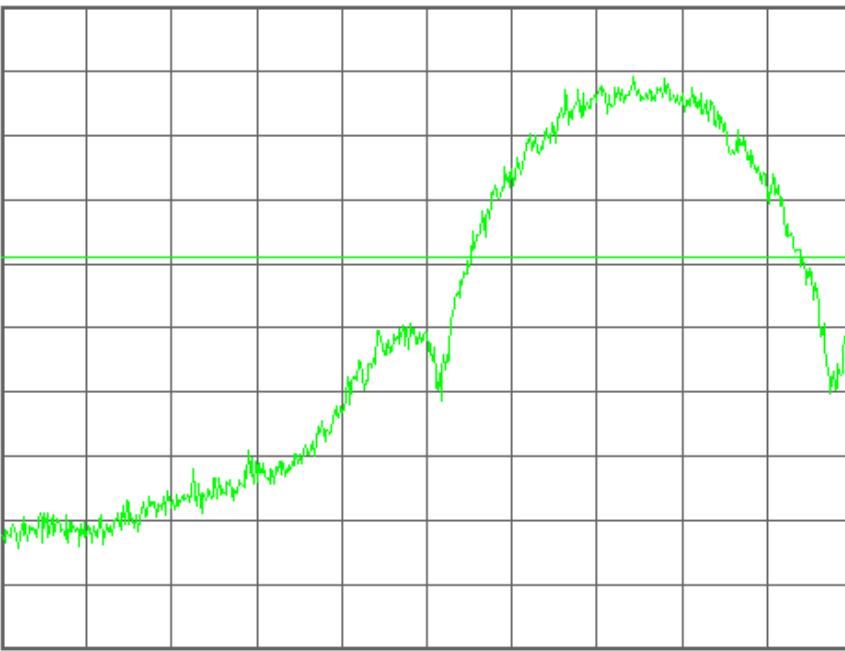
R T

Freq/Channel

FCC ID:A3LGT58300T Band Edge Ch.512 EDGE

Ref 26 dBm Atten 30 dB

#Avg  
Log  
10  
dB/  
Offst  
8.7  
dB  
DI  
-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)

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

Freq/Channel

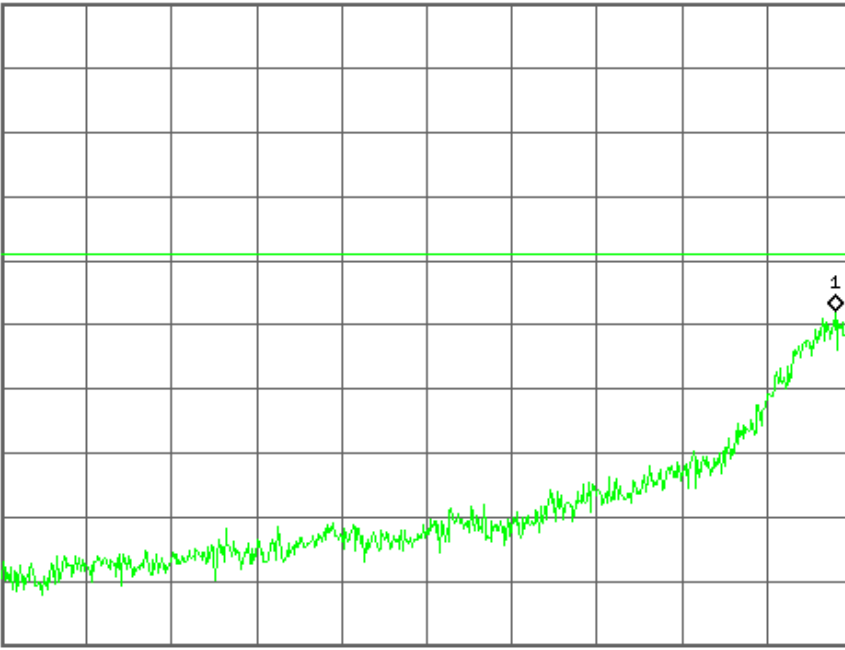
FCC ID:A3LGT58300T Band Edge Ch.512 EDGE

Mkr1 1.849 984 0 GHz

Ref 26 dBm Atten 30 dB

-21.77 dBm

#Avg  
Log  
10  
dB/  
Offst  
8.7  
dB  
DI  
-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)

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

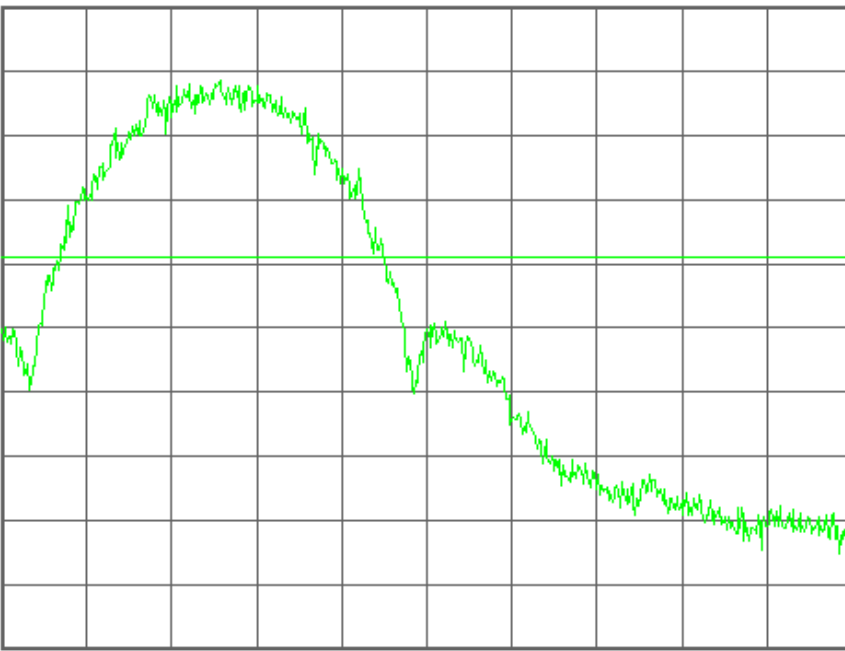
R T

Freq/Channel

FCC ID:A3LGT8300T Band Edge Ch.810 EDGE

Ref 26 dBm Atten 30 dB

#Avg  
Log  
10  
dB/  
Offst  
8.7  
dB  
DI  
-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

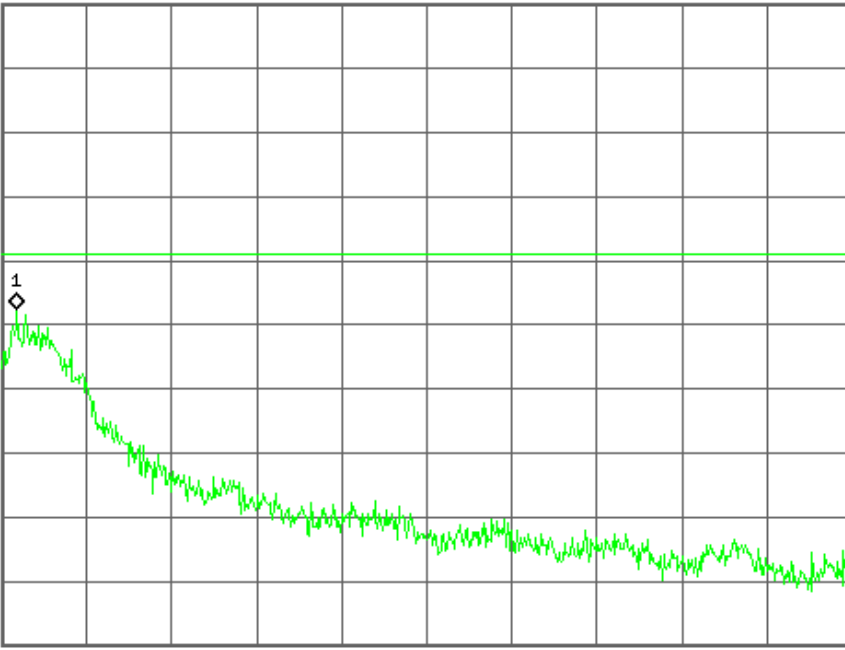
FCC ID:A3LGT8300T Band Edge Ch.810 EDGE

Mkr1 1.910 006 5 GHz

Ref 26 dBm Atten 30 dB

-21.63 dBm

#Avg  
Log  
10  
dB/  
Offst  
8.7  
dB  
DI  
-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:A3LGTS8300T P.A.R Ch.661 EDGE

▲ Mkr1 0 Hz

Ref 35 dBm

Atten 40 dB

-0.01 dB

#Avg

Log

10

dB/

Offst

8.7

dB

PAvg

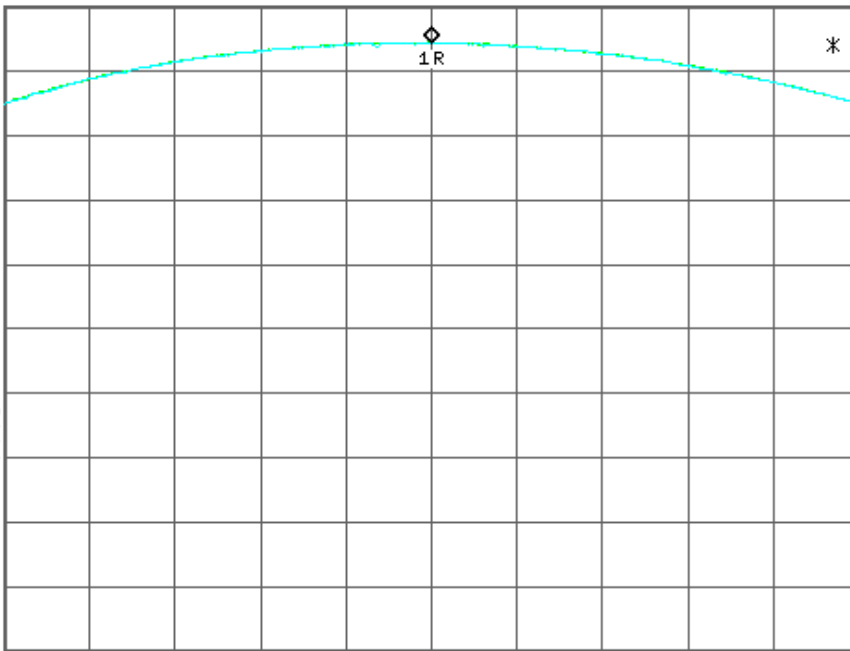
M1 V2

S3 FC

Ⓔ(f):

FTun

Swp



Center 1.880 000 GHz

Span 5 MHz

#Res BW 3 MHz

#VBW 3 MHz

Sweep 1 ms (601 pts)

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

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