



FCC TEST REPORT

FCC ID: WF5-ST11

Product	:	Tablet PC
Model Name	:	ST11, BPR-11, SPAD-11
Brand	:	Sewoo
Report No.	:	PTC24121305101E-FC04
Prepared for		
Aroot Co.,Ltd.		
28-6, Gajangsaneopdong-ro, Osan-si, Gyeonggi-do, Republic of Korea		
Prepared by		
Precise Testing & Certification Co., Ltd		
Building 1, No. 6, Tongxin Road, Dongcheng Street, Dongguan, Guangdong, China		



1 Test Result Certification

Applicant's name : Aroot Co.,Ltd.
Address : 28-6, Gajangsaneopdong-ro, Osan-si, Gyeonggi-do, Republic of Korea
Manufacture's name : Guangzhou Shangke Information Technology Co., LTD.
Address : Room 1205-1212, No.30, Huaxia Road, Tianhe District, Guangzhou, Guangdong Province,China
Product name : Tablet PC
Model name : ST11, BPR-11, SPAD-11
Standards : 47 CFR FCC Part 2&Part 22H&Part 24E,ANSI C63.26-2015, KDB 971168 D01 Power Meas License Digital Systems v03r01
Test Date : Dec. 24, 2024 to Mar. 03, 2025
Date of Issue : Mar. 03, 2025
Test Result : Pass

This device described above has been tested by PTC, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Test Engineer:

A handwritten signature in black ink, appearing to read 'Jack Zhou'.

Jack Zhou / Engineer

Technical Manager:

A handwritten signature in black ink, appearing to read 'Simon Pu'.

Simon Pu / Manager



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1. General Description Of Eut

Product Name:	Tablet PC	
Model Number:	ST11	
Hardware version:	V1.0	
Software version:	V1.00	
Frequency Bands:	GSM/GPRS/EDGE: ☒ GSM 850 ☒ PCS1900	
Operation Frequency Range:	GSM850:	824.2 MHz-848.8 MHZ
	PCS1900:	1850.2 MHz-1909.8 MHZ
Antenna Type:	FPC Antenna	
Antenna gain:	GSM850: -1.47dBi PCS1900: 2dBi	
Type of Modulation:	☒ GSM/GPRS: GMSK ☒ EGPRS(GMSK,8PSK)	
Power Supply:	Lion-battery 3.8V 7000mAh or DC 5.0V=3.0A,9.0V=2.22A,12.0V=1.67A Adapter: Input: AC 100-240V~50/60Hz 0.6A max	
Max power:	See Table 2.1	
Extreme Vol. Limits:	DC 3.4V to 4.3V (Normal: DC 3.8V)	
Test sample No.	PTC24121305102E-1/2, PTC24121305102E-2/2.	



Table 2.1 The Basic Technical Specification for Working BAND(S).

OPERATION BAND(S)	Power Class	Mod.	Max Conducted Peak Power (dBm)
GSM850	Class 4	GMSK	32.19
DCS1900	Class 1	GMSK	27.96



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2. Facilities And Accreditations

2.1. Test Facility

Precise Testing & Certification Co., Ltd

Address: Building 1, No. 6, Tongxin Road, Dongcheng Street, Dongguan, Guangdong, China

FCC Registration Number: 790290

A2LA Certificate No.: 4408.01

IC Registration Number: 12191A



2.2. Description Of Test Channels And Test Modes

Test channels:

GSM 850			
Test Channel	BW(MHz)	UL Channel	Frequency(MHz)
Low Range	0.2	128	824.2
Mid Range	0.2	190	836.6
High Range	0.2	251	848.8

PCS1900			
Test Channel	BW(MHz)	UL Channel	Frequency(MHz)
Low Range	0.2	512	1850.2
Mid Range	0.2	661	1880.0
High Range	0.2	810	1909.8

Note 1: The worst condition was recorded in the test report if no other modes test data.



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2.3. Equipment Modifications

Not available for this EUT intended for grant.



3. Summary Of Test Requirements And Results

GSM850:

Test Item	FCC Rule No.	Requirements	Judgement
Effective (Isotropic) Radiated Power	§2.1046, §2.913(a)	EIRP $\leq$ 7W(38.5dBm)	Pass
Occupied Bandwidth	§2.1049	OBW: No limit.	Pass
Emission Bandwidth	22.917(b)	EBW: No limit.	Pass
Band Edges Compliance	§2.1051 §22.917(a)	$\leq$ -13 dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block.	Pass
Spurious Emission at Antenna Terminals	§2.1051, §22.917	FCC: $\leq$ -13 dBm/100 kHz, from 9 kHz to 10th harmonics but outside authorized operating frequency ranges.	Pass
Field Strength of Spurious Radiation	§2.1053, §22.917	FCC: $\leq$ -13 dBm/100 kHz.	Pass
Frequency Stability	§2.1055, §22.355	the fundamental emissions stay within the authorized bands of operation. (2.5ppm)	Pass
Peak-Average Ratio	§22.913	FCC: Limit $\leq$ 13dB	Pass

PCS 1900:

Test Item	FCC Rule No.	Requirements	Judgement
Effective (Isotropic) Radiated Power	§2.1046, §24.232(c)	EIRP $\leq$ 2W(33dBm)	Pass
Bandwidth	§2.1049 §24.238(a)	OBW: No limit. EBW: No limit.	Pass
Band Edges	§2.1051, §24.238(a)	$\leq$ -13 dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block.	Pass
Spurious Emission at Antenna Terminals	§2.1051, §24.238(a)	FCC: $\leq$ -13 dBm/100 kHz, from 9 kHz to 10th harmonics but outside authorized operating frequency ranges.	Pass
Field Strength of Spurious Radiation	§2.1053, §24.238(a)	-13dBm/1MHz	Pass
Frequency Stability	§2.1055, §24.235	the fundamental emission stays within the authorized frequency block. $\leq \pm 2.5$ ppm.	Pass
Peak to average ratio	§24.232(d)	$\leq$ 13dB	Pass



4. Measurement Instruments

RF Conducted Test

Name of Equipment	Manufacturer	Model	Serial No.	Characteristics	Last Calibration	Calibration Interval
MXG Signal Analyzer	Agilent	N9020A	SER MY5111038	10Hz-30GHz	Aug. 15, 2024	1 Year
Coaxial Cable	CDS	79254	46107086	10Hz-30GHz	Aug. 15, 2024	1 Year
Power Meter	Anritsu	ML2495A	0949003	300MHz-40GHz	Aug. 15, 2024	1 Year
Power Sensor	Anritsu	MA2411B	0917017	300MHz-40GHz	Aug. 15, 2024	1 Year
Signal Analyzer 40GHz	Rohde&Schwarz	FSV40	101456	10Hz-40GHz	Aug. 15, 2024	1 Year
Wireless Communication Tester	Rohde&Schwarz	CMW500	134930	/	Aug. 15, 2024	1 year

Remark: The temporary antenna connector is soldered on the PCB board in order to perform conducted tests and this temporary antenna connector is listed in the equipment list.

Name of Equipment	Manufacturer	Model	Serial No.	Characteristics	Last Calibration	Calibration Interval
EMI Test Receiver	Rohde&Schwarz	ESCI7	101671	9KHz-7GHz	Aug. 15, 2024	1 Year
Loop Antenna	Schwarzbeck	FMZB 1519B	192	9 KHz -30MHz	Aug. 15, 2024	1 Year
Bilog Antenna	SCHWARZBECK	VULB9160	9160-3355	25MHz-2GHz	Aug. 15, 2024	1 Year
Preamplifier (low frequency)	SCHWARZBECK	BBV 9475	9745-0013	1MHz-1GHz	Mar. 23,2024	1 Year
Cable	Schwarzbeck	PLF-100	549489	9KHz-3GHz	Aug. 15, 2024	1 Year
Spectrum Analyzer	Rohde&Schwarz	FSV40	6625-01-588-5515	9KHz-40GHz	Aug. 15, 2024	1 Year
Horn Antenna	SCHWARZBECK	9120D	9120D-1246	1GHz-18GHz	Aug. 15, 2024	1 Year
Power Amplifier	ZHINAN	ZN3380C	15002	1GHz-26.5GHz	Aug. 15, 2024	1 Year
Horn Antenna	SCHWARZBECK	BBHA 9170	9170-1066	15GHz-40GHz	Jul. 19, 2024	1 Year



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Amplifier	SCHWARZBEC K	BBV 9721	9721-205	18GHz- 40GHz	Jul. 19, 2024	1 Year
Cable	H+S	CBL-26	N/A	1GHz- 26.5GHz	Aug. 15, 2024	1 Year
RF Cable	R&S	R204	R21X	1GHz-40GHz	Aug. 15, 2024	1 Year
MXG Vector Signal Generator	Agilent	N5182A	MY49060455	-	Aug. 15, 2024	1 Year
ESG Series Analog signal generator	Agilent	E4421B	GB40051240	-	Aug. 15, 2024	1 Year



5. Effective (Isotropic) Radiated Power and Conducted Output Power

5.1. Conducted Output Power

Measurement Procedure: FCC KDB 971168 D01 V03r01

The transmitter output was connected to a calibrated coaxial cable, attenuator and power meter, the other end of which was connected to a Base Station Simulator. The Base Station Simulator was set to force the EUT to its maximum power setting. The power output at the transmitter antenna port was determined by adding the value of the cable insertion loss to the power reading. The tests were performed at three frequencies (low channel, middle channel and high channel) and on the highest power levels, which can be setup on the transmitters.

5.2. Effective (Isotropic) Radiated Power

Measurement Procedure: FCC KDB 971168 D01 V03r01 ; C63.26 (2015).

Calculate power in dBm by the following formula:

$ERP\text{ (dBm)} = \text{Conducted Power (dBm)} + \text{antenna gain (dBd)}$

$EIRP\text{ (dBm)} = \text{Conducted Power (dBm)} + \text{antenna gain (dBi)}$

$EIRP = ERP + 2.15\text{dB}$


Test result:
GSM850 and GSM1900:

Band	Channel	Conducted Power(dBm)	ERP/EIRP(dBm)	Limit(dBm)	Verdict
GSM850	128	32.19	28.57	38.5	PASS
GSM850	190	32.06	28.44	38.5	PASS
GSM850	251	31.51	27.89	38.5	PASS
GSM1900	512	27.22	29.22	33	PASS
GSM1900	661	27.35	29.35	33	PASS
GSM1900	810	27.96	29.96	33	PASS

GPRS 850 and GPRS 1900:

Band	Channel	Slot	Power(dBm)	ERP/EIRP(dBm)	Limit(dBm)	Verdict
GPRS850	128	1	31.85	28.23	38.5	PASS
GPRS850	128	2	31.05	27.43	38.5	PASS
GPRS850	128	3	29.27	25.65	38.5	PASS
GPRS850	128	4	28.16	24.54	38.5	PASS
GPRS850	190	1	31.65	28.03	38.5	PASS
GPRS850	190	2	30.88	27.26	38.5	PASS
GPRS850	190	3	29.09	25.47	38.5	PASS
GPRS850	190	4	27.99	24.37	38.5	PASS
GPRS850	251	1	31.51	27.89	38.5	PASS
GPRS850	251	2	30.75	27.13	38.5	PASS
GPRS850	251	3	28.97	25.35	38.5	PASS
GPRS850	251	4	27.85	24.23	38.5	PASS
GPRS1900	512	1	27.23	29.23	33	PASS
GPRS1900	512	2	26.57	28.57	33	PASS
GPRS1900	512	3	25.00	27.00	33	PASS
GPRS1900	512	4	23.94	25.94	33	PASS
GPRS1900	661	1	27.39	29.39	33	PASS
GPRS1900	661	2	26.78	28.78	33	PASS
GPRS1900	661	3	25.13	27.13	33	PASS
GPRS1900	661	4	24.09	26.09	33	PASS
GPRS1900	810	1	28.06	30.06	33	PASS
GPRS1900	810	2	27.44	29.44	33	PASS
GPRS1900	810	3	25.81	27.81	33	PASS
GPRS1900	810	4	24.78	26.78	33	PASS



EGPRS 850 and EGPRS 1900:

Band	Channel	Slot	Power(dBm)	ERP/EIRP(dBm)	Limit(dBm)	Verdict
EGPRS850	128	1	25.34	21.72	38.5	PASS
EGPRS850	128	2	24.03	20.41	38.5	PASS
EGPRS850	128	3	21.84	18.22	38.5	PASS
EGPRS850	128	4	20.66	17.04	38.5	PASS
EGPRS850	190	1	24.81	21.19	38.5	PASS
EGPRS850	190	2	23.64	20.02	38.5	PASS
EGPRS850	190	3	21.54	17.92	38.5	PASS
EGPRS850	190	4	20.14	16.52	38.5	PASS
EGPRS850	251	1	24.22	20.60	38.5	PASS
EGPRS850	251	2	23.12	19.50	38.5	PASS
EGPRS850	251	3	20.99	17.37	38.5	PASS
EGPRS850	251	4	19.77	16.15	38.5	PASS
EGPRS1900	512	1	25.74	27.74	33	PASS
EGPRS1900	512	2	24.65	26.65	33	PASS
EGPRS1900	512	3	22.69	24.69	33	PASS
EGPRS1900	512	4	21.62	23.62	33	PASS
EGPRS1900	661	1	24.99	26.99	33	PASS
EGPRS1900	661	2	24.14	26.14	33	PASS
EGPRS1900	661	3	22.15	24.15	33	PASS
EGPRS1900	661	4	20.96	22.96	33	PASS
EGPRS1900	810	1	24.66	26.66	33	PASS
EGPRS1900	810	2	23.66	25.66	33	PASS
EGPRS1900	810	3	21.78	23.78	33	PASS
EGPRS1900	810	4	20.65	22.65	33	PASS

Note:

For getting the EIRP (Efficient Isotropic Radiated Power), the following formula The following formula is used for calculation:

1.ERP [dBm] = Conducted Power [dBm] + Gain [dBd]

2.EIRP [dBm] = Conducted Power [dBm] + Gain [dBi]



6. Spurious Emission (Conducted and Radiated)

6.1. Measurement Result (Pre-measurement)

GSM850:

Test Channel	BW(MHz)	UL Channel	Frequency(MHz)	Judgment
Low Range	0.2	128	824.2	Pass
Middle Range	0.2	190	836.6	Pass
High Range	0.2	251	848.8	Pass

PCS1800:

Test Channel	BW(MHz)	UL Channel	Frequency(MHz)	Judgment
Low Range	0.2	512	1850.2	Pass
Middle Range	0.2	661	1880	Pass
High Range	0.2	810	1909.8	Pass



Test Plot(s) Conducted method

Test limit:

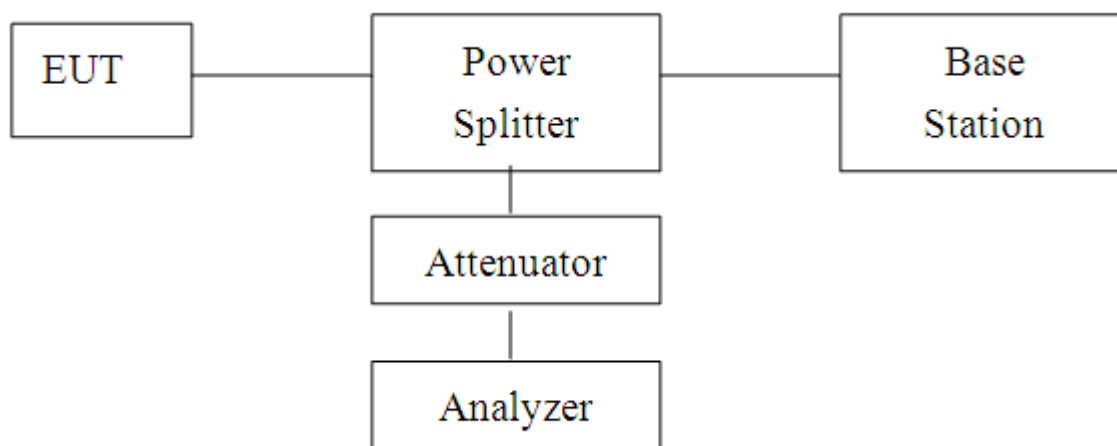
The spurious (unwanted) emission limits specified in the individual FCC rule parts applicable to licensed digital transmitters (typically referred to under the heading 'emission limits') normally apply to any and all emissions that are present outside of the authorized frequency band/block and apply to emissions in both the out-of-band and spurious domains. In some rule parts, the unwanted emission limits are specified by an emission mask that defines the applicable limit as a function of the frequency range relative to the authorized frequency block.

Typically, unwanted emissions are required by the licensed rule parts to be attenuated below the transmitter power by a factor of at least $X + 10\log(P)$ dB, where P represents the transmitter power expressed in watts and X is a specified scalar value (e.g., 43). This specification can be interpreted in one of two equivalent ways. First, the required attenuation can be construed to be relative to the mean carrier power, with the resultant of the equation $X + 10\log(P)$ being expressed in dBc (dB relative to the maximum carrier power). Alternatively, the specification can be interpreted as an absolute limit when the specified attenuation is actually subtracted from the maximum permissible transmitter power [i.e., $10\log(P) - \{X + 10\log(P)\}$], resulting in an absolute level of $-X$ dBW [or $(-X + 30)$ dBm]. See section 4.

Test procedure:

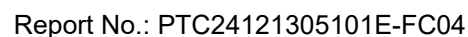
The RF output of the transceiver was connected to a spectrum analyzer and simulator through appropriate attenuation. The resolution bandwidth of the spectrum analyzer was set at 100 kHz below 1 GHz and 1 MHz above 1 GHz. Sufficient scans were taken to show any out of band emissions up to 10th harmonics.

Conducted Emission Test-Up:

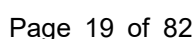


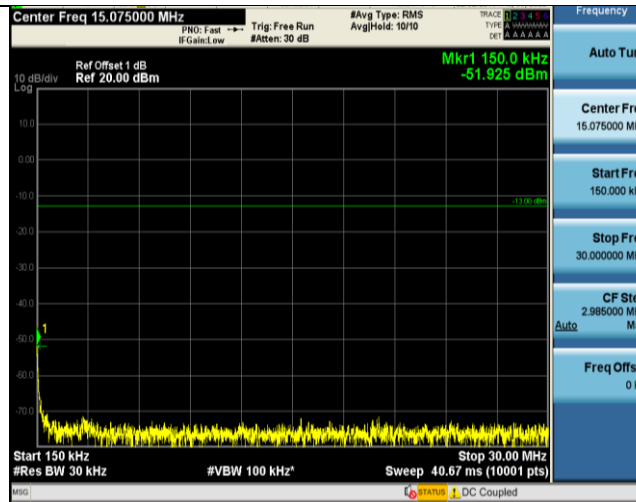

Test Result:

Band	Channel	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	0.009~0.15MHz	0.01	-63.7	-33	PASS
GSM850	128	0.15~30MHz	0.15	-51.93	-13	PASS
GSM850	128	30~1000MHz	79.99	-54.17	-13	PASS
GSM850	128	1000~10000MHz	3175	-47.86	-13	PASS
GSM850	190	0.009~0.15MHz	0.01	-58.87	-33	PASS
GSM850	190	0.15~30MHz	0.15	-51.88	-13	PASS
GSM850	190	30~1000MHz	986.45	-56.47	-13	PASS
GSM850	190	1000~10000MHz	2546.2	-39.28	-13	PASS
GSM850	251	0.009~0.15MHz	0.01	-59.91	-33	PASS
GSM850	251	0.15~30MHz	0.15	-51.78	-13	PASS
GSM850	251	30~1000MHz	978.53	-56.17	-13	PASS
GSM850	251	1000~10000MHz	2546.5	-39.96	-13	PASS
GPRS850	128	0.009~0.15MHz	0.01	-64.65	-33	PASS
GPRS850	128	0.15~30MHz	0.15	-51.14	-13	PASS
GPRS850	128	30~1000MHz	203.27	-56.38	-13	PASS
GPRS850	128	1000~10000MHz	2546.2	-46.53	-13	PASS
GPRS850	190	0.009~0.15MHz	0.01	-64.5	-33	PASS
GPRS850	190	0.15~30MHz	0.15	-54.43	-13	PASS
GPRS850	190	30~1000MHz	244.21	-56.27	-13	PASS
GPRS850	190	1000~10000MHz	2546.5	-45.61	-13	PASS
GPRS850	251	0.009~0.15MHz	0.01	-64.65	-33	PASS
GPRS850	251	0.15~30MHz	0.15	-53.1	-13	PASS
GPRS850	251	30~1000MHz	979.86	-55.29	-13	PASS
GPRS850	251	1000~10000MHz	2546.2	-47.44	-13	PASS
EGPRS850	128	0.009~0.15MHz	0.01	-65.25	-33	PASS
EGPRS850	128	0.15~30MHz	0.15	-53.13	-13	PASS
EGPRS850	128	30~1000MHz	953.76	-56.06	-13	PASS
EGPRS850	128	1000~10000MHz	3170.8	-47.89	-13	PASS
EGPRS850	190	0.009~0.15MHz	0.01	-66.49	-33	PASS
EGPRS850	190	0.15~30MHz	0.15	-53.72	-13	PASS
EGPRS850	190	30~1000MHz	551.57	-56.35	-13	PASS
EGPRS850	190	1000~10000MHz	3187	-47.89	-13	PASS
EGPRS850	251	0.009~0.15MHz	0.03	-50.99	-33	PASS
EGPRS850	251	0.15~30MHz	0.15	-53.34	-13	PASS
EGPRS850	251	30~1000MHz	973.55	-56.11	-13	PASS
EGPRS850	251	1000~10000MHz	2546.5	-47.09	-13	PASS
GSM1900	512	0.009~0.15MHz	0.01	-64.51	-43	PASS
GSM1900	512	0.15~30MHz	0.15	-53.55	-23	PASS
GSM1900	512	30~1000MHz	662.31	-56.09	-13	PASS
GSM1900	512	1000~3000MHz	2680.47	-51.87	-13	PASS
GSM1900	512	3000~20000MHz	17092.43	-42.49	-13	PASS
GSM1900	661	0.009~0.15MHz	0.01	-62.04	-43	PASS
GSM1900	661	0.15~30MHz	0.15	-52.18	-23	PASS
GSM1900	661	30~1000MHz	795.23	-56.01	-13	PASS
GSM1900	661	1000~3000MHz	2676.6	-52.04	-13	PASS
GSM1900	661	3000~20000MHz	17096.4	-42.47	-13	PASS
GSM1900	810	0.009~0.15MHz	0.01	-55.21	-43	PASS
GSM1900	810	0.15~30MHz	0.15	-53.3	-23	PASS
GSM1900	810	30~1000MHz	830.09	-56.07	-13	PASS
GSM1900	810	1000~3000MHz	2684.47	-51.87	-13	PASS
GSM1900	810	3000~20000MHz	17098.1	-42.57	-13	PASS
GPRS1900	512	0.009~0.15MHz	0.01	-62.02	-43	PASS
GPRS1900	512	0.15~30MHz	0.15	-55.02	-23	PASS

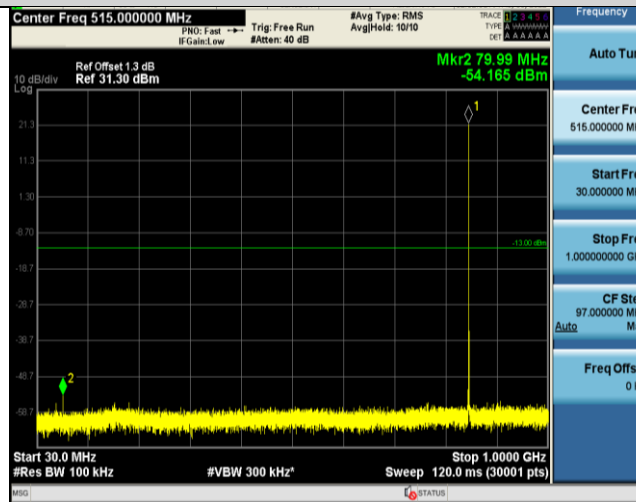


Test Graphs:

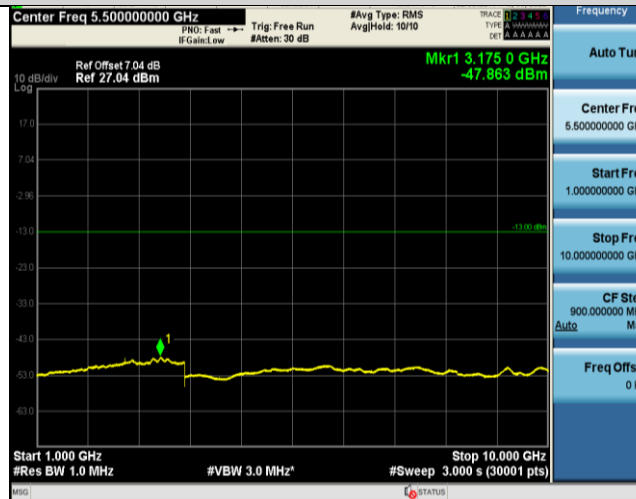




GSM850-128-30~1000MHz



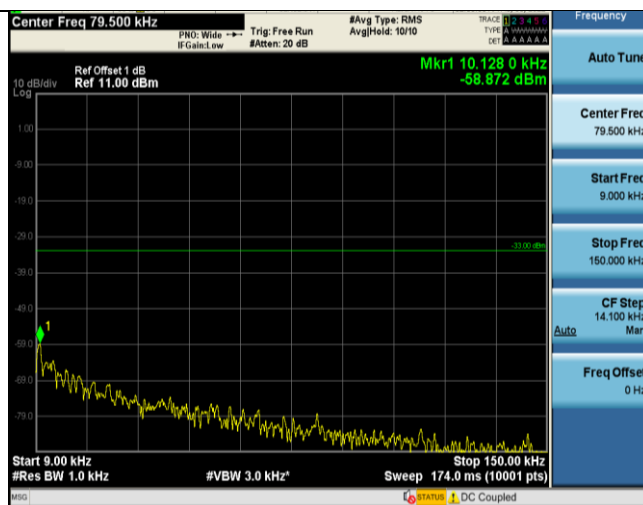
GSM850-128-1000~10000MHz



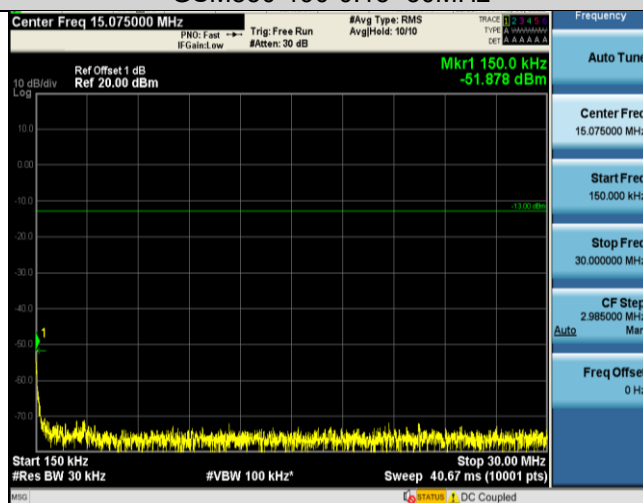
GSM850-190-0.009~0.15MHz



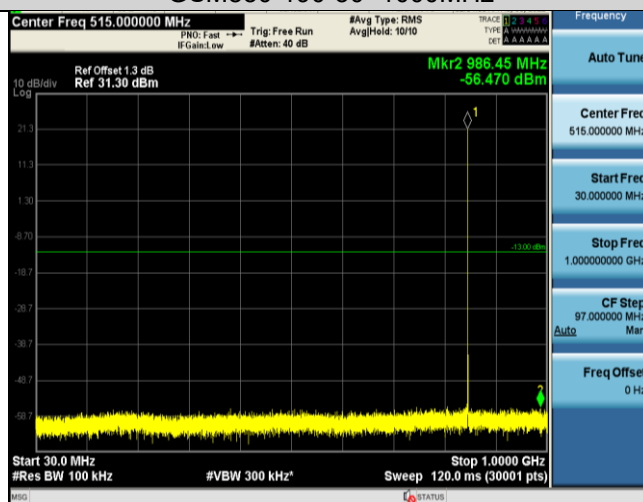
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GSM850-190-0.15~30MHz



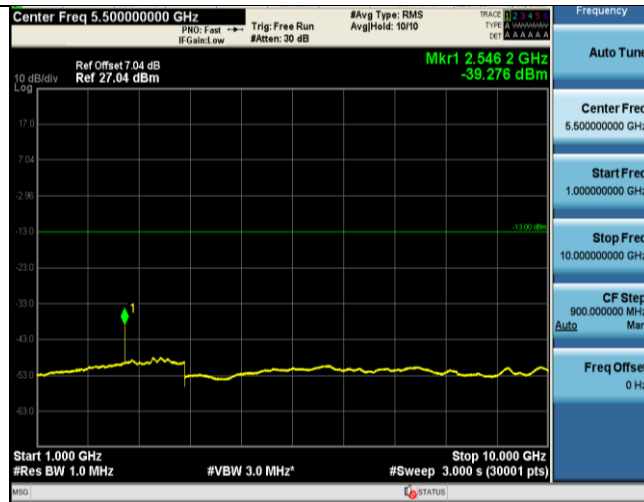
GSM850-190-30~1000MHz



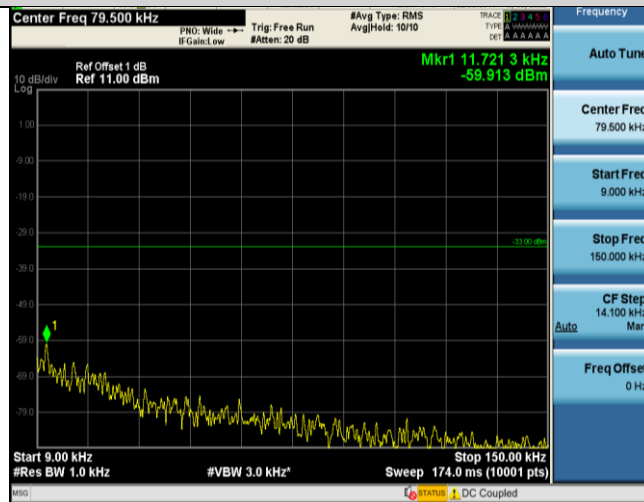
GSM850-190-1000~10000MHz



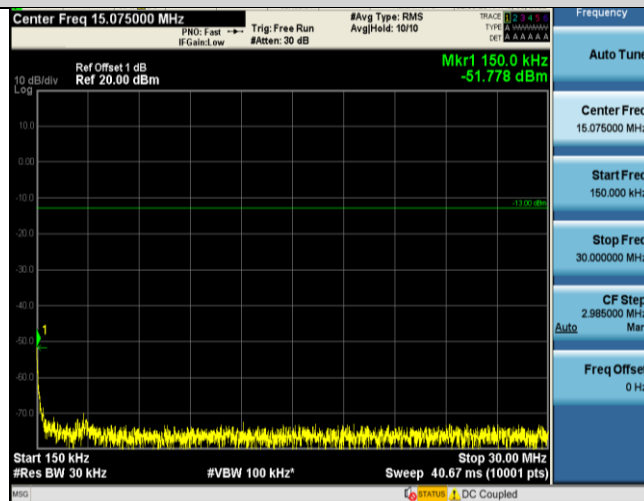
Report No.: PTC24121305101E-FC04



GSM850-251-0.009~0.15MHz



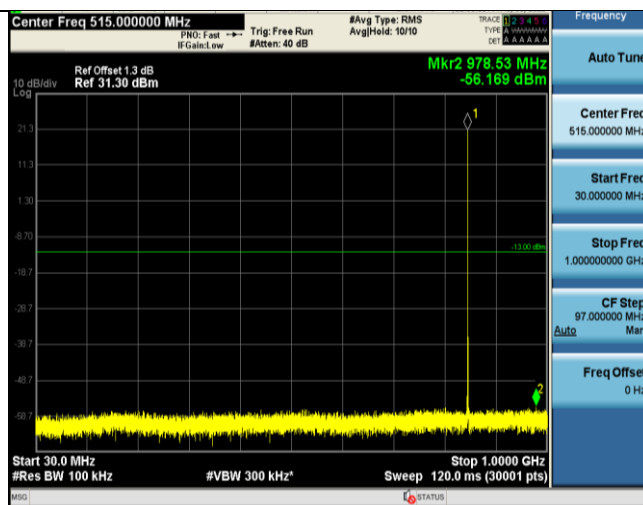
GSM850-251-0.15~30MHz



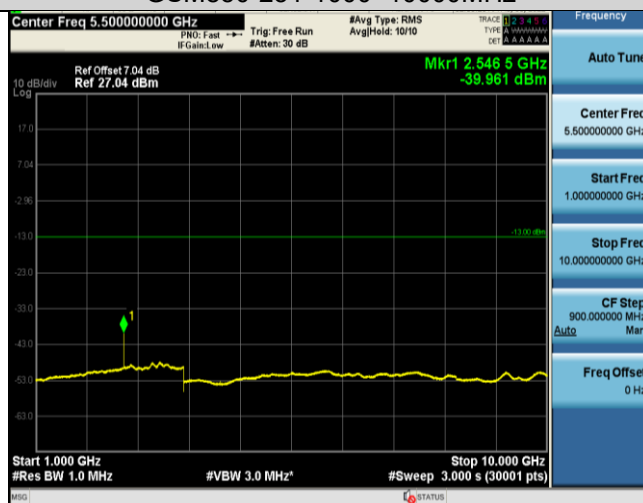
GSM850-251-30~1000MHz



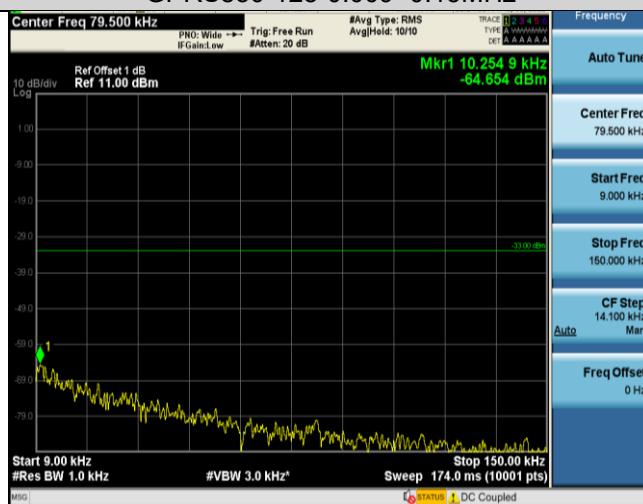
Report No.: PTC24121305101E-FC04



GSM850-251-1000~10000MHz



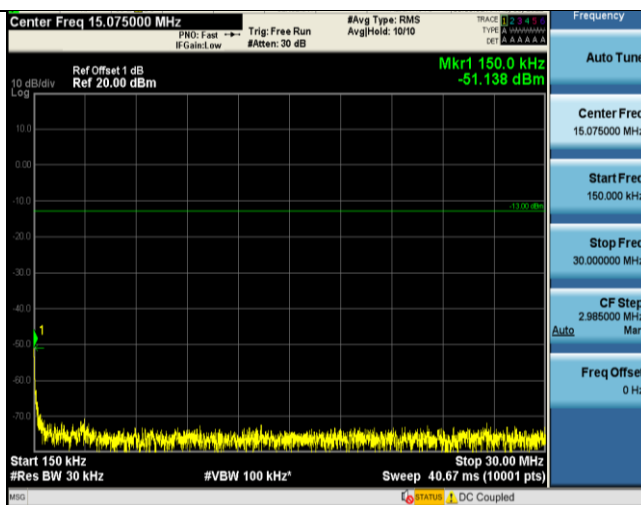
GPRS850-128-0.009~0.15MHz



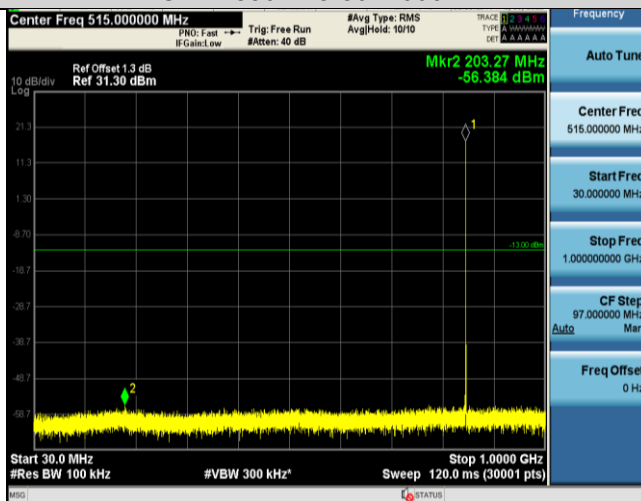
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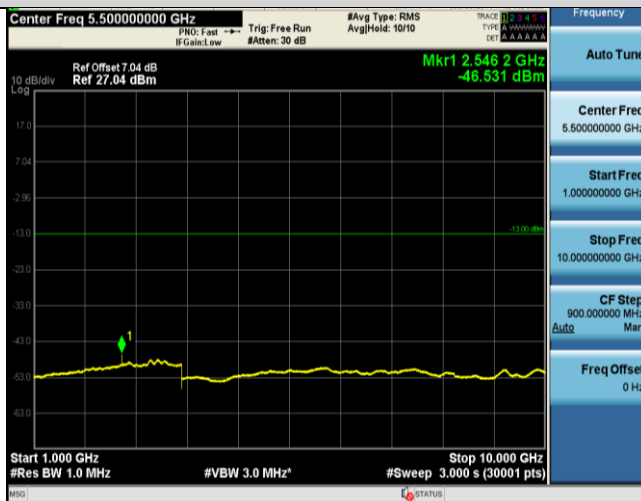
Report No.: PTC24121305101E-FC04



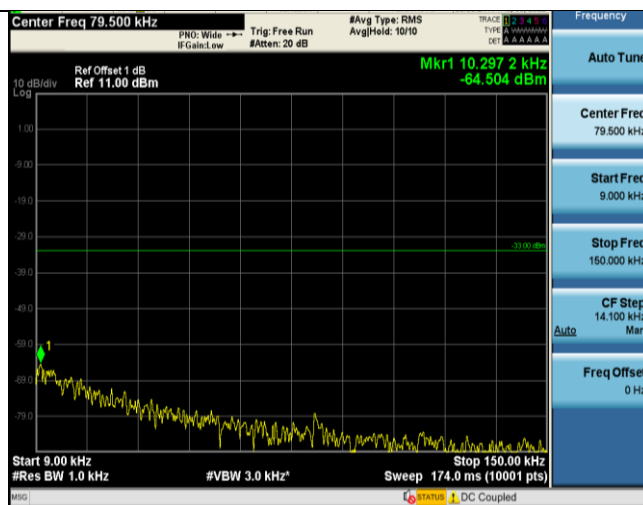
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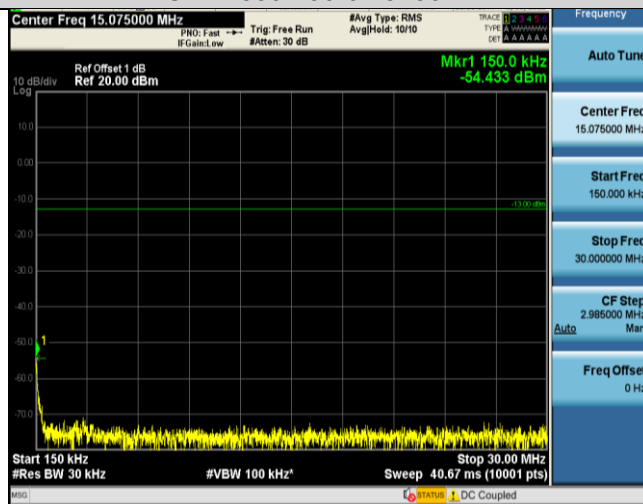
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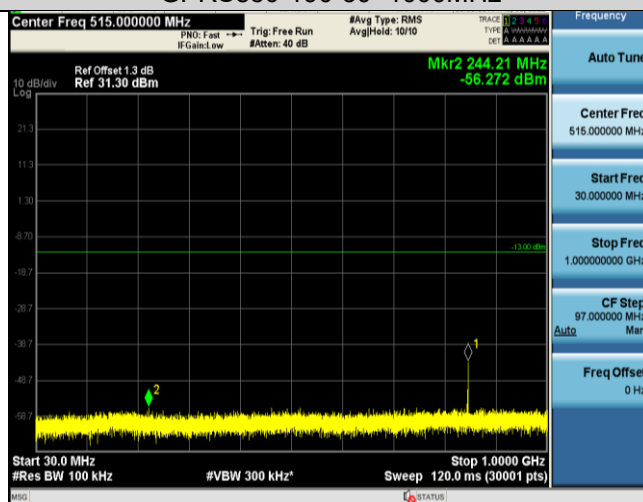
GPRS850-190-0.009~0.15MHz



GPRS850-190-0.15~30MHz



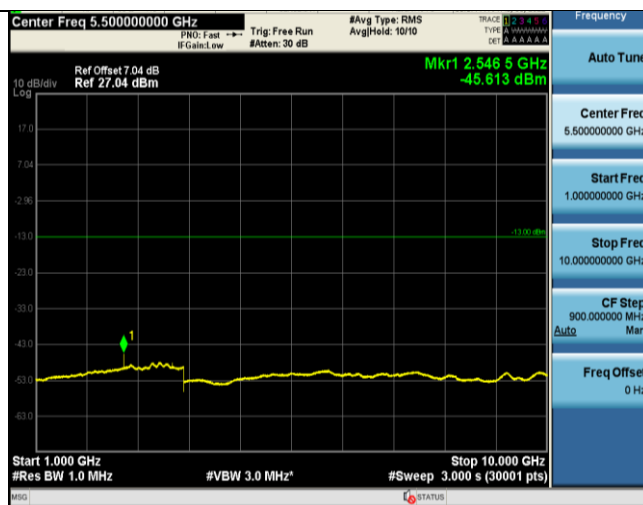
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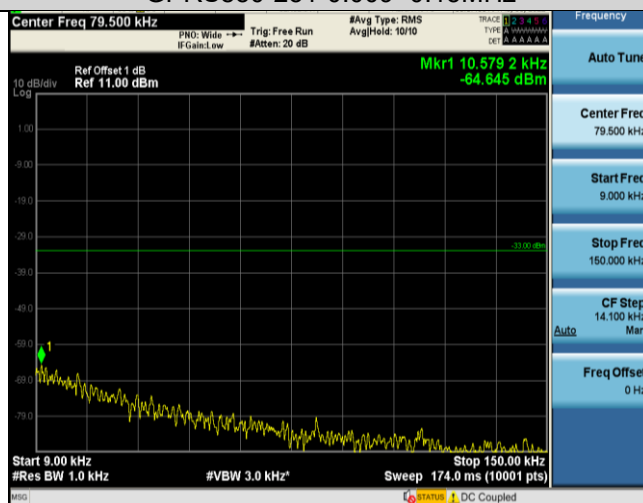
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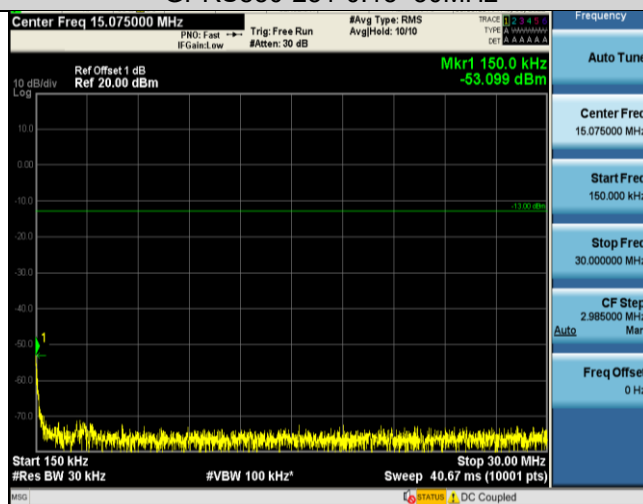
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GPRS850-251-0.009~0.15MHz



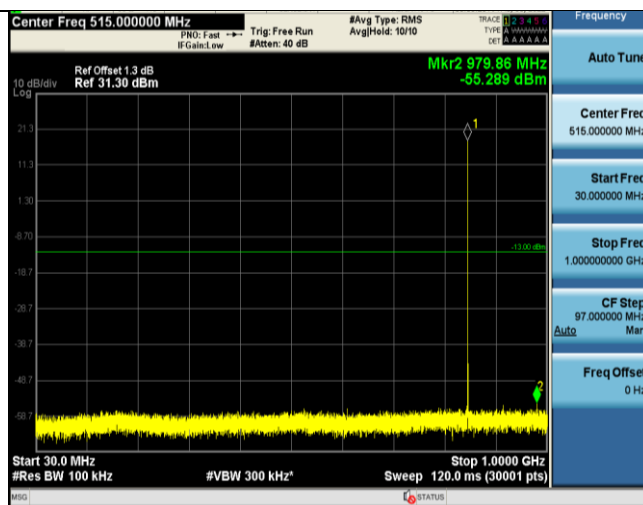
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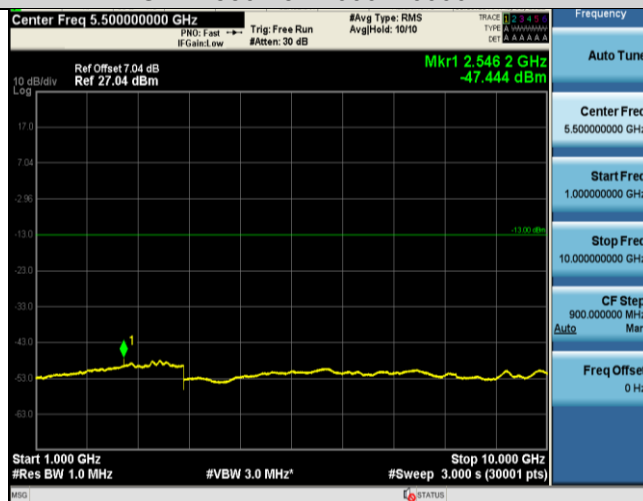
GPRS850-251-30~1000MHz



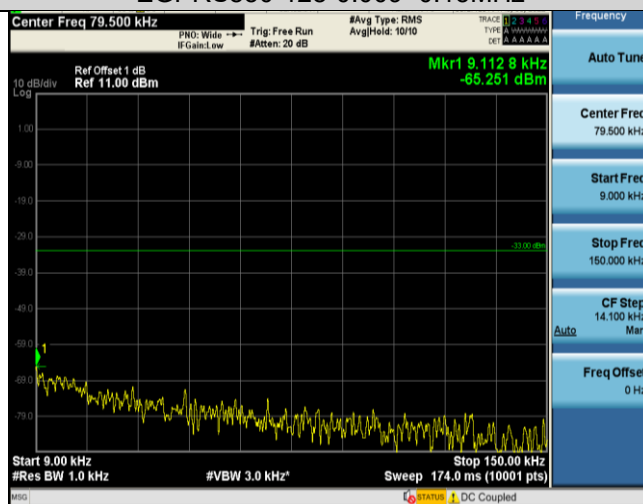
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GPRS850-251-1000~10000MHz



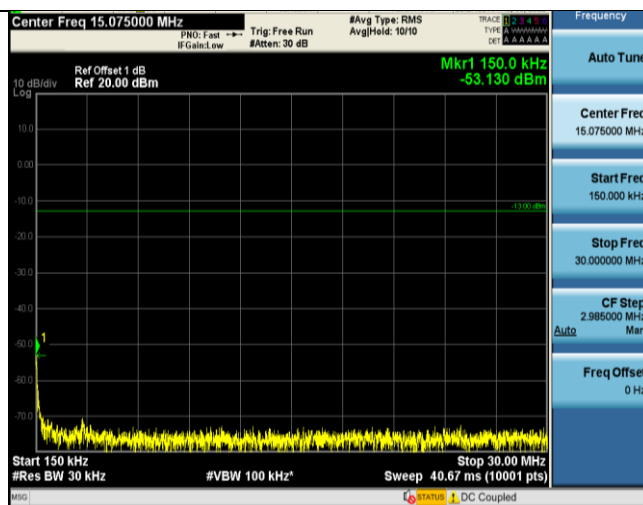
EGPRS850-128-0.009~0.15MHz



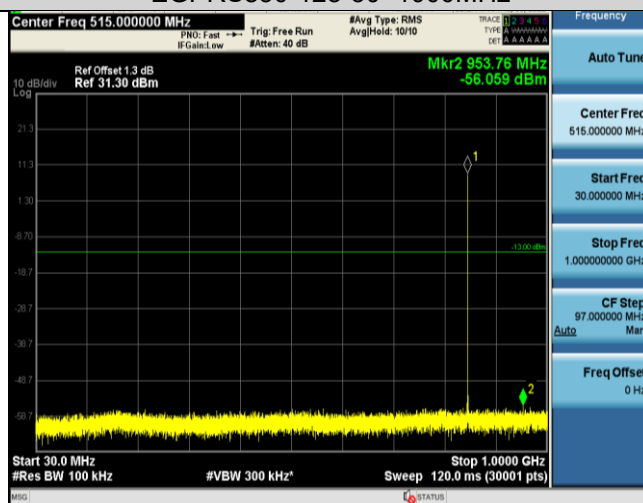
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Report No.: PTC24121305101E-FC04



EGPRS850-128-30~1000MHz



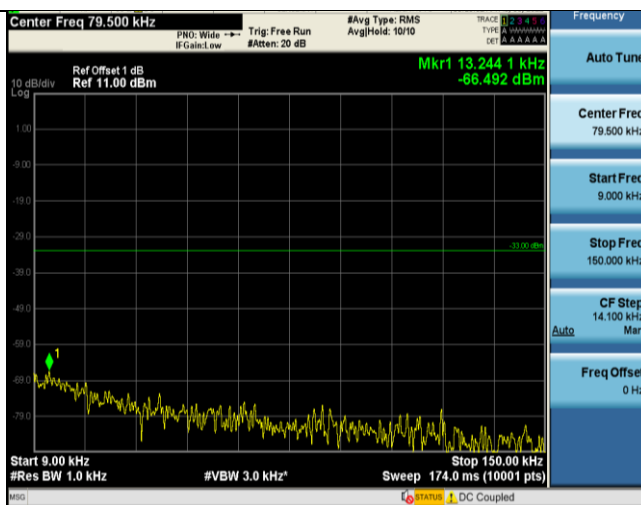
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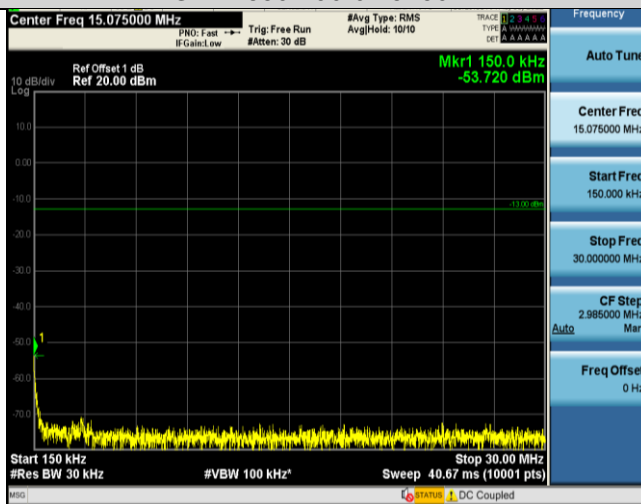
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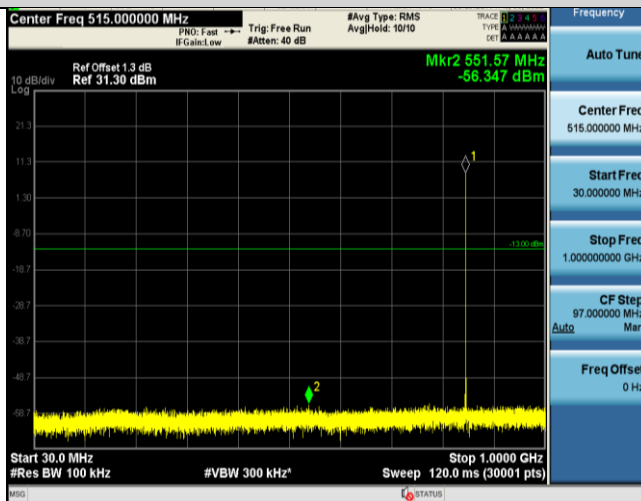
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EGPRS850-190-0.15~30MHz



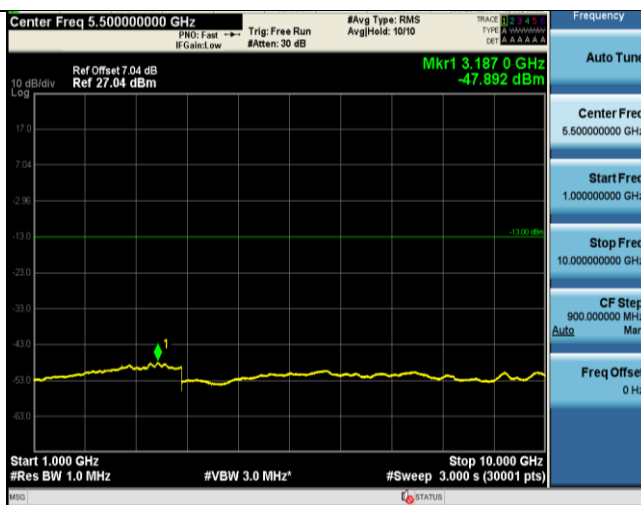
EGPRS850-190-30~1000MHz



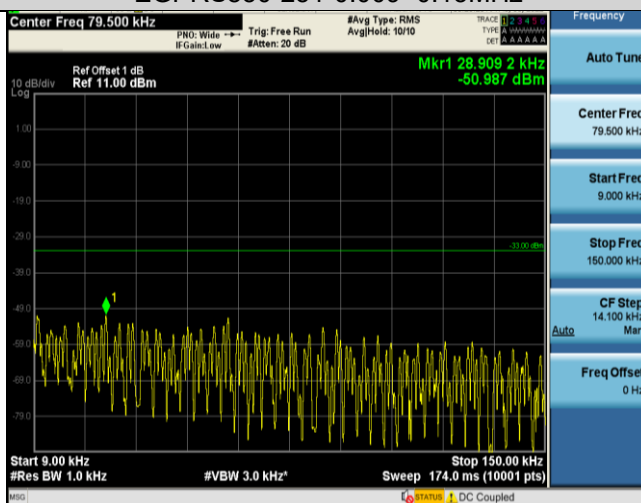
EGPRS850-190-1000~10000MHz



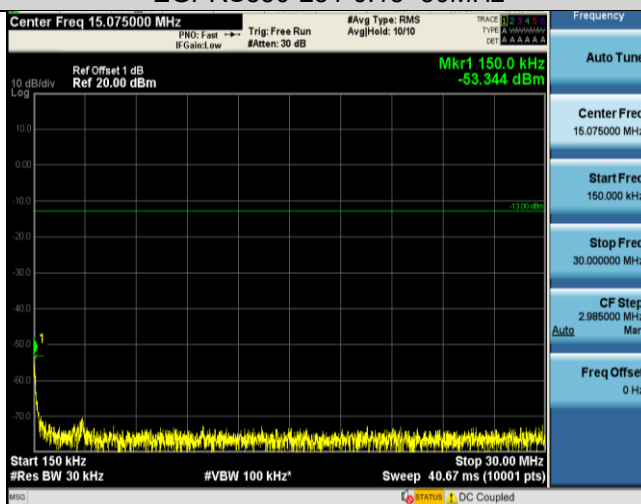
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EGPRS850-251-0.009~0.15MHz



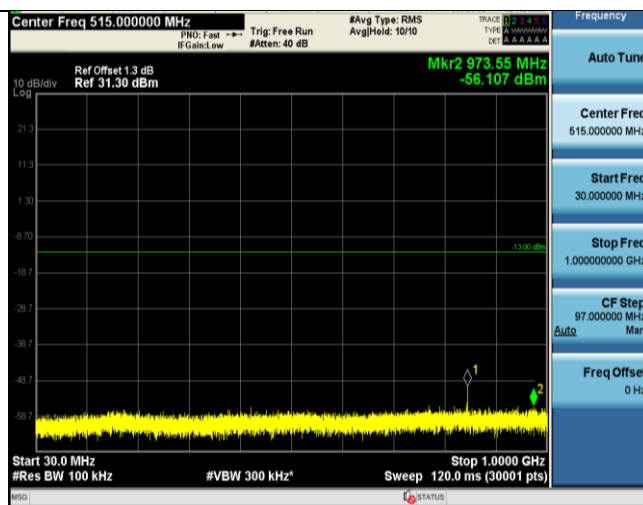
EGPRS850-251-0.15~30MHz



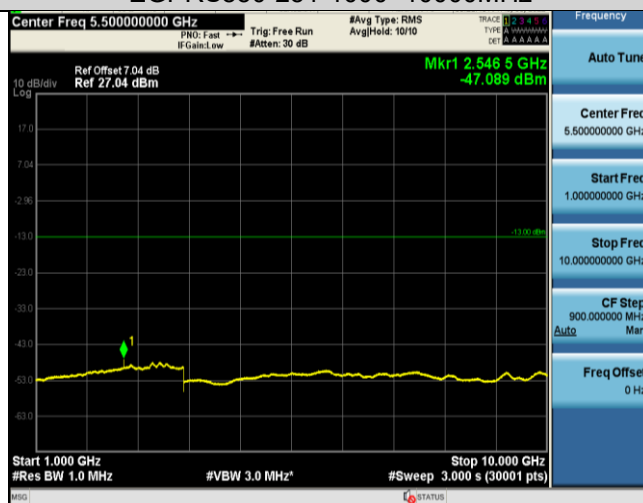
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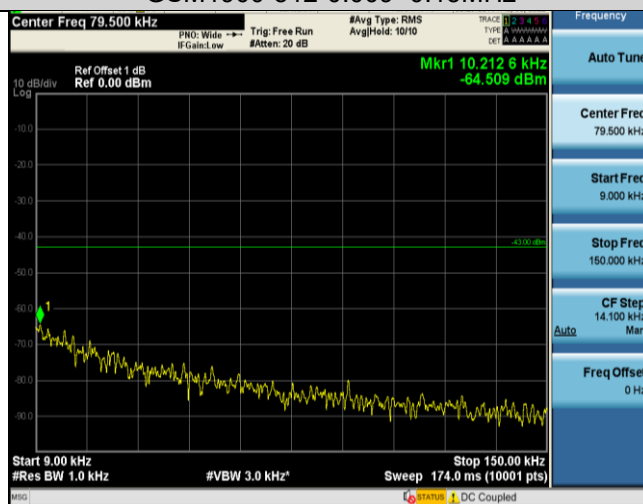
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EGPRS850-251-1000~10000MHz



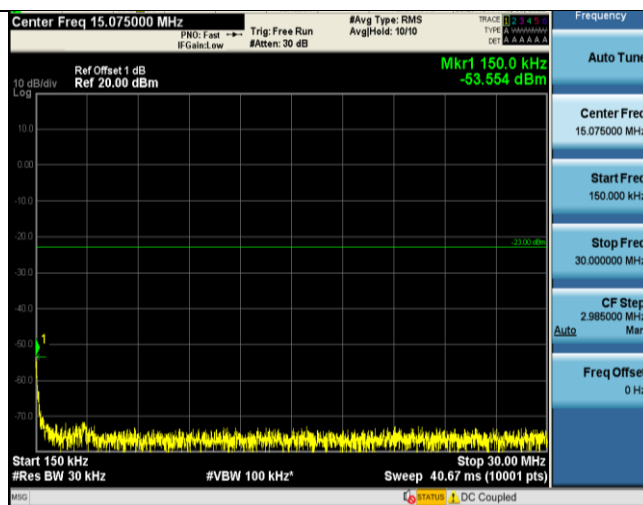
GSM1900-512-0.009~0.15MHz



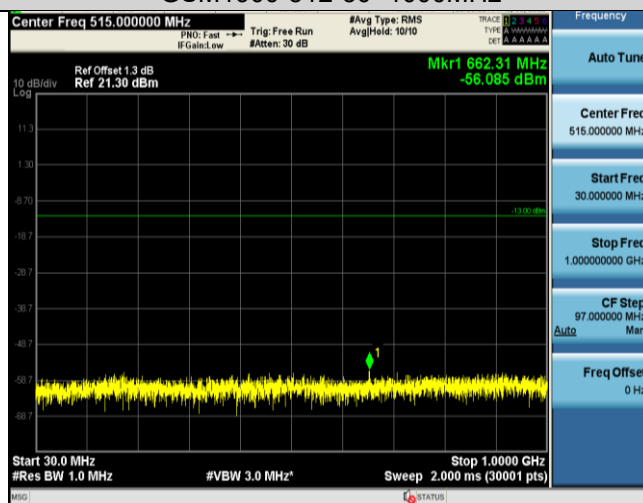
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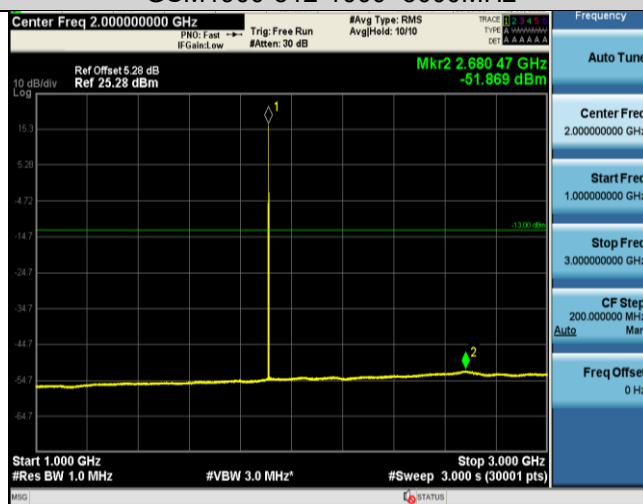
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GSM1900-512-30~1000MHz



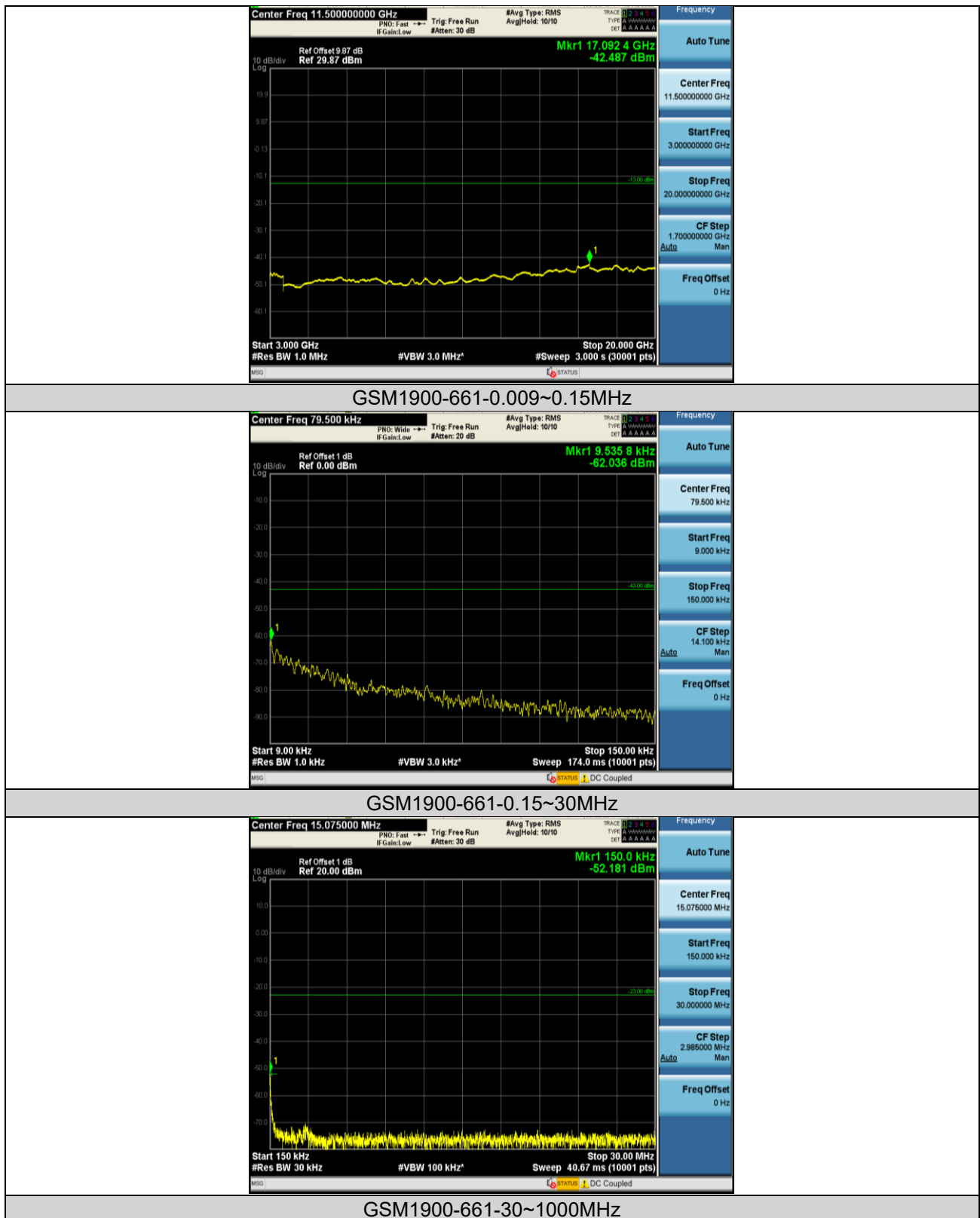
GSM1900-512-1000~3000MHz

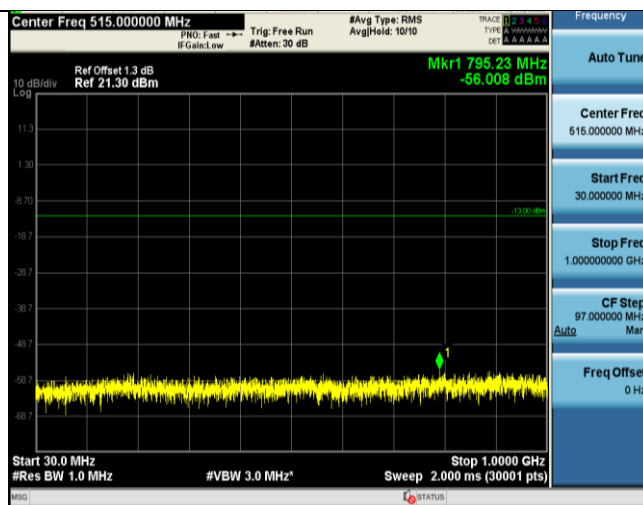


GSM1900-512-3000~20000MHz

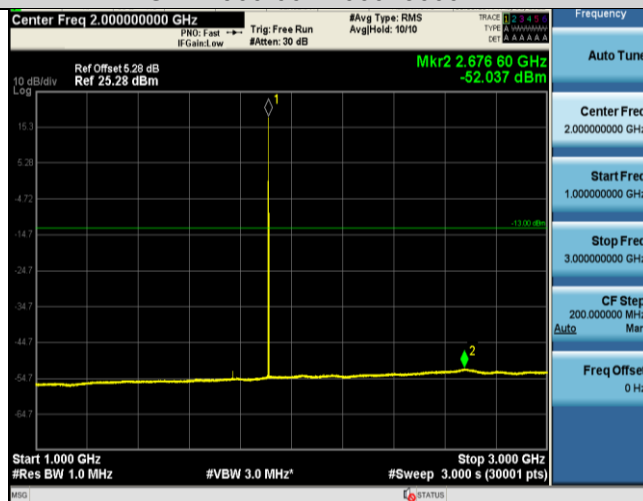


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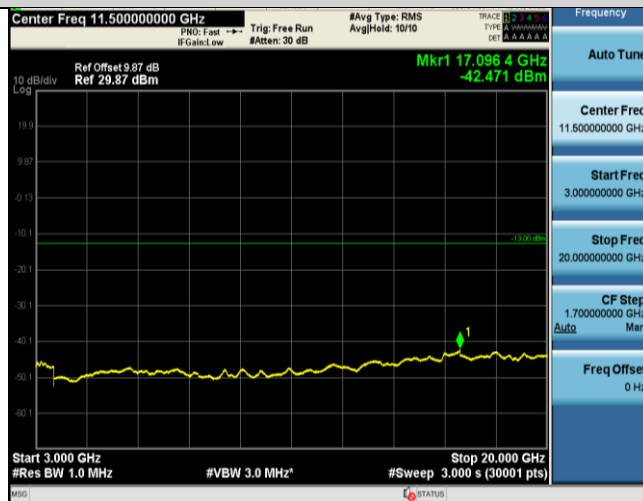




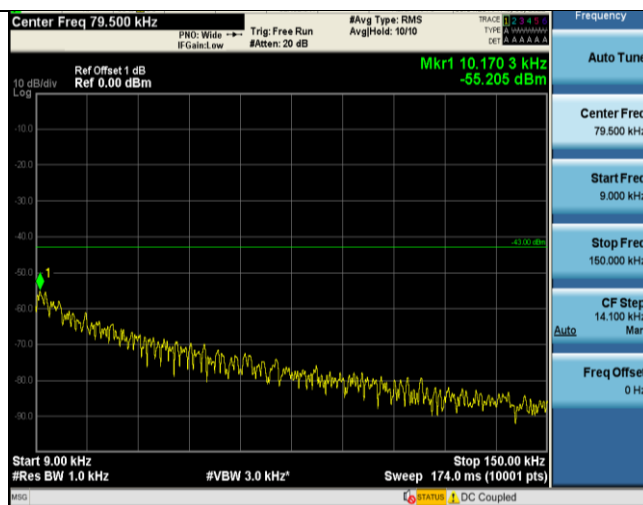
GSM1900-661-1000~3000MHz



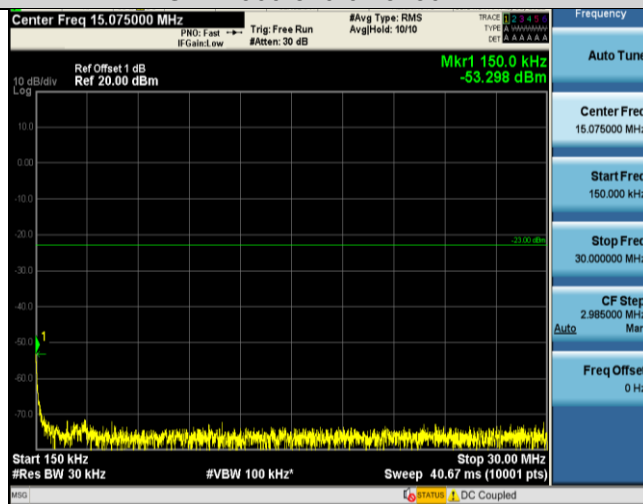
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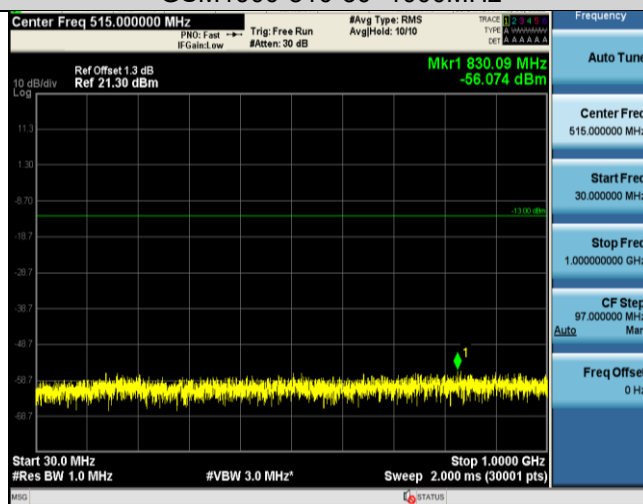
GSM1900-810-0.009~0.15MHz



GSM1900-810-0.15~30MHz



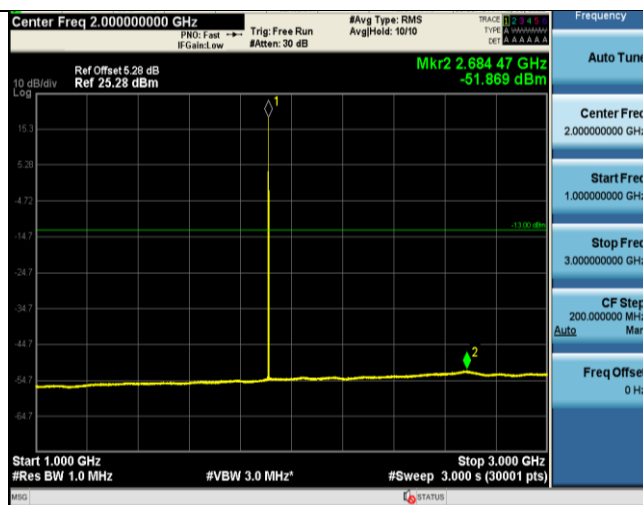
GSM1900-810-30~1000MHz



GSM1900-810-1000~3000MHz



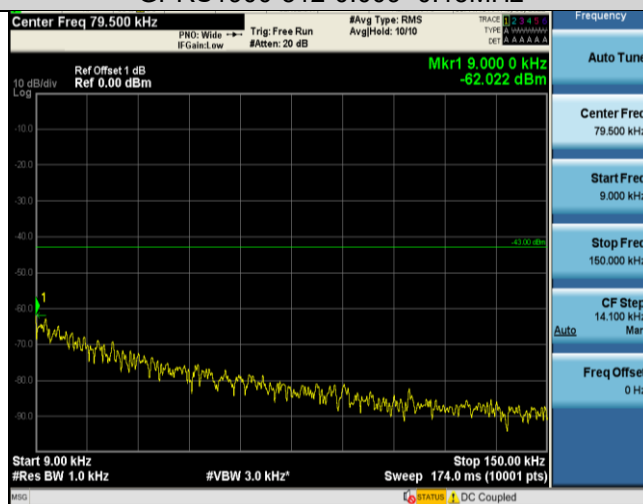
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GSM1900-810-3000~20000MHz



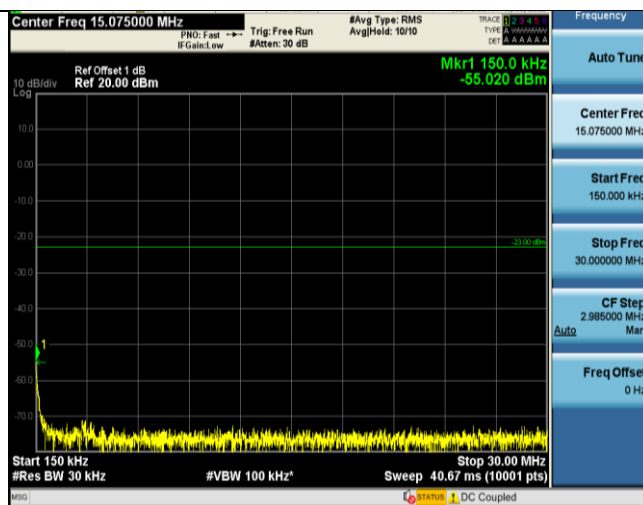
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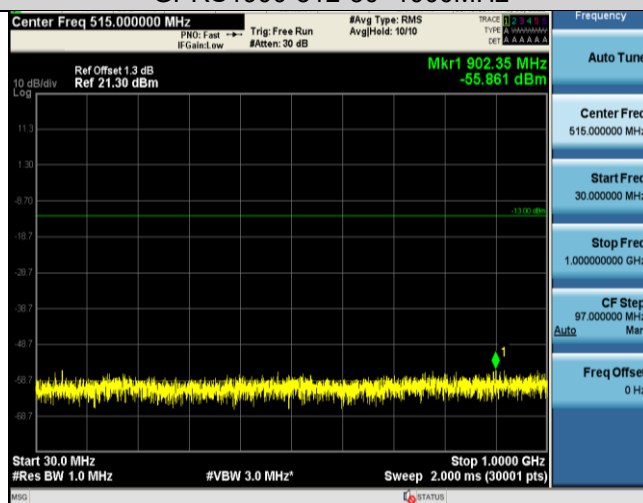
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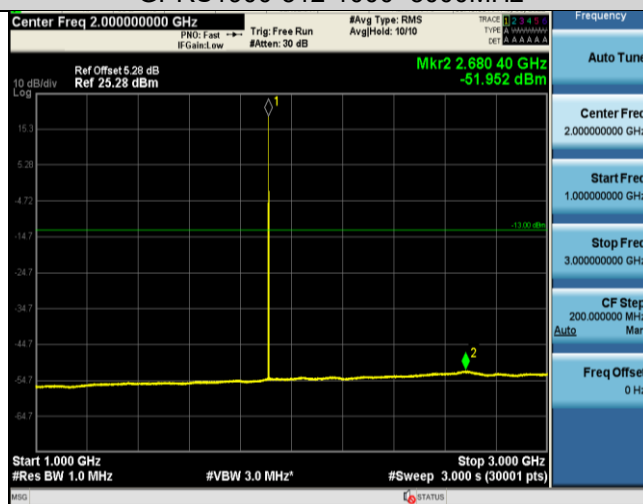
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GPRS1900-512-30~1000MHz



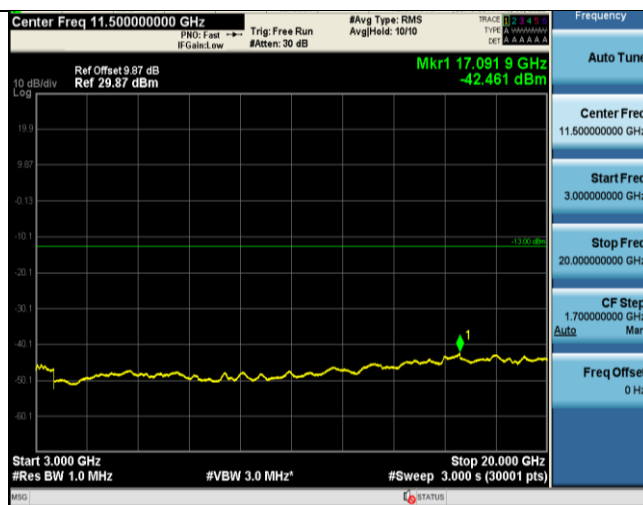
GPRS1900-512-1000~3000MHz



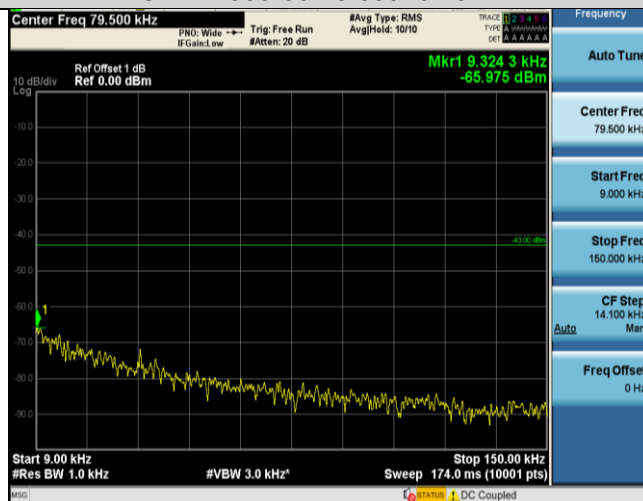
GPRS1900-512-3000~20000MHz



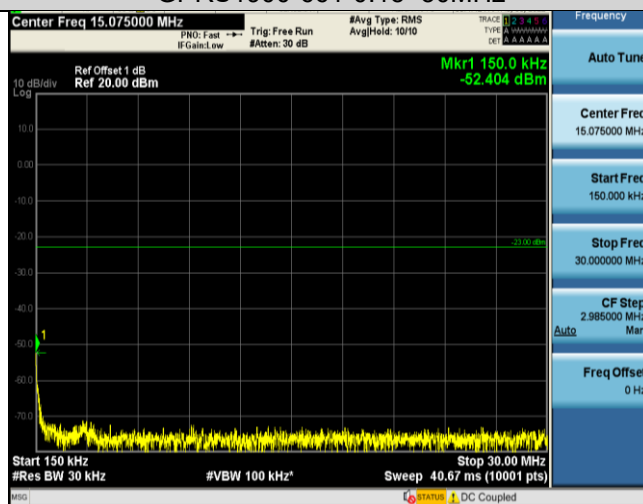
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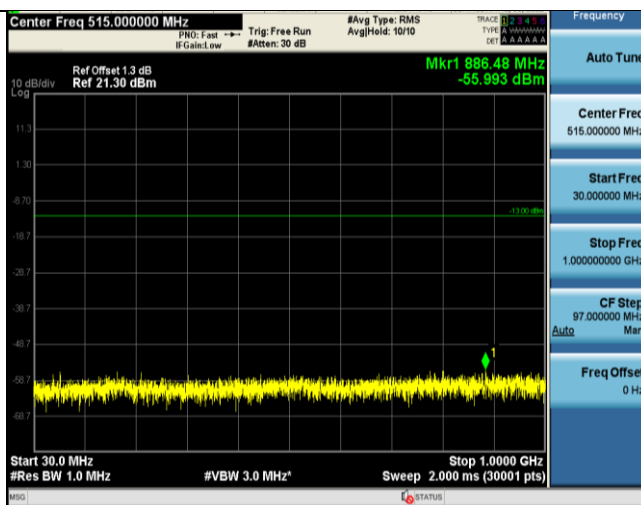
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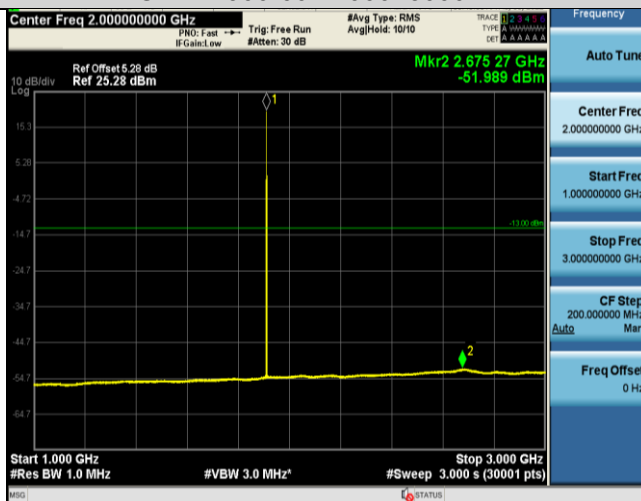
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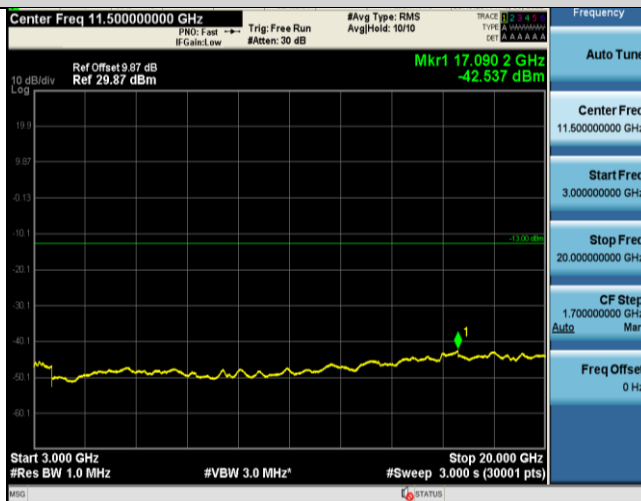
GPRS1900-661-30~1000MHz



GPRS1900-661-1000~3000MHz



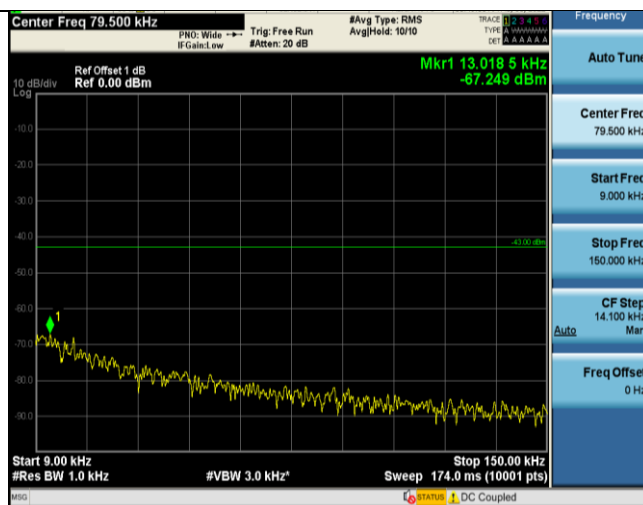
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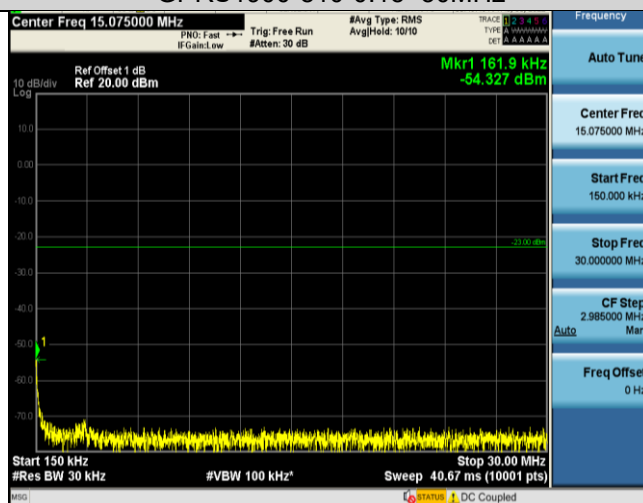
GPRS1900-810-0.009~0.15MHz



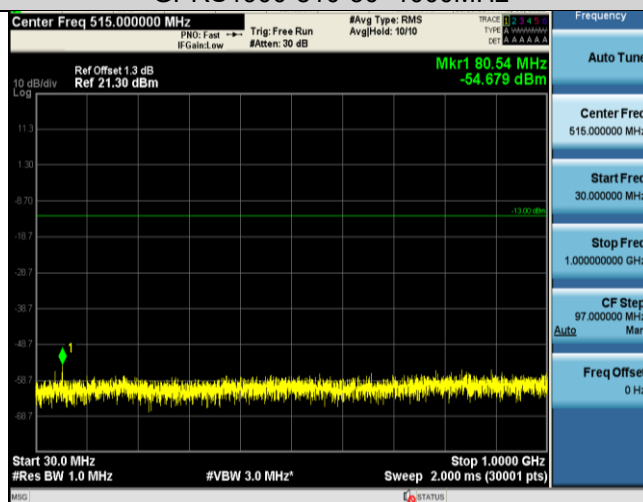
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GPRS1900-810-0.15~30MHz



GPRS1900-810-30~1000MHz



GPRS1900-810-1000~3000MHz