

## FCC 47 CFR PART 22H and 24E

### Test Report

Product Type : WWAN Mobile Hotspot Portable Device  
Applicant : Netgear Inc.  
Address : 350 East Plumeria Drive, San Jose, California 95134 United States  
Trade Name : Netgear  
Model Number : AC785S-500  
Test Specification : FCC 47 CFR PART 22H: Oct, 2013  
FCC 47 CFR PART 24E: Oct, 2013  
CANADA RSS-132 ISSUE 3: Jan. 2013  
CANADA RSS-133 ISSUE 6: Jan. 2013  
CANADA RSS-Gen ISSUE 4: Nov., 2014  
ANSI C63.4:2014  
Application Purpose : Original  
Receive Date : Sep. 11, 2014  
Test Period : Sep. 16 ~ Oct. 08, 2014  
Issue Date : Dec. 31, 2014

#### Issue by

A Test Lab Techno Corp.  
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Taiwan Accreditation Foundation accreditation number: 1330  
FCC Test Firm Information: 510205  
IC Test Firm Information: 7381A-1

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**Revision History**

Rev.	Issue Date	Revisions	Revised By
00	Nov. 27, 2014	Initial Issue	
01	Dec. 31, 2014	Revised report information.	Peggy Chang

## Verification of Compliance

Issued Date: 12/31/2014

Product Type : WWAN Mobile Hotspot Portable Device  
Applicant : Netgear Inc.  
Address : 350 East Plumeria Drive, San Jose, California 95134 United States  
Trade Name : Netgear  
Model Number : AC785S-500  
FCC ID : PY3AC785S  
EUT Rated Voltage : DC 5.0V, 1.0A  
Test Voltage : 120 Vac / 60 Hz ; DC 3.7V  
Applicable Standard : FCC 47 CFR PART 22H: Oct, 2013  
FCC 47 CFR PART 24E: Oct, 2013  
CANADA RSS-132 ISSUE 3: Jan. 2013  
CANADA RSS-133 ISSUE 6: Jan. 2013  
CANADA RSS-Gen ISSUE 4: Nov., 2014  
ANSI C63.4:2014

Application Purpose : Original

Test Result : Complied

Performing Lab. : A Test Lab Techno Corp.

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<http://www.atl-lab.com.tw/e-index.htm>



The above equipment was tested by A Test Lab Techno Corp. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4:2014 and the energy emitted by the sample tested as described in this report is in compliance with the requirements of FCC Rules Part 22H, Part 24E.

The test results of this report relate only to the tested sample identified in this report.

Approved By : Fly Lu Reviewed By : Eric Ou Yang  
(Manager) (Fly Lu) (Testing Engineer) (Eric Ou Yang)

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# 1 General Information

## 1.1. EUT Description

Applicant	Netgear Inc.				
Applicant Address	350 East Plumeria Drive, San Jose, California 95134 United States				
Manufacturer	Netgear Inc.				
Manufacturer Address	Suite 168 – 10760 Shellbridge Way, Richmond, BC Canada V6X 3H1				
Product Type	WWAN Mobile Hotspot Portable Device				
Trade Name	Netgear				
Model Number	AC785S-500				
FCC ID	PY3AC785S				
IMEI No.	014197000002053				
Mode	GPRS/EGPRS	Band	UL Frequency (MHz)	DL Frequency (MHz)	Modulation
		850	824.2 ~ 848.8	869.2 ~ 893.8	GMSK/8PSK
	WCDMA (RMC12.2K)/ HSDPA/ HSUPA	1900	1850.2 ~ 1909.8	1930.2 ~ 1989.8	GMSK/8PSK
		Band	UL Frequency (MHz)	DL Frequency (MHz)	Modulation
		II	1852.4 ~ 1907.6	1932.4 ~ 1987.6	QPSK
		V	826.4 ~ 846.6	871.4 ~ 891.6	QPSK
Channel Control	Auto				
Type of Antenna	IFA Antenan				
Antenna Gain (dBi)	GPRS/EGPRS 850 : 1.61 dBi GPRS/EGPRS 1900 : 2.21 dBi WCDMA/ HSDPA/ HSUPA Band II : 2.24 dBi WCDMA/ HSDPA/ HSUPA Band V : 1.61 dBi				
Max. RF Output power	GPRS 850 : 32.42 dBm / 1.746 W EGPRS 850 : 29.70 dBm / 0.933 W GPRS 1900 : 29.86 dBm / 0.968 W EGPRS 1900 : 28.71 dBm / 0.743 W WCDMA/ HSDPA/ HSUPA Band II : 26.43 dBm / 0.440 W WCDMA/ HSDPA/ HSUPA Band V : 26.59 dBm / 0.456 W				
Max. ERP/EIRP	GPRS 850 : 32.13 dBm / 1.633 W EGPRS 850 : 27.56 dBm / 0.570 W GPRS 1900 : 27.36 dBm / 0.545 W EGPRS 1900 : 23.98 dBm / 0.250 W WCDMA/ HSDPA/ HSUPA Band II : 23.81 dBm / 0.240 W WCDMA/ HSDPA/ HSUPA Band V : 24.50 dBm / 0.282 W				
Emission Designator	GPRS 850 : 246KGXW EGPRS 850 : 245KG7W GPRS 1900 : 246KGXW EGPRS 1900 : 248KG7W WCDMA/ HSDPA/ HSUPA Band II : 4M15F9W WCDMA/ HSDPA/ HSUPA Band V : 4M18F9W				

## 1.2. Mode of Operation

ATL has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode
Mode 1: GPRS 850 Link Mode
Mode 2: GPRS 1900 Link Mode
Mode 3: EGPRS 850 Link Mode
Mode 4: EGPRS 1900 Link Mode
Mode 5: WCDMA Band II Link Mode
Mode 6: WCDMA Band V Link Mode
Mode 7: Receive Link Mode

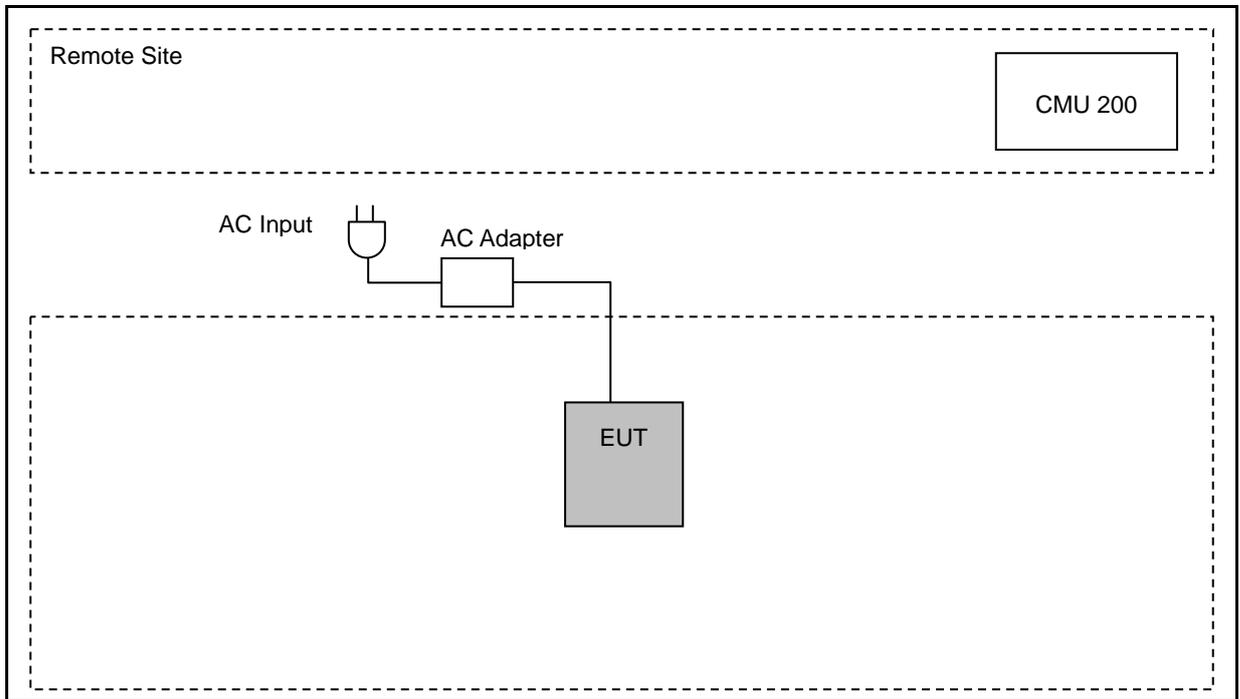
Note: Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.

By preliminary testing and verifying three axis (X, Y and Z) position of EUT transmitted status, it was found that "X axis" position was the worst, then the final test was executed the worst condition and test data were recorded in this report.

## 1.3. EUT Exercise Software

1	Setup the EUT and Base Station (CMU200) as shown on 1.4.
2	Turn on the power of all equipment.

**1.4. Configuration of Test System Details**



Devices Description					
	Product	Manufacturer	Model Number	Serial Number	Power Cord
1.	----	----	----	----	----

**1.5. Test Site Environment**

Items	Required (IEC 60068-1)	Actual
Temperature (°C)	15-35	26
Humidity (%RH)	25-75	60
Barometric pressure (mbar)	860-1060	950

**1.6. Summary of Test Result**

Description	FCC Rule	IC Rule	Limit	Result
Conducted Output Power	§2.1046	N/A	N/A	Pass
Effective Radiated Power	§22.913(a)(2)	RSS-132(4.4) SRSP-503(5.1.3)	< 7 Watts for FCC (<6.3 Watts for IC)	Pass
Equivalent Isotropic Radiated Power	§24.232(c)	RSS-133 (6.4) SRSP-510(5.1.2)	< 2 Watts	Pass
Peak to average ratio	§24.232(d)	RSS-133 (6.4)	< 13 dB	Pass
Emission Bandwidth & Occupied Bandwidth	§2.1049 §22.917(a) §24.238(a)	RSS-Gen (6.6)	N/A	Pass
Band Edge Measurement	§2.1051 §22.917(a) §24.238(a)	RSS-132 (4.5.1)RSS-133 (6.5.1)	< 43+10log <sub>10</sub> (P[Watts])	Pass
Conducted Spurious Emission	§2.1051 §22.917(a) §24.238(a)	RSS-132 (4.5.1) RSS-133 (6.5.1)	< 43+10log <sub>10</sub> (P[Watts])	Pass
Field Strength of Spurious Radiation	§2.1053 §22.917(a) §24.238(a)	RSS-132 (4.5.1) RSS-133 (6.5.1) RSS-Gen (7.1)	< 43+10log <sub>10</sub> (P[Watts])	Pass
Frequency Stability for Temperature & Voltage	§2.1055 §22.355 §24.235	RSS-132(4.3) RSS-133(6.3)	< 2.5 ppm	Pass

## 2 RF Output Power Test

### 2.1. Limit

N/A

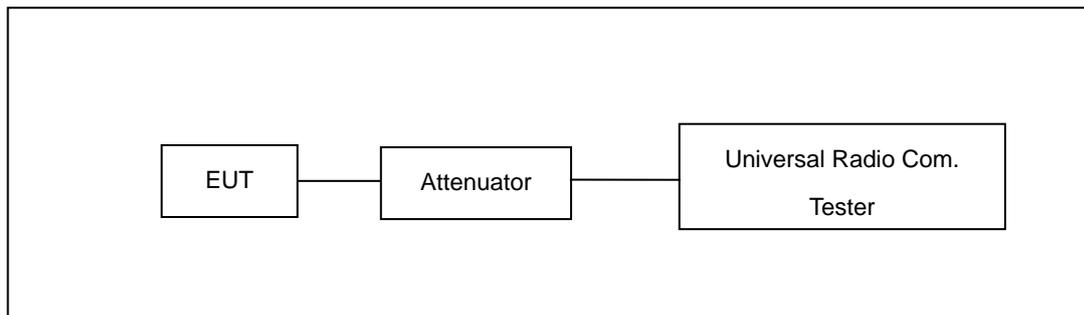
### 2.2. Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Universal Radio Communication Tester	R & S	CMU200	109369	08/11/2014	(2)
Test Site	ATL	TE05	TE05	N.C.R.	-----

Remark: <sup>(1)</sup> Calibration period 1 year. <sup>(2)</sup> Calibration period 2 years.

Note: N.C.R. = No Calibration Request.

### 2.3. Test Setup



### 2.4. Test Procedure

1. Set base station for EUT at GSM 850: PCL=5 and PCS 1900: PCL=0.
2. Set base station for EUT at WCDMA Band V and WCDMA Band II, power level was set to maximum.
3. Select lowest, middle, and highest channels for each band.

### 2.5. Uncertainty

The measurement uncertainty is defined as for RF output power measurement is 1.2 dB.

**2.6. Test Result**

Model Number	AC785S-500						
Test Item	RF Output Power						
Date of Test	10/08/2014			Test Site		TE05	
Bands	Modulation Type	Data Rate	Frequency (MHz)	Burst Average Power		Peak Power	
				(dBm)	(W)	(dBm)	(W)
GRRS 850 Multi Class :10 Max Up:2 Max Down:4 Sum:5	GMSK	4Down1Up (Duty Factor 1/8)	824.2	31.85	1.531	<b>32.42</b>	<b>1.746</b>
			836.6	31.79	1.510	32.31	1.702
			848.8	31.40	1.380	31.83	1.524
		3Down2Up (Duty Factor 2/8)	824.2	29.18	0.828	29.32	0.855
			836.6	28.85	0.767	29.12	0.817
			848.8	28.88	0.773	28.91	0.778
EGPRS 850 Multi Class :12 Max Up:4 Max Down:4 Sum:5	8PSK	4Down1Up (Duty Factor 1/8)	824.2	26.73	0.471	<b>29.70</b>	<b>0.933</b>
			836.6	26.49	0.446	29.50	0.891
			848.8	26.27	0.424	29.40	0.871
		3Down2Up (Duty Factor 2/8)	824.2	26.51	0.448	29.60	0.912
			836.6	26.26	0.423	29.40	0.871
			848.8	26.07	0.405	29.20	0.832
		2Down3Up (Duty Factor 3/8)	824.2	26.28	0.425	29.40	0.871
			836.6	25.99	0.397	29.30	0.851
			848.8	25.91	0.390	29.10	0.813
		1Down4Up (Duty Factor 4/8)	824.2	26.13	0.410	29.20	0.832
			836.6	25.90	0.389	29.00	0.794
			848.8	25.70	0.372	28.90	0.776

Note: The peak power testing result was used peak detector.

Model Number	AC785S-500						
Test Item	RF Output Power						
Date of Test	10/08/2014			Test Site		TE05	
Bands	Modulation Type	Data Rate	Frequency (MHz)	Burst Average Power		Peak Power	
				(dBm)	(W)	(dBm)	(W)
GRRS 1900 Multi Class :10 Max Up:2 Max Down:4 Sum:5	GMSK	4Down1Up (Duty Factor 1/8)	1850.20	29.61	0.914	<b>29.86</b>	<b>0.968</b>
			1880.00	29.46	0.883	29.67	0.927
			1909.80	29.32	0.855	29.54	0.899
		3Down2Up (Duty Factor 2/8)	1850.20	27.56	0.570	27.81	0.604
			1880.00	27.43	0.553	27.64	0.581
			1909.80	27.33	0.541	27.56	0.570
EGPRS 1900 Multi Class :10 Max Up:2 Max Down:4 Sum:5	8PSK	4Down1Up (Duty Factor 1/8)	1850.20	25.54	0.358	<b>28.71</b>	<b>0.743</b>
			1880.00	25.38	0.345	28.53	0.713
			1909.80	25.29	0.338	28.41	0.693
		3Down2Up (Duty Factor 2/8)	1850.20	25.38	0.345	28.54	0.714
			1880.00	25.22	0.333	28.34	0.682
			1909.80	25.13	0.326	28.23	0.665
		2Down3Up (Duty Factor 3/8)	1850.20	25.23	0.333	28.39	0.690
			1880.00	24.93	0.311	28.08	0.643
			1909.80	24.86	0.306	28.01	0.632
		1Down4Up (Duty Factor 4/8)	1850.20	25.05	0.320	28.15	0.653
			1880.00	24.85	0.305	27.94	0.622
			1909.80	24.74	0.298	27.81	0.604

Note: The peak power testing result was used peak detector.

Model Number	AC785S-500						
Test Item	RF Output Power						
Date of Test	10/08/2014			Test Site		TE05	
Bands	Modulation Type	Sub-Test	Frequency (MHz)	Burst Average Power		Peak Power	
				(dBm)	(W)	(dBm)	(W)
WCDMA Band II	QPSK	-----	1852.4	22.68	0.185	26.35	0.432
			1880.0	22.62	0.183	26.24	0.421
			1907.6	22.91	0.195	<b>26.43</b>	<b>0.440</b>
HSDPA Band II	QPSK	1	1852.4	21.83	0.152	25.47	0.352
			1880.0	21.81	0.152	25.36	0.344
			1907.6	22.02	0.159	25.62	0.365
		2	1852.4	21.81	0.152	25.46	0.352
			1880.0	21.77	0.150	25.31	0.340
			1907.6	21.97	0.157	25.60	0.363
		3	1852.4	21.35	0.136	25.06	0.321
			1880.0	21.34	0.136	24.90	0.309
			1907.6	21.56	0.143	25.14	0.327
		4	1852.4	21.34	0.136	25.02	0.318
			1880.0	21.33	0.136	24.88	0.308
			1907.6	21.55	0.143	25.13	0.326
HSUPA Band II	QPSK	1	1852.4	21.33	0.136	24.97	0.314
			1880.0	21.24	0.133	24.88	0.308
			1907.6	21.54	0.143	25.04	0.319
		2	1852.4	19.39	0.087	23.00	0.200
			1880.0	19.33	0.086	22.94	0.197
			1907.6	19.59	0.091	23.08	0.203
		3	1852.4	20.38	0.109	24.02	0.252
			1880.0	20.27	0.106	23.97	0.249
			1907.6	20.60	0.115	24.11	0.258
		4	1852.4	19.47	0.089	22.98	0.199
			1880.0	19.31	0.085	22.98	0.199
			1907.6	19.57	0.091	23.06	0.202
		5	1852.4	21.31	0.135	24.95	0.313
			1880.0	21.23	0.133	24.87	0.307
			1907.6	21.48	0.141	25.01	0.317

Note: The peak power testing result was used peak detector.

Model Number	AC785S-500						
Test Item	RF Output Power						
Date of Test	10/08/2014			Test Site		TE05	
Bands	Modulation Type	Sub-Test	Frequency (MHz)	Burst Average Power		Peak Power	
				(dBm)	(W)	(dBm)	(W)
WCDMA Band V	QPSK	-----	826.4	23.41	0.219	<b>26.59</b>	<b>0.456</b>
			836.6	23.22	0.210	26.32	0.429
			846.6	23.13	0.206	26.24	0.421
HSDPA Band V	QPSK	1	826.4	22.56	0.180	25.76	0.377
			836.6	22.32	0.171	25.48	0.353
			846.6	22.27	0.169	25.41	0.348
		2	826.4	22.53	0.179	25.73	0.374
			836.6	22.28	0.169	25.44	0.350
			846.6	22.22	0.167	25.36	0.344
		3	826.4	22.08	0.161	25.28	0.337
			836.6	21.83	0.152	24.99	0.316
			846.6	21.77	0.150	24.91	0.310
		4	826.4	22.04	0.160	25.24	0.334
			836.6	21.79	0.151	24.95	0.313
			846.6	21.76	0.150	24.90	0.309
HSUPA Band V	QPSK	1	826.4	22.02	0.159	25.16	0.328
			836.6	21.83	0.152	24.92	0.310
			846.6	21.77	0.150	24.79	0.301
		2	826.4	20.04	0.101	23.18	0.208
			836.6	19.84	0.096	22.93	0.196
			846.6	19.76	0.095	22.78	0.190
		3	826.4	21.04	0.127	24.18	0.262
			836.6	20.86	0.122	23.95	0.248
			846.6	20.77	0.119	23.79	0.239
		4	826.4	20.00	0.100	23.14	0.206
			836.6	19.82	0.096	22.91	0.195
			846.6	19.74	0.094	22.76	0.189
		5	826.4	22.00	0.158	25.14	0.327
			836.6	21.80	0.151	24.89	0.308
			846.6	21.73	0.149	24.75	0.299

Note: The peak power testing result was used peak detector.

### 3 Effective Radiated Power / Equivalent Isotropic Radiated Power Test

#### 3.1. Limit

For FCC Part 22.913(a)(2): The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

For FCC Part 24.232(b): The EIRP of mobile transmitters and auxiliary test transmitters must not exceed 2 Watts.

#### 3.2. Test Instruments

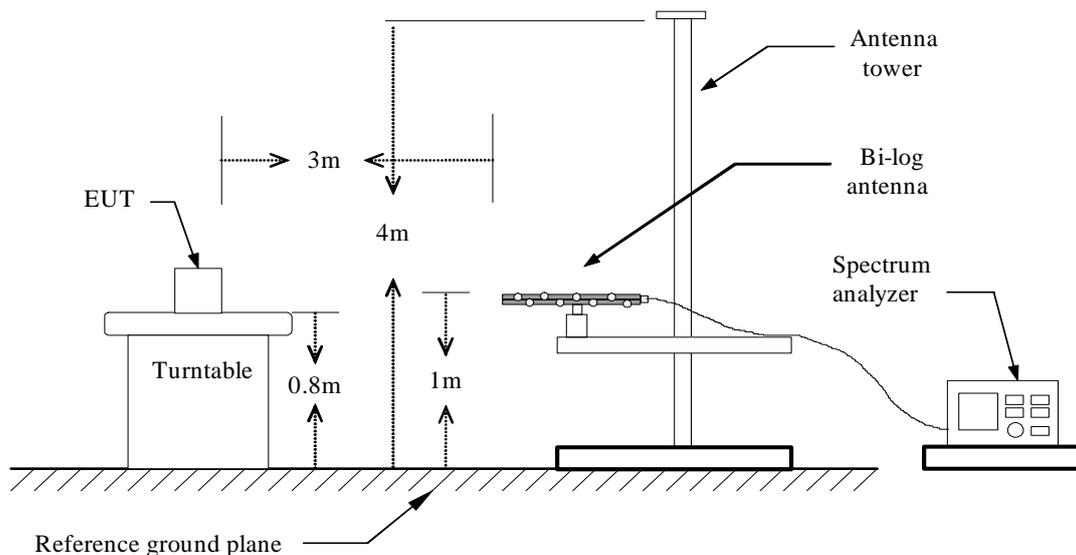
3 Meter Chamber					
Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
RF Pre-selector	Agilent	N9039A	MY46520256	01/10/2014	(1)
Spectrum Analyzer	Agilent	E4446A	MY46180578	01/10/2014	(1)
Pre Amplifier	Agilent	8449B	3008A02237	02/21/2014	(1)
Pre Amplifier	Agilent	8447D	2944A10961	02/21/2014	(1)
Broadband Antenna (30MHz~1GHz)	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	9163-270	07/22/2014	(1)
Horn Antenna (1~18GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	06/11/2014	(1)
Horn Antenna (18~40GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9170	9170-320	07/02/2014	(1)
Test Site	ATL	TE01	888001	08/28/2014	(1)

Remark: <sup>(1)</sup> Calibration period 1 year. <sup>(2)</sup> Calibration period 2 years.

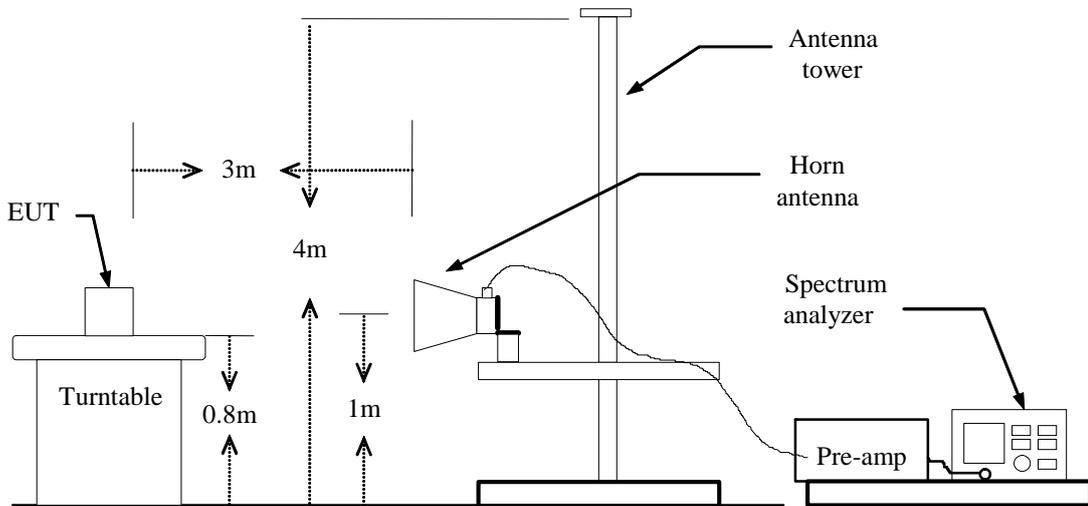
Note: N.C.R. = No Calibration Request.

#### 3.3. Setup

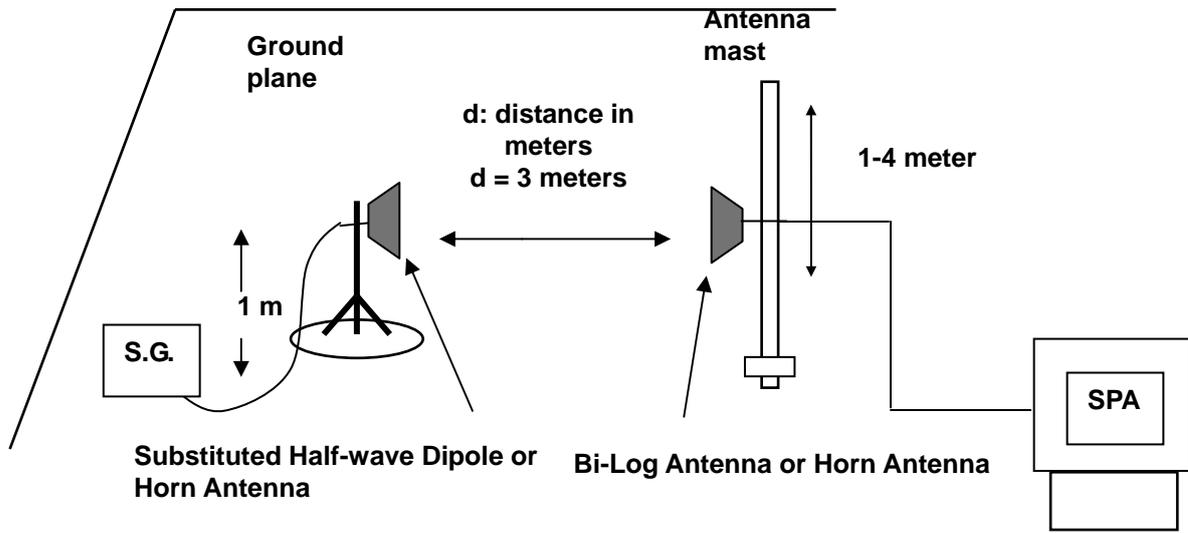
Below 1 GHz



Above 1 GHz



For Substituted Method Test Set-UP



### 3.4. Test Procedure

The measurement is made according to ANSI C63.4:2014 as follows:

The EUT was placed on a non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer.

During the measurement of the EUT, the resolution bandwidth was set to 3MHz and the average bandwidth was set to 3MHz. The highest emission was recorded with the rotation of the turntable and the lowering of the test antenna.

The reading was recorded and the field strength (E in dBuV/m) was calculated.

ERP in frequency band 824-849MHz, and EIRP in frequency band 1851.25 –1910MHz were measured using a substitution method. The EUT was replaced by half-wave dipole (824-849MHz) or horn antenna (1851.25-1910MHz) connected to a signal generator. The spectrum analyzer reading was recorded and ERP/EIRP was calculated as follows:

$$\text{ERP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBd)} - \text{Cable (dB)}$$

$$\text{EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBi)} - \text{Cable (dB)}$$

### 3.5. Uncertainty

The measurement uncertainty is defined as for Field Strength of Spurious Radiation measurement is  $\pm 3.072$  dB.

**3.6. Test Result**

Model Number	AC785S-500								
Test Item	ERP/EIRP								
Date of Test	09/16/2014					Test Site	TE01		
Bands	Modulation Type	Frequency (MHz)	Ant. Polar.	Read Level (dBm)	Correction Factor (dBm)	ERP		Limit	
						(dBm)	(W)		
GPRS 850	GMSK	824.2	H	17.03	10.81	27.84	0.608	< 7W	
			V	21.32	10.81	<b>32.13</b>	<b>1.633</b>	< 7W	
		836.6	H	17.90	10.82	28.72	0.745	< 7W	
			V	20.77	10.82	31.59	1.442	< 7W	
		848.8	H	17.05	10.90	27.95	0.624	< 7W	
			V	20.68	10.90	31.58	1.439	< 7W	
EGPRS 850	8PSK	824.2	H	14.30	10.81	25.11	0.324	< 7W	
			V	16.75	10.81	<b>27.56</b>	<b>0.570</b>	< 7W	
		836.6	H	14.29	10.82	25.11	0.324	< 7W	
			V	16.18	10.82	27.00	0.501	< 7W	
		848.8	H	14.65	10.90	25.55	0.359	< 7W	
			V	15.99	10.90	26.89	0.489	< 7W	

Model Number	AC785S-500								
Test Item	ERP/EIRP								
Date of Test	09/16/2014					Test Site	TE01		
Bands	Modulation Type	Frequency (MHz)	Ant. Polar.	Read Level (dBm)	Correction Factor (dBm)	EIRP		Limit	
						(dBm)	(W)		
GPRS 1900	GMSK	1850.20	H	17.21	6.33	23.54	0.226	< 2W	
			V	21.03	6.33	<b>27.36</b>	<b>0.545</b>	< 2W	
		1880.00	H	17.11	6.55	23.66	0.232	< 2W	
			V	20.10	6.55	26.65	0.462	< 2W	
		1909.80	H	16.04	8.50	24.54	0.284	< 2W	
			V	20.09	6.79	26.88	0.488	< 2W	
EGPRS 1900	8PSK	1850.20	H	15.69	6.33	22.02	0.159	< 2W	
			V	17.58	6.33	23.91	0.246	< 2W	
		1880.00	H	15.23	6.55	21.78	0.151	< 2W	
			V	17.34	6.55	23.89	0.245	< 2W	
		1909.80	H	14.86	6.80	21.66	0.147	< 2W	
			V	17.18	6.80	<b>23.98</b>	<b>0.250</b>	< 2W	

Note: 1. ERP/EIRP = Read Level + Correction factor.

2. For WCDMA signals, a peak detector is used with RBW = VBW = 5MHz.

3. For AMPS, GSM, and NADC TDMA signals, a peak detector is used, with RBW = VBW= 1 MHz.

Model Number	AC785S-500								
Test Item	ERP/EIRP								
Date of Test	09/16/2014					Test Site	TE01		
Bands	Modulation Type	Frequency (MHz)	Ant. Polar.	Read Level (dBm)	Correction Factor (dBm)	EIRP		Limit	
						(dBm)	(W)		
WCDMA Band II	QPSK	1852.4	H	14.32	6.34	20.66	0.116	< 2W	
			V	17.48	6.33	<b>23.81</b>	<b>0.240</b>	< 2W	
		1880.0	H	13.88	6.55	20.43	0.110	< 2W	
			V	16.55	6.54	23.09	0.204	< 2W	
		1907.6	H	13.91	6.77	20.68	0.117	< 2W	
			V	16.50	6.79	23.29	0.213	< 2W	

Model Number	AC785S-500								
Test Item	ERP/EIRP								
Date of Test	09/16/2014					Test Site	TE01		
Bands	Modulation Type	Frequency (MHz)	Ant. Polar.	Read Level (dBm)	Correction Factor (dBm)	ERP		Limit	
						(dBm)	(W)		
WCDMA Band V	QPSK	826.4	H	10.91	10.82	21.73	0.149	< 7W	
			V	13.68	10.82	<b>24.50</b>	<b>0.282</b>	< 7W	
		836.6	H	11.22	10.82	22.04	0.160	< 7W	
			V	12.34	10.82	23.16	0.207	< 7W	
		846.6	H	10.89	10.87	21.76	0.150	< 7W	
			H	12.92	10.87	23.79	0.239	< 7W	

Note: 1. ERP/EIRP = Read Level + Correction factor.

2. For WCDMA signals, a peak detector is used with RBW = VBW = 5MHz.

3. For AMPS, GSM, and NADC TDMA signals, a peak detector is used, with RBW = VBW= 1 MHz.

## 4 Peak to Average Ratio Test

### 4.1. Limit

In measuring transmissions in this band using an average power technique, the peak to-average ratio (PAR) of the transmission may not exceed 13 dB.

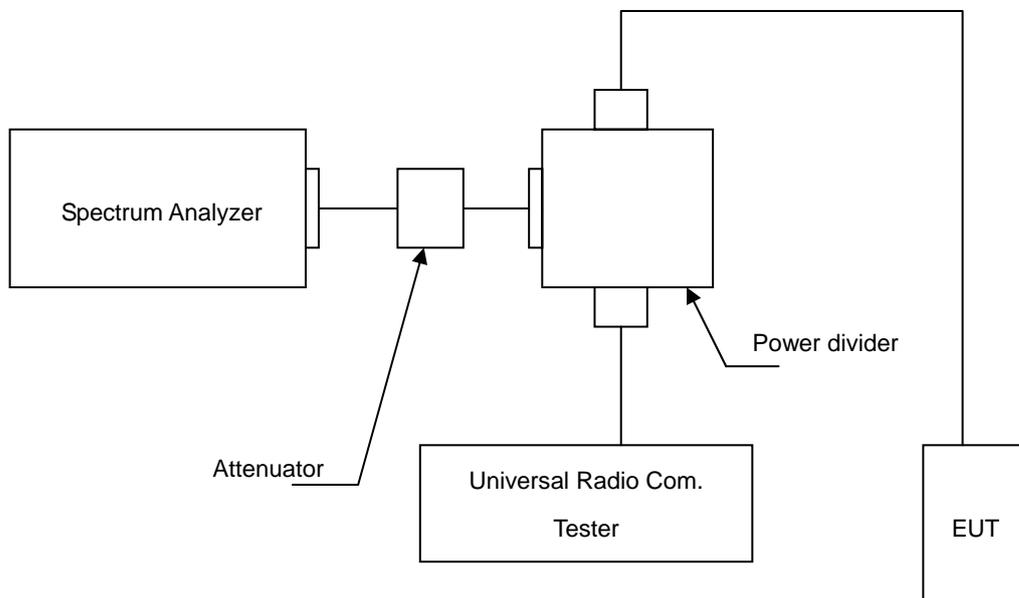
### 4.2. Test Instruments

Equipment	Manufacturer	Model No.	Serial No.	Cal. Date	Remark
Spectrum Analyzer	Agilent	E4445A	MY46181986	05/10/2014	(1)
Wideband Radio Communication Test	R & S	CMW500	103168	11/05/2013	(1)
Attenuator	RADIALL	R41572000	0603033073	N.C.R.	-----
Power divider	Agilent	87302C	3239A00760	N.C.R.	-----
Test Site	ATL	TE05	TE05	N.C.R.	-----

Remark: <sup>(1)</sup> Calibration period 1 year. <sup>(2)</sup> Calibration period 2 years.

Note: N.C.R. = No Calibration Request.

### 4.3. Setup



#### 4.4. Test Procedure

The measurement is made according to FCC rules part 24:

- a. Set resolution/measurement bandwidth signal's occupied bandwidth;
- b. Set the number of counts to a value that stabilizes the measured CCDF curve;
- c. Record the maximum PAPR level associated with a probability of 0.1%.

#### 4.5. Uncertainty

The measurement uncertainty is defined as for Conducted Power measurement is 1.2 dB.

#### 4.6. Test Result

Model Number	AC785S-500				
Test Item	Peak to Average Ratio				
Date of Test	09/16/2014			Test Site	TE05
Bands	Channel	Frequency (MHz)	Peak to Average Ratio (dB)	Limit (dB)	
WCDMA Band II	9262	1852.4	3.20	< 13	
	9400	1880.0	3.25	< 13	
	9538	1907.6	2.96	< 13	

**4.7. Test Graphs**

Mode 5: WCDMA Band II Link Mode																	
1850.20 MHz	<p><b>Average Power</b> 23.62 dBm 52.91 % at 0dB</p> <table border="1"> <tr><td>10.0 %</td><td>1.75 dB</td></tr> <tr><td>1.0 %</td><td>2.69 dB</td></tr> <tr><td>0.1 %</td><td>3.20 dB</td></tr> <tr><td>0.01 %</td><td>3.46 dB</td></tr> <tr><td>0.001 %</td><td>3.61 dB</td></tr> <tr><td>0.0001 %</td><td>3.72 dB</td></tr> <tr><td>Peak</td><td>3.76 dB</td></tr> <tr><td></td><td>27.38 dBm</td></tr> </table> <p>Center Freq: 1.852400000 GHz Trig: Free Run #Att: 34 dB Counts: 458 M5.00 Mpt Radio Std: None Info BW 5.0000 MHz</p>	10.0 %	1.75 dB	1.0 %	2.69 dB	0.1 %	3.20 dB	0.01 %	3.46 dB	0.001 %	3.61 dB	0.0001 %	3.72 dB	Peak	3.76 dB		27.38 dBm
10.0 %	1.75 dB																
1.0 %	2.69 dB																
0.1 %	3.20 dB																
0.01 %	3.46 dB																
0.001 %	3.61 dB																
0.0001 %	3.72 dB																
Peak	3.76 dB																
	27.38 dBm																
1880.00 MHz	<p><b>Average Power</b> 23.76 dBm 52.55 % at 0dB</p> <table border="1"> <tr><td>10.0 %</td><td>1.76 dB</td></tr> <tr><td>1.0 %</td><td>2.72 dB</td></tr> <tr><td>0.1 %</td><td>3.25 dB</td></tr> <tr><td>0.01 %</td><td>3.53 dB</td></tr> <tr><td>0.001 %</td><td>3.70 dB</td></tr> <tr><td>0.0001 %</td><td>3.78 dB</td></tr> <tr><td>Peak</td><td>3.94 dB</td></tr> <tr><td></td><td>27.70 dBm</td></tr> </table> <p>Center Freq: 1.880000000 GHz Trig: Free Run #Att: 34 dB Counts: 282 M5.00 Mpt Radio Std: None Info BW 5.0000 MHz</p>	10.0 %	1.76 dB	1.0 %	2.72 dB	0.1 %	3.25 dB	0.01 %	3.53 dB	0.001 %	3.70 dB	0.0001 %	3.78 dB	Peak	3.94 dB		27.70 dBm
10.0 %	1.76 dB																
1.0 %	2.72 dB																
0.1 %	3.25 dB																
0.01 %	3.53 dB																
0.001 %	3.70 dB																
0.0001 %	3.78 dB																
Peak	3.94 dB																
	27.70 dBm																
1909.80 MHz	<p><b>Average Power</b> 23.78 dBm 53.39 % at 0dB</p> <table border="1"> <tr><td>10.0 %</td><td>1.69 dB</td></tr> <tr><td>1.0 %</td><td>2.54 dB</td></tr> <tr><td>0.1 %</td><td>2.96 dB</td></tr> <tr><td>0.01 %</td><td>3.17 dB</td></tr> <tr><td>0.001 %</td><td>3.30 dB</td></tr> <tr><td>0.0001 %</td><td>3.37 dB</td></tr> <tr><td>Peak</td><td>3.42 dB</td></tr> <tr><td></td><td>27.20 dBm</td></tr> </table> <p>Center Freq: 1.907800000 GHz Trig: Free Run #Att: 34 dB Counts: 171 M5.00 Mpt Radio Std: None Info BW 5.0000 MHz</p>	10.0 %	1.69 dB	1.0 %	2.54 dB	0.1 %	2.96 dB	0.01 %	3.17 dB	0.001 %	3.30 dB	0.0001 %	3.37 dB	Peak	3.42 dB		27.20 dBm
10.0 %	1.69 dB																
1.0 %	2.54 dB																
0.1 %	2.96 dB																
0.01 %	3.17 dB																
0.001 %	3.30 dB																
0.0001 %	3.37 dB																
Peak	3.42 dB																
	27.20 dBm																

## 5 Emission Bandwidth & Occupied Bandwidth Test

### 5.1. Limit

The Occupied Bandwidth Limit:

N/A.

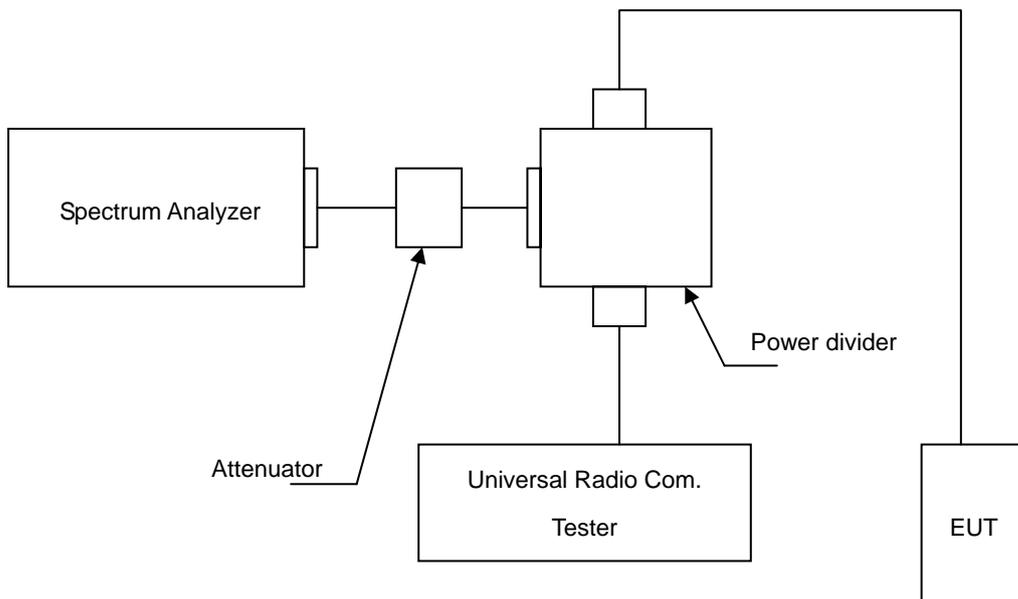
### 5.2. Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Universal Radio Communication Tester	R & S	CMU200	109369	08/11/2014	(2)
Spectrum Analyzer	Agilent	E4445A	MY46181986	05/10/2014	(1)
Attenuator	RADIALL	R41572000	0603033073	N.C.R.	-----
Power Divider	Agilent	87302C	3239A00760	N.C.R.	-----
Test Site	ATL	TE05	TE05	N.C.R.	-----

Remark: <sup>(1)</sup> Calibration period 1 year. <sup>(2)</sup> Calibration period 2 years.

Note: N.C.R. = No Calibration Request.

### 5.3. Setup



## 5.4. Test Procedure

The measurement is made according to FCC rules part 22 and 24:

1. The EUT was connected to Spectrum Analyzer and Base Station via Power Divider.
2. The occupied bandwidth of middle channel for the highest and lowest RF powers was measured.

## 5.5. Uncertainty

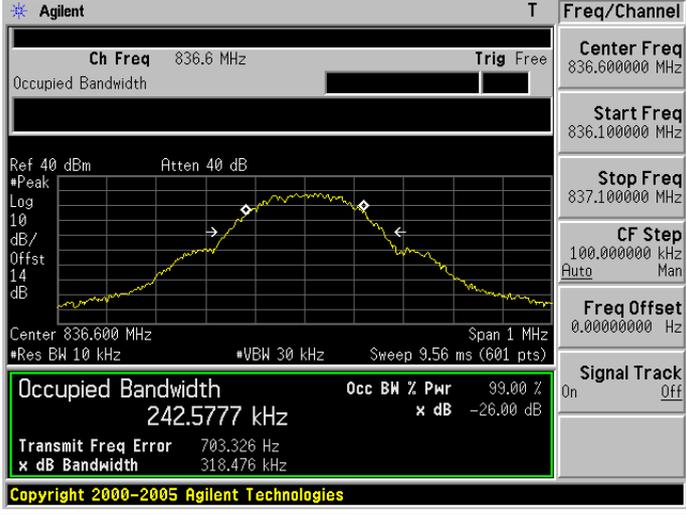
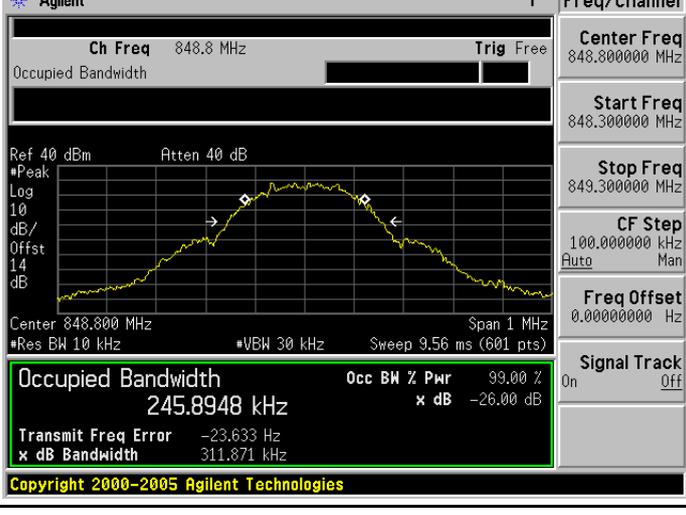
The measurement uncertainty is defined as  $\pm 10\text{Hz}$

## 5.6. Test Result

Model Number	AC785S-500				
Test Item	Emission Bandwidth & Occupied Bandwidth				
Date of Test	09/16/2014			Test Site	TE05
Bands	Channel	Frequency (MHz)	-26dB Bandwidth (kHz)	99% Bandwidth (kHz)	Note
GPRS 850	128	824.2	323.454	245.7525	RBW:10KHz , VBW:30KHz
	190	836.6	318.476	242.5777	RBW:10KHz , VBW:30KHz
	251	848.8	311.871	245.8948	RBW:10KHz , VBW:30KHz
GPRS 1900	512	1850.20	321.774	242.3158	RBW:10KHz , VBW:30KHz
	661	1880.00	323.059	244.8507	RBW:10KHz , VBW:30KHz
	810	1909.80	320.984	246.3308	RBW:10KHz , VBW:30KHz
EGPRS 850	128	824.2	314.789	245.2311	RBW:10KHz , VBW:30KHz
	190	836.6	309.191	242.1868	RBW:10KHz , VBW:30KHz
	251	848.8	311.199	239.8158	RBW:10KHz , VBW:30KHz
EGPRS 1900	512	1850.20	315.129	246.0911	RBW:10KHz , VBW:30KHz
	661	1880.00	317.405	247.5402	RBW:10KHz , VBW:30KHz
	810	1909.80	314.363	243.6049	RBW:10KHz , VBW:30KHz

Model Number	AC785S-500				
Test Item	Emission Bandwidth & Occupied Bandwidth				
Date of Test	09/16/2014			Test Site	TE05
Bands	Channel	Frequency (MHz)	-26dB Bandwidth (MHz)	99% Bandwidth (MHz)	Note
WCDMA Band II	9262	1852.4	4.680	4.1534	RBW:100KHz , VBW:300KHz
	9400	1880.0	4.647	4.1518	RBW:100KHz , VBW:300KHz
	9538	1907.6	4.659	4.1486	RBW:100KHz , VBW:300KHz
WCDMA Band V	4132	826.4	4.684	4.1582	RBW:100KHz , VBW:300KHz
	4183	836.6	4.689	4.1590	RBW:100KHz , VBW:300KHz
	4233	846.6	4.675	4.1763	RBW:100KHz , VBW:300KHz

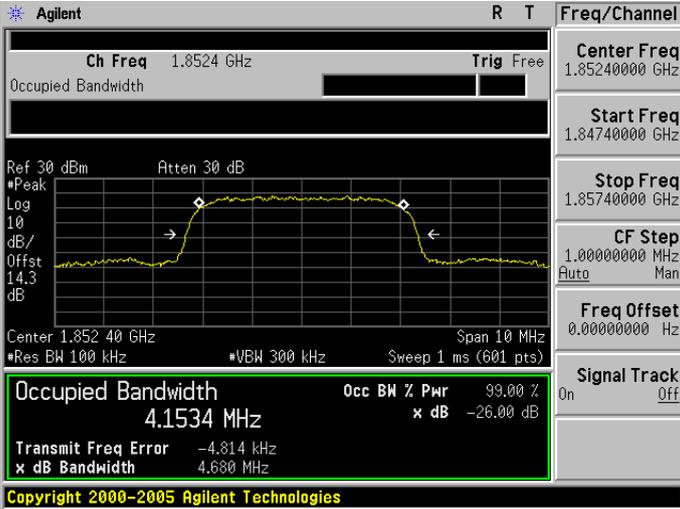
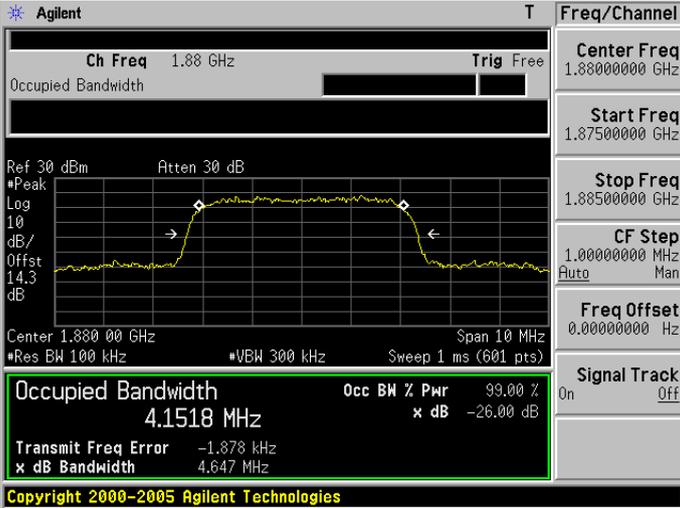
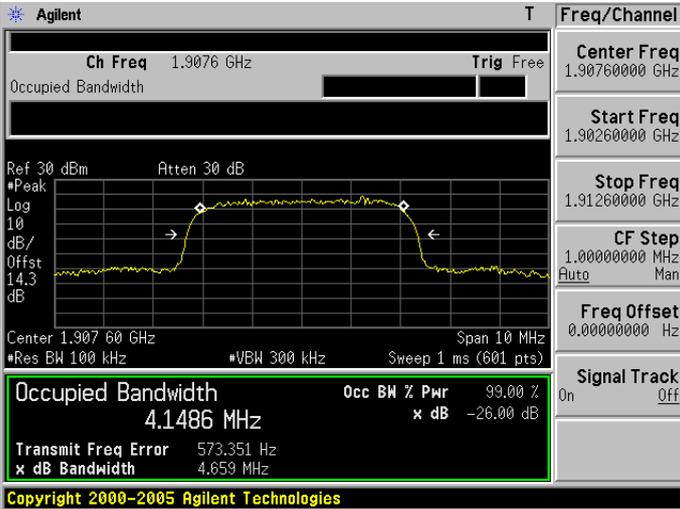
**5.7. Test Graphs**

Mode 1: GPRS 850 Link Mode	
824.2 MHz	 <p><b>Agilent</b> R T Freq/Channel</p> <p>Ch Freq 824.2 MHz Trig Free</p> <p>Center Freq 824.200000 MHz</p> <p>Start Freq 823.700000 MHz</p> <p>Stop Freq 824.700000 MHz</p> <p>CF Step 100.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 40 dBm Atten 40 dB</p> <p>#Peak Log 10 dB/Offst 14 dB</p> <p>Center 824.200 MHz Span 1 MHz</p> <p>#Res BW 10 kHz #VBW 30 kHz Sweep 9.56 ms (601 pts)</p> <p><b>Occupied Bandwidth</b> 245.7525 kHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 2.066 kHz x dB Bandwidth 323.454 kHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
836.6 MHz	 <p><b>Agilent</b> T Freq/Channel</p> <p>Ch Freq 836.6 MHz Trig Free</p> <p>Center Freq 836.600000 MHz</p> <p>Start Freq 836.100000 MHz</p> <p>Stop Freq 837.100000 MHz</p> <p>CF Step 100.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 40 dBm Atten 40 dB</p> <p>#Peak Log 10 dB/Offst 14 dB</p> <p>Center 836.600 MHz Span 1 MHz</p> <p>#Res BW 10 kHz #VBW 30 kHz Sweep 9.56 ms (601 pts)</p> <p><b>Occupied Bandwidth</b> 242.5777 kHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 703.326 Hz x dB Bandwidth 318.476 kHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
848.8 MHz	 <p><b>Agilent</b> T Freq/Channel</p> <p>Ch Freq 848.8 MHz Trig Free</p> <p>Center Freq 848.800000 MHz</p> <p>Start Freq 848.300000 MHz</p> <p>Stop Freq 849.300000 MHz</p> <p>CF Step 100.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 40 dBm Atten 40 dB</p> <p>#Peak Log 10 dB/Offst 14 dB</p> <p>Center 848.800 MHz Span 1 MHz</p> <p>#Res BW 10 kHz #VBW 30 kHz Sweep 9.56 ms (601 pts)</p> <p><b>Occupied Bandwidth</b> 245.8948 kHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -23.633 Hz x dB Bandwidth 311.871 kHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>

Mode 2: GPRS 1900 Link Mode	
1850.20 MHz	<p>Agilent T Freq/Channel</p> <p>Ch Freq 1.8502 GHz Trig Free</p> <p>Center Freq 1.85020000 GHz</p> <p>Start Freq 1.84970000 GHz</p> <p>Stop Freq 1.85070000 GHz</p> <p>CF Step 100.000000 kHz</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 40 dBm Atten 40 dB</p> <p>#Peak Log 10 dB/Offst 14.3 dB</p> <p>Center 1.850 200 GHz Span 1 MHz</p> <p>#Res BW 10 kHz #VBW 30 kHz Sweep 9.56 ms (601 pts)</p> <p><b>Occupied Bandwidth 242.3158 kHz</b> Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 1.931 kHz</p> <p>x dB Bandwidth 321.774 kHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
1880.00 MHz	<p>Agilent T Freq/Channel</p> <p>Ch Freq 1.88 GHz Trig Free</p> <p>Center Freq 1.88000000 GHz</p> <p>Start Freq 1.87950000 GHz</p> <p>Stop Freq 1.88050000 GHz</p> <p>CF Step 100.000000 kHz</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 40 dBm Atten 40 dB</p> <p>#Peak Log 10 dB/Offst 14.3 dB</p> <p>Center 1.880 000 GHz Span 1 MHz</p> <p>#Res BW 10 kHz #VBW 30 kHz Sweep 9.56 ms (601 pts)</p> <p><b>Occupied Bandwidth 244.8507 kHz</b> Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -208.516 Hz</p> <p>x dB Bandwidth 323.059 kHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
1909.80 MHz	<p>Agilent T Freq/Channel</p> <p>Ch Freq 1.9098 GHz Trig Free</p> <p>Center Freq 1.90980000 GHz</p> <p>Start Freq 1.90930000 GHz</p> <p>Stop Freq 1.91030000 GHz</p> <p>CF Step 100.000000 kHz</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 40 dBm Atten 40 dB</p> <p>#Peak Log 10 dB/Offst 14.3 dB</p> <p>Center 1.909 800 GHz Span 1 MHz</p> <p>#Res BW 10 kHz #VBW 30 kHz Sweep 9.56 ms (601 pts)</p> <p><b>Occupied Bandwidth 246.3308 kHz</b> Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 675.437 Hz</p> <p>x dB Bandwidth 320.984 kHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>

Mode 3: EGPRS 850 Link Mode	
824.2 MHz	<p>Agilent T</p> <p>Ch Freq 824.2 MHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 40 dBm Atten 40 dB</p> <p>#Peak Log 10 dB/Offst 14 dB</p> <p>Center 824.200 MHz Span 1 MHz</p> <p>#Res BW 10 kHz #VBW 30 kHz Sweep 9.56 ms (601 pts)</p> <p><b>Occupied Bandwidth 245.2311 kHz</b></p> <p>Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 877.850 Hz x dB Bandwidth 314.789 kHz</p> <p>Copyright 2000-2005 Agilent Technologies</p> <p>Freq/Channel</p> <p>Center Freq 824.200000 MHz</p> <p>Start Freq 823.700000 MHz</p> <p>Stop Freq 824.700000 MHz</p> <p>CF Step 100.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p>
836.6 MHz	<p>Agilent R T</p> <p>Ch Freq 836.6 MHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 40 dBm Atten 40 dB</p> <p>#Peak Log 10 dB/Offst 14 dB</p> <p>Center 836.600 MHz Span 1 MHz</p> <p>#Res BW 10 kHz #VBW 30 kHz Sweep 9.56 ms (601 pts)</p> <p><b>Occupied Bandwidth 242.1868 kHz</b></p> <p>Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 410.556 Hz x dB Bandwidth 309.191 kHz</p> <p>Copyright 2000-2005 Agilent Technologies</p> <p>Freq/Channel</p> <p>Center Freq 836.600000 MHz</p> <p>Start Freq 836.100000 MHz</p> <p>Stop Freq 837.100000 MHz</p> <p>CF Step 100.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p>
848.8 MHz	<p>Agilent T</p> <p>Ch Freq 848.8 MHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 40 dBm Atten 40 dB</p> <p>#Peak Log 10 dB/Offst 14 dB</p> <p>Center 848.800 MHz Span 1 MHz</p> <p>#Res BW 10 kHz #VBW 30 kHz Sweep 9.56 ms (601 pts)</p> <p><b>Occupied Bandwidth 239.8158 kHz</b></p> <p>Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 179.495 Hz x dB Bandwidth 311.199 kHz</p> <p>Copyright 2000-2005 Agilent Technologies</p> <p>Freq/Channel</p> <p>Center Freq 848.800000 MHz</p> <p>Start Freq 848.300000 MHz</p> <p>Stop Freq 849.300000 MHz</p> <p>CF Step 100.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p>

Mode 4: EGPRS 1900 Link Mode	
1850.20 MHz	<p>Agilent T Freq/Channel</p> <p>Ch Freq 1.8502 GHz Trig Free</p> <p>Center Freq 1.85020000 GHz</p> <p>Start Freq 1.84970000 GHz</p> <p>Stop Freq 1.85070000 GHz</p> <p>CF Step 100.000000 kHz</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 40 dBm Atten 40 dB</p> <p>#Peak Log 10 dB/Offst 14.3 dB</p> <p>Center 1.850 200 GHz Span 1 MHz</p> <p>#Res BW 10 kHz #VBW 30 kHz Sweep 9.56 ms (601 pts)</p> <p><b>Occupied Bandwidth 246.0911 kHz</b></p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB -26.00 dB</p> <p>Transmit Freq Error 1.147 kHz</p> <p>x dB Bandwidth 315.129 kHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
1880.00 MHz	<p>Agilent T Freq/Channel</p> <p>Ch Freq 1.88 GHz Trig Free</p> <p>Center Freq 1.88000000 GHz</p> <p>Start Freq 1.87950000 GHz</p> <p>Stop Freq 1.88050000 GHz</p> <p>CF Step 100.000000 kHz</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 40 dBm Atten 40 dB</p> <p>#Peak Log 10 dB/Offst 14.3 dB</p> <p>Center 1.880 000 GHz Span 1 MHz</p> <p>#Res BW 10 kHz #VBW 30 kHz Sweep 9.56 ms (601 pts)</p> <p><b>Occupied Bandwidth 247.5402 kHz</b></p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB -26.00 dB</p> <p>Transmit Freq Error 778.540 Hz</p> <p>x dB Bandwidth 317.405 kHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
1909.80 MHz	<p>Agilent T Freq/Channel</p> <p>Ch Freq 1.9098 GHz Trig Free</p> <p>Center Freq 1.90980000 GHz</p> <p>Start Freq 1.90930000 GHz</p> <p>Stop Freq 1.91030000 GHz</p> <p>CF Step 100.000000 kHz</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 40 dBm Atten 40 dB</p> <p>#Peak Log 10 dB/Offst 14.3 dB</p> <p>Center 1.909 800 GHz Span 1 MHz</p> <p>#Res BW 10 kHz #VBW 30 kHz Sweep 9.56 ms (601 pts)</p> <p><b>Occupied Bandwidth 243.6049 kHz</b></p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB -26.00 dB</p> <p>Transmit Freq Error -403.062 Hz</p> <p>x dB Bandwidth 314.363 kHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>

Mode 5: WCDMA Band II Link Mode	
1850.20 MHz	 <p>Agilent R T Freq/Channel</p> <p>Ch Freq 1.8524 GHz Trig Free</p> <p>Center Freq 1.85240000 GHz</p> <p>Start Freq 1.84740000 GHz</p> <p>Stop Freq 1.85740000 GHz</p> <p>CF Step 1.00000000 MHz</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 30 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 14.3 dB</p> <p>Center 1.852 40 GHz Span 10 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 1 ms (601 pts)</p> <p><b>Occupied Bandwidth 4.1534 MHz</b> Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -4.814 kHz x dB Bandwidth 4.680 MHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
1880.00 MHz	 <p>Agilent T Freq/Channel</p> <p>Ch Freq 1.88 GHz Trig Free</p> <p>Center Freq 1.88000000 GHz</p> <p>Start Freq 1.87500000 GHz</p> <p>Stop Freq 1.88500000 GHz</p> <p>CF Step 1.00000000 MHz</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 30 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 14.3 dB</p> <p>Center 1.880 00 GHz Span 10 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 1 ms (601 pts)</p> <p><b>Occupied Bandwidth 4.1518 MHz</b> Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -1.878 kHz x dB Bandwidth 4.647 MHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
1909.80 MHz	 <p>Agilent T Freq/Channel</p> <p>Ch Freq 1.9076 GHz Trig Free</p> <p>Center Freq 1.90760000 GHz</p> <p>Start Freq 1.90260000 GHz</p> <p>Stop Freq 1.91260000 GHz</p> <p>CF Step 1.00000000 MHz</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 30 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 14.3 dB</p> <p>Center 1.907 60 GHz Span 10 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 1 ms (601 pts)</p> <p><b>Occupied Bandwidth 4.1486 MHz</b> Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 573.351 Hz x dB Bandwidth 4.659 MHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>

Mode 6: WCDMA Band V Link Mode	
826.4 MHz	<p>Agilent T Freq/Channel</p> <p>Ch Freq 826.4 MHz Trig Free</p> <p>Center Freq 826.400000 MHz</p> <p>Start Freq 821.400000 MHz</p> <p>Stop Freq 831.400000 MHz</p> <p>CF Step 1.00000000 MHz</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 30 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 14 dB</p> <p>Center 826.40 MHz Span 10 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 1 ms (601 pts)</p> <p><b>Occupied Bandwidth 4.1582 MHz</b></p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB Bandwidth -26.00 dB</p> <p>Transmit Freq Error -5.000 kHz</p> <p>x dB Bandwidth 4.684 MHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
836.6 MHz	<p>Agilent T Freq/Channel</p> <p>Ch Freq 836.6 MHz Trig Free</p> <p>Center Freq 836.600000 MHz</p> <p>Start Freq 831.600000 MHz</p> <p>Stop Freq 841.600000 MHz</p> <p>CF Step 1.00000000 MHz</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 30 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 14 dB</p> <p>Center 836.60 MHz Span 10 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 1 ms (601 pts)</p> <p><b>Occupied Bandwidth 4.1590 MHz</b></p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB Bandwidth -26.00 dB</p> <p>Transmit Freq Error 10.536 kHz</p> <p>x dB Bandwidth 4.689 MHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
846.6 MHz	<p>Agilent T Freq/Channel</p> <p>Ch Freq 846.6 MHz Trig Free</p> <p>Center Freq 846.600000 MHz</p> <p>Start Freq 841.600000 MHz</p> <p>Stop Freq 851.600000 MHz</p> <p>CF Step 1.00000000 MHz</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 30 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 14 dB</p> <p>Center 846.60 MHz Span 10 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 1 ms (601 pts)</p> <p><b>Occupied Bandwidth 4.1763 MHz</b></p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB Bandwidth -26.00 dB</p> <p>Transmit Freq Error 10.510 kHz</p> <p>x dB Bandwidth 4.675 MHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>

## 6 Band Edge Test

### 6.1. Limit

The Band Edge Limit:

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10\log(P)$  dB.

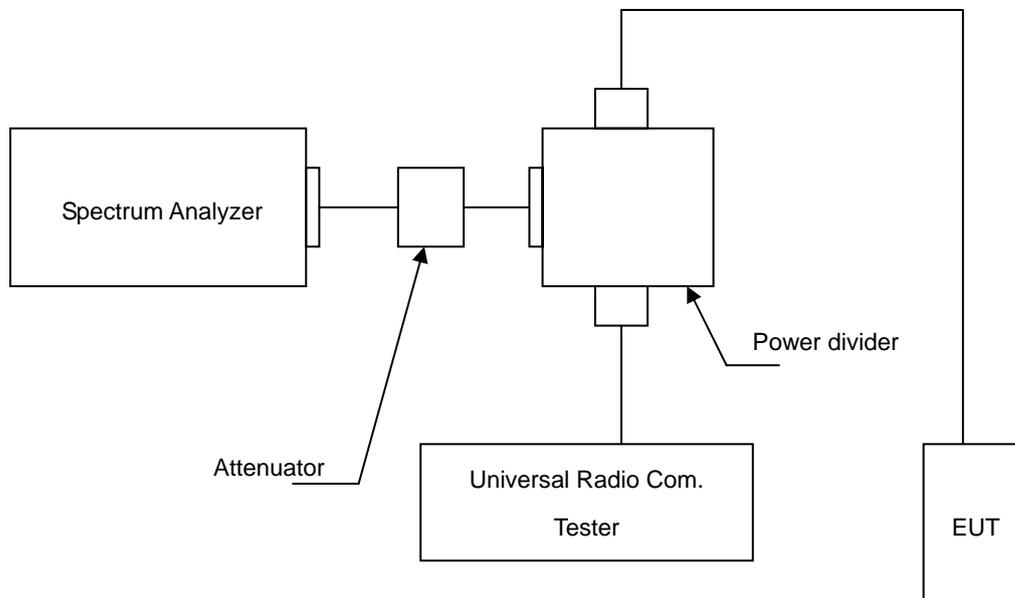
### 6.2. Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Universal Radio Communication Tester	R & S	CMU200	109369	08/11/2014	(2)
Spectrum Analyzer	Agilent	E4445A	MY46181986	05/10/2014	(1)
Attenuator	RADIALL	R41572000	0603033073	N.C.R.	-----
Power Divider	Agilent	87302C	3239A00760	N.C.R.	-----
Test Site	ATL	TE05	TE05	N.C.R.	-----

Remark: <sup>(1)</sup> Calibration period 1 year. <sup>(2)</sup> Calibration period 2 years.

Note: N.C.R. = No Calibration Request.

### 6.3. Setup



## 6.4. Test Procedure

The measurement is made according to FCC rules part 22 and 24:

1. The EUT was connected to Spectrum Analyzer and Base Station via Power Divider.
2. The band edge of low and high channels for the highest RF powers within the transmitting frequency band were measured. Setting RBW as roughly BW/100.
3. The band edge setting:
  - a. RB=10 kHz; VB=30 kHz for GSM 850 and PCS 1900.
  - b. RB=51 kHz; VB=160 kHz for WCDMA Band V and WCDMA Band II.

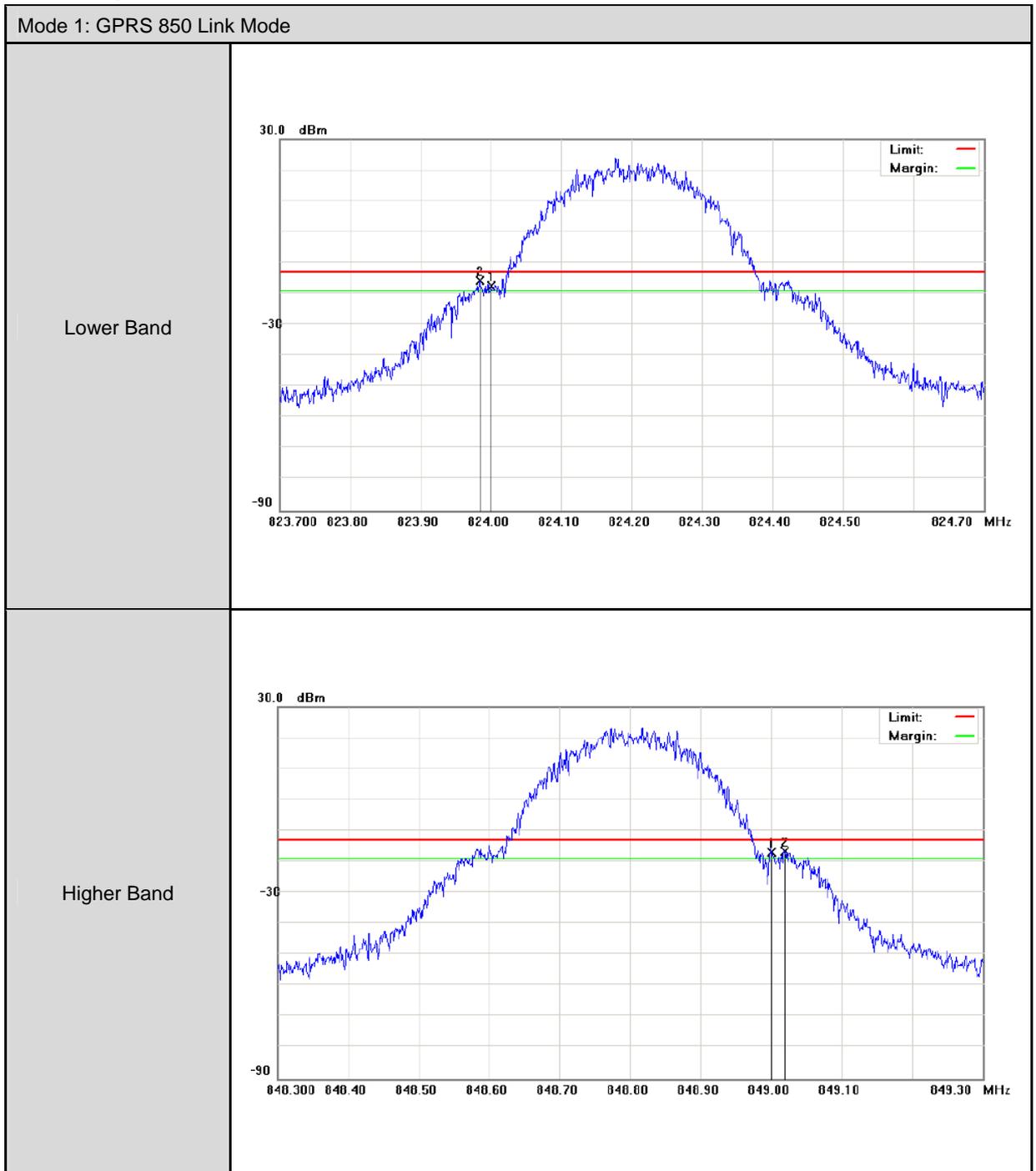
## 6.5. Uncertainty

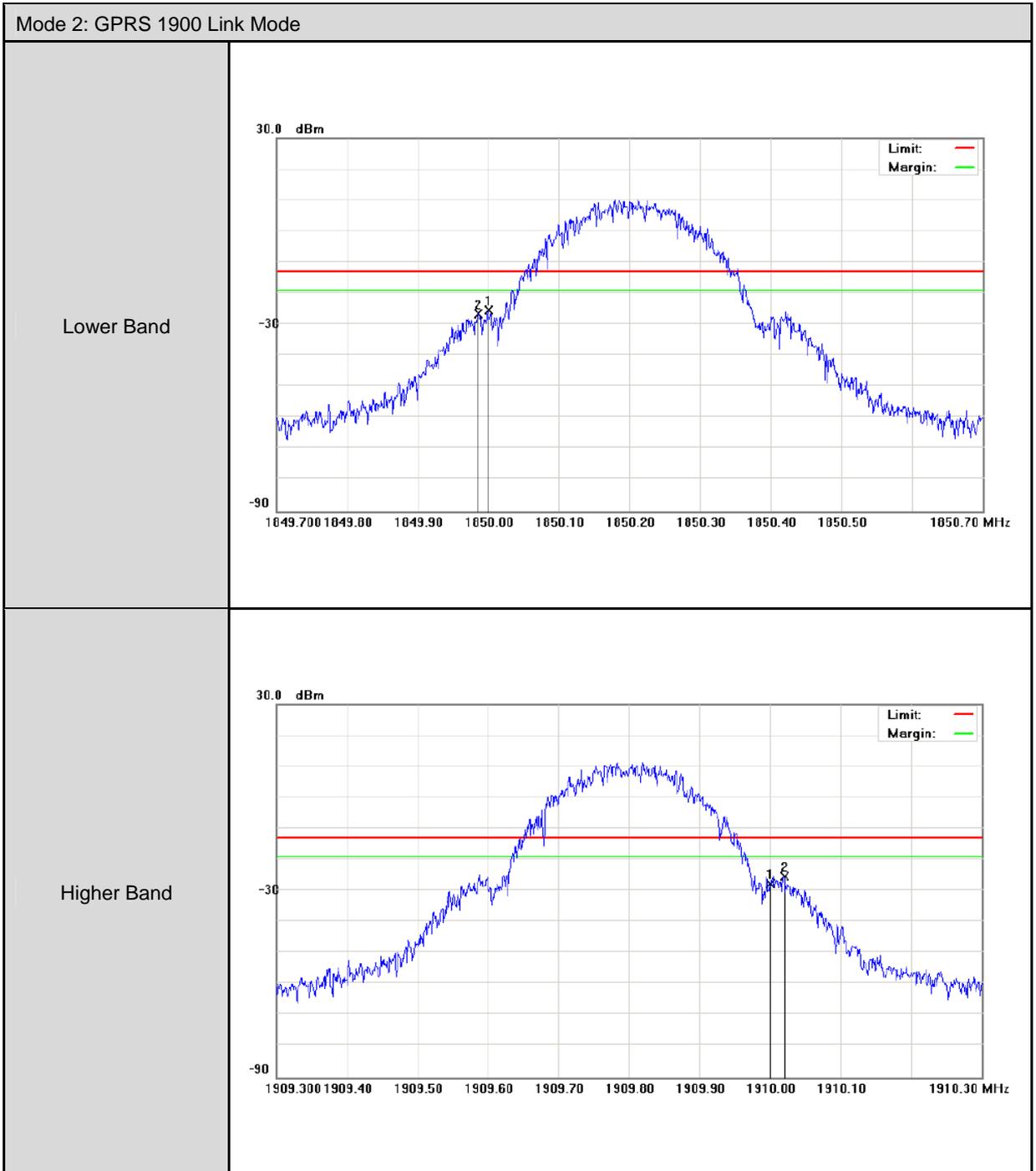
The measurement uncertainty is defined as  $\pm 10\text{Hz}$

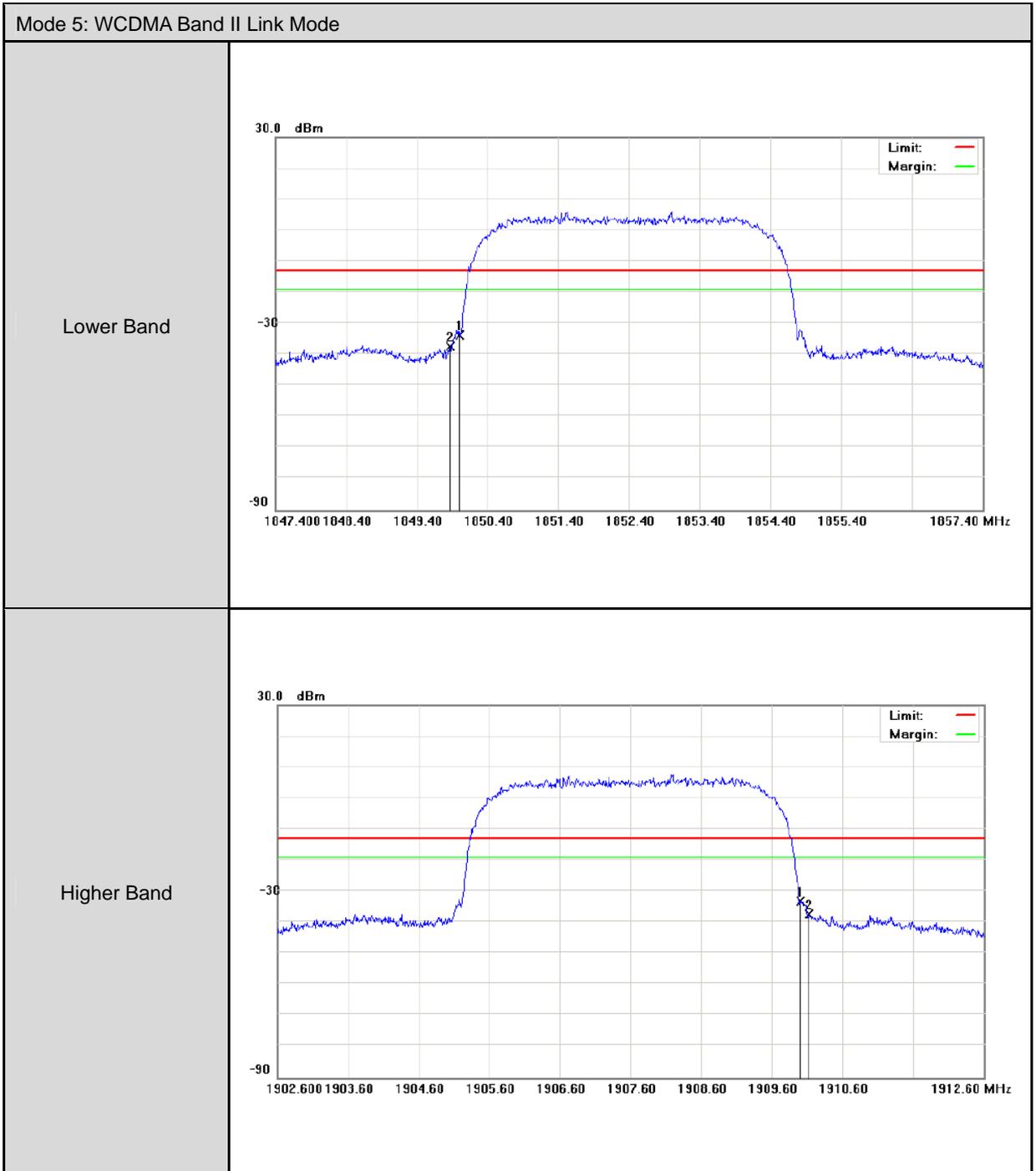
## 6.6. Test Result

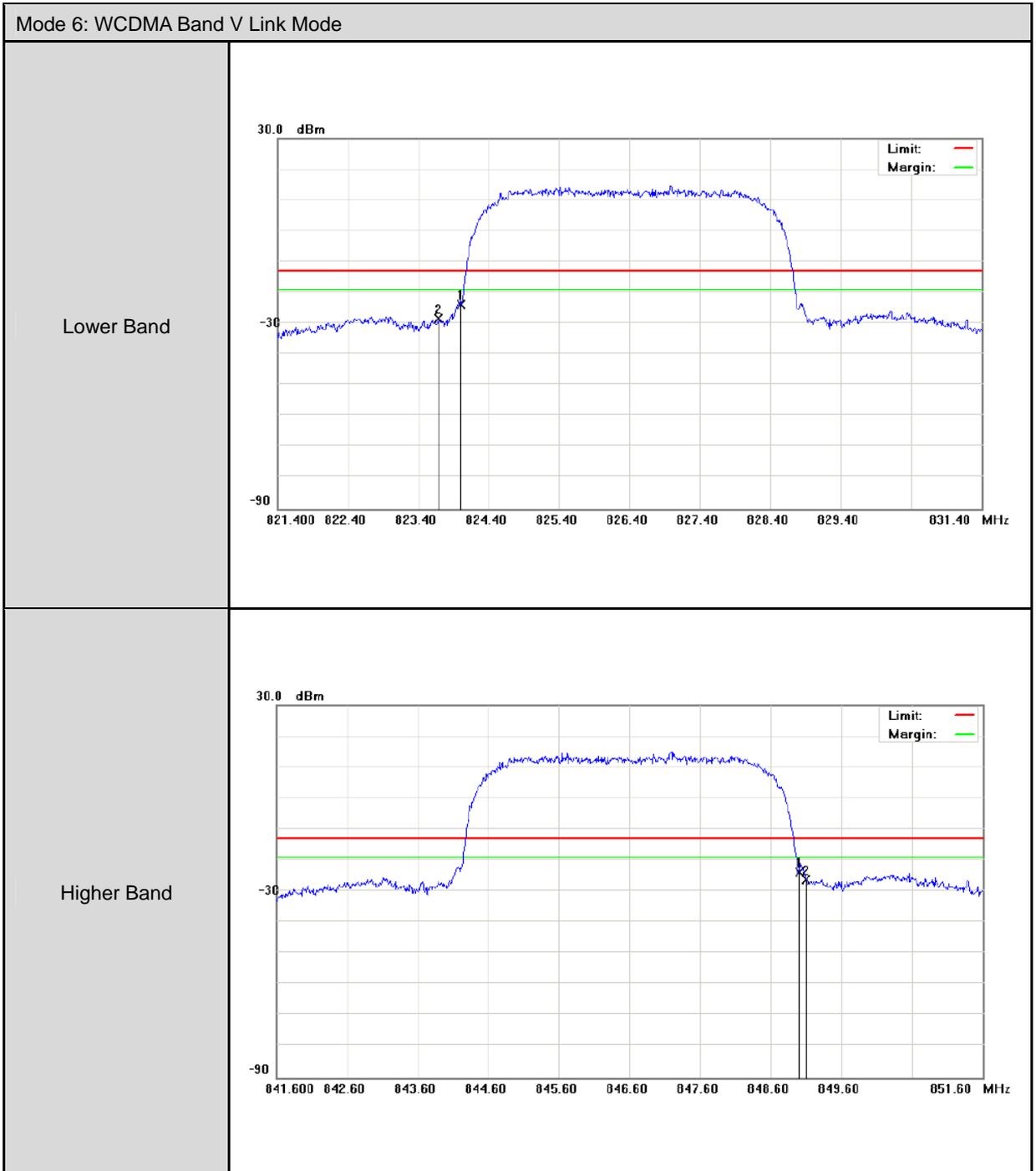
Model Number		AC785S-500				
Test Item		Band Edge				
Date of Test		09/16/2014			Test Site	TE05
Bands		Channel	Frequency (MHz)	Bandwidth (dBm)	Limit (dBm)	Result
GPRS 850	Lower	128	824.0000	-15.65	-13	Pass
	Higher	251	849.0000	-16.71	-13	Pass
GPRS 1900	Lower	512	1850.000	-25.40	-13	Pass
	Higher	810	1910.000	-25.45	-13	Pass
WCDMA Band II	Lower	9262	1850.000	-33.79	-13	Pass
	Higher	9538	1910.000	-33.03	-13	Pass
WCDMA Band V	Lower	4132	824.0000	-23.72	-13	Pass
	Higher	4233	849.0000	-23.92	-13	Pass

**6.7. Test Graphs**









## 7 Conducted Spurious Emission Test

### 7.1. Limit

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10\log(P)$  dB.

### 7.2. Test Instruments

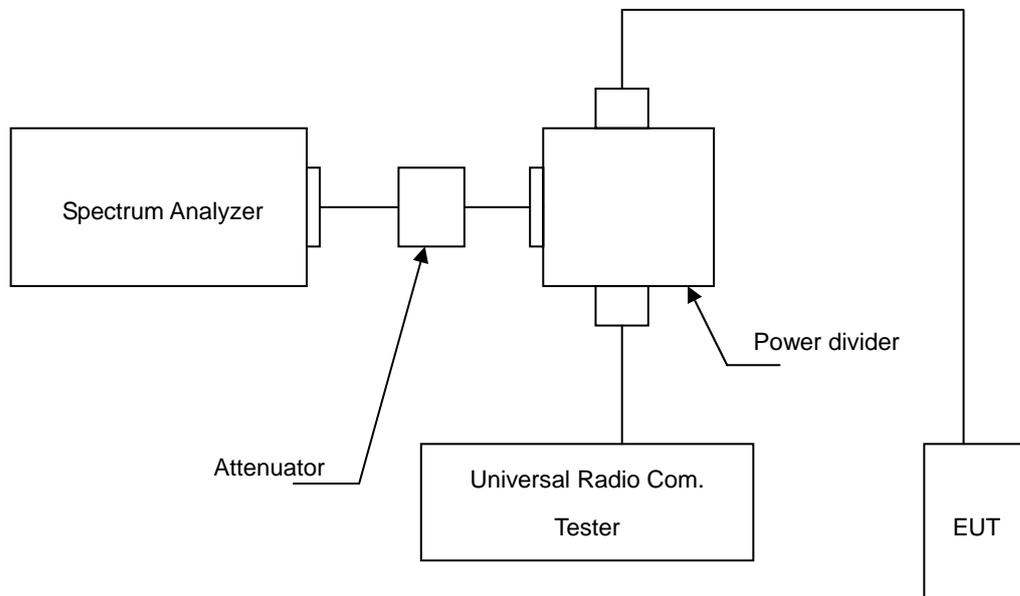
Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Universal Radio Communication Tester	R & S	CMU200	109369	08/11/2014	(2)
Spectrum Analyzer	Agilent	E4445A	MY46181986	05/10/2014	(1)
Attenuator	RADIALL	R41572000	0603033073	N.C.R.	-----
Power Divider	Agilent	87302C	3239A00760	N.C.R.	-----
Test Site	ATL	TE05	TE05	N.C.R.	-----

Remark: <sup>(1)</sup> Calibration period 1 year. <sup>(2)</sup> Calibration period 2 years.

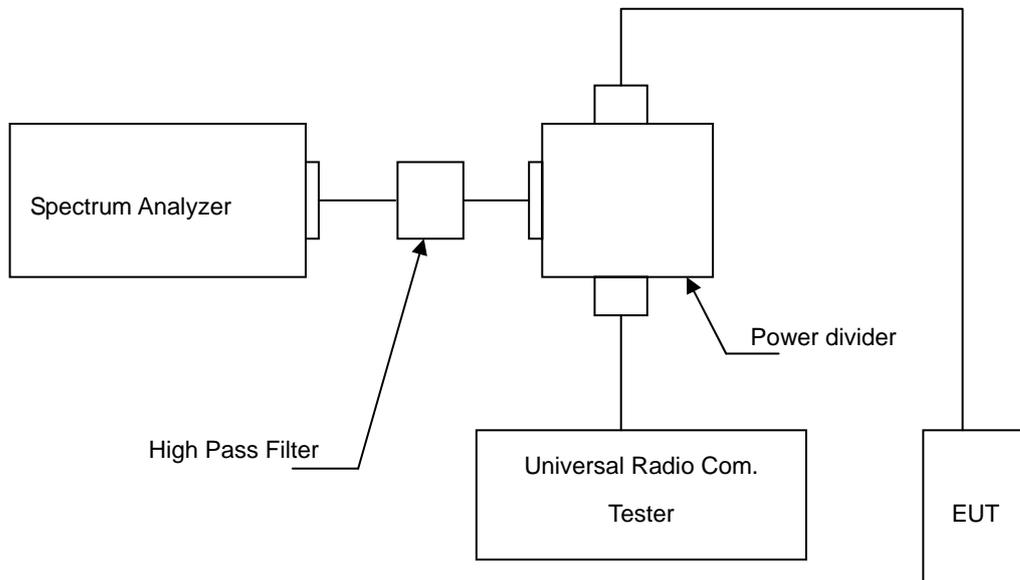
Note: N.C.R. = No Calibration Request.

### 7.3. Setup

Below 2.8GHz



Above 2.8GHz



### 7.4. Test Procedure

1. The EUT was connected to Spectrum Analyzer and Base Station via Power Divider.
2. The middle channel for the highest RF power within the transmitting frequency was measured.
3. The conducted spurious emission for the whole frequency range was taken.
4. Test setting at GSM 850 RB>100 kHz, VB>100 kHz; PCS 1900 RB>1MHz, VB>1MHz.

### 7.5. Uncertainty

The measurement uncertainty is evaluated as  $\pm 2.24$  dB.

### 7.6. Test Result

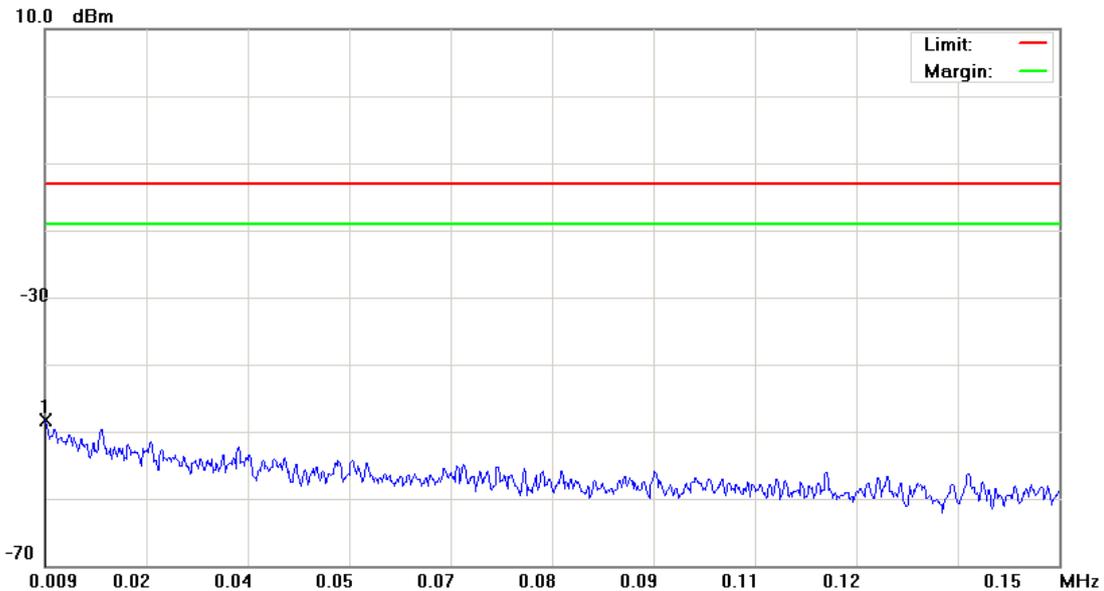
Model Number	AC785S-500		
Test Item	Conducted Spurious Emission		
Test Mode	Mode 1 / Mode 2 / Mode 5 / Mode 6		
Date of Test	09/16/2014	Test Site	TE05

File :AC785S-500(CH128)

Data :#1

Date: 2014/9/16

Time: 下午 03:09:14



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1 KHz VBW: 3 KHz
M/N: AC785S-500		
Mode: GPRS 850		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	0.0091	-78.91	30.58	-48.33	-13.00	-35.33	peak		

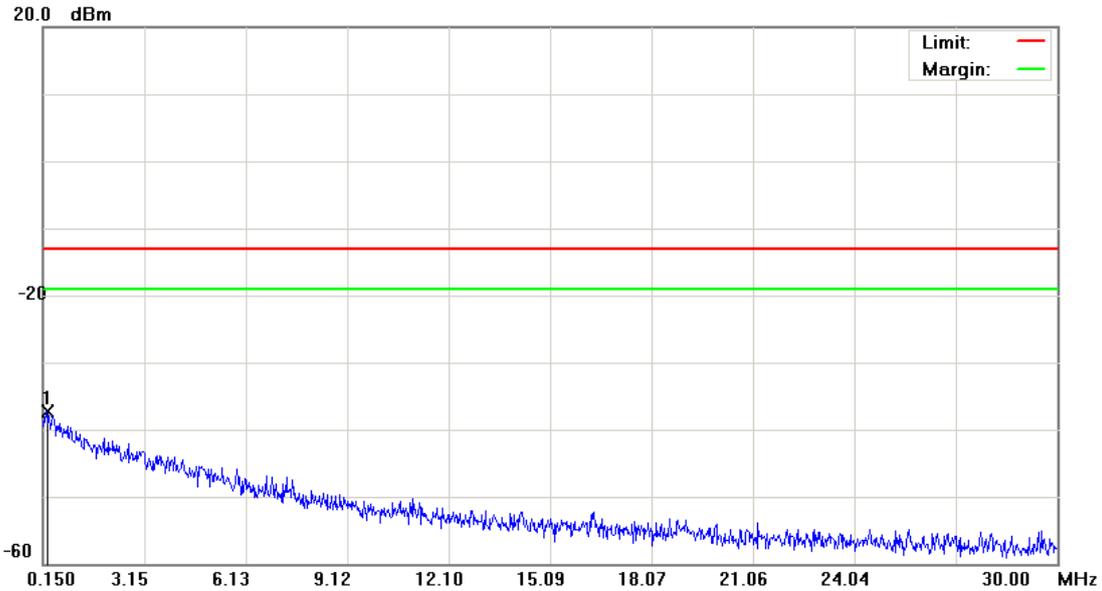
\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH128)

Data :#2

Date: 2014/9/16

Time: 下午 03:09:38



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 10 KHz VBW: 30 KHz
M/N: AC785S-500		
Mode: GPRS 850		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	0.2545	-68.66	31.36	-37.30	-13.00	-24.30	peak		

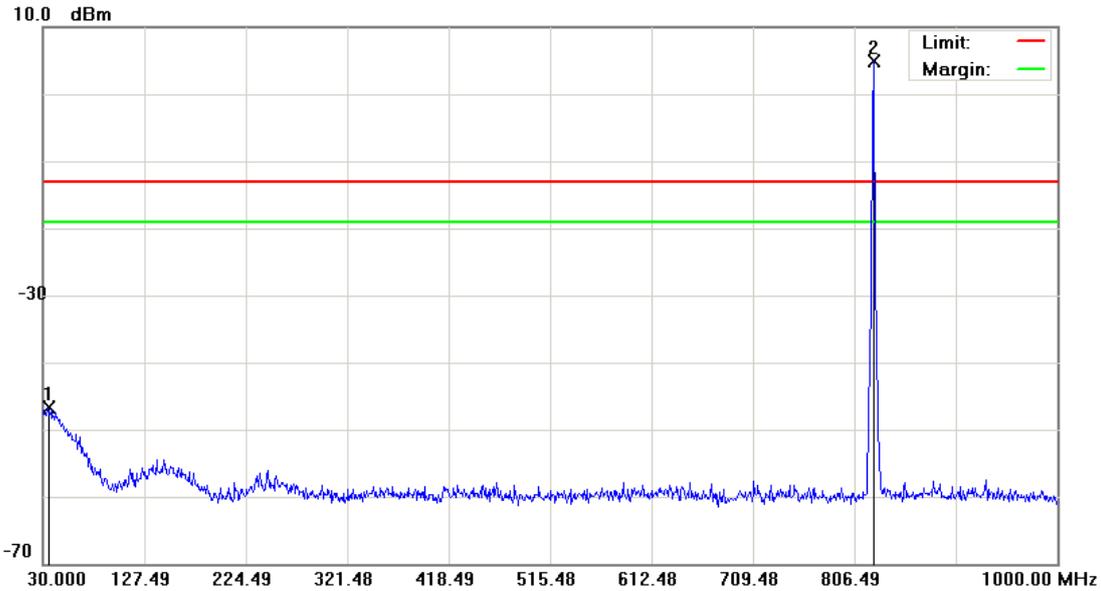
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File :AC785S-500(CH128)

Data :#3

Date: 2014/9/16

Time: 下午 03:10:02

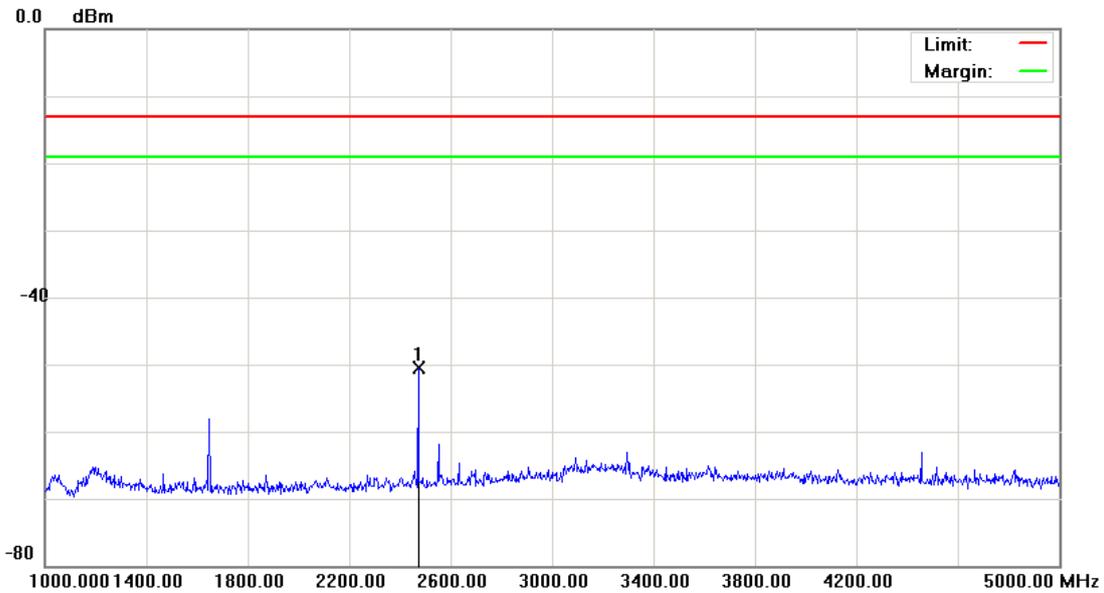


Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 100 KHz VBW: 300 KHz
M/N: AC785S-500		
Mode: GPRS 850		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1		35.3350	-63.33	16.61	-46.72	-13.00	-33.72	peak		
2	*	824.4300	1.14	3.84	4.98	-13.00	17.98	peak		Tx

\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH128)      Data :#4      Date: 2014/9/16      Time: 下午 03:28:48



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz    VBW: 3000 KHz
M/N: AC785S-500		
Mode: GPRS 850		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	2472.000	-54.94	4.45	-50.49	-13.00	-37.49	peak		

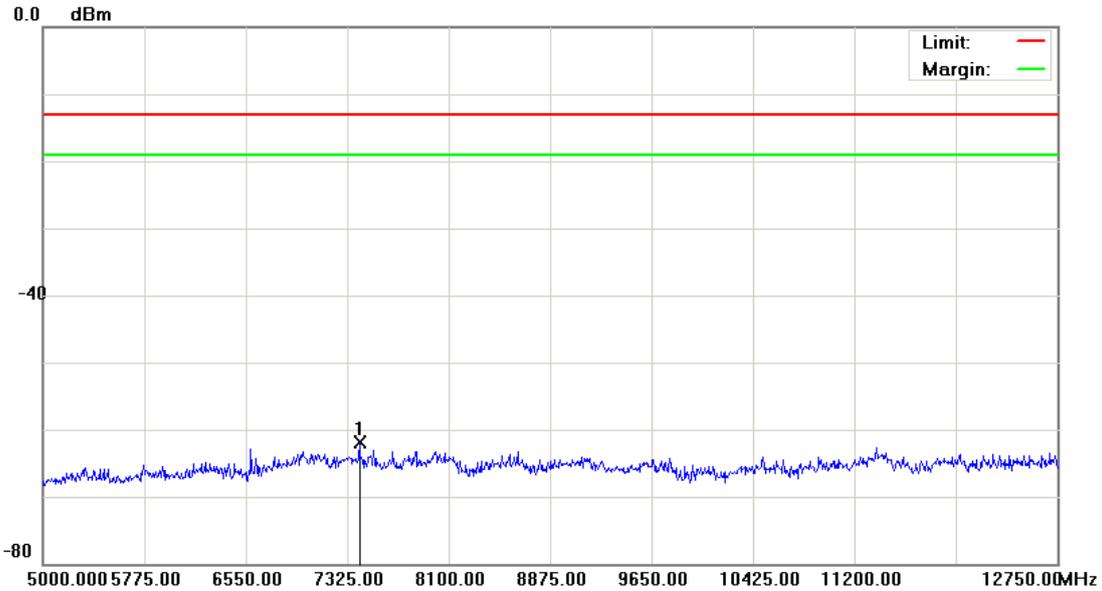
\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH128)

Data :#5

Date: 2014/9/16

Time: 下午 03:29:11

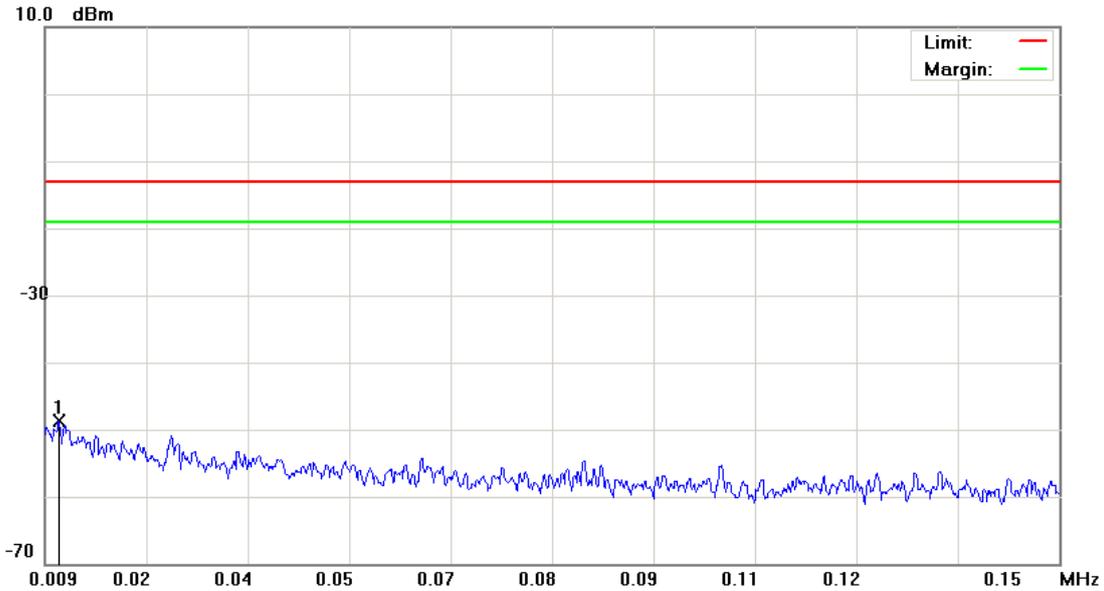


Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz VBW: 3000 KHz
M/N: AC785S-500		
Mode: GPRS 850		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree	Comment
1	*	7418.000	-67.08	5.21	-61.87	-13.00	-48.87	peak			

\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH190)      Data :#1      Date: 2014/9/16      Time: 下午 03:20:18



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1 KHz    VBW: 3 KHz
M/N: AC785S-500		
Mode: GPRS 850		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	0.0110	-79.35	30.57	-48.78	-13.00	-35.78	peak		

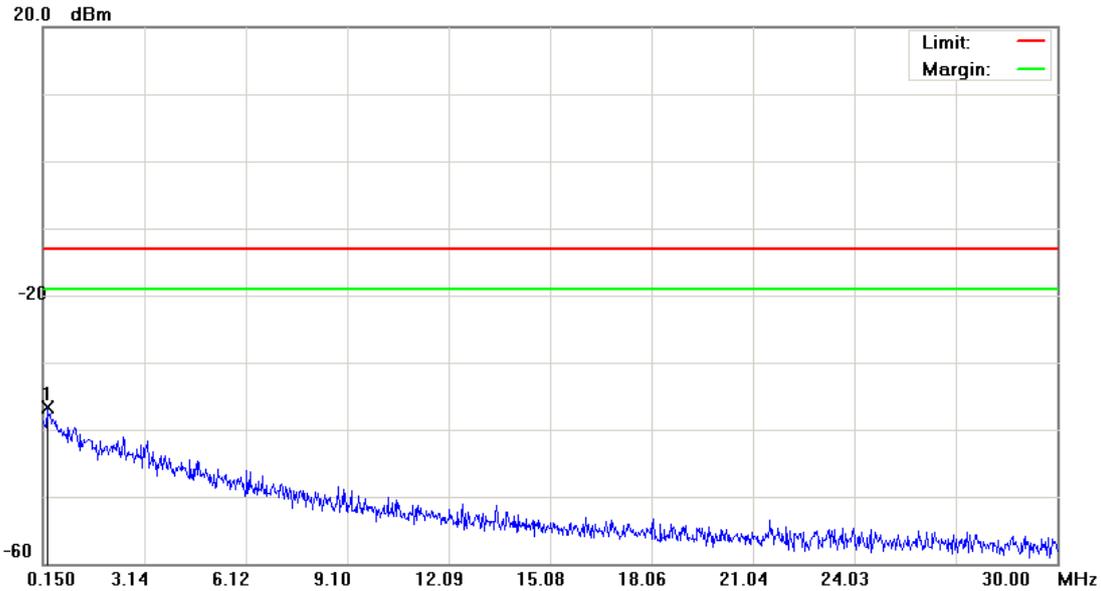
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File :AC785S-500(CH190)

Data :#2

Date: 2014/9/16

Time: 下午 03:20:41



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 10 KHz VBW: 30 KHz
M/N: AC785S-500		
Mode: GPRS 850		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	0.2843	-68.30	31.61	-36.69	-13.00	-23.69	peak		

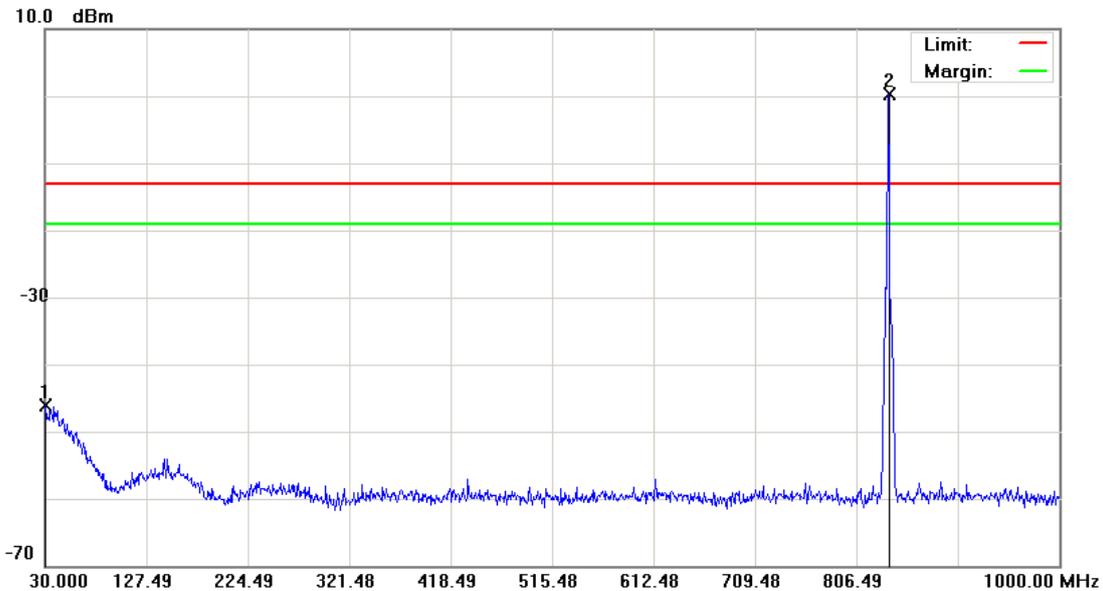
\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH190)

Data :#3

Date: 2014/9/16

Time: 下午 03:21:05

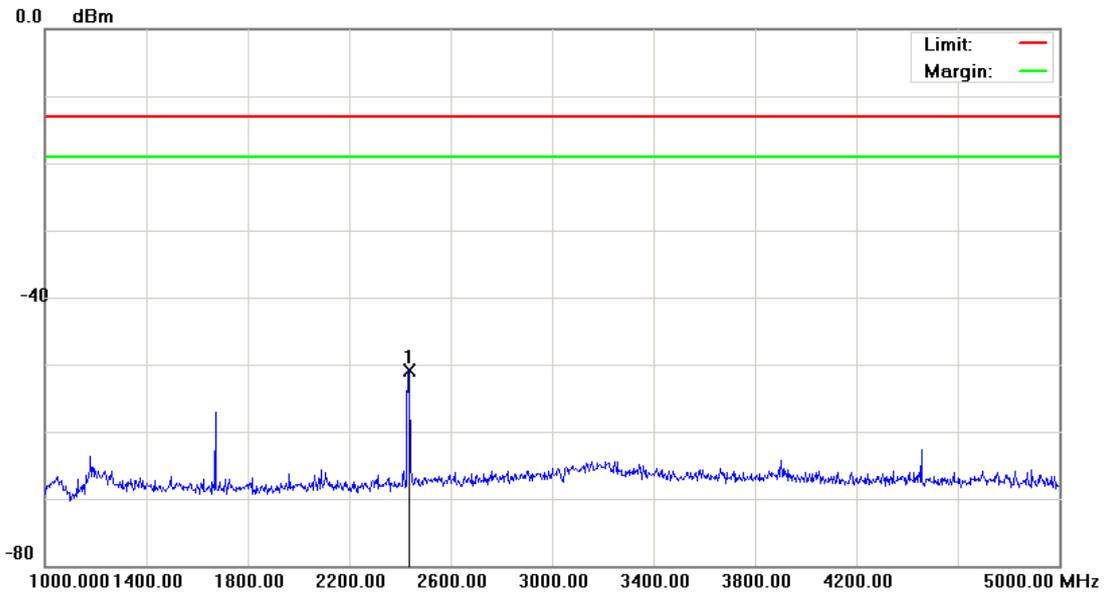


Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 100 KHz VBW: 300 KHz
M/N: AC785S-500		
Mode: GPRS 850		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1		30.9700	-63.21	17.10	-46.11	-13.00	-33.11	peak		
2	*	836.5550	-3.69	3.96	0.27	-13.00	13.27	peak		Tx

\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH190)      Data :#4      Date: 2014/9/16      Time: 下午 03:31:15

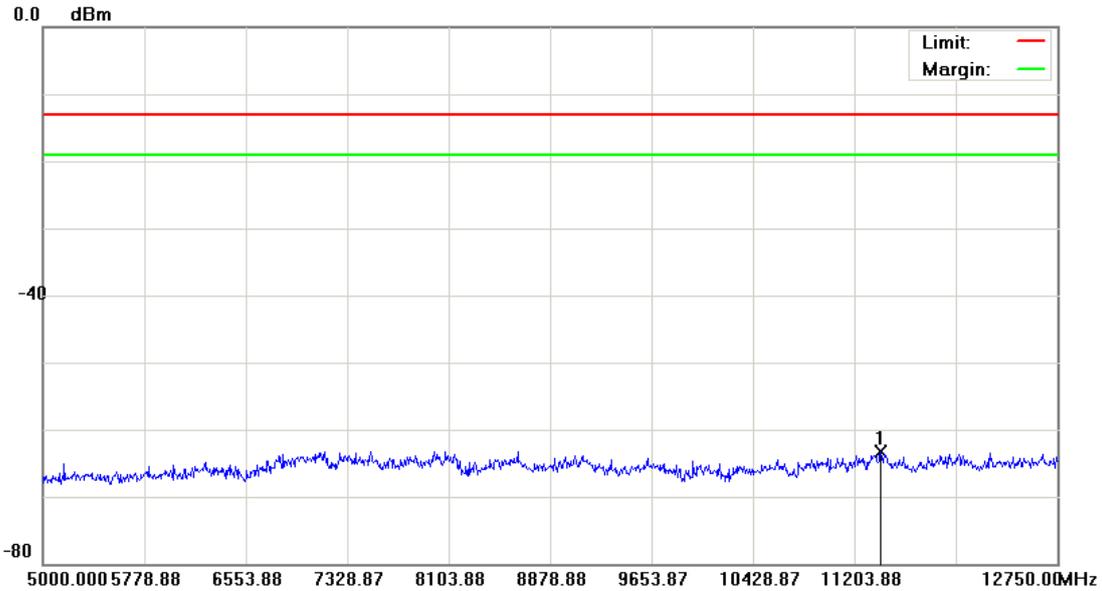


Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz VBW: 3000 KHz
M/N: AC785S-500		
Mode: GPRS 850		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	2434.000	-55.26	4.46	-50.80	-13.00	-37.80	peak		

\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH190)      Data :#5      Date: 2014/9/16      Time: 下午 03:31:38

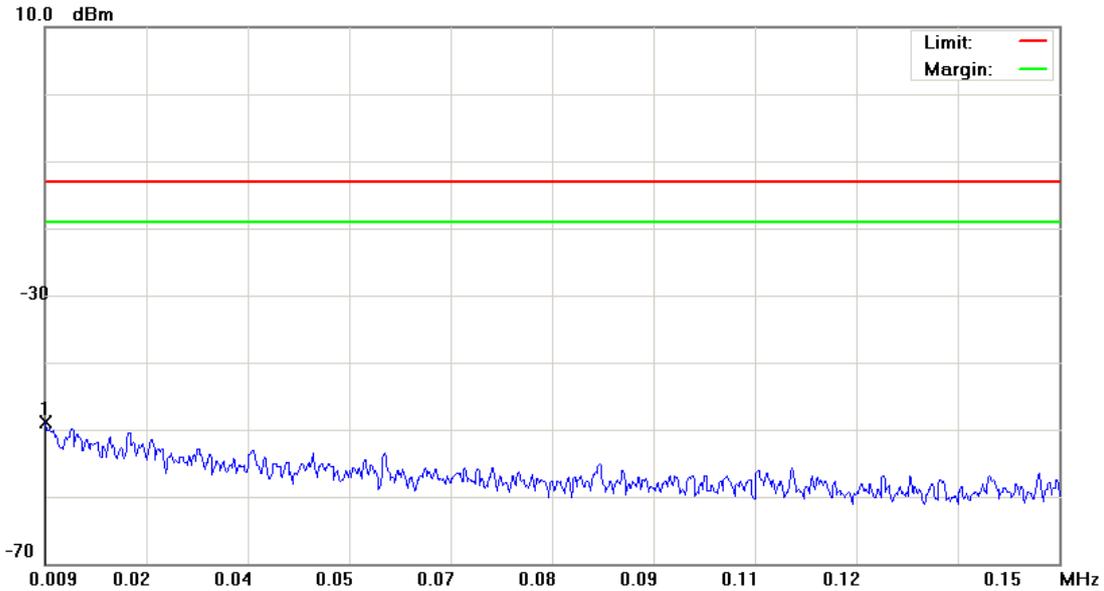


Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz    VBW: 3000 KHz
M/N: AC785S-500		
Mode: GPRS 850		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	11401.500	-68.81	5.56	-63.25	-13.00	-50.25	peak		

\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH251)      Data :#1      Date: 2014/9/16      Time: 下午 03:24:24



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1 KHz    VBW: 3 KHz
M/N: AC785S-500		
Mode: GPRS 850		
Note:		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBm	dB	dBm	dBm	dB	cm	degree
1	*	0.0090	-79.48	30.58	-48.90	-13.00	-35.90	peak	Comment

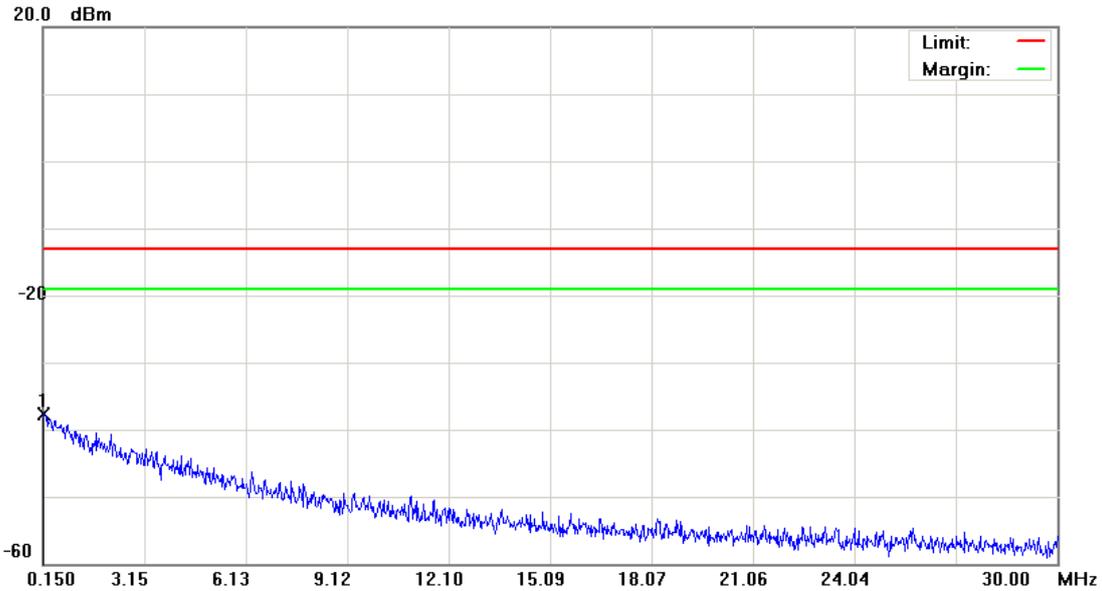
\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH251)

Data :#2

Date: 2014/9/16

Time: 下午 03:24:49



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 10 KHz VBW: 30 KHz
M/N: AC785S-500		
Mode: GPRS 850		
Note:		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBm	dB	dBm	dBm	dB	cm	degree
1	*	0.1798	-68.39	30.75	-37.64	-13.00	-24.64	peak	Comment

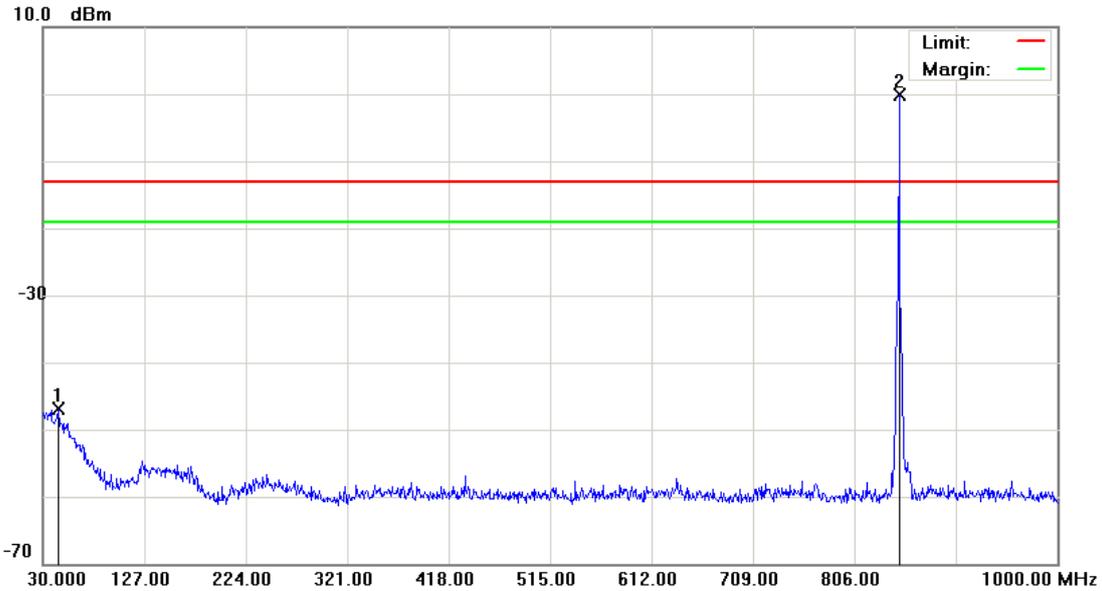
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File :AC785S-500(CH251)

Data :#3

Date: 2014/9/16

Time: 下午 03:25:13

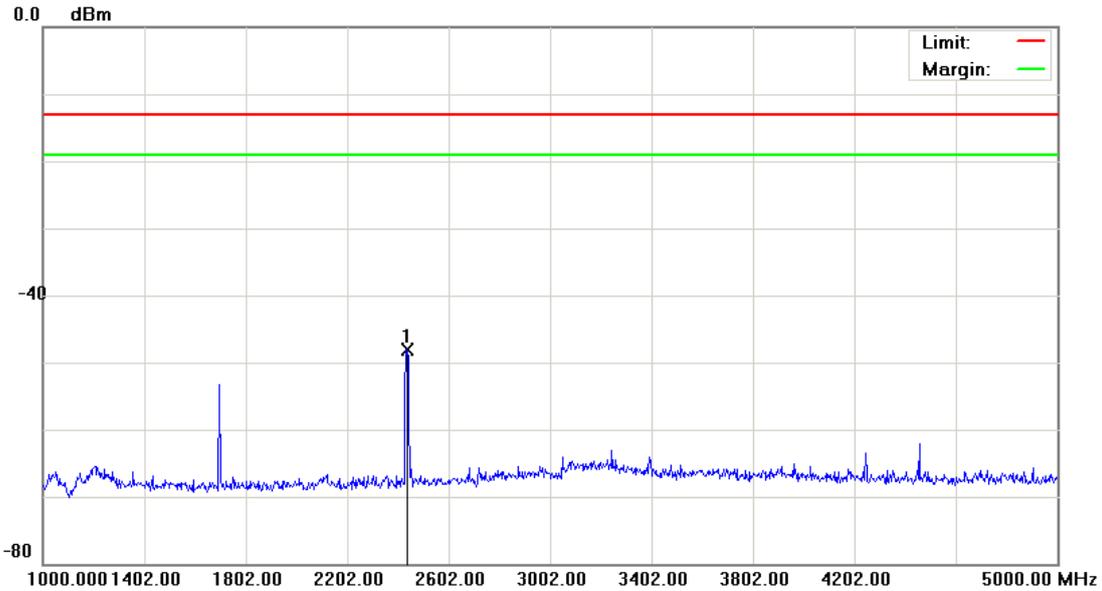


Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 100 KHz VBW: 300 KHz
M/N: AC785S-500		
Mode: GPRS 850		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1		44.5500	-62.49	15.56	-46.93	-13.00	-33.93	peak		
2	*	848.6800	-4.11	3.98	-0.13	-13.00	12.87	peak		Tx

\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH251)      Data :#4      Date: 2014/9/16      Time: 下午 03:32:23



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz    VBW: 3000 KHz
M/N: AC785S-500		
Mode: GPRS 850		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	2436.000	-52.51	4.46	-48.05	-13.00	-35.05	peak		

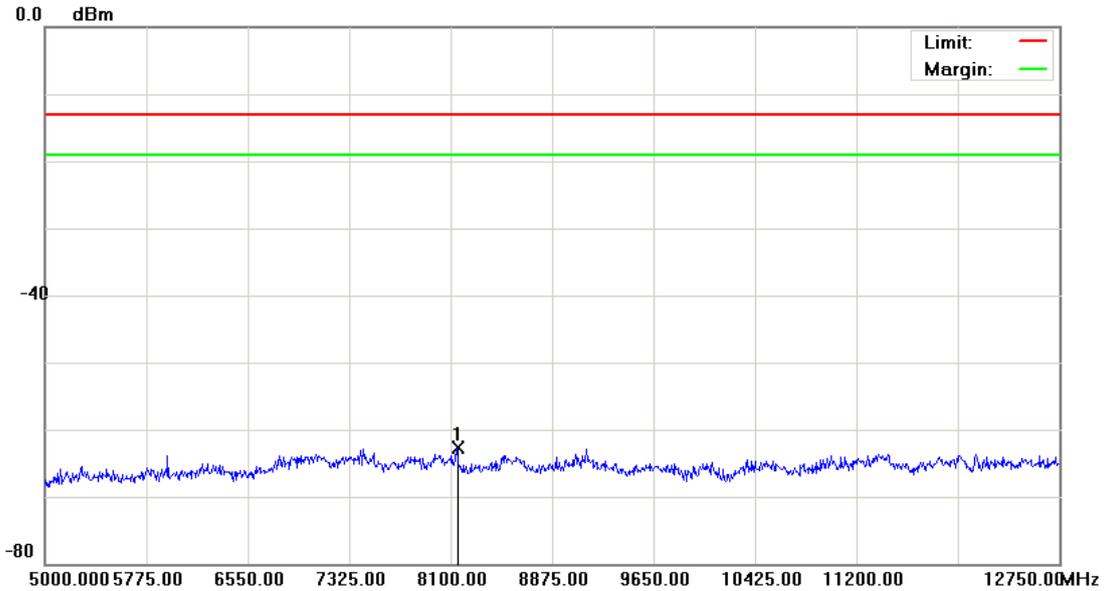
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File :AC785S-500(CH251)

Data :#5

Date: 2014/9/16

Time: 下午 03:32:46



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz VBW: 3000 KHz
M/N: AC785S-500		
Mode: GPRS 850		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	8150.375	-68.50	5.81	-62.69	-13.00	-49.69	peak		

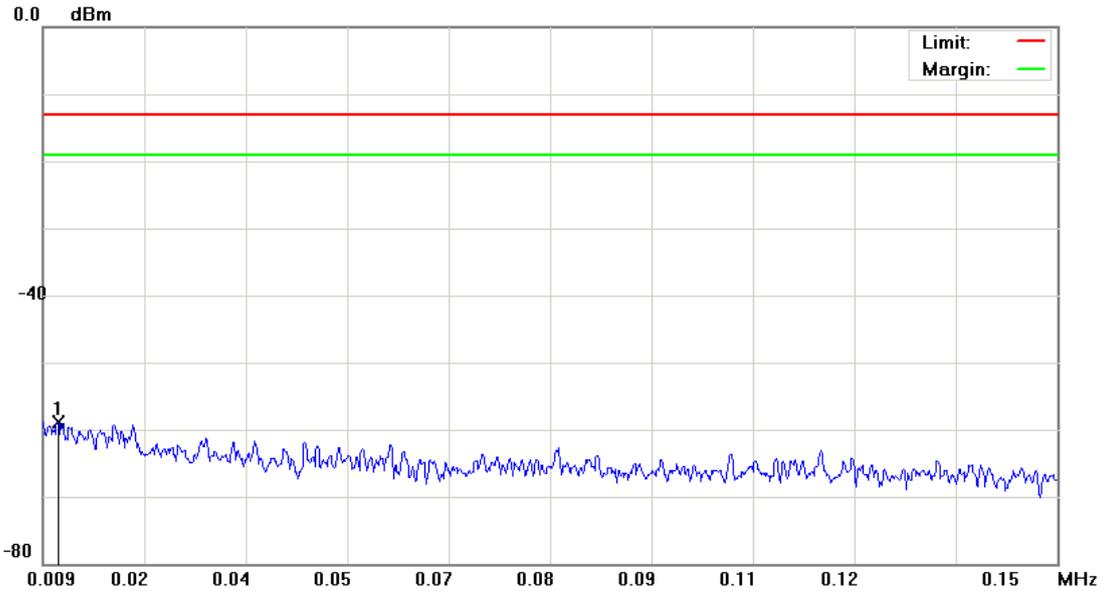
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File :AC785S-500(CH512)

Data :#1

Date: 2014/9/16

Time: 下午 02:22:23



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1 KHz VBW: 3 KHz
M/N: AC785S-500		
Mode: GPRS 1900		
Note:		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBm	dB	dBm	dBm	dB	cm	degree
1	*	0.0111	-70.28	11.35	-58.93	-13.00	-45.93	peak	Comment

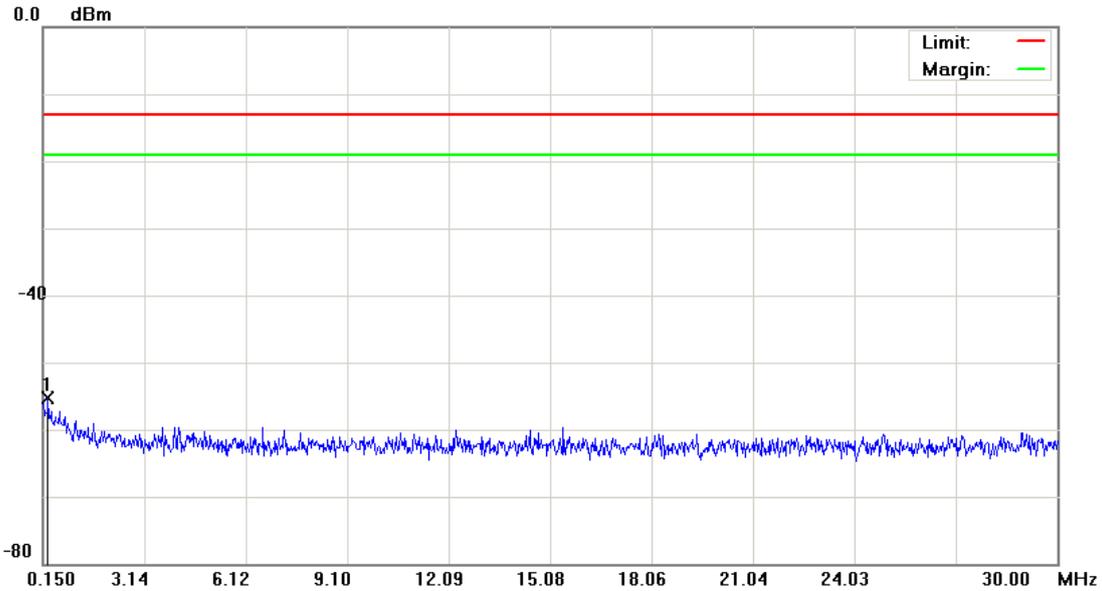
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File :AC785S-500(CH512)

Data :#2

Date: 2014/9/16

Time: 下午 02:22:47



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 10 KHz VBW: 30 KHz
M/N: AC785S-500		
Mode: GPRS 1900		
Note:		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBm	dB	dBm	dBm	dB	cm	degree
1	*	0.2993	-67.94	12.62	-55.32	-13.00	-42.32	peak	Comment

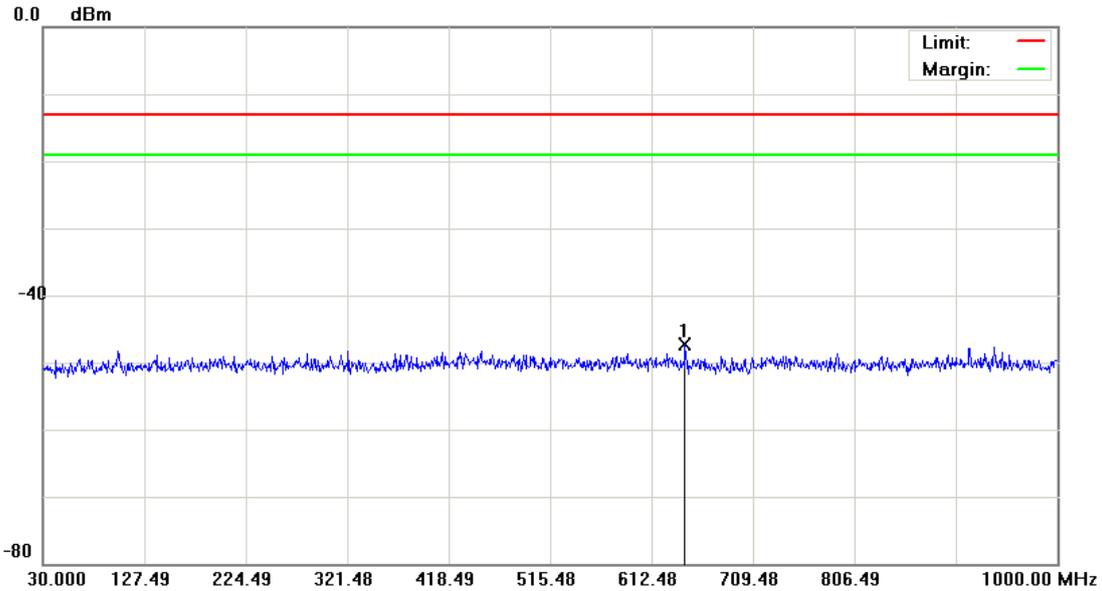
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File :AC785S-500(CH512)

Data :#3

Date: 2014/9/16

Time: 下午 02:23:11

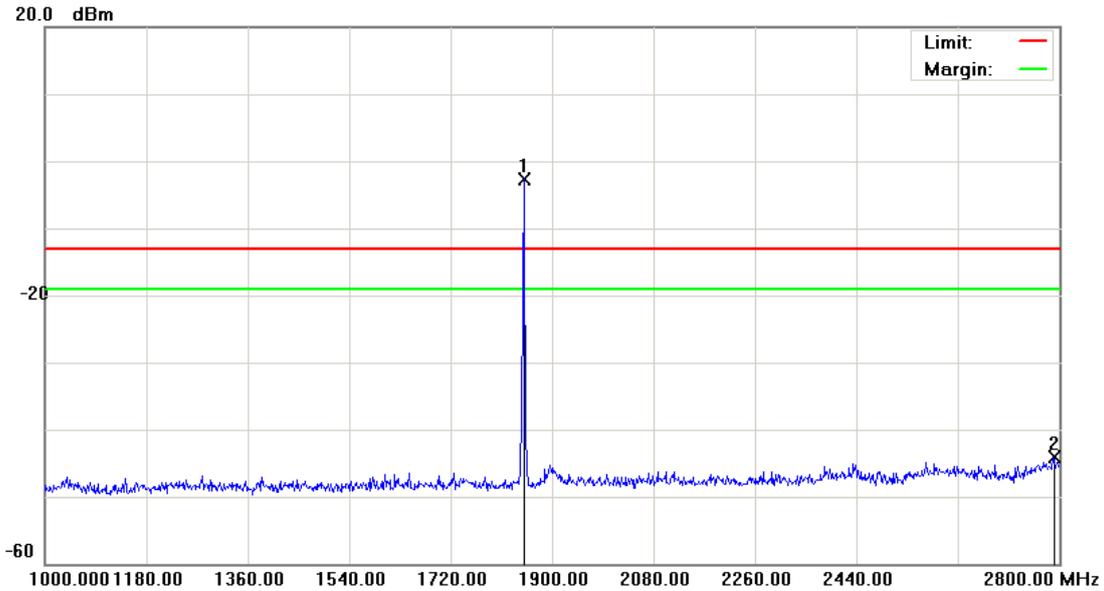


Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 100 KHz VBW: 300 KHz
M/N: AC785S-500		
Mode: GPRS 1900		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	644.0100	-60.49	13.10	-47.39	-13.00	-34.39	peak		

\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH512)      Data :#4      Date: 2014/9/16      Time: 下午 02:31:50



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz    VBW: 3000 KHz
M/N: AC785S-500		
Mode: GPRS 1900		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	1850.500	-6.92	4.26	-2.66	-13.00	10.34	peak		Tx
2		2790.100	-49.92	5.90	-44.02	-13.00	-31.02	peak		

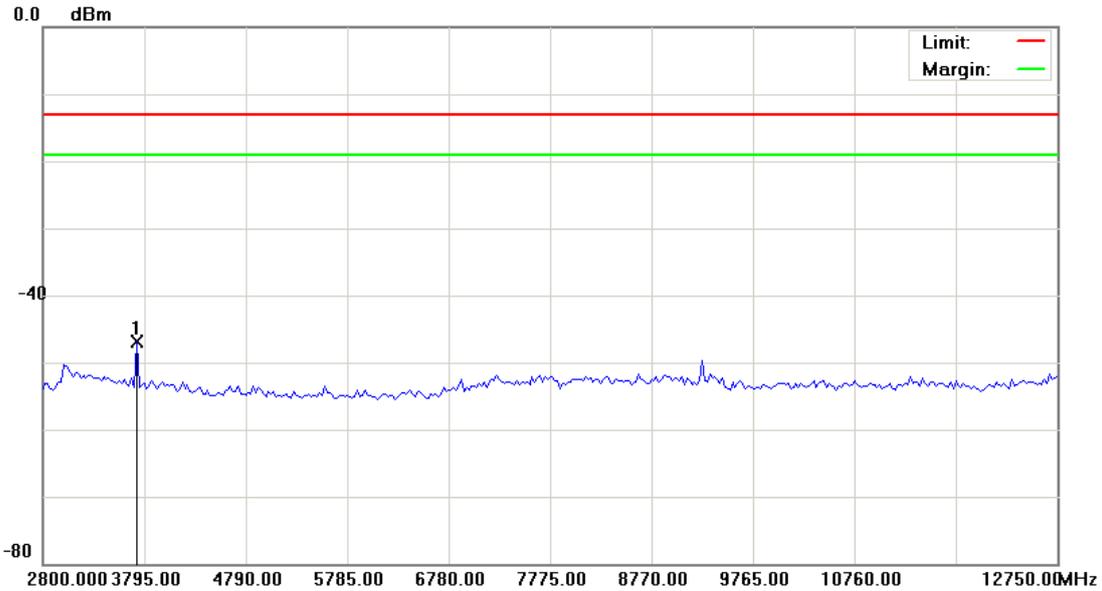
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File :AC785S-500(CH512)

Data :#5

Date: 2014/9/16

Time: 上午 11:29:17

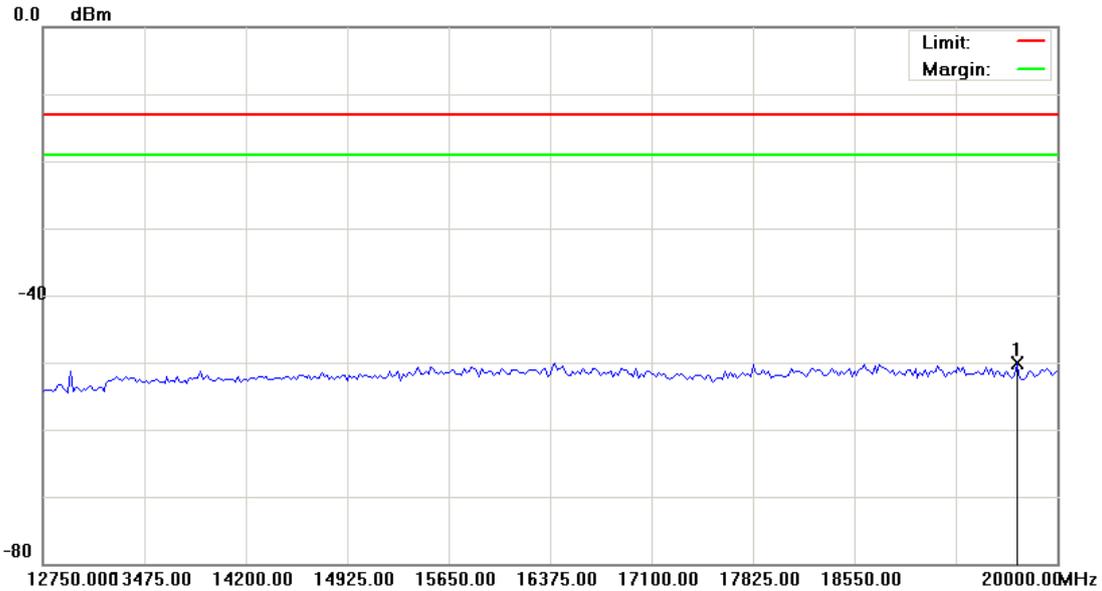


Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz VBW: 3000 KHz
M/N: AC785S-500		
Mode: GPRS 1900		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	3720.375	-51.80	4.88	-46.92	-13.00	-33.92	peak		

\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH512)      Data :#6      Date: 2014/9/16      Time: 上午 11:29:36



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz    VBW: 3000 KHz
M/N: AC785S-500		
Mode: GPRS 1900		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	19710.000	-57.48	7.36	-50.12	-13.00	-37.12			peak

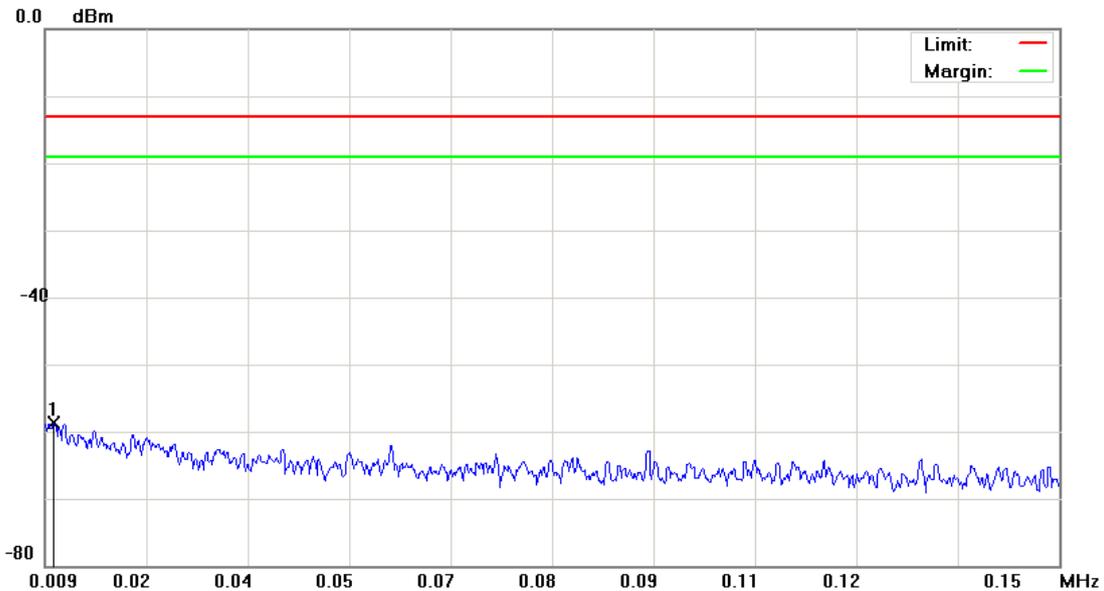
\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH661)

Data :#1

Date: 2014/9/16

Time: 下午 02:25:10



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1 KHz VBW: 3 KHz
M/N: AC785S-500		
Mode: GPRS 1900		
Note:		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBm	dB	dBm	dBm	dB	cm	degree
1	*	0.0103	-70.04	11.34	-58.70	-13.00	-45.70	peak	Comment

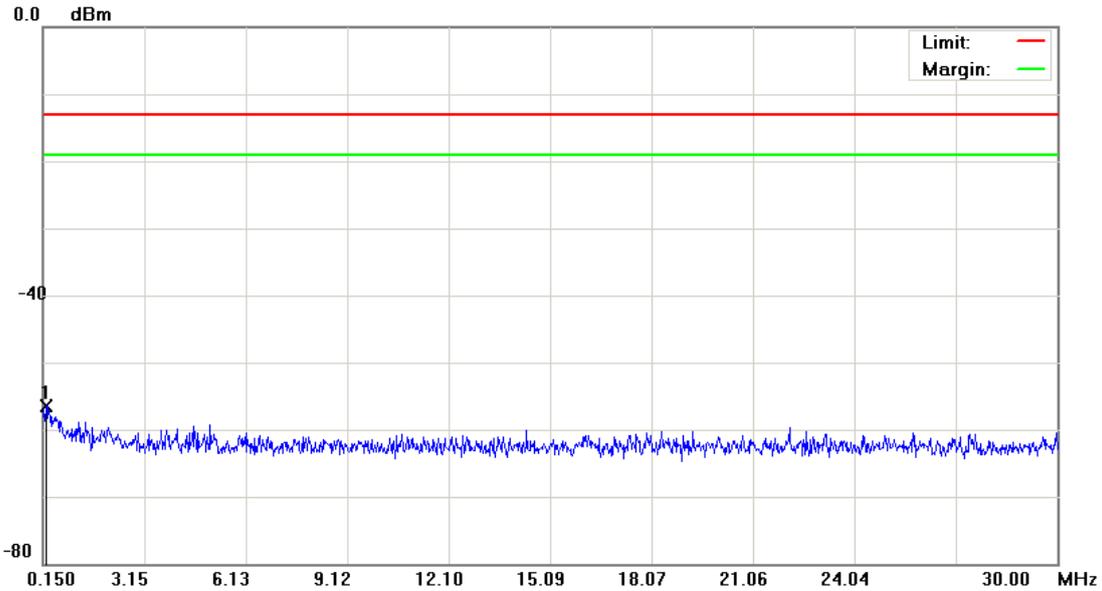
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File :AC785S-500(CH661)

Data :#2

Date: 2014/9/16

Time: 下午 02:25:34

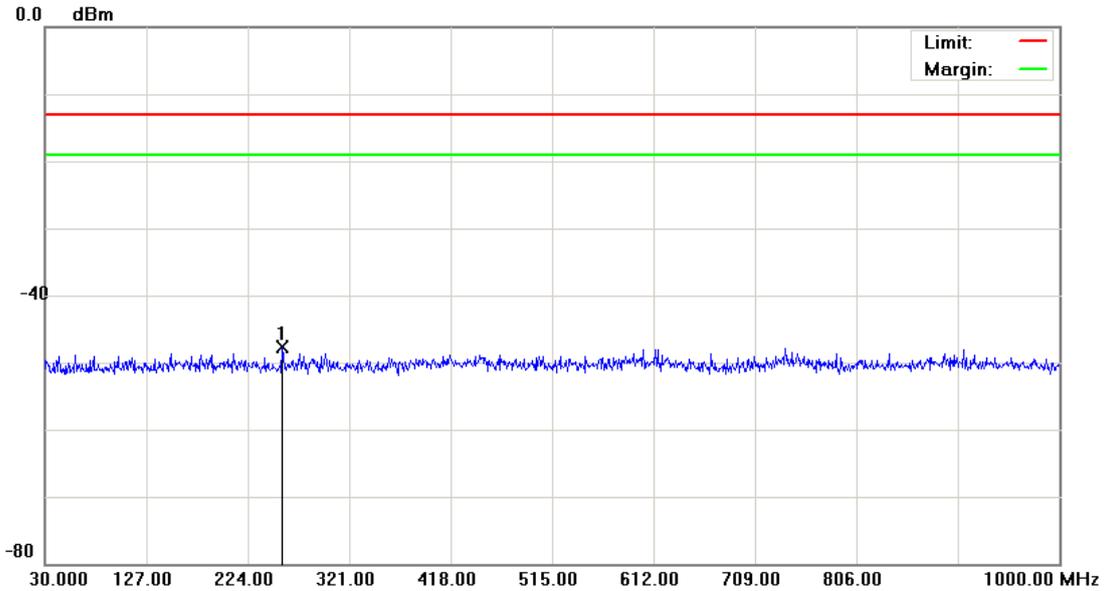


Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 10 KHz VBW: 30 KHz
M/N: AC785S-500		
Mode: GPRS 1900		
Note:		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	
1	*	0.2395	-69.00	12.50	-56.50	-13.00	-43.50	peak		

\*:Maximum data x:Over limit !:over margin

File :AC785S-500(CH661)      Data :#3      Date: 2014/9/16      Time: 下午 02:25:58

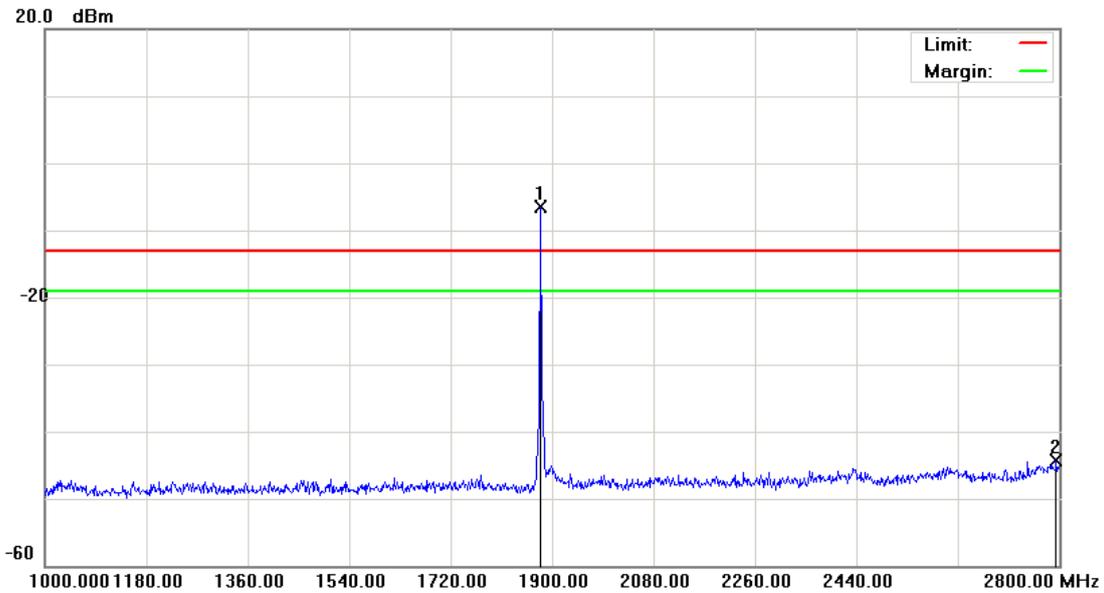


Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 100 KHz VBW: 300 KHz
M/N: AC785S-500		
Mode: GPRS 1900		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	256.9800	-60.90	13.26	-47.64	-13.00	-34.64	peak		

\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH661)      Data :#4      Date: 2014/9/16      Time: 下午 02:33:16

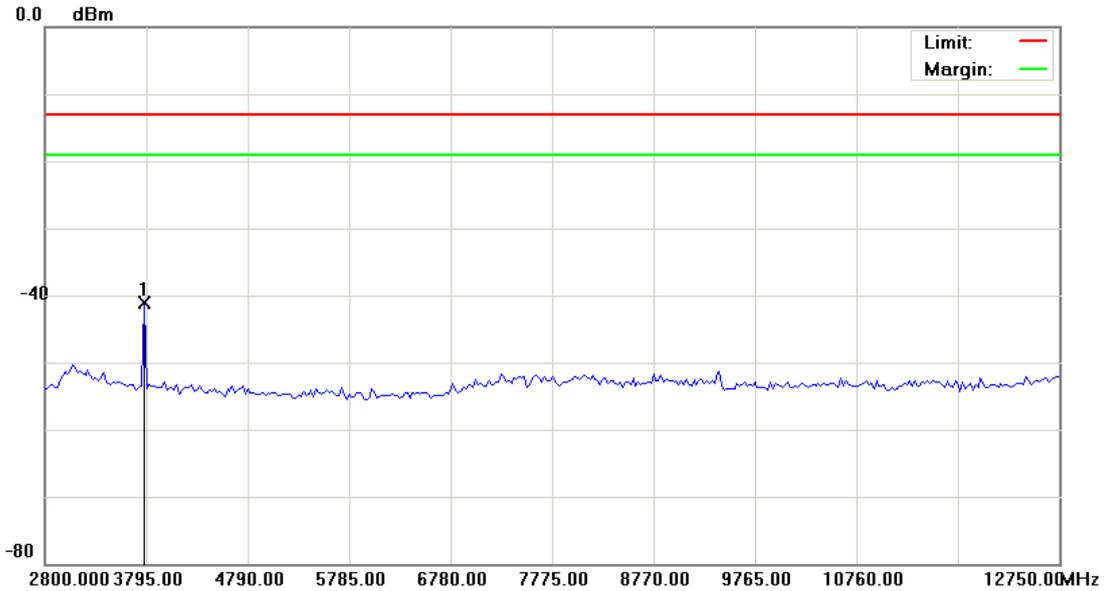


Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz VBW: 3000 KHz
M/N: AC785S-500		
Mode: GPRS 1900		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree	Comment
1	*	1880.200	-11.20	4.65	-6.55	-13.00	6.45	peak			Tx
2		2794.600	-50.21	5.90	-44.31	-13.00	-31.31	peak			

\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH661)      Data :#5      Date: 2014/9/16      Time: 上午 11:30:24

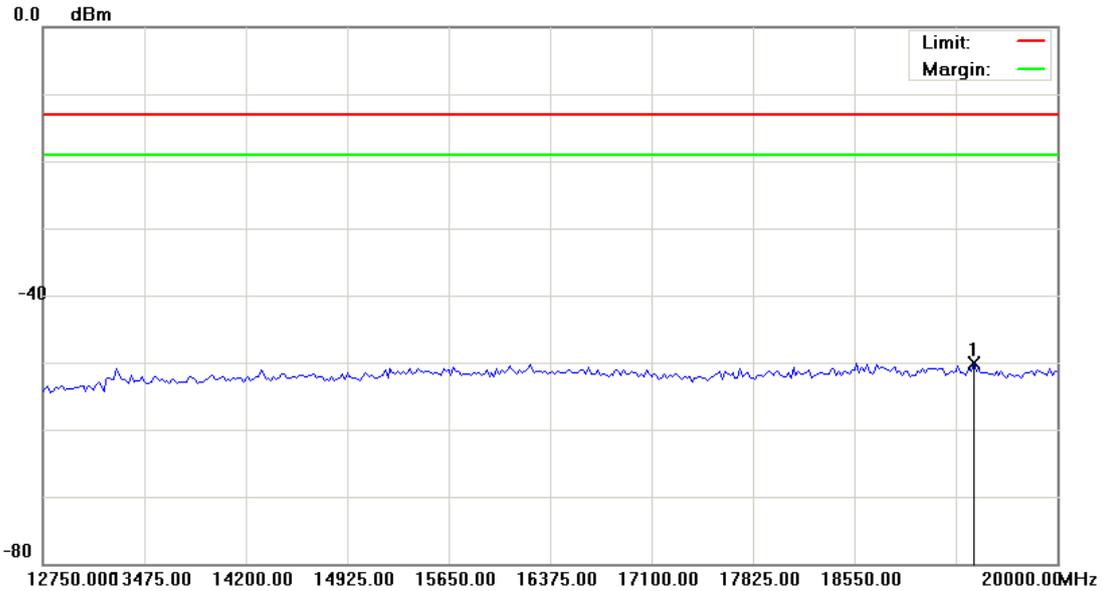


Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz    VBW: 3000 KHz
M/N: AC785S-500		
Mode: GPRS 1900		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	3770.125	-45.93	4.93	-41.00	-13.00	-28.00			peak

\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH661)      Data :#6      Date: 2014/9/16      Time: 上午 11:30:44



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz    VBW: 3000 KHz
M/N: AC785S-500		
Mode: GPRS 1900		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	19401.875	-57.31	7.27	-50.04	-13.00	-37.04	peak		

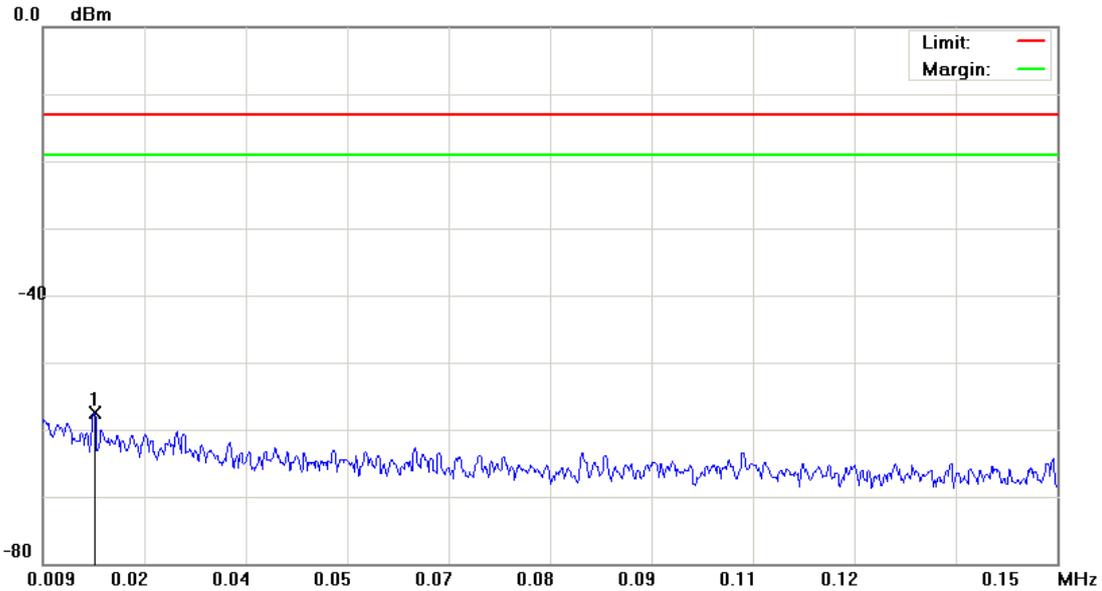
\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH810)

Data :#1

Date: 2014/9/16

Time: 下午 02:26:44

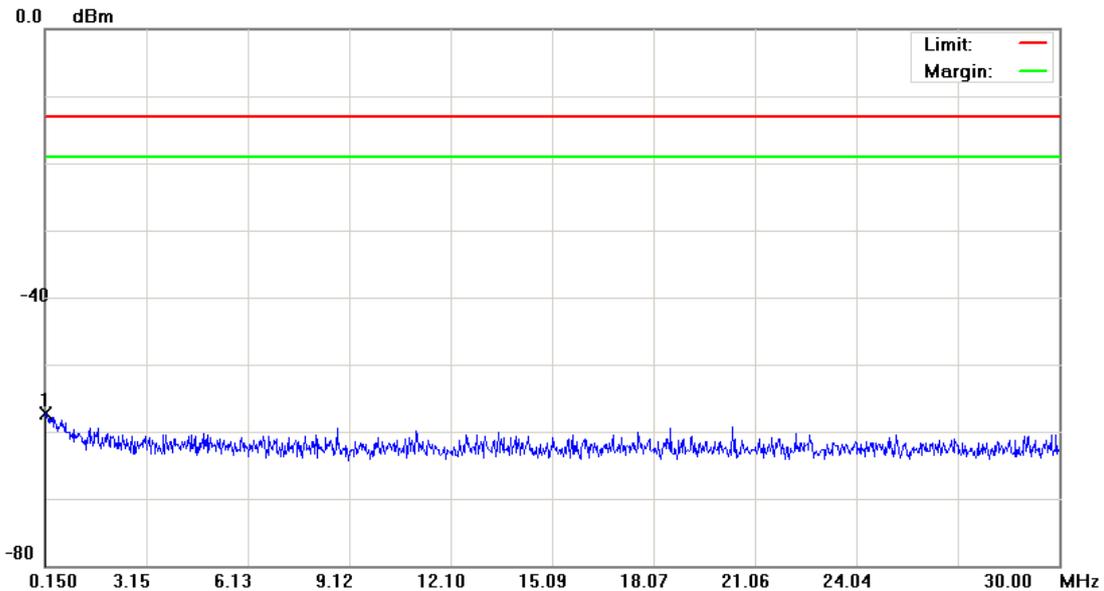


Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1 KHz VBW: 3 KHz
M/N: AC785S-500		
Mode: GPRS 1900		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	0.0161	-68.84	11.41	-57.43	-13.00	-44.43	peak		

\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH810)      Data :#2      Date: 2014/9/16      Time: 下午 02:27:08



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 10 KHz    VBW: 30 KHz
M/N: AC785S-500		
Mode: GPRS 1900		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	0.1798	-69.68	12.45	-57.23	-13.00	-44.23	peak		

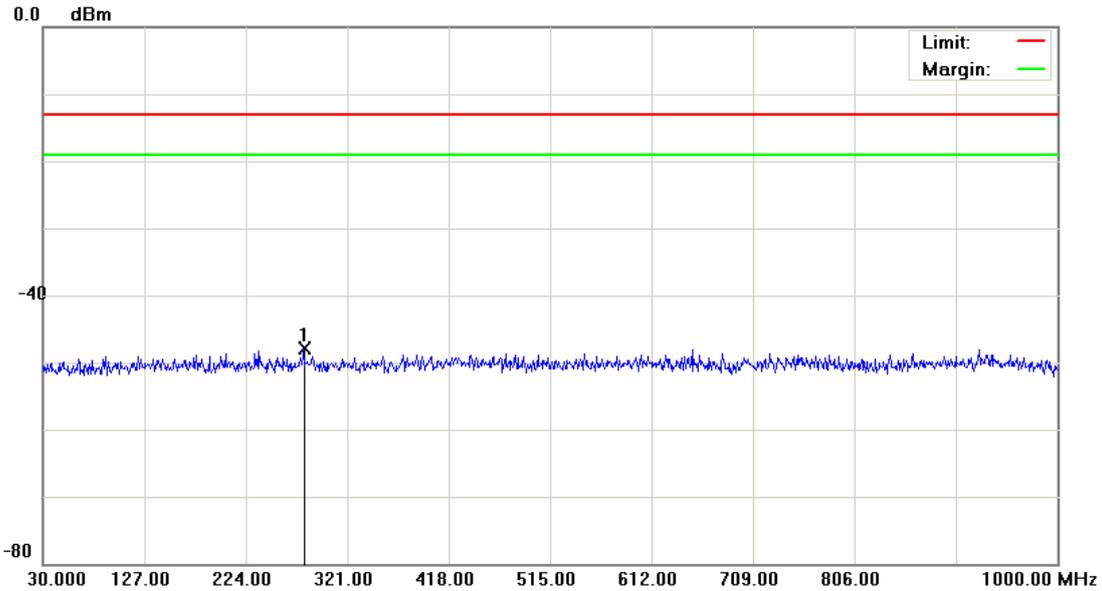
\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH810)

Data :#3

Date: 2014/9/16

Time: 下午 02:27:32



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 100 KHz VBW: 300 KHz
M/N: AC785S-500		
Mode: GPRS 1900		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	279.7750	-61.22	13.24	-47.98	-13.00	-34.98			peak

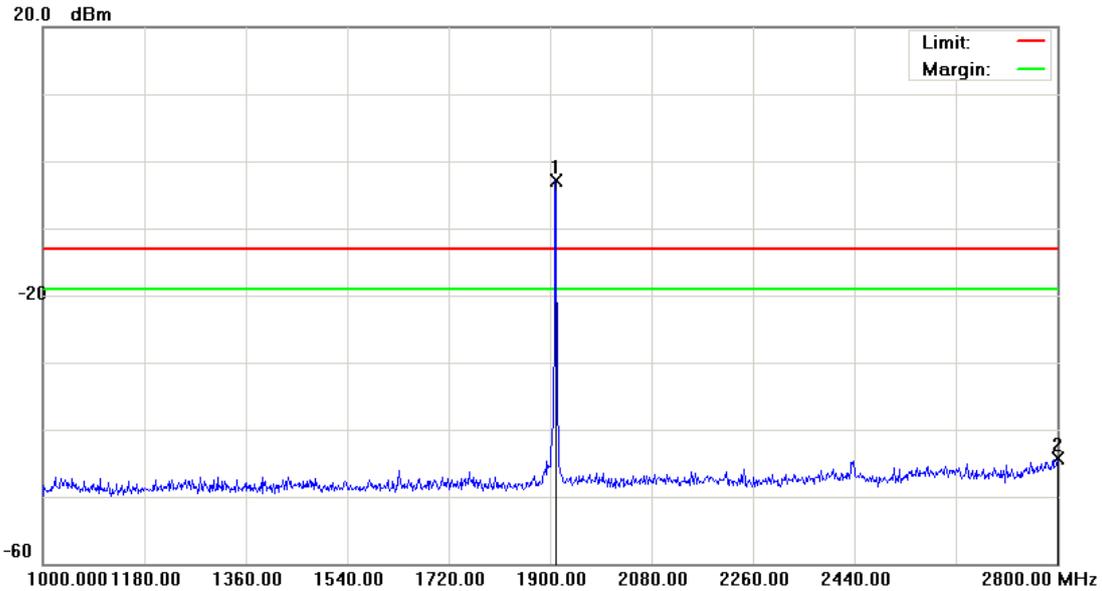
\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH810)

Data :#4

Date: 2014/9/16

Time: 下午 02:34:44

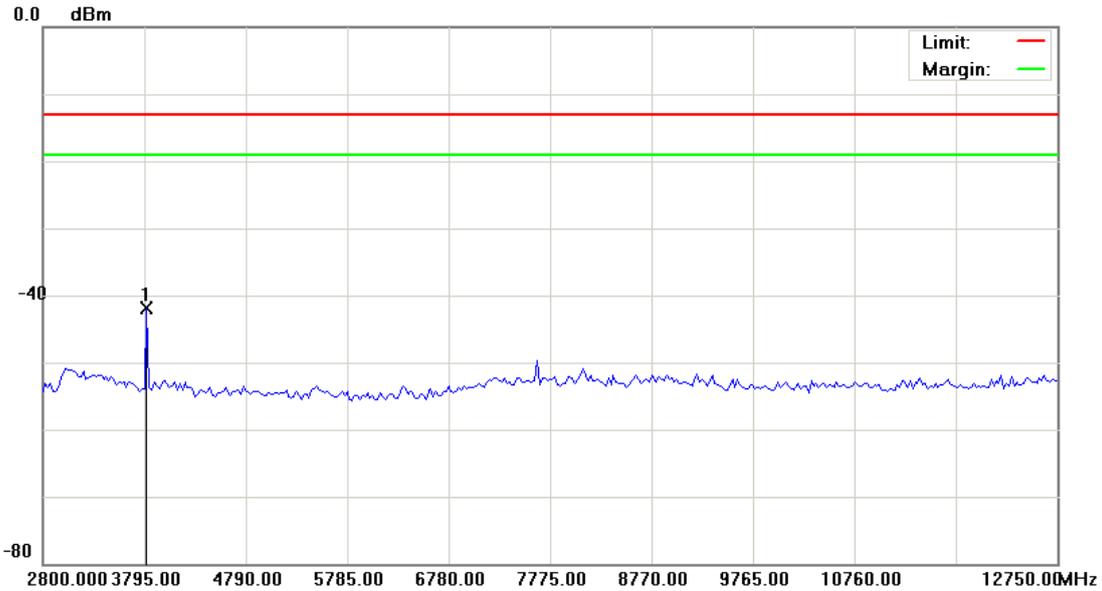


Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz VBW: 3000 KHz
M/N: AC785S-500		
Mode: GPRS 1900		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree	Comment
1	*	1909.900	-8.52	5.71	-2.81	-13.00	10.19	peak			Tx
2		2800.000	-50.30	5.91	-44.39	-13.00	-31.39	peak			

\*:Maximum data x:Over limit !:over margin

File :AC785S-500(CH810)      Data :#5      Date: 2014/9/16      Time: 上午 11:31:20

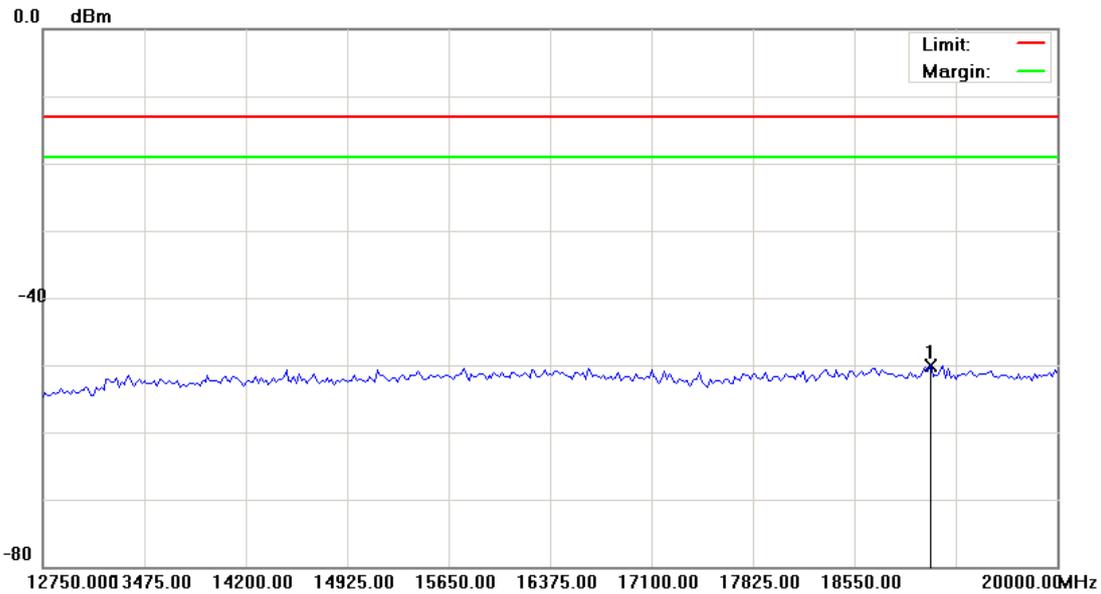


Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz    VBW: 3000 KHz
M/N: AC785S-500		
Mode: GPRS 1900		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	3819.875	-46.86	4.91	-41.95	-13.00	-28.95			peak

\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH810)      Data :#6      Date: 2014/9/16      Time: 上午 11:31:40



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz VBW: 3000 KHz
M/N: AC785S-500		
Mode: GPRS 1900		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree	Comment
1	*	19093.750	-57.18	7.18	-50.00	-13.00	-37.00	peak			

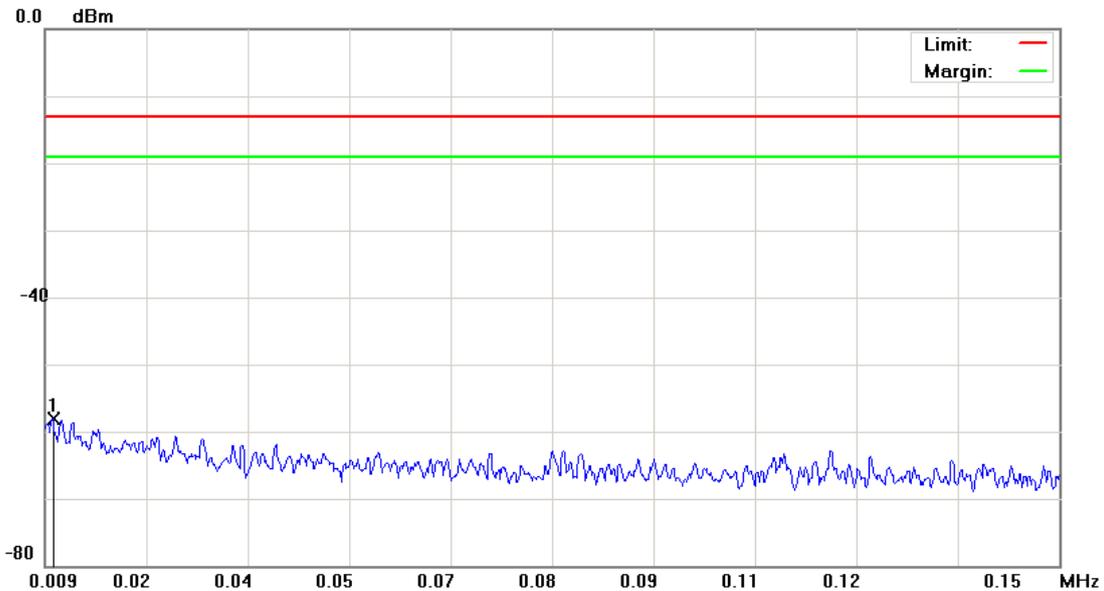
\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH9262)

Data :#1

Date: 2014/9/16

Time: 下午 02:04:54



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1 KHz VBW: 3 KHz
M/N: AC785S-500		
Mode: WCDMA Band II		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	0.0101	-69.46	11.34	-58.12	-13.00	-45.12	peak		

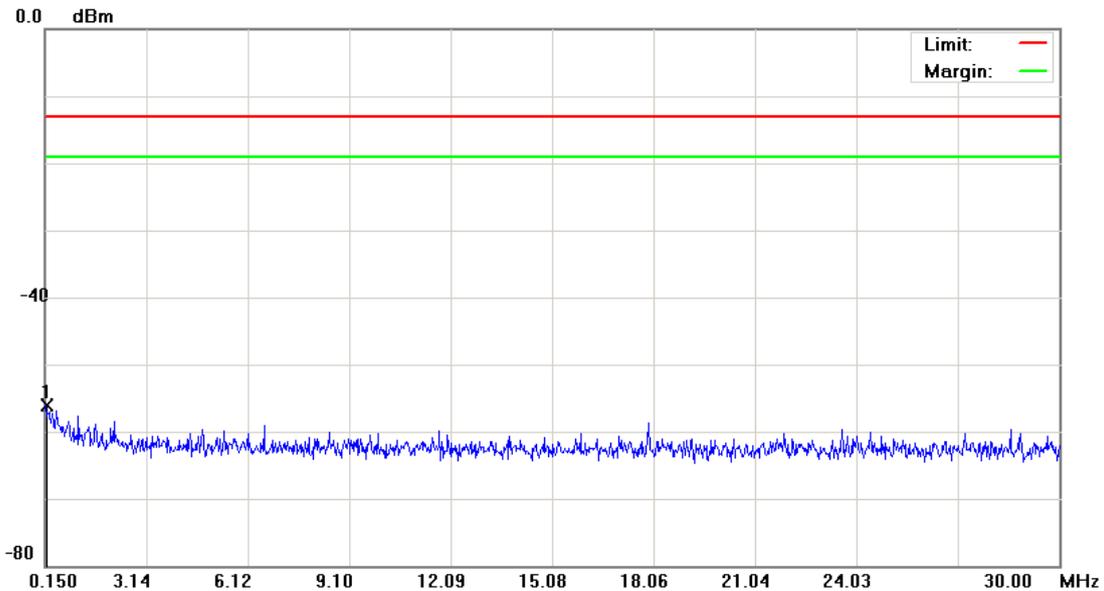
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File :AC785S-500(CH9262)

Data :#2

Date: 2014/9/16

Time: 下午 02:05:18



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 10 KHz VBW: 30 KHz
M/N: AC785S-500		
Mode: WCDMA Band II		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	0.1948	-68.63	12.45	-56.18	-13.00	-43.18	peak		

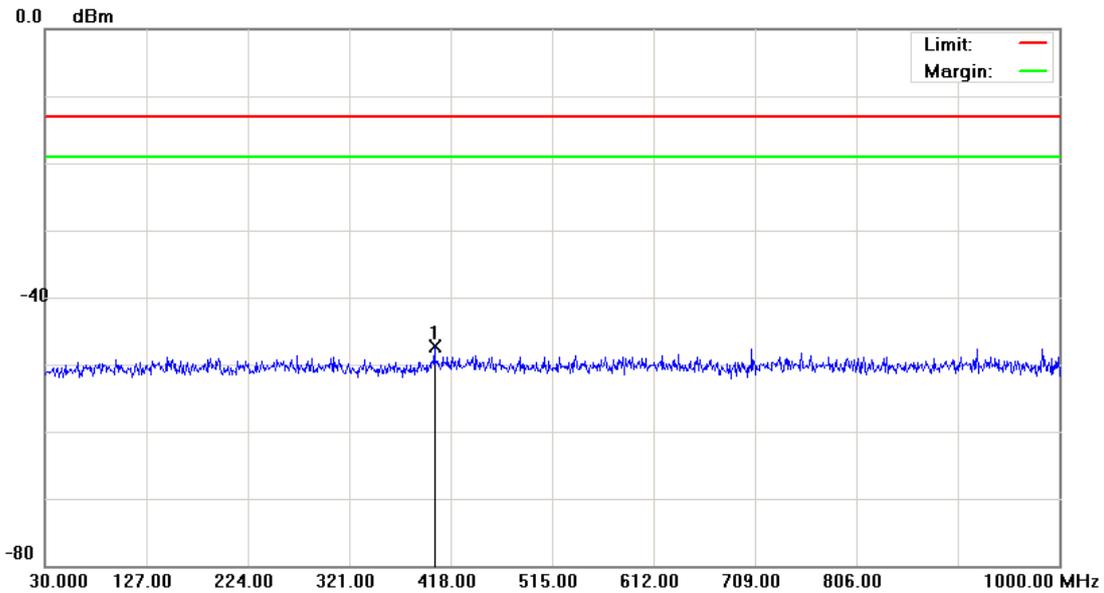
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File :AC785S-500(CH9262)

Data :#3

Date: 2014/9/16

Time: 下午 02:05:43



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 100 KHz VBW: 300 KHz
M/N: AC785S-500		
Mode: WCDMA Band II		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	402.9650	-60.63	13.25	-47.38	-13.00	-34.38	peak		

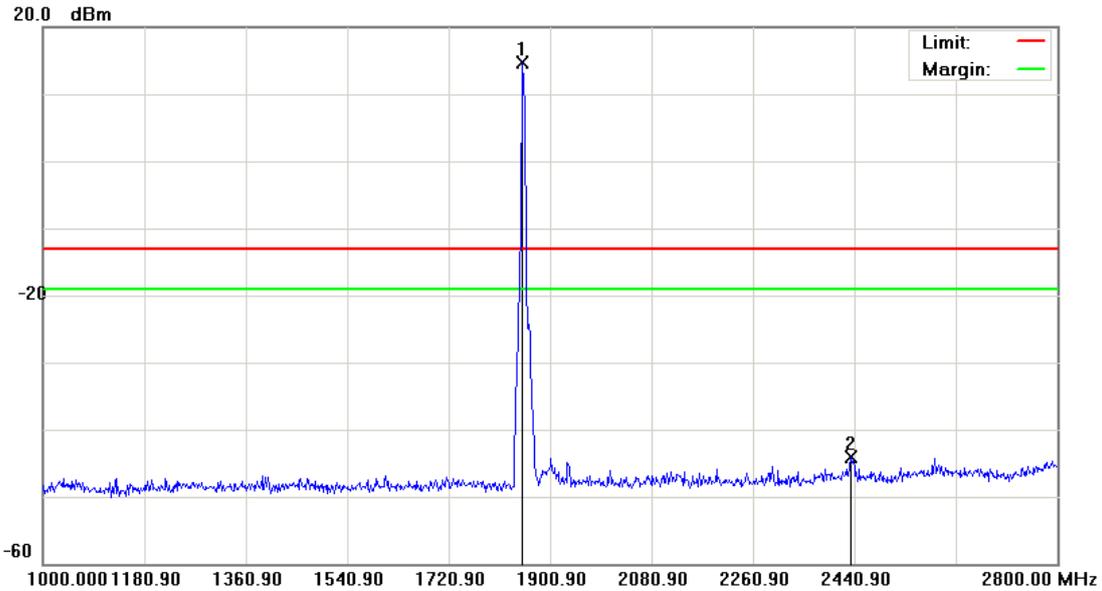
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File :AC785S-500(CH9262)

Data :#4

Date: 2014/9/16

Time: 下午 02:39:03



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz VBW: 3000 KHz
M/N: AC785S-500		
Mode: WCDMA Band II		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	1850.500	10.54	4.26	14.80	-13.00	27.80	peak		Tx
2		2432.800	-49.19	5.07	-44.12	-13.00	-31.12	peak		

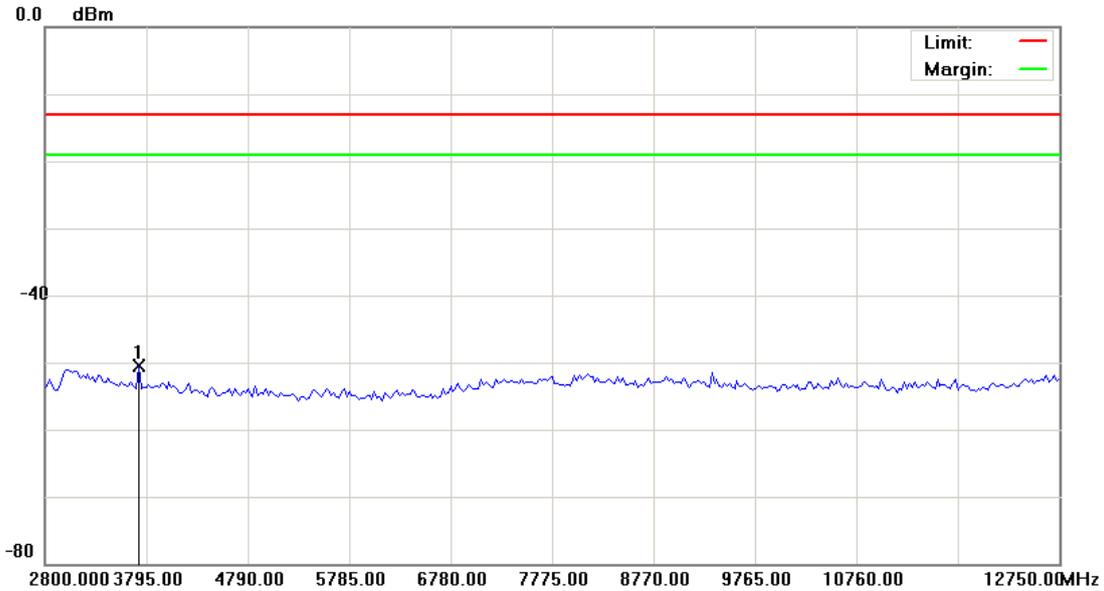
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File :AC785S-500(CH9262)

Data :#5

Date: 2014/9/16

Time: 上午 11:19:32



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz VBW: 3000 KHz
M/N: AC785S-500		
Mode: WCDMA Band II		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	3720.375	-55.37	4.88	-50.49	-13.00	-37.49	peak		

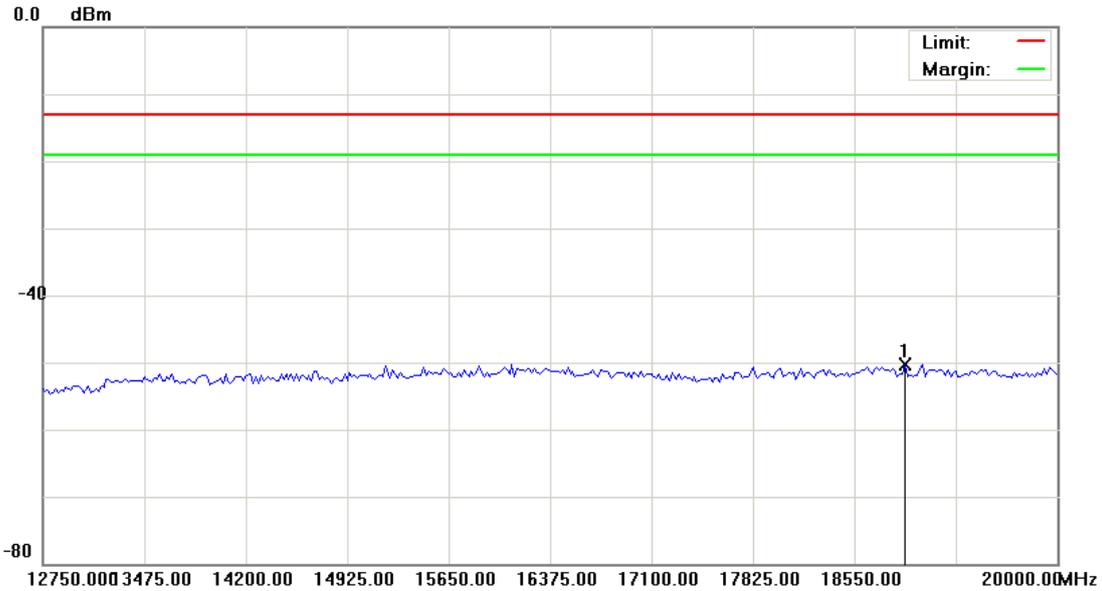
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File :AC785S-500(CH9262)

Data :#6

Date: 2014/9/16

Time: 上午 11:19:51



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz VBW: 3000 KHz
M/N: AC785S-500		
Mode: WCDMA Band II		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	18912.500	-57.34	7.13	-50.21	-13.00	-37.21	peak		

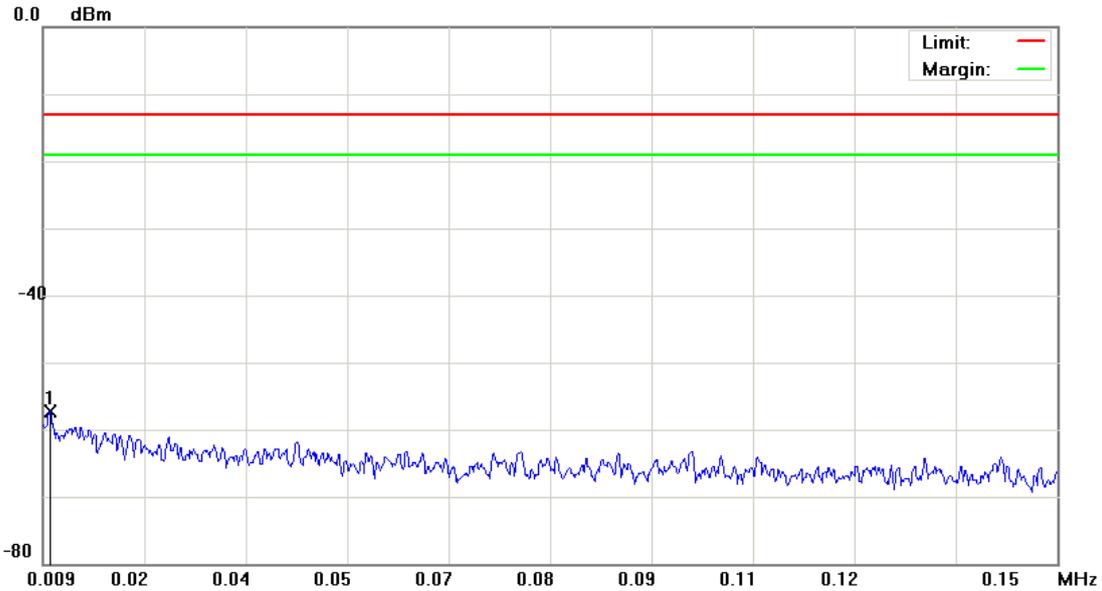
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File :AC785S-500(CH9400)

Data :#1

Date: 2014/9/16

Time: 下午 02:06:28



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1 KHz VBW: 3 KHz
M/N: AC785S-500		
Mode: WCDMA Band II		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	0.0100	-68.61	11.33	-57.28	-13.00	-44.28	peak		

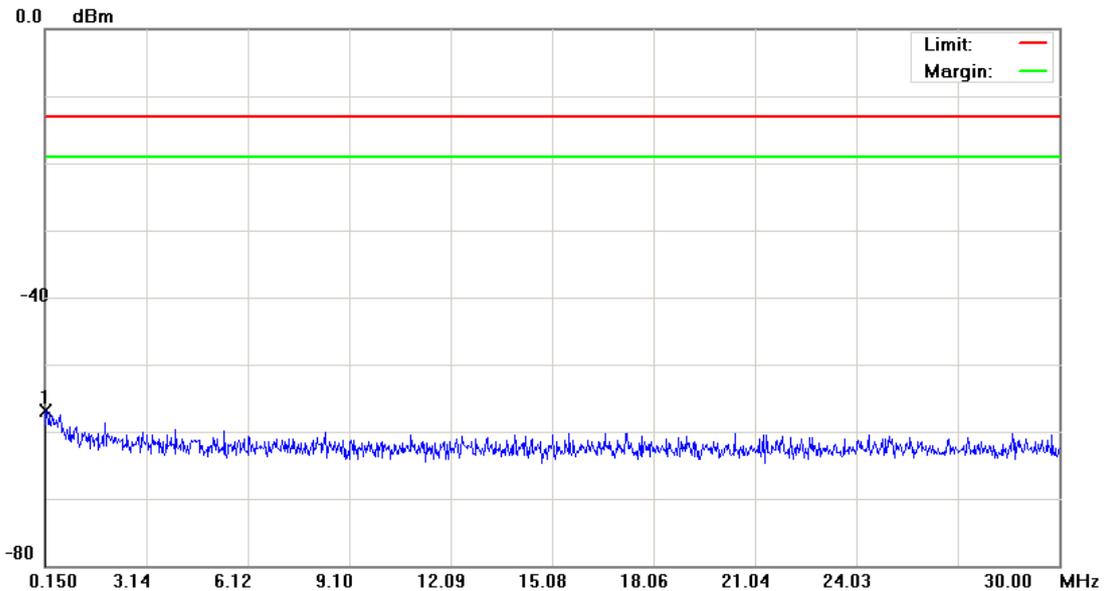
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File :AC785S-500(CH9400)

Data :#2

Date: 2014/9/16

Time: 下午 02:06:52



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 10 KHz VBW: 30 KHz
M/N: AC785S-500		
Mode: WCDMA Band II		
Note:		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBm	dB	dBm	dBm	dB	cm	degree
1	*	0.1500	-69.32	12.47	-56.85	-13.00	-43.85	peak	Comment

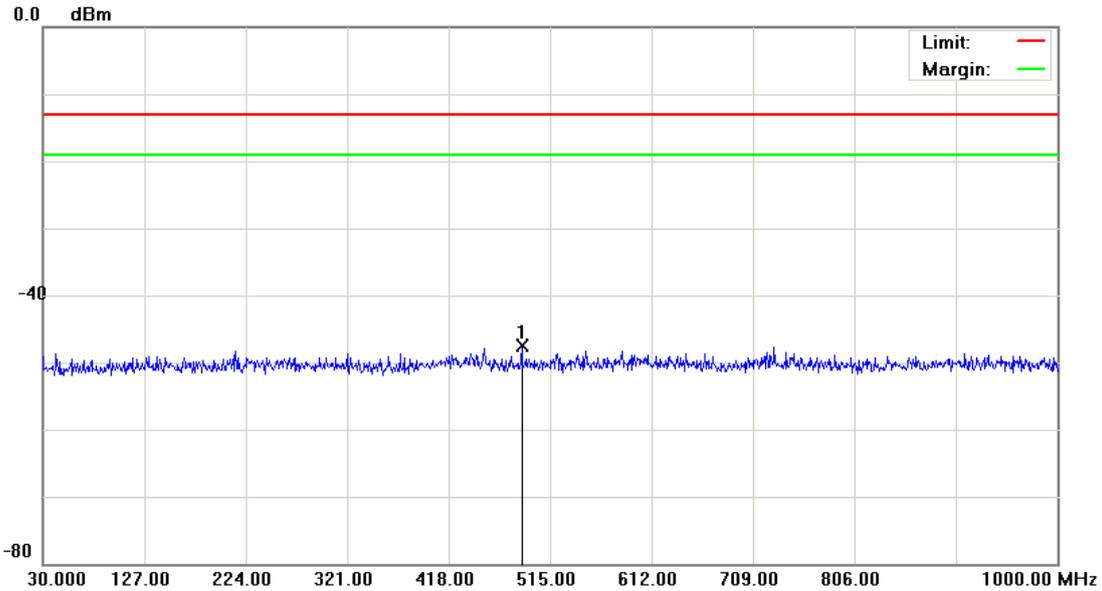
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File :AC785S-500(CH9400)

Data :#3

Date: 2014/9/16

Time: 下午 02:07:16



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 100 KHz VBW: 300 KHz
M/N: AC785S-500		
Mode: WCDMA Band II		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	488.3250	-60.70	13.14	-47.56	-13.00	-34.56	peak		

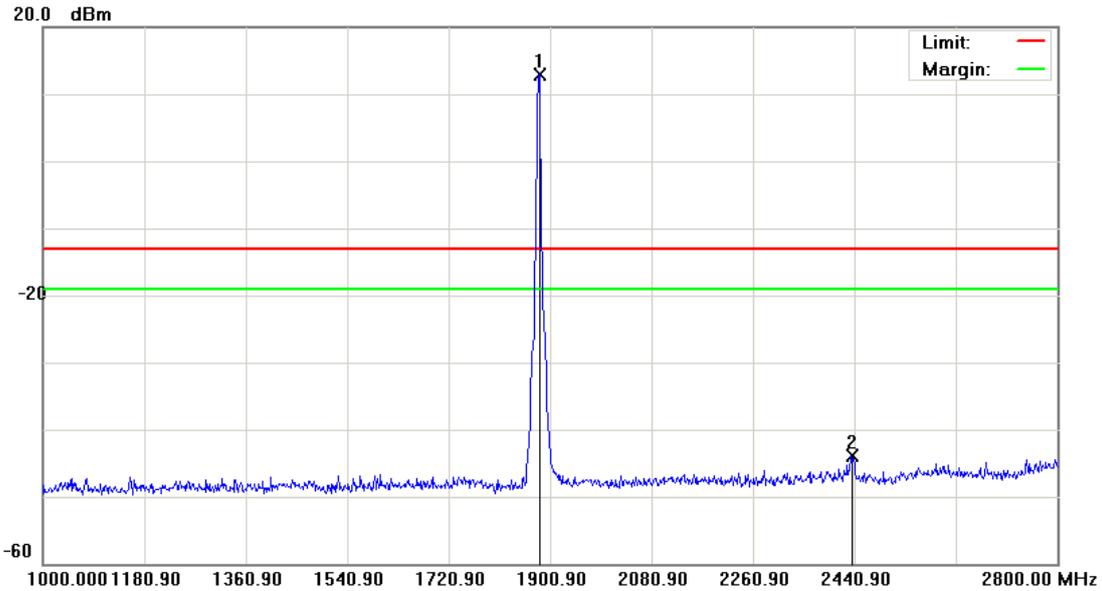
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File :AC785S-500(CH9400)

Data :#4

Date: 2014/9/16

Time: 下午 02:40:17



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz VBW: 3000 KHz
M/N: AC785S-500		
Mode: WCDMA Band II		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	1881.100	8.09	4.74	12.83	-13.00	25.83	peak		Tx
2		2435.500	-48.89	5.05	-43.84	-13.00	-30.84	peak		

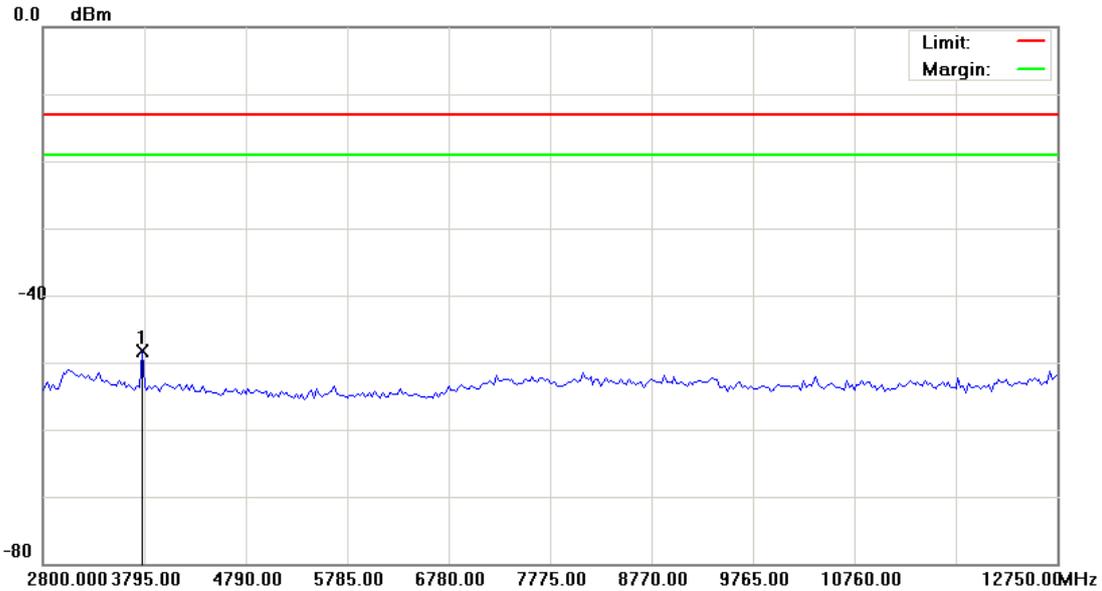
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File :AC785S-500(CH9400)

Data :#5

Date: 2014/9/16

Time: 上午 11:20:32



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz VBW: 3000 KHz
M/N: AC785S-500		
Mode: WCDMA Band II		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	3770.125	-53.24	4.93	-48.31	-13.00	-35.31			peak

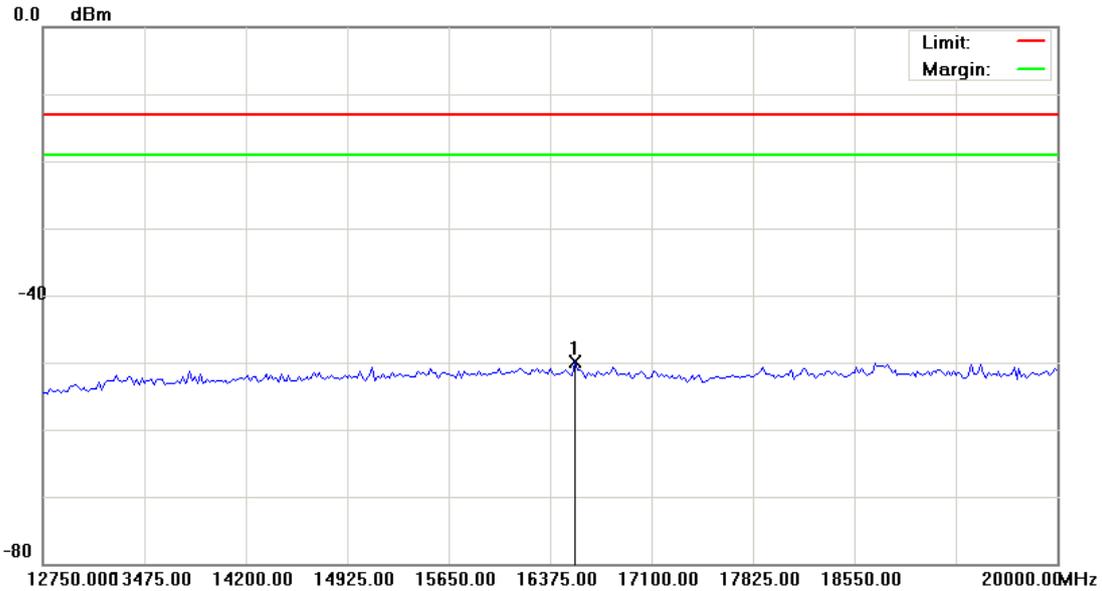
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File :AC785S-500(CH9400)

Data :#6

Date: 2014/9/16

Time: 上午 11:20:52



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz VBW: 3000 KHz
M/N: AC785S-500		
Mode: WCDMA Band II		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	16556.250	-56.44	6.46	-49.98	-13.00	-36.98	peak		

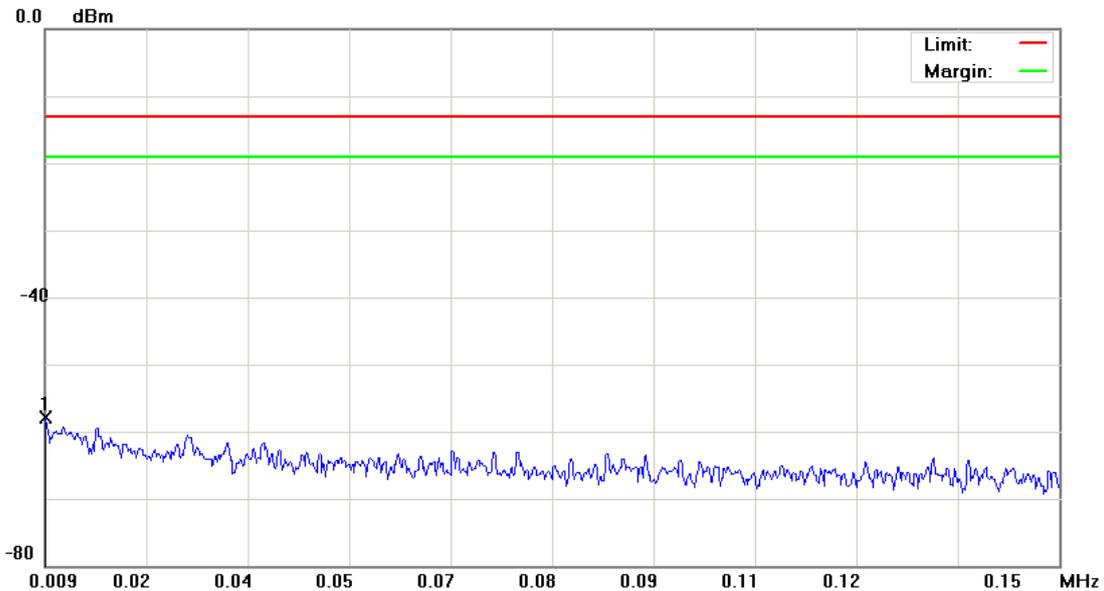
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File :AC785S-500(CH9538)

Data :#1

Date: 2014/9/16

Time: 下午 02:12:20



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1 KHz VBW: 3 KHz
M/N: AC785S-500		
Mode: WCDMA Band II		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	0.0091	-69.30	11.32	-57.98	-13.00	-44.98	peak		

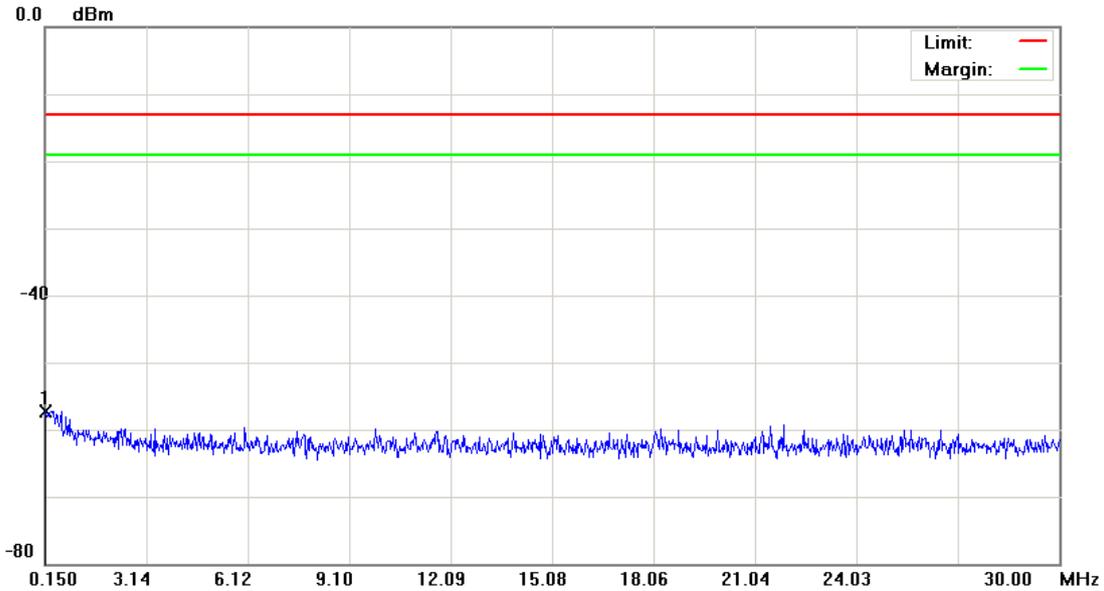
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File :AC785S-500(CH9538)

Data :#2

Date: 2014/9/16

Time: 下午 02:12:44



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 10 KHz VBW: 30 KHz
M/N: AC785S-500		
Mode: WCDMA Band II		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	0.1798	-69.71	12.45	-57.26	-13.00	-44.26	peak		

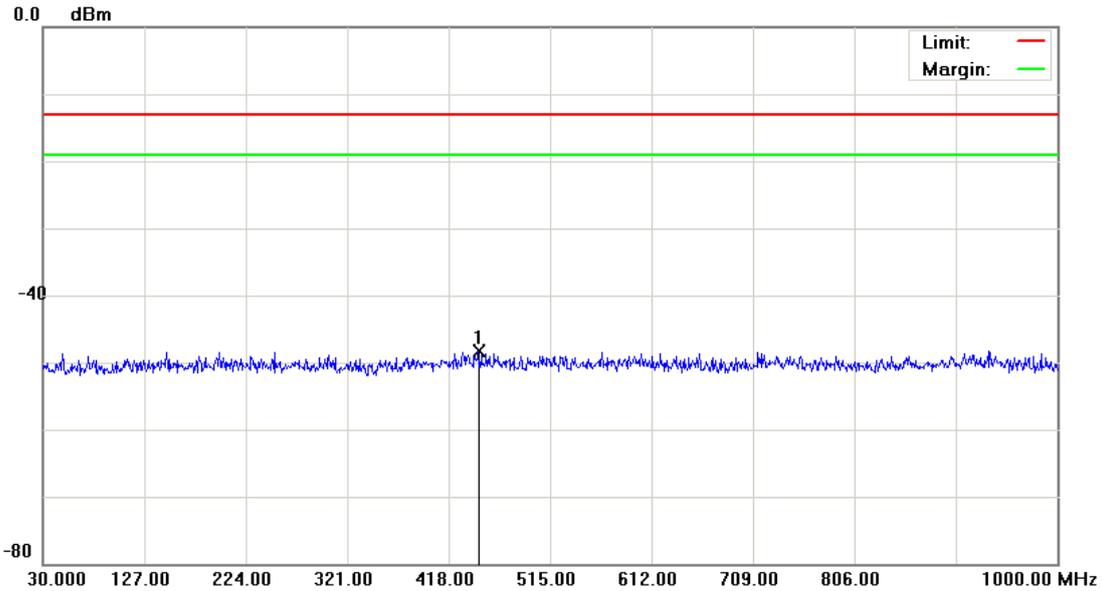
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File :AC785S-500(CH9538)

Data :#3

Date: 2014/9/16

Time: 下午 02:13:08



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 100 KHz VBW: 300 KHz
M/N: AC785S-500		
Mode: WCDMA Band II		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	446.6150	-61.43	13.22	-48.21	-13.00	-35.21	peak		

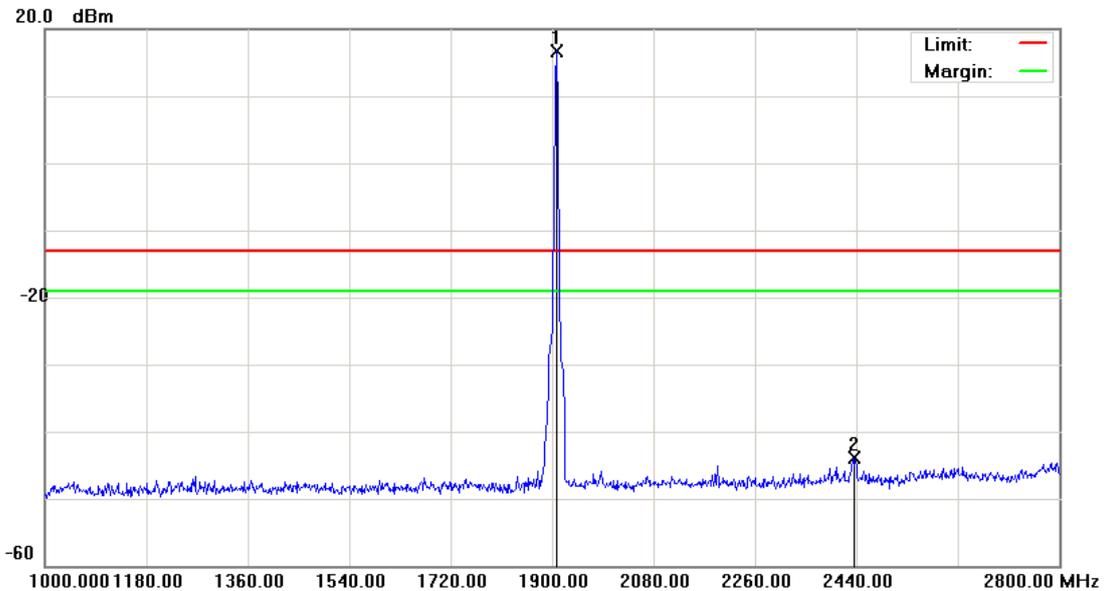
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File :AC785S-500(CH9538)

Data :#4

Date: 2014/9/16

Time: 下午 02:42:23



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz VBW: 3000 KHz
M/N: AC785S-500		
Mode: WCDMA Band II		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree	Comment
1	*	1909.000	10.85	5.80	16.65	-13.00	29.65	peak			Tx
2		2435.500	-48.97	5.05	-43.92	-13.00	-30.92	peak			

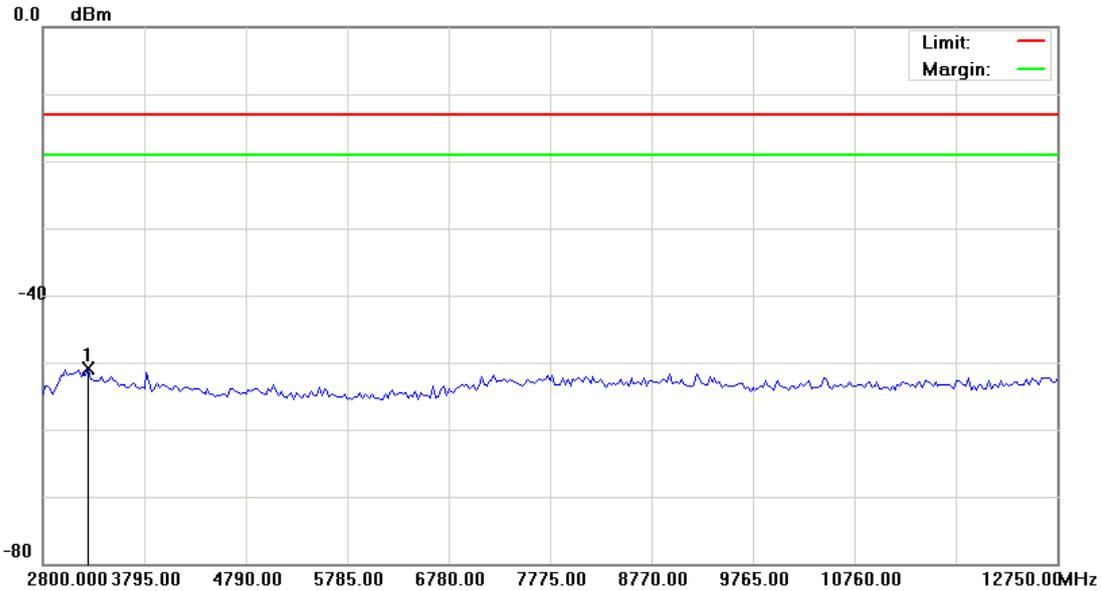
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File :AC785S-500(CH9538)

Data :#5

Date: 2014/9/16

Time: 上午 11:21:32



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz VBW: 3000 KHz
M/N: AC785S-500		
Mode: WCDMA Band II		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	3247.750	-56.07	5.11	-50.96	-13.00	-37.96	peak		

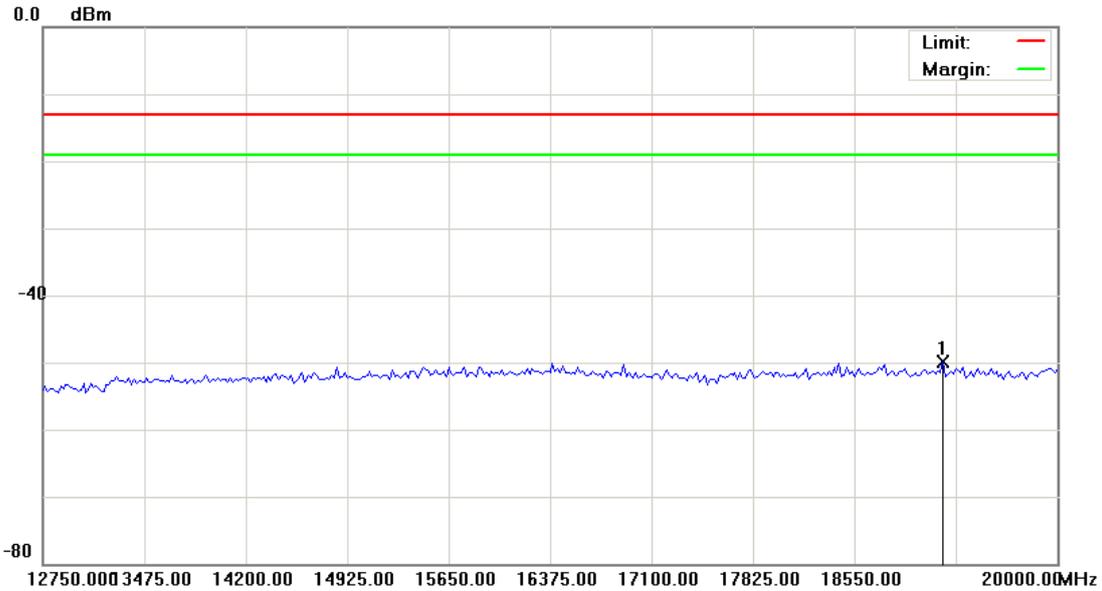
\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH9538)

Data :#6

Date: 2014/9/16

Time: 上午 11:21:52



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz VBW: 3000 KHz
M/N: AC785S-500		
Mode: WCDMA Band II		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	19184.375	-57.18	7.21	-49.97	-13.00	-36.97	peak		

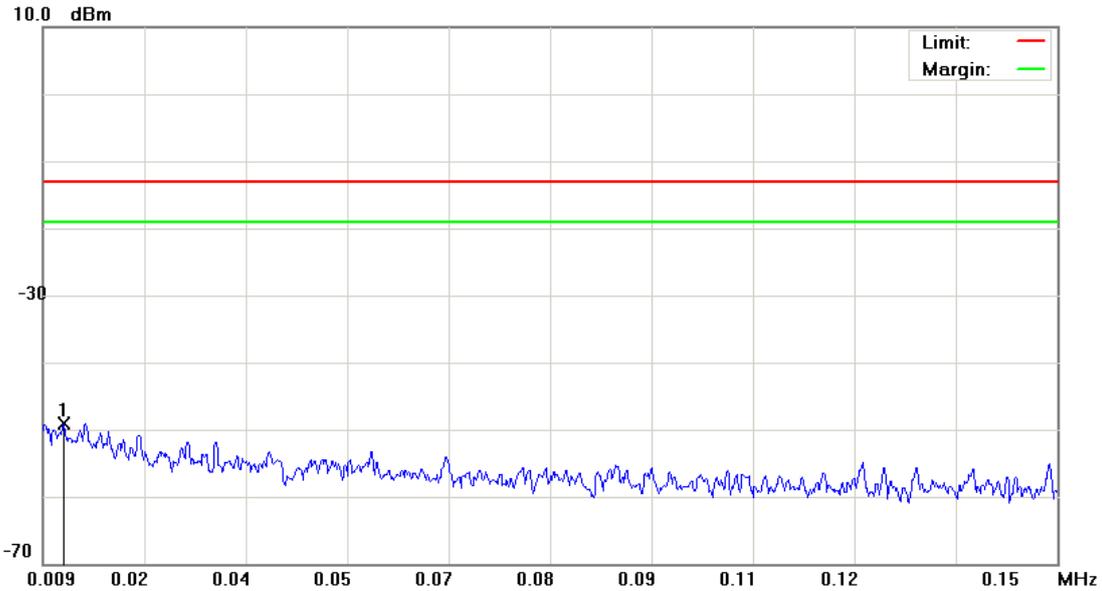
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File :AC785S-500(CH4132)

Data :#1

Date: 2014/9/16

Time: 下午 02:59:41



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1 KHz VBW: 3 KHz
M/N: AC785S-500		
Mode: WCDMA Band V		
Note:		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBm	dB	dBm	dBm	dB	cm	degree
1	*	0.0120	-79.72	30.57	-49.15	-13.00	-36.15	peak	Comment

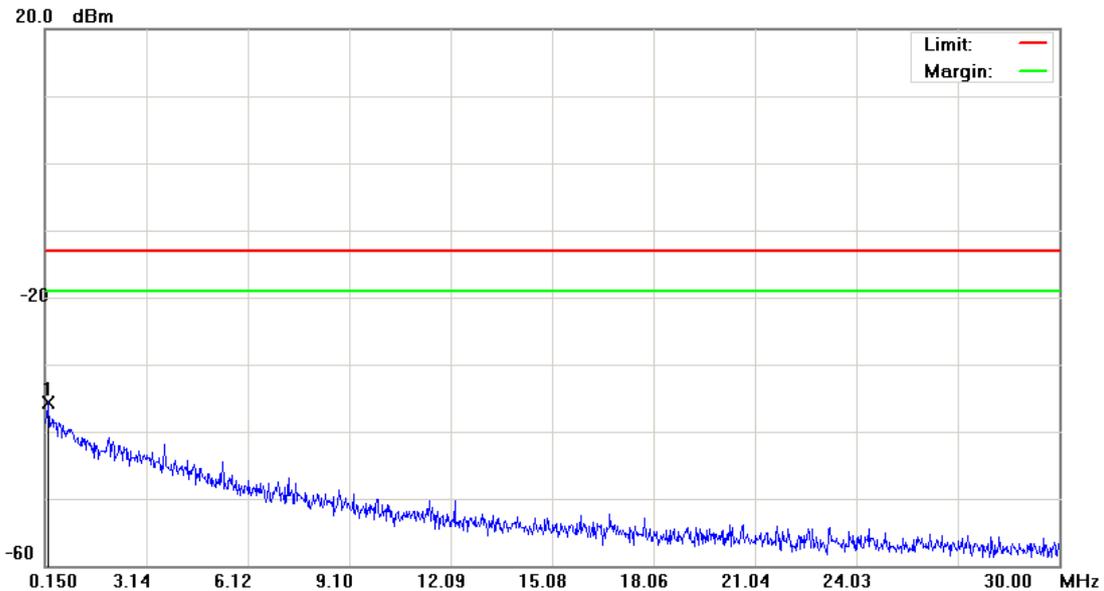
\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH4132)

Data :#2

Date: 2014/9/16

Time: 下午 03:00:05



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 10 KHz VBW: 30 KHz
M/N: AC785S-500		
Mode: WCDMA Band V		
Note:		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBm	dB	dBm	dBm	dB	cm	degree
1	*	0.2395	-66.85	31.24	-35.61	-13.00	-22.61	peak	Comment

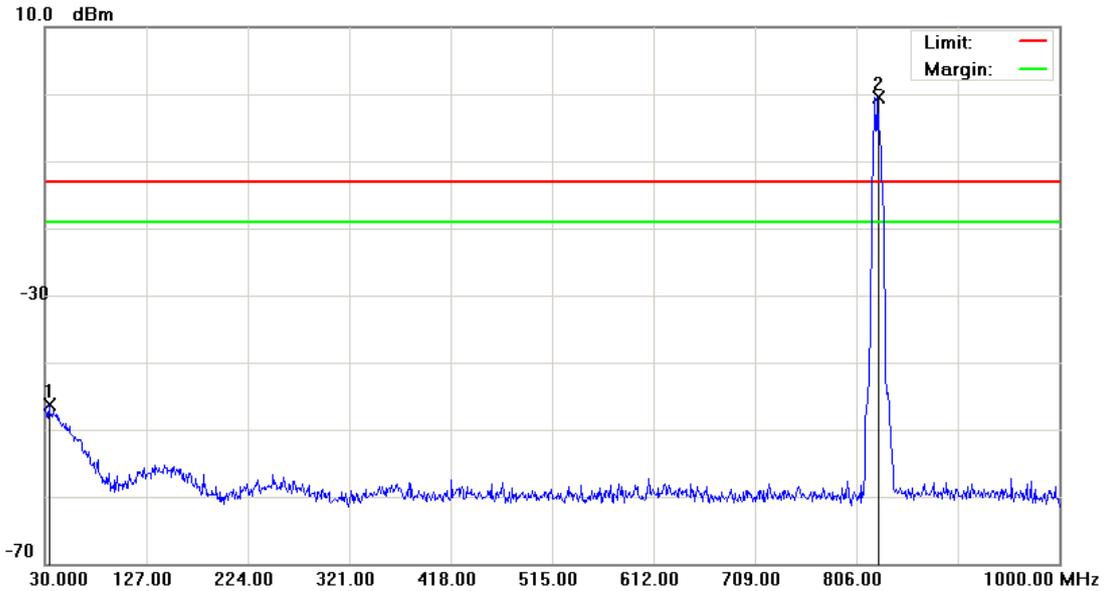
\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH4132)

Data :#3

Date: 2014/9/16

Time: 下午 03:00:29



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 100 KHz VBW: 300 KHz
M/N: AC785S-500		
Mode: WCDMA Band V		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1		34.3650	-63.00	16.72	-46.28	-13.00	-33.28	peak		
2	*	826.8550	-4.35	3.86	-0.49	-13.00	12.51	peak		Tx

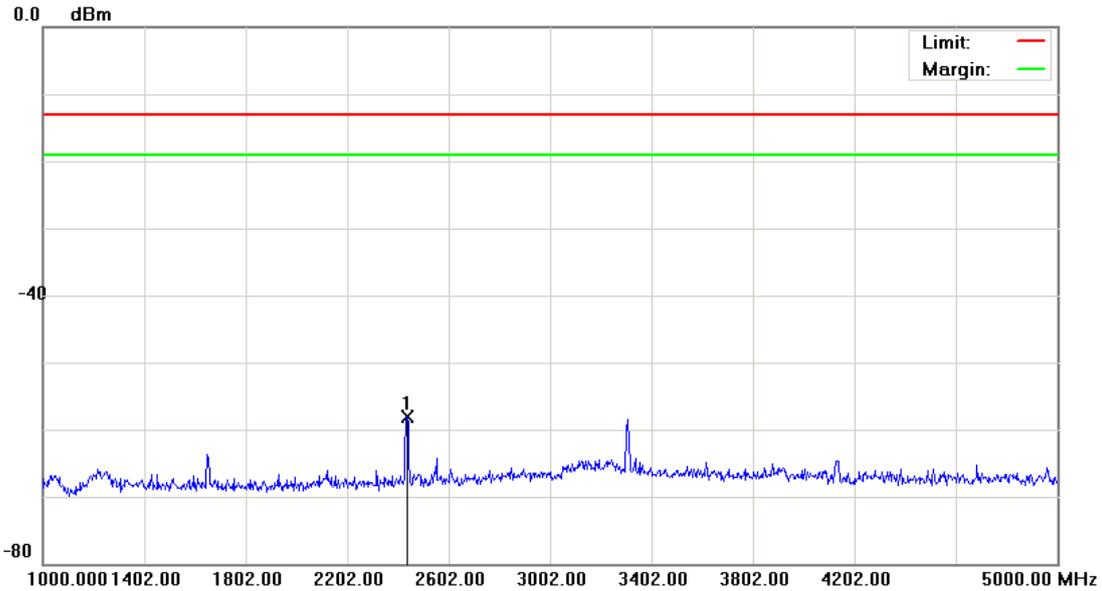
\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH4132)

Data :#4

Date: 2014/9/16

Time: 下午 03:52:13



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz VBW: 3000 KHz
M/N: AC785S-500		
Mode: WCDMA Band V		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	2436.000	-62.64	4.46	-58.18	-13.00	-45.18	peak		

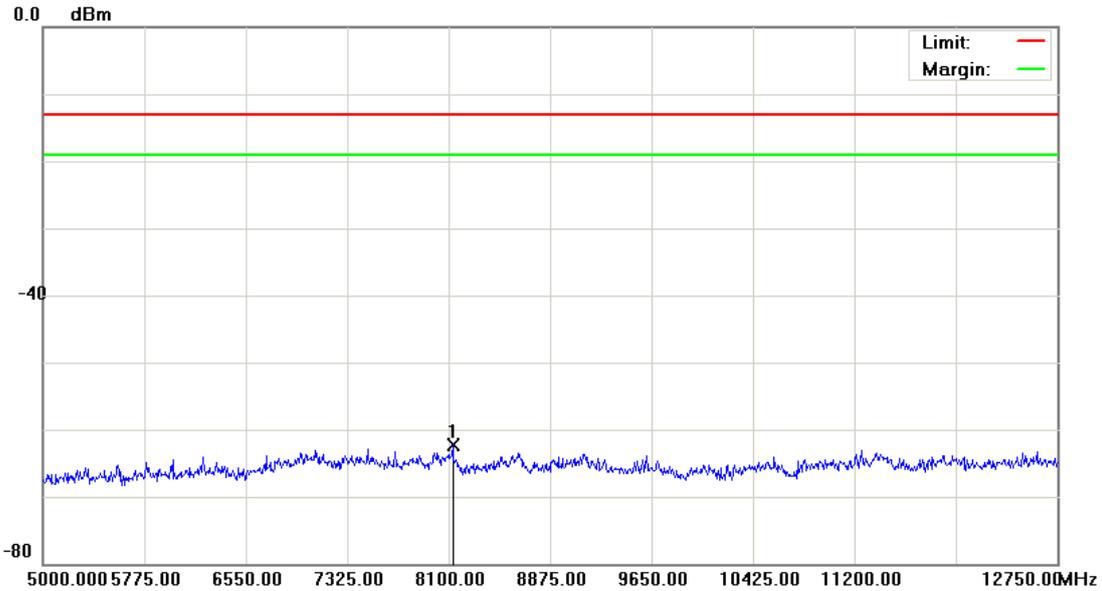
\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH4132)

Data :#5

Date: 2014/9/16

Time: 下午 03:52:36



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz VBW: 3000 KHz
M/N: AC785S-500		
Mode: WCDMA Band V		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	8131.000	-68.04	5.78	-62.26	-13.00	-49.26	peak		

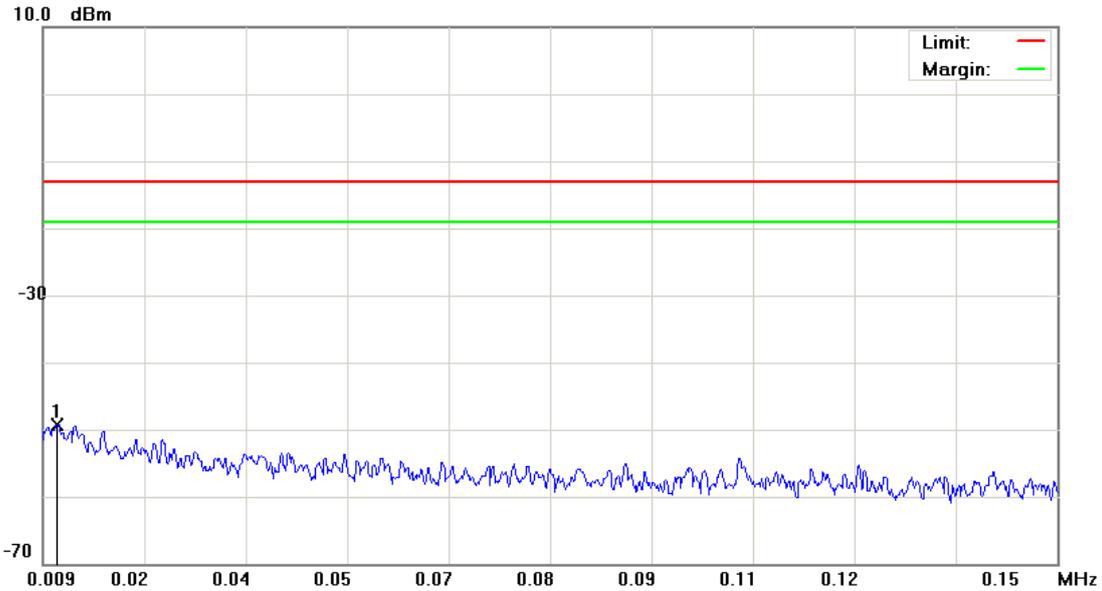
\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH4183)

Data :#1

Date: 2014/9/16

Time: 下午 03:02:20



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1 KHz VBW: 3 KHz
M/N: AC785S-500		
Mode: WCDMA Band V		
Note:		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBm	dB	dBm	dBm	dB	cm	degree
1	*	0.0110	-79.89	30.57	-49.32	-13.00	-36.32	peak	Comment

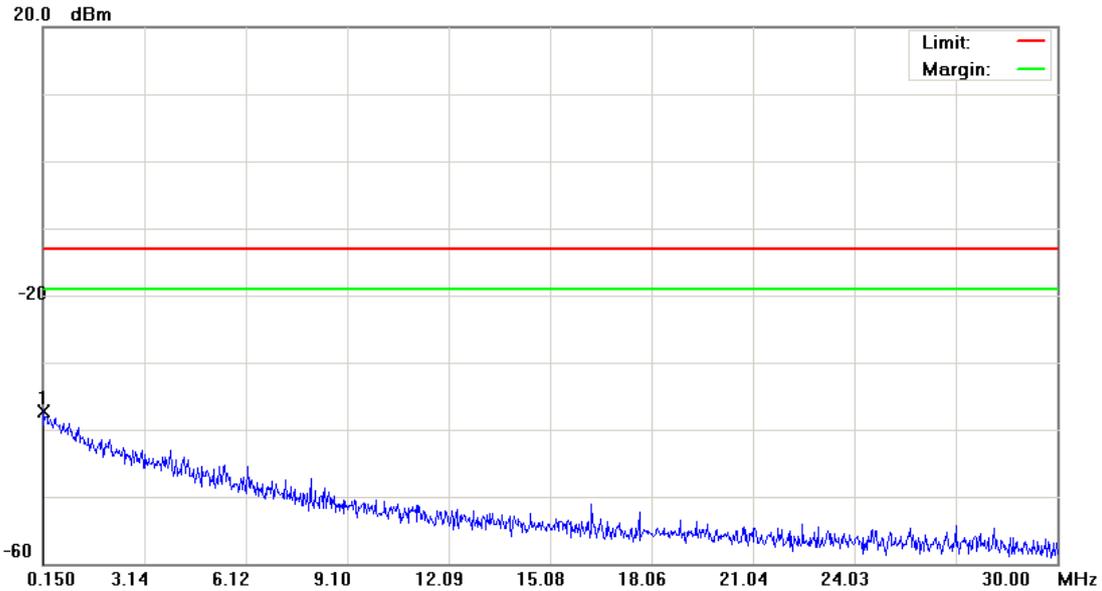
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File :AC785S-500(CH4183)

Data :#2

Date: 2014/9/16

Time: 下午 03:02:44



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 10 KHz VBW: 30 KHz
M/N: AC785S-500		
Mode: WCDMA Band V		
Note:		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBm	dB	dBm	dBm	dB	cm	degree
1	*	0.1500	-67.90	30.51	-37.39	-13.00	-24.39	peak	Comment

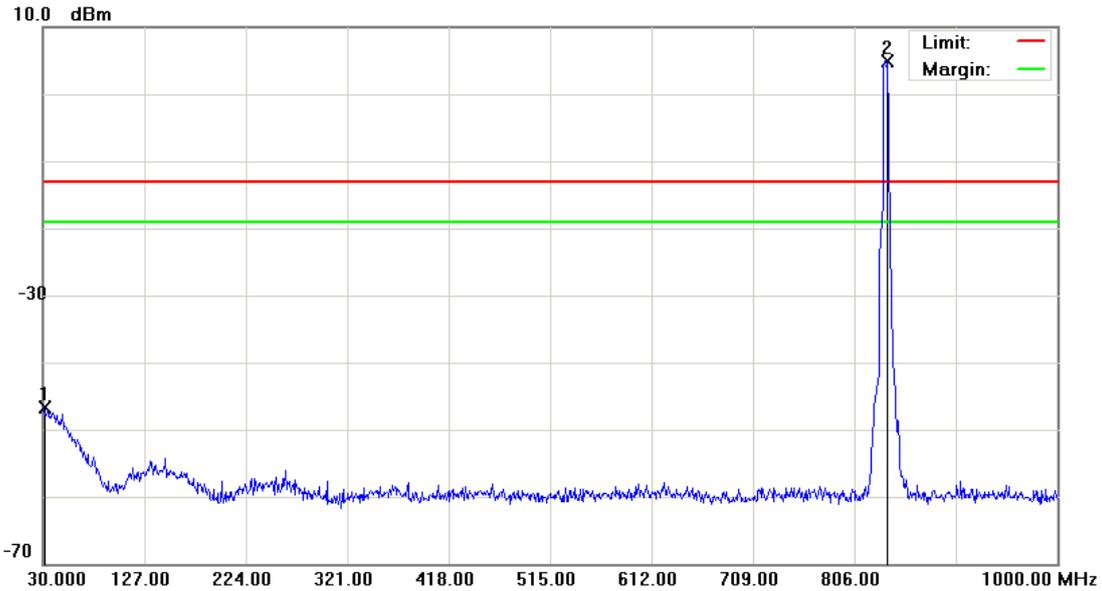
\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH4183)

Data :#3

Date: 2014/9/16

Time: 下午 03:03:08



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 100 KHz VBW: 300 KHz
M/N: AC785S-500		
Mode: WCDMA Band V		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1		31.4550	-63.80	17.05	-46.75	-13.00	-33.75	peak		
2	*	838.0100	0.97	3.97	4.94	-13.00	17.94	peak		Tx

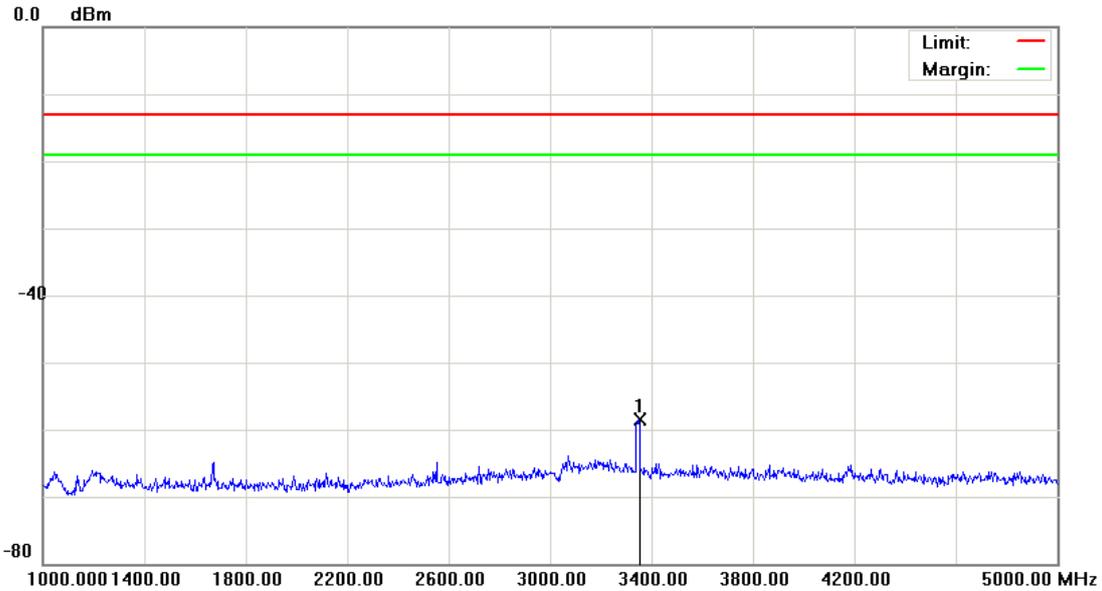
\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH4183)

Data :#4

Date: 2014/9/16

Time: 下午 03:53:19



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz VBW: 3000 KHz
M/N: AC785S-500		
Mode: WCDMA Band V		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	3350.000	-63.03	4.52	-58.51	-13.00	-45.51	peak		

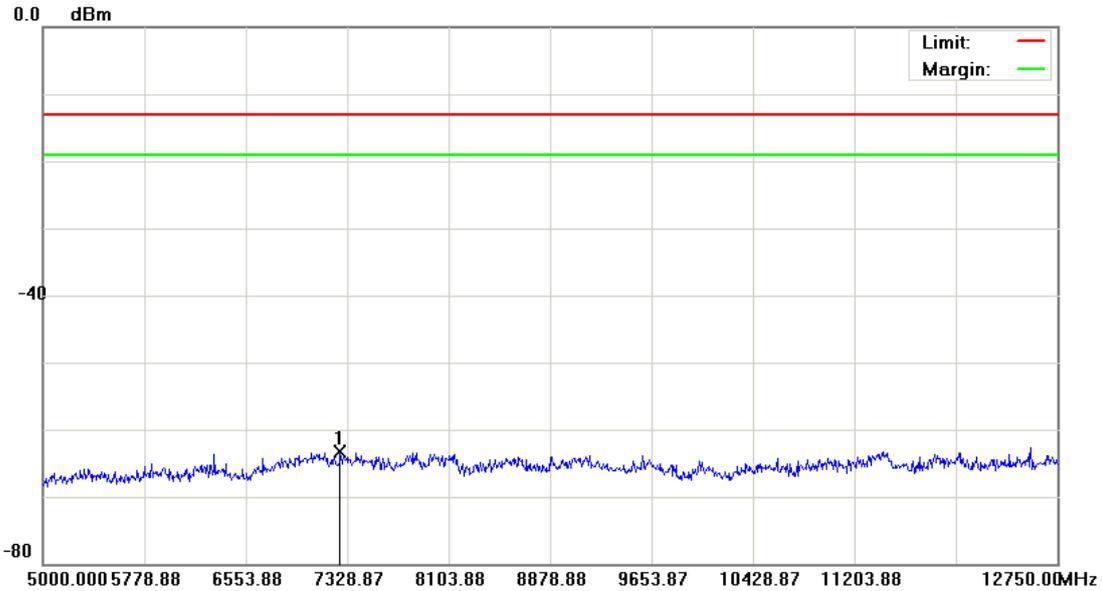
\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH4183)

Data :#5

Date: 2014/9/16

Time: 下午 03:53:42



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz VBW: 3000 KHz
M/N: AC785S-500		
Mode: WCDMA Band V		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	7270.750	-68.24	4.94	-63.30	-13.00	-50.30	peak		

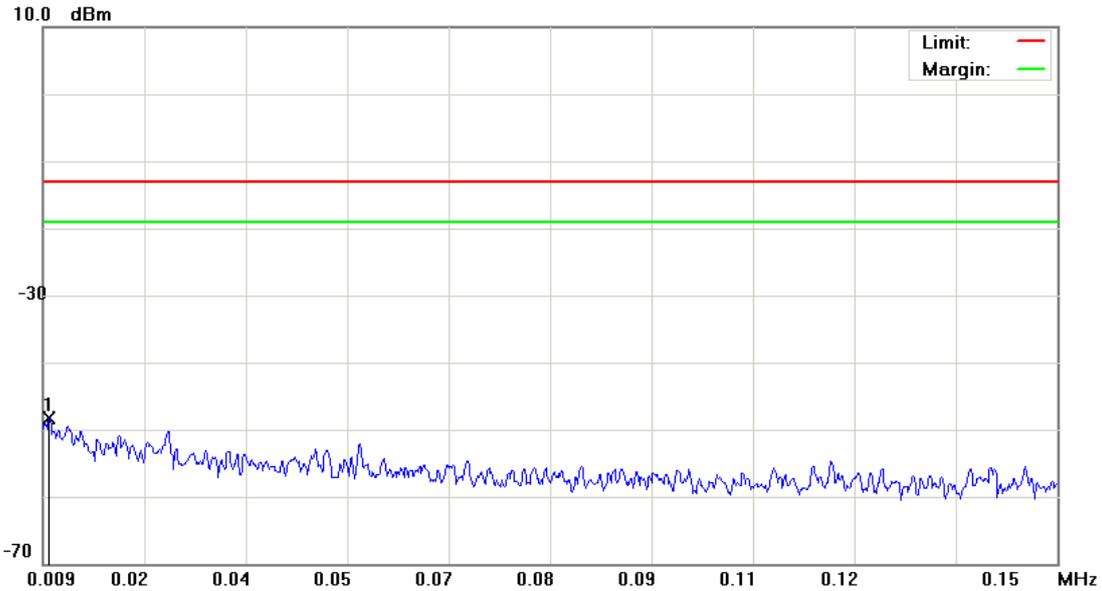
\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH4233)

Data :#1

Date: 2014/9/16

Time: 下午 03:05:38



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1 KHz VBW: 3 KHz
M/N: AC785S-500		
Mode: WCDMA Band V		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	0.0098	-78.81	30.58	-48.23	-13.00	-35.23			peak

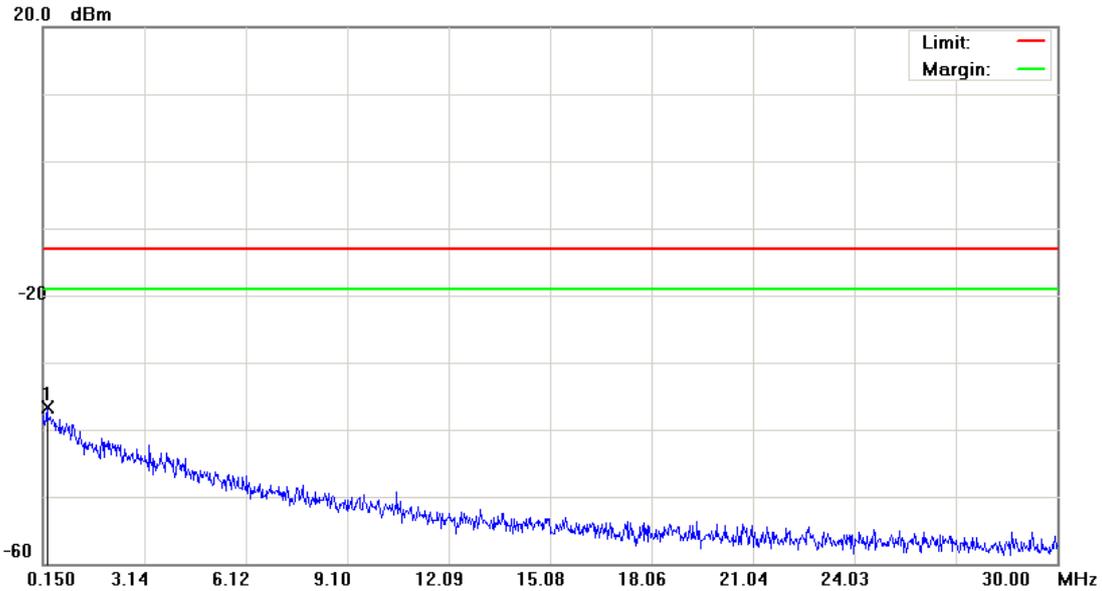
\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH4233)

Data :#2

Date: 2014/9/16

Time: 下午 03:06:02



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 10 KHz VBW: 30 KHz
M/N: AC785S-500		
Mode: WCDMA Band V		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	0.2694	-68.11	31.49	-36.62	-13.00	-23.62	peak		

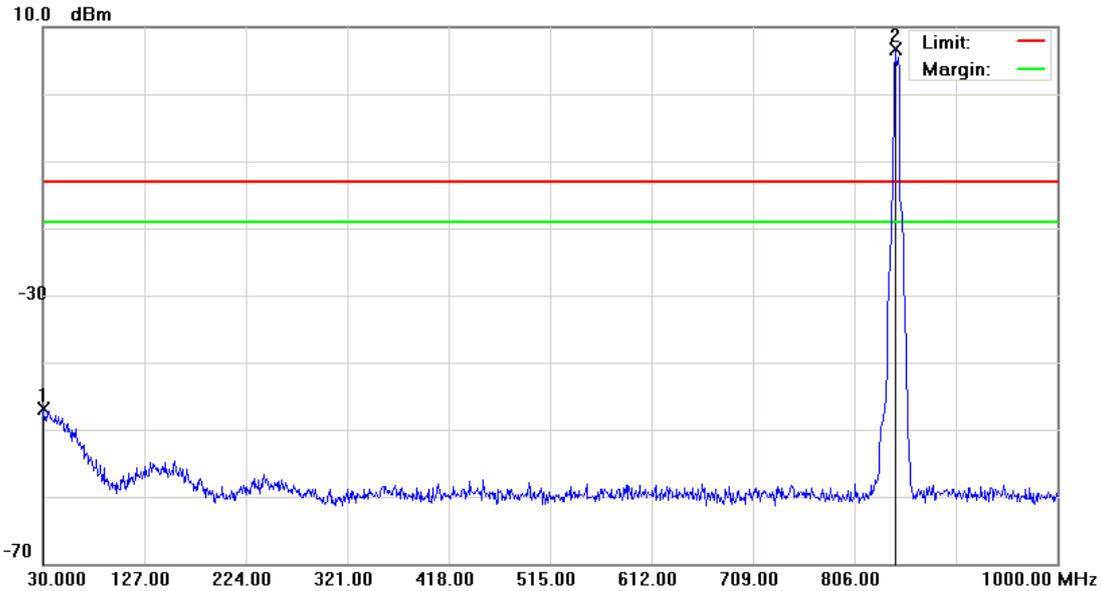
\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH4233)

Data :#3

Date: 2014/9/16

Time: 下午 03:06:26



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 100 KHz VBW: 300 KHz
M/N: AC785S-500		
Mode: WCDMA Band V		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1		30.0000	-64.13	17.21	-46.92	-13.00	-33.92	peak		
2	*	845.2850	2.70	3.99	6.69	-13.00	19.69	peak		Tx

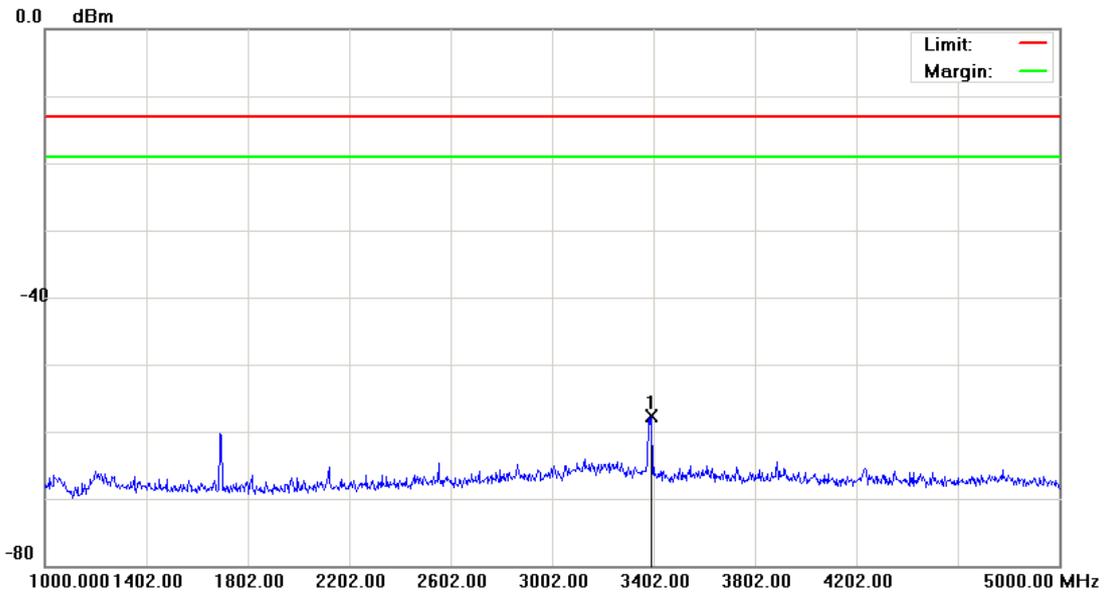
\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH4233)

Data :#4

Date: 2014/9/16

Time: 下午 04:02:01



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz VBW: 3000 KHz
M/N: AC785S-500		
Mode: WCDMA Band V		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	3392.000	-62.24	4.47	-57.77	-13.00	-44.77	peak		

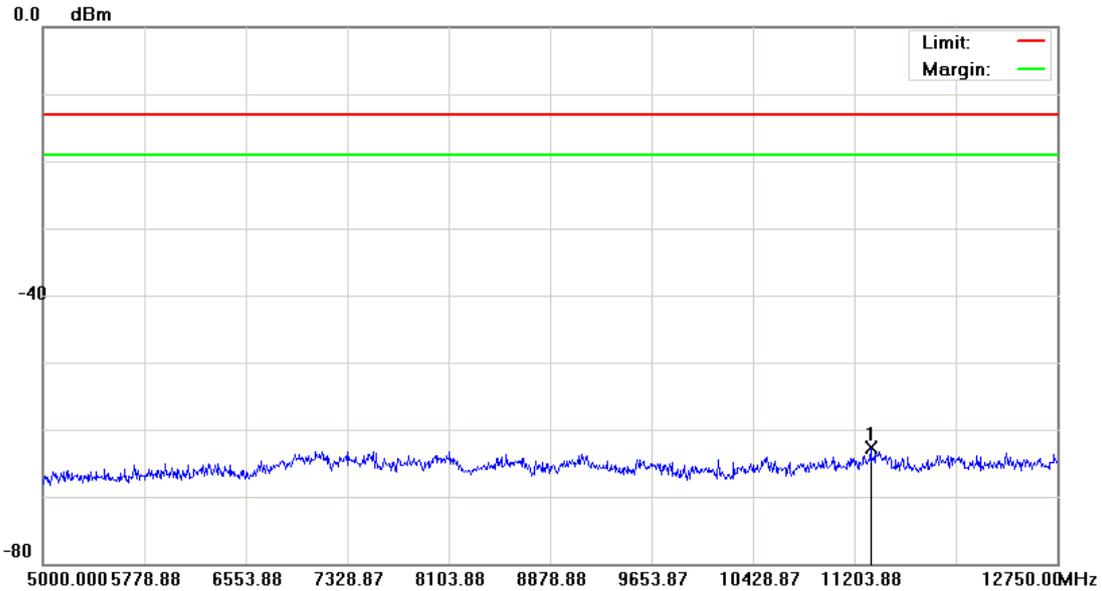
\*:Maximum data    x:Over limit    !:over margin

File :AC785S-500(CH4233)

Data :#5

Date: 2014/9/16

Time: 下午 04:02:24



Site: site #1	Polarization: <i>Conducted Power</i>	Temperature: 26 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: DC 3.7V	Humidity: 55 %
EUT: WWAN Mobile Hotspot Portable Device	Distance:	RBW: 1000 KHz VBW: 3000 KHz
M/N: AC785S-500		
Mode: WCDMA Band V		
Note:		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree	Comment
1	*	11327.875	-67.87	5.08	-62.79	-13.00	-49.79	peak		

\*:Maximum data    x:Over limit    !:over margin

## 8 Field Strength of Spurious Radiation Test

### 8.1. Limit

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10\log(P)$  dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

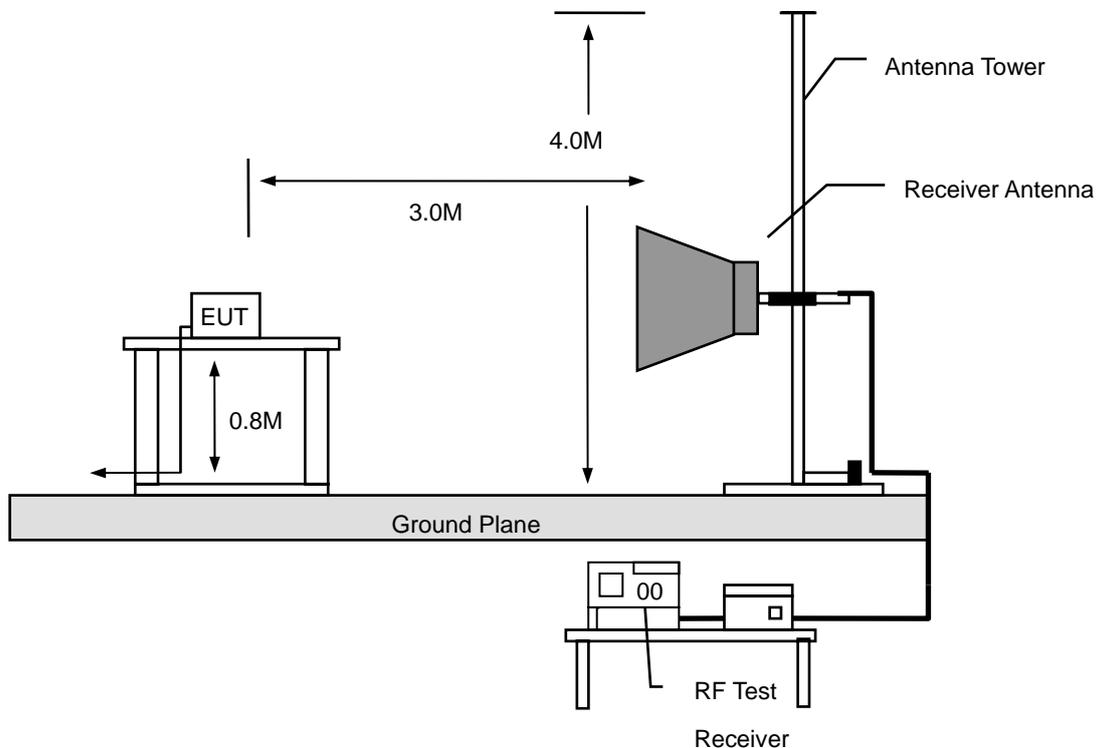
### 8.2. Test Instruments

3 Meter Chamber					
Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
RF Pre-selector	Agilent	N9039A	MY46520256	01/10/2014	(1)
Spectrum Analyzer	Agilent	E4446A	MY46180578	01/10/2014	(1)
Pre Amplifier	Agilent	8449B	3008A02237	02/21/2014	(1)
Pre Amplifier	Agilent	8447D	2944A10961	02/21/2014	(1)
Broadband Antenna (30MHz~1GHz)	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	9163-270	07/22/2014	(1)
Horn Antenna (1~18GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	06/11/2014	(1)
Horn Antenna (18~40GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9170	9170-320	07/02/2014	(1)
Test Site	ATL	TE01	888001	08/28/2014	(1)

Remark: <sup>(1)</sup> Calibration period 1 year. <sup>(2)</sup> Calibration period 2 years.

Note: N.C.R. = No Calibration Request.

### 8.3. Setup



### 8.4. Test Procedure

Final radiation measurements were made on a three-meter, Semi Anechoic Chamber. The EUT system was placed on a nonconductive turntable which is 0.8 meters height, top surface 1.0 x 1.5 meter. The spectrum was examined from 250 MHz to 2.5 GHz in order to cover the whole spectrum below 10th harmonic which could generate from the EUT. During the test, EUT was set to transmit continuously & Measurements spectrum range from 30 MHz to 26.5 GHz is investigated.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, and then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements.

A nonconductive material surrounded the EUT to supporting the EUT for standing on three orthogonal planes. At each condition, the EUT was rotated 360 degrees, and the antenna was raised and lowered from one to four meters to find the maximum emission levels. Measurements were taken using both horizontal and vertical antenna polarization.

SCHWARZBECK MESS-ELEKTRONIK Biconilog Antenna (mode VULB9163) at 3 Meter and the SCHWARZBECK Double Ridged Guide Antenna (model BBHA9120D&9170) was used in frequencies 1 – 26.5 GHz at a distance of 1 meter. All test results were extrapolated to equivalent signal at 3 meters utilizing an inverse linear distance extrapolation Factor (20dB/decade).

For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

Appropriate preamplifiers were used for improving sensitivity and precautions were taken to avoid overloading or desensitizing the spectrum analyzer. No post – detector video filters were used in the test.

The spectrum analyzer's 6 dB bandwidth was set to 1 MHz, and the analyzer was operated in the peak detection mode, for frequencies both below and up 1 GHz. The average levels were obtained by subtracting the duty cycle correction factor from the peak readings.

The following procedures were used to convert the emission levels measured in decibels referenced to 1 microvolt (dBuV) into field intensity in micro volts per meter (uV/m).

The actual field intensity in decibels referenced to 1 microvolt in to field intensity in micro volts per meter (dBuV/m). The actual field intensity in decibels referenced to 1 microvolt per meter (dBuV/m) is determined by algebraically adding the measured reading in dBuV, the antenna factor (dB), and cable loss (dB) and Subtracting the gain of preamplifier (dB) is auto calculate in spectrum analyzer.

$$(1) \text{ Amplitude (dBuV/m) = FI (dBuV) +AF (dBuV) +CL (dBuV)-Gain (dB)}$$

FI= Reading of the field intensity.

AF= Antenna factor.

CL= Cable loss.

P.S Amplitude is auto calculate in spectrum analyzer.

$$(2) \text{ Actual Amplitude (dBuV/m) = Amplitude (dBuV)-Dis(dB)}$$

The FCC specified emission limits were calculated according the EUT operating frequency and by following linear interpolation equations:

(a) For fundamental frequency : Transmitter Output < +30dBm

(b) For spurious frequency : Spurious emission limits = fundamental emission limit /10

## 8.5. Uncertainty

The measurement uncertainty is defined as for Field Strength of Spurious Radiation measurement is  $\pm 3.072$  dB.

**8.6. Test Result**

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC785S-500	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	1	Date:	09/17/2014
Frequency:	824.2 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
84.5000	-65.09	-2.30	-67.39	-13.00	-54.39	peak	H
144.0000	-72.91	2.89	-70.02	-13.00	-57.02	peak	H
286.0000	-75.57	-4.29	-79.86	-13.00	-66.86	peak	H
366.5000	-77.61	-0.52	-78.13	-13.00	-65.13	peak	H
515.0000	-80.14	6.65	-73.49	-13.00	-60.49	peak	H
630.0000	-78.45	6.70	-71.75	-13.00	-58.75	peak	H
3268.000	-70.32	12.26	-58.06	-13.00	-45.06	peak	H
4756.000	-74.27	15.38	-58.89	-13.00	-45.89	peak	H
7084.000	-73.93	23.76	-50.17	-13.00	-37.17	peak	H
129.0000	-80.01	18.07	-61.94	-13.00	-48.94	peak	V
201.5000	-79.54	9.59	-69.95	-13.00	-56.95	peak	V
289.5000	-80.36	1.22	-79.14	-13.00	-66.14	peak	V
461.0000	-80.09	1.11	-78.98	-13.00	-65.98	peak	V
581.0000	-80.46	5.00	-75.46	-13.00	-62.46	peak	V
685.5000	-79.95	9.57	-70.38	-13.00	-57.38	peak	V
3292.000	-72.22	15.73	-56.49	-13.00	-43.49	peak	V
4804.000	-74.26	19.67	-54.59	-13.00	-41.59	peak	V
7204.000	-73.00	21.76	-51.24	-13.00	-38.24	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC785S-500	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	1	Date:	09/17/2014
Frequency:	836.6 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
85.5000	-64.65	-2.10	-66.75	-13.00	-53.75	peak	H
144.0000	-73.92	2.89	-71.03	-13.00	-58.03	peak	H
201.0000	-81.34	2.37	-78.97	-13.00	-65.97	peak	H
366.5000	-77.66	-0.52	-78.18	-13.00	-65.18	peak	H
474.5000	-78.97	4.69	-74.28	-13.00	-61.28	peak	H
630.0000	-77.99	6.70	-71.29	-13.00	-58.29	peak	H
3316.000	-72.32	12.41	-59.91	-13.00	-46.91	peak	H
4684.000	-73.90	14.98	-58.92	-13.00	-45.92	peak	H
7120.000	-73.77	23.86	-49.91	-13.00	-36.91	peak	H
160.5000	-78.86	18.21	-60.65	-13.00	-47.65	peak	V
200.0000	-80.73	9.81	-70.92	-13.00	-57.92	peak	V
288.0000	-80.14	1.08	-79.06	-13.00	-66.06	peak	V
440.5000	-79.85	0.84	-79.01	-13.00	-66.01	peak	V
615.5000	-80.22	7.82	-72.40	-13.00	-59.40	peak	V
693.0000	-79.48	9.85	-69.63	-13.00	-56.63	peak	V
3292.000	-72.04	15.73	-56.31	-13.00	-43.31	peak	V
4756.000	-72.86	19.59	-53.27	-13.00	-40.27	peak	V
7120.000	-73.73	21.63	-52.10	-13.00	-39.10	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC785S-500	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	1	Date:	09/17/2014
Frequency:	848.8 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
85.5000	-66.01	-2.10	-68.11	-13.00	-55.11	peak	H
144.0000	-74.00	2.89	-71.11	-13.00	-58.11	peak	H
288.0000	-75.54	-4.10	-79.64	-13.00	-66.64	peak	H
365.0000	-77.52	-0.58	-78.10	-13.00	-65.10	peak	H
493.5000	-80.92	5.80	-75.12	-13.00	-62.12	peak	H
658.5000	-79.05	6.78	-72.27	-13.00	-59.27	peak	H
3268.000	-70.73	12.26	-58.47	-13.00	-45.47	peak	H
4756.000	-72.59	15.38	-57.21	-13.00	-44.21	peak	H
7180.000	-74.92	24.04	-50.88	-13.00	-37.88	peak	H
132.0000	-78.34	18.46	-59.88	-13.00	-46.88	peak	V
200.5000	-78.67	9.73	-68.94	-13.00	-55.94	peak	V
366.5000	-78.71	1.37	-77.34	-13.00	-64.34	peak	V
465.5000	-79.65	1.24	-78.41	-13.00	-65.41	peak	V
613.5000	-80.41	7.65	-72.76	-13.00	-59.76	peak	V
676.5000	-80.55	9.31	-71.24	-13.00	-58.24	peak	V
3268.000	-71.70	15.57	-56.13	-13.00	-43.13	peak	V
4732.000	-75.69	19.54	-56.15	-13.00	-43.15	peak	V
7036.000	-75.64	21.52	-54.12	-13.00	-41.12	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC785S-500	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	2	Date:	09/17/2014
Frequency:	1850.2 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
84.5000	-64.09	-2.30	-66.39	-13.00	-53.39	peak	H
201.0000	-80.76	2.37	-78.39	-13.00	-65.39	peak	H
288.0000	-73.06	-4.10	-77.16	-13.00	-64.16	peak	H
440.0000	-79.99	3.27	-76.72	-13.00	-63.72	peak	H
572.5000	-78.40	6.69	-71.71	-13.00	-58.71	peak	H
687.5000	-78.43	6.83	-71.60	-13.00	-58.60	peak	H
3292.000	-71.43	12.35	-59.08	-13.00	-46.08	peak	H
4708.000	-74.99	15.11	-59.88	-13.00	-46.88	peak	H
7120.000	-75.12	23.86	-51.26	-13.00	-38.26	peak	H
129.0000	-80.02	18.07	-61.95	-13.00	-48.95	peak	V
203.0000	-81.61	9.38	-72.23	-13.00	-59.23	peak	V
299.0000	-80.89	2.06	-78.83	-13.00	-65.83	peak	V
469.5000	-81.06	1.34	-79.72	-13.00	-66.72	peak	V
602.5000	-80.81	6.70	-74.11	-13.00	-61.11	peak	V
714.0000	-81.19	10.57	-70.62	-13.00	-57.62	peak	V
3340.000	-71.04	16.02	-55.02	-13.00	-42.02	peak	V
4708.000	-74.15	19.49	-54.66	-13.00	-41.66	peak	V
7180.000	-72.41	21.74	-50.67	-13.00	-37.67	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC785S-500	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	2	Date:	09/17/2014
Frequency:	1880.0 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
79.0000	-64.39	-2.79	-67.18	-13.00	-54.18	peak	H
144.0000	-73.18	2.89	-70.29	-13.00	-57.29	peak	H
288.0000	-73.05	-4.10	-77.15	-13.00	-64.15	peak	H
347.5000	-77.90	-1.08	-78.98	-13.00	-65.98	peak	H
539.5000	-79.81	7.34	-72.47	-13.00	-59.47	peak	H
687.5000	-79.48	6.83	-72.65	-13.00	-59.65	peak	H
3292.000	-72.21	12.35	-59.86	-13.00	-46.86	peak	H
4708.000	-70.96	15.11	-55.85	-13.00	-42.85	peak	H
7156.000	-74.16	23.97	-50.19	-13.00	-37.19	peak	H
130.5000	-79.18	19.05	-60.13	-13.00	-47.13	peak	V
200.0000	-80.61	9.81	-70.80	-13.00	-57.80	peak	V
366.5000	-79.42	1.37	-78.05	-13.00	-65.05	peak	V
487.5000	-80.63	1.76	-78.87	-13.00	-65.87	peak	V
651.5000	-81.48	8.66	-72.82	-13.00	-59.82	peak	V
709.0000	-80.46	10.40	-70.06	-13.00	-57.06	peak	V
3316.000	-71.48	15.87	-55.61	-13.00	-42.61	peak	V
4756.000	-73.23	19.59	-53.64	-13.00	-40.64	peak	V
7156.000	-74.67	21.69	-52.98	-13.00	-39.98	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC785S-500	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	2	Date:	09/17/2014
Frequency:	1909.8 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
79.5000	-63.72	-3.03	-66.75	-13.00	-53.75	peak	H
144.0000	-73.75	2.89	-70.86	-13.00	-57.86	peak	H
288.0000	-73.06	-4.10	-77.16	-13.00	-64.16	peak	H
366.5000	-78.16	-0.52	-78.68	-13.00	-65.68	peak	H
523.0000	-81.16	6.88	-74.28	-13.00	-61.28	peak	H
687.5000	-80.44	6.83	-73.61	-13.00	-60.61	peak	H
3292.000	-71.88	12.35	-59.53	-13.00	-46.53	peak	H
4720.000	-74.11	15.18	-58.93	-13.00	-45.93	peak	H
7072.000	-74.78	23.73	-51.05	-13.00	-38.05	peak	H
137.5000	-74.14	16.23	-57.91	-13.00	-44.91	peak	V
203.0000	-80.76	9.38	-71.38	-13.00	-58.38	peak	V
349.0000	-79.88	0.99	-78.89	-13.00	-65.89	peak	V
448.0000	-79.70	0.97	-78.73	-13.00	-65.73	peak	V
599.0000	-79.97	6.41	-73.56	-13.00	-60.56	peak	V
719.0000	-81.51	10.73	-70.78	-13.00	-57.78	peak	V
3328.000	-72.25	15.95	-56.30	-13.00	-43.30	peak	V
4684.000	-74.11	19.45	-54.66	-13.00	-41.66	peak	V
7072.000	-75.38	21.56	-53.82	-13.00	-40.82	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC785S-500	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	5	Date:	09/17/2014
Frequency:	1852.4 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
81.0000	-65.15	-3.06	-68.21	-13.00	-55.21	peak	H
144.0000	-72.96	2.89	-70.07	-13.00	-57.07	peak	H
288.0000	-72.57	-4.10	-76.67	-13.00	-63.67	peak	H
365.5000	-77.63	-0.56	-78.19	-13.00	-65.19	peak	H
538.5000	-80.86	7.30	-73.56	-13.00	-60.56	peak	H
658.5000	-81.48	6.78	-74.70	-13.00	-61.70	peak	H
3244.000	-70.22	12.19	-58.03	-13.00	-45.03	peak	H
4672.000	-74.59	14.92	-59.67	-13.00	-46.67	peak	H
7084.000	-74.24	23.76	-50.48	-13.00	-37.48	peak	H
129.5000	-78.38	18.68	-59.70	-13.00	-46.70	peak	V
201.5000	-81.91	9.59	-72.32	-13.00	-59.32	peak	V
300.5000	-81.38	2.11	-79.27	-13.00	-66.27	peak	V
365.0000	-80.30	1.42	-78.88	-13.00	-65.88	peak	V
575.0000	-81.32	4.53	-76.79	-13.00	-63.79	peak	V
713.5000	-81.29	10.55	-70.74	-13.00	-57.74	peak	V
3280.000	-70.39	15.65	-54.74	-13.00	-41.74	peak	V
4708.000	-73.54	19.49	-54.05	-13.00	-41.05	peak	V
7120.000	-74.52	21.63	-52.89	-13.00	-39.89	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC785S-500	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	5	Date:	09/17/2014
Frequency:	1880.0 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
80.0000	-63.68	-3.26	-66.94	-13.00	-53.94	peak	H
144.0000	-71.82	2.89	-68.93	-13.00	-55.93	peak	H
288.0000	-72.98	-4.10	-77.08	-13.00	-64.08	peak	H
365.0000	-77.07	-0.58	-77.65	-13.00	-64.65	peak	H
515.0000	-80.21	6.65	-73.56	-13.00	-60.56	peak	H
676.0000	-80.10	6.82	-73.28	-13.00	-60.28	peak	H
3376.000	-72.36	12.60	-59.76	-13.00	-46.76	peak	H
4708.000	-73.62	15.11	-58.51	-13.00	-45.51	peak	H
7156.000	-74.16	23.97	-50.19	-13.00	-37.19	peak	H
130.0000	-76.12	19.26	-56.86	-13.00	-43.86	peak	V
202.0000	-81.53	9.52	-72.01	-13.00	-59.01	peak	V
297.5000	-81.90	1.93	-79.97	-13.00	-66.97	peak	V
481.0000	-80.75	1.67	-79.08	-13.00	-66.08	peak	V
627.0000	-80.67	8.20	-72.47	-13.00	-59.47	peak	V
669.5000	-79.08	9.19	-69.89	-13.00	-56.89	peak	V
3328.000	-71.79	15.95	-55.84	-13.00	-42.84	peak	V
4672.000	-74.44	19.43	-55.01	-13.00	-42.01	peak	V
7120.000	-74.60	21.63	-52.97	-13.00	-39.97	peak	V

Standard:	FCC Part 24	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC785S-500	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	5	Date:	09/17/2014
Frequency:	1907.6 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
84.0000	-64.48	-2.41	-66.89	-13.00	-53.89	peak	H
144.0000	-73.16	2.89	-70.27	-13.00	-57.27	peak	H
288.0000	-73.63	-4.10	-77.73	-13.00	-64.73	peak	H
366.5000	-77.46	-0.52	-77.98	-13.00	-64.98	peak	H
513.0000	-81.55	6.58	-74.97	-13.00	-61.97	peak	H
692.5000	-81.09	6.85	-74.24	-13.00	-61.24	peak	H
3268.000	-72.35	12.26	-60.09	-13.00	-47.09	peak	H
4708.000	-74.71	15.11	-59.60	-13.00	-46.60	peak	H
7108.000	-74.52	23.84	-50.68	-13.00	-37.68	peak	H
133.5000	-76.17	17.84	-58.33	-13.00	-45.33	peak	V
201.5000	-81.89	9.59	-72.30	-13.00	-59.30	peak	V
288.0000	-80.04	1.08	-78.96	-13.00	-65.96	peak	V
428.5000	-80.98	0.68	-80.30	-13.00	-67.30	peak	V
606.0000	-80.60	7.01	-73.59	-13.00	-60.59	peak	V
724.5000	-81.32	10.68	-70.64	-13.00	-57.64	peak	V
3292.000	-71.66	15.73	-55.93	-13.00	-42.93	peak	V
4756.000	-72.52	19.59	-52.93	-13.00	-39.93	peak	V
7168.000	-74.40	21.72	-52.68	-13.00	-39.68	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC785S-500	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	6	Date:	09/17/2014
Frequency:	826.4 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
84.5000	-66.36	-2.30	-68.66	-13.00	-55.66	peak	H
144.0000	-72.44	2.89	-69.55	-13.00	-56.55	peak	H
288.0000	-74.89	-4.10	-78.99	-13.00	-65.99	peak	H
366.5000	-78.11	-0.52	-78.63	-13.00	-65.63	peak	H
524.5000	-80.98	6.92	-74.06	-13.00	-61.06	peak	H
658.5000	-80.39	6.78	-73.61	-13.00	-60.61	peak	H
3244.000	-71.09	12.19	-58.90	-13.00	-45.90	peak	H
4732.000	-73.55	15.24	-58.31	-13.00	-45.31	peak	H
7072.000	-73.57	23.73	-49.84	-13.00	-36.84	peak	H
134.0000	-72.49	17.64	-54.85	-13.00	-41.85	peak	V
200.5000	-81.61	9.73	-71.88	-13.00	-58.88	peak	V
296.0000	-80.79	1.79	-79.00	-13.00	-66.00	peak	V
366.5000	-80.50	1.37	-79.13	-13.00	-66.13	peak	V
592.5000	-81.73	5.91	-75.82	-13.00	-62.82	peak	V
679.0000	-80.02	9.35	-70.67	-13.00	-57.67	peak	V
3268.000	-71.67	15.57	-56.10	-13.00	-43.10	peak	V
4672.000	-74.30	19.43	-54.87	-13.00	-41.87	peak	V
7108.000	-74.44	21.63	-52.81	-13.00	-39.81	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC785S-500	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	6	Date:	09/17/2014
Frequency:	836.6 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
84.5000	-64.72	-2.30	-67.02	-13.00	-54.02	peak	H
144.0000	-73.81	2.89	-70.92	-13.00	-57.92	peak	H
288.0000	-73.89	-4.10	-77.99	-13.00	-64.99	peak	H
366.5000	-79.22	-0.52	-79.74	-13.00	-66.74	peak	H
508.0000	-81.05	6.43	-74.62	-13.00	-61.62	peak	H
658.5000	-78.58	6.78	-71.80	-13.00	-58.80	peak	H
3244.000	-70.55	12.19	-58.36	-13.00	-45.36	peak	H
4756.000	-74.33	15.38	-58.95	-13.00	-45.95	peak	H
7120.000	-74.50	23.86	-50.64	-13.00	-37.64	peak	H
134.5000	-74.35	17.44	-56.91	-13.00	-43.91	peak	V
201.0000	-80.90	9.68	-71.22	-13.00	-58.22	peak	V
294.5000	-80.82	1.66	-79.16	-13.00	-66.16	peak	V
463.5000	-80.33	1.19	-79.14	-13.00	-66.14	peak	V
612.5000	-80.30	7.58	-72.72	-13.00	-59.72	peak	V
707.5000	-81.24	10.36	-70.88	-13.00	-57.88	peak	V
3292.000	-72.12	15.73	-56.39	-13.00	-43.39	peak	V
4684.000	-73.64	19.45	-54.19	-13.00	-41.19	peak	V
7180.000	-73.87	21.74	-52.13	-13.00	-39.13	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC785S-500	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	6	Date:	09/17/2014
Frequency:	846.6 MHz	Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
85.5000	-66.19	-2.10	-68.29	-13.00	-55.29	peak	H
144.0000	-73.85	2.89	-70.96	-13.00	-57.96	peak	H
288.0000	-72.62	-4.10	-76.72	-13.00	-63.72	peak	H
366.5000	-79.07	-0.52	-79.59	-13.00	-66.59	peak	H
537.0000	-80.67	7.26	-73.41	-13.00	-60.41	peak	H
647.5000	-80.25	6.50	-73.75	-13.00	-60.75	peak	H
3340.000	-71.08	12.49	-58.59	-13.00	-45.59	peak	H
4768.000	-73.96	15.44	-58.52	-13.00	-45.52	peak	H
7072.000	-73.55	23.73	-49.82	-13.00	-36.82	peak	H
134.0000	-73.98	17.64	-56.34	-13.00	-43.34	peak	V
202.0000	-80.30	9.52	-70.78	-13.00	-57.78	peak	V
299.0000	-81.14	2.06	-79.08	-13.00	-66.08	peak	V
365.5000	-80.13	1.40	-78.73	-13.00	-65.73	peak	V
493.5000	-80.30	1.86	-78.44	-13.00	-65.44	peak	V
709.0000	-79.94	10.40	-69.54	-13.00	-56.54	peak	V
3316.000	-72.53	15.87	-56.66	-13.00	-43.66	peak	V
4756.000	-73.86	19.59	-54.27	-13.00	-41.27	peak	V
7120.000	-74.25	21.63	-52.62	-13.00	-39.62	peak	V

Standard:	RSS-Gen	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AC785S-500	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	7	Date:	09/17/2014
		Test By:	Eric Ou Yang

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
3030.000	36.86	-0.11	36.75	74.00	-37.25	peak	H
4542.000	33.88	4.31	38.19	74.00	-35.81	peak	H
6698.000	34.02	10.03	44.05	74.00	-29.95	peak	H
3030.000	35.73	-0.11	35.62	74.00	-38.38	peak	V
4626.000	33.56	4.52	38.08	74.00	-35.92	peak	V
6733.000	32.98	10.13	43.11	74.00	-30.89	peak	V

## 9 Frequency Stability (Temperature & Voltage Variation) Test

### 9.1. Limit

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within  $\pm 0.00025\%$  ( $\pm 2.5\text{ppm}$ ) of the center frequency.

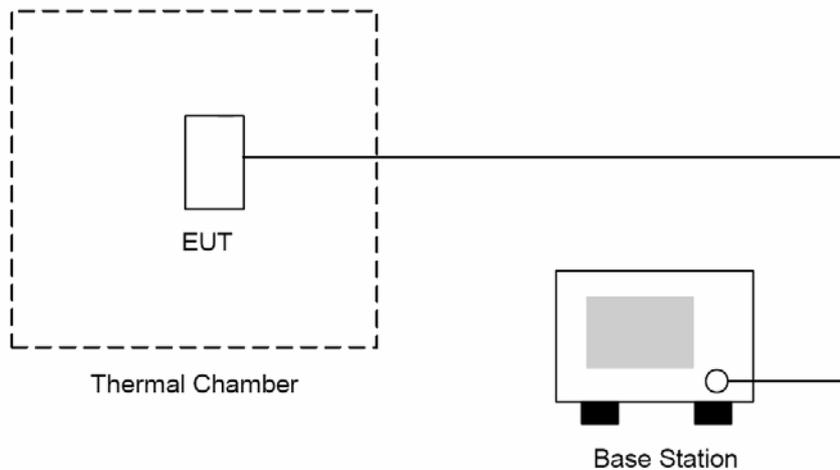
### 9.2. Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Universal Radio Communication Tester	R & S	CMU200	109369	08/11/2014	(2)
Temperature & Humidity Chamber	TAICHY	MHU-225LA	980729	08/14/2014	(1)
Test Site	ATL	TE05	TE05	N.C.R.	-----

Remark: <sup>(1)</sup> Calibration period 1 year. <sup>(2)</sup> Calibration period 2 years.

Note: N.C.R. = No Calibration Request.

### 9.3. Setup



#### **9.4. Test Procedure**

The measurement is made according to FCC rules part 22 and 24:

1. The EUT and test equipment were set up as shown on the following section.
2. With all power removed, the temperature was decreased to  $-30^{\circ}\text{C}$  and permitted to stabilize for three hours. Power was applied and the maximum change in frequency was note within one minute.
3. With power OFF, the temperature was raised in  $10^{\circ}\text{C}$  steps. The sample was permitted to stabilize at each step for at least one-half hour. Power was applied and the maximum frequency change was noted within one minute.
4. The EUT was placed in a temperature chamber at  $25 \pm 5^{\circ}\text{C}$  and connected as the following section.
5. The power supply voltage to the EUT was varied from BEP to 115% of the nominal value measured at the input to the EUT.
6. The temperature tests were performed for the worst case.
7. Test data was recorded.

#### **9.5. Uncertainty**

The measurement uncertainty is defined as for Frequency Stability (Temperature Variation) measurement is  $\pm 10\text{Hz}$ .

**9.6. Test Result**

Model Number	AC785S-500					
Test Item	Frequency Stability (Temperature & Voltage Variation)					
Test Mode	Mode 1					
Date of Test	09/16/2014				Test Site	TE05
Level	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
Normal	3.70	-30	33	0.039	±2.5	Pass
Normal	3.70	-20	25	0.030	±2.5	Pass
Normal	3.70	-10	27	0.032	±2.5	Pass
Normal	3.70	0	36	0.043	±2.5	Pass
Normal	3.70	10	31	0.037	±2.5	Pass
Battery full point	4.25	20	30	0.036	±2.5	Pass
Normal	3.70	20	27	0.032	±2.5	Pass
Battery cut-off point	3.60	20	33	0.039	±2.5	Pass
Normal	3.70	30	31	0.037	±2.5	Pass
Normal	3.70	40	29	0.035	±2.5	Pass
Normal	3.70	50	30	0.036	±2.5	Pass

Model Number	AC785S-500					
Test Item	Frequency Stability (Temperature & Voltage Variation)					
Test Mode	Mode 2					
Date of Test	09/16/2014				Test Site	TE05
Level	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
Normal	3.70	-30	76	0.040	±2.5	Pass
Normal	3.70	-20	70	0.037	±2.5	Pass
Normal	3.70	-10	73	0.039	±2.5	Pass
Normal	3.70	0	59	0.031	±2.5	Pass
Normal	3.70	10	63	0.034	±2.5	Pass
Battery full point	4.25	20	76	0.040	±2.5	Pass
Normal	3.70	20	69	0.037	±2.5	Pass
Battery cut-off point	3.60	20	71	0.038	±2.5	Pass
Normal	3.70	30	77	0.041	±2.5	Pass
Normal	3.70	40	63	0.034	±2.5	Pass
Normal	3.70	50	51	0.027	±2.5	Pass

Model Number	AC785S-500					
Test Item	Frequency Stability (Temperature & Voltage Variation)					
Test Mode	Mode 5					
Date of Test	09/16/2014				Test Site	TE05
Level	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
Normal	3.70	-30	-6	-0.007	±2.5	Pass
Normal	3.70	-20	-11	-0.013	±2.5	Pass
Normal	3.70	-10	13	0.016	±2.5	Pass
Normal	3.70	0	4	0.005	±2.5	Pass
Normal	3.70	10	9	0.011	±2.5	Pass
Battery full point	4.25	20	-7	-0.004	±2.5	Pass
Normal	3.70	20	6	0.003	±2.5	Pass
Battery cut-off point	3.60	20	1	0.001	±2.5	Pass
Normal	3.70	30	15	0.018	±2.5	Pass
Normal	3.70	40	22	0.026	±2.5	Pass
Normal	3.70	50	-10	-0.012	±2.5	Pass

Model Number	AC785S-500					
Test Item	Frequency Stability (Temperature & Voltage Variation)					
Test Mode	Mode 6					
Date of Test	09/16/2014				Test Site	TE05
Level	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
Normal	3.70	-30	-6	-0.003	±2.5	Pass
Normal	3.70	-20	9	0.005	±2.5	Pass
Normal	3.70	-10	11	0.006	±2.5	Pass
Normal	3.70	0	16	0.009	±2.5	Pass
Normal	3.70	10	-5	-0.003	±2.5	Pass
Battery full point	4.25	20	-4	-0.005	±2.5	Pass
Normal	3.70	20	13	0.016	±2.5	Pass
Battery cut-off point	3.60	20	-5	-0.006	±2.5	Pass
Normal	3.70	30	8	0.004	±2.5	Pass
Normal	3.70	40	16	0.009	±2.5	Pass
Normal	3.70	50	-9	-0.005	±2.5	Pass