FCC TEST REPORT

for

47 CFR Part 24E

Equipment	:	**Repeater**
Trade Name	:	**Coiler**
Model No.	:	**TG-1900**
FCC ID	:	**UG8C-2007-19**
Uplink Frequency Range	:	**PCS : 1850.2~1909.8MHz**
Downlink Frequency Range	:	**PCS : 1930.2~1989.8MHz**
Max. EIRP Power	:	**PCS : 2.5061W**
Emission Designator	:	**300 KGXW**
Applicant	:	**Coiler Corporation** 8F-4, No. 75, Sec. 1, Hsin Tai Wu Road, Hsi-Chih City (221), Taipei Hsien, Taiwan

- The test result refers exclusively to the test presented test model / sample.
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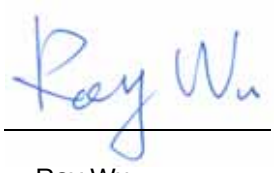
- **Certificate or Test Report must not be used by the applicant to claim the product in this test report endorsed by NVLAP or any agency of U.S. government.**
- The data shown in this test report were carried out on Mar. 14, 2007 at **Sporton International Inc. LAB.**
- Report No.: FG721401, Report Version: Rev. 02



Roy Wu
Deputy Manager

SPORTON International Inc.

6F, No.106, Sec. 1, Hsin Tai Wu Rd., Hsi Chih, Taipei Hsien, Taiwan, R.O.C.

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History of this test report

Report Issue Date: Mar. 20, 2007

Report No.	Description

1. General Information

1.1. Applicant

Coiler Corporation
8F-4, No. 75, Sec. 1, Hsin Tai Wu Road, Hsi-Chih City (221), Taipei Hsien, Taiwan

1.2. Manufacturer

Coiler Corporation
8F-4, No. 75, Sec. 1, Hsin Tai Wu Road, Hsi-Chih City (221), Taipei Hsien, Taiwan

1.3. Basic Description of Equipment under Test

Equipment	: Repeater
Trade Name	: Coiler
Model No.	: TG-1900
AC Power Cord	: AC 120V, 1.7 meter, 2 pin

1.2 Feature of Equipment under Test

DUT Type :	Repeater
Trade Name :	Coiler
Model Name :	TG-1900
FCC ID :	UG8C-2007-19
Support Band :	GSM 1900
Uplink Frequency :	1850.2-1909.8 MHz.
Downlink Frequency :	1930.2-1989.8 MHz
Antenna Type :	External Panel Antenna (Gain: 9 dBi)
Maximum Output Power to Antenna :	24.99 dBm
Maximum EIRP :	2.5061 W (33.99 dBm)
Power Rating (DC/AC Voltage) :	9V / 900mA
Digital Modulation Emission :	GMSK
Type of Emission :	300 KGXW
DUT Stage :	Production Unit

1.3 Report Date

EUT Received : Feb. 14, 2007

Report Date : Mar. 20, 2007

2. Test Configuration of Equipment under Test

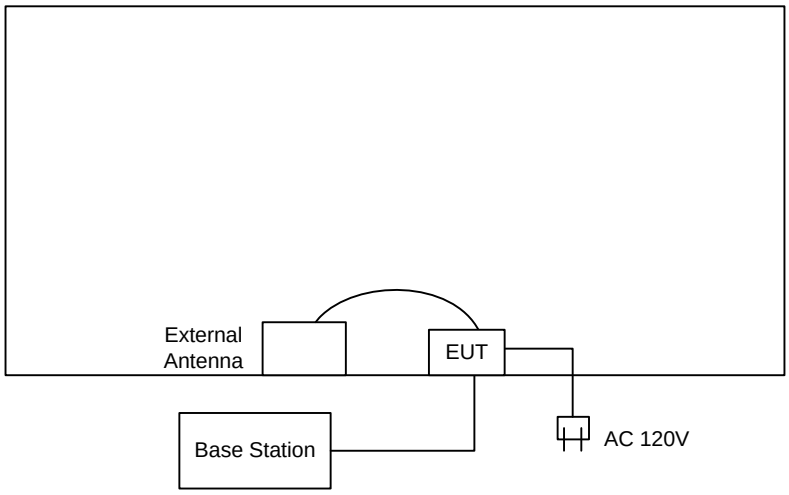
2.1 Test Manner

a. The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range.
b. During all testings, EUT is in link mode at maximum power level.
c. Frequency range investigated: radiated emission 30MHz to 18000 MHz for PCS.

2.2 Test Mode

Application	PCS
Radiated Emission	☒ Mode 1: PCS 1850.2MHz Uplink Mode ☒ Mode 2: PCS 1880MHz Uplink Mode ☒ Mode 3: PCS 1909.8MHz Uplink Mode ☒ Mode 4: PCS 1930.2MHz Downlink Mode ☒ Mode 5: PCS 1960MHz Downlink Mode ☒ Mode 6: PCS 1989.8MHz Downlink Mode
Conducted Measurement	☒ Mode 1: PCS 1850.2MHz Uplink Mode ☒ Mode 2: PCS 1880MHz Uplink Mode ☒ Mode 3: PCS 1930.2MHz Uplink Mode ☒ Mode 4: PCS 1930.2MHz Downlink Mode ☒ Mode 5: PCS 1960MHz Downlink Mode ☒ Mode 6: PCS 1989.8MHz Downlink Mode

2.3 Connection Diagram of Test System



2.4 Ancillary Equipment List

Item	Equipment	Trade Name	Model No.	Power Cord
1.	Base Station	R & S	CMU200	AC 100-240V

3. General Information of Test Site

Test Site Location : No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park,
Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.
TEL : 886-3-327-3456
FAX : 886-3-318-0055
Test Site No : 03CH06-HY

The chamber meets the characteristics of ANSI C63.4-2003. This site is on file with the FCC. The Industry Canada file number for this site is IC 4088.

3.1 Test Voltage

120V / 60Hz

3.2 Test in Compliance with

47 CFR Part 24E

3.3 Frequency Range Investigated

a. Radiation: from 30 MHz up to the 10th harmonic of the highest fundamental frequency.

3.4 Test Distance

The test distance of radiated emission from antenna to EUT is 3 m.

4. Test Data and Test Result

4.1 List of Measurements and Examinations

FCC Rule	DESCRIPTION OF TEST	Result	Section
§2.1046	RF Output Power	Passed	4.2
§2.1049, § 24.238(b)	Occupied Bandwidth & Band Edge Measurement	Passed	4.4
§2.1051	Conducted Emission & Out of Band Rejection:Filter Frequency response & Intermodulation	Passed	4.5
§2.1053	Field Strength of Spurious Radiation	Passed	4.6

4.2 RF Output Power

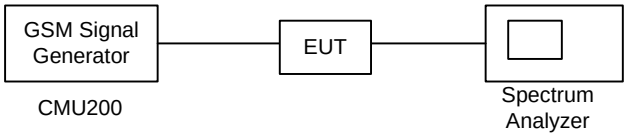
4.2.1 Measurement Instruments：

As described in chapter 5 of this test report.

4.2.2 Test Procedure：

1. The EUT was respectively connected to the specturm analyzer and the GSM signal genetator.
2. Set the EUT maximum gain condition.
3. Varied the input power from the GSM signal genetator, and the maximum output power was recorded.
4. Repeatedly tested the low,middle,high channels for uplink and downlink modes .

4.2.3 Test Setup Layout：



4.2.4 Test Result：

Bands	Frequency (MHz)	Input Power (dBm)	Conducted Power (dBm)	Conducted Power (Watts)
PCS 1900	1850.2 (Low)	-37.6	24.96	0.3133
	1880.0 (Mid)	-36.2	24.95	0.3126
	1909.8 (High)	-27.3	24.99	0.3155
	1930.2(Low)	-36.9	16.99	0.0500
	1960.0(Mid)	-44.8	16.97	0.0498
	1989.8(High)	-44.4	16.98	0.0499

4.3 Occupied Bandwidth and Band Edge Measurement

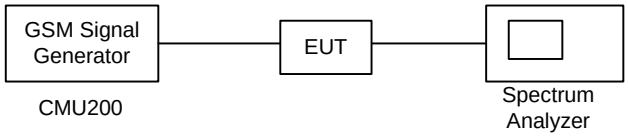
4.3.1 Measurement Instruments

As described in chapter 5 of this test report.

4.3.2 Test Procedure

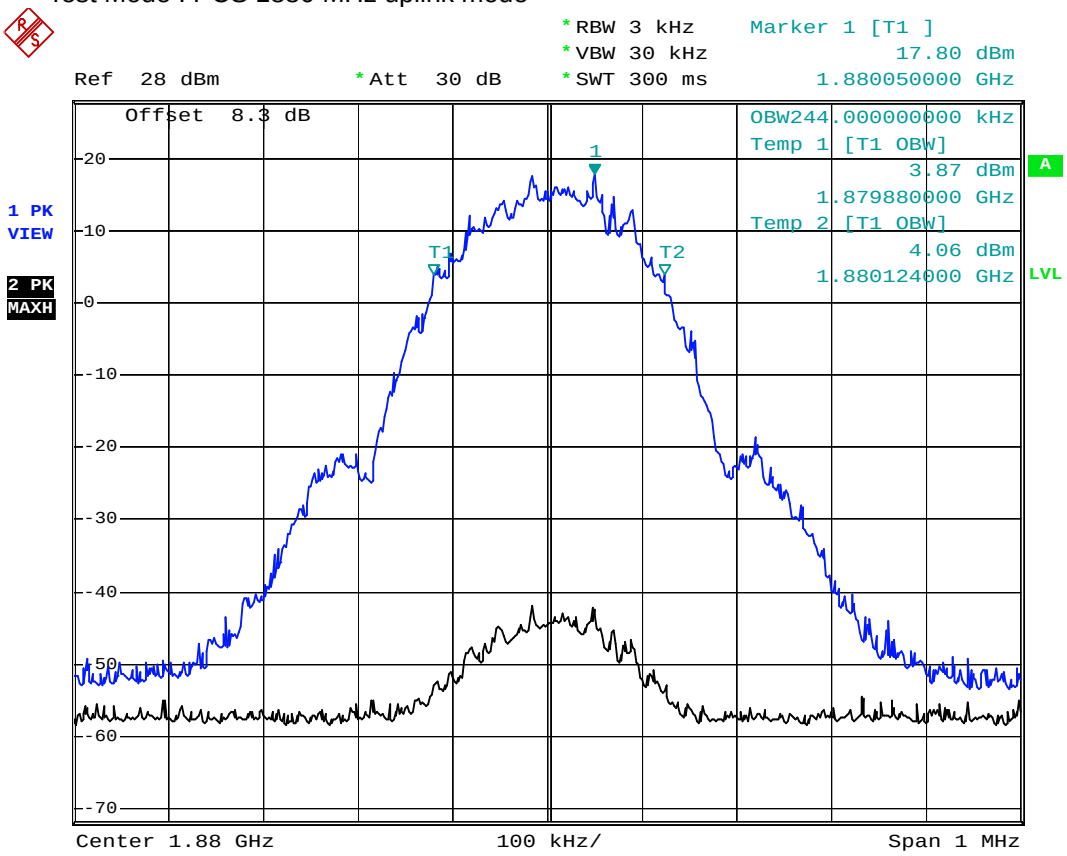
1. The EUT was respectively connected to the specturm analyzer and the GSM signal genetator.
2. Set the EUT maximum gain condition.
3. Varied the input power from the GSM signal genetator, and the maximum output power reached.
4. The occupied bandwidth of middle channel was measured.
5. The bandedge of low and high channels for the highest RF powers within the transmitting frequency band were measured. Setting RBW as roughly BW/100.

4.3.3 Test Setup Layout



4.3.4 99% Occupid Bandwidth Test Result

- Test Mode : PCS 1880 MHz uplink mode



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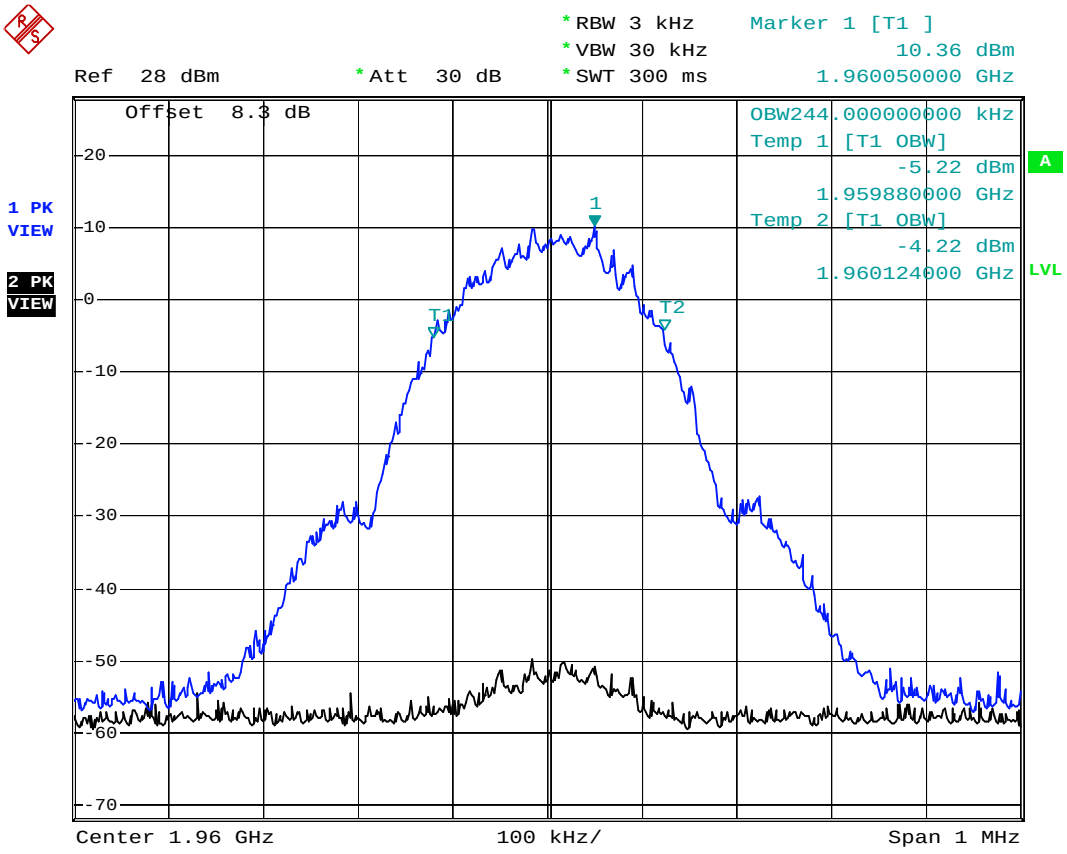
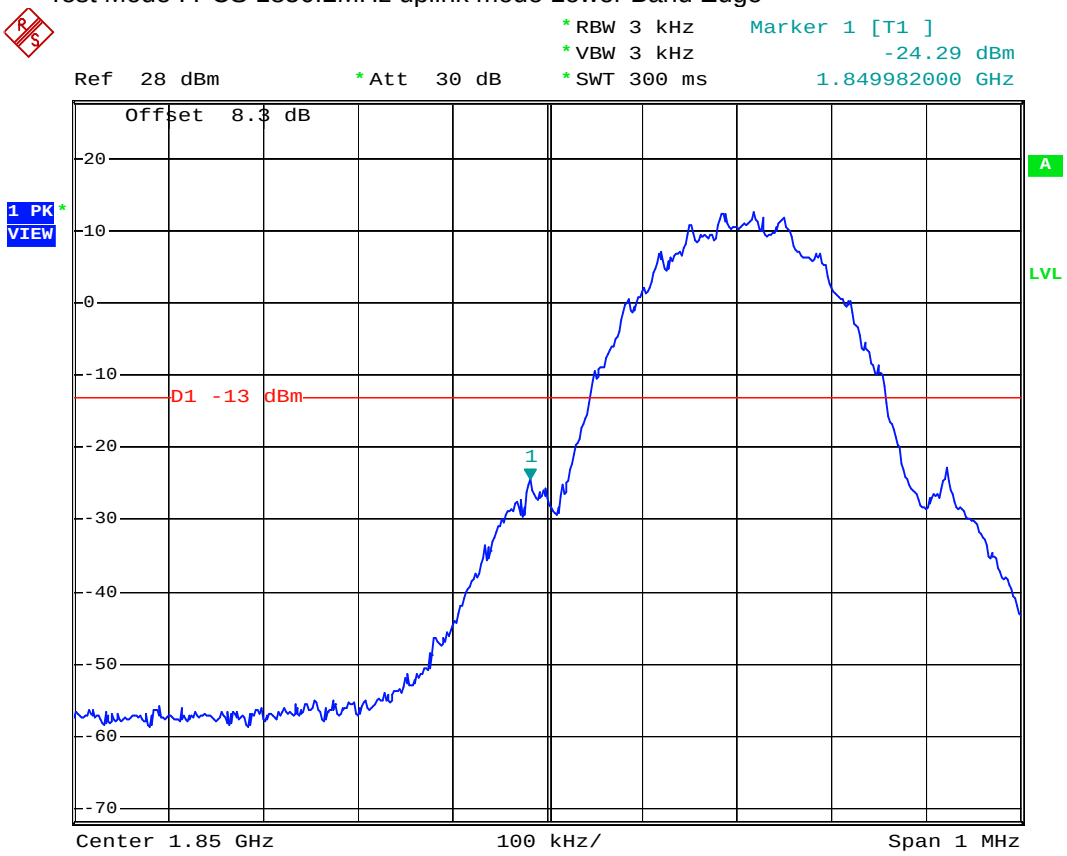
- Test Mode : PCS 1960 MHz downlink mode



Date: 10.MAR.2007 11:39:36

4.3.5 Band Edge Test Result

- Test Mode : PCS 1850.2MHz uplink mode Lower Band Edge



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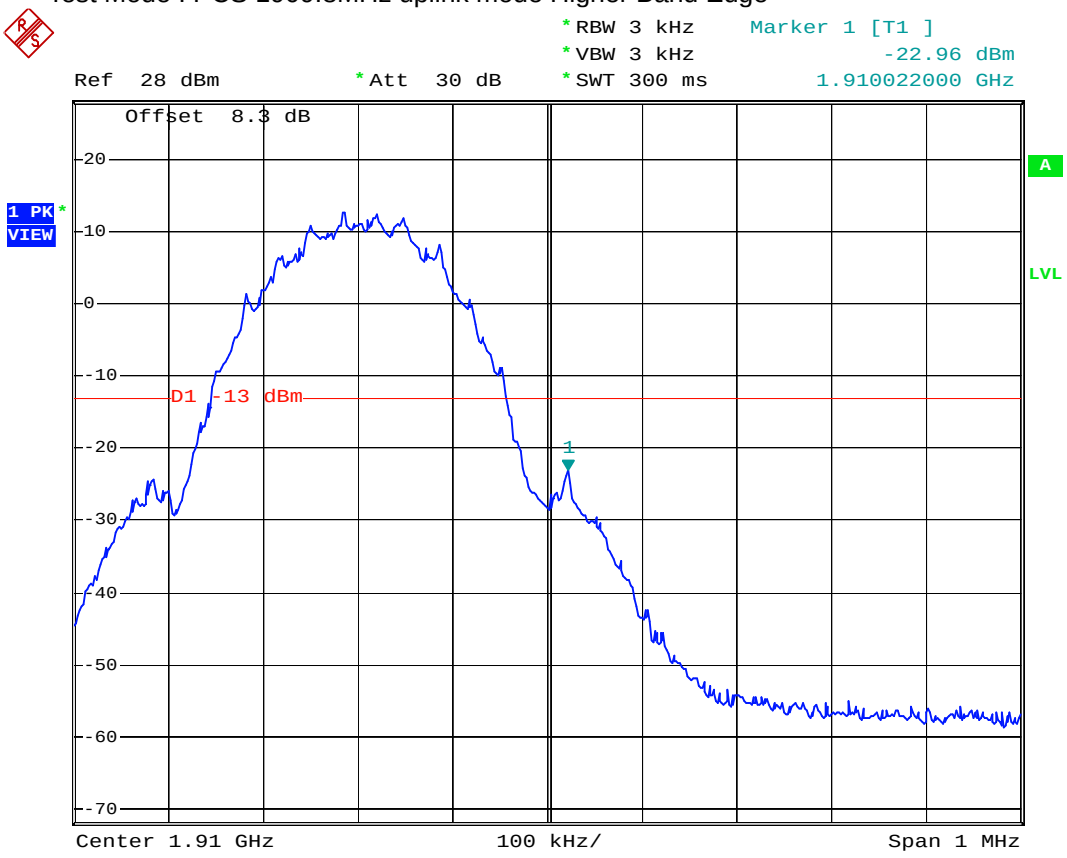
- Test Mode : PCS 1909.8MHz uplink mode Higher Band Edge



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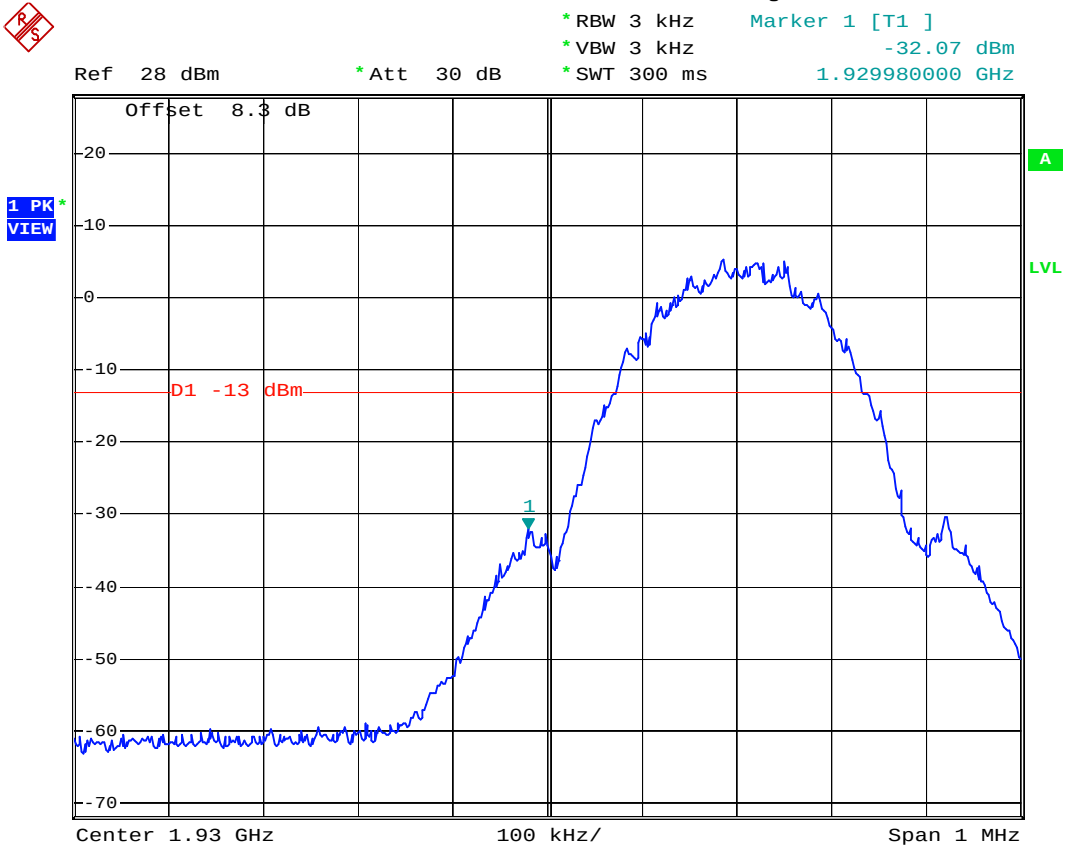
- Test Mode : PCS 1930.2MHz downlink mode Lower Band Edge



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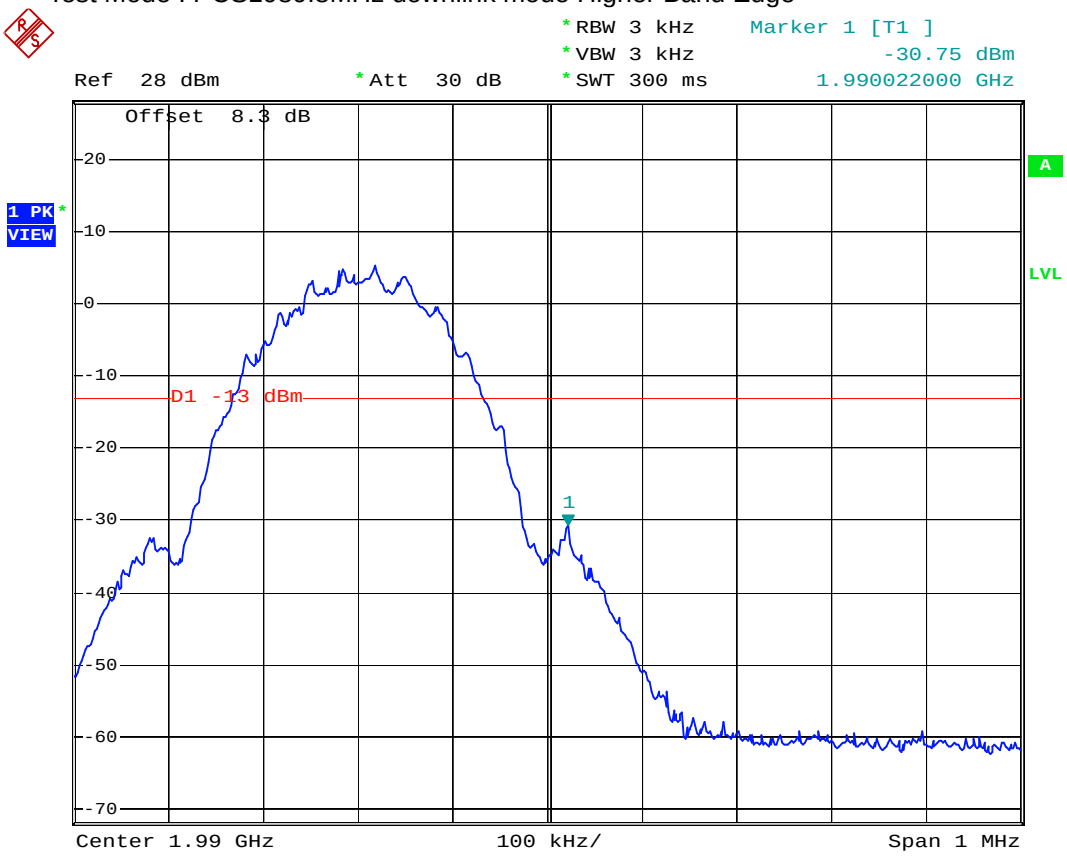
- Test Mode : PCS1989.8MHz downlink mode Higher Band Edge



Date: 10.MAR.2007 11:27:27

4.4 Conducted Emission & Out of Band Rejection: Filter Frequency response & Intermodulation

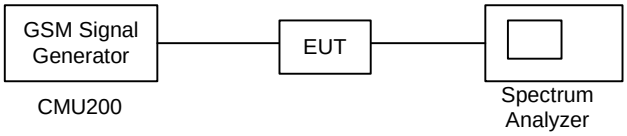
4.4.1 Measurement Instruments

As described in chapter 5 of this test report.

4.4.2 Test Procedure (For Conducted Emission)

1. The EUT was respectively connected to the specturm analyzer and the GSM signal genetator.
2. Set the EUT maximum gain condition.
3. Varied the input power from the GSM signal genetator, and the maximum output power reached.
4. The middle channel for the highest RF power within the transmitting frequency was measured.
5. The conducted spurious emission for the whole frequency range was taken.

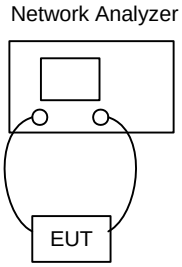
4.4.3 Test Setup Layout



4.4.4 Test Procedure (For Out of Band Rejection)

1. The EUT was respectively connected to Network Analyzer's port 1 and prot2.
2. Set the EUT maximum gain condition.
3. The Out of Band Rejection for the whole authorized frequency band was measured.

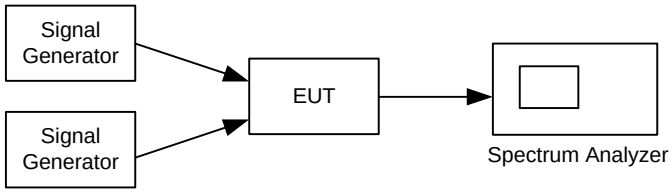
4.4.5 Test Setup Layout



4.4.6 Test Procedure (For Intermodulation)

1. The EUT was connected respectively to the spectrum analyzer and the signal generator (CMU200) which generated a CW and CMDA signal.
2. Set the EUT maximum gain and output power.
3. Inputed a GSM frequency at 1850.2MHz from CMU200 and a CW frequency at 1850.8MHz (Offsets 600KHz from the 1850.2MHz) from another one.
4. Measured and recorded for the lower band edge at 1850MHz and spurious up to the 10th harmonics.
5. Measured and recorded for the upper band edge at 1910MHz and spurious up to the 10th harmonics.
6. Repeatedly measured above steps for GSM and CDMA.

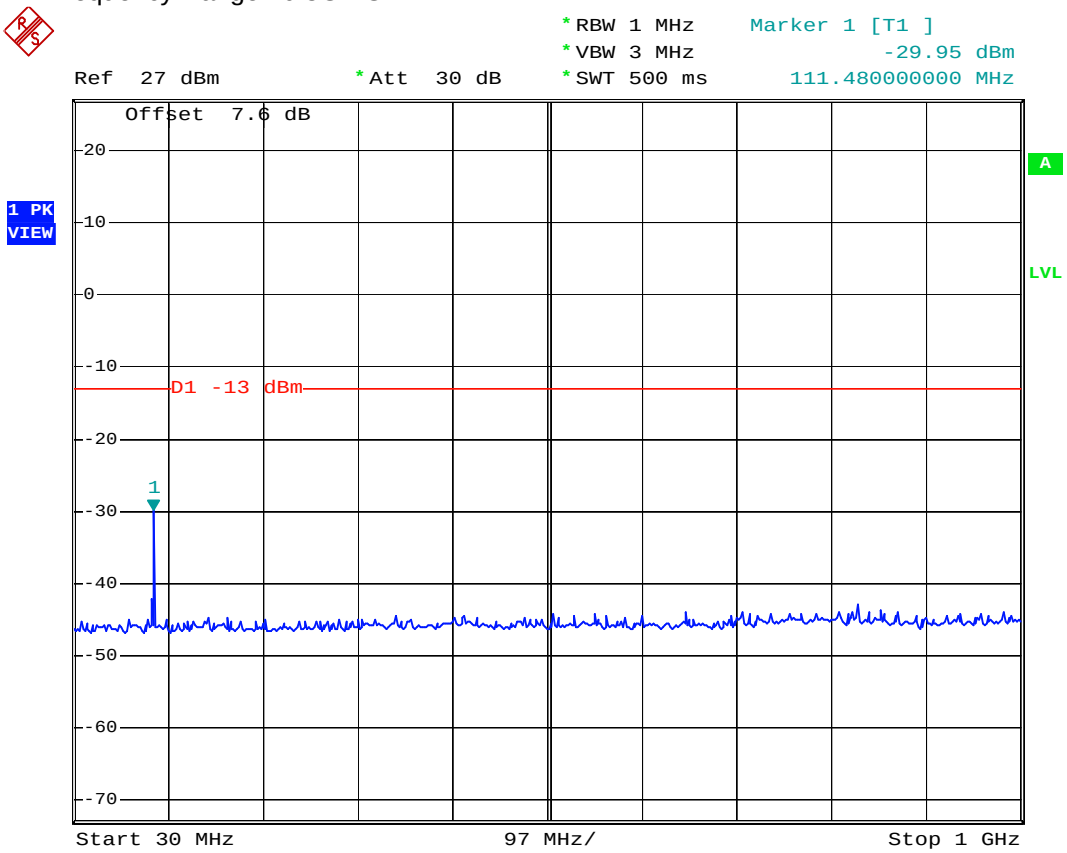
4.4.7 Test Setup Layout



4.4.8 Test Result

4.4.8.1 Conducted Emission

- Test Mode : PCS 1850.2 MHz uplink mode
- Frequency Range : 0.3G-1G



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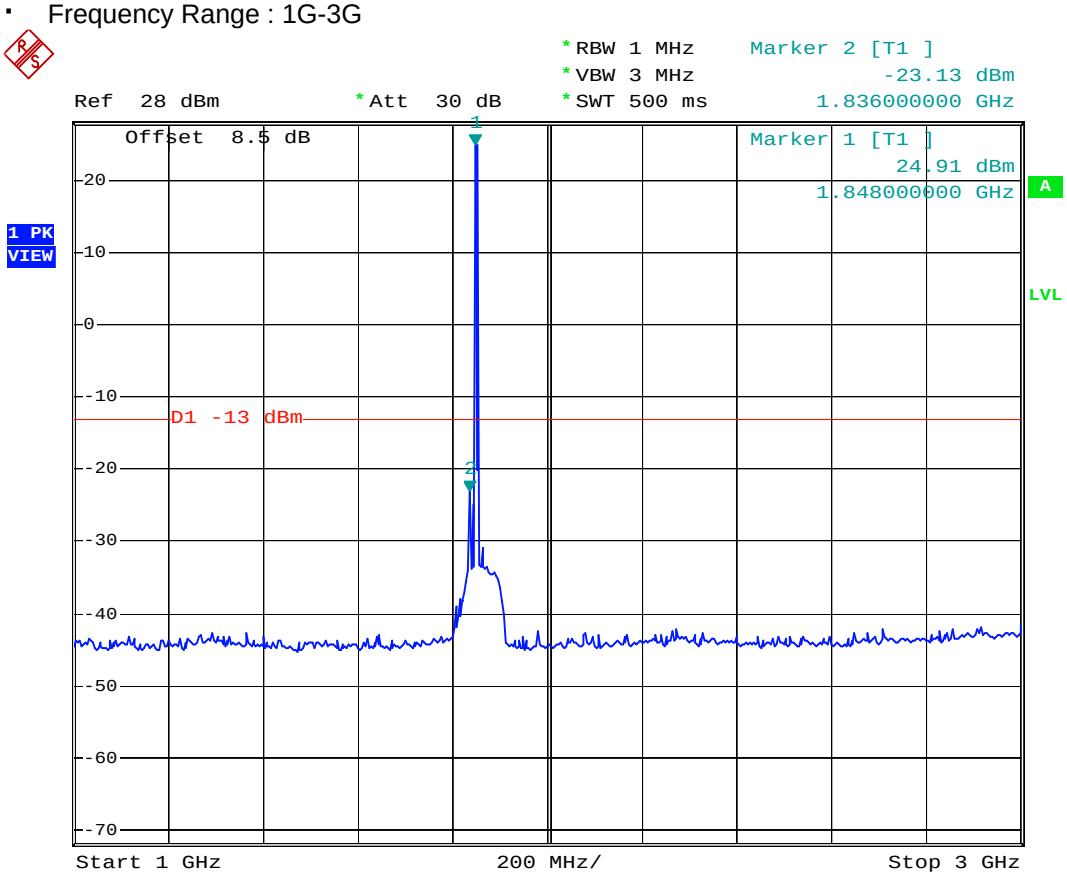
- Frequency Range : 1G-3G



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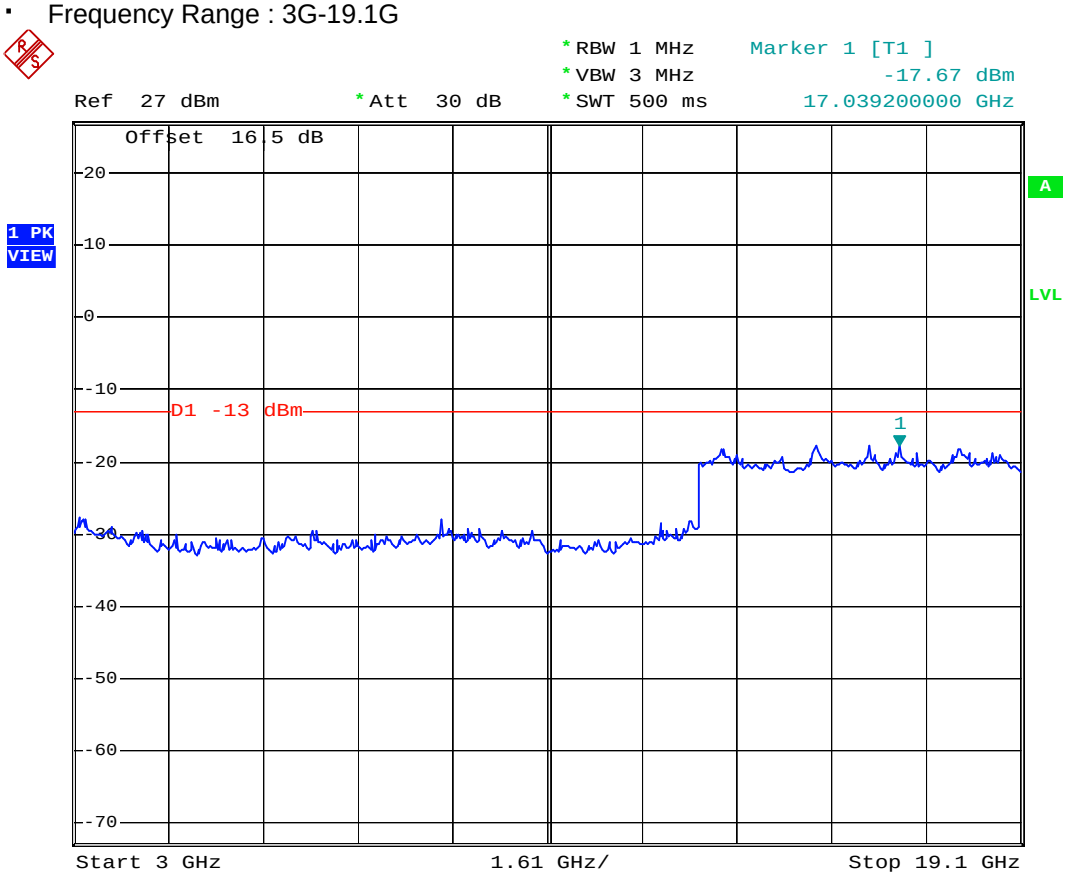
- Frequency Range : 3G-19.1G



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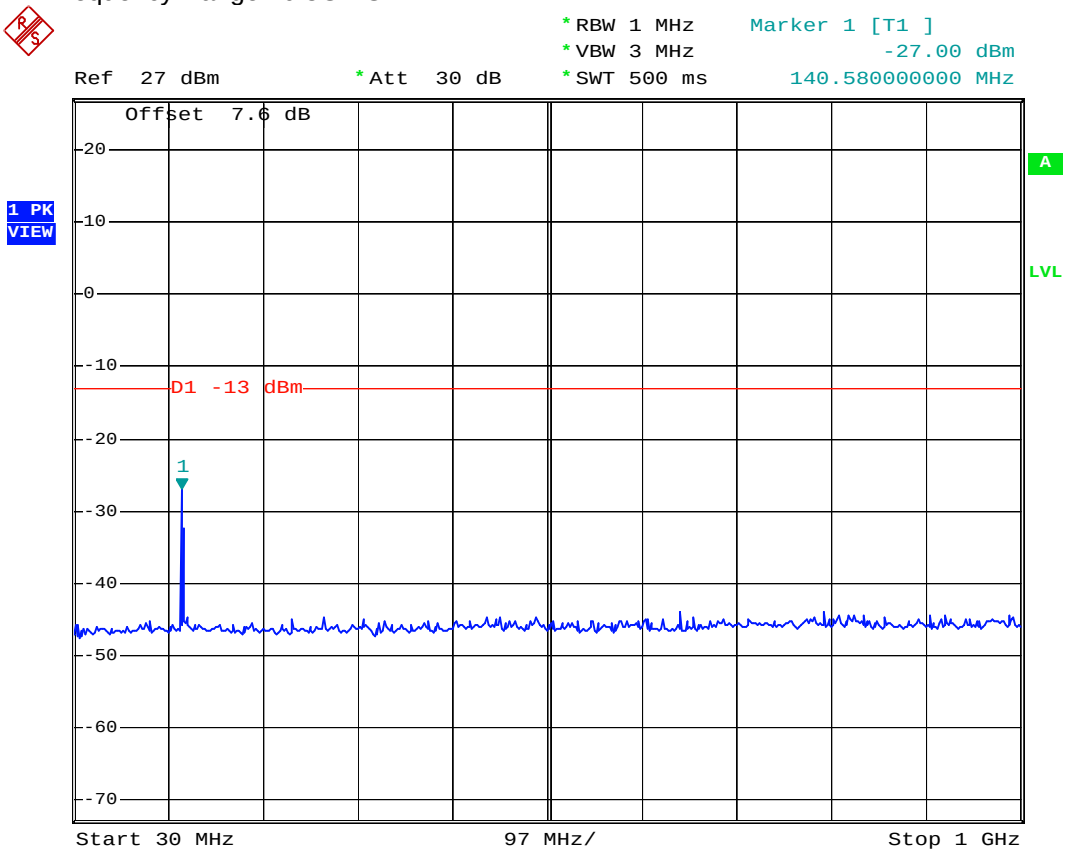
- Test Mode : PCS 1880 MHz uplink mode
- Frequency Range : 0.3G-1G



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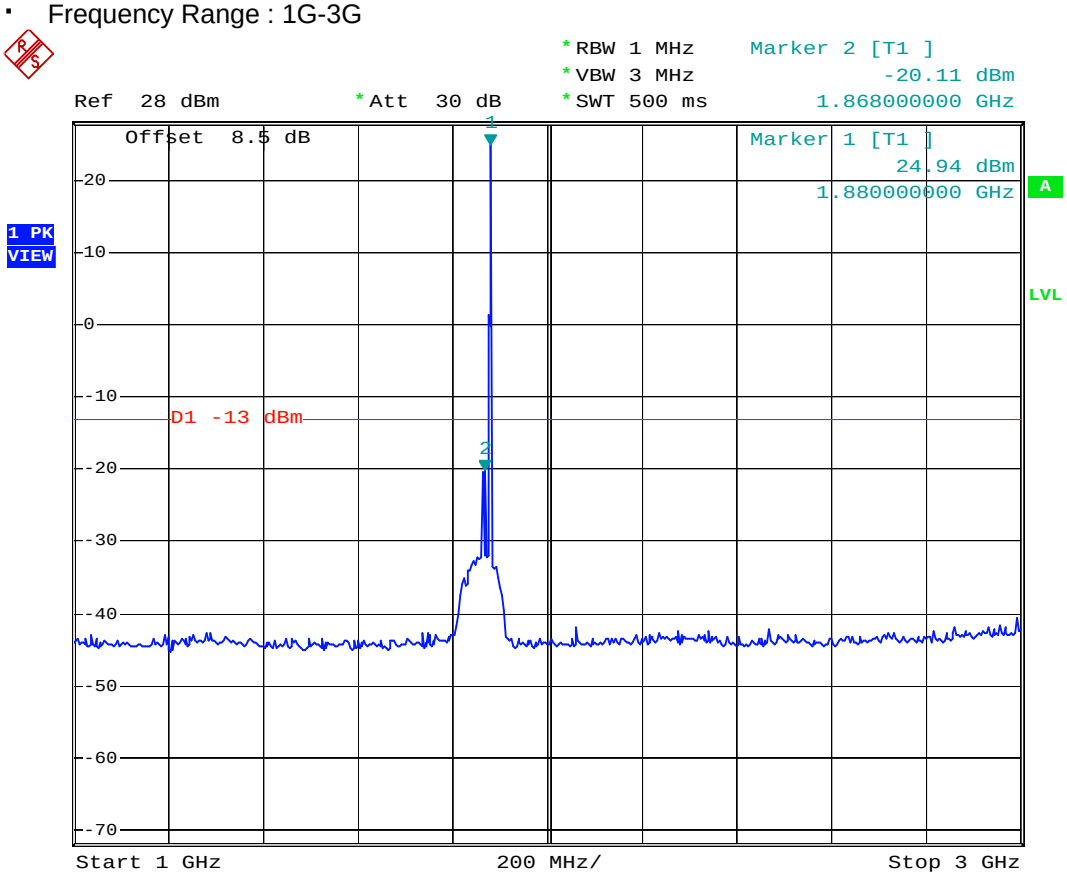
- Frequency Range : 1G-3G



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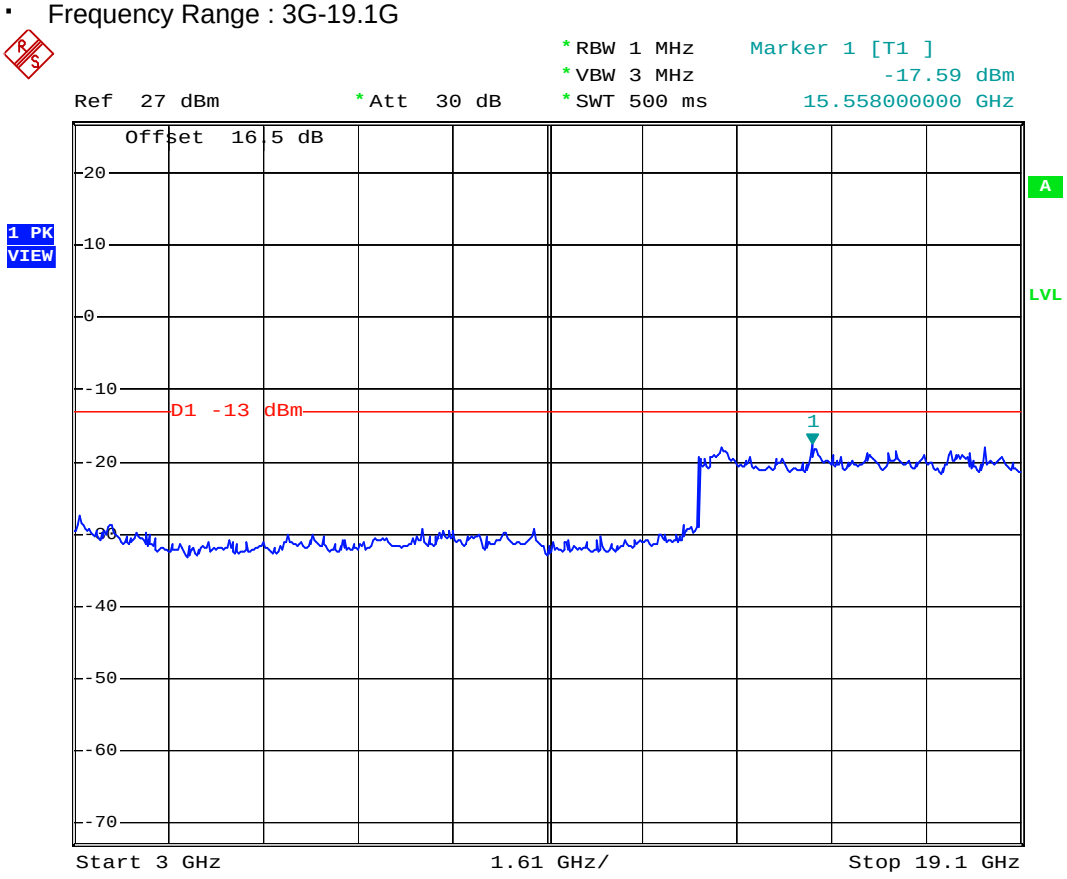
- Frequency Range : 3G-19.1G



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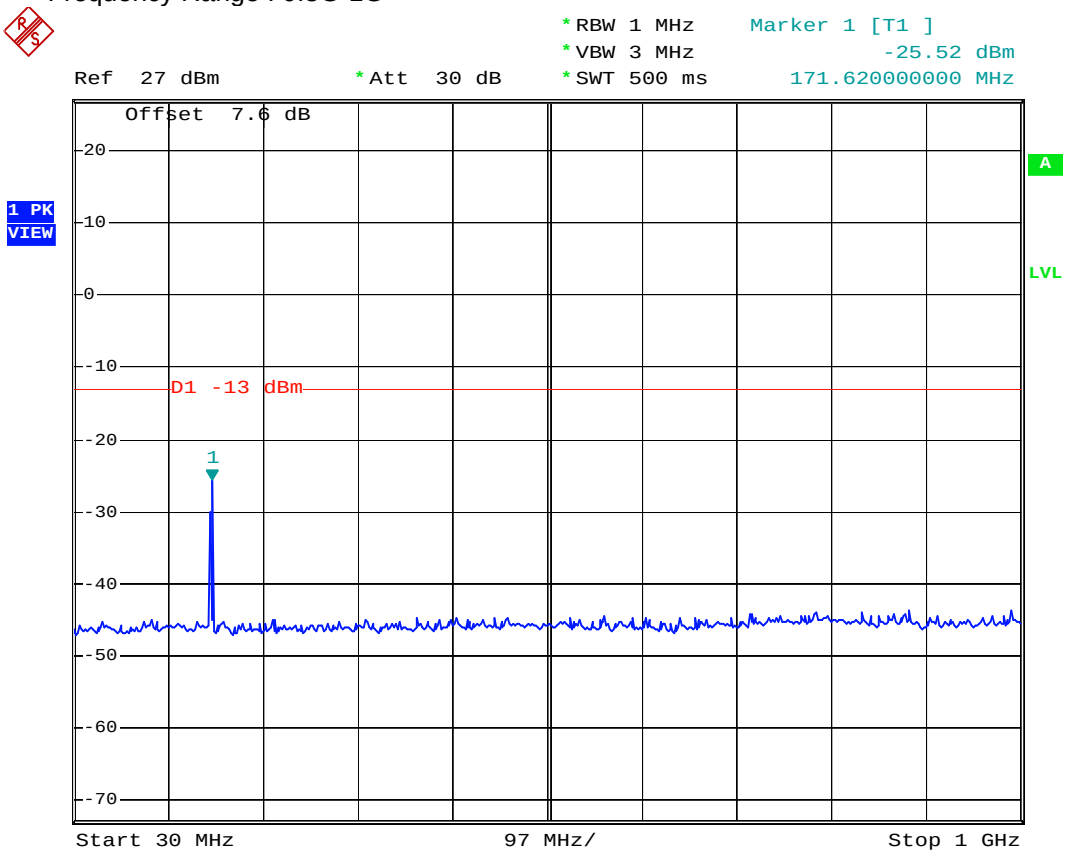
- Test Mode : PCS 1909.8 MHz uplink mode
- Frequency Range : 0.3G-1G



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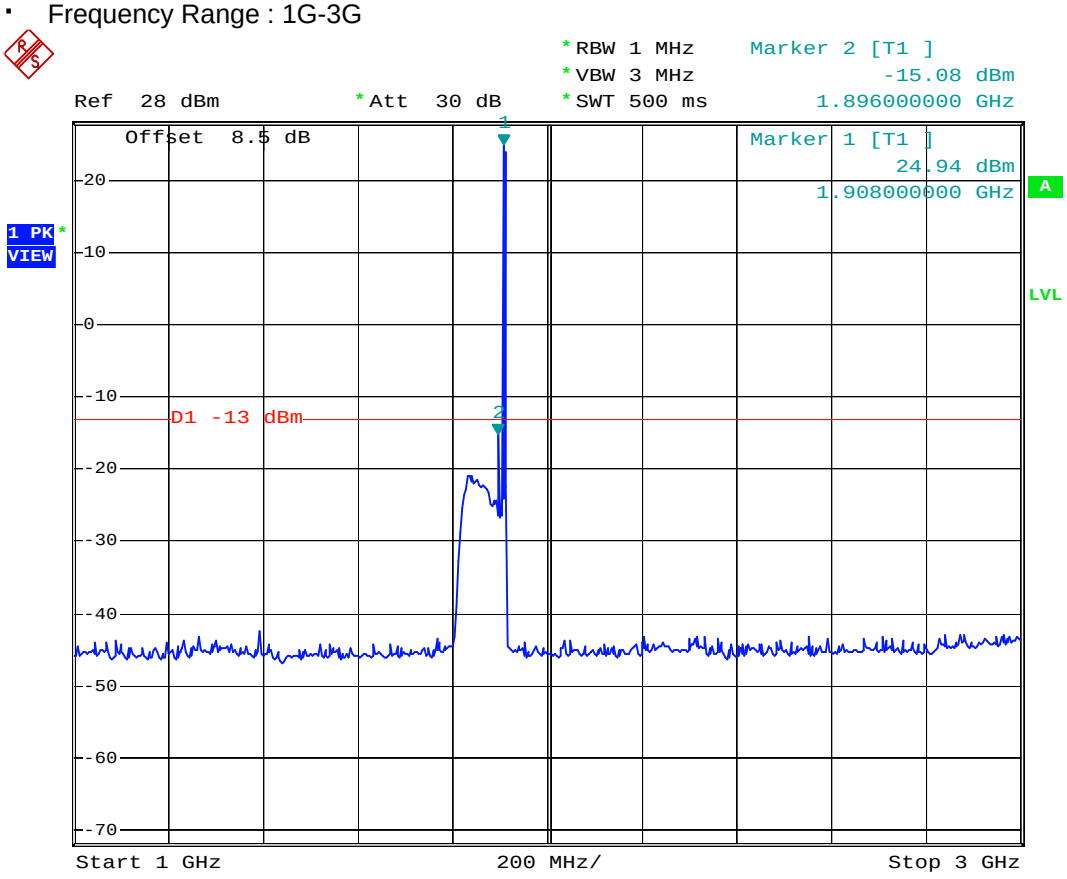
- Frequency Range : 1G-3G



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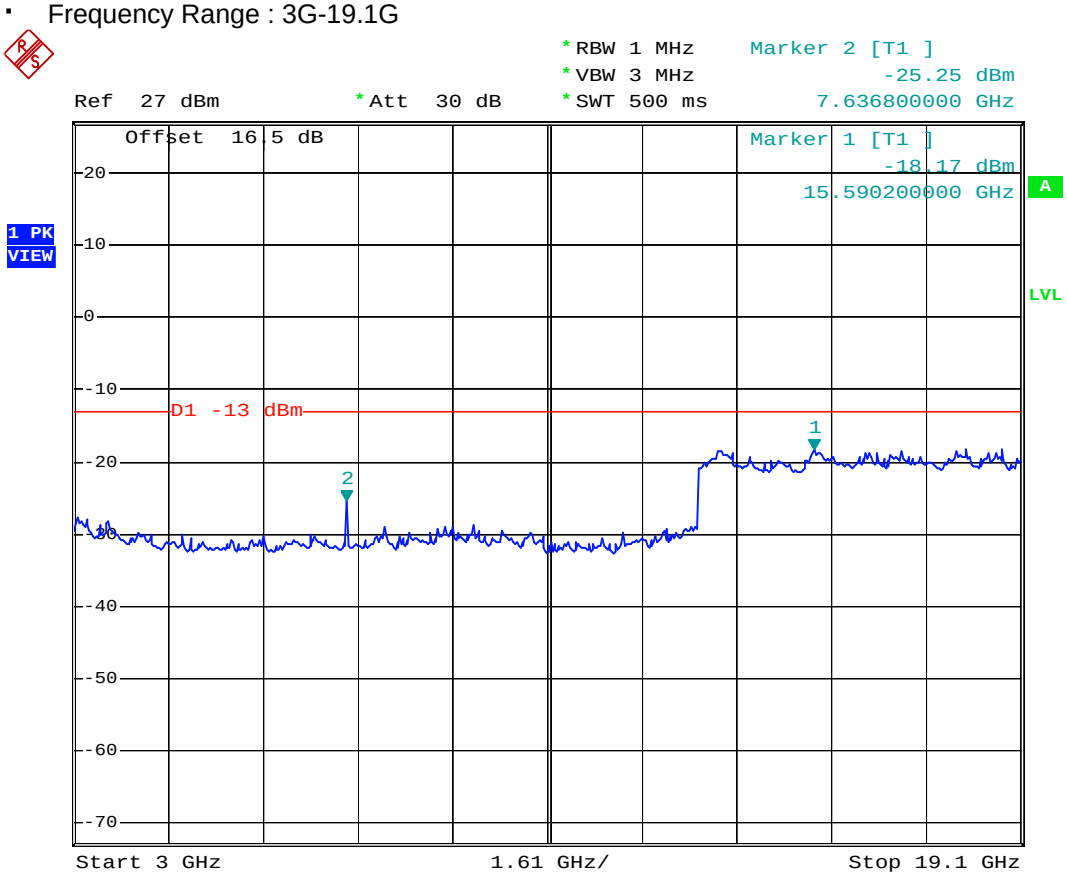
- Frequency Range : 3G-19.1G



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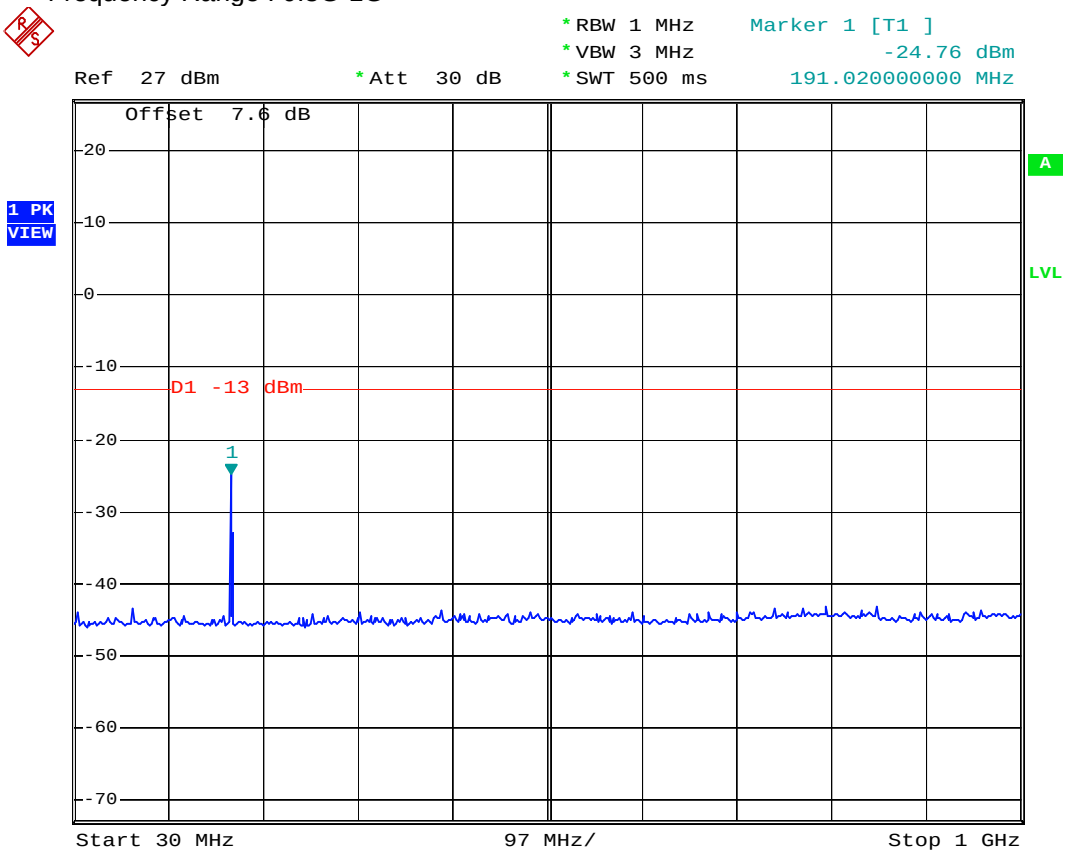
- Test Mode : PCS 1930.2 MHz downlink mode
- Frequency Range : 0.3G-1G



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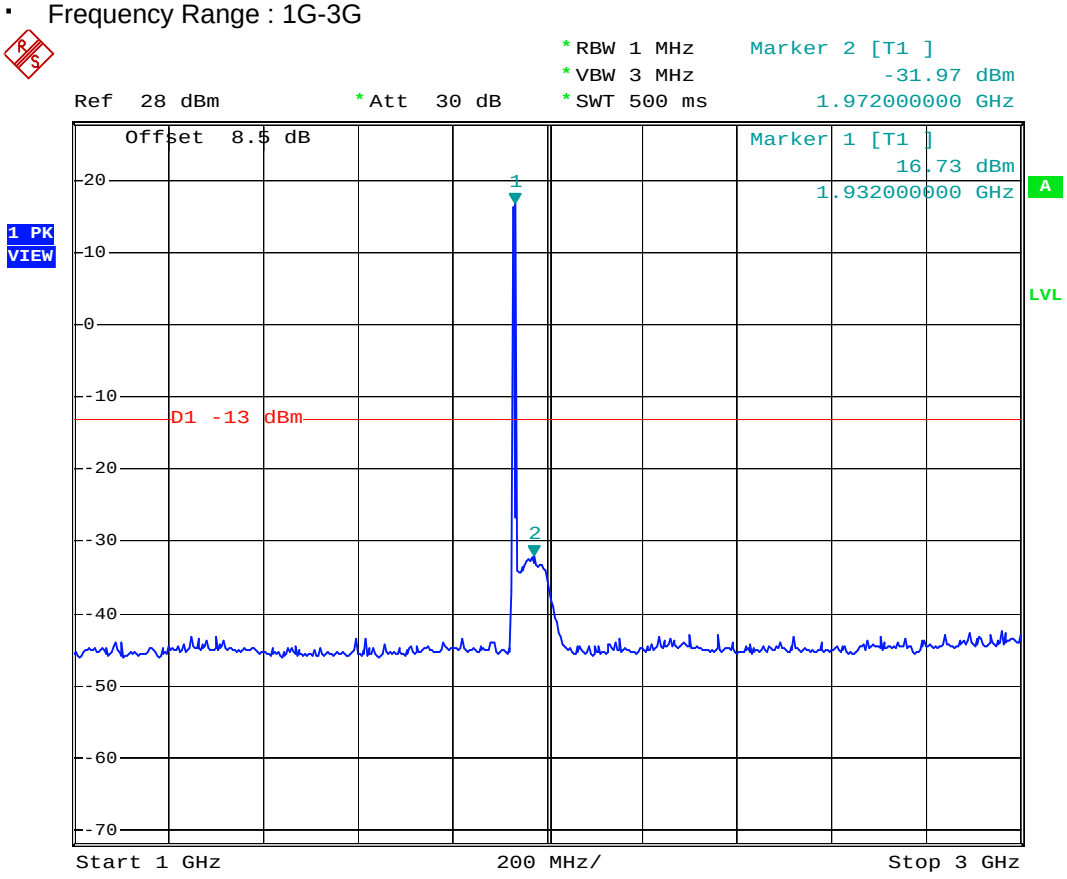
- Frequency Range : 1G-3G



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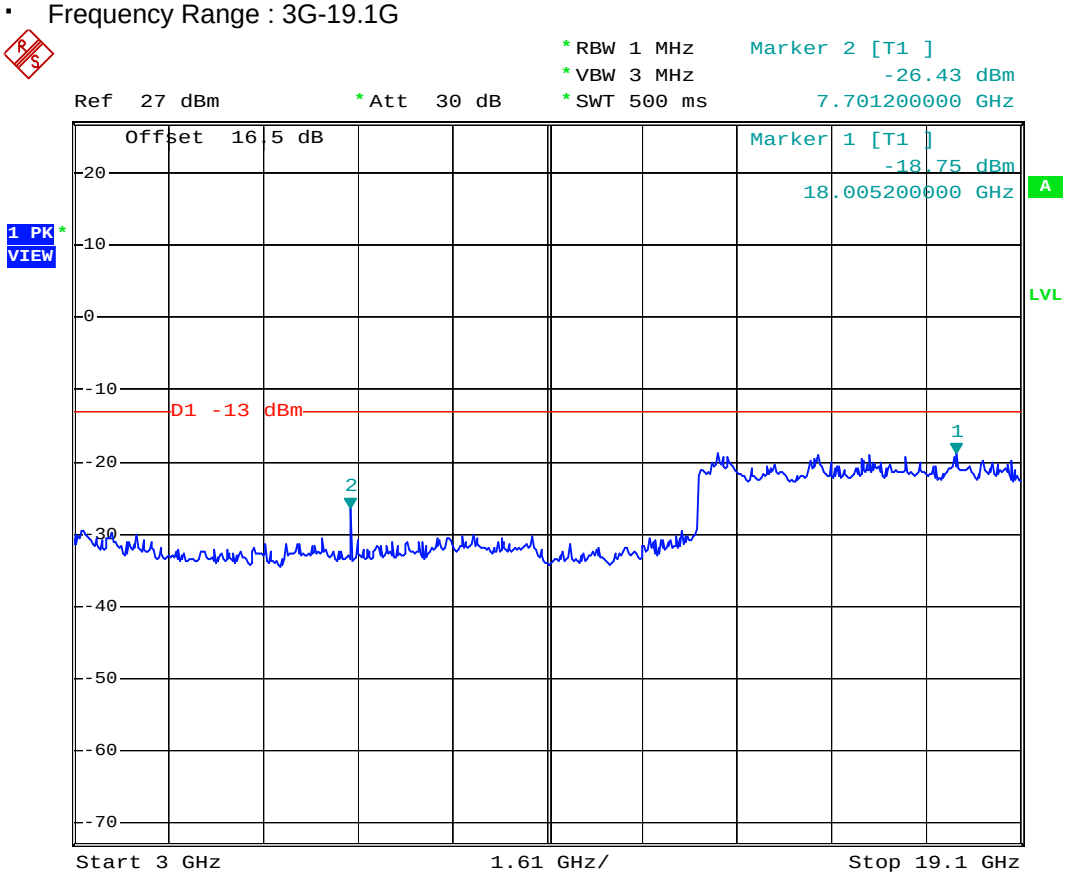
- Frequency Range : 3G-19.1G



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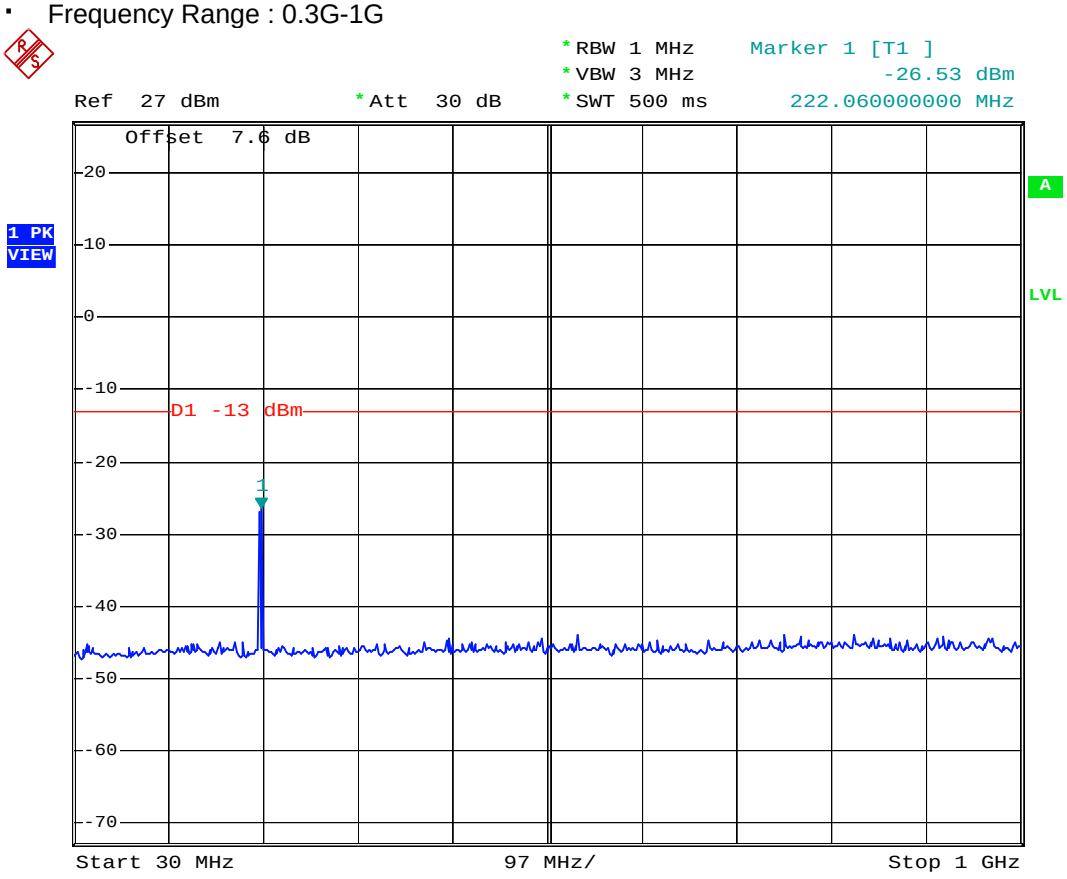
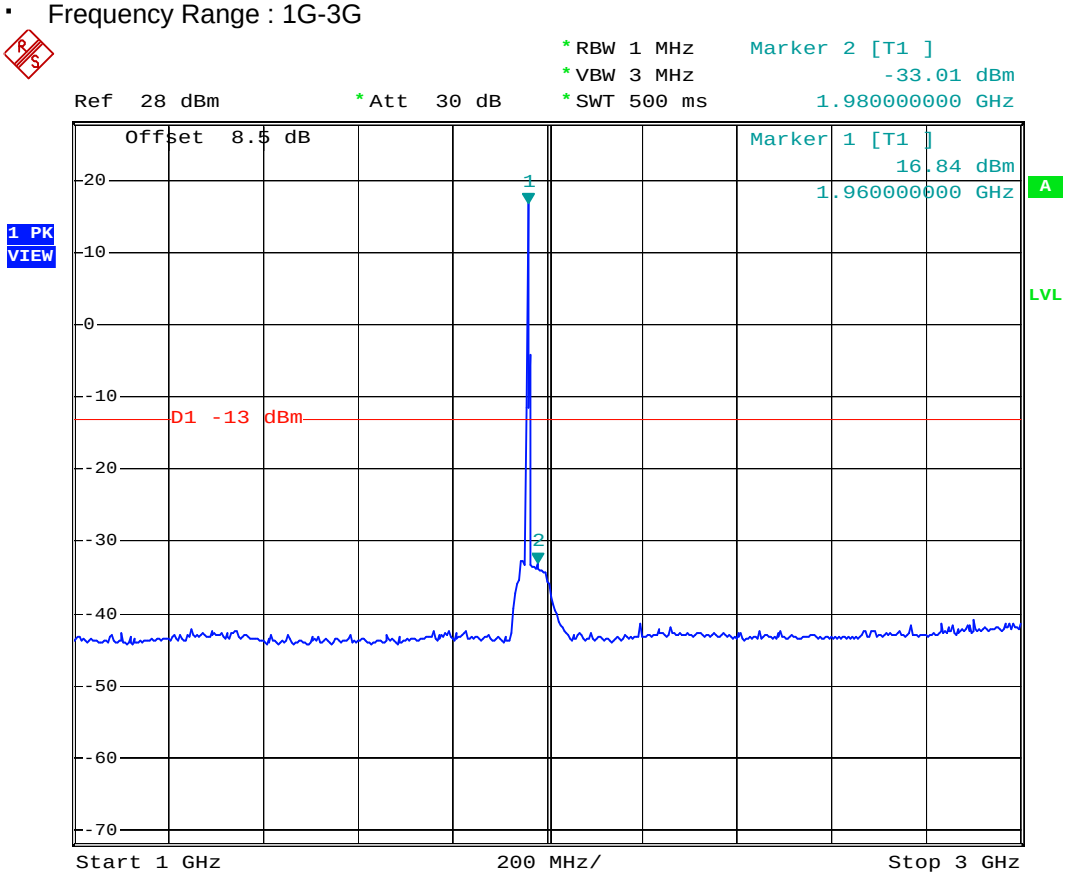
- Test Mode : PCS 1960 MHz downlink mode
- Frequency Range : 0.3G-1G



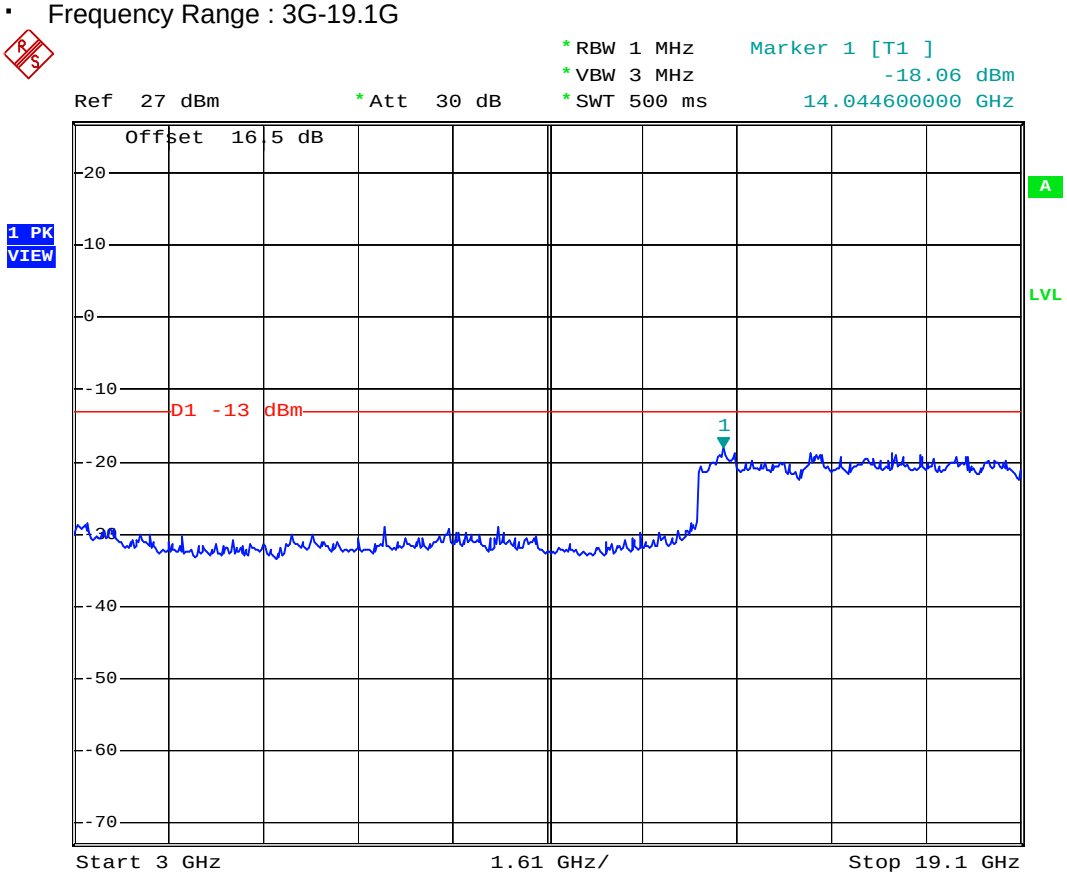
Date: 3.MAR.2007 13:50:39

- Frequency Range : 1G-3G



Date: 10.MAR.2007 11:59:43

- Frequency Range : 3G-19.1G



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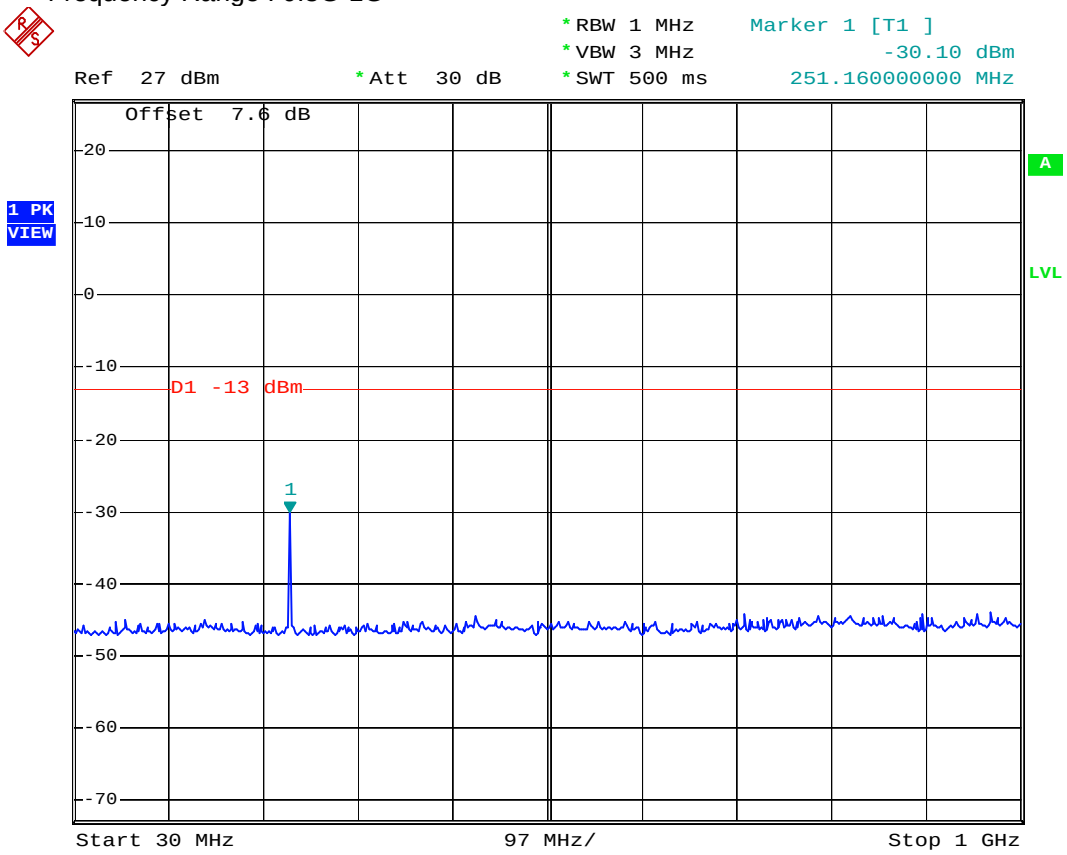
- Test Mode : PCS 1989.8 MHz downlink mode
- Frequency Range : 0.3G-1G



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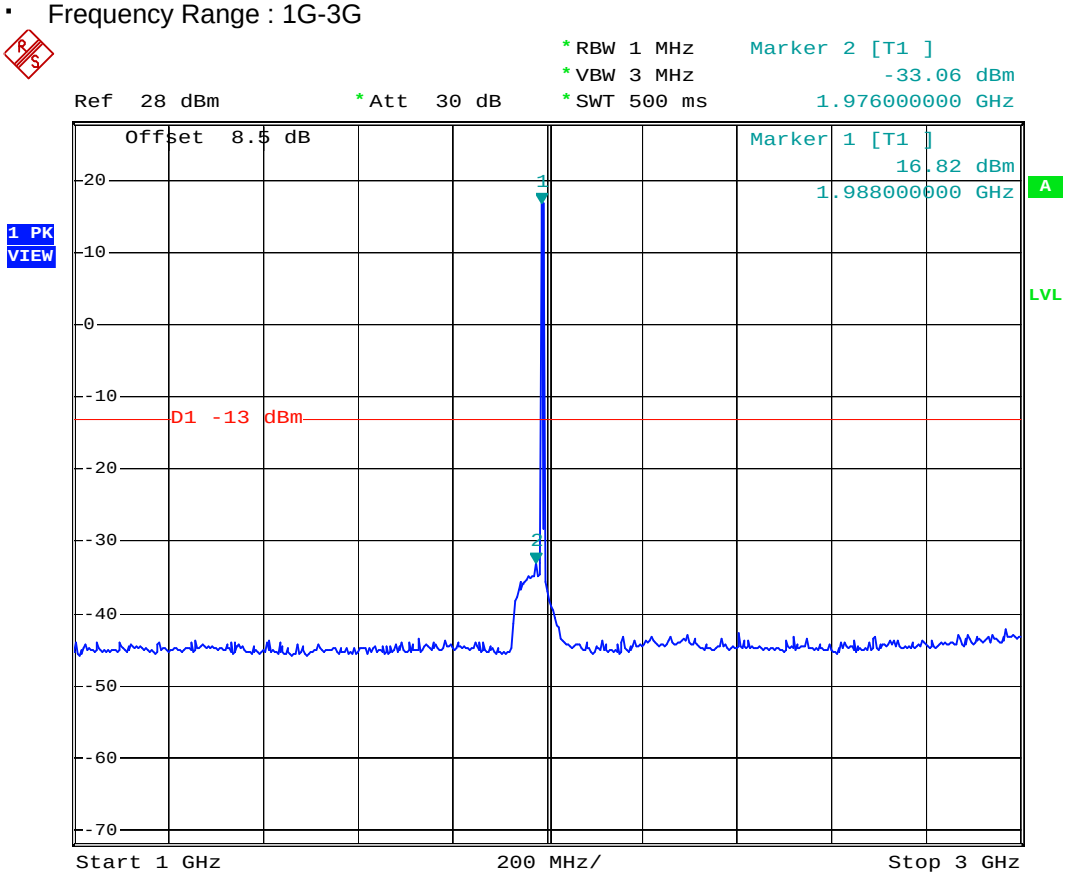
- Frequency Range : 1G-3G



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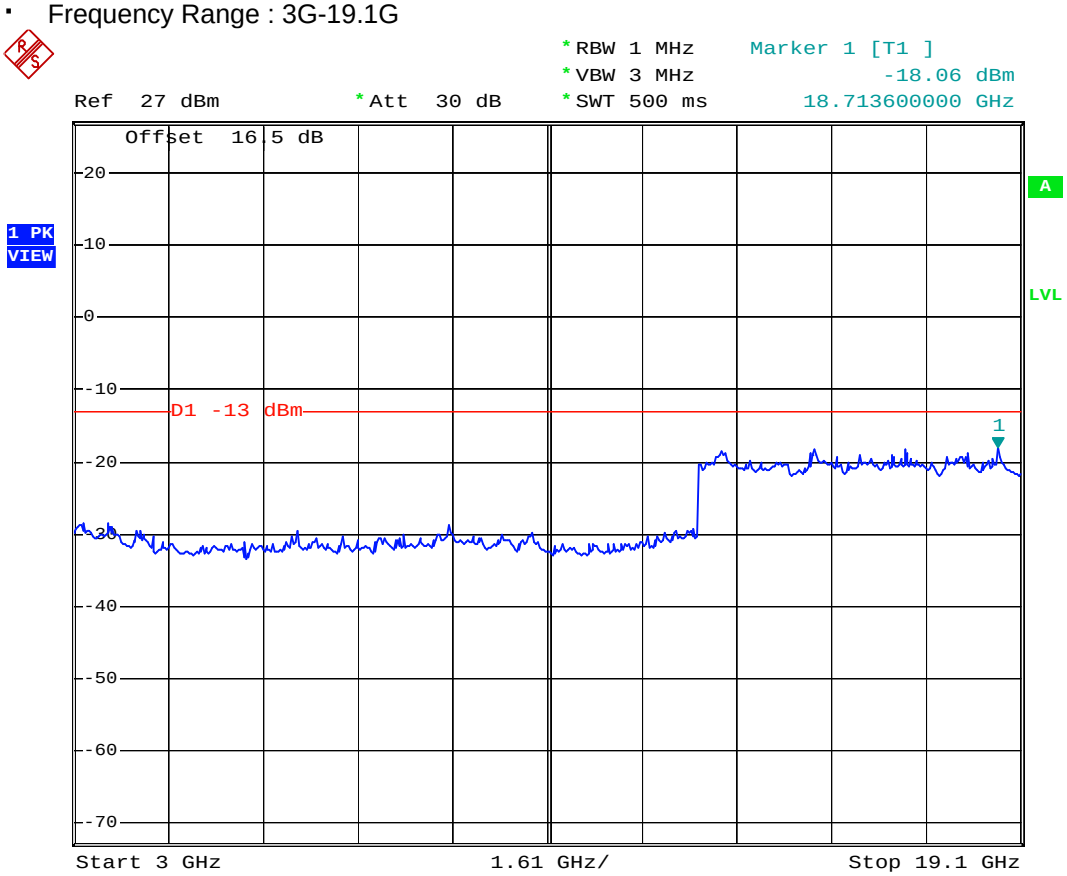
- Frequency Range : 3G-19.1G



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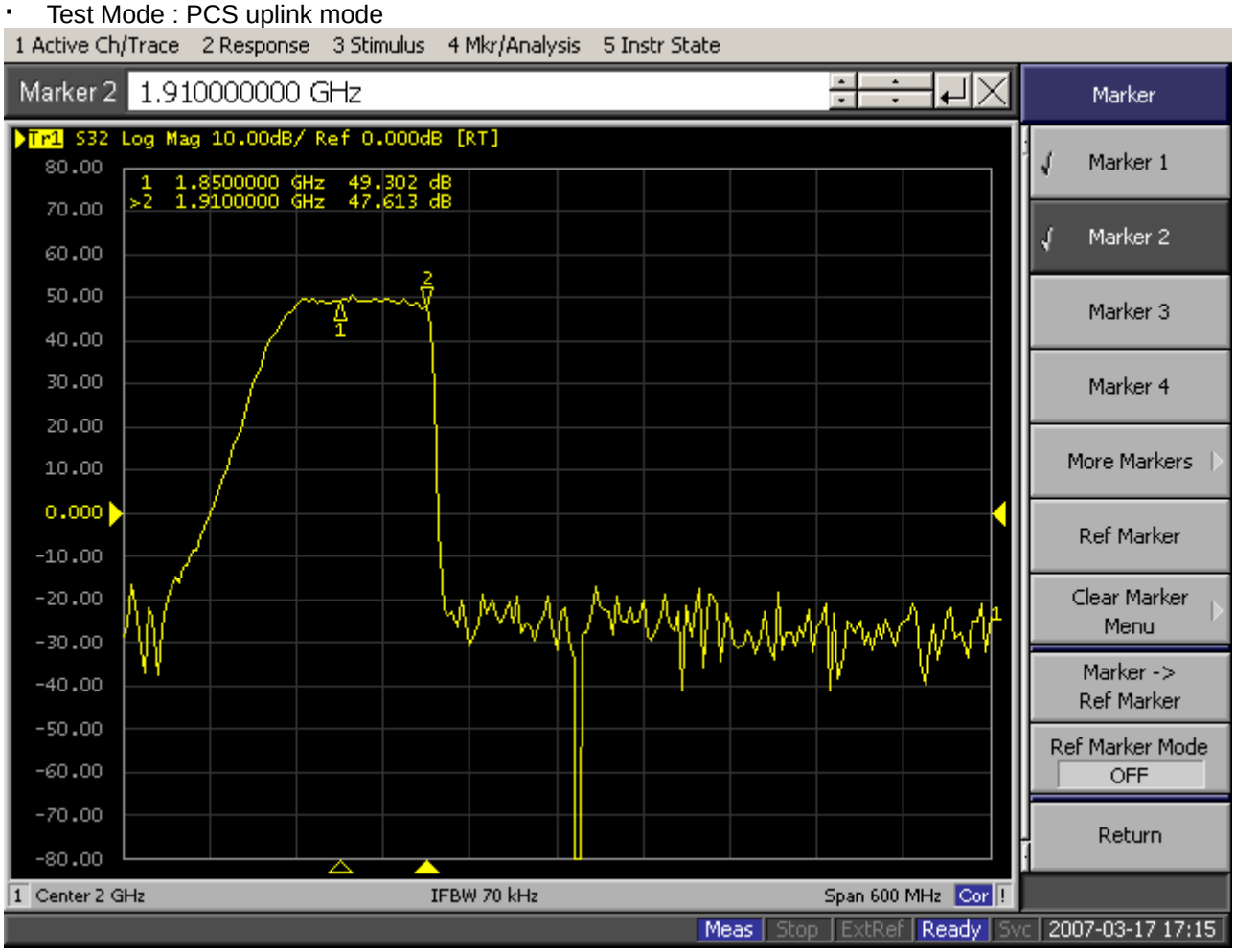
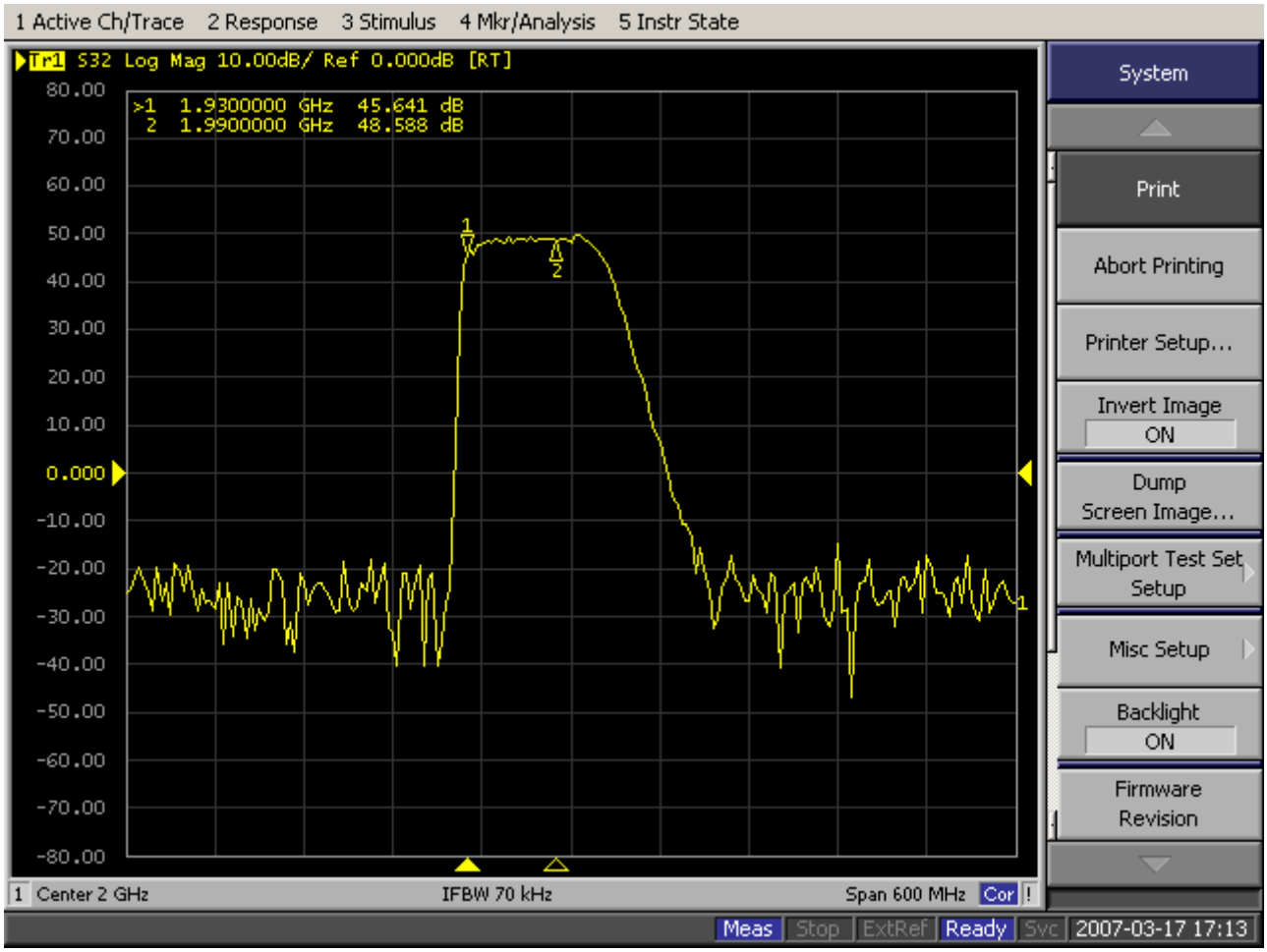
4.4.8.2 Out of Band Rejection:Filter Frequency response

- Test Mode : PCS uplink mode



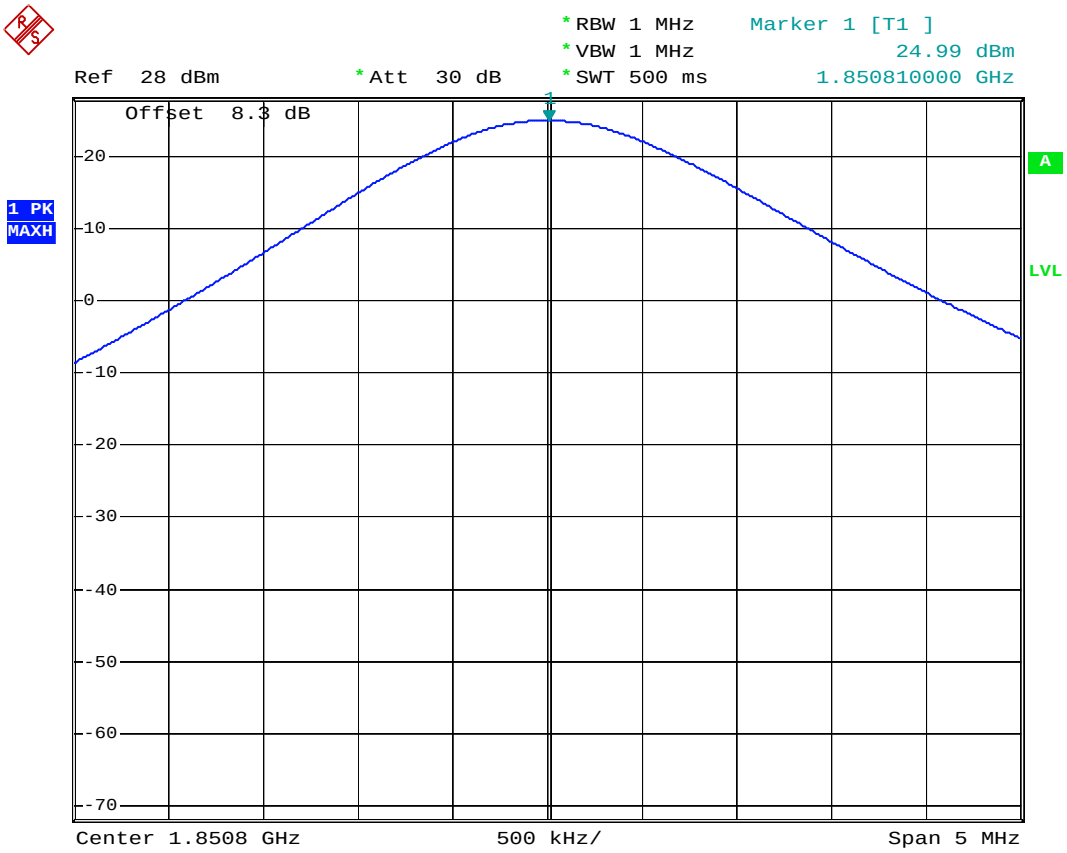
- Test Mode : PCS downlink mode



4.4.8.3 Intermodulation

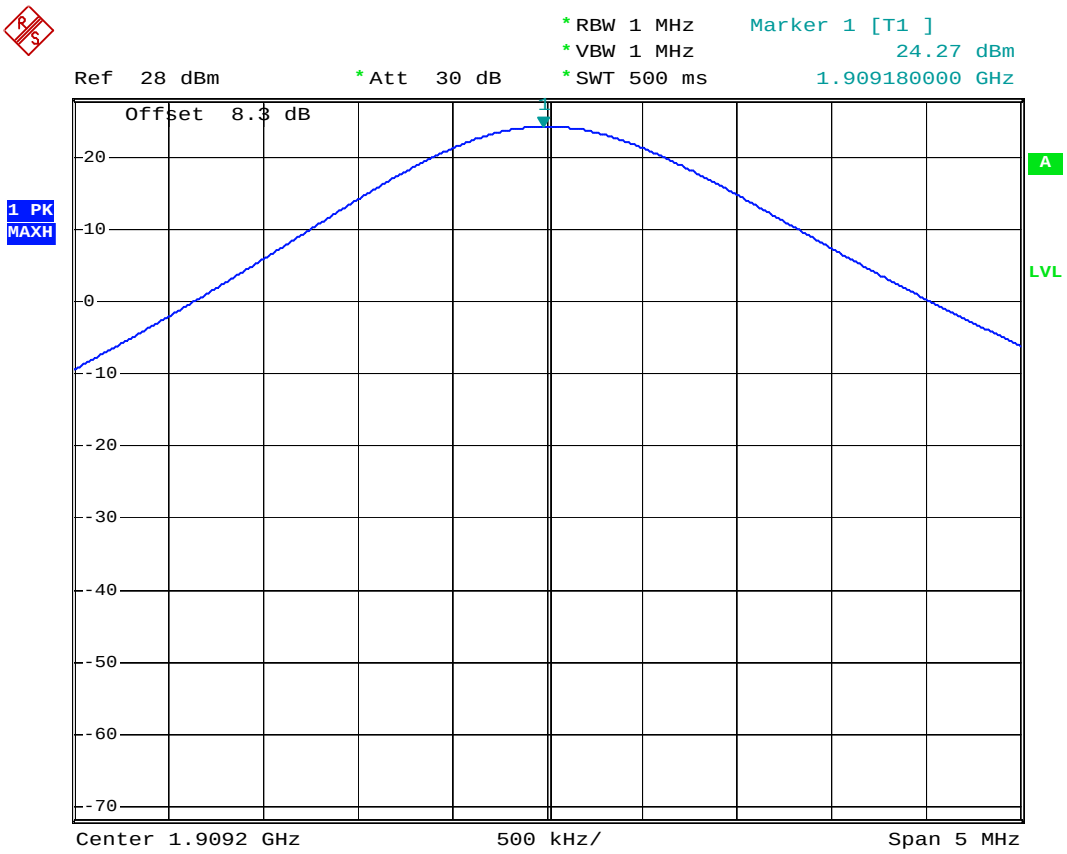
- Maximum Output Power for CW signal from EUT.

- Test Item: Peak Power
- Frequency: PCS 1850.8MHz



Date: 3.MAR.2007 15:36:54

- Frequency: PCS 1909.2MHz



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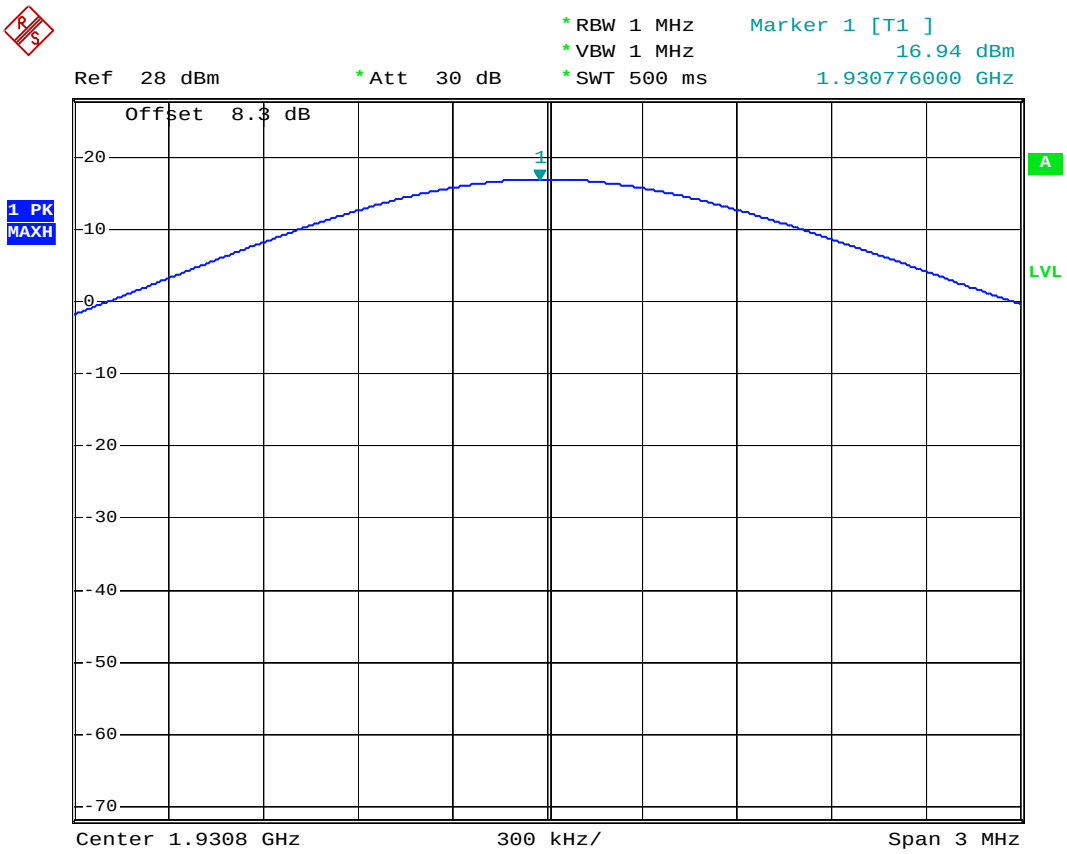
- Frequency: PCS 1930.8MHz



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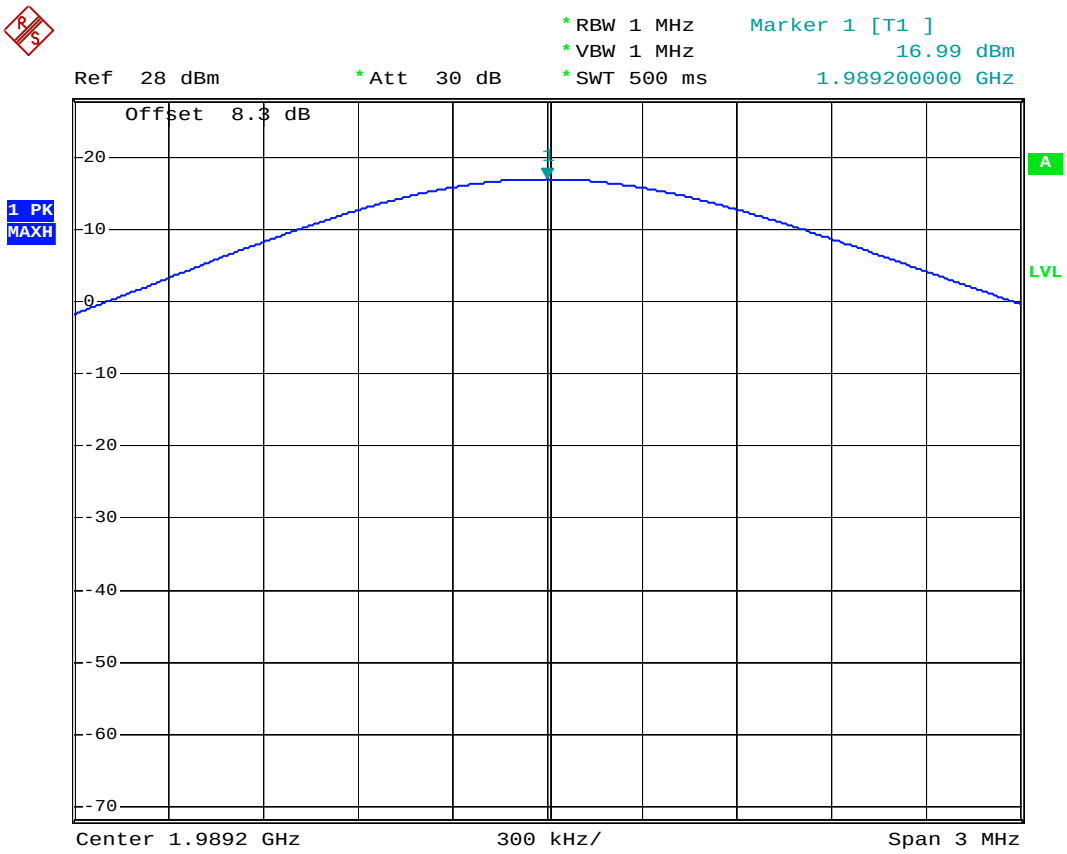
- Frequency: PCS 1989.2MHz



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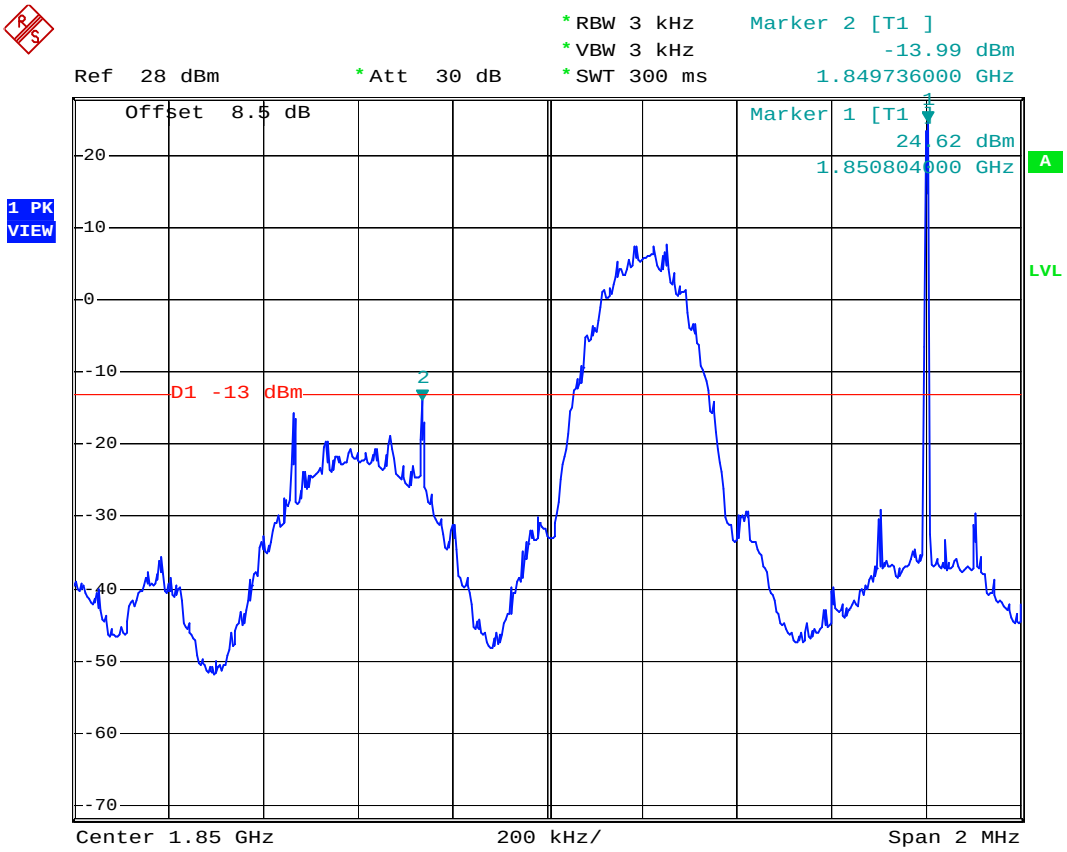
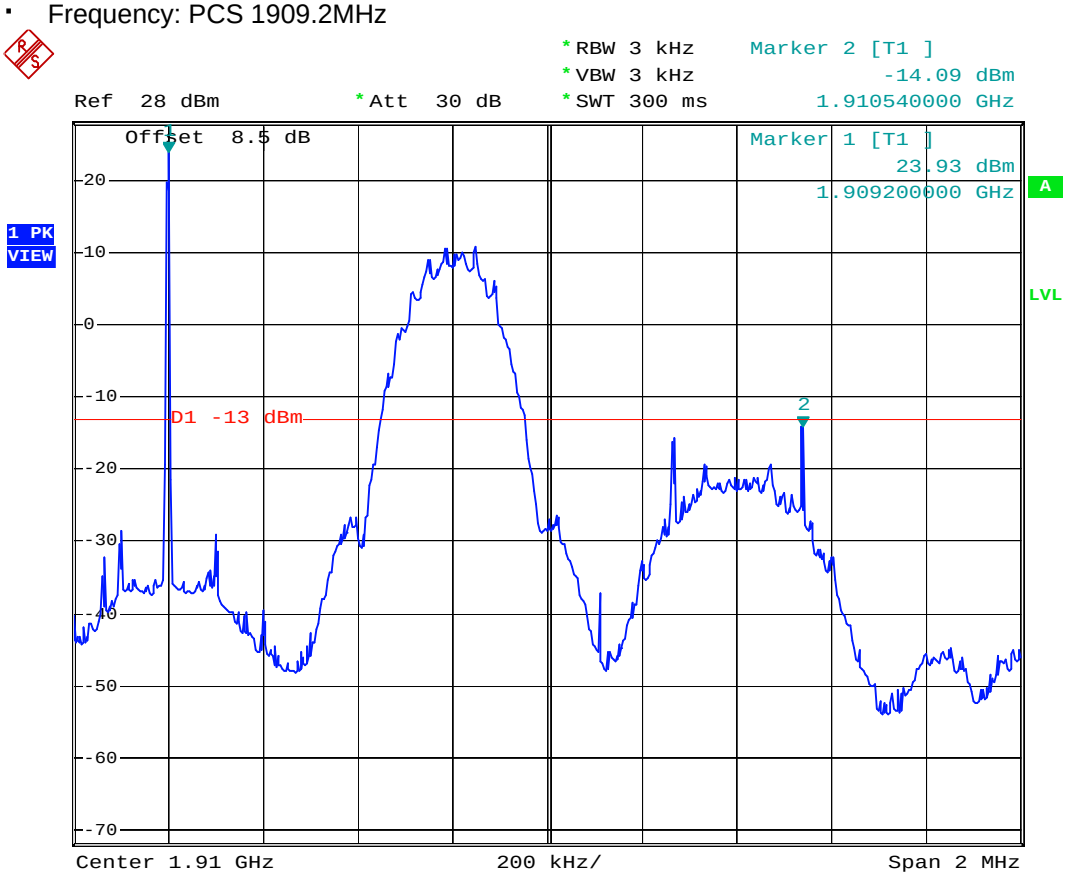
- Test Item: Band Edge
- Frequency: PCS 1850.8MHz



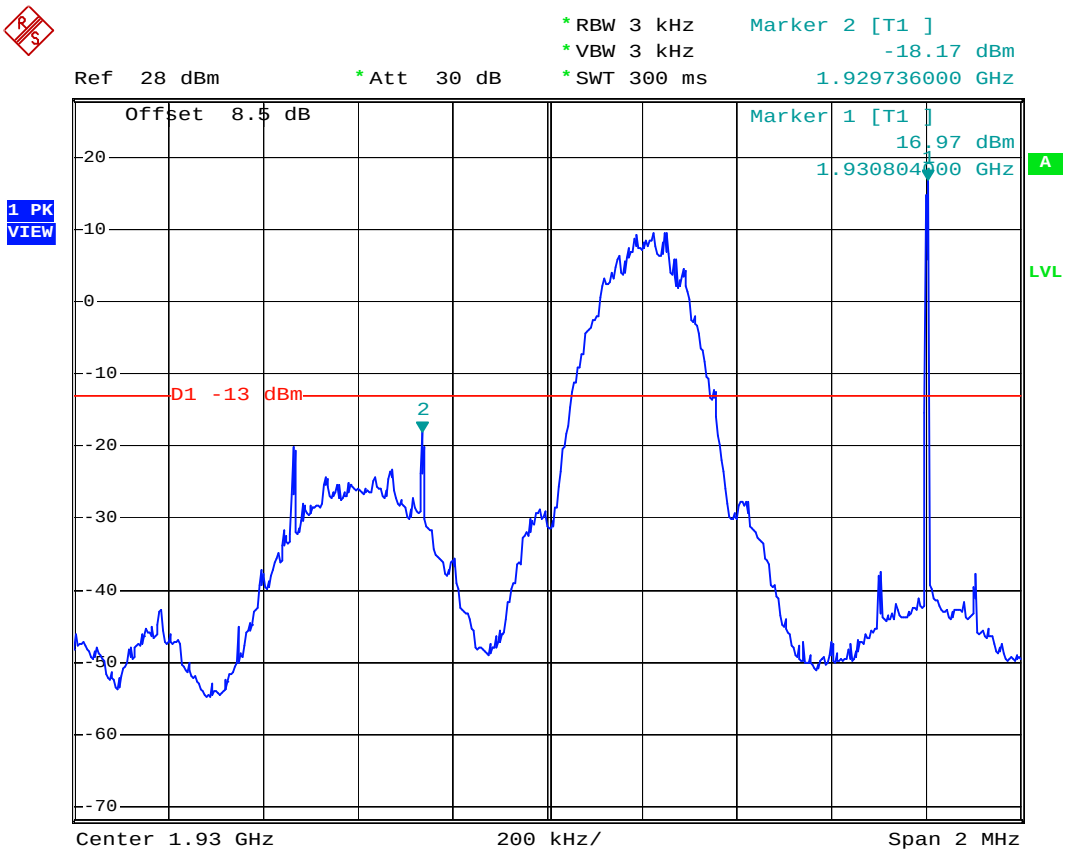
Date: 10.MAR.2007 13:23:53

- Frequency: PCS 1909.2MHz



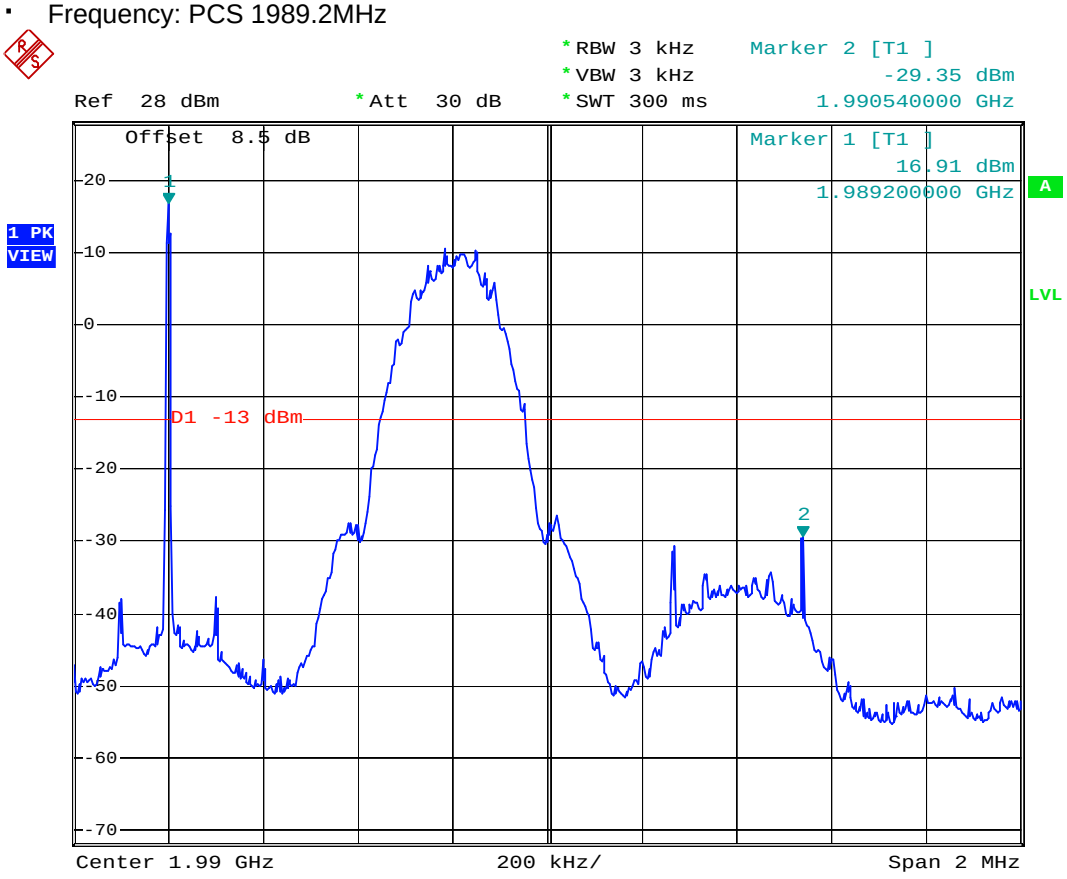
Date: 10.MAR.2007 13:14:49

- Frequency: PCS 1930.8MHz



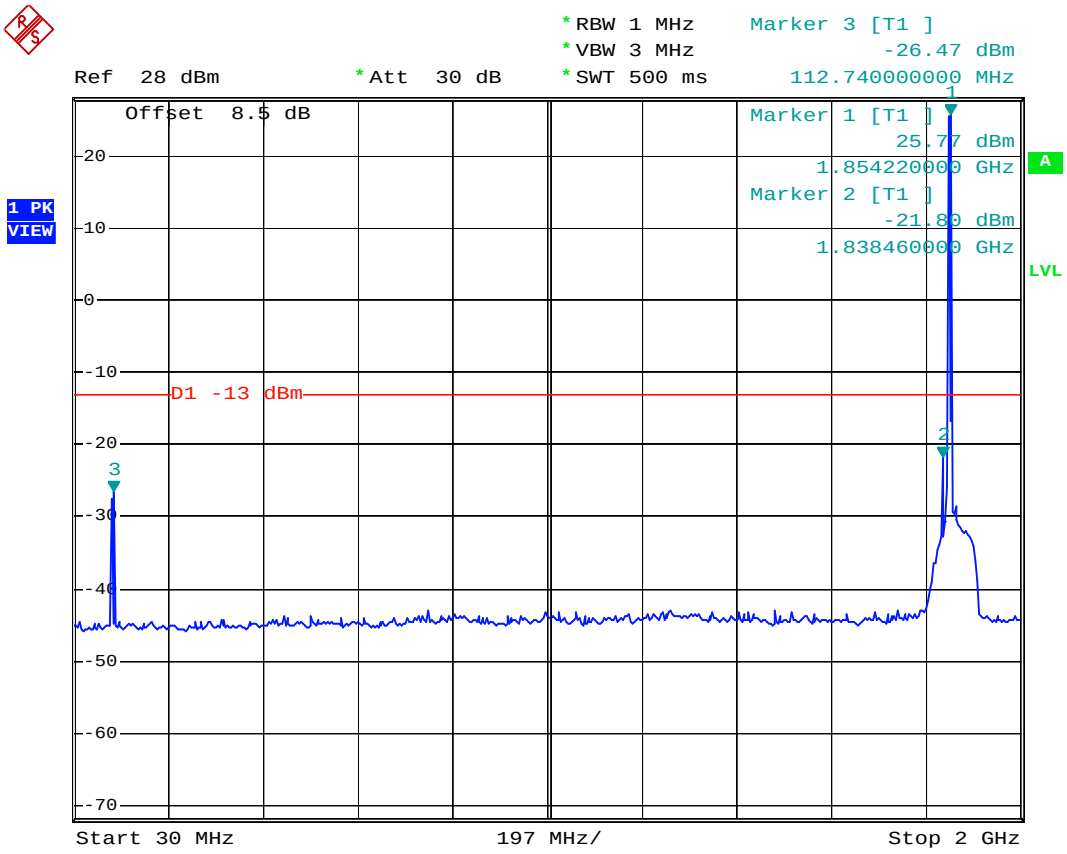
Date: 10.MAR.2007 12:15:48

- Frequency: PCS 1989.2MHz



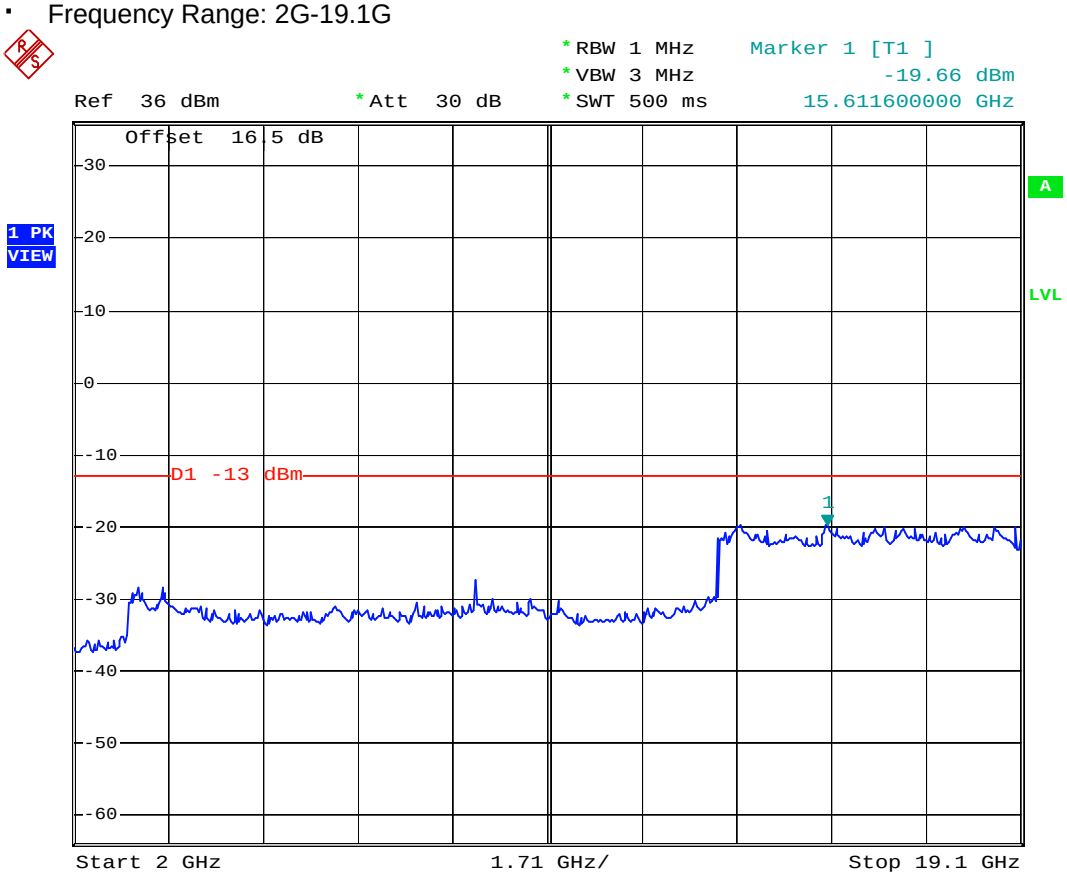
Date: 10.MAR.2007 12:19:23

- Test Item: Conducted Spurious
- Test Mode: PCS 1850.8MHz Uplink Mode
- Frequency Range: 0.3G-2G



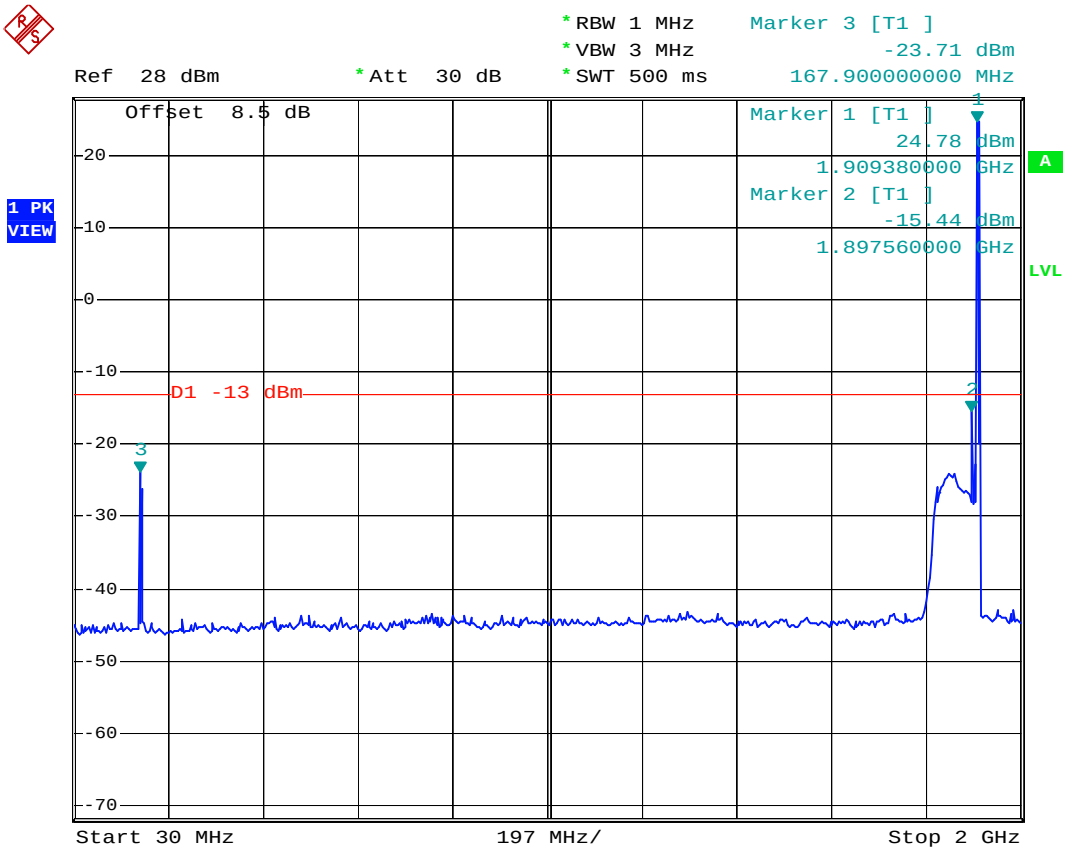
Date: 10.MAR.2007 13:39:25

- Frequency Range: 2G-19.1G



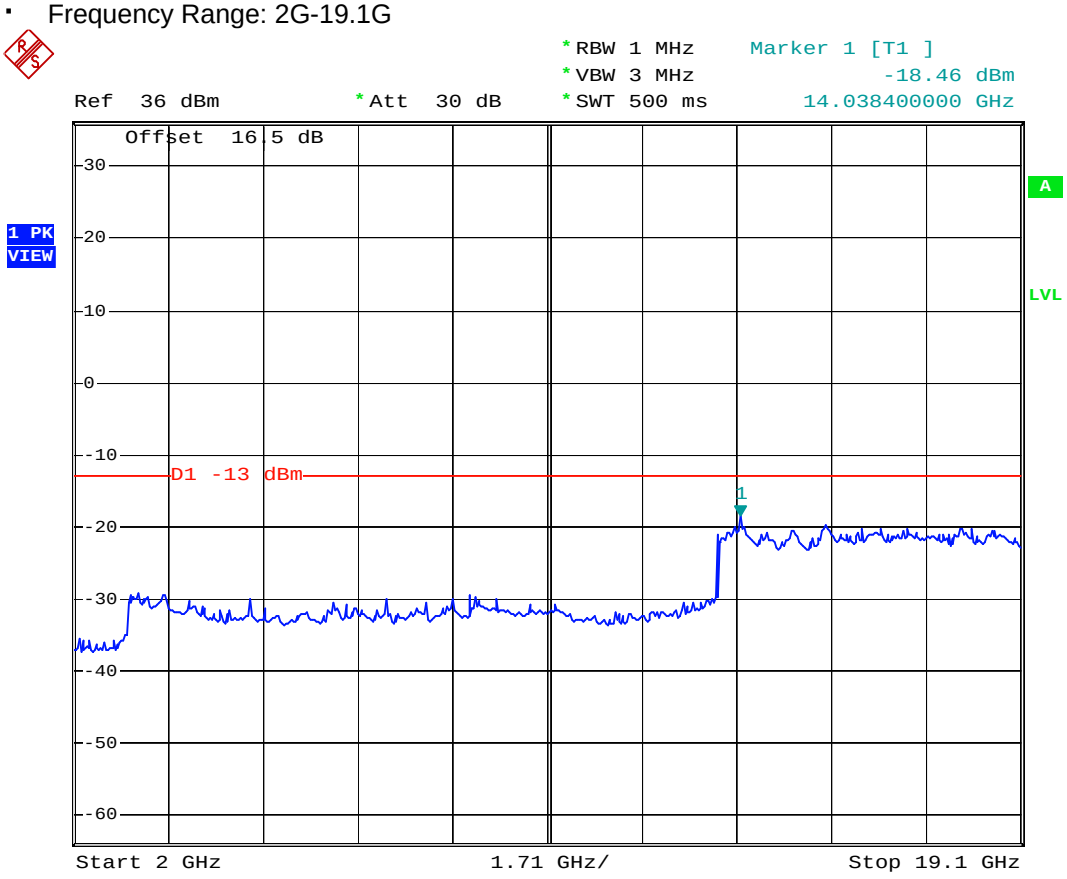
Date: 10.MAR.2007 13:41:15

- Test Mode: PCS 1909.2MHz Uplink Mode
- Frequency Range: 0.3G-2G



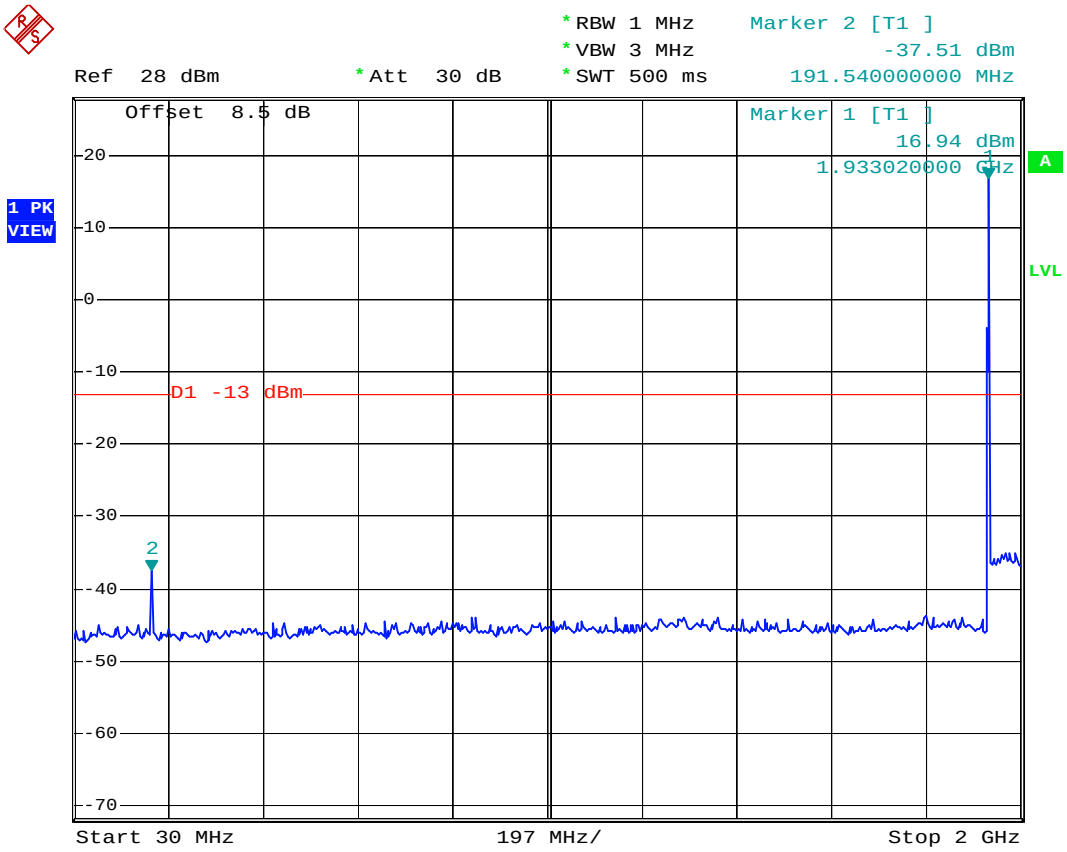
Date: 10.MAR.2007 13:44:43

- Frequency Range: 2G-19.1G



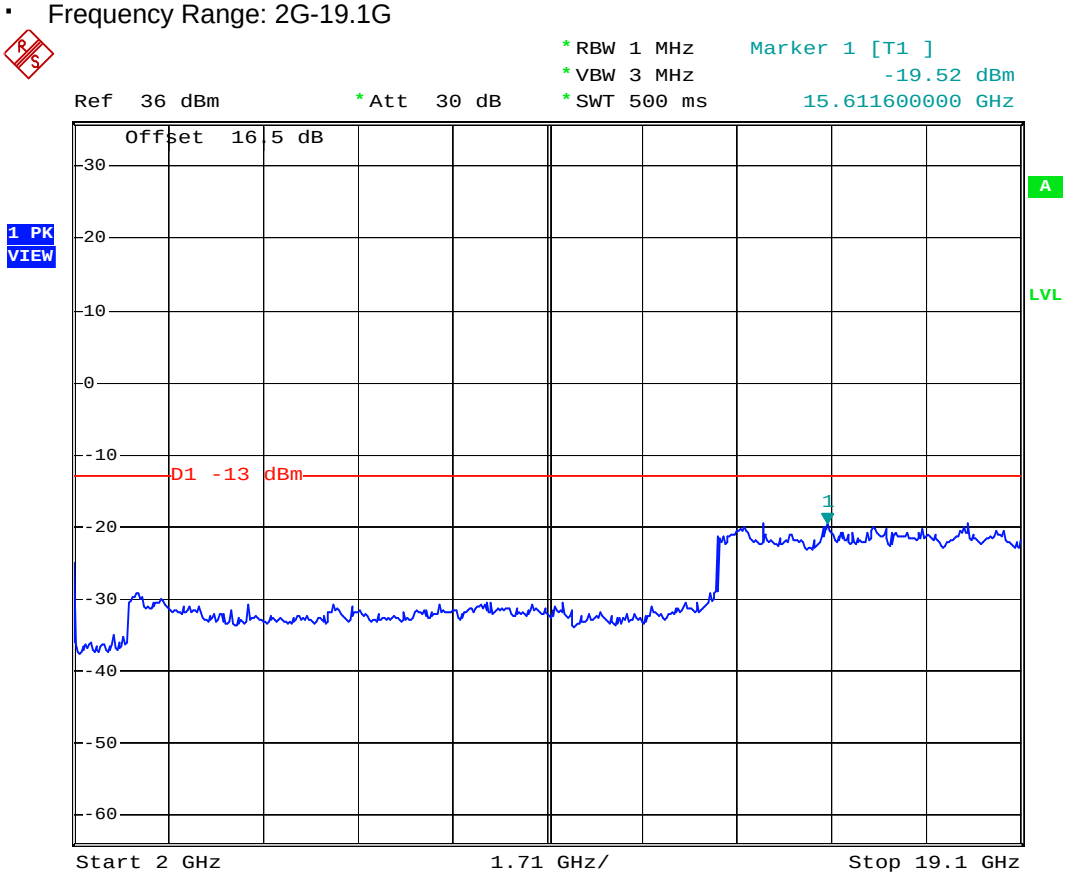
Date: 10.MAR.2007 13:43:24

- Test Mode: PCS 1930.8MHz Downlink Mode
- Frequency Range: 0.3G-2G



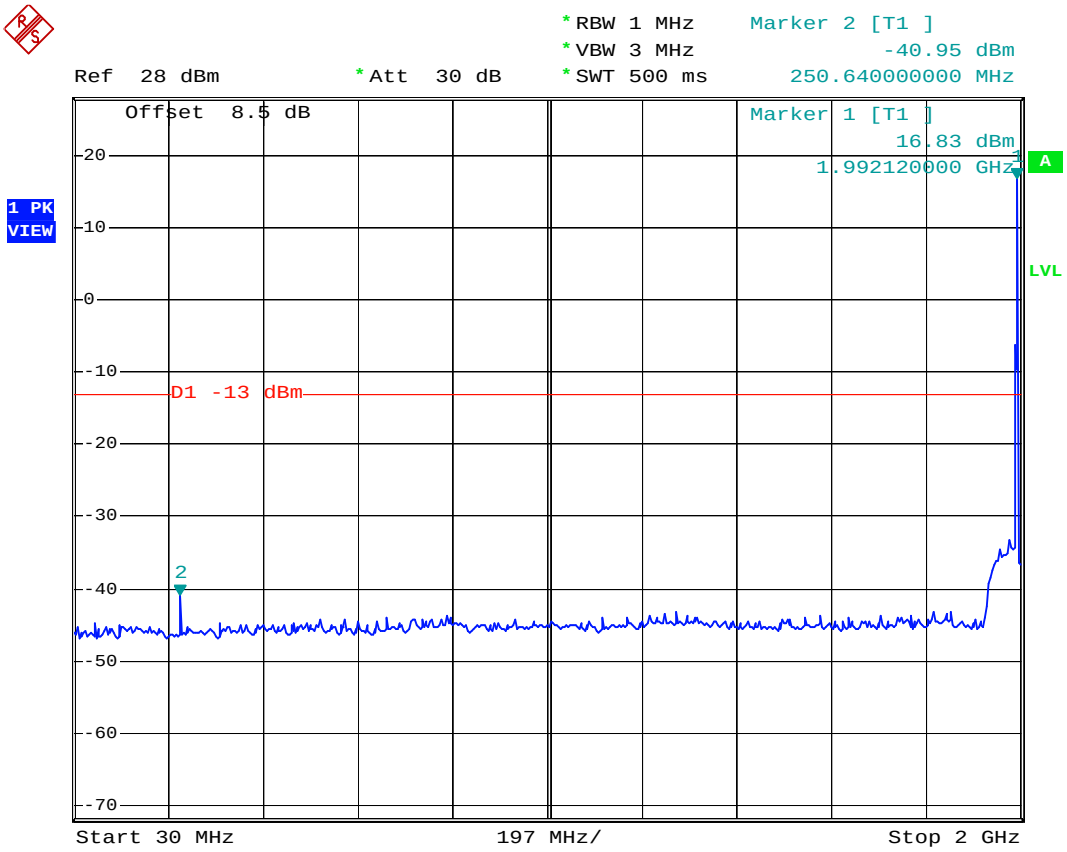
Date: 10.MAR.2007 14:49:07

- Frequency Range: 2G-19.1G



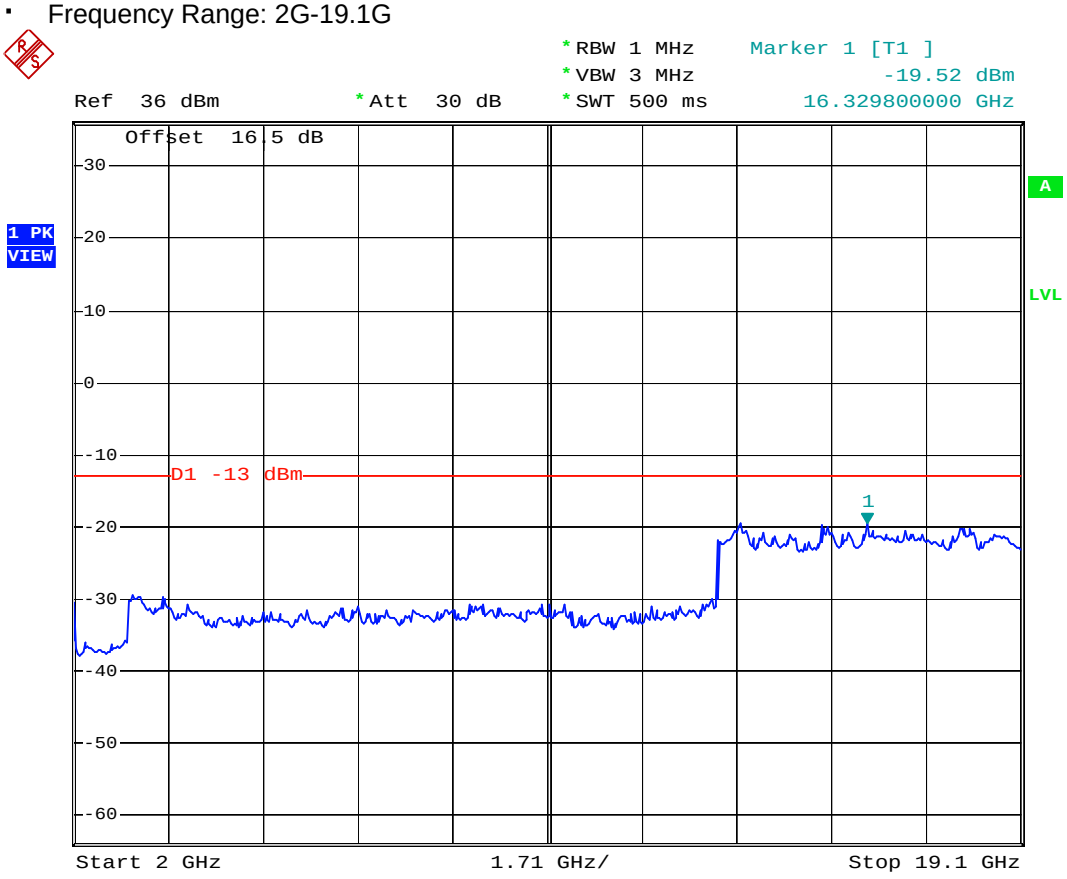
Date: 10.MAR.2007 14:47:21

- Test Mode: PCS 1989.2MHz Downlink Mode
- Frequency Range: 0.3G-2G



Date: 10.MAR.2007 14:44:33

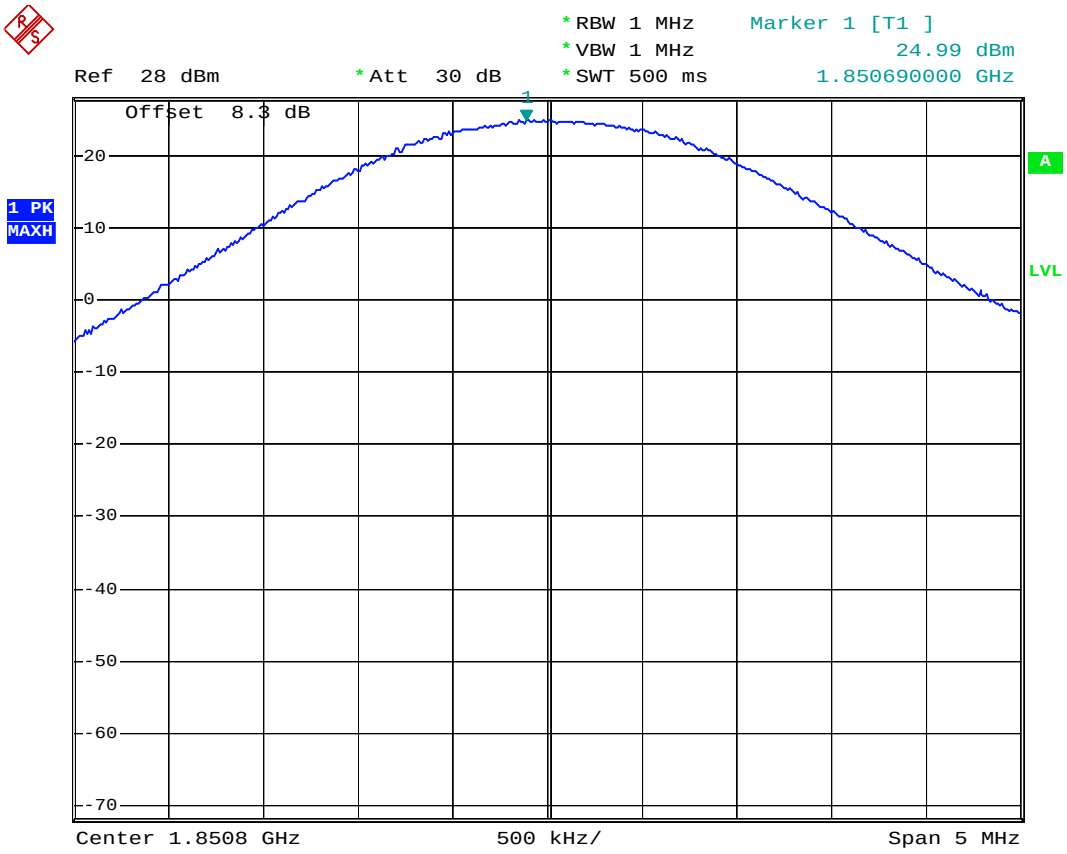
- Frequency Range: 2G-19.1G



Date: 10.MAR.2007 14:45:38

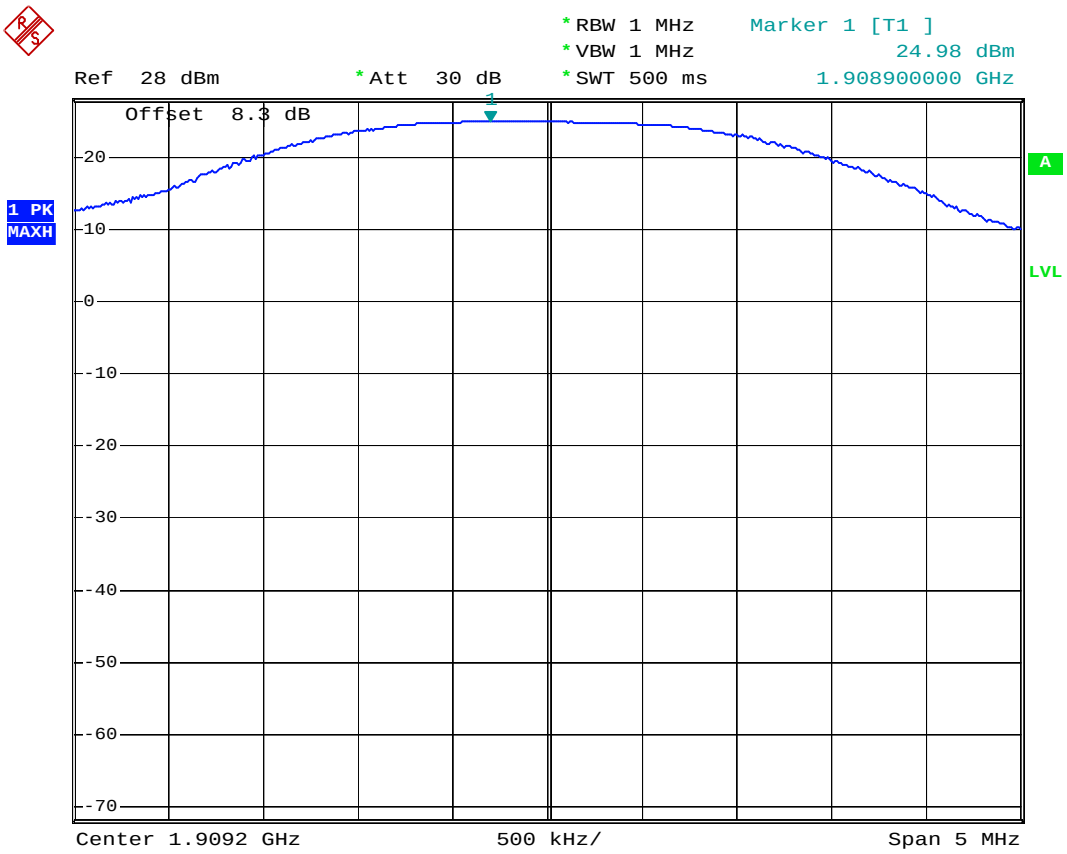
➢ Maximum Output Power for CDMA signal from EUT.

- Test Item: Peak Power
- Frequency: PCS 1850.8MHz



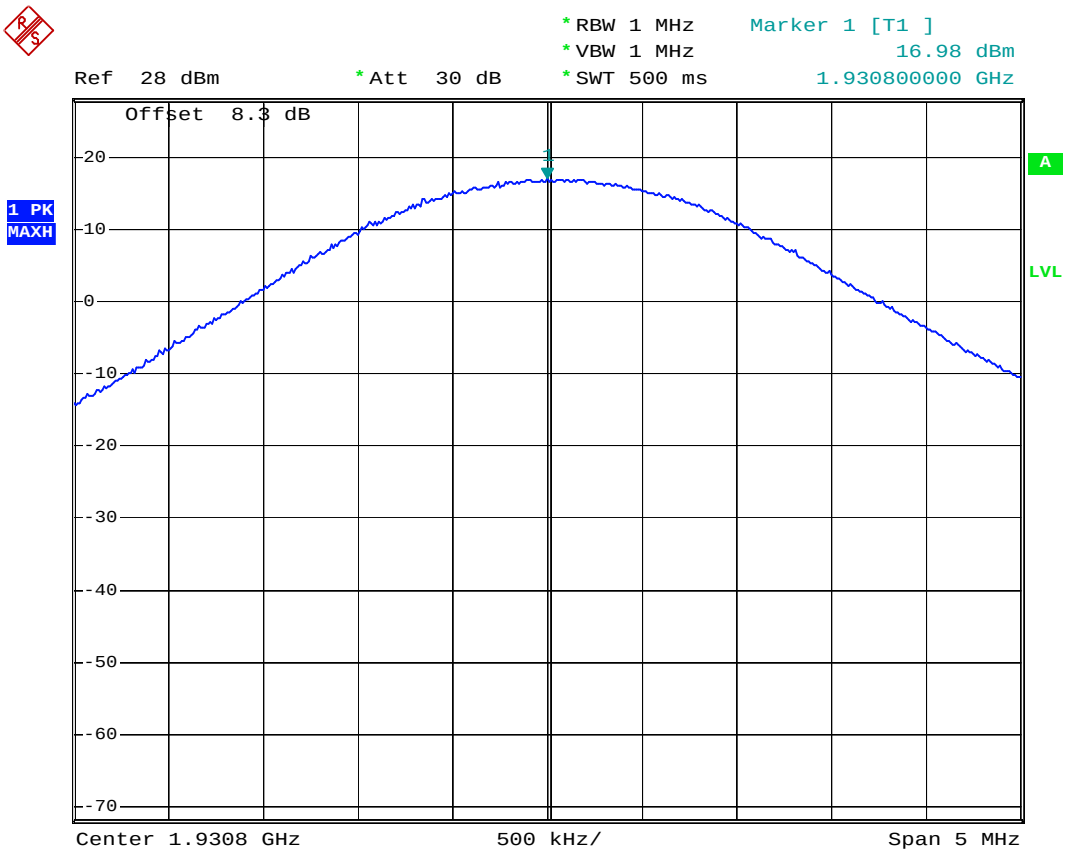
Date: 3.MAR.2007 15:53:14

- Frequency: PCS 1909.2MHz



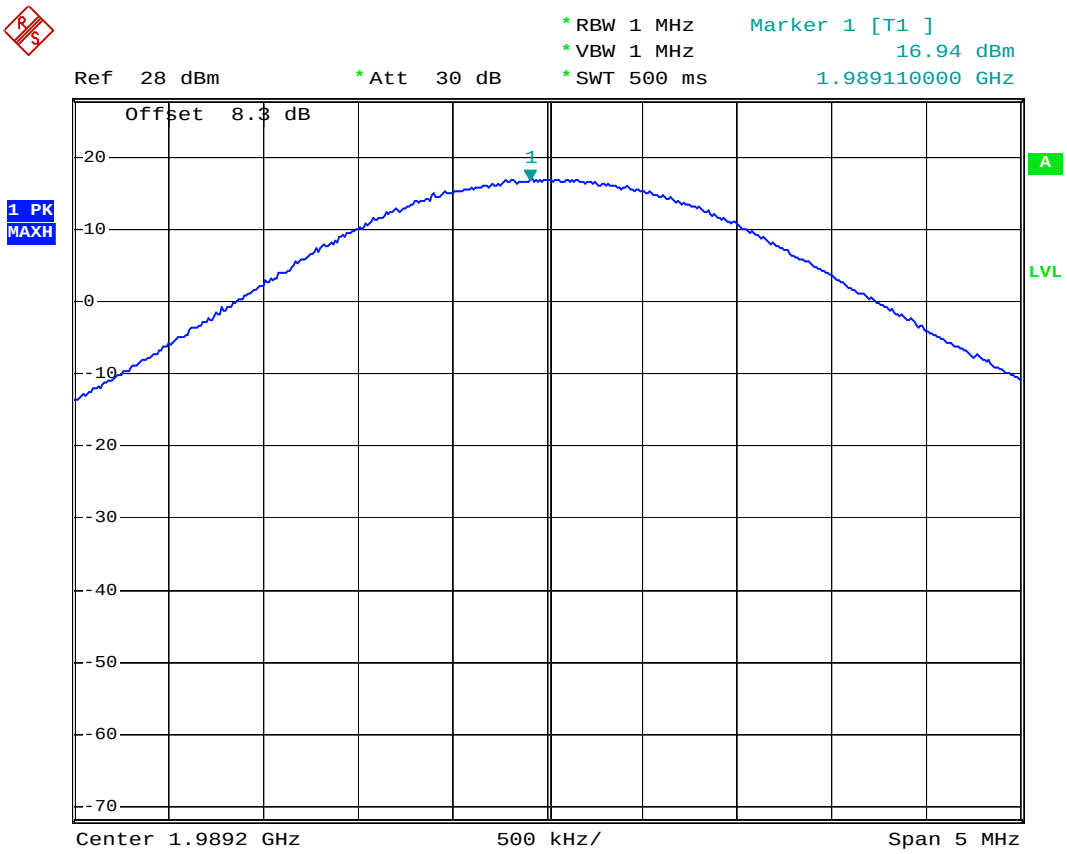
Date: 3.MAR.2007 15:57:43

- Frequency: PCS 1930.8MHz



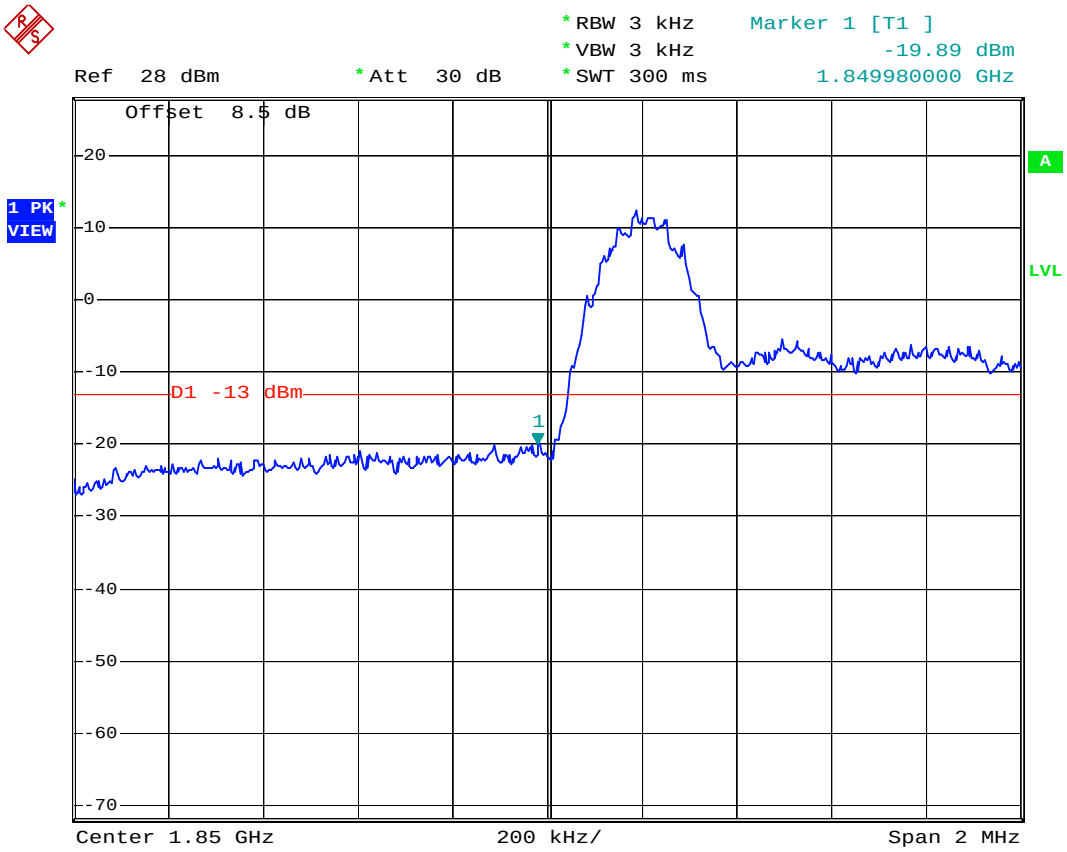
Date: 10.MAR.2007 10:42:58

- Frequency: PCS 1989.2MHz



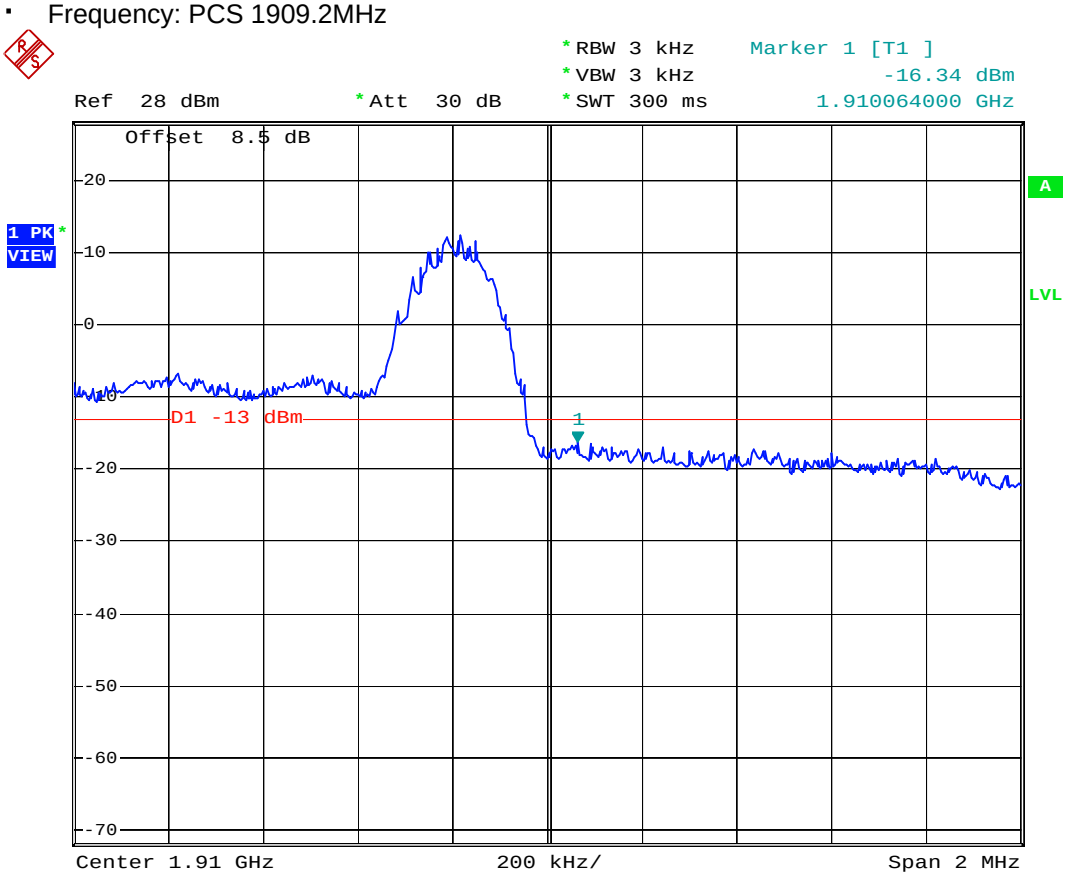
Date: 10.MAR.2007 10:46:33

- Test Item: Band Edge
- Frequency: PCS 1850.8MHz



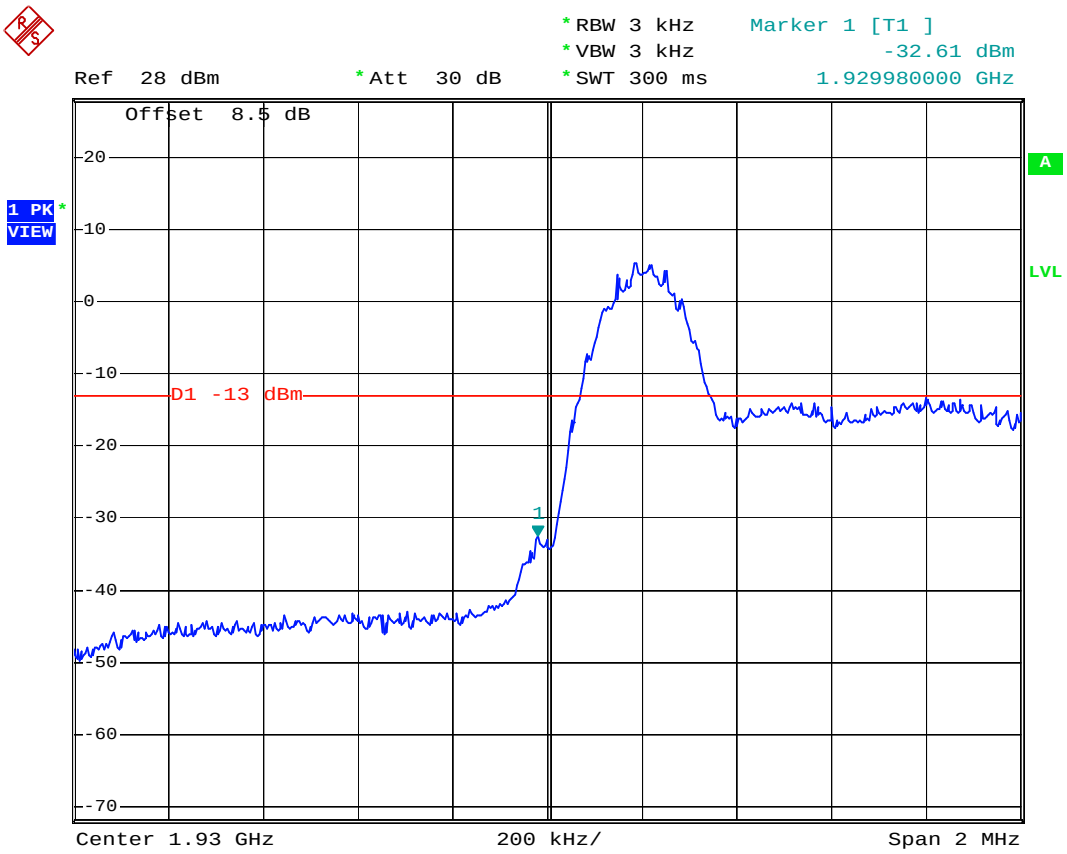
Date: 10.MAR.2007 12:39:04

- Frequency: PCS 1909.2MHz



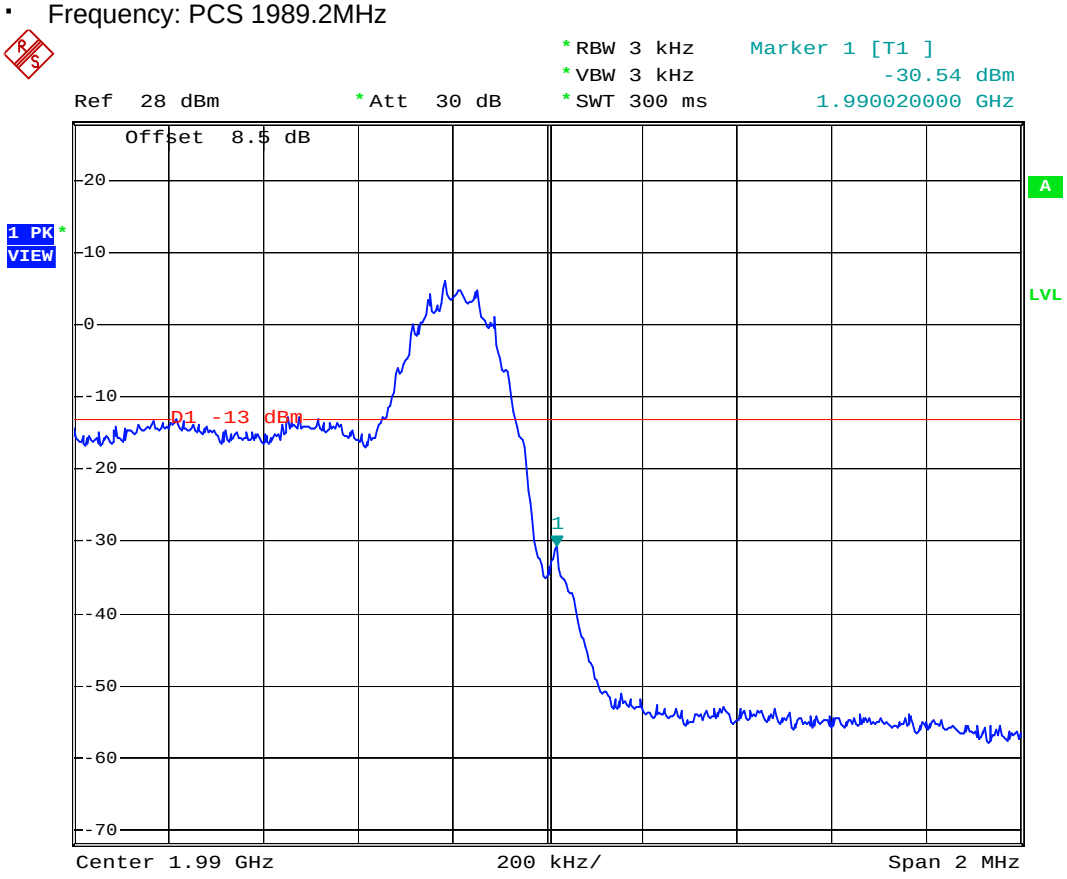
Date: 10.MAR.2007 13:00:14

- Frequency: PCS 1930.8MHz



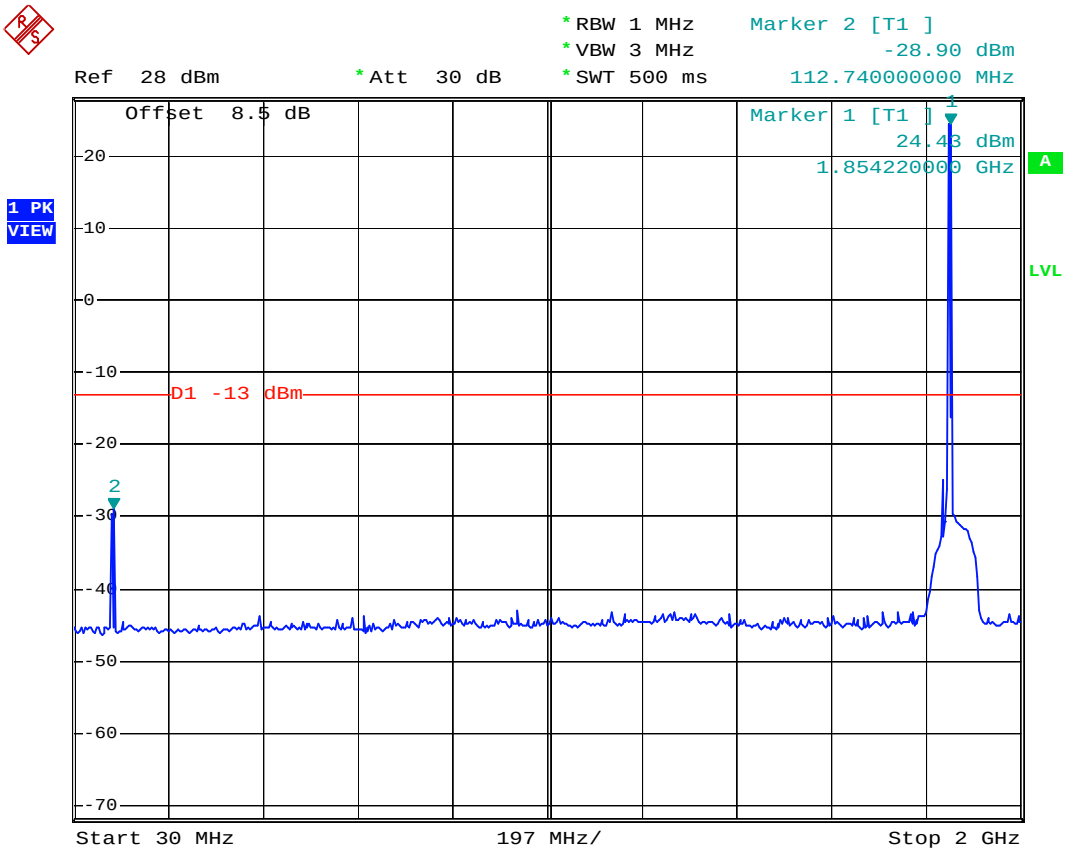
Date: 10.MAR.2007 12:25:10

- Frequency: PCS 1989.2MHz



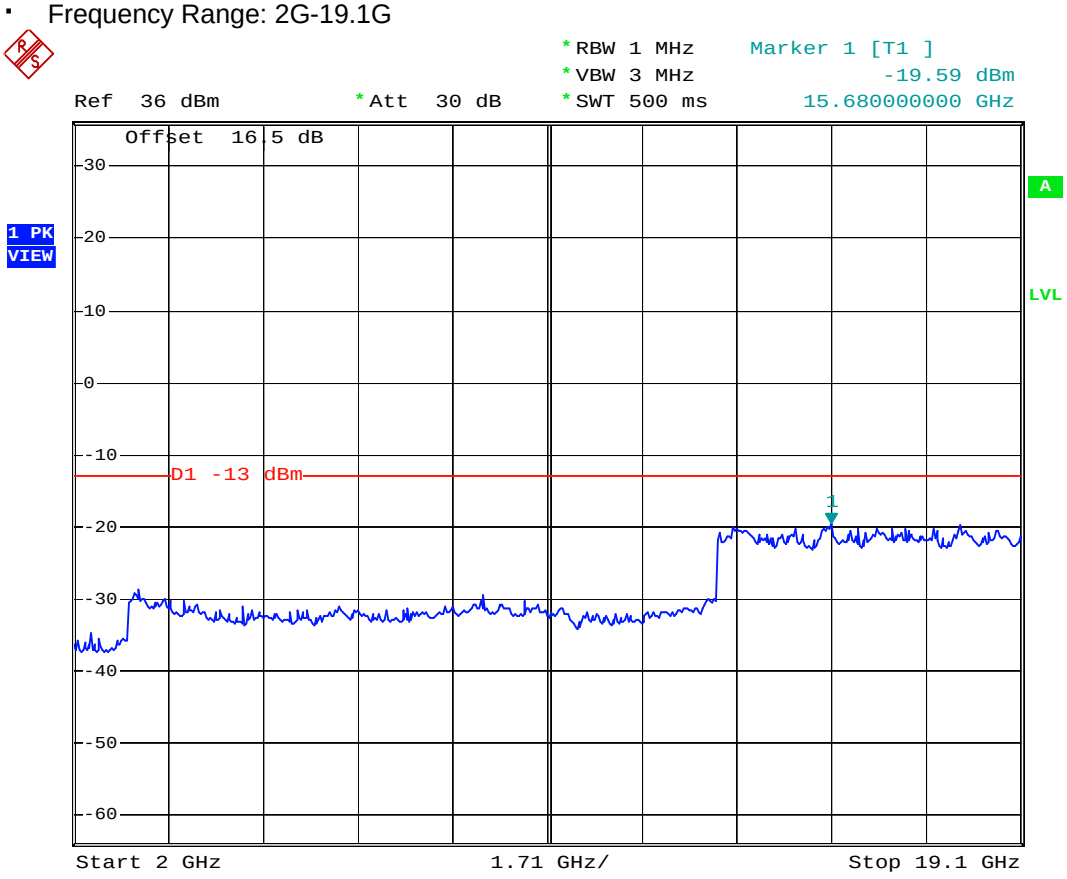
Date: 10.MAR.2007 12:26:42

- Test Item: Conducted Spurious
- Test Mode: PCS 1850.8MHz Uplink Mode
- Frequency Range: 0.3G-2G



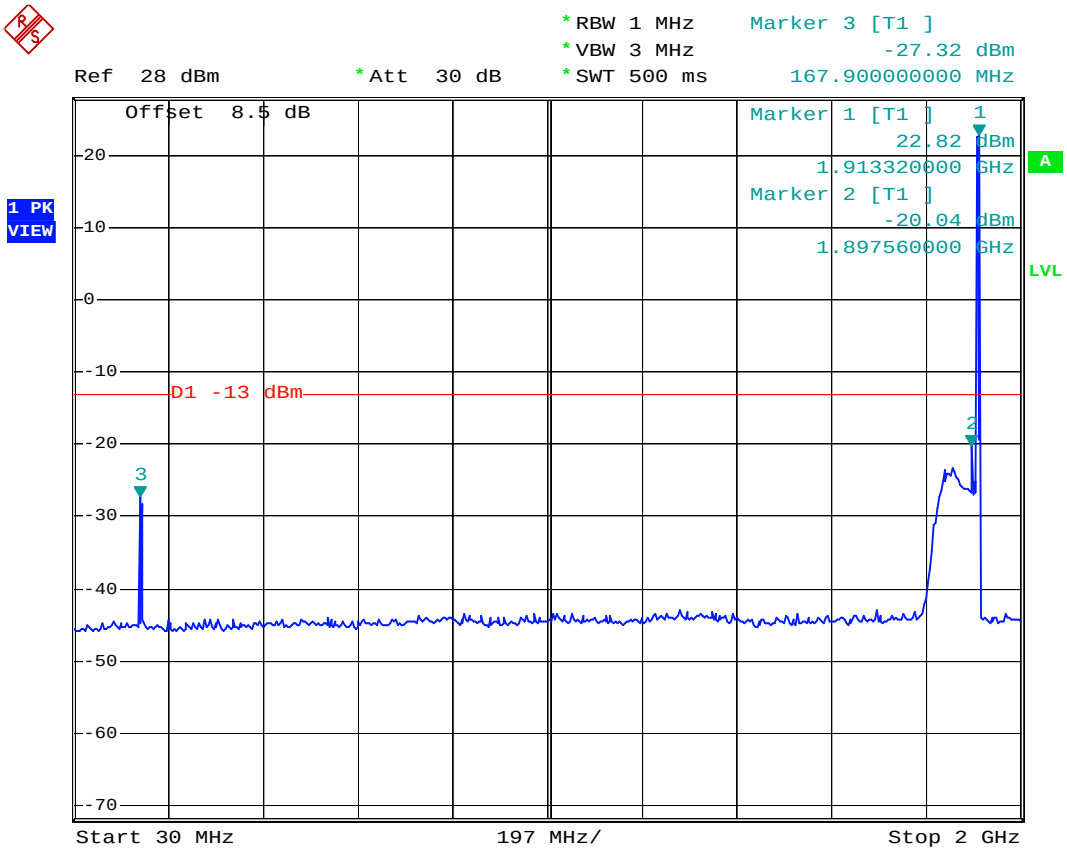
Date: 10.MAR.2007 13:59:53

- Frequency Range: 2G-19.1G



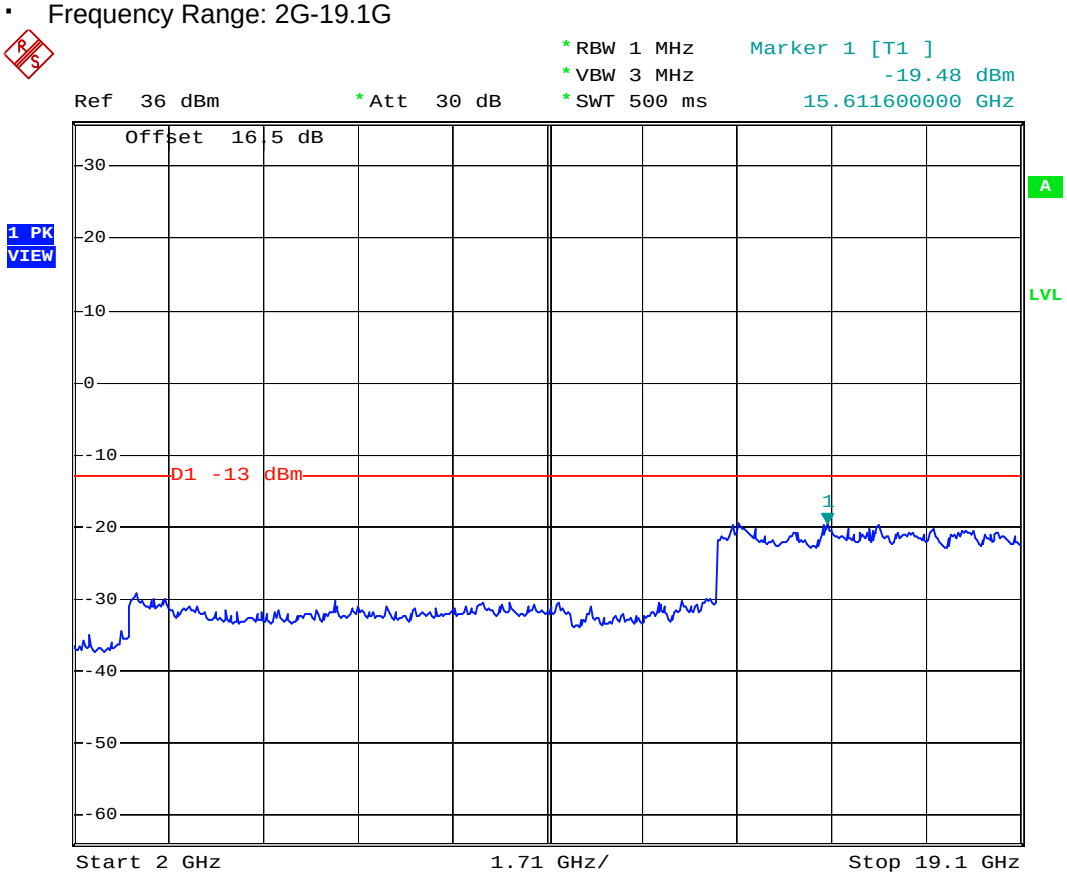
Date: 10.MAR.2007 13:56:52

- Test Mode: PCS 1909.2MHz Uplink Mode
- Frequency Range: 0.3G-2G



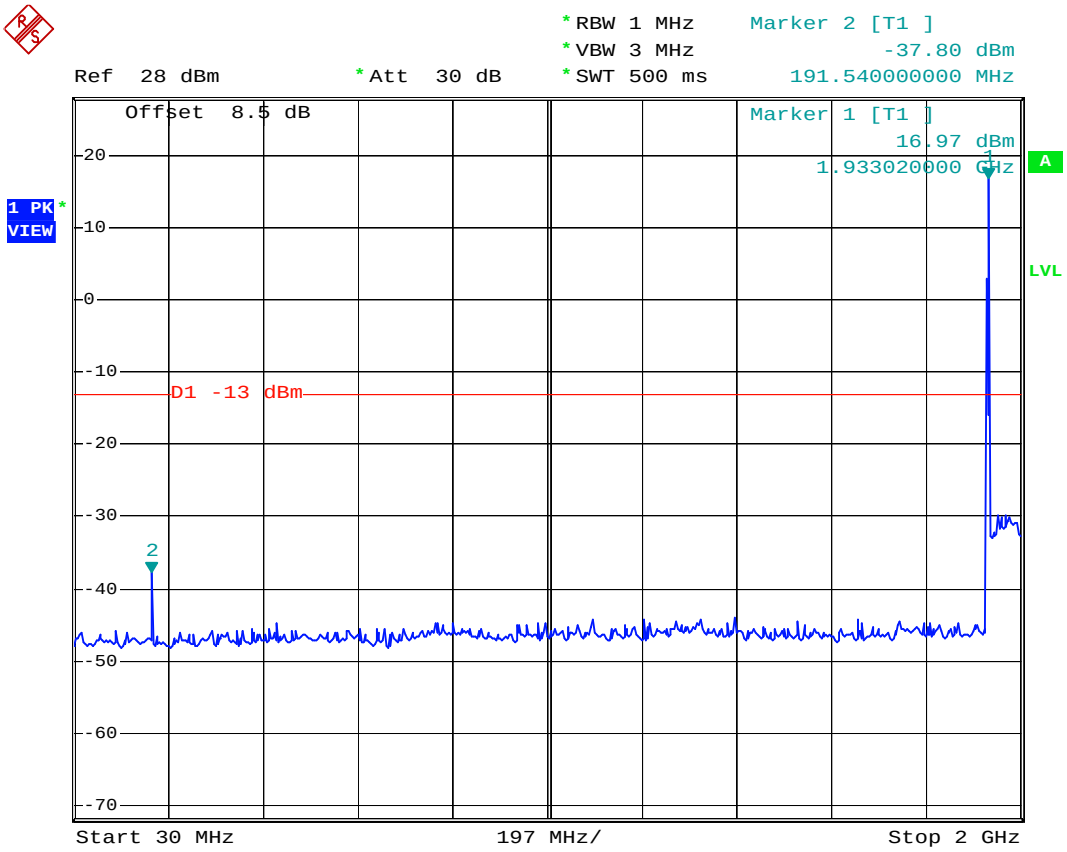
Date: 10.MAR.2007 13:54:24

- Frequency Range: 2G-19.1G



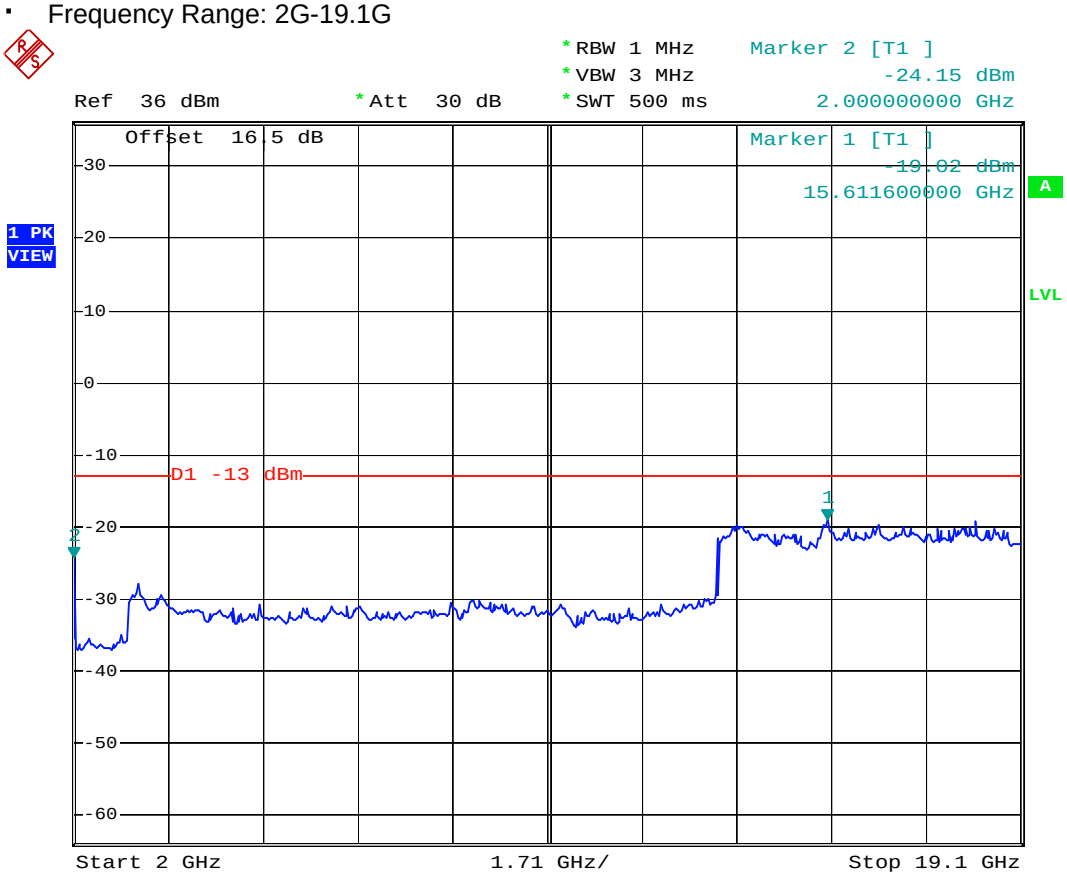
Date: 10.MAR.2007 13:55:08

- Test Mode: PCS 1930.8MHz Downlink Mode
- Frequency Range: 0.3G-2G



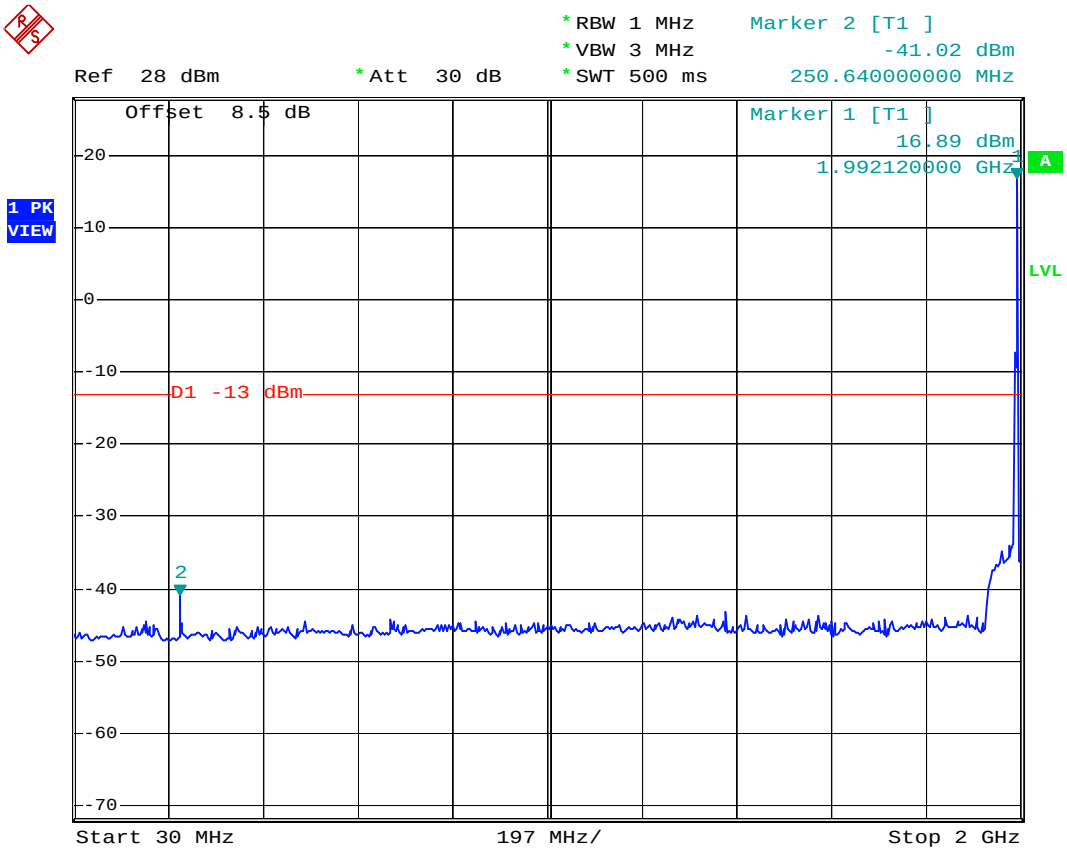
Date: 10.MAR.2007 14:13:15

- Frequency Range: 2G-19.1G



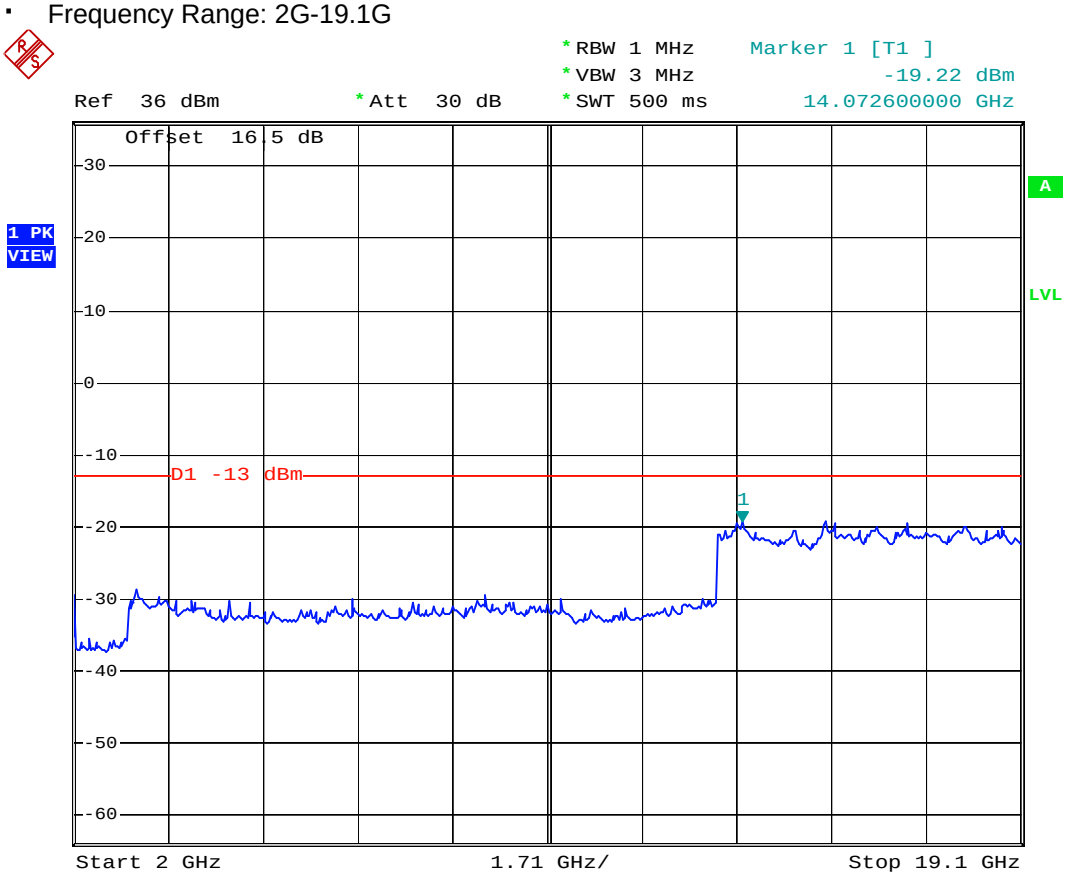
Date: 10.MAR.2007 14:14:21

- Test Mode: PCS 1989.2MHz Downlink Mode
- Frequency Range: 0.3G-2G



Date: 10.MAR.2007 14:37:14

- Frequency Range: 2G-19.1G



Date: 10.MAR.2007 14:15:55

4.4 Field Strength of Spurious Radiation

Equivalent isotropic radiated Power Measurements by substitution method according to ANSI/TIA/EIA-603.

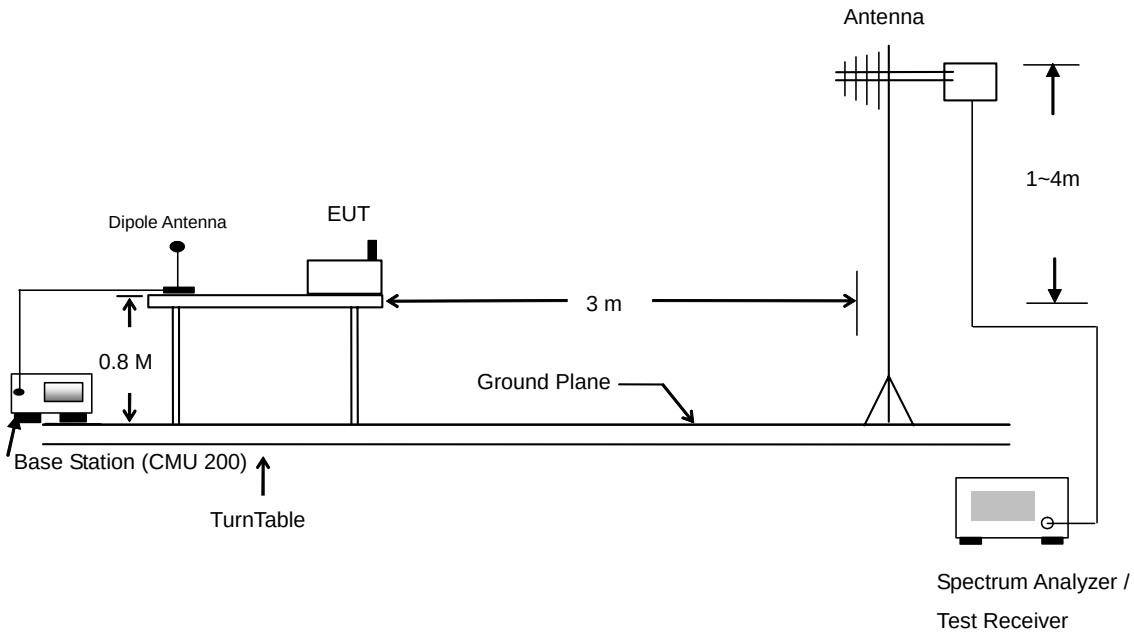
4.5.1 Measurement Instruments

As described in chapter 5 of this test report.

4.5.2 Test Procedure

1. The EUT was placed on a rotatable wooden table with 0.8 meter about ground.
2. The EUT was set 3 meters from the receiving antenna which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to reach the maximum spurious emission for both horizontal and vertical polarizations.
5. Taking the record of maximum spurious emission.
6. A Horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the recored of output power at antenna port.
9. Repeat step 7 to step 8 for another polariztion.
10. Emission level (dBm) = output power + substituion Gain.

4.5.3 Test Setup Layout



4.5.4 Test Result

- Test Mode : Mode 1

PCS 1850.2MHz Uplink Mode Radiated Spurious EIRP							
H Polarization				V Polarization			
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)
58.620	-54.160	-13	-41.16	44.040	-43.820	-13	-30.82
66.180	-46.740	-13	-33.74	58.080	-40.790	-13	-27.79
108.840	-56.890	-13	-43.89	**65.640**	**-38.090**	**-13**	**-25.09**
799.800	-63.480	-13	-50.48	901.300	-61.080	-13	-48.08
939.800	-63.070	-13	-50.07	950.300	-61.410	-13	-48.41
1000.000	-62.970	-13	-49.97	985.300	-60.730	-13	-47.73
				3700.000	-51.320	-13	-38.32

- Test Mode : Mode 2

PCS 1880MHz Uplink Mode Radiated Spurious EIRP							
H Polarization				V Polarization			
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)
41.880	-58.150	-13	-45.15	44.040	-42.970	-13	-29.97
56.730	-53.800	-13	-40.80	**57.540**	**-42.520**	**-13**	**-29.52**
64.830	-54.770	-13	-41.77	71.580	-46.750	-13	-33.75
756.400	-63.490	-13	-50.49	871.900	-61.100	-13	-48.10
799.800	-63.720	-13	-50.72	952.400	-61.070	-13	-48.07
997.900	-63.230	-13	-50.23	988.800	-61.230	-13	-48.23
3758.000	-48.380	-13	-35.38	3758.000	-51.180	-13	-38.18
5638.000	-48.220	-13	-35.22	5638.000	-49.840	-13	-36.84

- Test Mode : Mode 3

PCS 1909.8MHz Uplink Mode Radiated Spurious EIRP							
H Polarization				V Polarization			
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)
58.890	-54.490	-13	-41.49	44.040	-44.510	-13	-31.51
66.990	-47.660	-13	-34.66	58.080	-40.970	-13	-27.97
108.840	-56.960	-13	-43.96	**65.640**	**-38.530**	**-13**	**-25.53**
799.800	-62.700	-13	-49.70	875.400	-61.780	-13	-48.78
917.400	-63.990	-13	-50.99	946.800	-61.290	-13	-48.29
1000.000	-62.490	-13	-49.49	987.400	-61.140	-13	-48.14
3818.000	-50.570	-13	-37.57	3818.000	-50.920	-13	-37.92
5728.000	-40.670	-13	-27.67	5728.000	-43.100	-13	-30.10
				7638.000	-43.980	-13	-30.98

- Test Mode : Mode 4

PCS 1930.2MHz Downlink Mode Radiated Spurious EIRP							
H Polarization				V Polarization			
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)
41.340	-57.550	-13	-44.55	43.230	-44.110	-13	-31.11
57.540	-54.340	-13	-41.34	**56.730**	**-43.440**	**-13**	**-30.44**
64.290	-54.900	-13	-41.90	71.580	-43.440	-13	-30.44
754.300	-63.360	-13	-50.36	885.900	-61.510	-13	-48.51
799.800	-63.660	-13	-50.66	945.400	-61.790	-13	-48.79
1000.000	-62.580	-13	-49.58	981.800	-61.010	-13	-48.01

- Test Mode : Mode 5

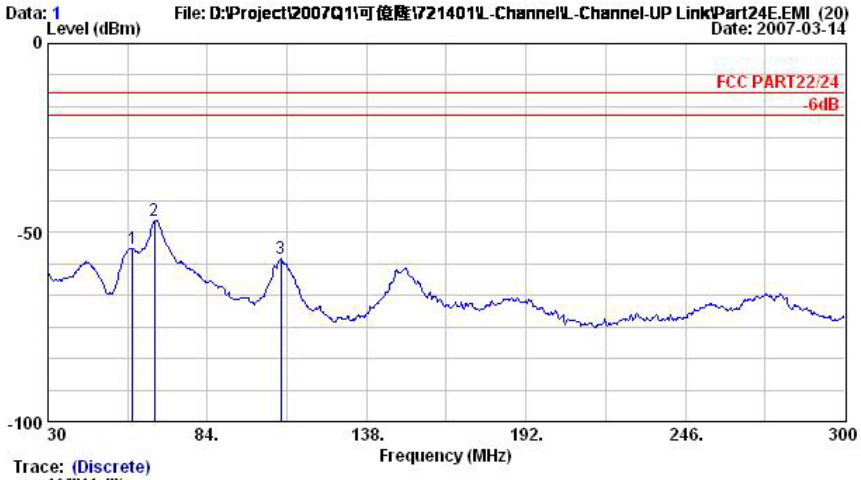
PCS 1960MHz Downlink Mode Radiated Spurious EIRP							
H Polarization				V Polarization			
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)
57.540	-54.970	-13	-41.97	43.230	-44.560	-13	-31.56
64.560	-55.770	-13	-42.77	56.730	-43.760	-13	-30.76
109.380	-57.040	-13	-44.04	**71.580**	**-43.370**	**-13**	**-30.37**
754.300	-64.050	-13	-51.05	845.300	-61.650	-13	-48.65
966.400	-63.070	-13	-50.07	960.800	-61.520	-13	-48.52
1000.000	-62.200	-13	-49.20	995.800	-60.380	-13	-47.38

- Test Mode : Mode 6

PCS 1989.8MHz Downlink Mode Radiated Spurious EIRP							
H Polarization				V Polarization			
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)
56.190	-55.130	-13	-42.13	42.690	-44.630	-13	-31.63
63.480	-55.720	-13	-42.72	56.190	-43.930	-13	-30.93
110.190	-56.810	-13	-43.81	**71.580**	**-43.780**	**-13**	**-30.78**
756.400	-63.690	-13	-50.69	878.900	-61.370	-13	-48.37
971.300	-63.510	-13	-50.51	962.900	-61.310	-13	-48.31
1000.000	-62.030	-13	-49.03	1000.000	-61.180	-13	-48.18

4.5.5 Test Data

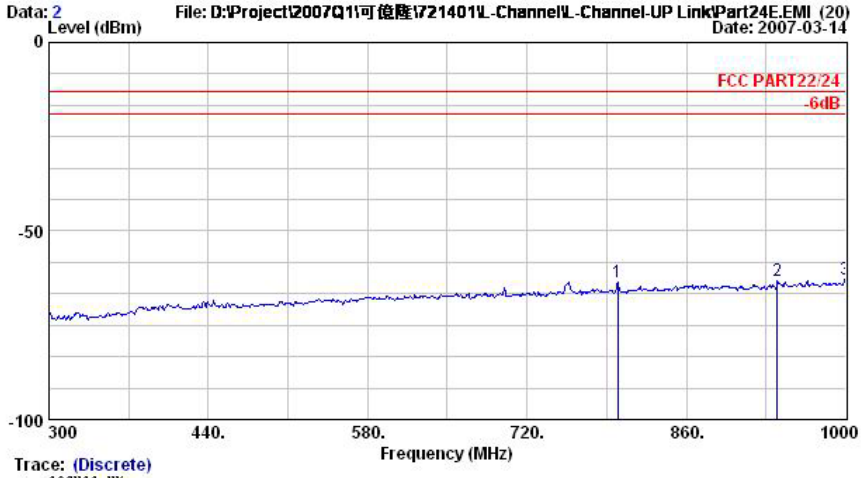
Mode 1
Horizontal Polarization



Trace: (Discrete)

Site	: 03CH06-HY
Condition	: LF-SPURIOUS HORIZONTAL
EUT	: Repeater
Power	: 120Vac/60Hz
Model	: FG 721401
Memo	: PCS 1850.2 MHz Uplink Mode+Adaptor

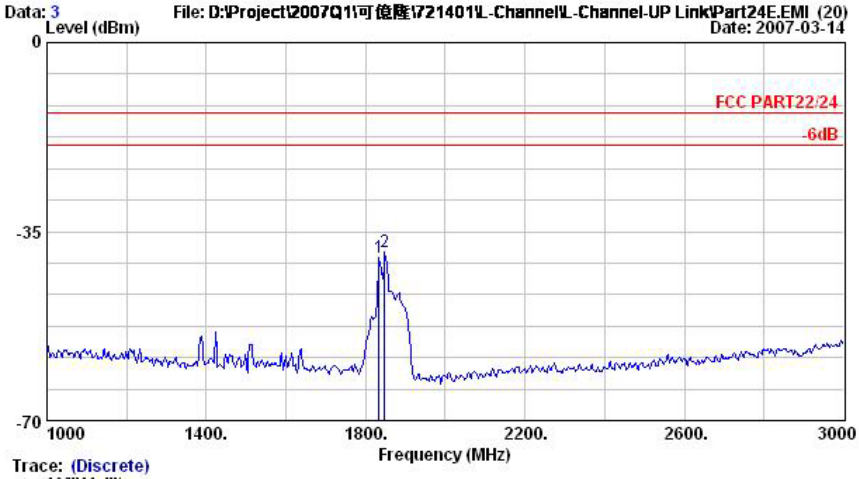
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	58.62	-54.16	-41.16	-13.00	-41.76	-12.40	Peak
2 @	66.18	-46.74	-33.74	-13.00	-34.37	-12.37	Peak
3	108.84	-56.89	-43.89	-13.00	-44.55	-12.34	Peak



Trace: (Discrete)

Site	: 03CH06-HY
Condition	: LF-SPURIOUS HORIZONTAL
EUT	: Repeater
Power	: 120Vac/60Hz
Model	: FG 721401
Memo	: PCS 1850.2 MHz Uplink Mode+Adaptor

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	799.80	-63.48	-50.48	-13.00	-61.79	-1.69	Peak
2	939.80	-63.07	-50.07	-13.00	-62.73	-0.34	Peak
3	1000.00	-62.97	-49.97	-13.00	-63.21	0.24	Peak



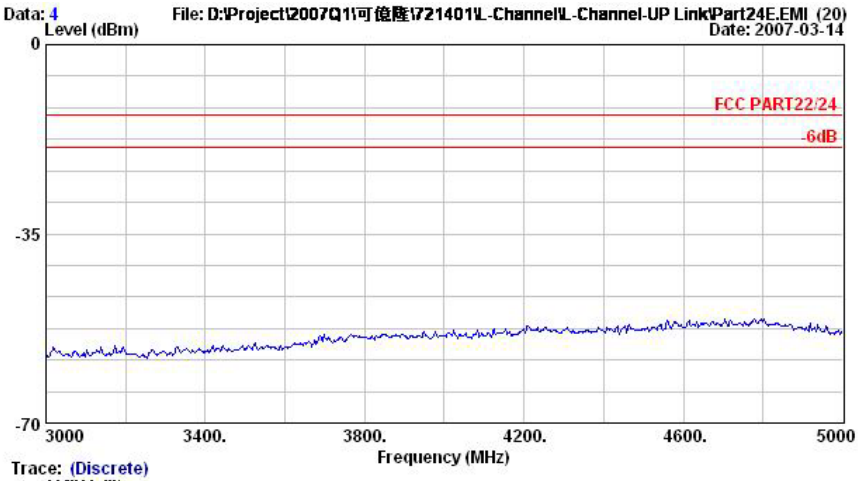
Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1850.2 MHz Uplink Mode+Adaptor

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	1834.00	-39.71			-39.36	-0.34	Peak
2 @	1848.00	-38.79			-38.44	-0.34	Peak

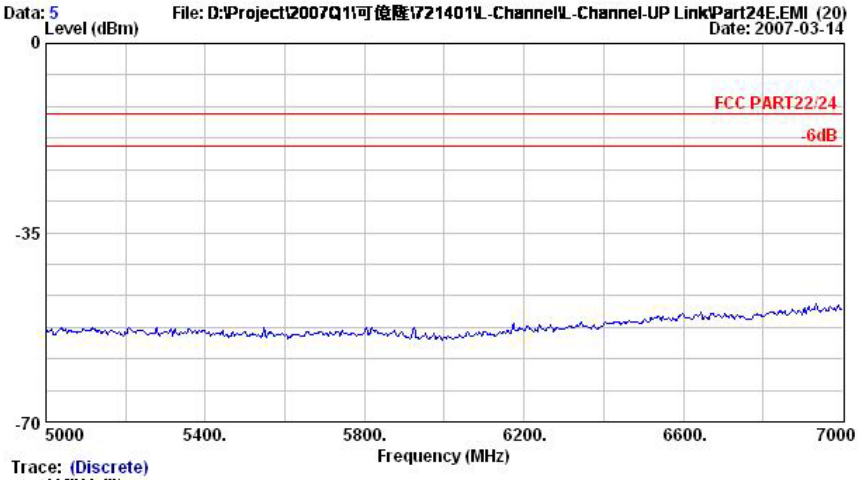
Remark:

1. #1: Uplink Signal
2. #2: Uplink Signal

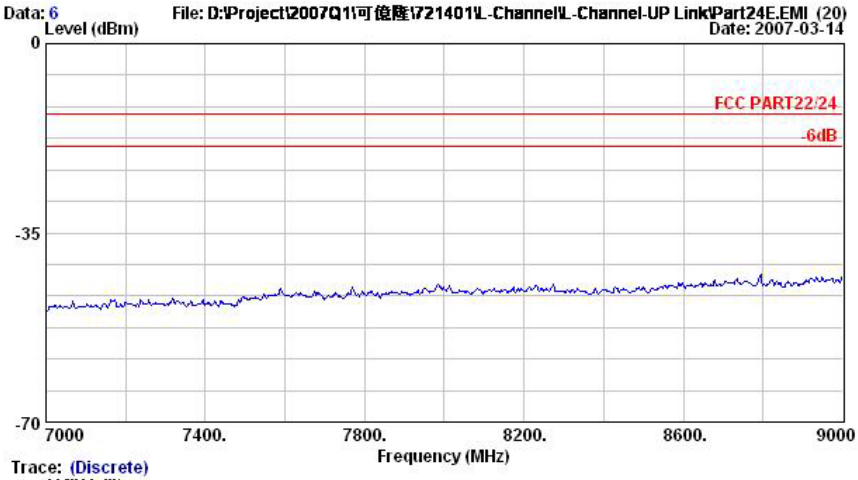


Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1850.2 MHz Uplink Mode+Adaptor

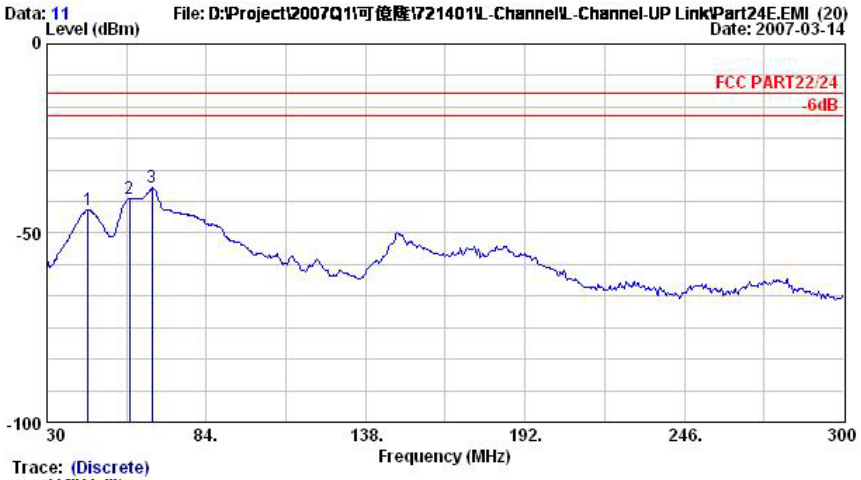


Site : 03CH06-HV
Condition : HF-SPURIOUS HORIZONTAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1850.2 MHz Uplink Mode+Adaptor



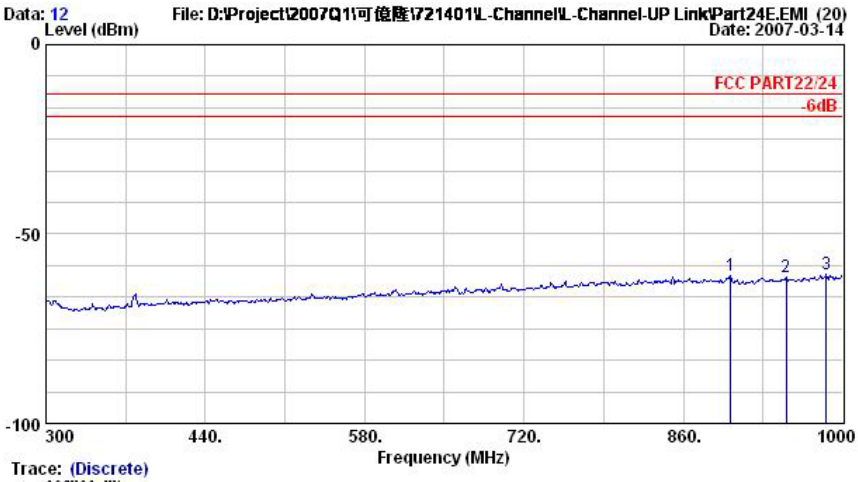
Site : 03CH06-HV
Condition : HF-SPURIOUS HORIZONTAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1850.2 MHz Uplink Mode+Adaptor

Vertical Polarization



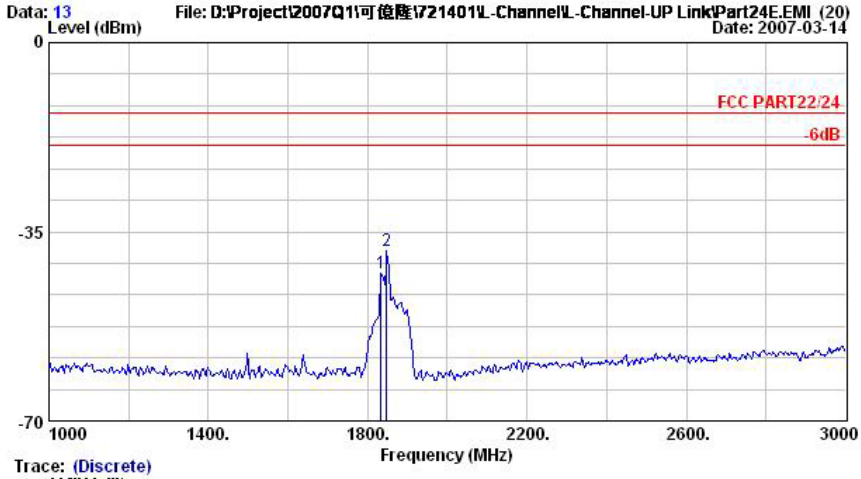
Site : 03CH06-HV
Condition : LF-SPURIOUS VERTICAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1850.2 MHz Uplink Mode+Adaptor

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	44.04	-43.82	-30.82	-13.00	-30.91	-12.90	Peak
2 @	58.08	-40.79	-27.79	-13.00	-27.09	-13.70	Peak
3 @	65.64	-38.09	-25.09	-13.00	-25.51	-12.58	Peak



Site : 03CH06-HV
Condition : LF-SPURIOUS VERTICAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1850.2 MHz Uplink Mode+Adaptor

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	901.30	-61.08	-48.08	-13.00	-62.96	1.87	Peak
2	950.30	-61.41	-48.41	-13.00	-63.68	2.27	Peak
3	985.30	-60.73	-47.73	-13.00	-63.27	2.54	Peak

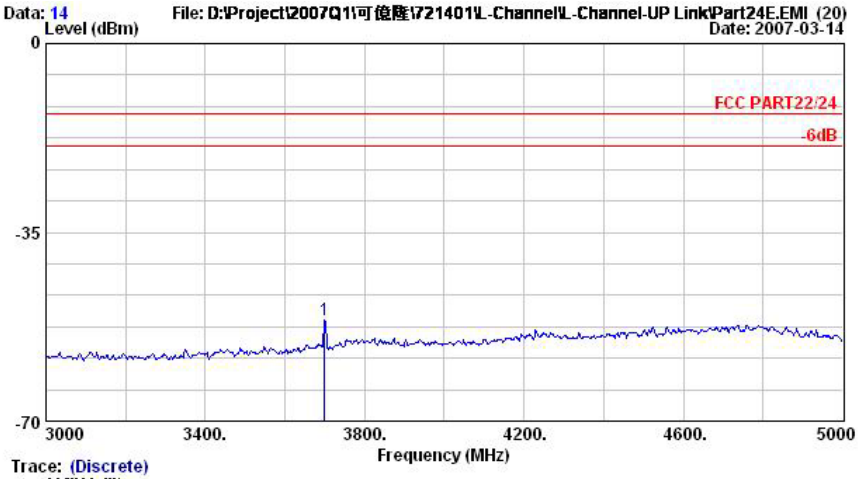


Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1850.2 MHz Uplink Mode+Adaptor

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	1834.00	-42.63			-42.33	-0.30	Peak
2 @	1848.00	-38.55			-38.25	-0.30	Peak

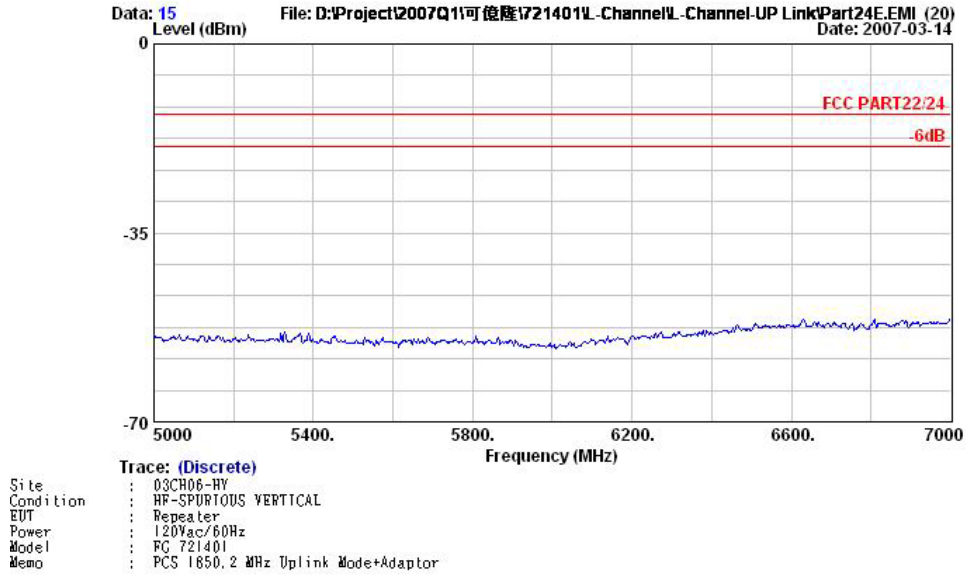
Remark:
1. #1: Uplink Signal
2. #2: Uplink Signal

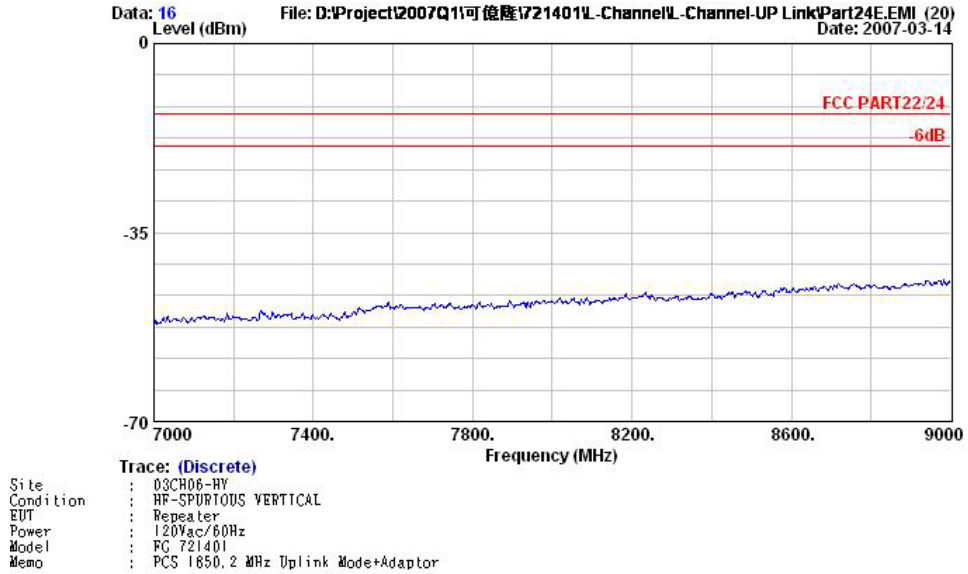


Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1850.2 MHz Uplink Mode+Adaptor

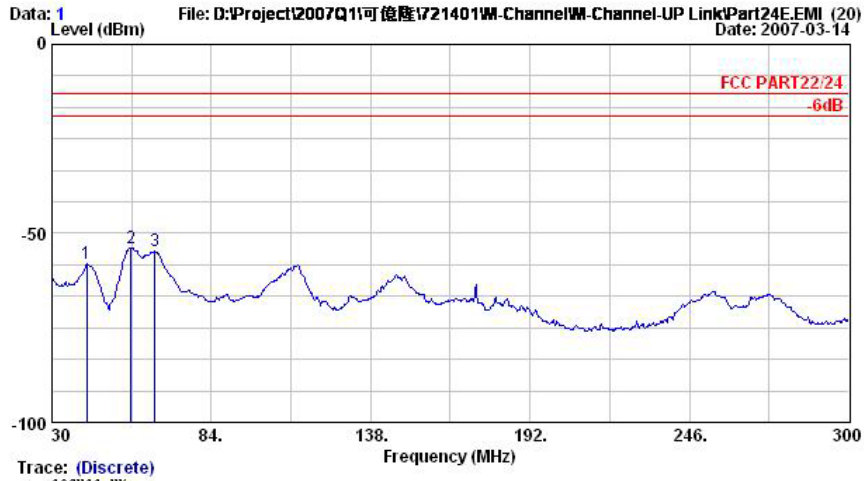
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	3700.00	-51.32	-38.32	-13.00	-57.52	6.20	Peak





Remark: There is no more obvious spurious emission except the listings above.

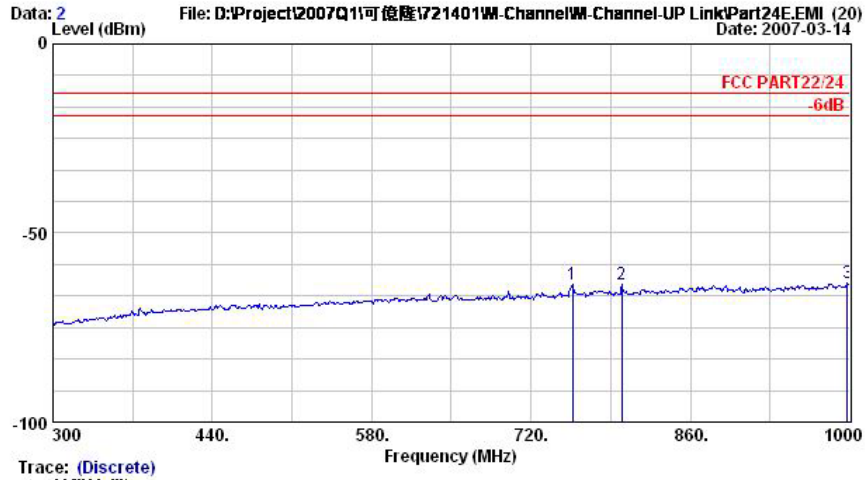
Mode 2
Horizontal Polarization



Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS HORIZONTAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1880 MHz Uplink Mode+Adaptor

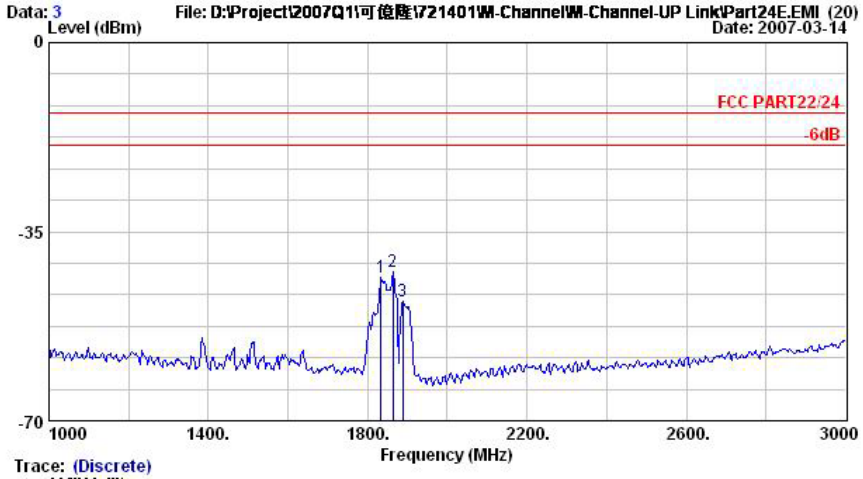
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	41.88	-58.15	-45.15	-13.00	-51.20	-6.95	Peak
2 @	56.73	-53.80	-40.80	-13.00	-41.40	-12.40	Peak
3	64.83	-54.77	-41.77	-13.00	-42.39	-12.37	Peak



Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS HORIZONTAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1880 MHz Uplink Mode+Adaptor

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	756.40	-63.49	-50.49	-13.00	-61.35	-2.14	Peak
2	799.80	-63.72	-50.72	-13.00	-62.03	-1.69	Peak
3	997.90	-63.23	-50.23	-13.00	-63.45	0.22	Peak



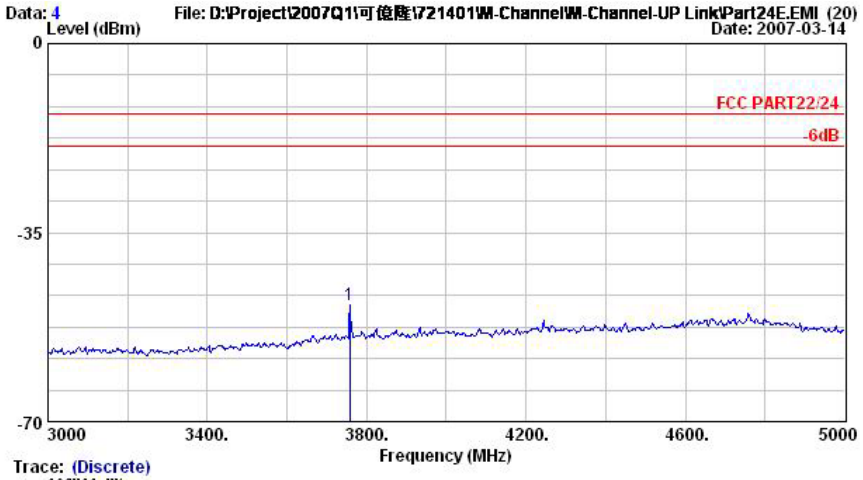
Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1880 MHz Uplink Mode+Adaptor

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	1834.00	-43.36			-43.01	-0.34	Peak
2 @	1864.00	-42.53			-42.02	-0.51	Peak
3 @	1888.00	-47.86			-47.18	-0.68	Peak

Remark:

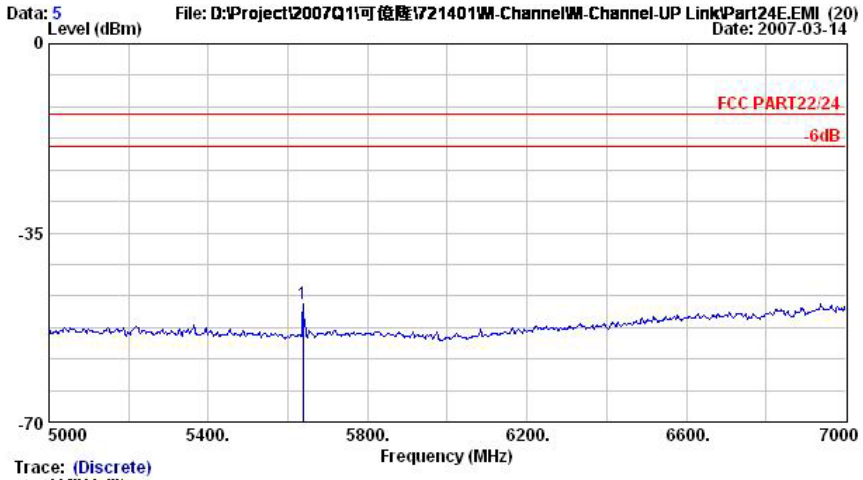
1. #1: Uplink Signal
2. #2: Uplink Signal
3. #3: Uplink Signal



Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1880 MHz Uplink Mode+Adaptor

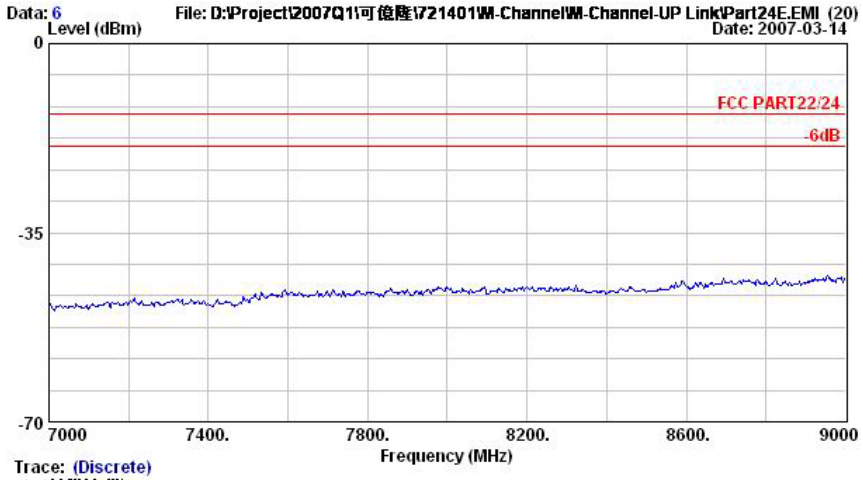
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	3758.00	-48.38	-35.38	-13.00	-56.31	7.92	Peak



Trace: (Discrete)

Site : 03CH06-HV
Condition : HF-SPURIOUS HORIZONTAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1880 MHz Uplink Mode+Adaptor

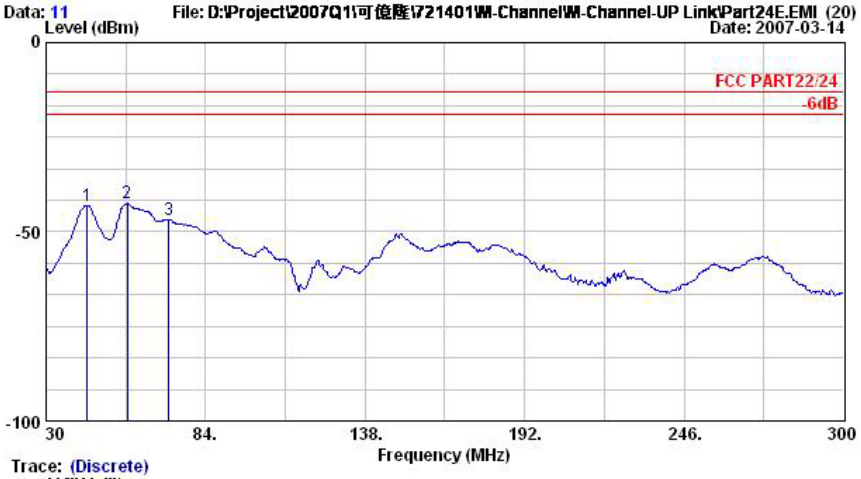
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	5638.00	-48.22	-35.22	-13.00	-58.19	9.97	Peak



Trace: (Discrete)

Site : 03CH06-HV
Condition : HF-SPURIOUS HORIZONTAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1880 MHz Uplink Mode+Adaptor

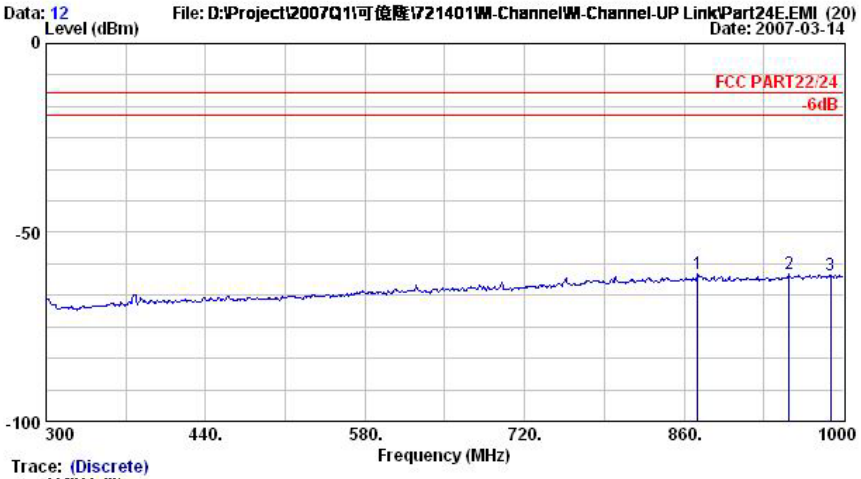
Vertical Polarization



Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS VERTICAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1880 MHz Uplink Mode+Adaptor

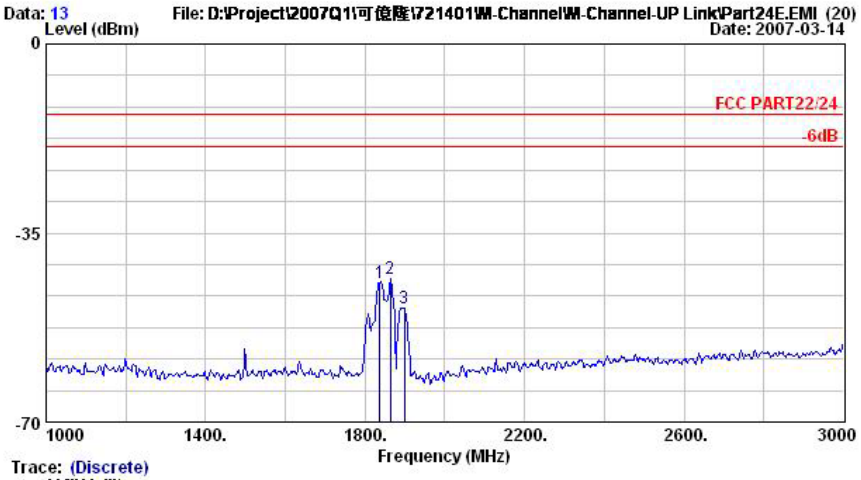
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	44.04	-42.97	-29.97	-13.00	-30.06	-12.90	Peak
2 @	57.54	-42.52	-29.52	-13.00	-28.68	-13.84	Peak
3 @	71.58	-46.75	-33.75	-13.00	-35.01	-11.74	Peak



Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS VERTICAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1880 MHz Uplink Mode+Adaptor

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	871.90	-61.10	-48.10	-13.00	-62.74	1.64	Peak
2	952.40	-61.07	-48.07	-13.00	-63.35	2.28	Peak
3	988.80	-61.23	-48.23	-13.00	-63.80	2.57	Peak



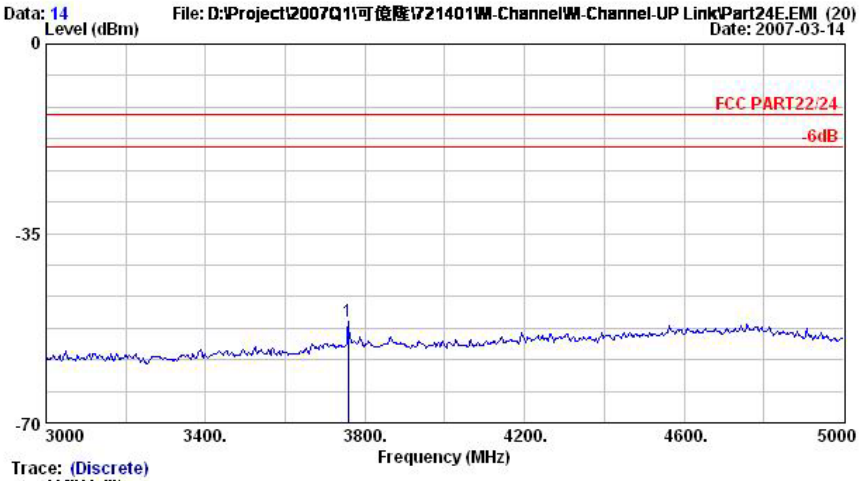
Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1880 MHz Uplink Mode+Adaptor

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	1836.00	-44.14			-43.84	-0.30	Peak
2 @	1864.00	-43.44			-43.04	-0.40	Peak
3 @	1898.00	-48.83			-48.33	-0.50	Peak

Remark:

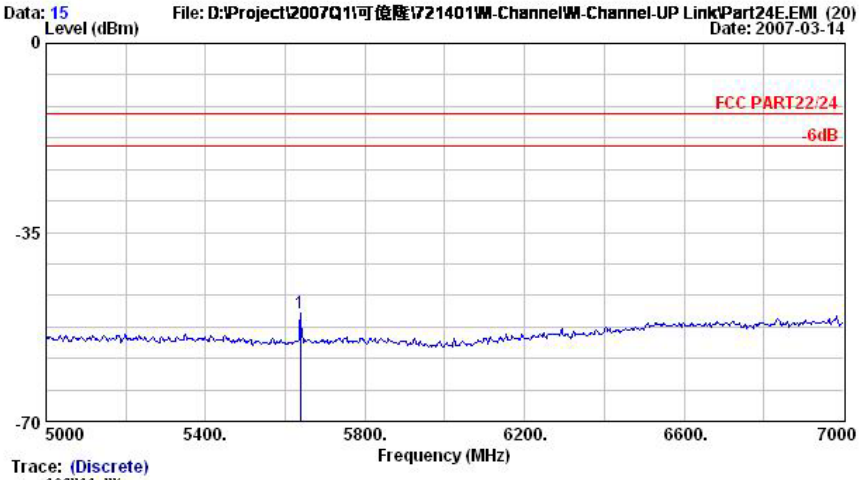
1. #1: Uplink Signal
2. #2: Uplink Signal
3. #3: Uplink Signal



Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1880 MHz Uplink Mode+Adaptor

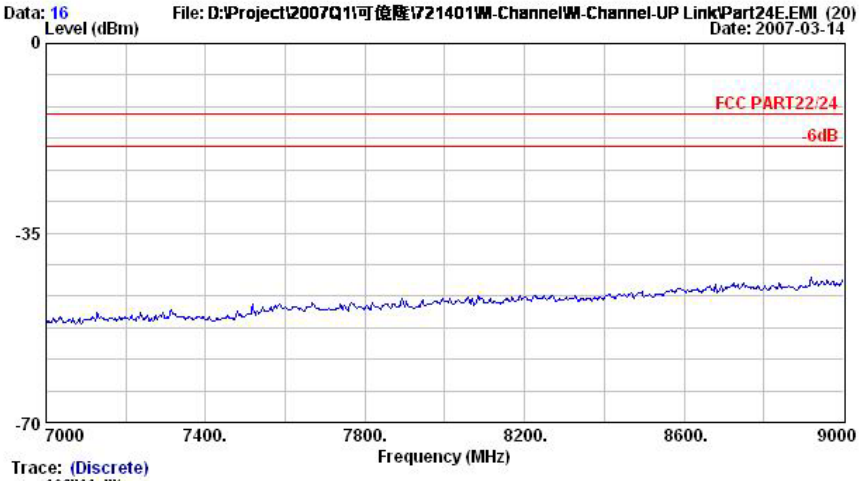
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	3758.00	-51.18	-38.18	-13.00	-57.82	6.64	Peak



Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1880 MHz Uplink Mode+Adaptor

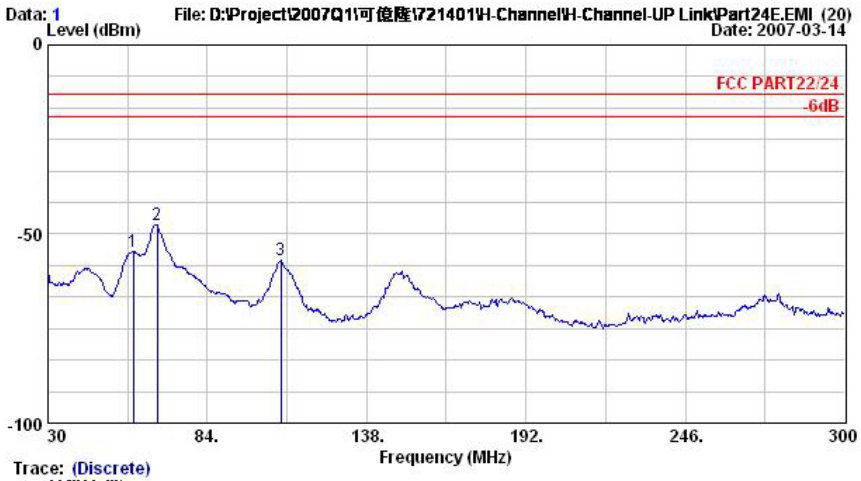
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	5638.00	-49.84	-36.84	-13.00	-58.49	8.65	Peak



Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1880 MHz Uplink Mode+Adaptor

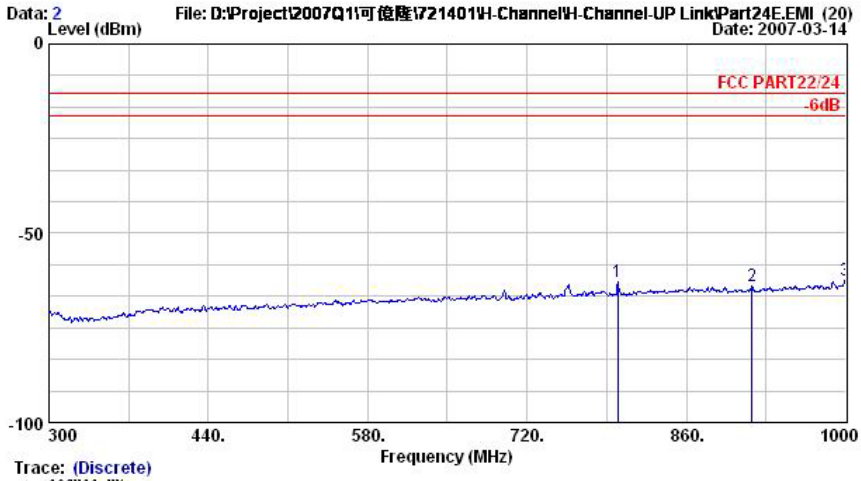
Mode 3
Horizontal Polarization



Trace: (Discrete)

Site	: 03CH06-HY
Condition	: LF-SPURIOUS HORIZONTAL
EUT	: Repeater
Power	: 120Vac/60Hz
Model	: FG 721401
Memo	: PCS 1909.6 MHz Uplink Mode+Adaptor

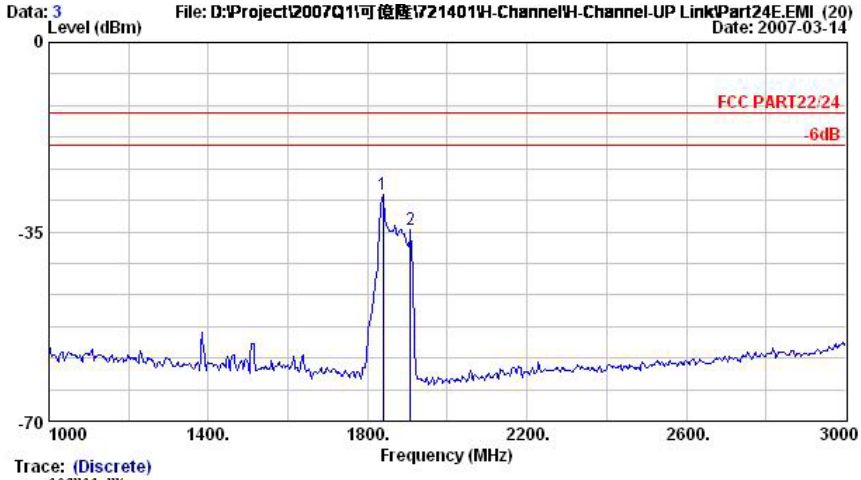
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	58.89	-54.49	-41.49	-13.00	-42.10	-12.40	Peak
2	66.99	-47.66	-34.66	-13.00	-35.29	-12.37	Peak
3	108.84	-56.96	-43.96	-13.00	-44.62	-12.34	Peak



Trace: (Discrete)

Site	: 03CH06-HY
Condition	: LF-SPURIOUS HORIZONTAL
EUT	: Repeater
Power	: 120Vac/60Hz
Model	: FG 721401
Memo	: PCS 1909.6 MHz Uplink Mode+Adaptor

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	799.80	-62.70	-49.70	-13.00	-61.01	-1.69	Peak
2	917.40	-63.99	-50.99	-13.00	-63.43	-0.56	Peak
3	1000.00	-62.49	-49.49	-13.00	-62.73	0.24	Peak

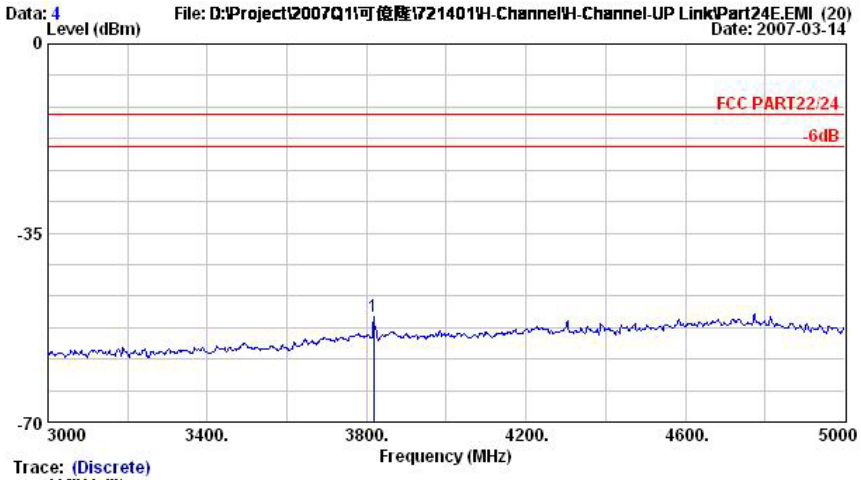


Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1909.6 MHz Uplink Mode+Adaptor

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	1838.00	-28.20			-27.86	-0.34	Peak
2 @	1908.00	-34.48			-33.67	-0.81	Peak

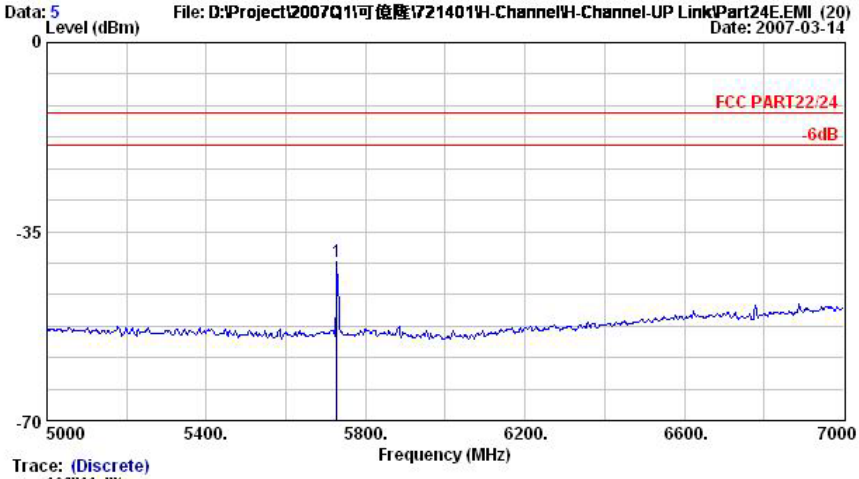
Remark:
1. #1: Uplink Signal
2. #2: Uplink Signal



Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1909.6 MHz Uplink Mode+Adaptor

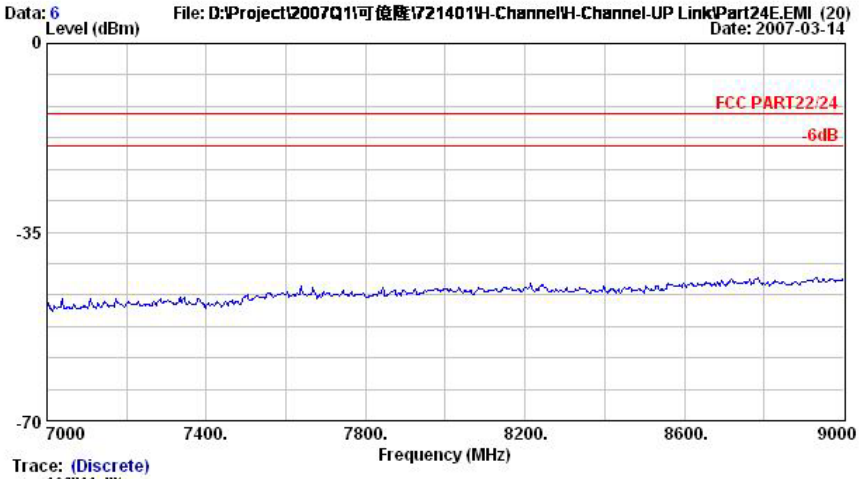
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	3818.00	-50.57	-37.57	-13.00	-58.89	8.32	Peak



Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1909.6 MHz Uplink Mode+Adaptor

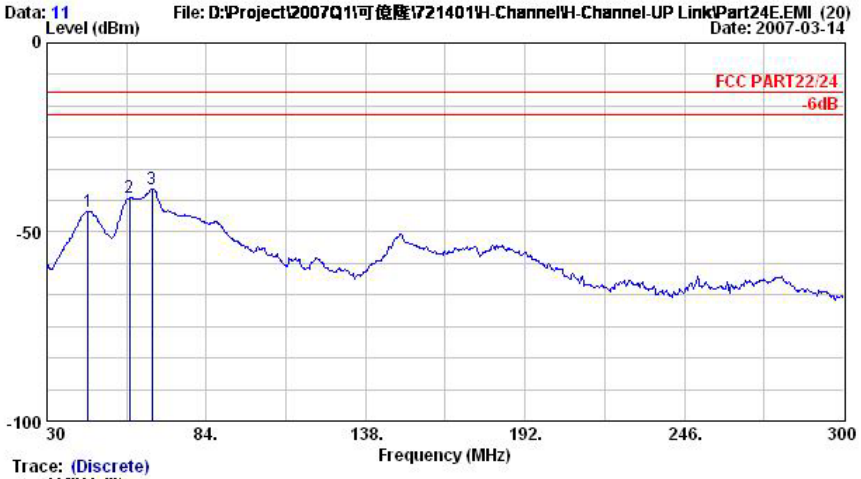
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	5728.00	-40.67	-27.67	-13.00	-50.79	10.12	Peak



Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1909.6 MHz Uplink Mode+Adaptor

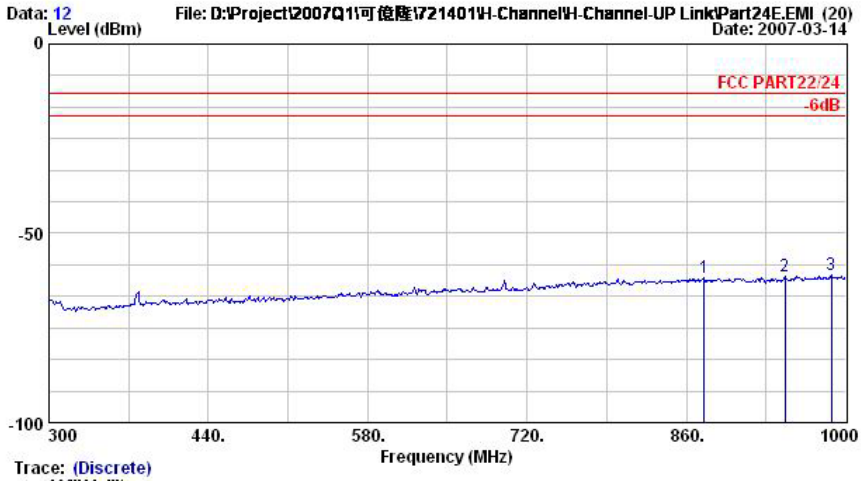
Vertical Polarization



Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS VERTICAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1909.8 MHz Uplink Mode+Adaptor

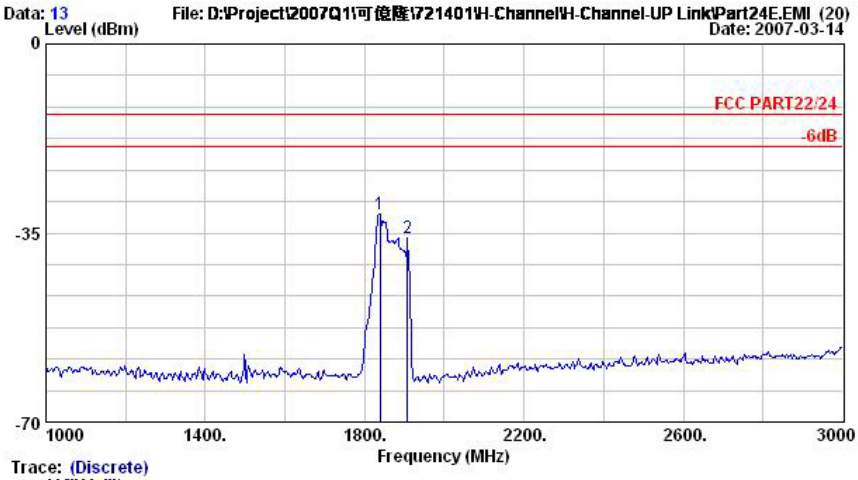
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	44.04	-44.51	-31.51	-13.00	-31.61	-12.90	Peak
2 @	58.08	-40.97	-27.97	-13.00	-27.26	-13.70	Peak
3 @	65.64	-38.53	-25.53	-13.00	-25.95	-12.58	Peak



Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS VERTICAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1909.8 MHz Uplink Mode+Adaptor

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	875.40	-61.78	-48.78	-13.00	-63.45	1.67	Peak
2	946.80	-61.29	-48.29	-13.00	-63.53	2.24	Peak
3	987.40	-61.14	-48.14	-13.00	-63.70	2.56	Peak

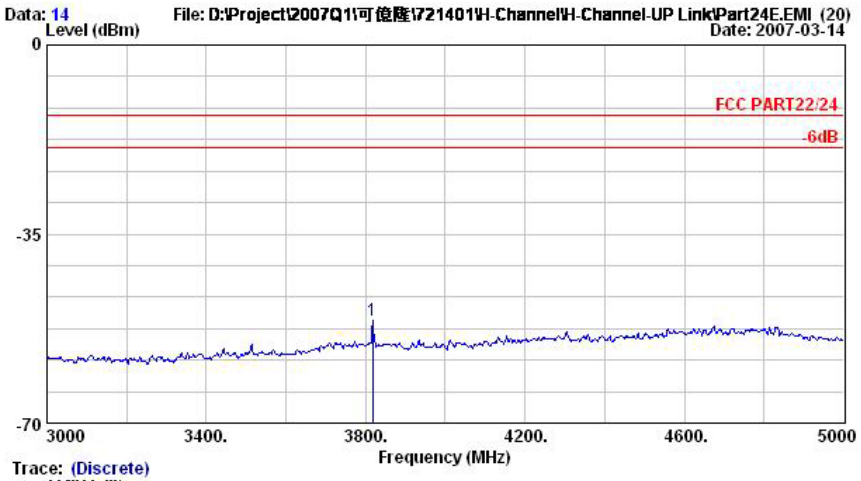


Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1909.8 MHz Uplink Mode+Adaptor

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	1838.00	-31.48			-31.18	-0.30	Peak
2 @	1908.00	-36.01			-35.52	-0.50	Peak

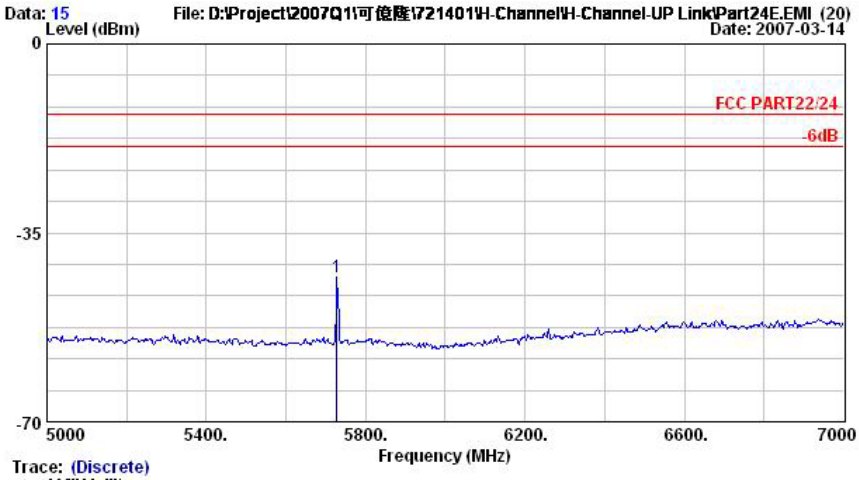
Remark:
1. #1: Uplink Signal
2. #2: Uplink Signal



Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1909.8 MHz Uplink Mode+Adaptor

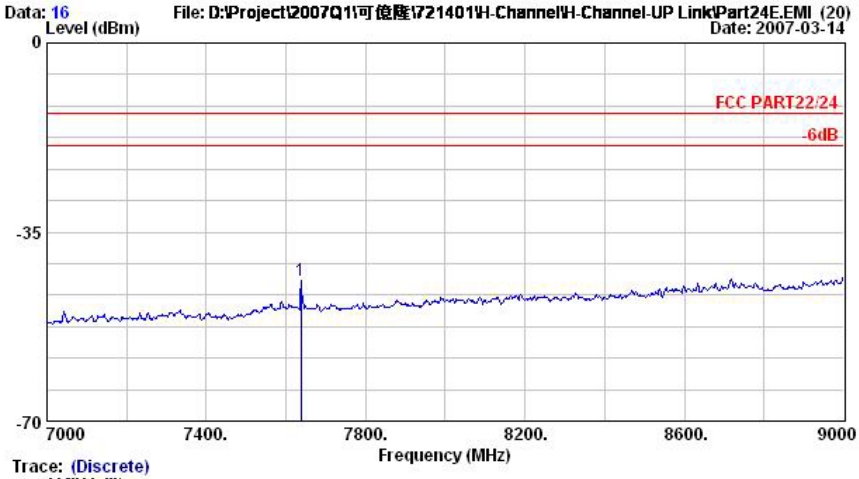
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	3818.00	-50.92	-37.92	-13.00	-57.87	6.94	Peak



Trace: (Discrete)

Site : 03CH06-HV
Condition : HF-SPURIOUS VERTICAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1909.6 MHz Uplink Mode+Adaptor

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	5728.00	-43.10	-30.10	-13.00	-51.87	8.77	Peak



Trace: (Discrete)

Site : 03CH06-HV
Condition : HF-SPURIOUS VERTICAL
EUT : Repeater
Power : 120Vac/60Hz
Model : FG 721401
Memo : PCS 1909.6 MHz Uplink Mode+Adaptor

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	7638.00	-43.98	-30.98	-13.00	-58.33	14.36	Peak

Remark: There is no more obvious spurious emission except the listings above.