FCC Test Report

Product Name	:	Advanced Industrial 4G/LTE Router, WWAN Failover Manager
Trade Name	:	BEC, Billion
Model No.	:	MX-200, MX-200e, M100, MX-200A, MX-200Ae
FCC ID.	:	QI3BIL-MX200A

Applicant	:	Billion Electric Co., Ltd.
Address	:	8F., No.192, Sec. 2, Zhongxing Rd., Xindian Dist., New Taipei City 231, Taiwan (R.O.C.)

Date of Receipt	:	May 26, 2017
Issued Date	:	Jul. 11, 2017
Report No.	:	1760012R-HPUSP49V00
Report Version	:	V3.0

Testing Laboratory
3024

Test Report Certification

Issued Date: Jul. 11, 2017
Report No. : 1760012R-HPUSP49V00

Product Name	:	Advanced Industrial 4G/LTE Router, WWAN Failover Manager
Applicant	:	Billion Electric Co., Ltd.
Address	:	8F., No.192, Sec. 2, Zhongxing Rd., Xindian Dist., New Taipei City 231, Taiwan (R.O.C.)
Manufacturer	:	Billion Electric Co., Ltd.
Model No.	:	MX-200, MX-200e, M100, MX-200A, MX-200Ae
FCC ID.	:	QI3BIL-MX200A
EUT Voltage	:	DC 9-56V
Testing Voltage	:	DC 12V(Power by Adapter AC120V/60Hz)
Trade Name	:	BEC, Billion
Applicable Standard	:	FCC CFR Title 47 Part 2 FCC CFR Title 47 Part 22 Subpart H FCC CFR Title 47 Part 24 Subpart E ANSI/TIA-603-D-2010
Test Lab	:	Hsin Chu Laboratory No.372-2, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County 310, Taiwan TEL:+886-3-582-8001 / FAX:+886-3-582-8958
Test Result	:	Complied

Documented By : (Demi Chang / Senior Engineering Adm. Specialist)

Tested By : (JuBo Shen / Senior Engineer)

Approved By : (Roy Wang / Director)

Revision History

Report No.	Version	Description	Issued Date
1760012R-HPUSP49V00	V3.0	Initial issue of report.	Jul. 11, 2017

Laboratory Information

We, **DEKRA Testing and Certification Co., Ltd.**, are an independent RF consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted (audited or listed) by the following related bodies in compliance with ISO 17025 specified testing scopes:

Taiwan R.O.C.	**:**	**TAF, Accreditation Number: 3024**
USA	**:**	**FCC, Registration Number: 834100**
Canada	**:**	**IC, Submission No: 181665 /** **IC Registration Number: 22397-1 / 22397-2 / 22397-3**

The related certificate for our laboratories about the test site and management system can be downloaded from DEKRA Testing and Certification Co., Ltd. Web Site:
http://www.dekra.com.tw/english/about/certificates.aspx?bval=5
The address and introduction of DEKRA Testing and Certification Co., Ltd. laboratories can be founded in our Web site : http://www.dekra.com.tw/index_en.aspx

If you have any comments, Please don't hesitate to contact us. Our test sites as below:

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1. General Information

1.1. EUT Description

Product Name	Advanced Industrial 4G/LTE Router, WWAN Failover Manager
Model No.	MX-200, MX-200e, M100, MX-200A, MX-200Ae
Trade Name	BEC, Billion
Tx Frequency Range	WCDMA Band 2: 1852.4-1907.6 MHz WCDMA Band 5: 826.4-846.6 MHz
Rx Frequency Range	WCDMA Band 2: 1932.4-1987.6 MHz WCDMA Band 5: 871.4-891.6 MHz
Type of Modulation	WCDMA: QPSK (Uplink); HSDPA/HSUPA: QPSK
HW Version	1.011
SW Version	1.04.1.103p

Antenna Information	
Antenna Type	Dipole Antenna
Antenna Gain	0.71 dBi (700-960MHz) 3.7 dBi (1710-2700MHz) 4.5 dBi (GPS)

Accessory Information	
Power Adapter	Billion, BA018-120120AXU I/P: 100-240V ~ 0.5A 50/60Hz O/P: 12V⎓1.2A Cable Out: Non-Shielded, 2m.
LTE Antenna	Cortec Technology Inc., AN0727-64DP5BSM (2pcs)
GPS Antenna	Cortec Technology Inc., AG1575-0250SM (1pcs)

Note:

1. This Advanced Industrial 4G/LTE Router, WWAN Failover Manager included WCDMA Band 2, WCDMA Band 4 and WCDMA Band 5 transmitting and receiving function.

2. The different of the each model is shown as below:
   * BEC MX-200 / BEC MX-200A : MXConnect M2M Advanced Industrial 4G/LTE Router
   * BEC MX-200e / BEC MX-200Ae : WWAN Failover Manager
   * Billion M100 : Advanced Industrial 4G/LTE Router

	MX-200	MX-200A	M100	MX-200e	MX-200Ae
Trade Name	BEC		Billion	BEC	
Hardware design	PCBA/Layout/Scheme/ Key component/housing / interface …100% same				
LTE antennas(SMA)	Detachable LTE Antenna *2pcs				
GPS antenna (SMA)	1				
SIM slot (2FF)	1				
RS-232 (DB-9)	1				
Ethernet Giga port	2				
Power input	9-56VDC				
External color	Casing: Metal/Black				
Software function	with VPN			without VPN	

1.2. Mode of Operation

DEKRA 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	
TX	Mode 1: WCDMA Band 5_Link Mode Mode 2: WCDMA Band 5_Idle Mode Mode 3: WCDMA Band 2_Link Mode Mode 4: WCDMA Band 2_Idle Mode Mode 5: WCDMA Band 5_HSUPA Mode Mode 6: WCDMA Band 5_HSDPA Mode Mode 7: WCDMA Band 2_HSUPA Mode Mode 8: WCDMA Band 2_HSDPA Mode

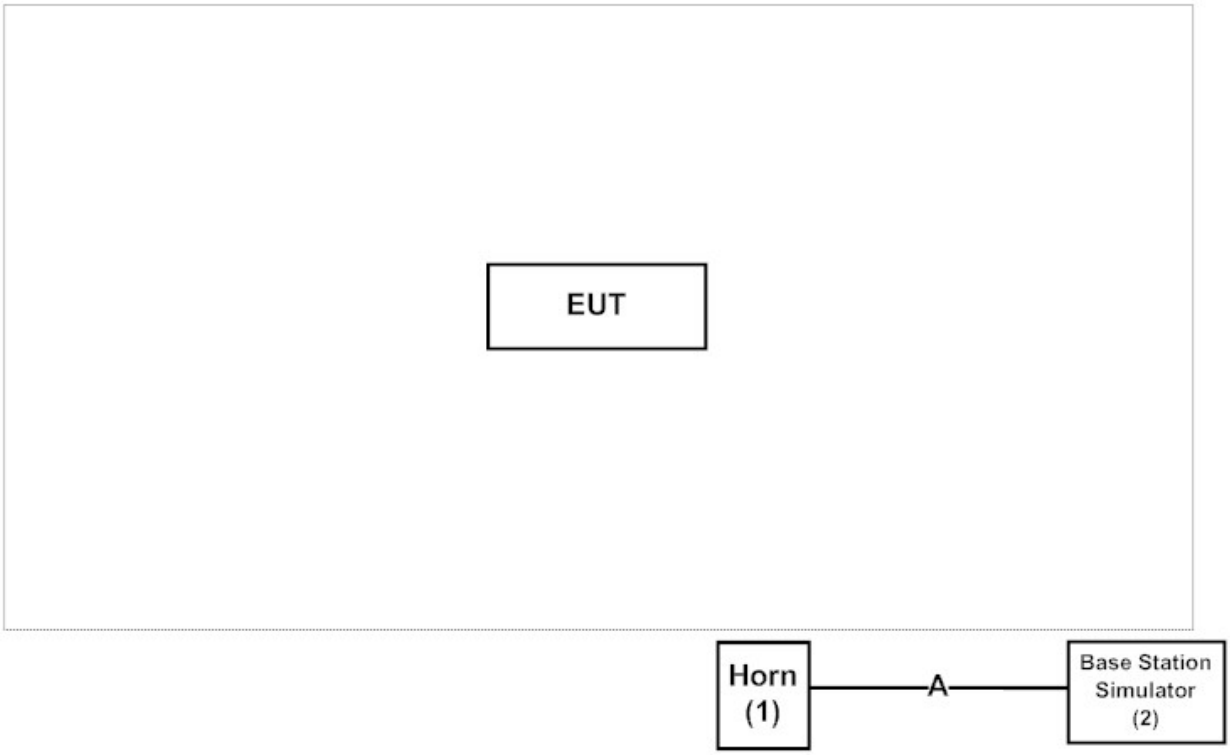
1.3. Tested System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	FCC ID	Power Cord
1	Horn	ELECTRO METRICS	EM6961	103326	DoC	--
2	Base Station Simulator	JRC	NJZ-2000	ET00477	DoC	--

1.4. Configuration of Tested System

Connection Diagram



Signal Cable Type		Signal cable Description
A	RF Cable	Shielded, 2m.

1.5. EUT Exercise Software

1	Setup the EUT as shown in Section 1.4.
2	Turn on the power of all equipment. Horn link with base station.
3	The EUT link with base station and it will continue receive the signal from WCDMA function.
4	Repeat the above procedure.

2. Technical Test

2.1. Summary of Test Result

Performed Item	FCC References	Result
Peak Output Power	FCC Part 22.913(a)(2) FCC Part 24.232(b) FCC Part 2.1046	Pass
Occupied Bandwidth	FCC Part 2.1049 FCC Part 24.238(b)	Pass
Spurious Emission At Antenna Terminals (+/- 1MHz)	FCC Part 22.917(a) FCC Part 24.238(a) FCC Part 2.1049	Pass
Spurious Emission	FCC Part 2.1051 FCC Part 2.1053	Pass
Frequency Stability Under Temperature & Voltage Variations	FCC Part 22.355 FCC Part 24.235 FCC Part 2.1055	Pass

2.2. Test Environment

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	23
Humidity (%RH)	25-75	52
Barometric pressure (mbar)	860-1060	950-1000

3. Peak Output Power

3.1. Test Equipment

The following test equipments are used during the RF power output tests:

Peak Output Power - Conducted Power Measurement /SR10-H

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Signal & Spectrum Analyzer	R&S	FSVA40	101455	2017/11/27
Multisystem UE Tester	Japan radio	NJZ-2000	ET00477	2017/09/19
Directional Coupler	Agilent	778D	20402	2017/10/06

Peak Output Power - Radiated Power Measurement /CB4-H

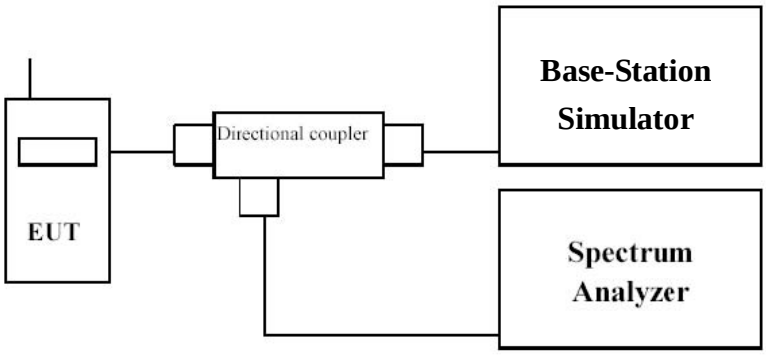
Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Bilog Antenna	Schaffner	CBL6112B	2891	2017/08/14
Horn Antenna	Schwarzbeck	BBHA 9120	D312	2017/10/25
Pre-Amplifier	EMCI	EMC0031835	980233	2018/02/02
Pre-Amplifier	Schwarzbeck	DBL-1840N506	013	2017/09/29
Pre-Amplifier	Miteq	JS41-001040000-58-5P	1573954	2017/10/04
Horn Antenna	Schwarzbeck	BBHA 9170	203	2017/08/28
Signal & Spectrum Analyzer	R&S	FSV40	101049	2018/01/05

Note: 1. All of the equipment that need to be calibrated are with calibration period of 1 year.

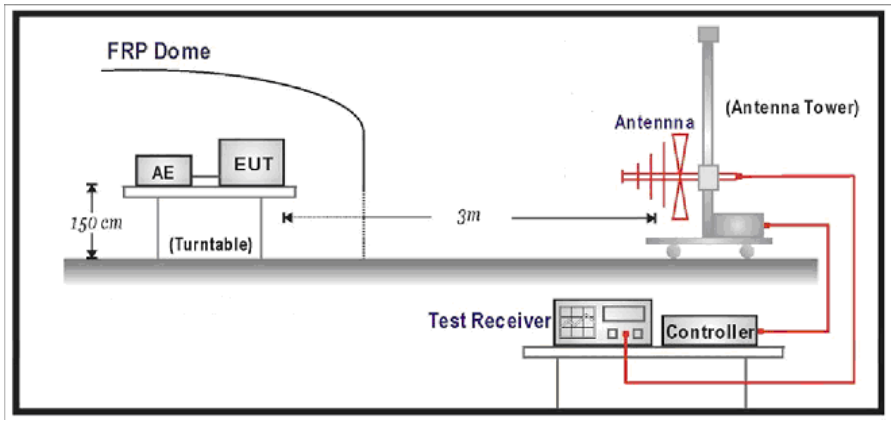
2. EIRP = Substitution Level + Substitution Antenna Gain - Cable Loss.

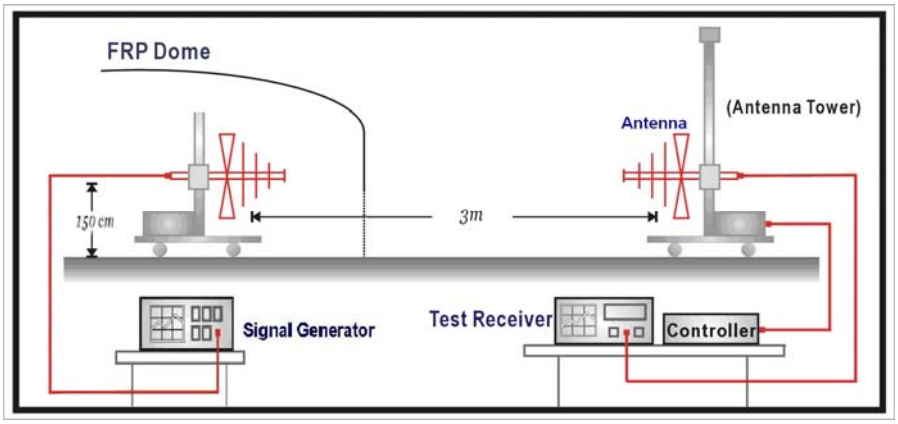
3.2. Test Setup

Conducted Power Measurement:



Radiated Power Measurement:





3.3. Limit

1) Part 22 H

The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

2) Part 24 E

The EIRP of mobile transmitters and auxiliary test transmitters must not exceed 2 Watts.

3.4. Test Procedure

Conducted Power Measurement:

a) Place the EUT on a bench and set it in transmitting mode.
b) Connect a low loss RF cable from the antenna port to a spectrum analyzer and Base Station Simulator by a Directional Couple.
c) EUT Communicate with Base Station Simulator then selects a channel for testing.
d) Add a correction factor to the display of spectrum, and then test.

3.5. Uncertainty

The measurement uncertainty is defined as for Conducted Power Measurement ± 1.2 dB, for Radiated Power Measurement ± 3.2 dB

3.6. Test Result

Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Item	Peak Output Power		
Test Mode	Mode 1: WCDMA Band 5_Link Mode		
Date of Test	2017/02/03	Test Site	SR10-H

Frequency (MHz)	Peak Power		Average Power		Limit (dBm)
	Reading Level (dBm)	Measure Level (dBm)	Reading Level (dBm)	Measure Level (dBm)	
826.4	24.49	25.20	21.41	22.12	38
836.6	24.70	25.41	21.53	22.24	38
846.6	24.51	25.22	21.53	22.24	38

Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Item	Peak Output Power		
Test Mode	Mode 3: WCDMA Band 2_Link Mode		
Date of Test	2017/02/03	Test Site	SR10-H

Frequency (MHz)	Peak Power		Average Power		Limit (dBm)
	Reading Level (dBm)	Measure Level (dBm)	Reading Level (dBm)	Measure Level (dBm)	
1852.4	25.67	29.37	22.47	26.17	33
1880.0	25.61	29.31	22.49	26.19	33
1907.6	25.17	28.87	22.03	25.73	33

Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Item	Peak Output Power		
Test Mode	Mode 5: WCDMA Band 5_HSUPA Mode		
Date of Test	2017/02/15	Test Site	SR10-H

Frequency (MHz)	Peak Power		Average Power		Limit (dBm)
	Reading Level (dBm)	Measure Level (dBm)	Reading Level (dBm)	Measure Level (dBm)	
826.4	28.42	29.41	23.27	24.26	38
836.6	28.56	29.55	23.16	24.15	38
846.6	28.45	29.44	23.22	24.21	38

Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Item	Peak Output Power		
Test Mode	Mode 6: WCDMA Band 5_HSDPA Mode		
Date of Test	2017/02/15	Test Site	SR10-H

Frequency (MHz)	Peak Power		Average Power		Limit (dBm)
	Reading Level (dBm)	Measure Level (dBm)	Reading Level (dBm)	Measure Level (dBm)	
826.4	27.62	28.61	23.79	24.78	38
836.6	27.38	28.37	23.68	24.67	38
846.6	27.92	28.91	23.78	24.77	38

Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Item	Peak Output Power		
Test Mode	Mode 7: WCDMA Band 2_HSUPA Mode		
Date of Test	2017/02/15	Test Site	SR10-H

Frequency (MHz)	Peak Power		Average Power		Limit (dBm)
	Reading Level (dBm)	Measure Level (dBm)	Reading Level (dBm)	Measure Level (dBm)	
1852.4	25.91	28.72	20.59	23.4	33
1880.0	25.94	28.75	20.44	23.25	33
1907.6	25.71	28.52	20.32	23.13	33

Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Item	Peak Output Power		
Test Mode	Mode 8: WCDMA Band 2_HSDPA Mode		
Date of Test	2017/02/15	Test Site	SR10-H

Frequency (MHz)	Peak Power		Average Power		Limit (dBm)
	Reading Level (dBm)	Measure Level (dBm)	Reading Level (dBm)	Measure Level (dBm)	
1852.4	24.91	27.72	21.05	23.86	33
1880.0	25.08	27.89	21.02	23.83	33
1907.6	24.66	27.47	20.77	23.58	33

4. Occupied Bandwidth

4.1. Test Equipment

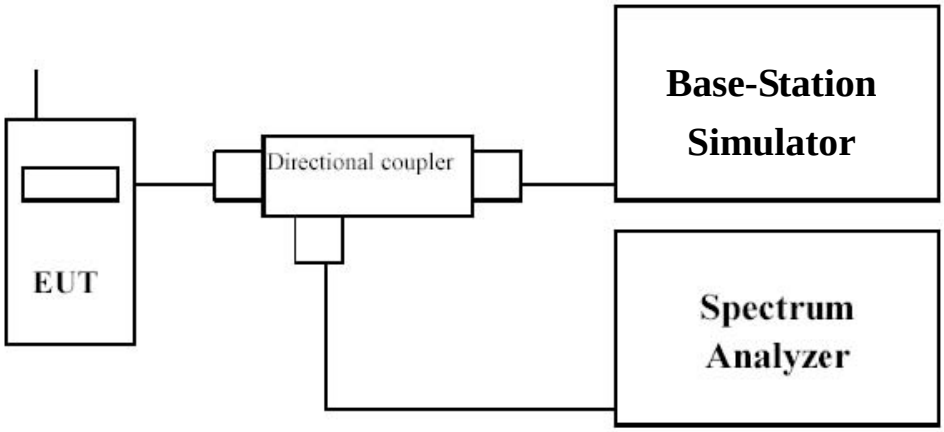
The following test equipments are used during the RF power output tests:

Occupied Bandwidth/ SR10-H

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Signal & Spectrum Analyzer	R&S	FSV40	101049	2018/01/22
Multisystem UE Tester	Japan radio	NJZ-2000	ET00477	2017/09/19
Directional Coupler	Agilent	778D	20402	2017/10/06

Note: All equipment upon which need to be calibrated are with calibration period of 1 year.

4.2. Test Setup



4.3. Limit

N/A

4.4. Test Procedure

Using a resolution bandwidth of 3 kHz and a video bandwidth of 10 kHz, the -26dBc points were established and the emission bandwidth determined. The plots below show the resultant display from the Spectrum Analyzer.

4.5. Uncertainty

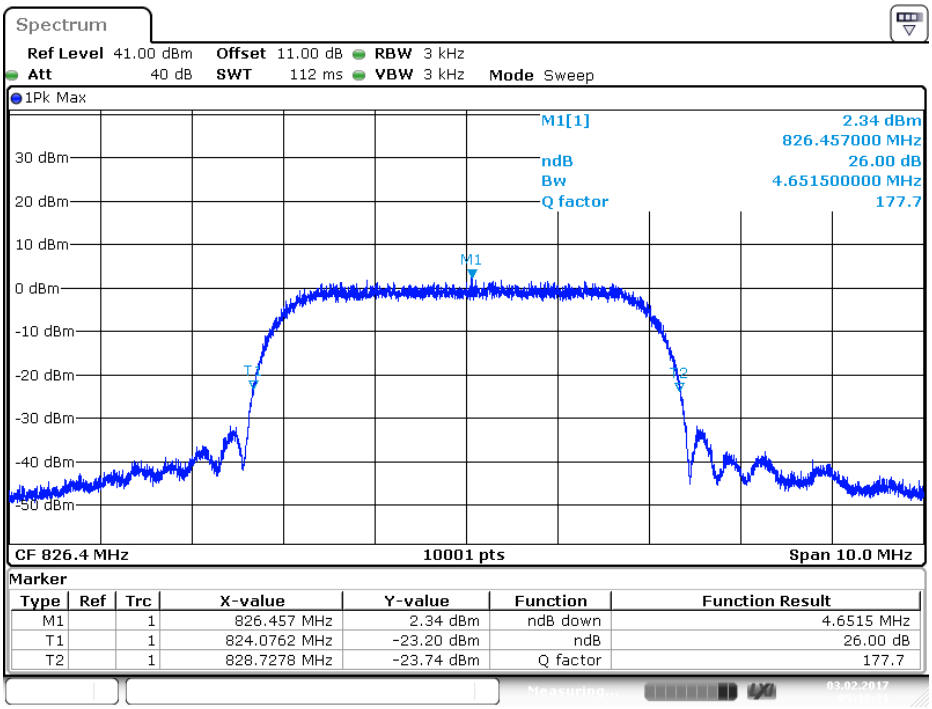
The measurement uncertainty is defined as ± 10 Hz

4.6. Test Result

Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Item	Occupied Bandwidth		
Test Mode	Mode 1: WCDMA Band 5_Link Mode		
Date of Test	2017/02/03	Test Site	SR10-H

Frequency (MHz)	-26dB BW Measure Level (MHz)	99% BW Measure Level (MHz)	Limit (MHz)
826.4	4.652	4.142	N/A
836.6	4.642	4.137	N/A
846.6	4.602	4.127	N/A

826.4 MHz (-26dB BW)



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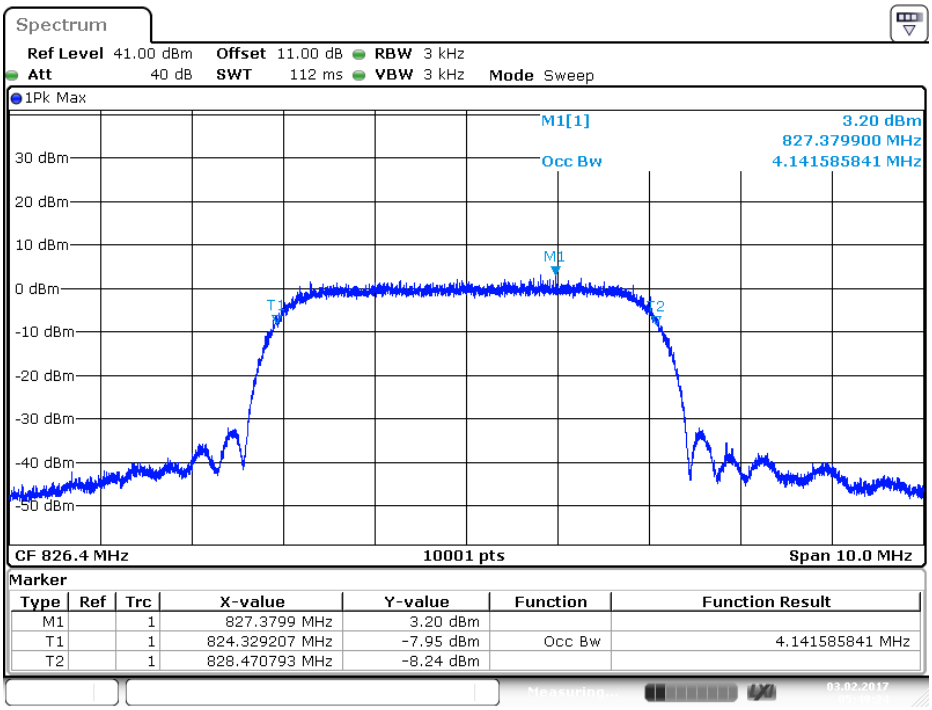
826.4 MHz (99% BW)



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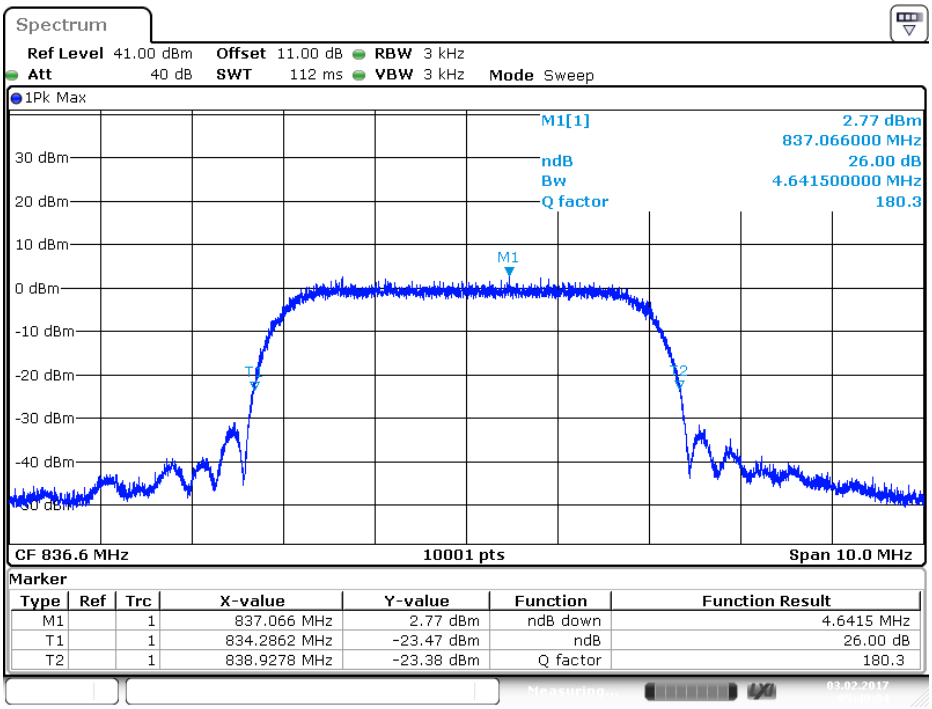

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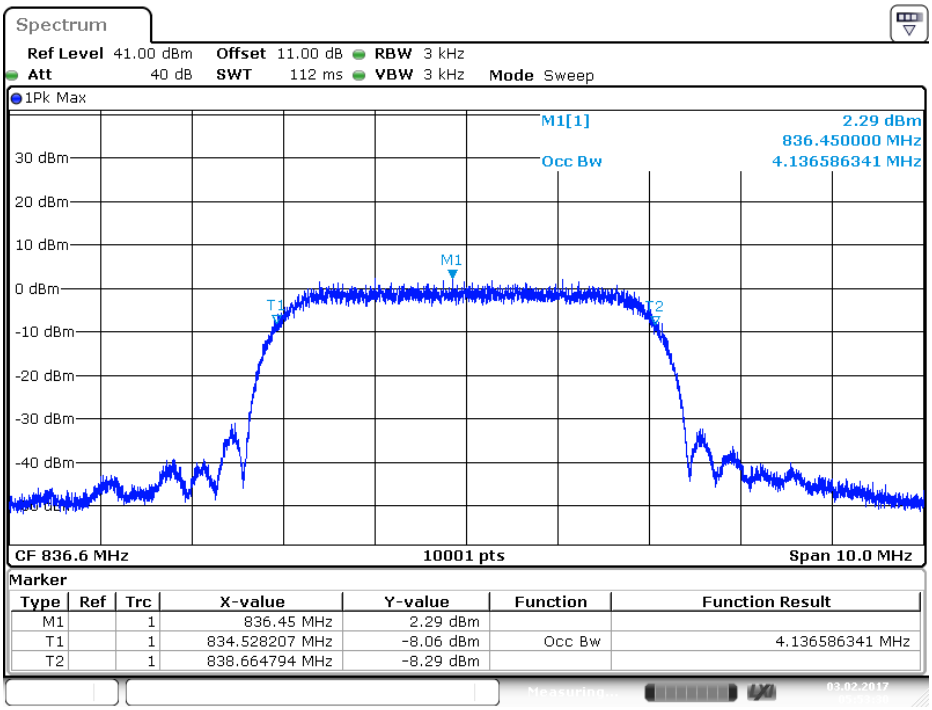

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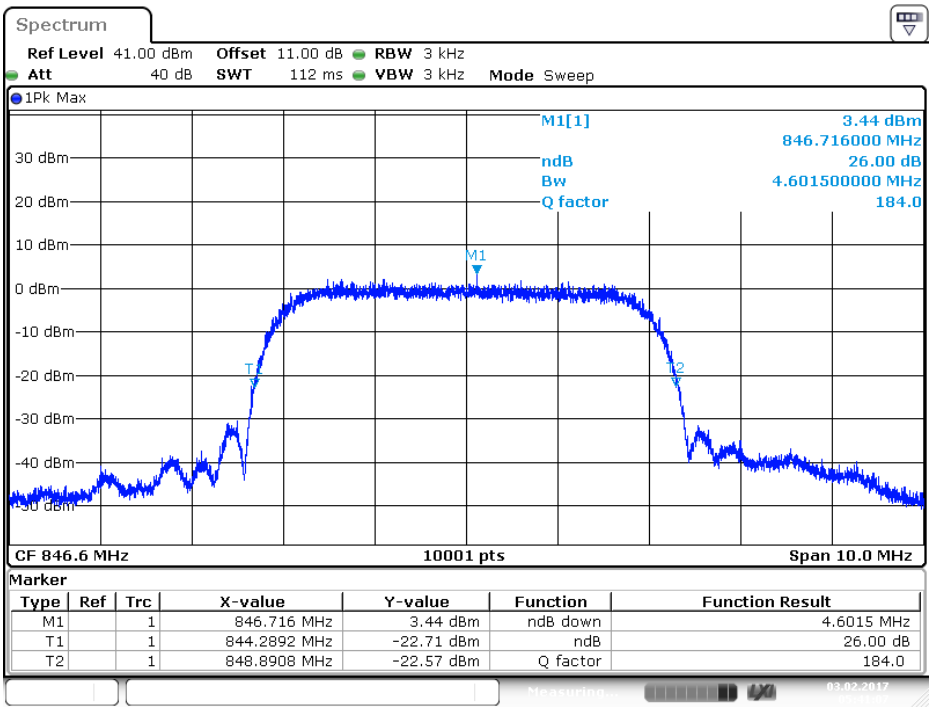
846.6 MHz (-26dB BW)



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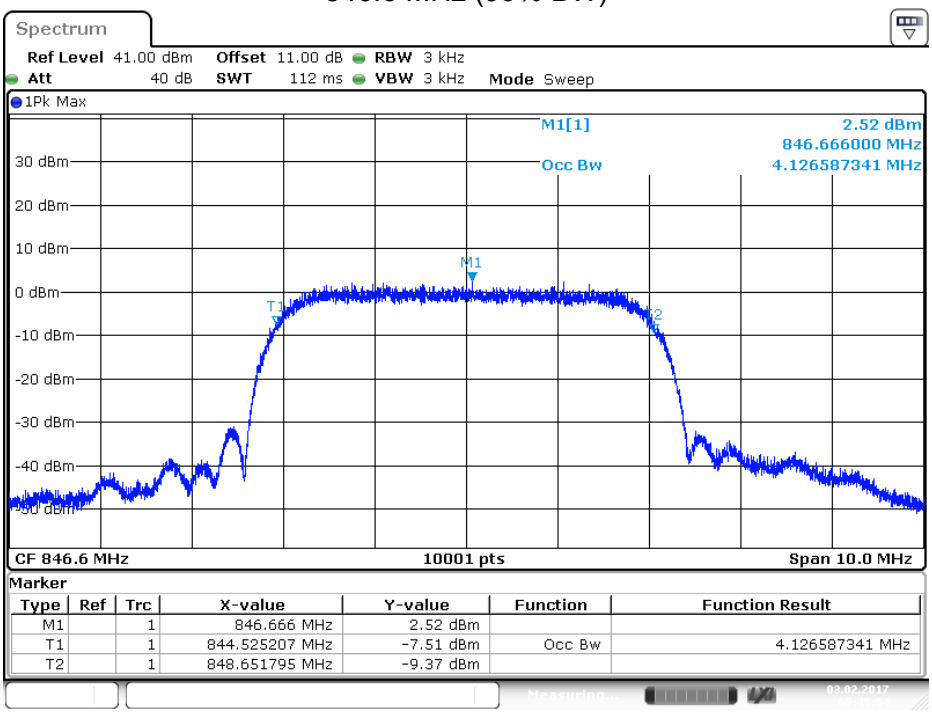
846.6 MHz (99% BW)



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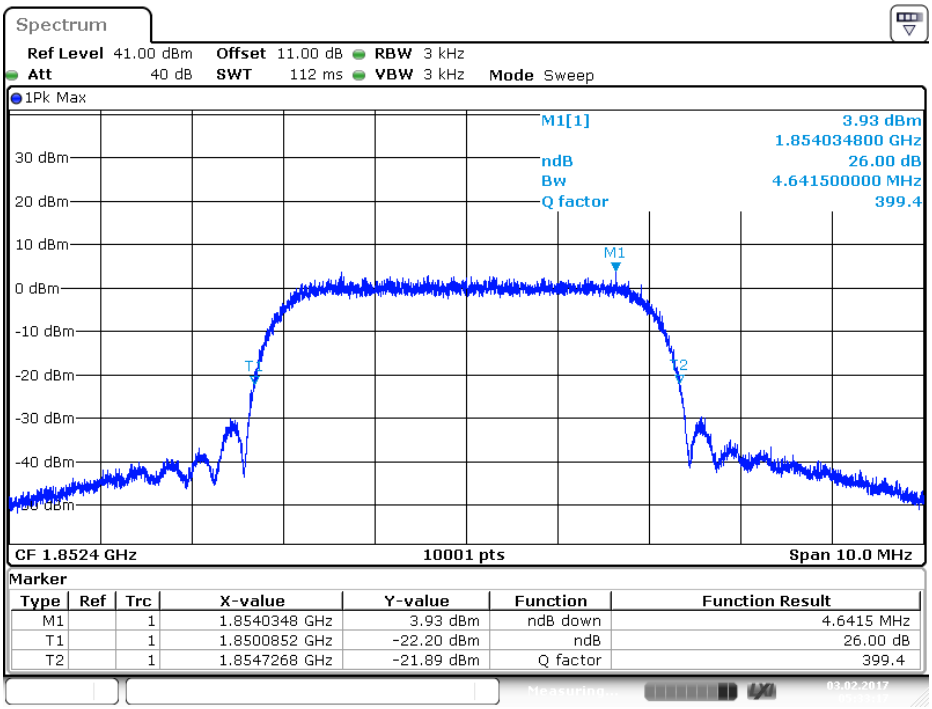
Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Item	Occupied Bandwidth		
Test Mode	Mode 3: WCDMA Band 2_Link Mode		
Date of Test	2017/02/03	Test Site	SR10-H

Frequency (MHz)	-26dB BW Measure Level (MHz)	99% BW Measure Level (MHz)	Limit (MHz)
1852.4	4.642	4.147	N/A
1880.0	4.658	4.153	N/A
1907.6	4.673	4.147	N/A

1852.4 MHz (-26dB BW)



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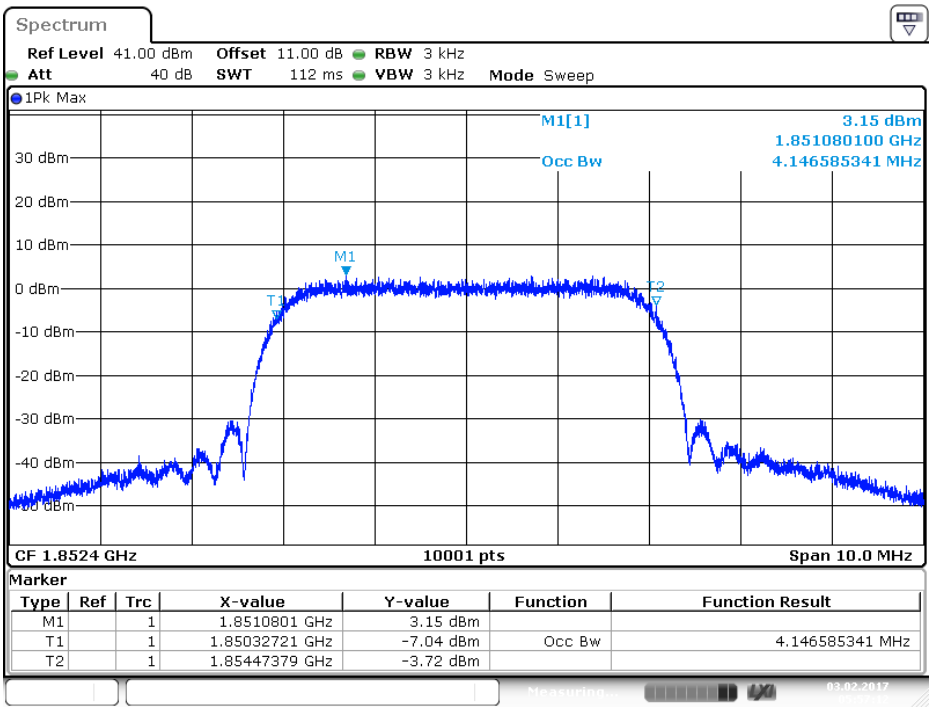
1852.4 MHz (99% BW)



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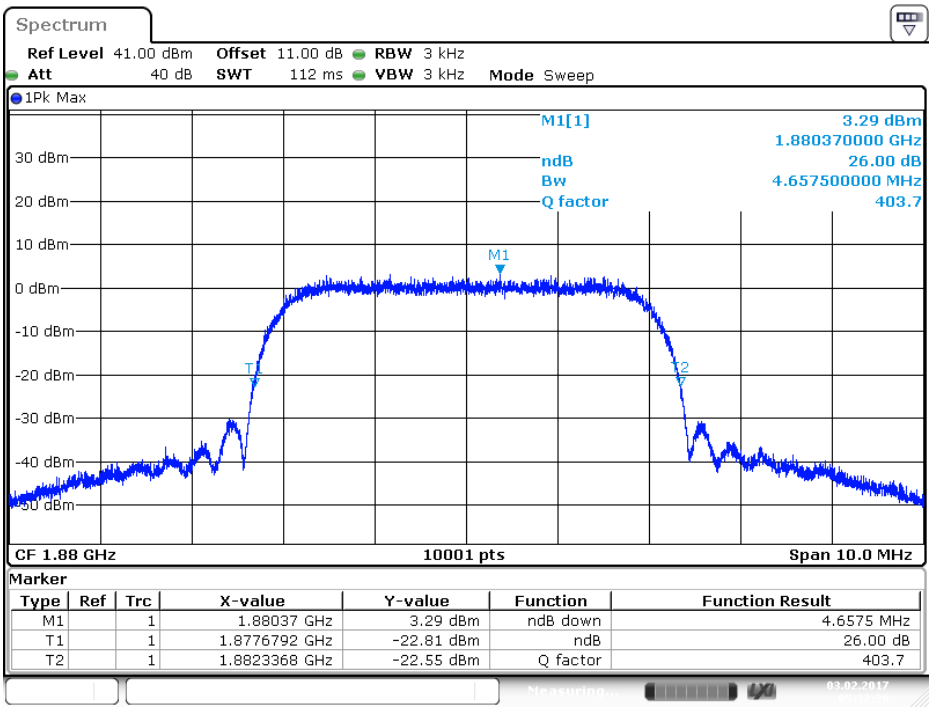
1880.0 MHz (-26dB BW)



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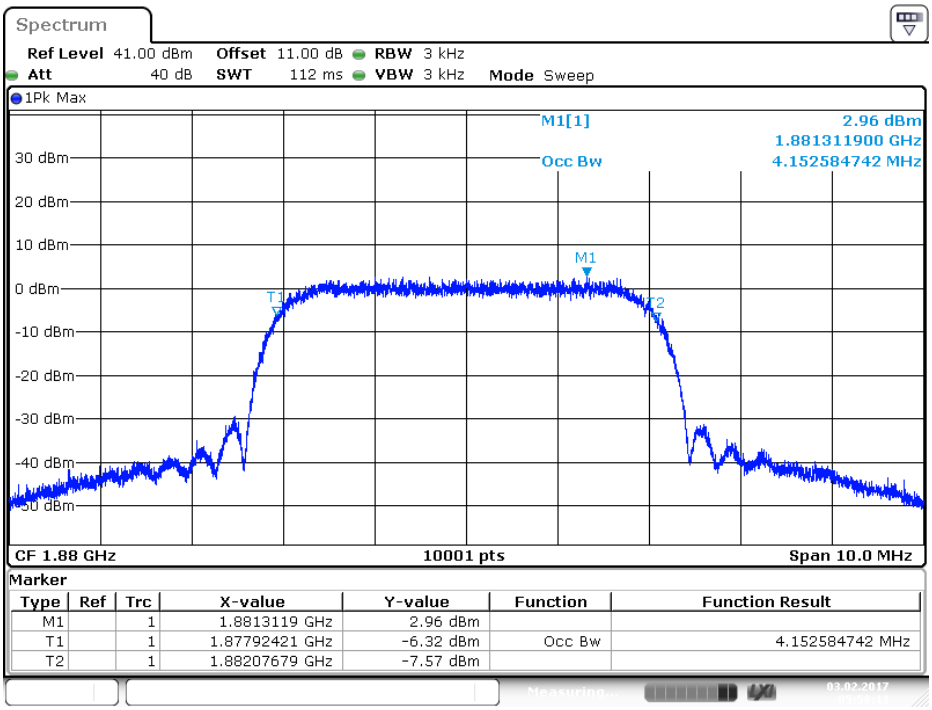
1880.0 MHz (99% BW)



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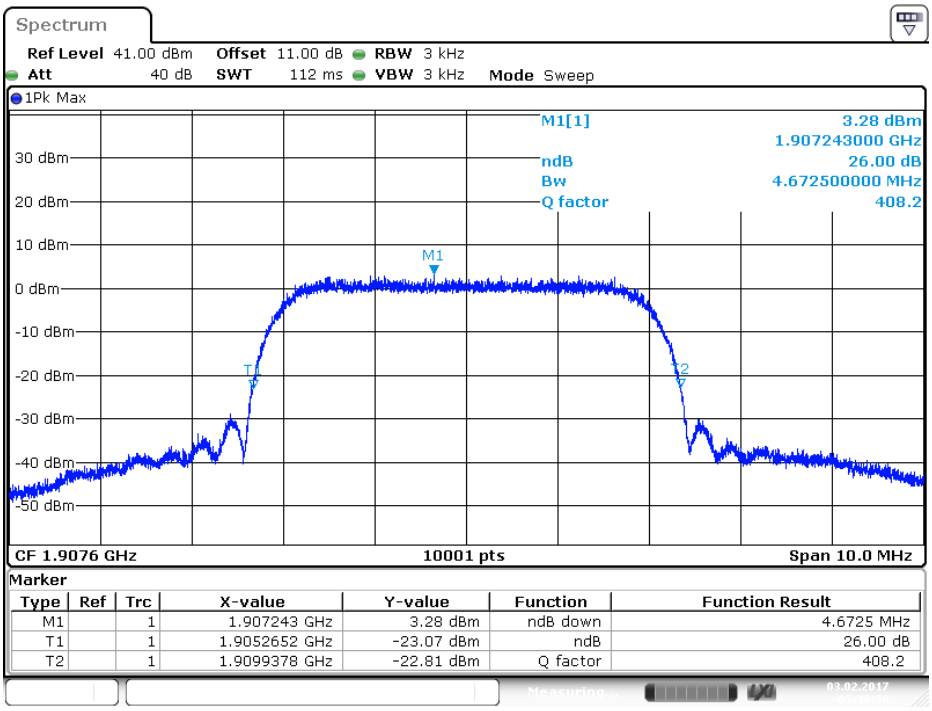
1907.6 MHz (-26dB BW)



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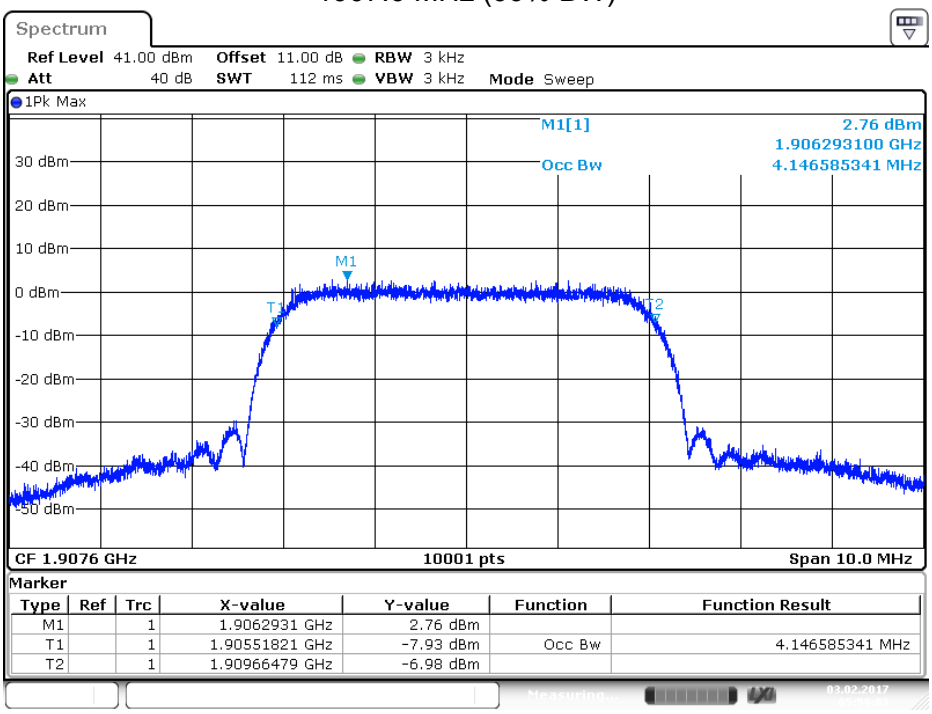
1907.6 MHz (99% BW)



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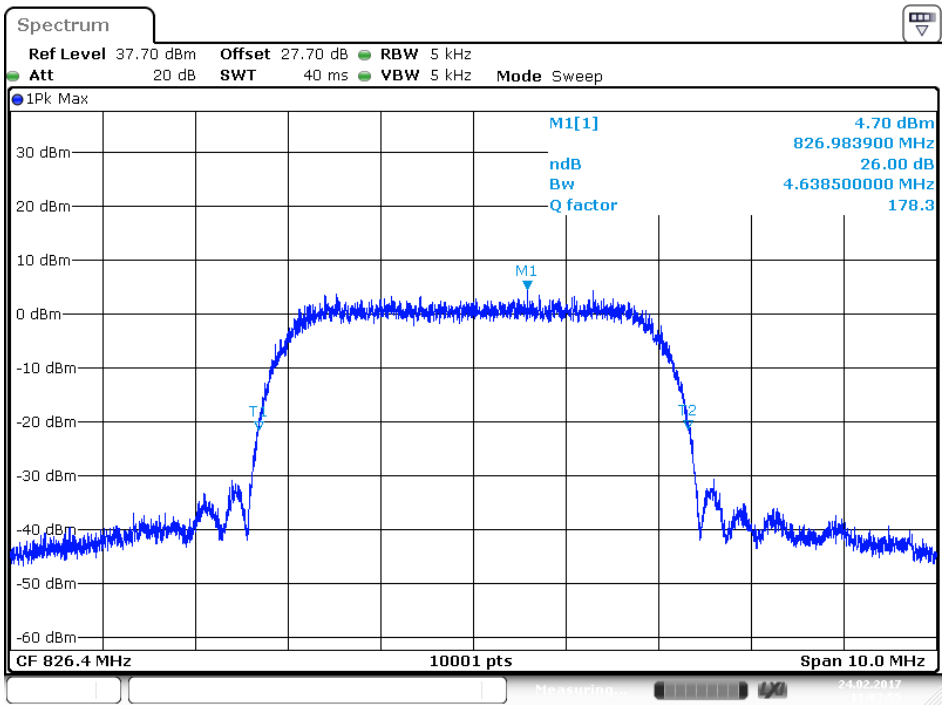
Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Item	Occupied Bandwidth		
Test Mode	Mode 5: WCDMA Band 5_HSUPA Mode		
Date of Test	2017/02/24	Test Site	SR10-H

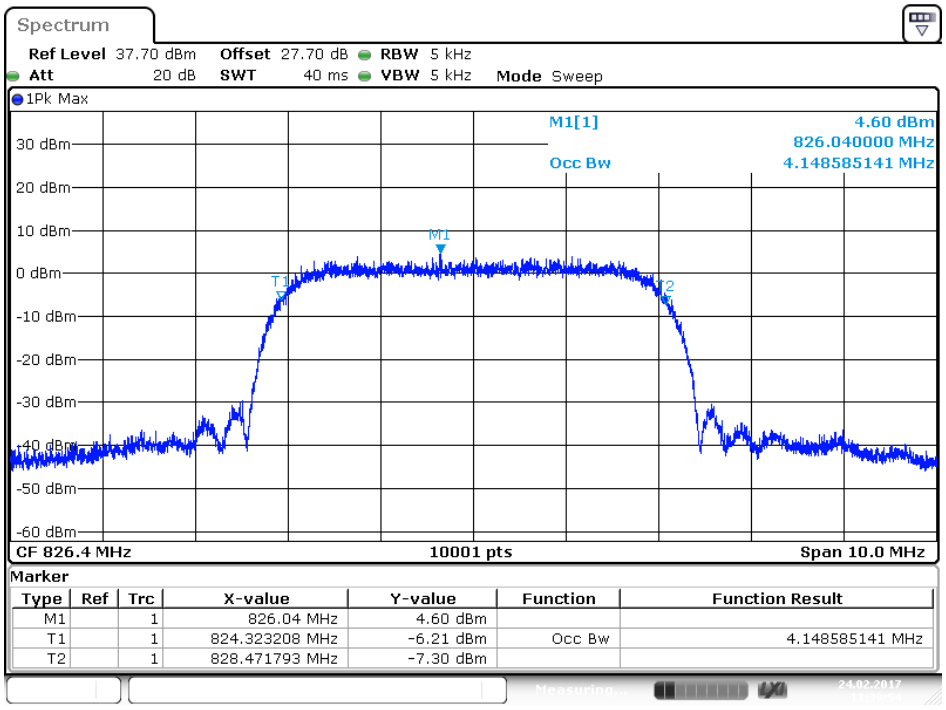
Frequency (MHz)	-26dB BW Measure Level (MHz)	99% BW Measure Level (MHz)	Limit (MHz)
826.4	4.667	4.1486	N/A
836.6	4.670	4.1506	N/A
846.6	4.642	4.1306	N/A

826.4 MHz (-26dB BW)



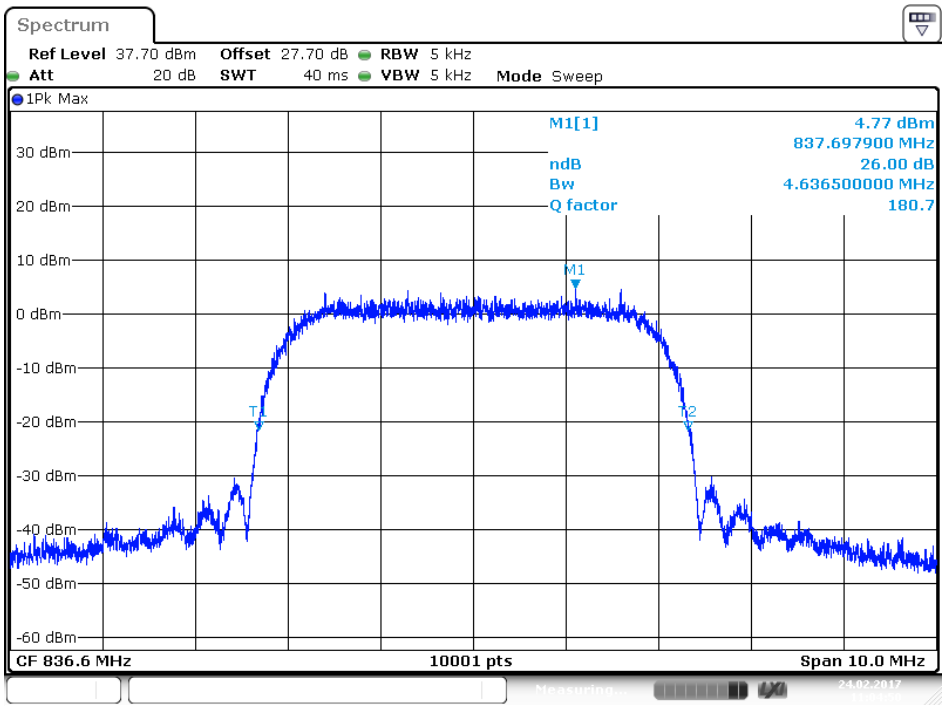
Date: 24.FEB.2017 11:03:56

826.4 MHz (99% BW)



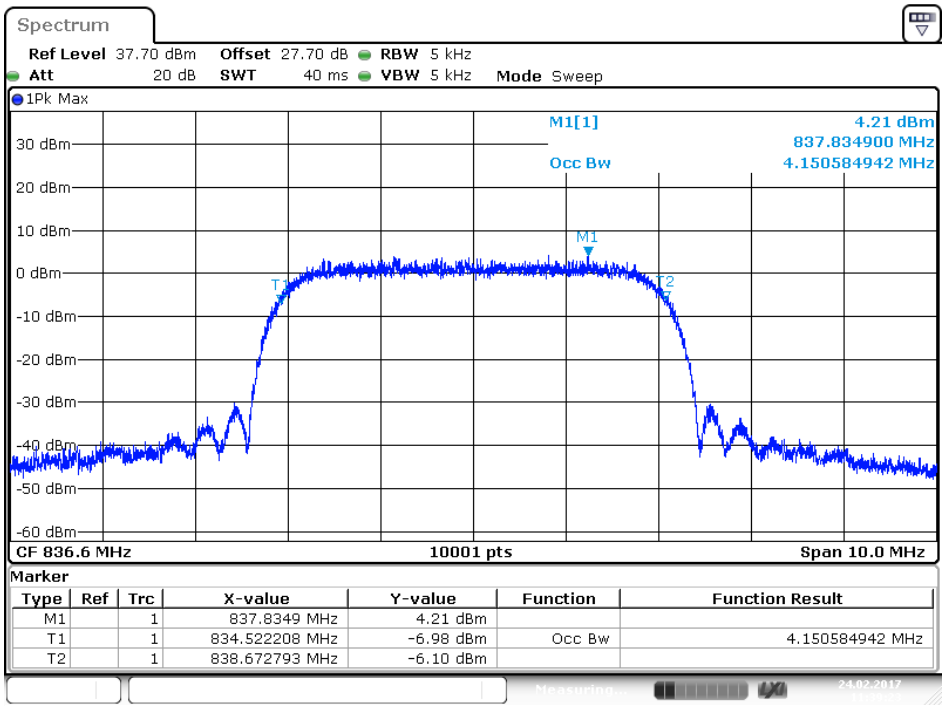
Date: 24.FEB.2017 11:39:55

836.6 MHz (-26dB BW)



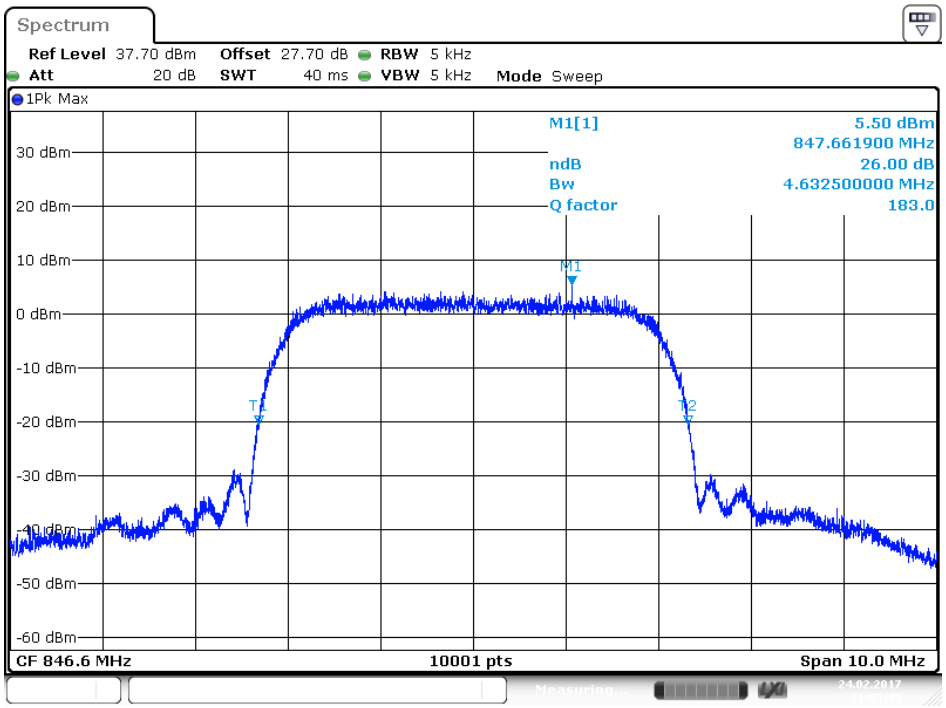
Date: 24.FEB.2017 11:04:51

836.6 MHz (99% BW)



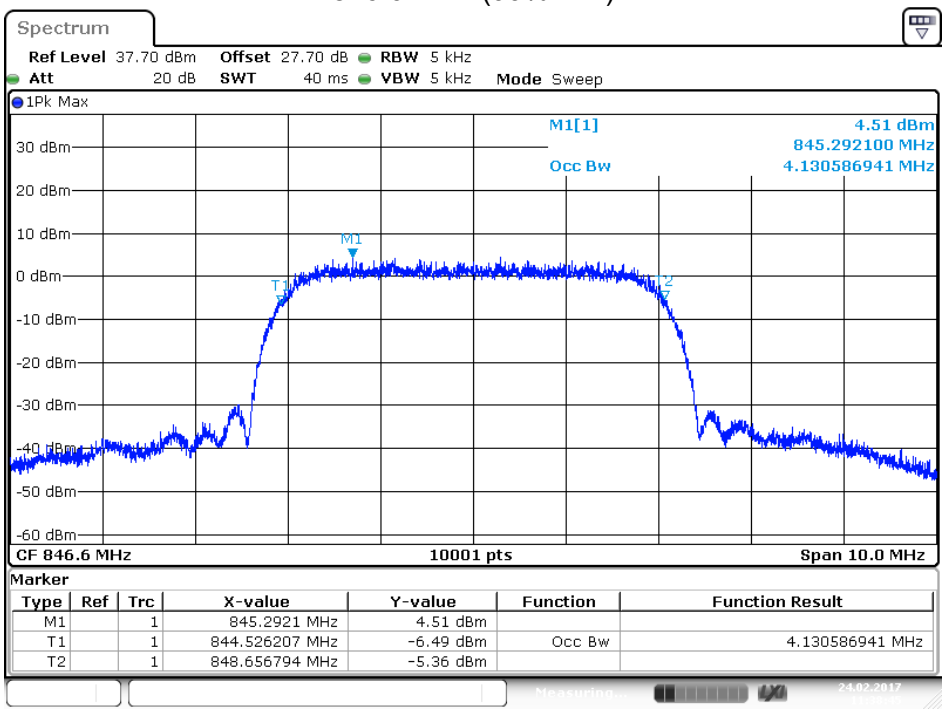
Date: 24.FEB.2017 11:39:23

846.6 MHz (-26dB BW)



Date: 24.FEB.2017 11:05:45

846.6 MHz (99% BW)

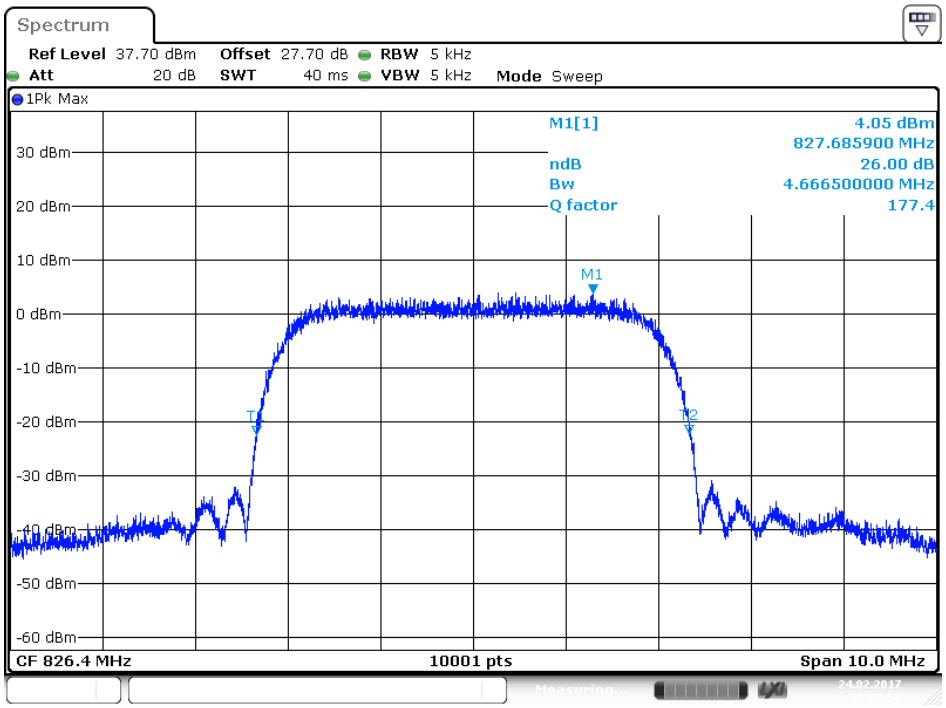


Date: 24.FEB.2017 11:38:45

Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Item	Occupied Bandwidth		
Test Mode	Mode 6: WCDMA Band 5_HSDPA Mode		
Date of Test	2017/02/24	Test Site	SR10-H

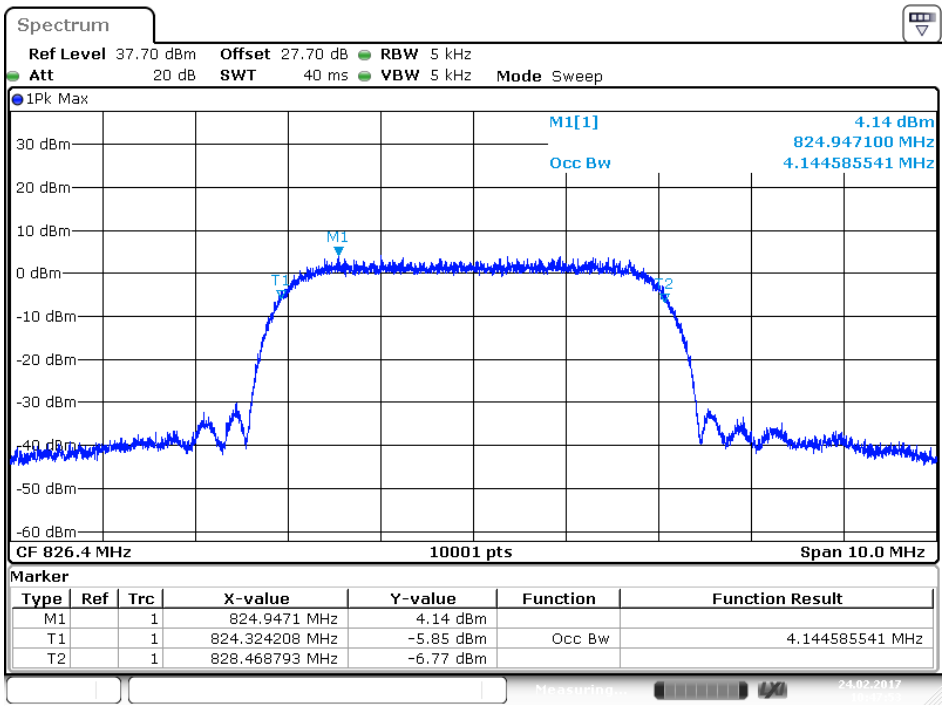
Frequency (MHz)	-26dB BW Measure Level (MHz)	99% BW Measure Level (MHz)	Limit (MHz)
1852.4	4.639	4.1446	N/A
1880.0	4.637	4.1326	N/A
1907.6	4.633	4.1426	N/A

1852.4 MHz (-26dB BW)



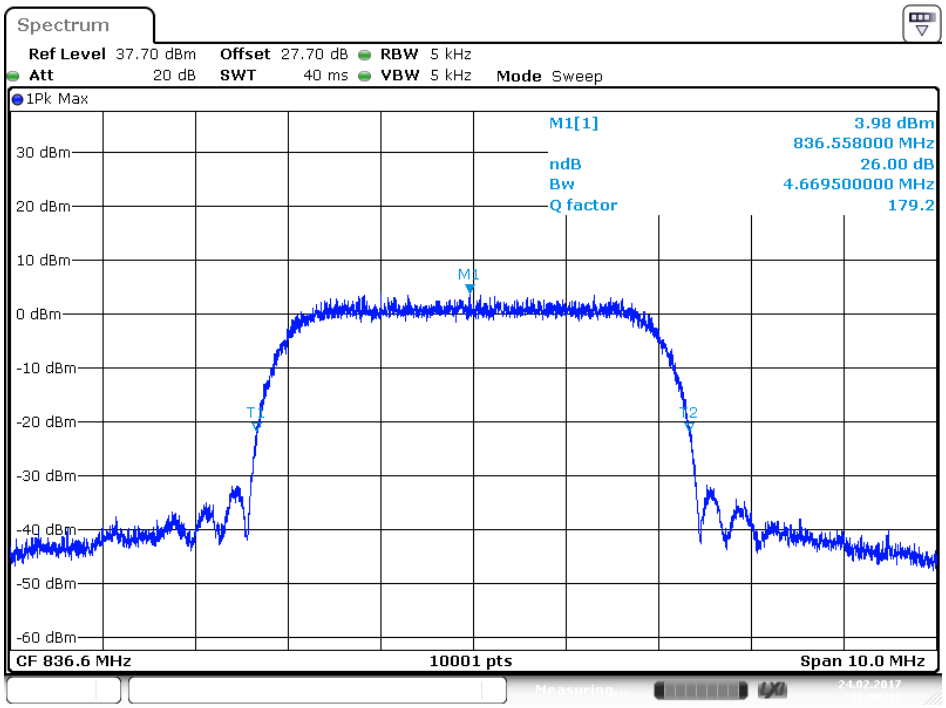
Date: 24.FEB.2017 11:00:53

1852.4 MHz (99% BW)



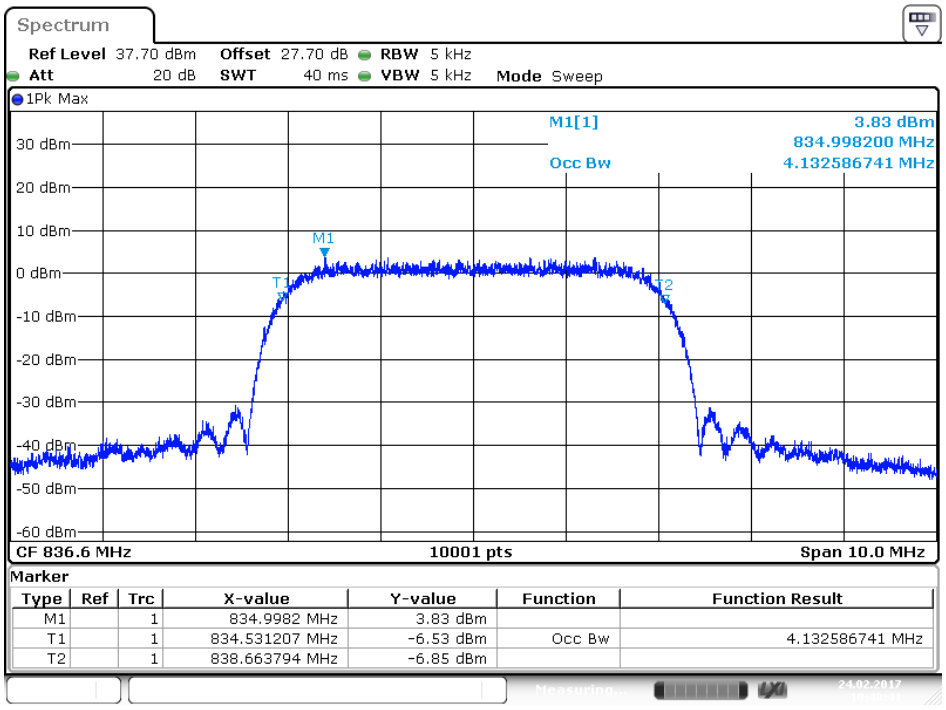
Date: 24.FEB.2017 10:47:53

1880.0 MHz (-26dB BW)



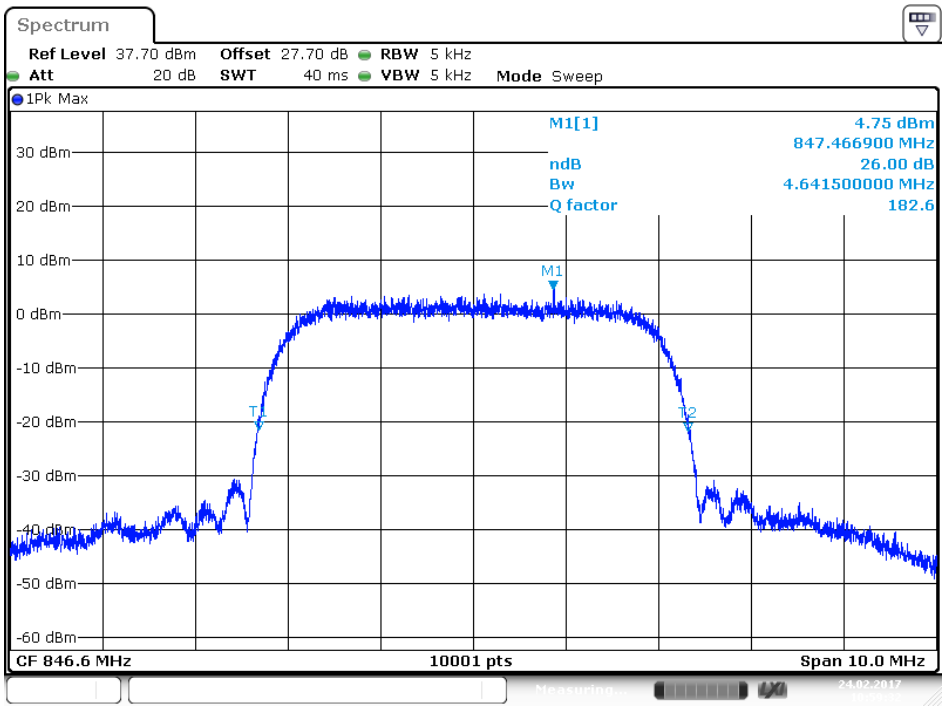
Date: 24.FEB.2017 11:00:18

1880.0 MHz (99% BW)



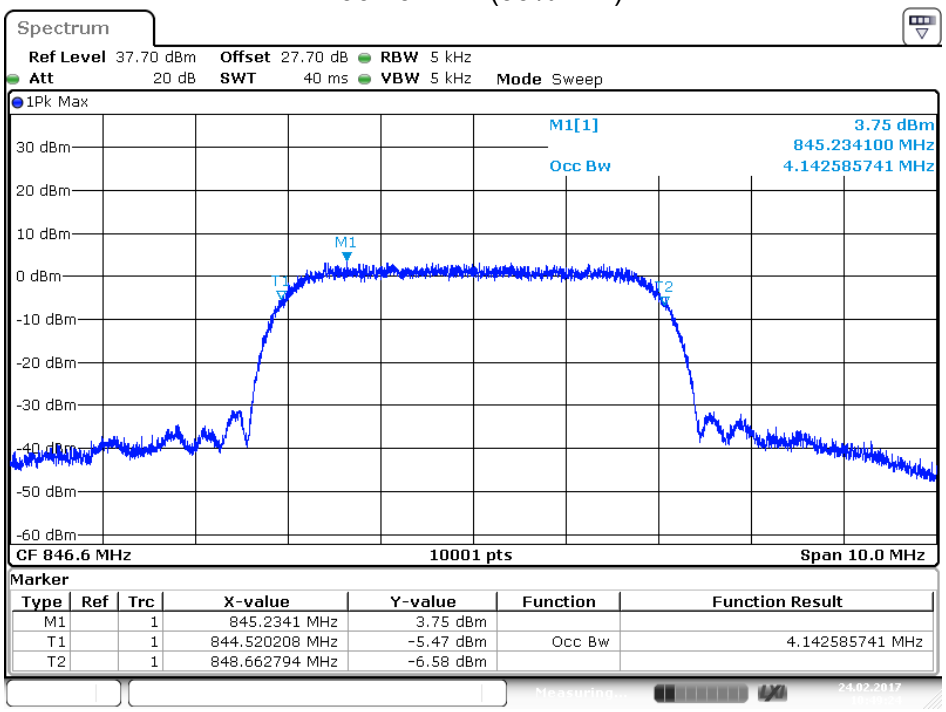
Date: 24.FEB.2017 10:48:41

1907.6 MHz (-26dB BW)



Date: 24.FEB.2017 10:59:32

1907.6 MHz (99% BW)

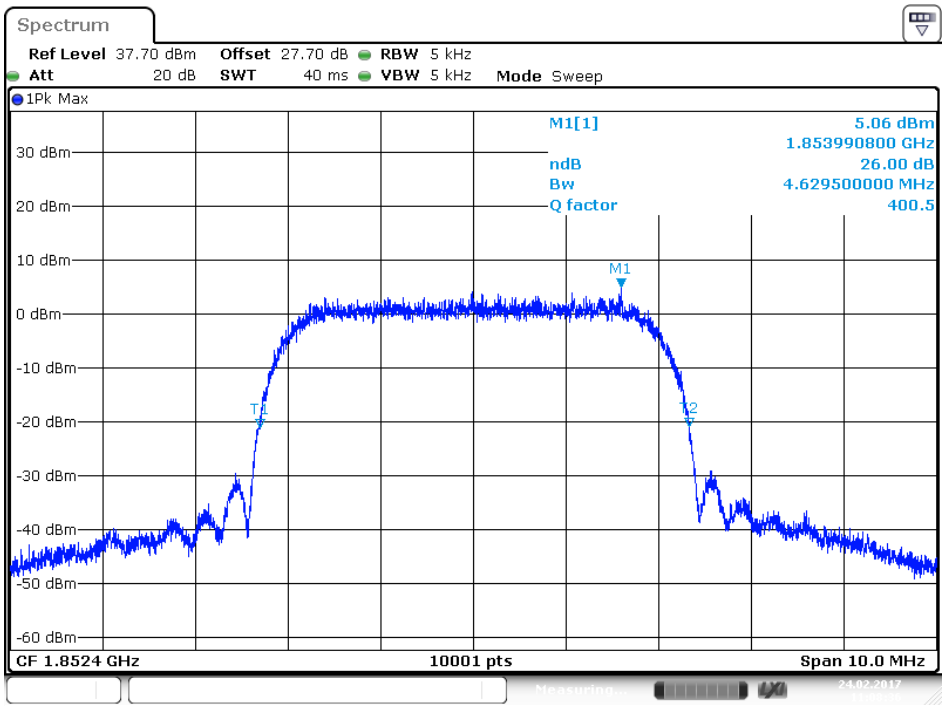


Date: 24.FEB.2017 10:49:25

Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Item	Occupied Bandwidth		
Test Mode	Mode 7: WCDMA Band 2_HSUPA Mode		
Date of Test	2017/02/24	Test Site	SR10-H

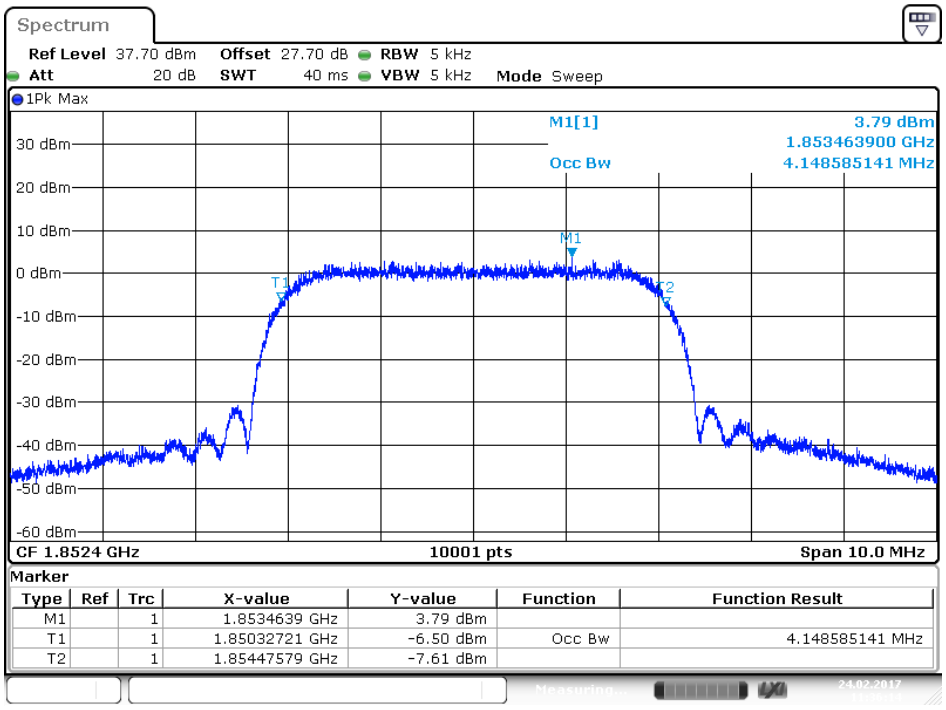
Frequency (MHz)	-26dB BW Measure Level (MHz)	99% BW Measure Level (MHz)	Limit (MHz)
826.4	4.675	4.1486	N/A
836.6	4.653	4.1566	N/A
846.6	4.670	4.1476	N/A

826.4 MHz (-26dB BW)



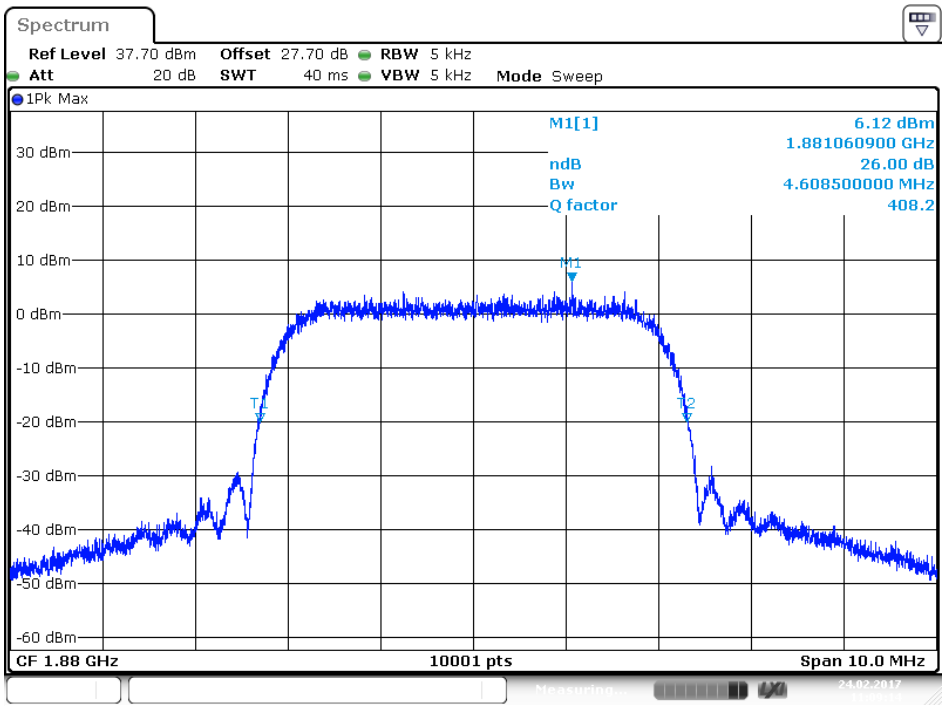
Date: 24.FEB.2017 11:08:36

826.4 MHz (99% BW)



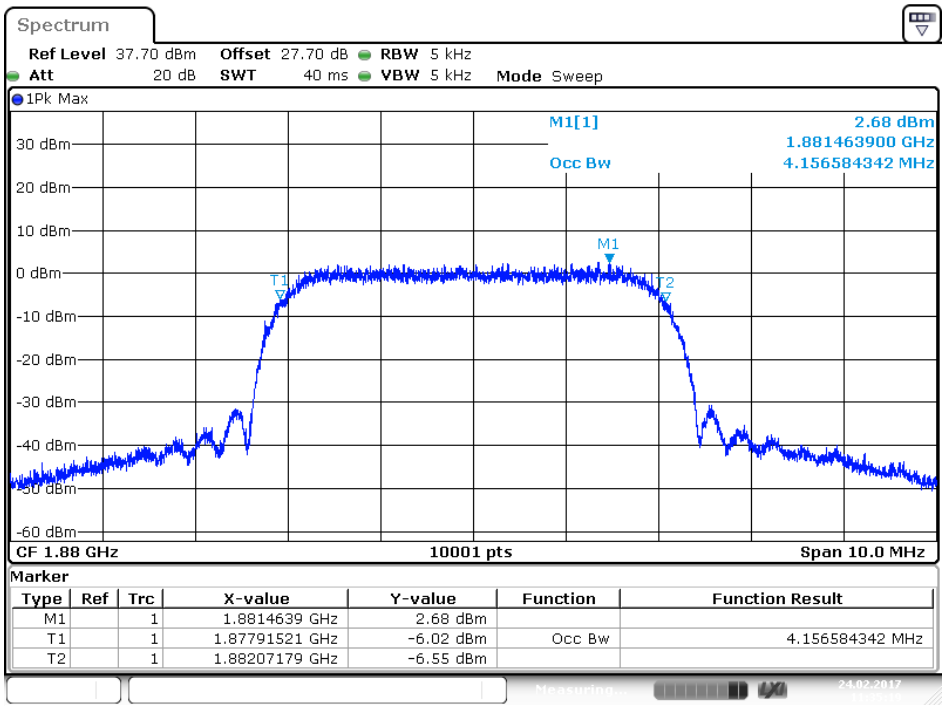
Date: 24.FEB.2017 11:36:14

836.6 MHz (-26dB BW)



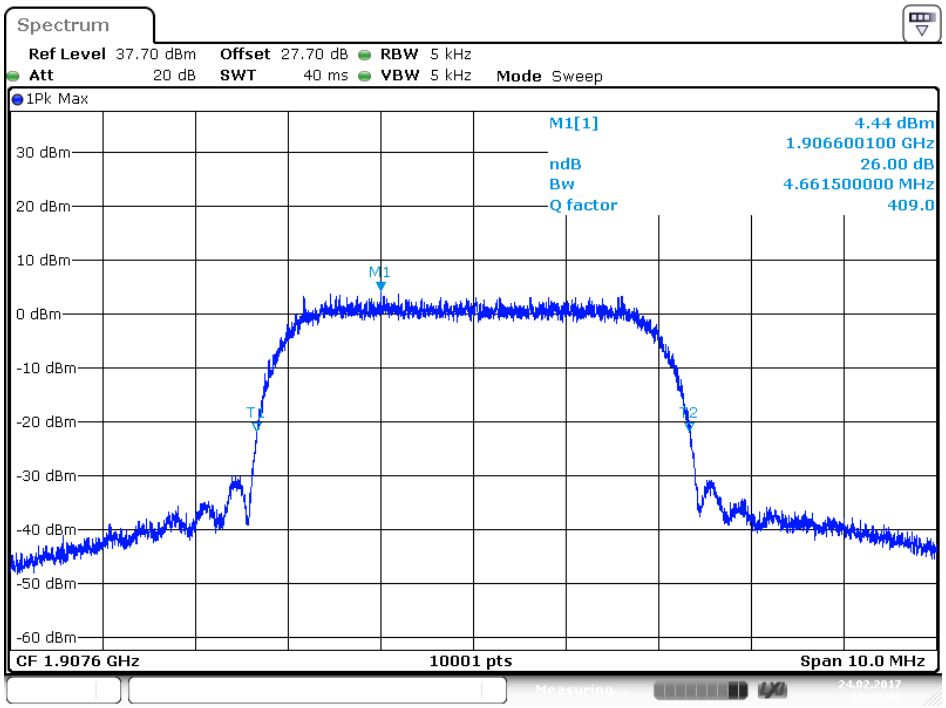
Date: 24.FEB.2017 11:09:14

836.6 MHz (99% BW)



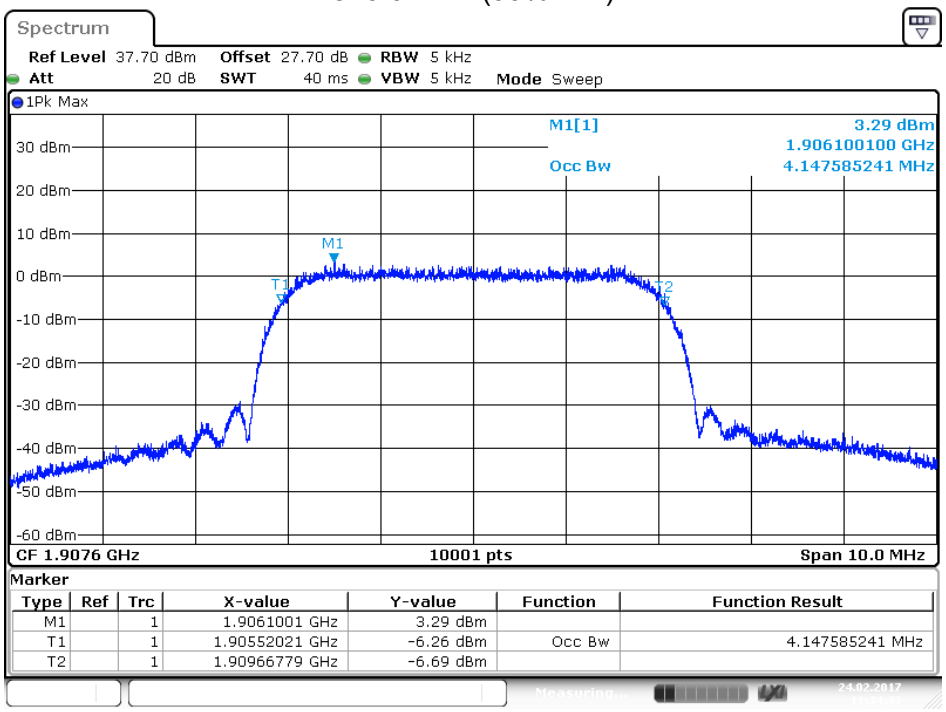
Date: 24.FEB.2017 11:35:19

846.6 MHz (-26dB BW)



Date: 24.FEB.2017 11:10:09

846.6 MHz (99% BW)

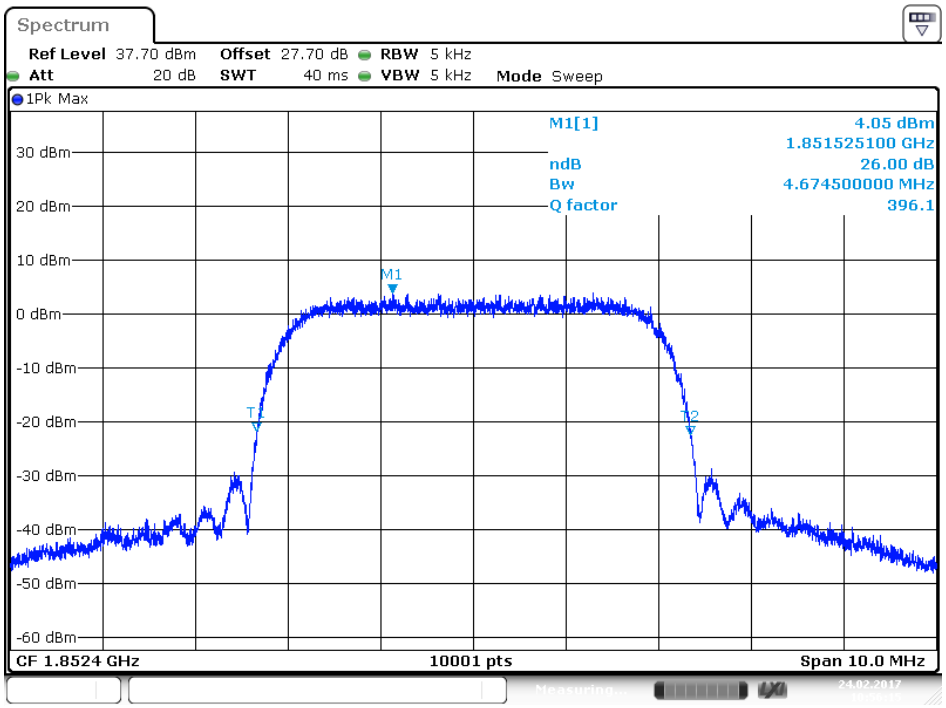


Date: 24.FEB.2017 11:34:33

Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Item	Occupied Bandwidth		
Test Mode	Mode 8: WCDMA Band 2_HSDPA Mode		
Date of Test	2017/02/24	Test Site	SR10-H

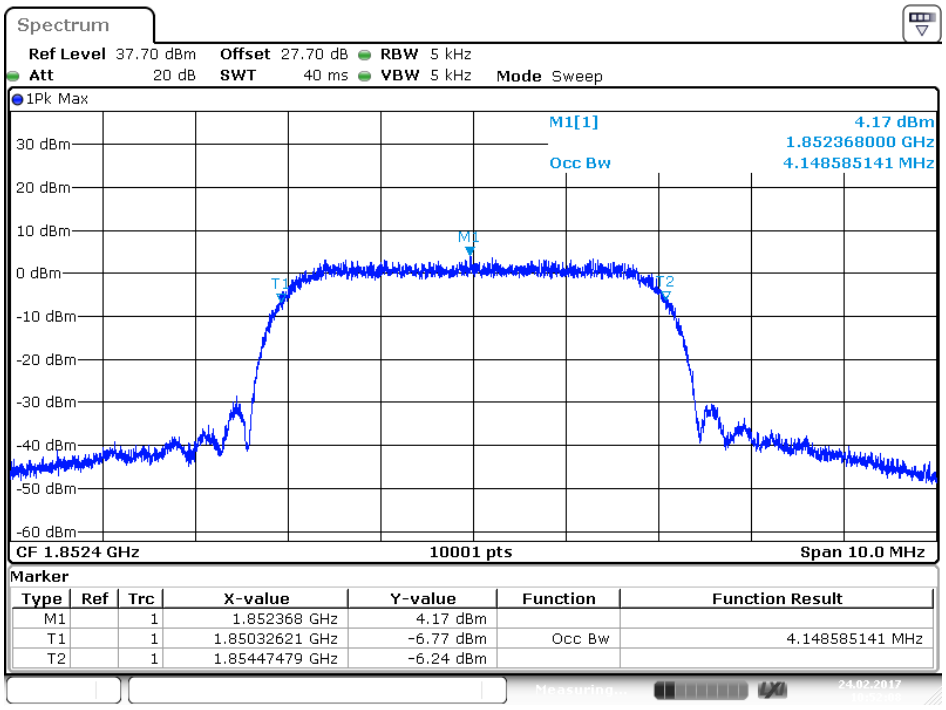
Frequency (MHz)	-26dB BW Measure Level (MHz)	99% BW Measure Level (MHz)	Limit (MHz)
1852.4	4.630	4.1486	N/A
1880.0	4.609	4.1526	N/A
1907.6	4.662	4.1506	N/A

1852.4 MHz (-26dB BW)



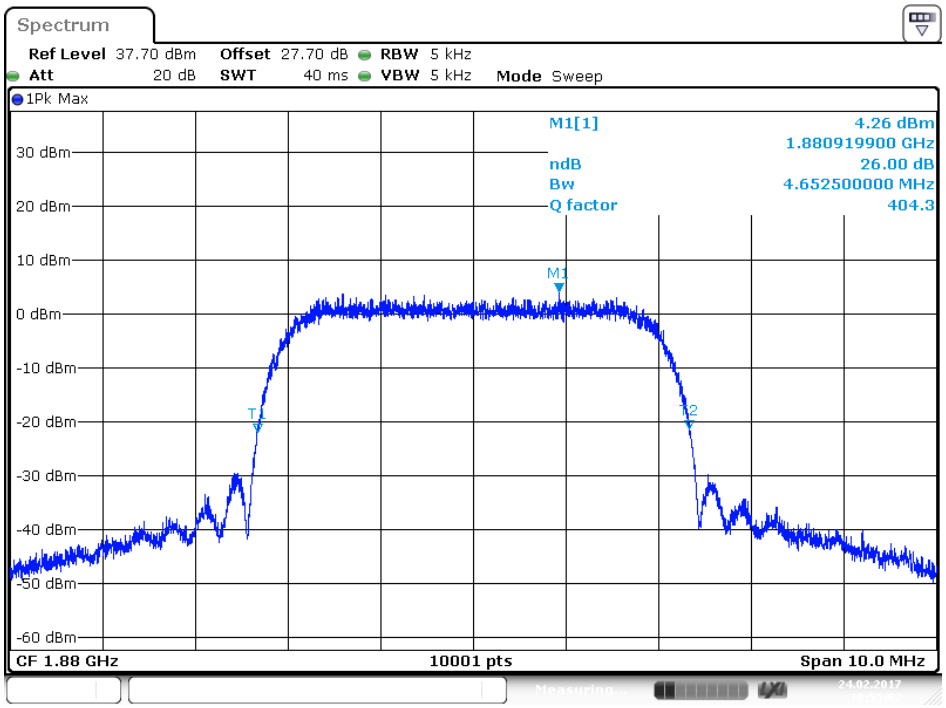
Date: 24.FEB.2017 10:56:15

1852.4 MHz (99% BW)



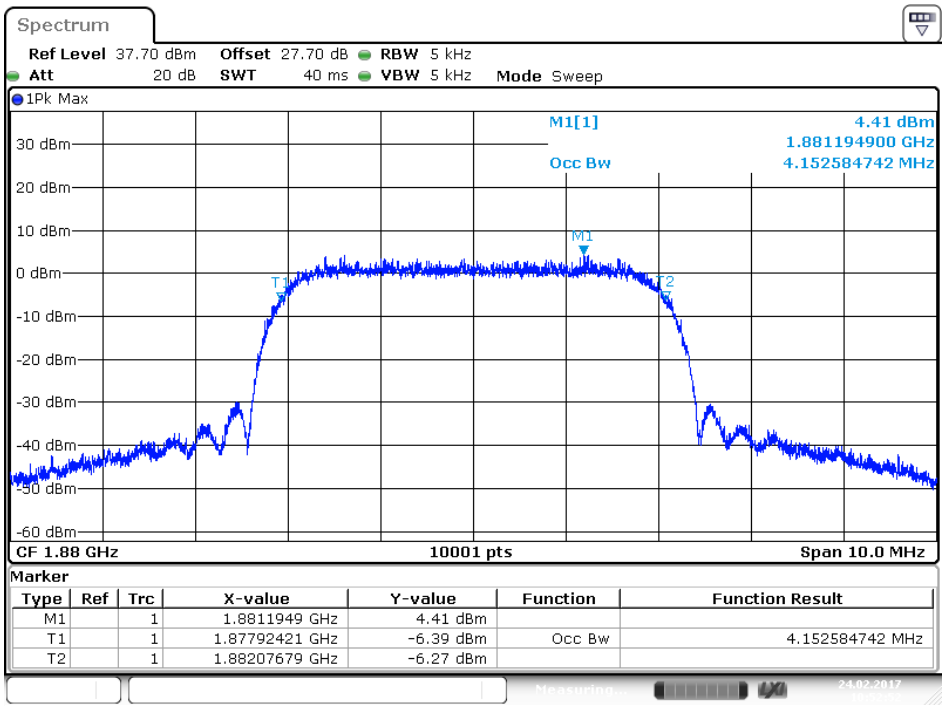
Date: 24.FEB.2017 10:52:08

1880.0 MHz (-26dB BW)



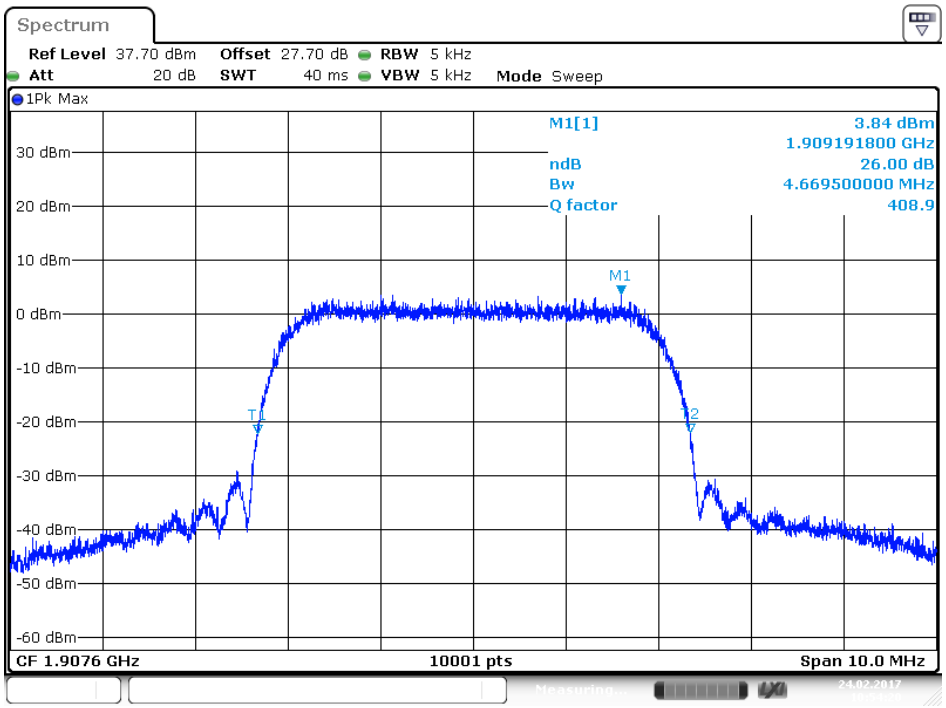
Date: 24.FEB.2017 10:55:03

1880.0 MHz (99% BW)



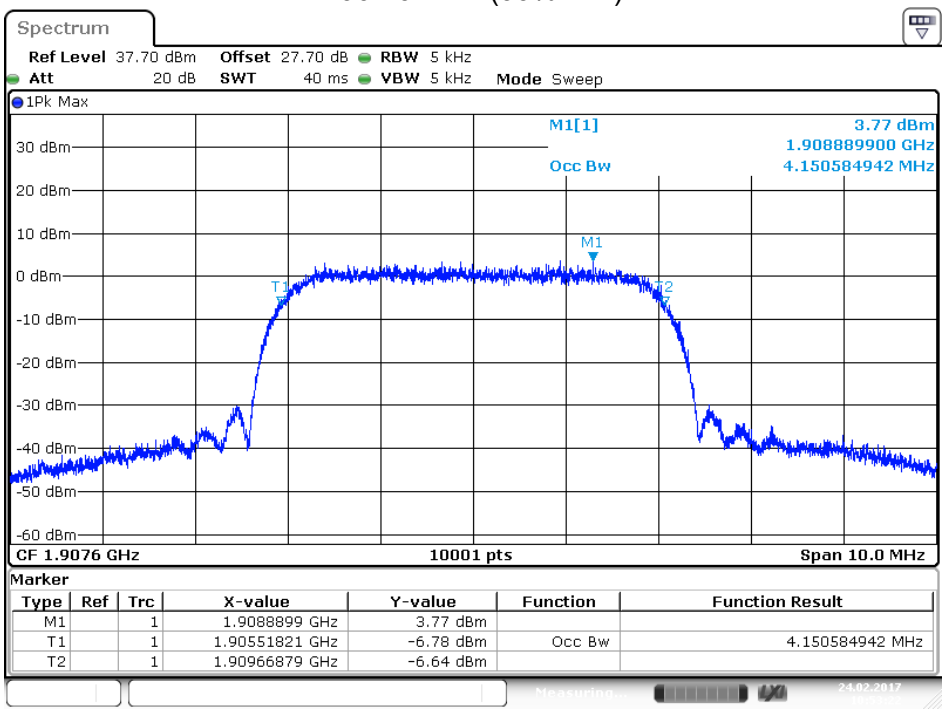
Date: 24.FEB.2017 10:52:52

1907.6 MHz (-26dB BW)



Date: 24.FEB.2017 10:54:21

1907.6 MHz (99% BW)



Date: 24.FEB.2017 10:53:22

5. Spurious Emission At Antenna Terminals (+/- 1MHz)

5.1. Test Equipment

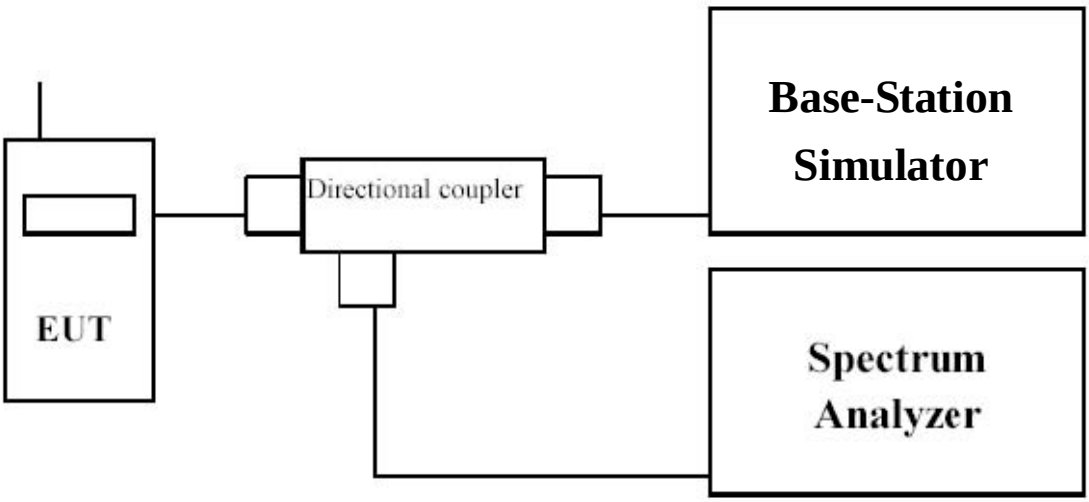
The following test equipments are used during the RF power output tests:

Spurious Emission At Antenna Terminals (+/- 1MHz)/ SR10-H

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Signal & Spectrum Analyzer	R&S	FSV40	101049	2018/01/22
Multisystem UE Tester	Japan radio	NJZ-2000	ET00477	2017/09/19
Directional Coupler	Agilent	778D	20402	2017/10/06

Note: All equipments upon which need to be calibrated are with calibration period of 1 year.

5.2. Test Setup



5.3. 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 + 10log(P) dB.

5.4. Test Procedure

In the 1MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed to measure the out of band Emissions.

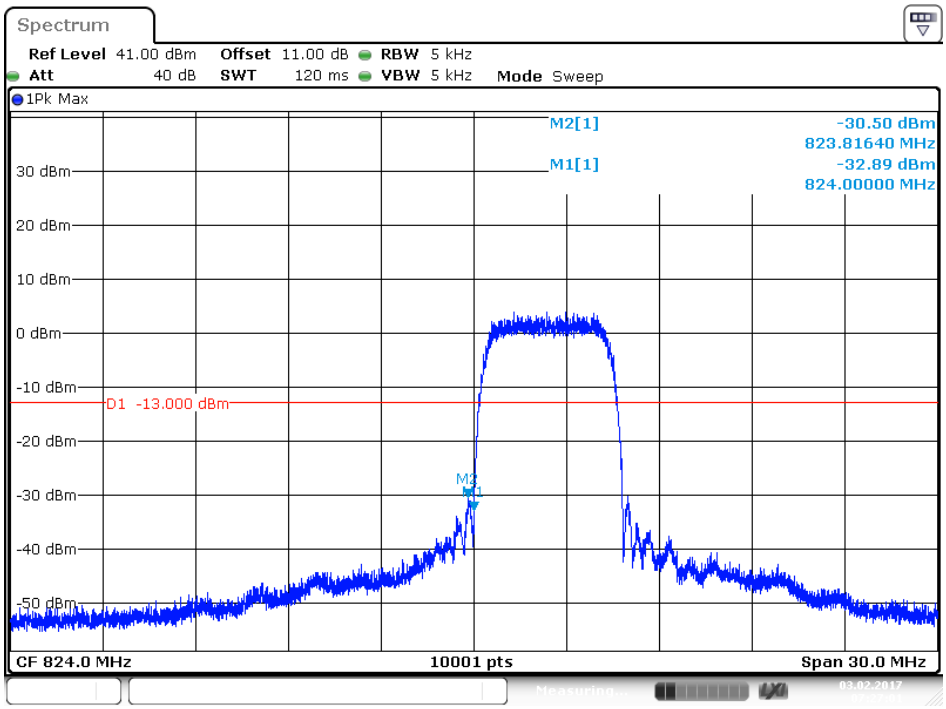
5.5. Uncertainty

The measurement uncertainty is defined as ± 1.2 dB.

5.6. Test Result

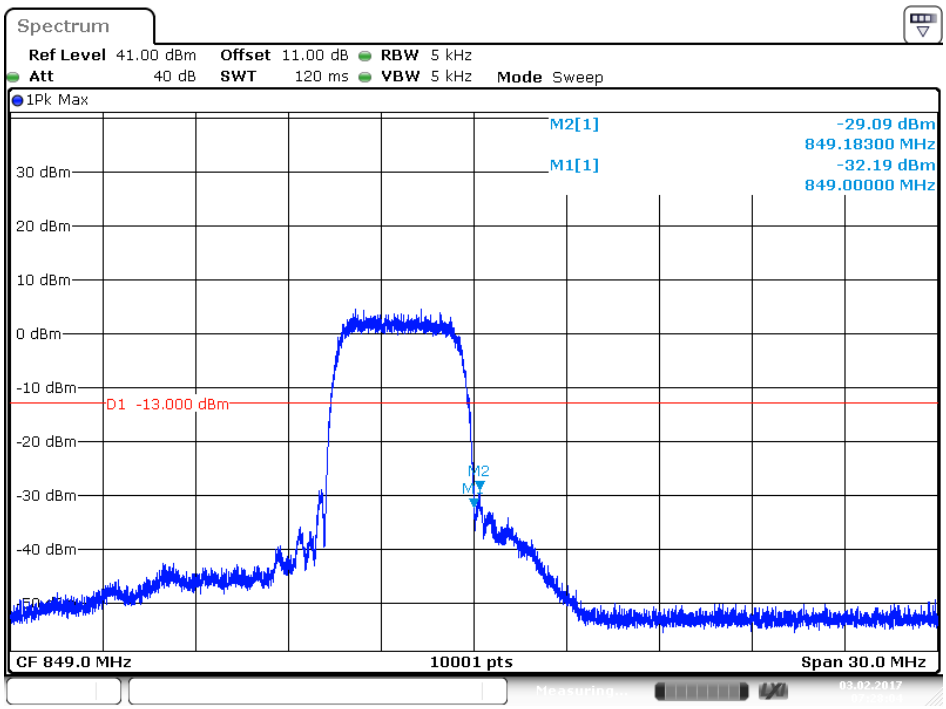
Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Item	Spurious Emission At Antenna Terminals (+/- 1MHz)		
Test Mode	Mode 1: WCDMA Band 5_Link Mode		
Date of Test	2017/02/03	Test Site	SR10-H

826.4 MHz



Date: 3.FEB.2017 07:27:02

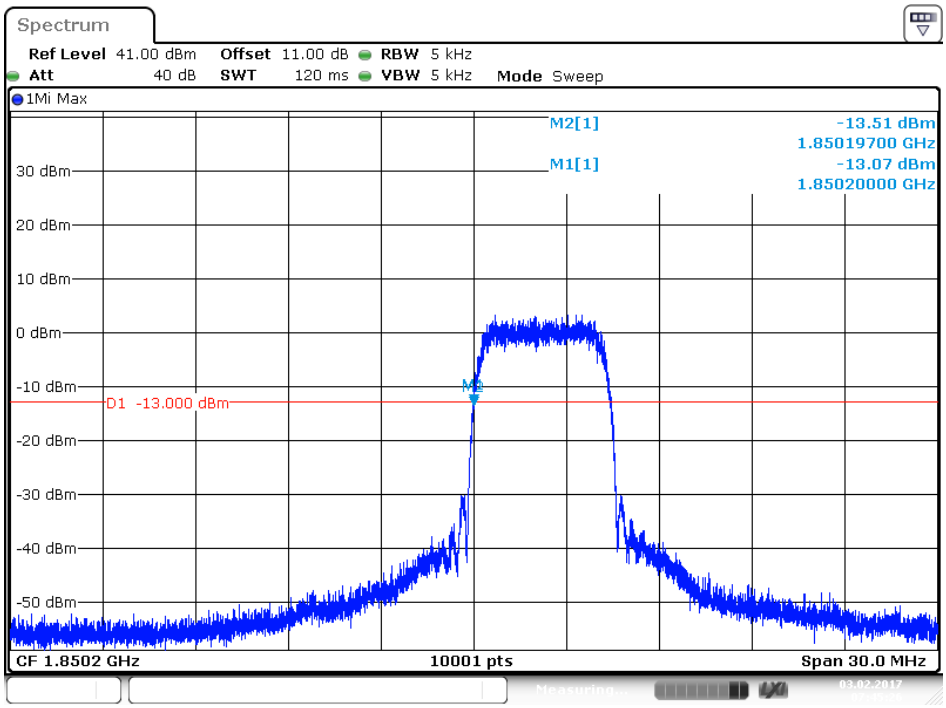
846.6 MHz



Date: 3.FEB.2017 07:28:04

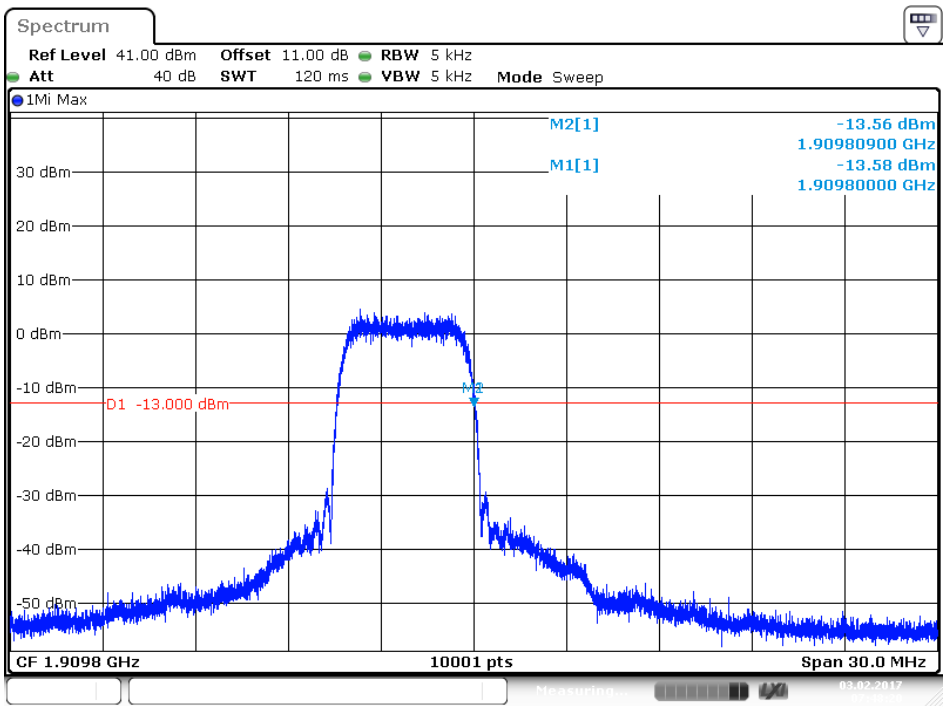
Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Item	Spurious Emission At Antenna Terminals (+/- 1MHz)		
Test Mode	Mode 3: WCDMA Band 2_Link Mode		
Date of Test	2017/02/03	Test Site	SR10-H

1852.4 MHz



Date: 3.FEB.2017 07:45:26

1907.6 MHz



Date: 3.FEB.2017 07:48:20

6. Spurious Emission

6.1. Test Equipment

The following test equipments are used during the radiated emission test:

Conducted Spurious Emission /SR10-H

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Signal & Spectrum Analyzer	R&S	FSV40	101049	2018/01/22
Multisystem UE Tester	Japan radio	NJZ-2000	ET00477	2017/09/19
Directional Coupler	Agilent	778D	20402	2017/10/06

Radiated Spurious Emission /CB4-H

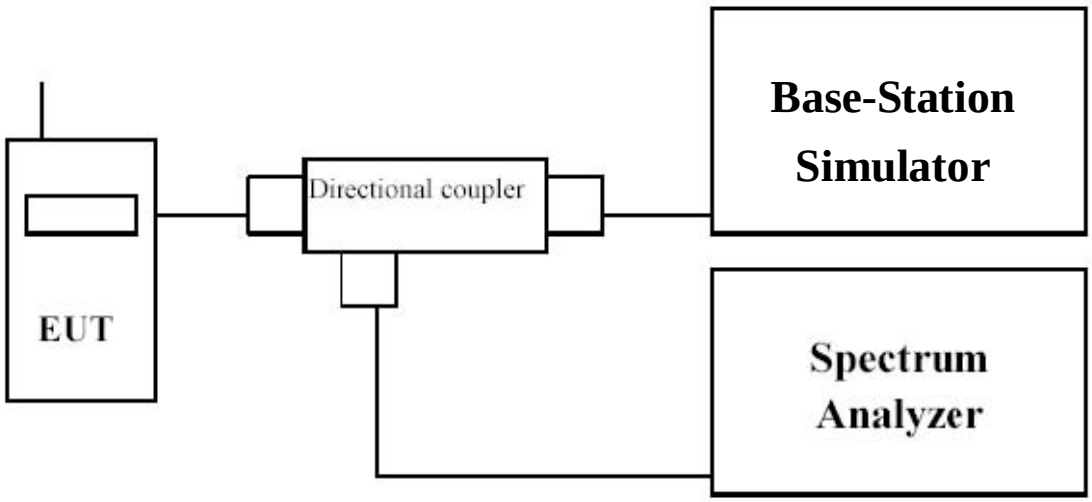
Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Bilog Antenna	Schaffner	CBL6112B	2891	2017/08/14
Horn Antenna	Schwarzbeck	BBHA 9120	D312	2017/10/25
Pre-Amplifier	EMCI	EMC0031835	980233	2018/02/02
Pre-Amplifier	Schwarzbeck	DBL-1840N506	013	2017/09/29
Pre-Amplifier	Miteq	JS41-001040000-58-5P	1573954	2017/10/04
Horn Antenna	Schwarzbeck	BBHA 9170	203	2017/08/28
Signal & Spectrum Analyzer	R&S	FSV40	101049	2018/01/22

Note: 1. All equipments that need to be calibrated are with calibration period of 1 year.

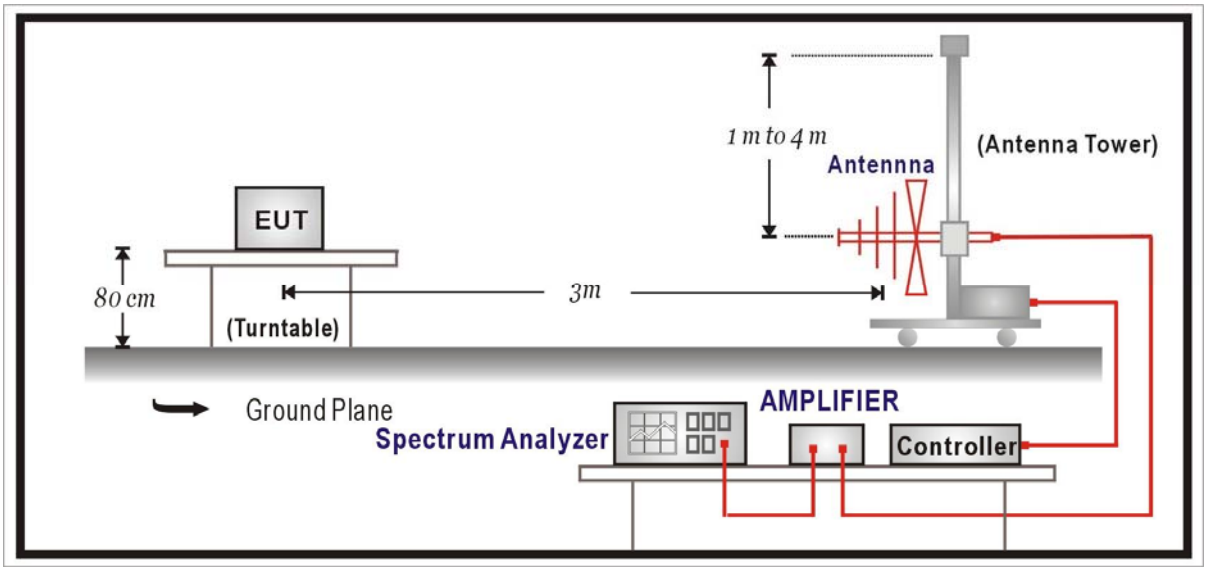
2. EIRP = Substitution Level + Substitution Antenna Gain - Cable Loss.

6.2. Test Setup

Conducted Spurious Measurement:



Radiated Spurious Measurement:



6.3. 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 + 10log (P) dB.

6.4. Test Procedure

Conducted Spurious Measurement:

a) Place the EUT on a bench and set it in transmitting mode.
b) Connect a low loss RF cable from the antenna port to a spectrum analyzer and BASE STATION SIMULATOR by a Directional Couple.
c) EUT Communicate with BASE STATION SIMULATOR then selects a channel for testing.
d) Add a correction factor to the display of spectrum, and then test.
e) The resolution bandwidth of the spectrum analyzer was set at 1 MHz, sufficient scans were taken to show the out of band Emission if any up to 10^{th} harmonic.

Radiated Spurious Measurement:

a) The measurement is divided into the Preliminary Measurement and the Final Measurement. The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB bandwidth of the antenna. The worst radiated emission is measured on the Final Measurement.

b) The EUT shall be placed at the specified height on a support, and in the position closest to normal use as declared by provider.
c) The test antenna shall be oriented initially for vertical polarization and shall be chosen to correspond to the frequency of the transmitter
d) The output of the test antenna shall be connected to the measuring receiver.
e) The transmitter shall be switched on and the measuring receiver shall be tuned to the frequency of the transmitter under test.
f) The test antenna shall be raised and lowered through the specified range of height until a maximum signal level is detected by the measuring receiver.
g) The transmitter shall then be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
h) The test antenna shall be raised and lowered again through the specified range of height until a maximum signal level is detected by the measuring receiver.
i) The maximum signal level detected by the measuring receiver shall be noted.
j) The transmitter shall be replaced by a substitution antenna.
k) The substitution antenna shall be orientated for vertical polarization and the length of the substitution antenna shall be adjusted to correspond to the frequency of the transmitter.
l) The substitution antenna shall be connected to a calibrated signal generator.
m) If necessary, the input attenuator setting of the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
n) The test antenna shall be raised and lowered through the specified range of height to ensure that the maximum signal is received.
o) The input signal to the substitution antenna shall be adjusted to the level that produces a level detected by the measuring receiver, that is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuator setting of the measuring receiver.
p) The measurement shall be repeated with the test antenna and the substitution antenna orientated for horizontal polarization.
q) The measure of the effective radiated power is the larger of the two levels recorded at the input to the substitution antenna, corrected for gain of the substitution antenna if necessary.
r) The frequency range was checked up to 10^{th} harmonic.

6.5. Uncertainty

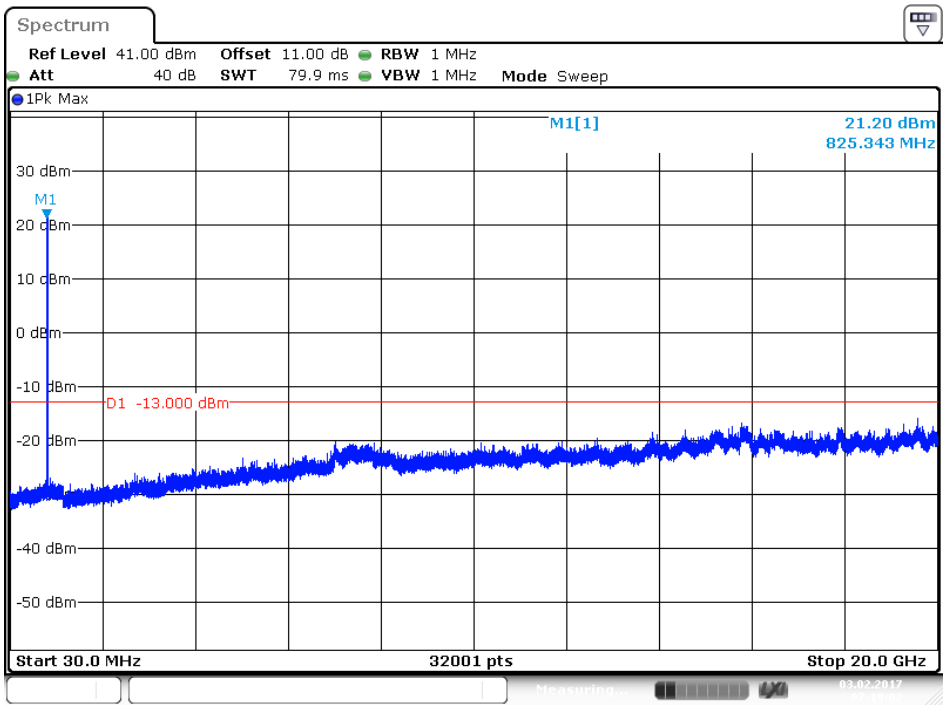
The measurement uncertainty is defined as for Conducted Power Measurement ± 1.2 dB, for Radiated Power Measurement ± 3.2 dB

6.6. Test Result

Conducted Test

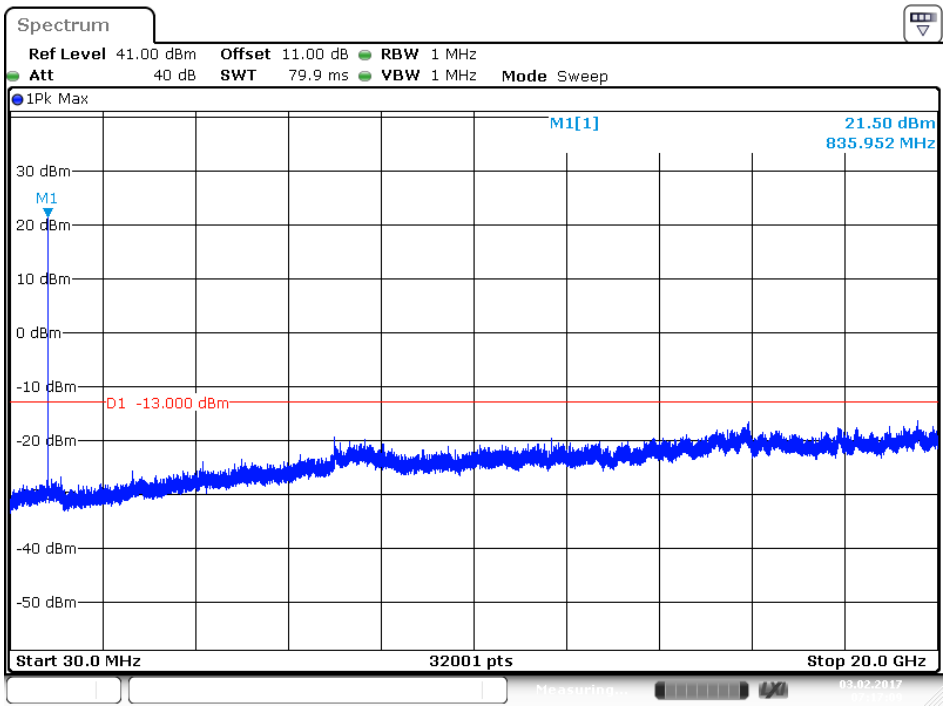
Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Item	Spurious Emission		
Test Mode	Mode 1: WCDMA Band 5_Link Mode		
Date of Test	2017/02/03	Test Site	CB4-H

826.4 MHz



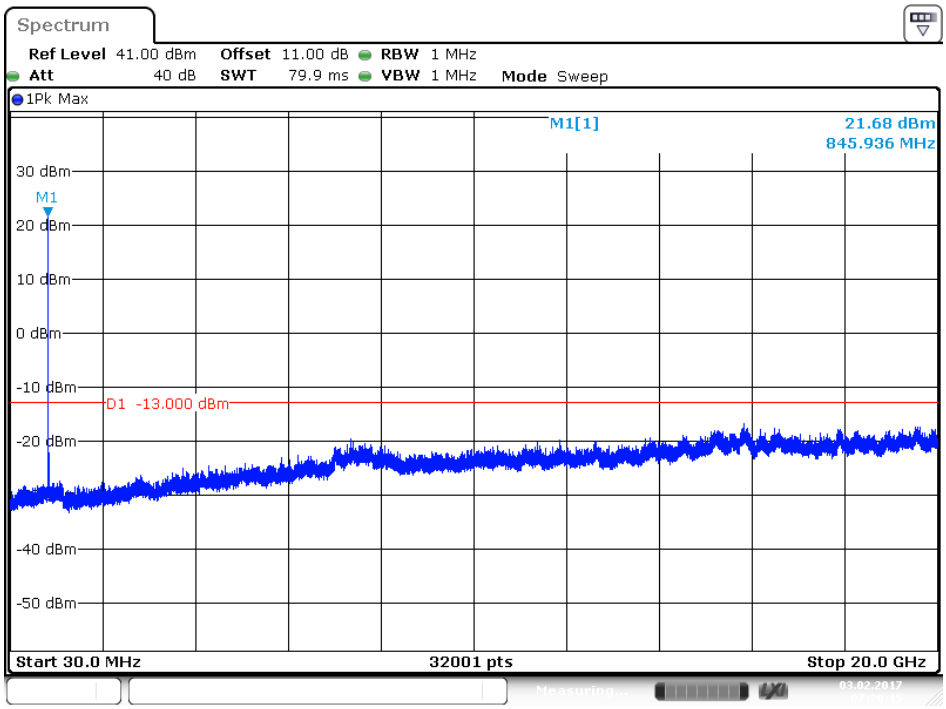
Date: 3.FEB.2017 07:19:02

836.6 MHz



Date: 3.FEB.2017 07:17:09

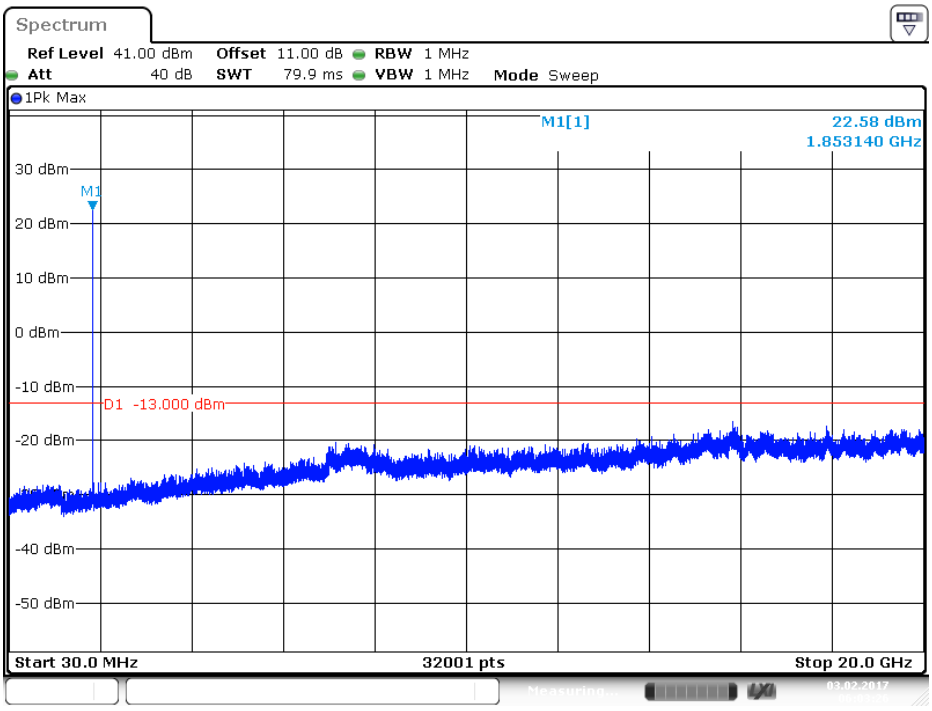
846.6 MHz



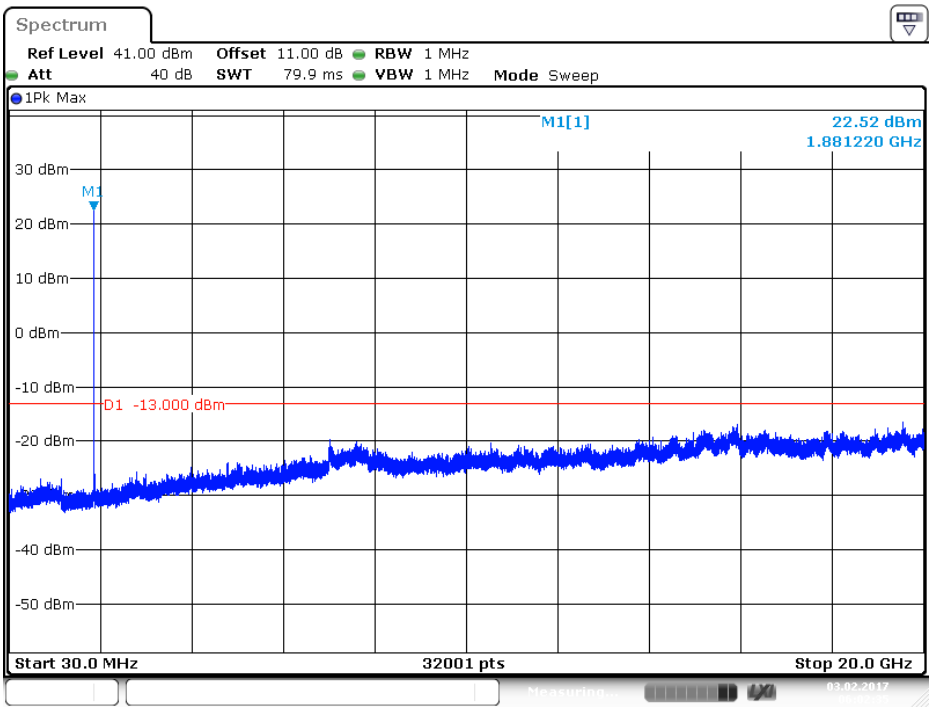
Date: 3.FEB.2017 07:20:15

Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Item	Spurious Emission		
Test Mode	Mode 3: WCDMA Band 2_Link Mode		
Date of Test	2017/02/03	Test Site	CB4-H

1852.4 MHz

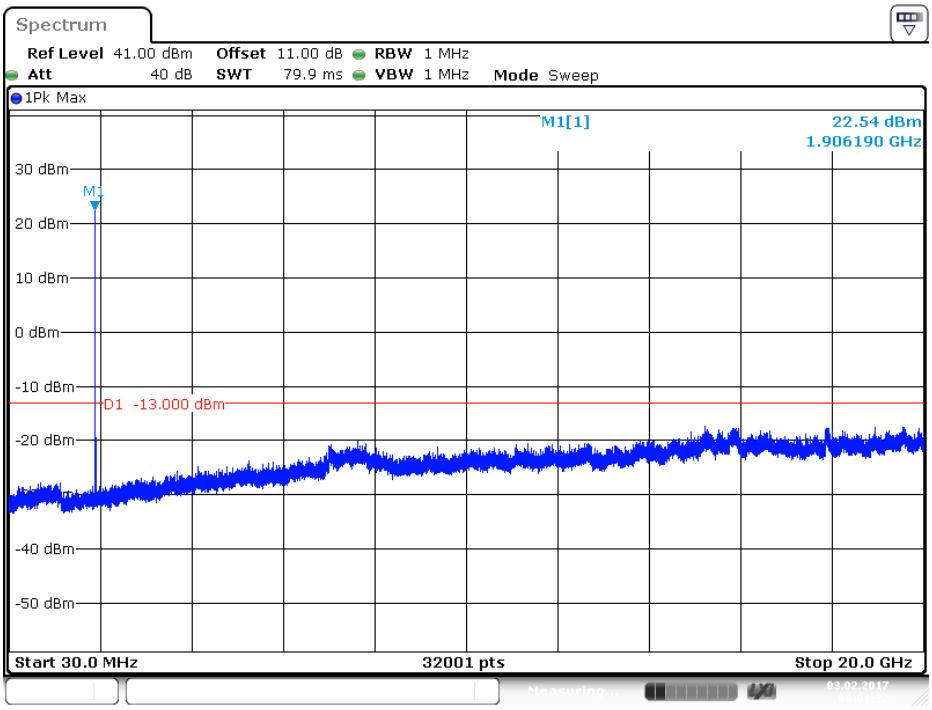


1880.0 MHz



Date: 3.FEB.2017 06:02:36

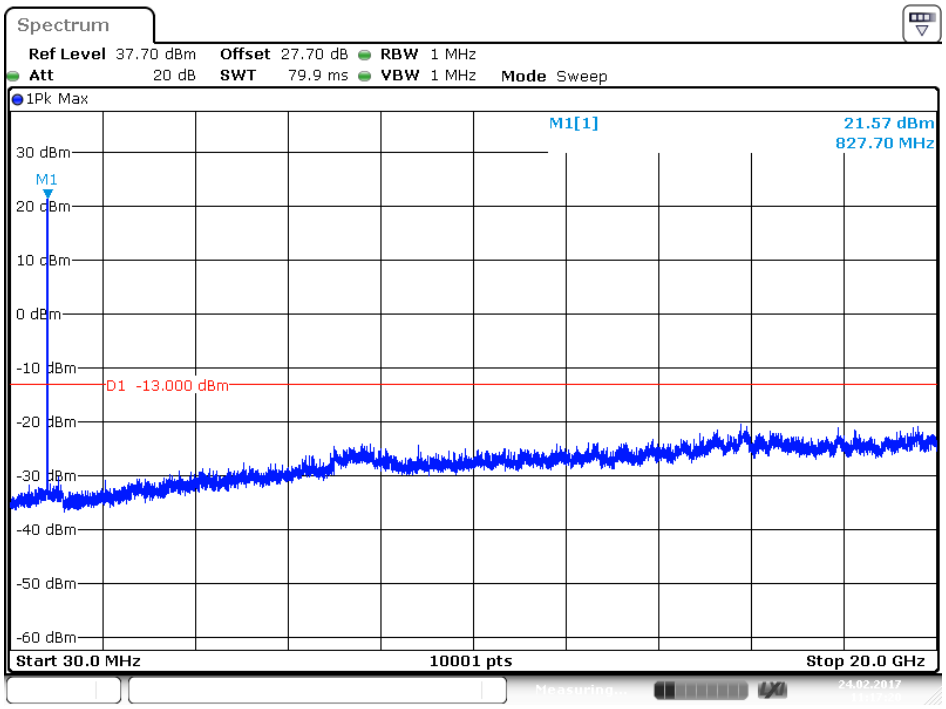
1907.6 MHz



Date: 3.FEB.2017 06:01:23

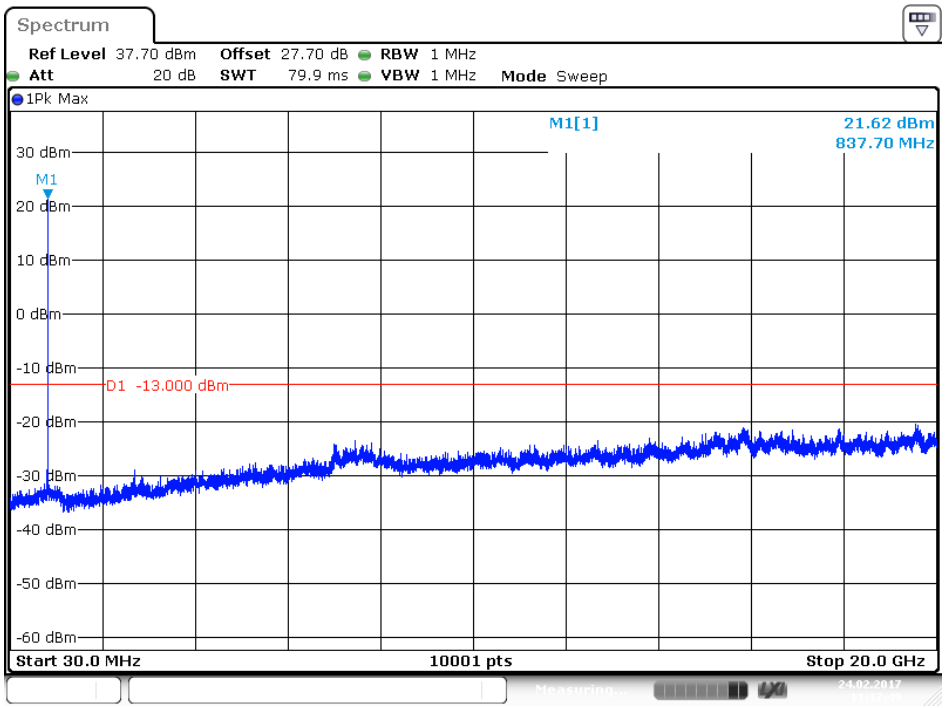
Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Item	Spurious Emission		
Test Mode	Mode 5: WCDMA Band 5_HSUPA Mode		
Date of Test	2017/02/24	Test Site	CB4-H

826.4 MHz



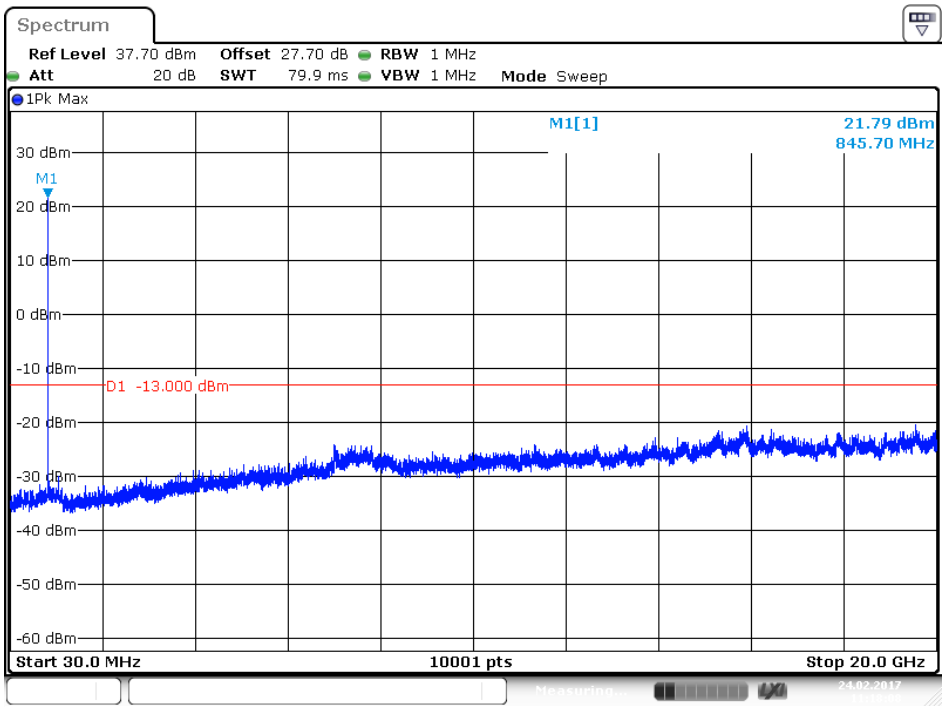
Date: 24.FEB.2017 11:17:21

836.6 MHz



Date: 24.FEB.2017 11:17:49

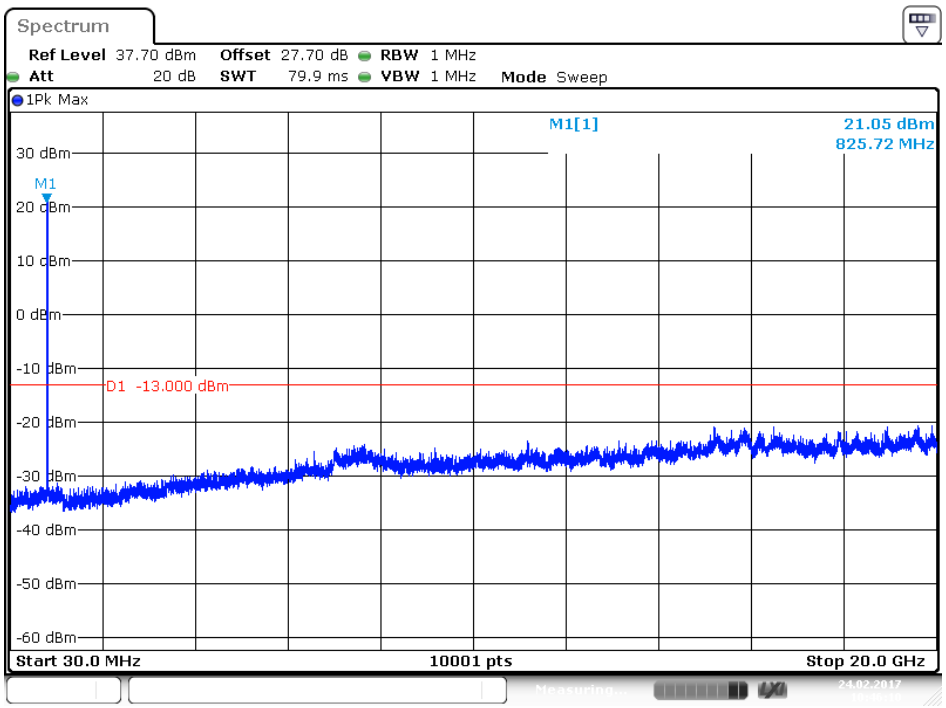
846.6 MHz



Date: 24.FEB.2017 11:18:08

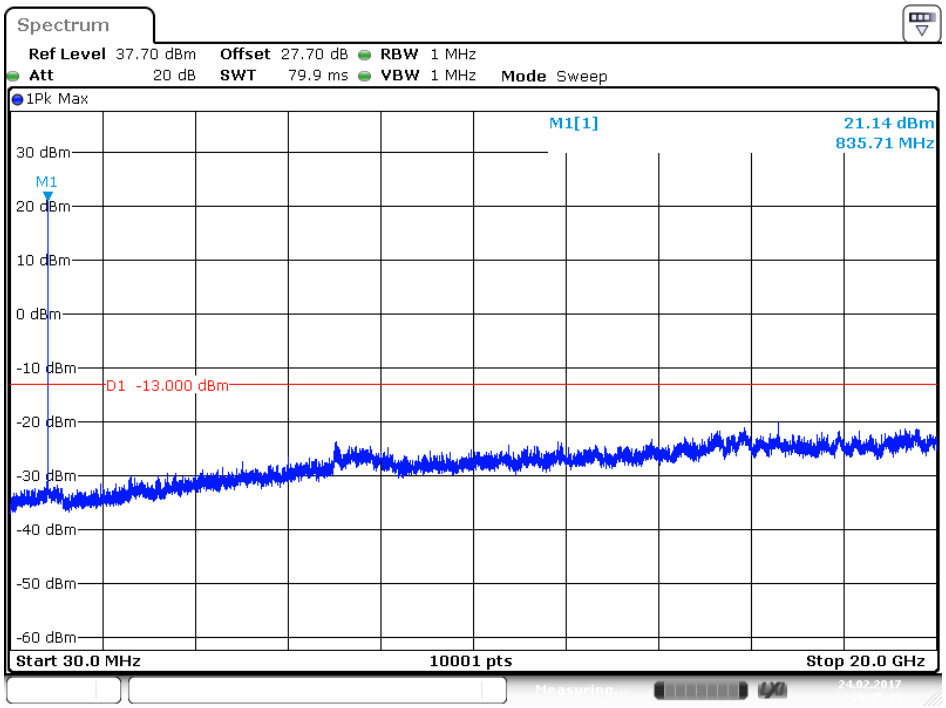
Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Item	Spurious Emission		
Test Mode	Mode 6: WCDMA Band 5_HSDPA Mode		
Date of Test	2017/02/24	Test Site	CB4-H

1852.4 MHz



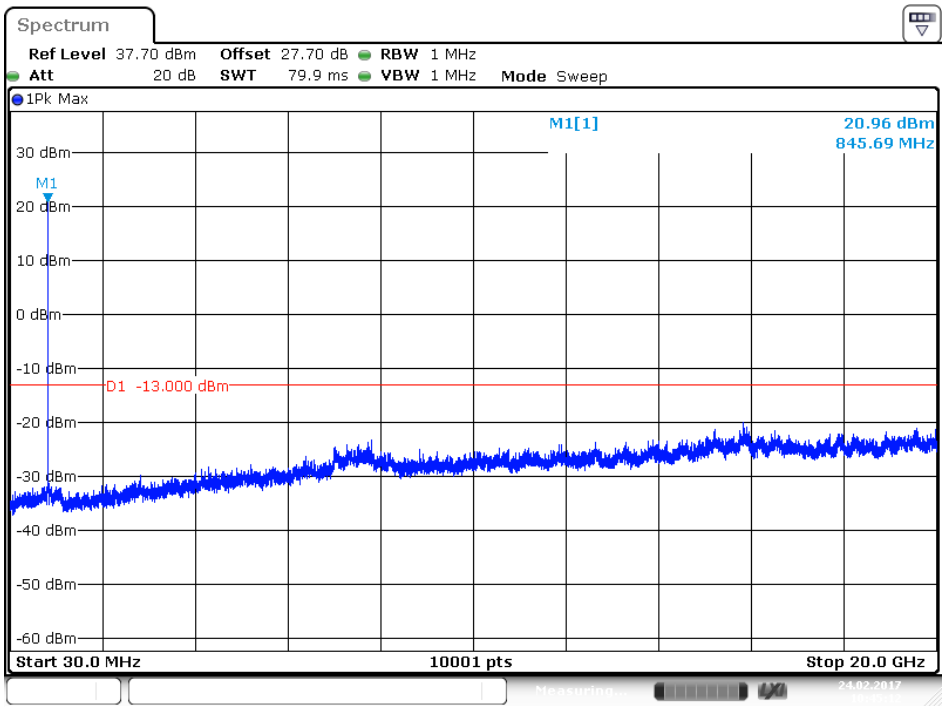
Date: 24.FEB.2017 10:46:10

1880.0 MHz



Date: 24.FEB.2017 10:45:46

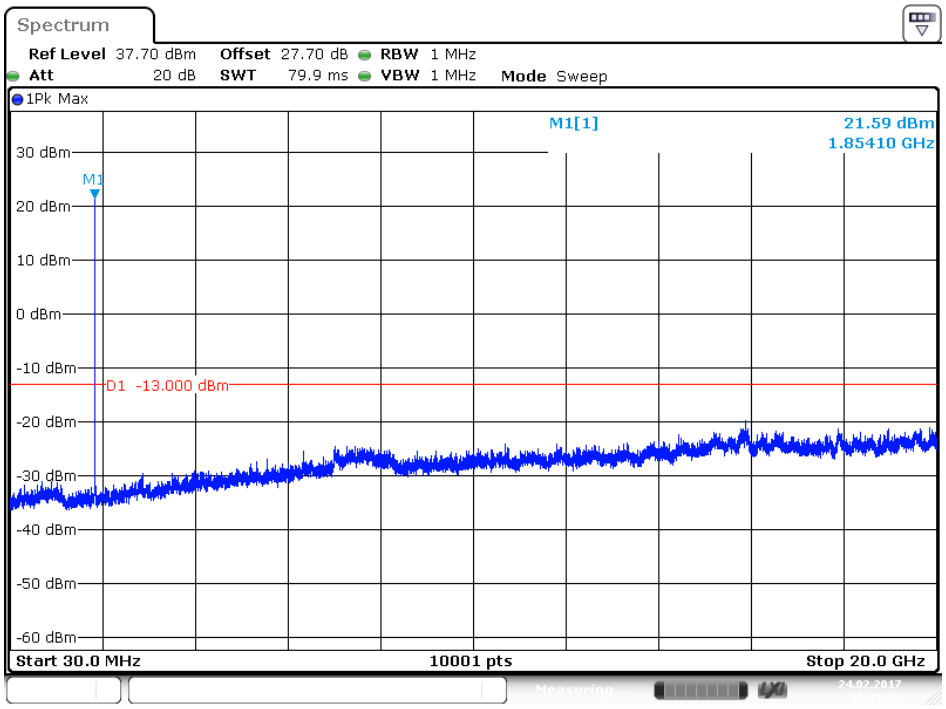
1907.6 MHz



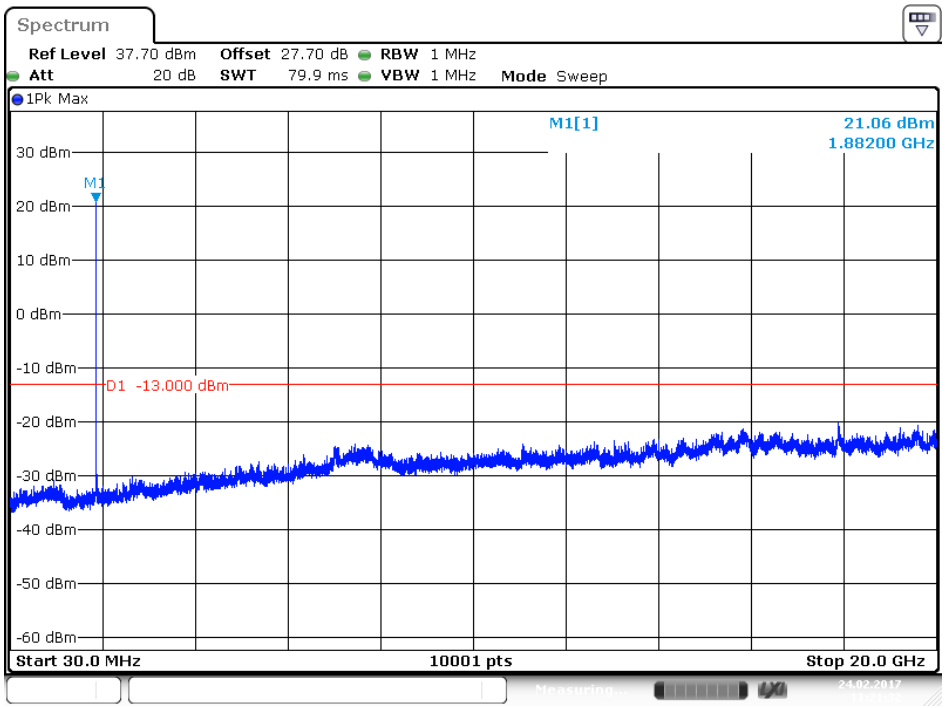
Date: 24.FEB.2017 10:45:12

Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Item	Spurious Emission		
Test Mode	Mode 7: WCDMA Band 2_HSUPA Mode		
Date of Test	2017/02/24	Test Site	CB4-H

826.4 MHz



836.6 MHz



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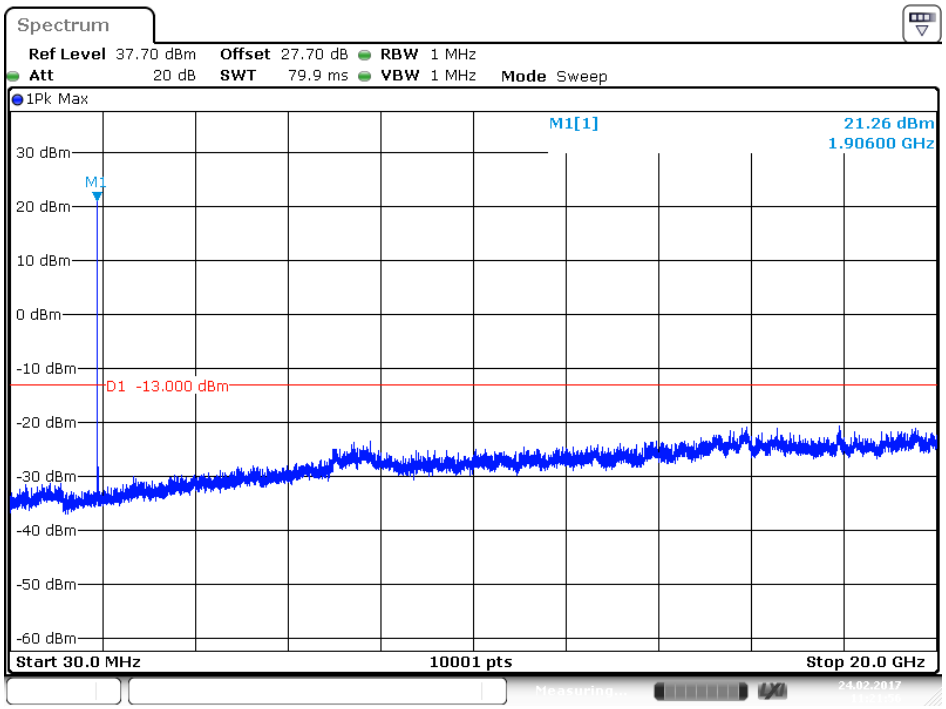
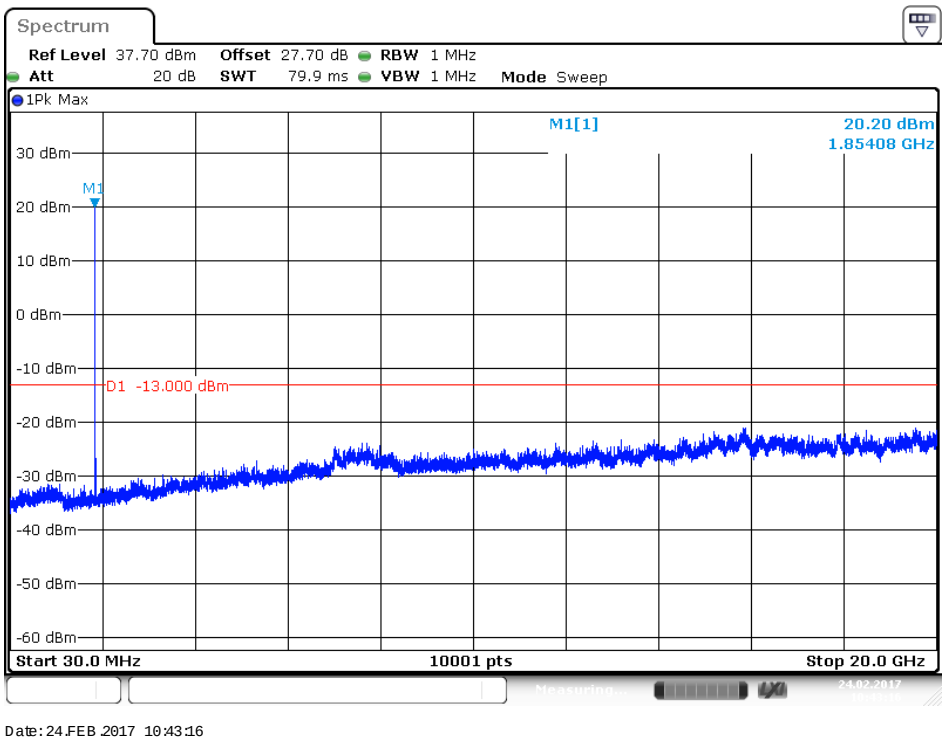
846.6 MHz



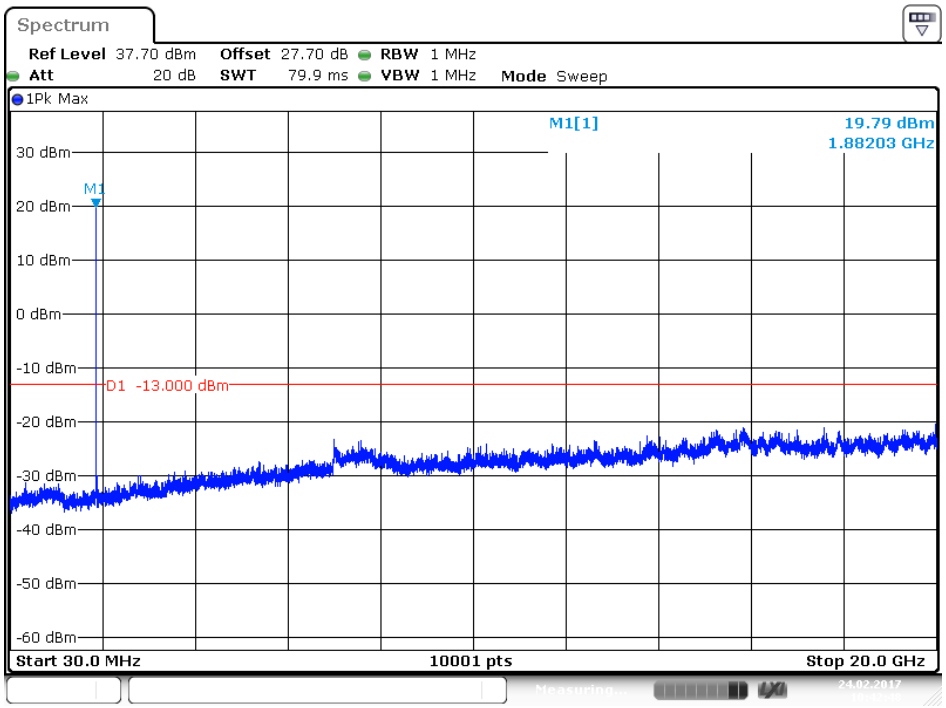
Date: 24.FEB.2017 11:21:56

Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Item	Spurious Emission		
Test Mode	Mode 8: WCDMA Band 2_HSDPA Mode		
Date of Test	2017/02/24	Test Site	CB4-H

1852.4 MHz

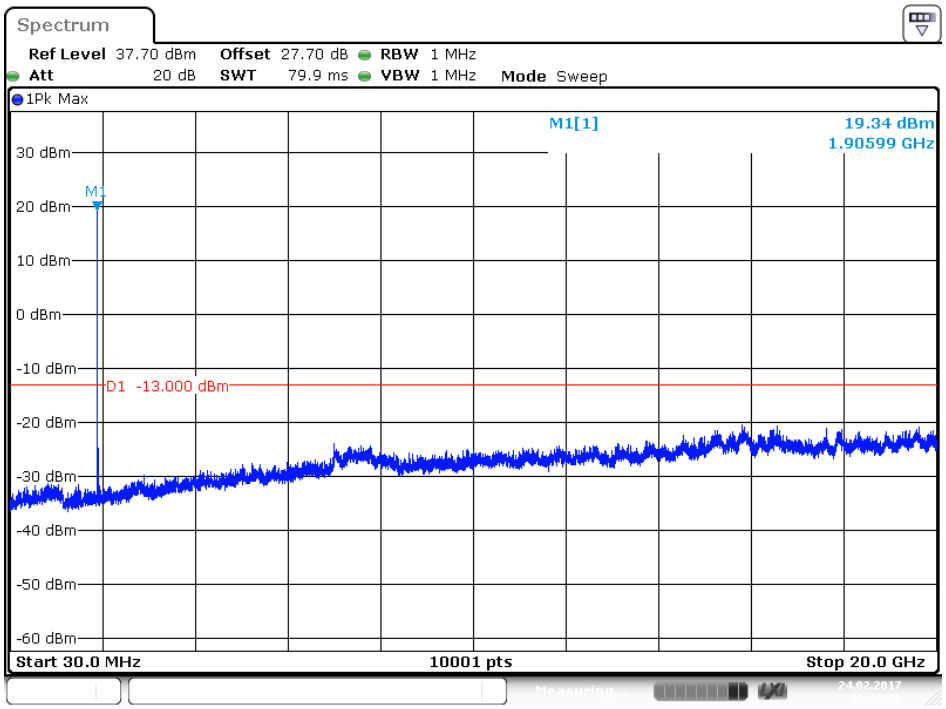


1880.0 MHz



Date: 24.FEB.2017 10:42:48

1907.6 MHz

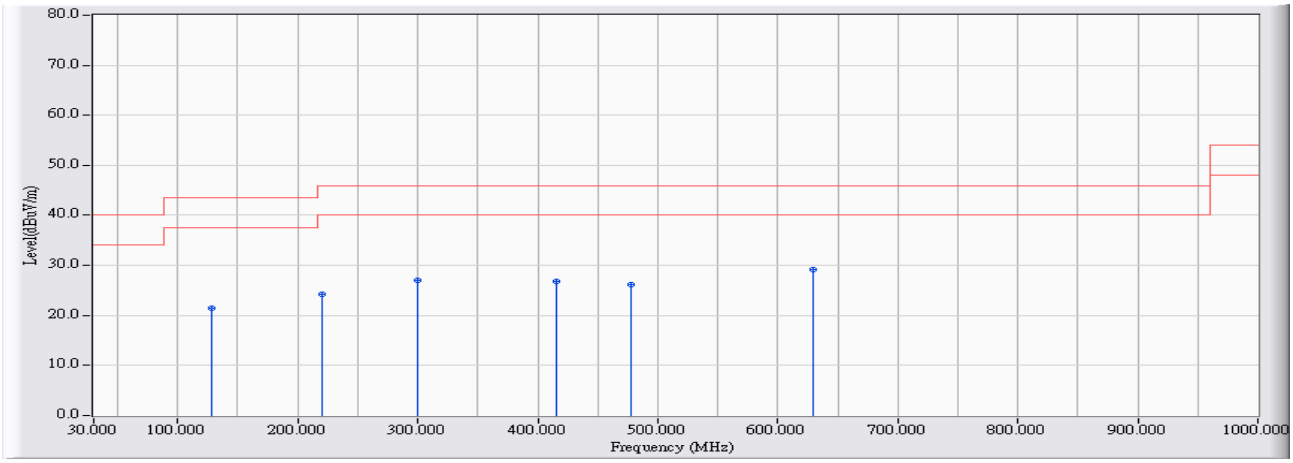


Date: 24.FEB.2017 10:42:06

Radiated Test

30MHz-1GHz Spurious

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB4-H_FCC_EFS_S2_30M-1GHz_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 1: WCDMA Band 5_Link Mode_836.6MHz**

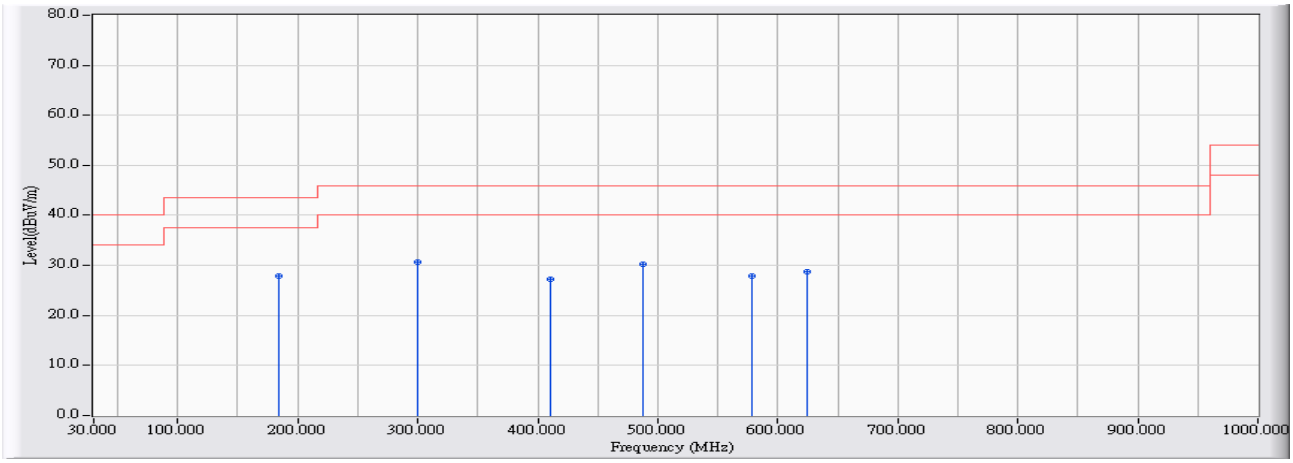


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		127.766	-21.232	42.734	21.503	-21.997	43.500	QUASIPEAK
2		220.101	-22.050	46.240	24.191	-21.809	46.000	QUASIPEAK
3		300.021	-19.403	46.486	27.083	-18.917	46.000	QUASIPEAK
4		415.439	-15.698	42.446	26.749	-19.251	46.000	QUASIPEAK
5		477.222	-14.529	40.710	26.181	-19.819	46.000	QUASIPEAK
6	*	628.818	-12.109	41.293	29.184	-16.816	46.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB4-H_FCC_EFS_S2_30M-1GHz_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 1: WCDMA Band 5_Link Mode_836.6MHz**

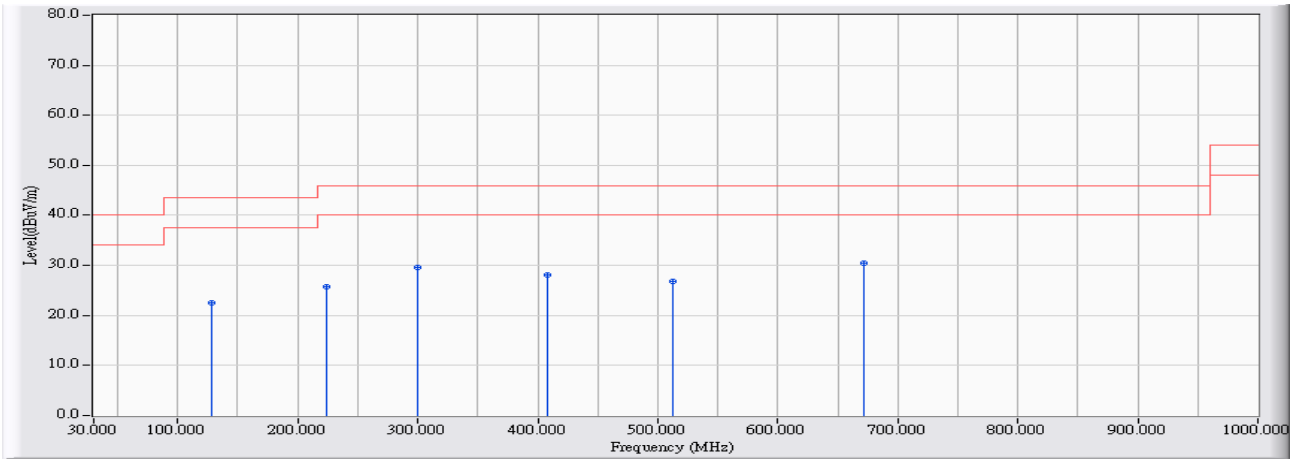


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		184.506	-23.878	51.711	27.833	-15.667	43.500	QUASIPEAK
2	*	300.021	-19.403	50.049	30.646	-15.354	46.000	QUASIPEAK
3		410.493	-15.527	42.736	27.209	-18.791	46.000	QUASIPEAK
4		487.115	-14.285	44.442	30.156	-15.844	46.000	QUASIPEAK
5		578.771	-13.343	41.323	27.980	-18.020	46.000	QUASIPEAK
6		624.357	-11.956	40.762	28.807	-17.193	46.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB4-H_FCC_EFS_S2_30M-1GHz_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 2: WCDMA Band 5_Idle Mode_836.6MHz**

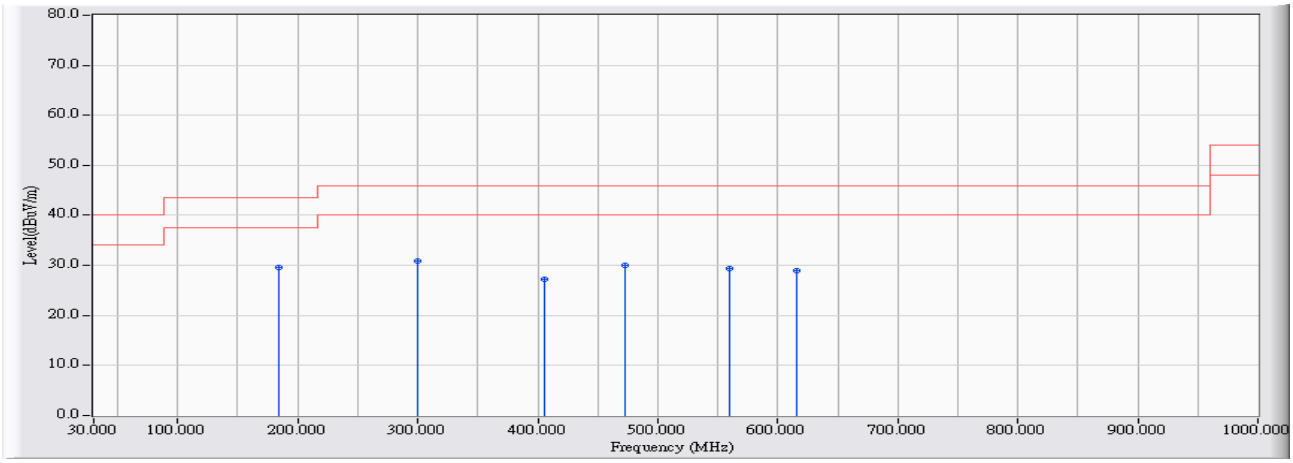


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		128.736	-21.243	43.701	22.458	-21.042	43.500	QUASIPEAK
2		224.272	-21.777	47.618	25.841	-20.159	46.000	QUASIPEAK
3		300.021	-19.403	49.026	29.623	-16.377	46.000	QUASIPEAK
4		408.553	-15.549	43.600	28.051	-17.949	46.000	QUASIPEAK
5		512.139	-13.583	40.446	26.864	-19.136	46.000	QUASIPEAK
6	*	671.591	-11.466	41.913	30.447	-15.553	46.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB4-H_FCC_EFS_S2_30M-1GHz_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 2: WCDMA Band 5_Idle Mode_836.6MHz**

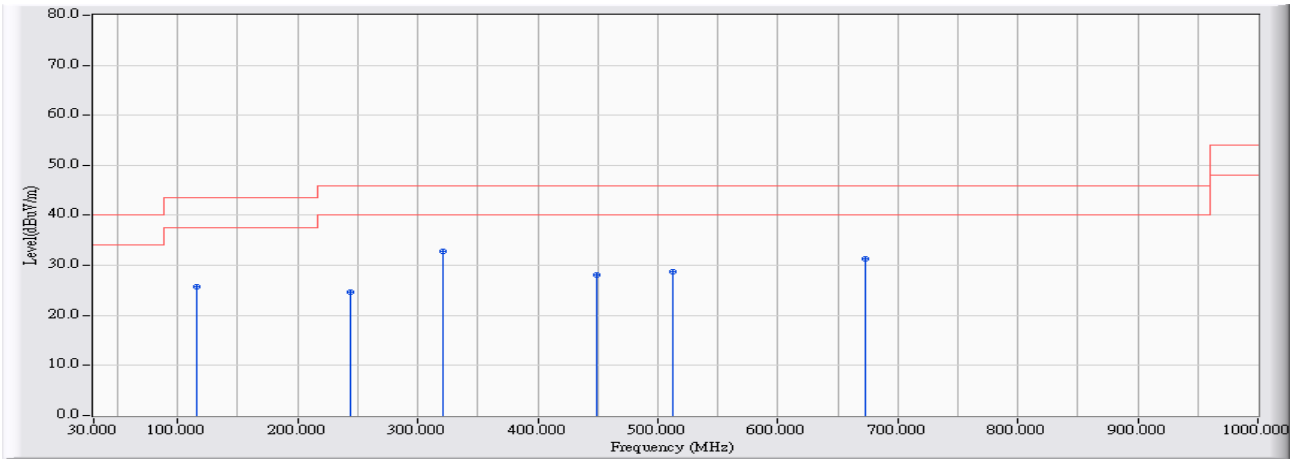


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	184.215	-23.894	53.412	29.519	-13.981	43.500	QUASIPEAK
2		299.924	-19.404	50.298	30.894	-15.106	46.000	QUASIPEAK
3		405.740	-15.612	42.850	27.239	-18.761	46.000	QUASIPEAK
4		472.955	-14.553	44.563	30.010	-15.990	46.000	QUASIPEAK
5		559.664	-13.095	42.574	29.479	-16.521	46.000	QUASIPEAK
6		616.015	-11.982	40.928	28.945	-17.055	46.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB4-H_FCC_EFS_S2_30M-1GHz_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 3: WCDMA Band 2_Link Mode_1880MHz**

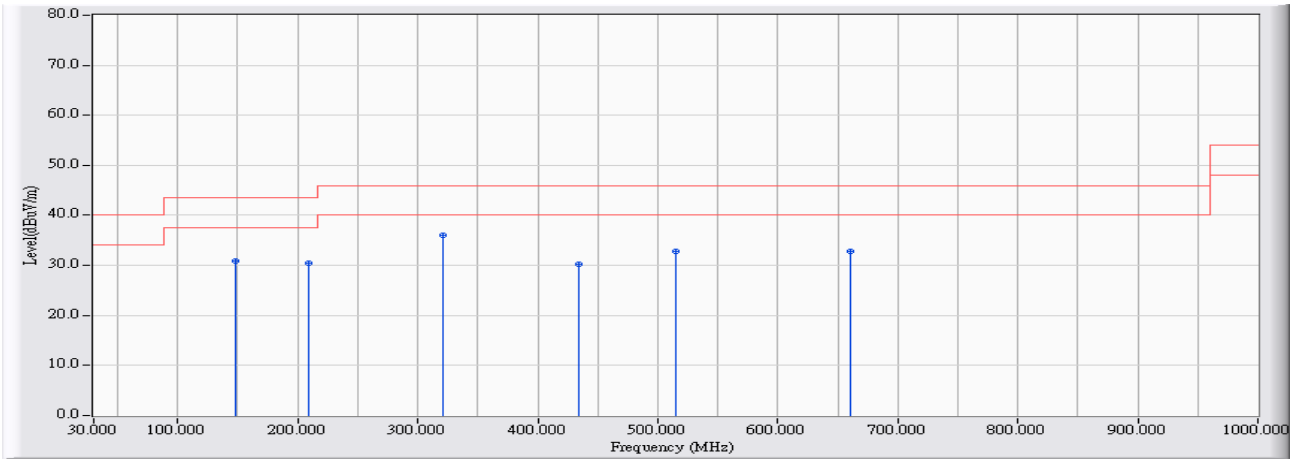


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		116.418	-21.530	47.272	25.742	-17.758	43.500	QUASIPEAK
2		244.155	-20.539	45.231	24.692	-21.308	46.000	QUASIPEAK
3	*	320.971	-18.858	51.597	32.739	-13.261	46.000	QUASIPEAK
4		448.804	-14.721	42.751	28.031	-17.969	46.000	QUASIPEAK
5		513.012	-13.579	42.250	28.671	-17.329	46.000	QUASIPEAK
6		672.755	-11.447	42.845	31.398	-14.602	46.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB4-H_FCC_EFS_S2_30M-1GHz_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 3: WCDMA Band 2_Link Mode_1880MHz**

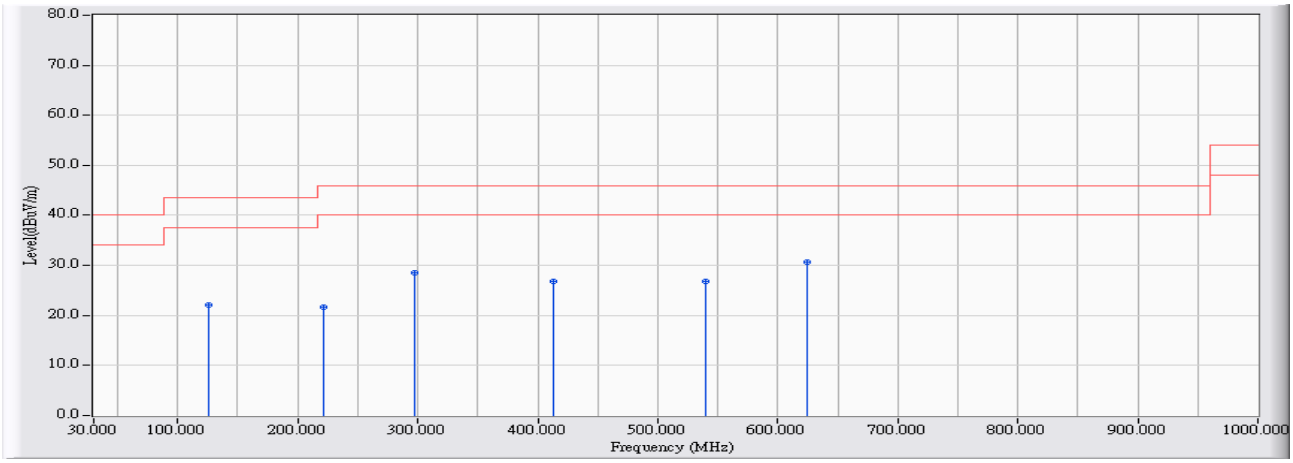


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		147.746	-22.067	52.930	30.863	-12.637	43.500	QUASIPEAK
2		209.432	-22.515	53.070	30.555	-12.945	43.500	QUASIPEAK
3	*	320.971	-18.858	54.939	36.081	-9.919	46.000	QUASIPEAK
4		434.450	-15.353	45.492	30.139	-15.861	46.000	QUASIPEAK
5		514.952	-13.572	46.304	32.731	-13.269	46.000	QUASIPEAK
6		660.534	-12.189	45.060	32.871	-13.129	46.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB4-H_FCC_EFS_S2_30M-1GHz_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 4: WCDMA Band 2_Idle Mode_1880MHz**

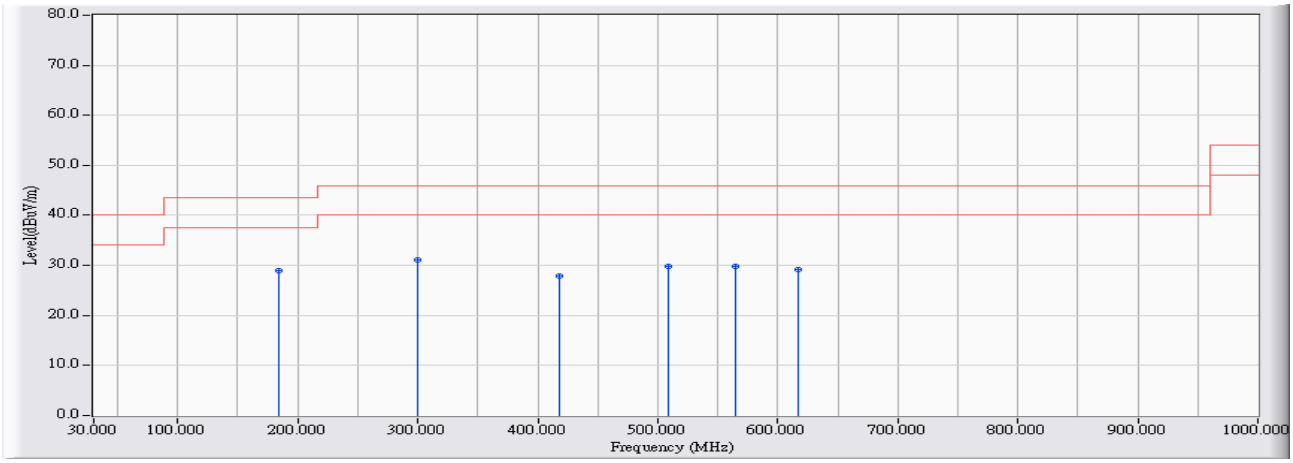


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1		125.535	-21.204	43.264	22.060	-21.440	43.500	QUASIPEAK
2		220.974	-21.992	43.596	21.603	-24.397	46.000	QUASIPEAK
3		297.499	-19.382	47.997	28.616	-17.384	46.000	QUASIPEAK
4		412.724	-15.604	42.492	26.888	-19.112	46.000	QUASIPEAK
5		539.781	-13.434	40.284	26.850	-19.150	46.000	QUASIPEAK
6	*	625.035	-11.979	42.625	30.646	-15.354	46.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_CLASS_B_03M_QP	**Margin : 6**
Probe : CB4-H_FCC_EFS_S2_30M-1GHz_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 4: WCDMA Band 2_Idle Mode_1880MHz**

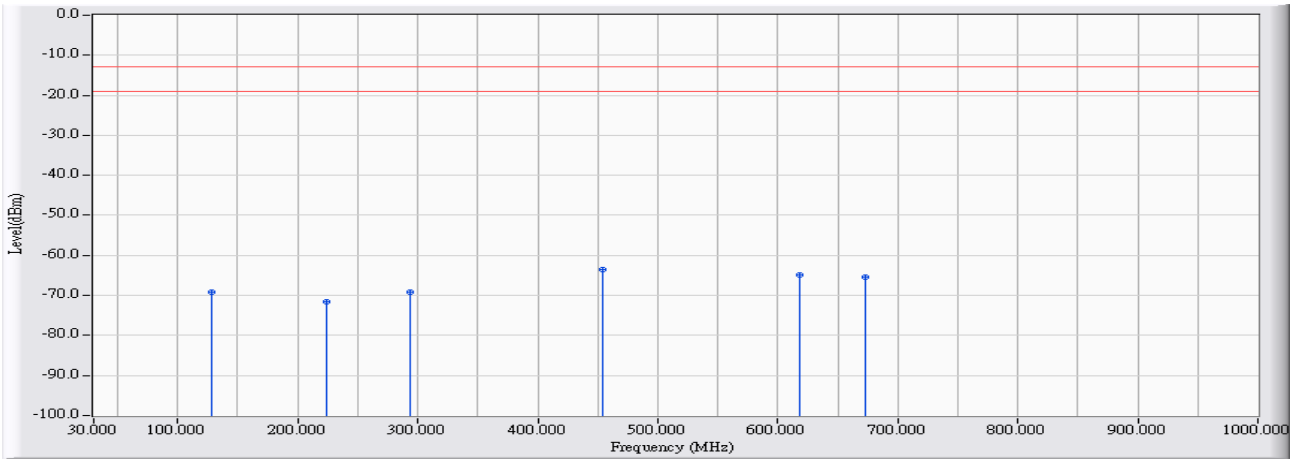


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Measure Level (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Detector Type
1	*	183.827	-23.913	52.871	28.958	-14.542	43.500	QUASIPEAK
2		300.021	-19.403	50.595	31.192	-14.808	46.000	QUASIPEAK
3		418.252	-15.794	43.762	27.968	-18.032	46.000	QUASIPEAK
4		508.744	-13.647	43.518	29.870	-16.130	46.000	QUASIPEAK
5		564.514	-12.990	42.719	29.729	-16.271	46.000	QUASIPEAK
6		617.179	-11.933	41.164	29.231	-16.769	46.000	QUASIPEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_S2_30M-1GHz_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 5: WCDMA Band 5_HSUPA Mode _836.6_HSUPA_Link**

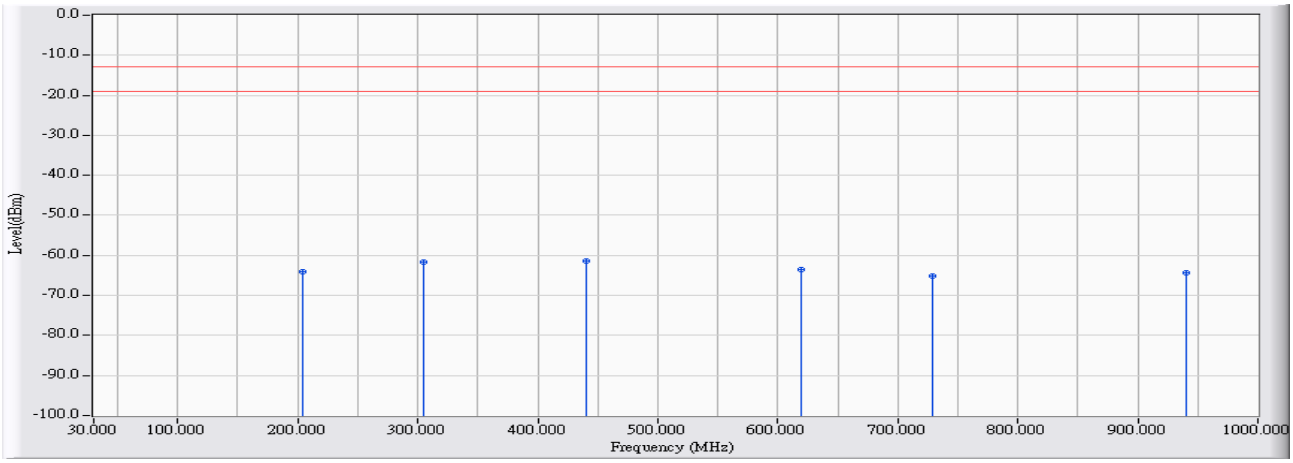


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		128.057	-28.863	-40.243	-69.106	-56.106	-13.000	PEAK
2		223.981	-25.541	-46.103	-71.644	-58.644	-13.000	PEAK
3		293.717	-20.711	-48.448	-69.159	-56.159	-13.000	PEAK
4	*	454.527	-14.983	-48.554	-63.537	-50.537	-13.000	PEAK
5		618.828	-11.842	-53.133	-64.975	-51.975	-13.000	PEAK
6		672.464	-11.575	-53.900	-65.475	-52.475	-13.000	PEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_S2_30M-1GHz_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 5: WCDMA Band 5_HSUPA Mode _836.6_HSUPA_Link**

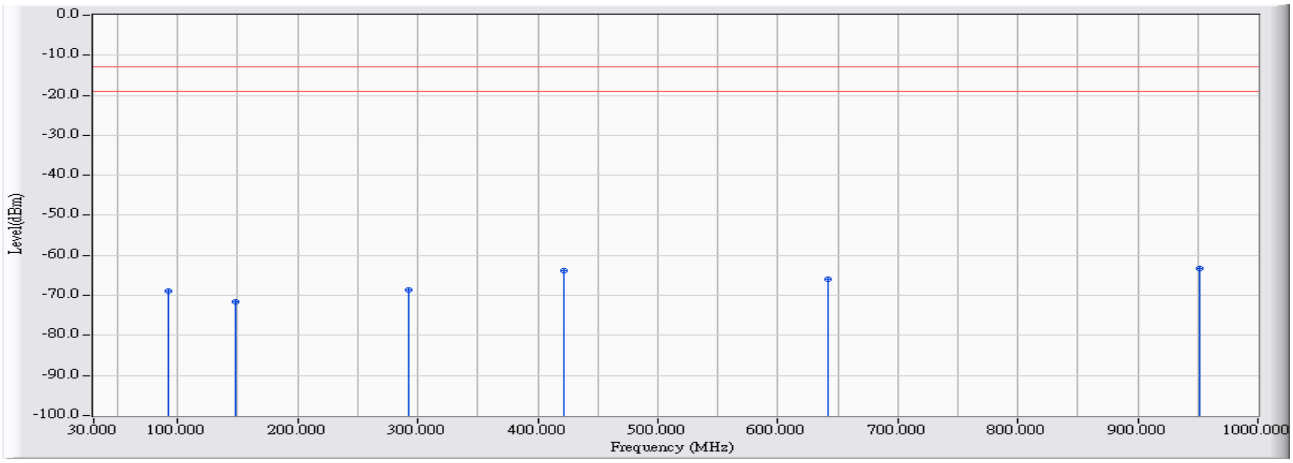


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		203.807	-24.575	-39.620	-64.195	-51.195	-13.000	PEAK
2		304.968	-20.184	-41.568	-61.752	-48.752	-13.000	PEAK
3	*	439.978	-15.592	-45.751	-61.343	-48.343	-13.000	PEAK
4		619.701	-11.212	-52.196	-63.408	-50.408	-13.000	PEAK
5		729.300	-10.257	-54.820	-65.076	-52.076	-13.000	PEAK
6		940.739	-7.457	-56.755	-64.212	-51.212	-13.000	PEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_S2_30M-1GHz_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 5: WCDMA Band 5_HSUPA Mode _836.6_HSUPA_Idle**

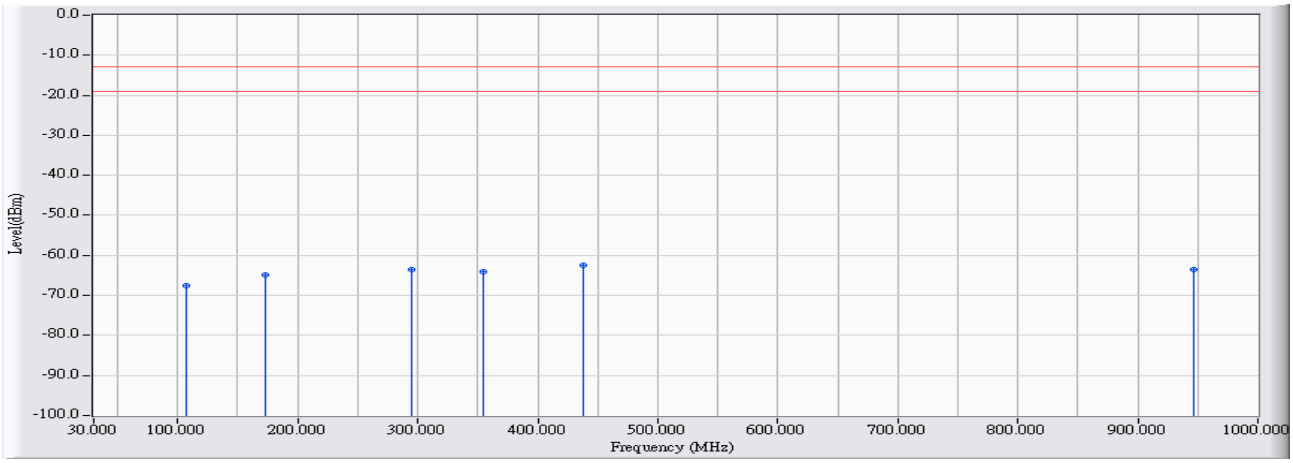


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		91.589	-28.203	-40.748	-68.951	-55.951	-13.000	PEAK
2		148.328	-28.065	-43.399	-71.464	-58.464	-13.000	PEAK
3		292.650	-20.750	-47.786	-68.536	-55.536	-13.000	PEAK
4		421.550	-16.223	-47.451	-63.674	-50.674	-13.000	PEAK
5		641.912	-12.801	-53.228	-66.029	-53.029	-13.000	PEAK
6	*	951.602	-7.478	-55.691	-63.169	-50.169	-13.000	PEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_S2_30M-1GHz_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 5: WCDMA Band 5_HSUPA Mode _836.6_HSUPA_Idle**

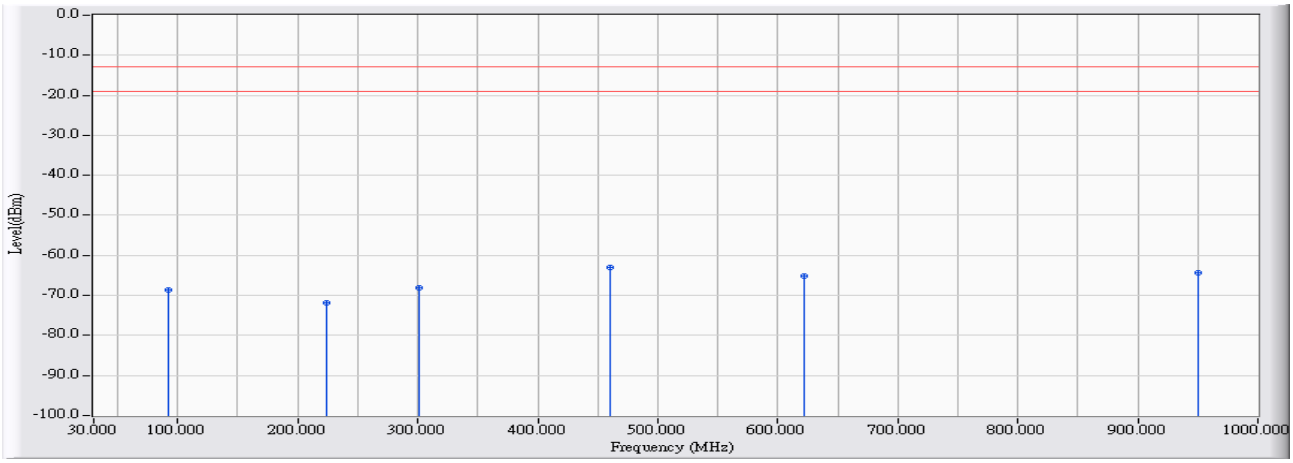


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		107.592	-20.366	-47.188	-67.553	-54.553	-13.000	PEAK
2		173.158	-22.687	-42.297	-64.984	-51.984	-13.000	PEAK
3		294.493	-20.358	-43.060	-63.419	-50.419	-13.000	PEAK
4		354.142	-18.063	-46.018	-64.082	-51.082	-13.000	PEAK
5	*	437.553	-15.689	-46.761	-62.450	-49.450	-13.000	PEAK
6		946.073	-7.417	-56.112	-63.529	-50.529	-13.000	PEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_S2_30M-1GHz_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 6: WCDMA Band 5_HSDPA Mode _836.6_HSDPA_Link**

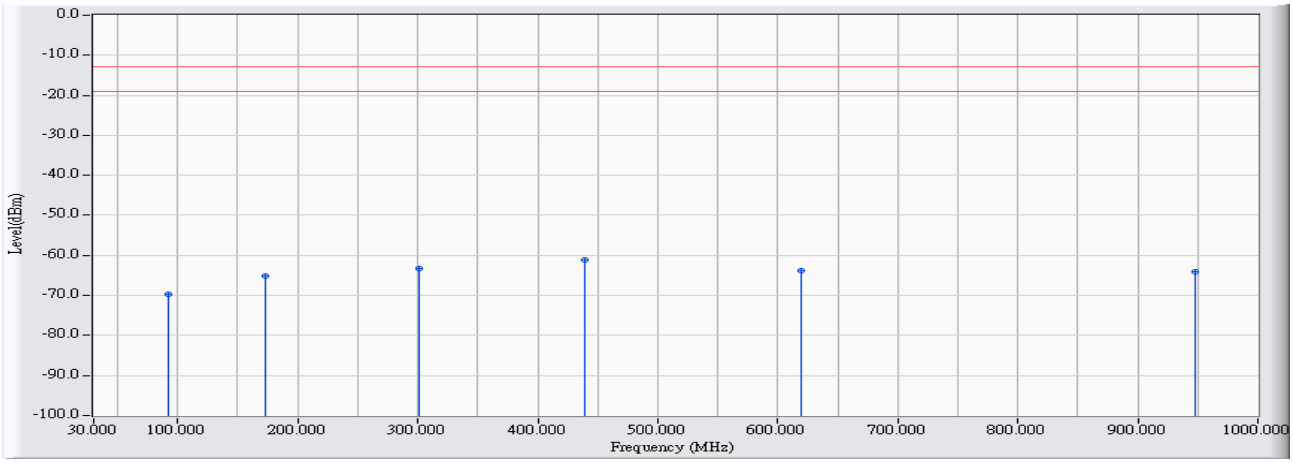


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		92.074	-28.188	-40.481	-68.669	-55.669	-13.000	PEAK
2		223.399	-25.585	-46.255	-71.840	-58.840	-13.000	PEAK
3		300.894	-20.458	-47.612	-68.070	-55.070	-13.000	PEAK
4	*	459.764	-14.887	-48.205	-63.092	-50.092	-13.000	PEAK
5		622.029	-11.861	-53.262	-65.123	-52.123	-13.000	PEAK
6		950.729	-7.427	-56.915	-64.342	-51.342	-13.000	PEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_S2_30M-1GHz_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 6: WCDMA Band 5_HSDPA Mode _836.6_HSDPA_Link**

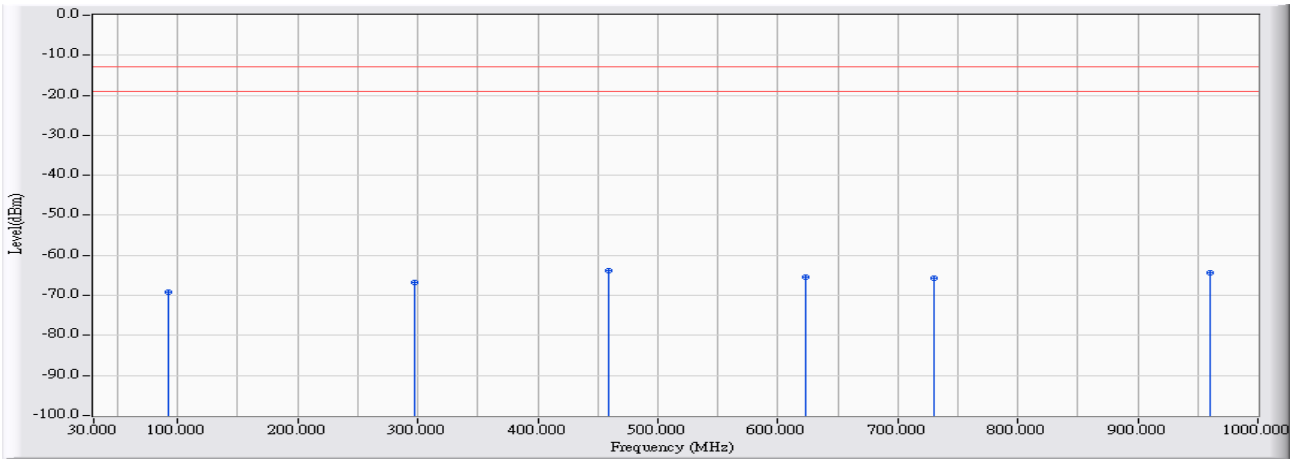


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		91.977	-21.525	-48.237	-69.763	-56.763	-13.000	PEAK
2		173.061	-22.687	-42.450	-65.137	-52.137	-13.000	PEAK
3		300.700	-20.263	-42.911	-63.174	-50.174	-13.000	PEAK
4	*	438.911	-15.637	-45.543	-61.180	-48.180	-13.000	PEAK
5		619.410	-11.223	-52.529	-63.752	-50.752	-13.000	PEAK
6		948.304	-7.400	-56.764	-64.165	-51.165	-13.000	PEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_S2_30M-1GHz_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 6: WCDMA Band 5_HSDPA Mode _836.6_HSDPA_Idle**

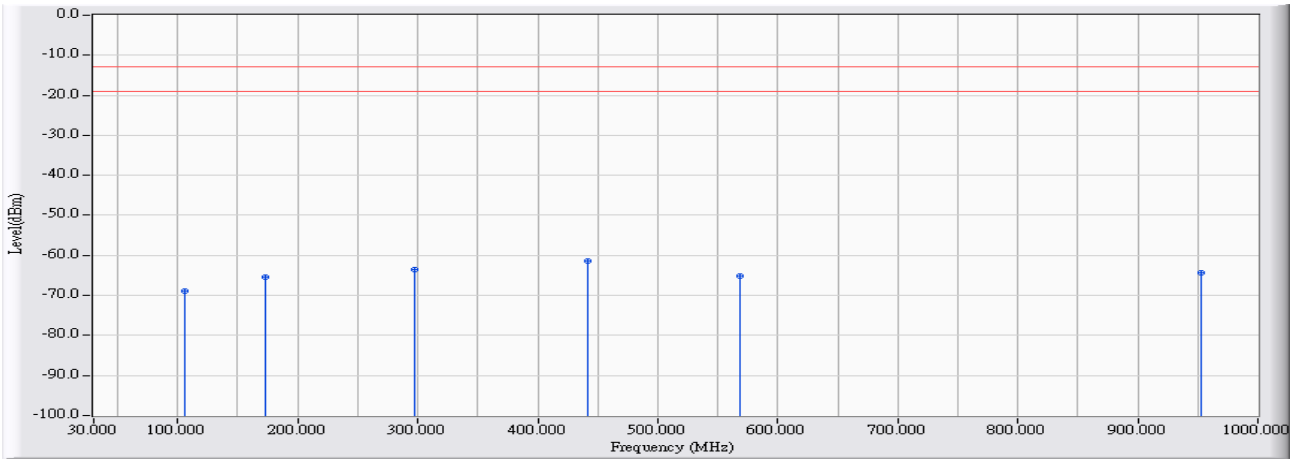


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		91.686	-28.201	-40.938	-69.138	-56.138	-13.000	PEAK
2		297.499	-20.572	-46.144	-66.715	-53.715	-13.000	PEAK
3	*	458.794	-14.905	-48.833	-63.737	-50.737	-13.000	PEAK
4		623.775	-11.925	-53.490	-65.416	-52.416	-13.000	PEAK
5		730.076	-10.578	-54.990	-65.568	-52.568	-13.000	PEAK
6		960.622	-8.029	-56.334	-64.363	-51.363	-13.000	PEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_S2_30M-1GHz_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 6: WCDMA Band 5_HSDPA Mode _836.6_HSDPA_Idle**

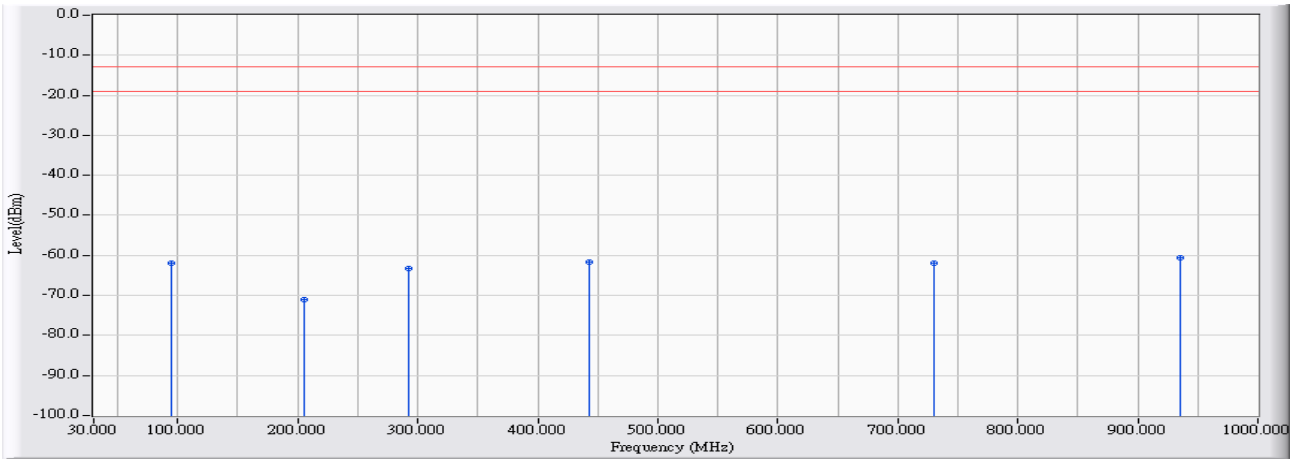


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		106.331	-20.236	-48.595	-68.830	-55.830	-13.000	PEAK
2		173.352	-22.688	-42.697	-65.385	-52.385	-13.000	PEAK
3		297.790	-20.309	-43.136	-63.446	-50.446	-13.000	PEAK
4	*	441.433	-15.509	-45.795	-61.304	-48.304	-13.000	PEAK
5		568.587	-12.402	-52.673	-65.075	-52.075	-13.000	PEAK
6		952.960	-7.544	-56.727	-64.271	-51.271	-13.000	PEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_S2_30M-1GHz_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 7: WCDMA Band 2_HSUPA Mode _1880_HSUPA_Link**

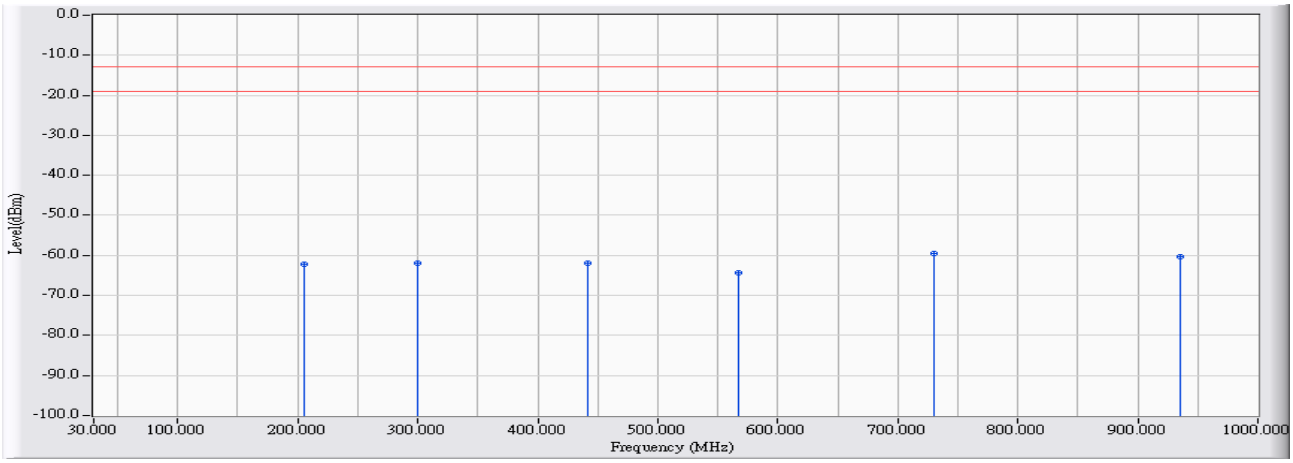


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		94.111	-28.123	-33.738	-61.861	-48.861	-13.000	PEAK
2		205.940	-26.710	-44.311	-71.022	-58.022	-13.000	PEAK
3		291.777	-20.783	-42.373	-63.156	-50.156	-13.000	PEAK
4		443.276	-15.424	-46.234	-61.658	-48.658	-13.000	PEAK
5		729.785	-10.591	-51.283	-61.874	-48.874	-13.000	PEAK
6	*	935.113	-7.883	-52.688	-60.571	-47.571	-13.000	PEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_S2_30M-1GHz_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 7: WCDMA Band 2_HSUPA Mode _1880_HSUPA_Link**

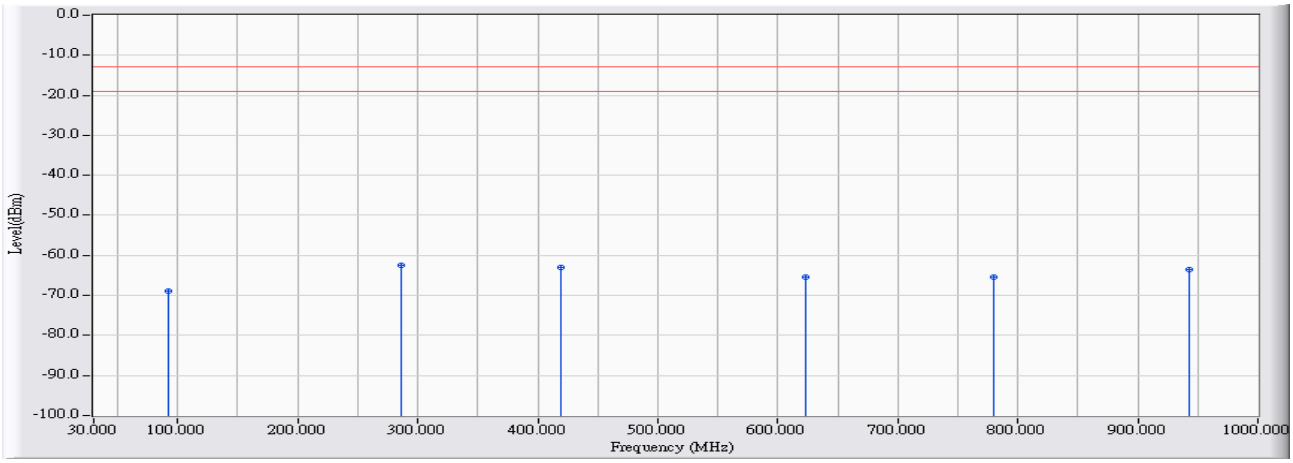


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		205.164	-24.487	-37.718	-62.205	-49.205	-13.000	PEAK
2		299.827	-20.279	-41.525	-61.804	-48.804	-13.000	PEAK
3		441.045	-15.532	-46.284	-61.816	-48.816	-13.000	PEAK
4		566.647	-12.459	-51.763	-64.223	-51.223	-13.000	PEAK
5	*	729.785	-10.235	-49.412	-59.646	-46.646	-13.000	PEAK
6		935.792	-7.848	-52.412	-60.260	-47.260	-13.000	PEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_S2_30M-1GHz_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 7: WCDMA Band 2_HSUPA Mode _1880_HSUPA_Idle**

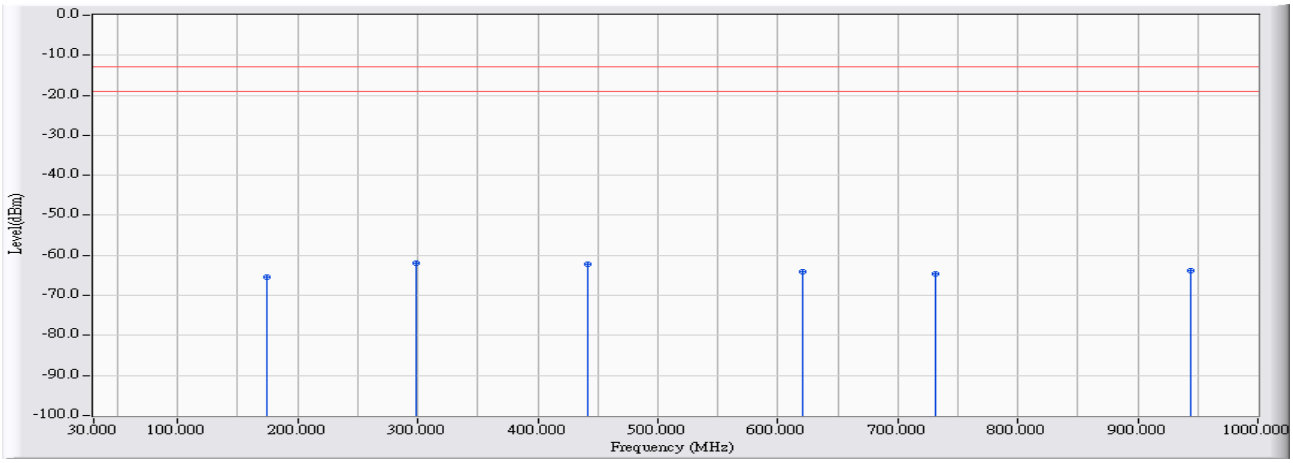


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		91.589	-28.203	-40.685	-68.888	-55.888	-13.000	PEAK
2	*	286.442	-21.037	-41.409	-62.445	-49.445	-13.000	PEAK
3		419.416	-16.257	-46.762	-63.019	-50.019	-13.000	PEAK
4		622.611	-11.882	-53.656	-65.539	-52.539	-13.000	PEAK
5		780.220	-9.304	-56.052	-65.357	-52.357	-13.000	PEAK
6		942.776	-7.431	-56.126	-63.557	-50.557	-13.000	PEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_S2_30M-1GHz_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 7: WCDMA Band 2_HSUPA Mode _1880_HSUPA_Idle**

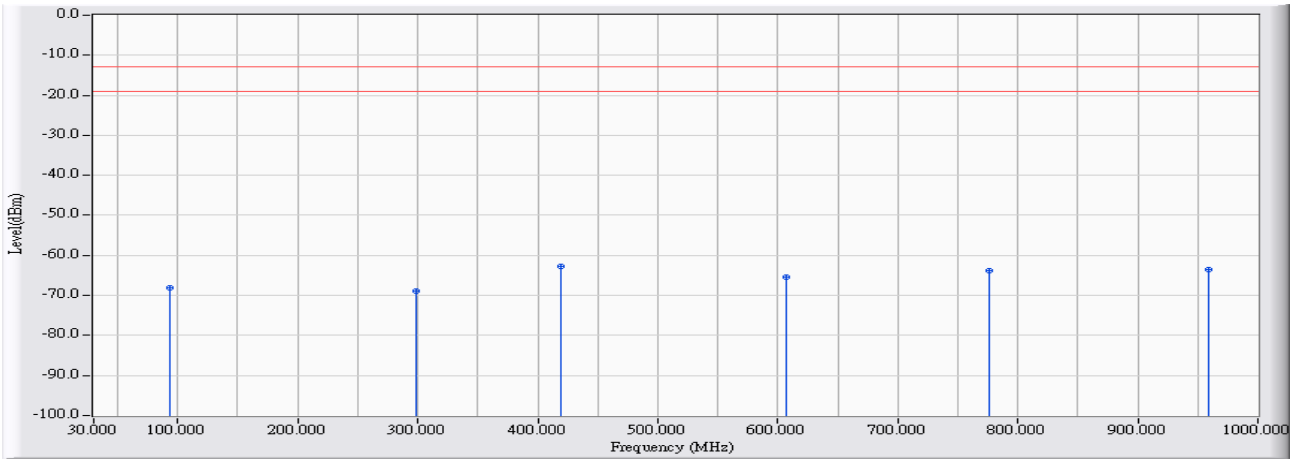


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		174.322	-22.694	-42.649	-65.343	-52.343	-13.000	PEAK
2	*	298.275	-20.301	-41.555	-61.857	-48.857	-13.000	PEAK
3		441.142	-15.526	-46.732	-62.258	-49.258	-13.000	PEAK
4		620.962	-11.230	-52.964	-64.194	-51.194	-13.000	PEAK
5		731.531	-10.217	-54.487	-64.704	-51.704	-13.000	PEAK
6		944.425	-7.428	-56.287	-63.716	-50.716	-13.000	PEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_S2_30M-1GHz_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 8: WCDMA Band 2_HSDPA Mode _1880_HSDPA_Link**

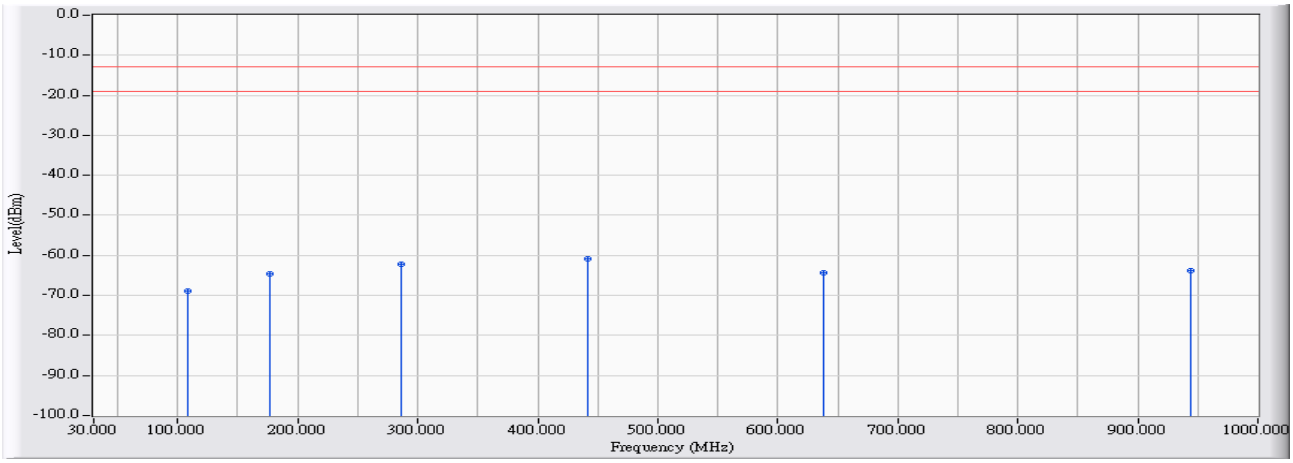


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		92.947	-28.160	-40.004	-68.164	-55.164	-13.000	PEAK
2		298.081	-20.550	-48.395	-68.945	-55.945	-13.000	PEAK
3	*	419.125	-16.247	-46.510	-62.757	-49.757	-13.000	PEAK
4		606.413	-12.341	-52.964	-65.305	-52.305	-13.000	PEAK
5		776.728	-9.599	-54.115	-63.715	-50.715	-13.000	PEAK
6		959.264	-7.921	-55.674	-63.595	-50.595	-13.000	PEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_S2_30M-1GHz_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 8: WCDMA Band 2_HSDPA Mode _1880_HSDPA_Link**

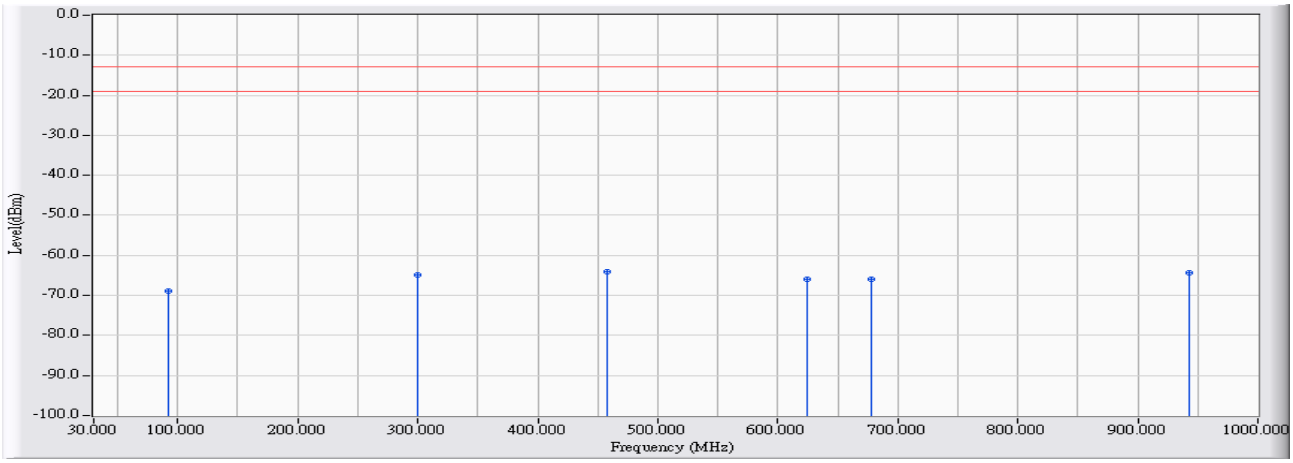


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		108.368	-20.446	-48.373	-68.818	-55.818	-13.000	PEAK
2		176.164	-22.809	-41.837	-64.645	-51.645	-13.000	PEAK
3		286.151	-20.545	-41.619	-62.164	-49.164	-13.000	PEAK
4	*	441.045	-15.532	-45.222	-60.754	-47.754	-13.000	PEAK
5		638.129	-12.094	-52.202	-64.295	-51.295	-13.000	PEAK
6		943.455	-7.435	-56.420	-63.855	-50.855	-13.000	PEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_S2_30M-1GHz_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 8: WCDMA Band 2_HSDPA Mode _1880_HSDPA_Idle**

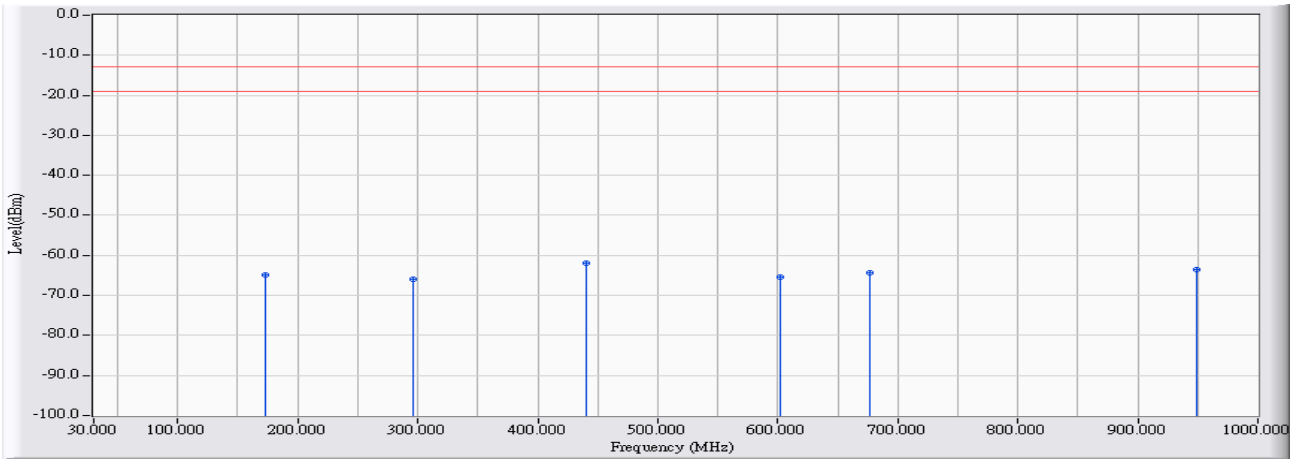


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		92.074	-28.188	-40.620	-68.808	-55.808	-13.000	PEAK
2		299.633	-20.493	-44.260	-64.752	-51.752	-13.000	PEAK
3	*	457.242	-14.933	-49.010	-63.943	-50.943	-13.000	PEAK
4		623.872	-11.930	-53.964	-65.894	-52.894	-13.000	PEAK
5		677.701	-11.505	-54.364	-65.869	-52.869	-13.000	PEAK
6		942.291	-7.433	-56.820	-64.253	-51.253	-13.000	PEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. " * ", means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_S2_30M-1GHz_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 8: WCDMA Band 2_HSDPA Mode _1880_HSDPA_Idle**



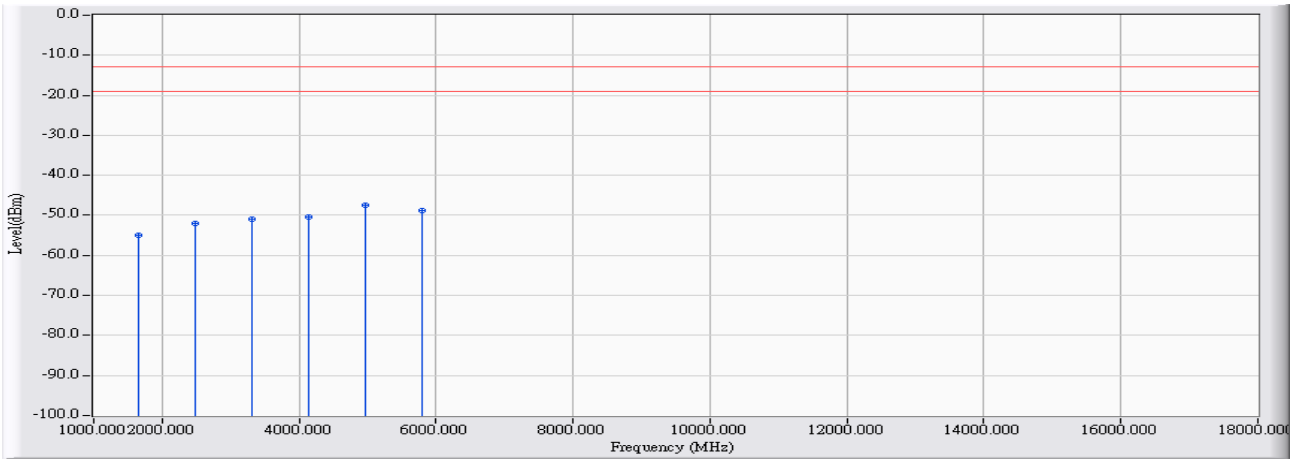
		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		173.255	-22.688	-42.222	-64.910	-51.910	-13.000	PEAK
2		295.656	-20.342	-45.571	-65.912	-52.912	-13.000	PEAK
3	*	440.172	-15.583	-46.250	-61.833	-48.833	-13.000	PEAK
4		601.952	-11.888	-53.588	-65.476	-52.476	-13.000	PEAK
5		676.246	-11.072	-53.351	-64.422	-51.422	-13.000	PEAK
6		948.401	-7.400	-56.031	-63.431	-50.431	-13.000	PEAK

Note:

1. All Reading Levels are Quasi-Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.

Harmonic & Spurious:

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_PART22_850_00M_PK	**Margin : 6**
Probe : CB4-H_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 1: WCDMA Band 5_Link Mode_826.4MHz**

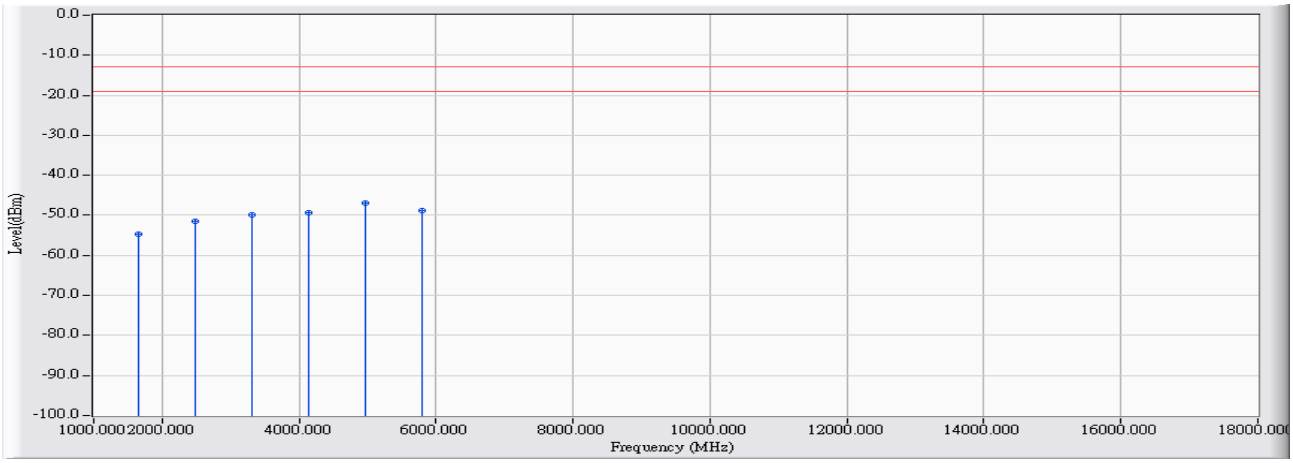


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1652.800	9.838	-64.680	-54.843	-41.843	-13.000	PEAK
2		2479.200	15.006	-67.120	-52.114	-39.114	-13.000	PEAK
3		3305.600	17.624	-68.570	-50.946	-37.946	-13.000	PEAK
4		4132.000	19.410	-69.940	-50.530	-37.530	-13.000	PEAK
5	*	4958.400	22.535	-70.070	-47.535	-34.535	-13.000	PEAK
6		5784.800	21.552	-70.320	-48.768	-35.768	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_PART22_850_00M_PK	**Margin : 6**
Probe : CB4-H_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 1: WCDMA Band 5_Link Mode_826.4MHz**

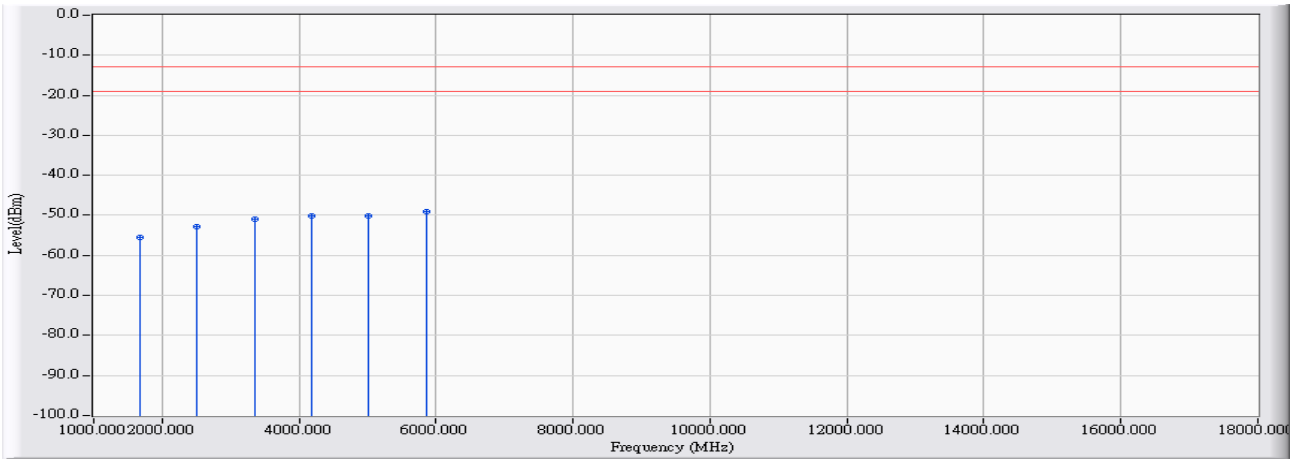


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1652.800	10.366	-64.940	-54.575	-41.575	-13.000	PEAK
2		2479.200	15.357	-66.900	-51.543	-38.543	-13.000	PEAK
3		3305.600	18.217	-68.160	-49.943	-36.943	-13.000	PEAK
4		4132.000	20.292	-69.750	-49.459	-36.459	-13.000	PEAK
5	*	4958.400	23.039	-69.870	-46.831	-33.831	-13.000	PEAK
6		5784.800	21.385	-70.220	-48.835	-35.835	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_PART22_850_00M_PK	**Margin : 6**
Probe : CB4-H_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 1: WCDMA Band 5_Link Mode_836.6MHz**

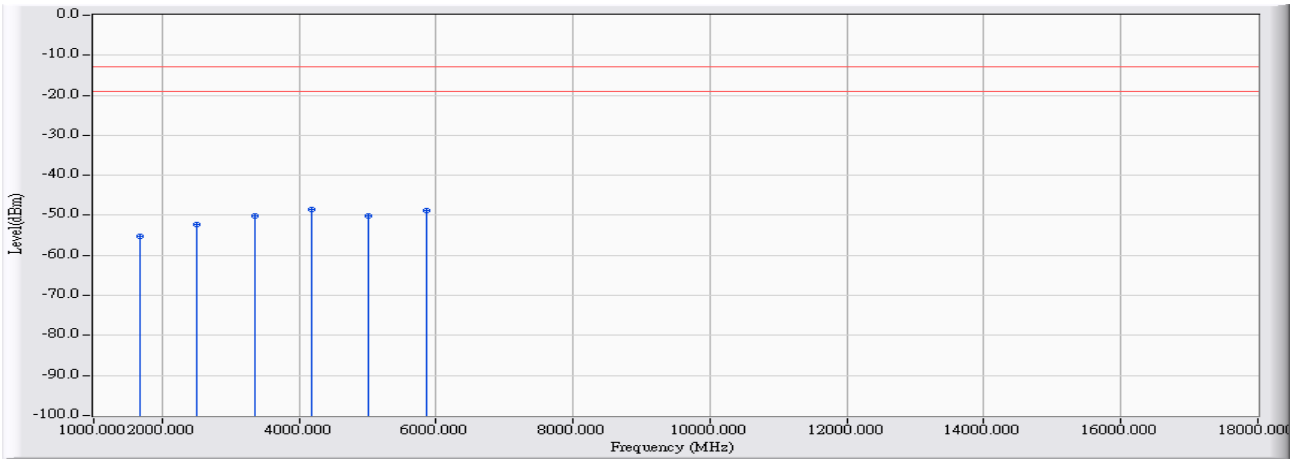


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1673.200	9.815	-65.390	-55.575	-42.575	-13.000	PEAK
2		2509.800	14.979	-67.820	-52.841	-39.841	-13.000	PEAK
3		3346.400	17.736	-68.640	-50.904	-37.904	-13.000	PEAK
4		4183.000	19.483	-69.520	-50.037	-37.037	-13.000	PEAK
5		5019.600	20.285	-70.390	-50.105	-37.105	-13.000	PEAK
6	*	5856.200	21.785	-70.760	-48.975	-35.975	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_PART22_850_00M_PK	**Margin : 6**
Probe : CB4-H_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 1: WCDMA Band 5_Link Mode_836.6MHz**

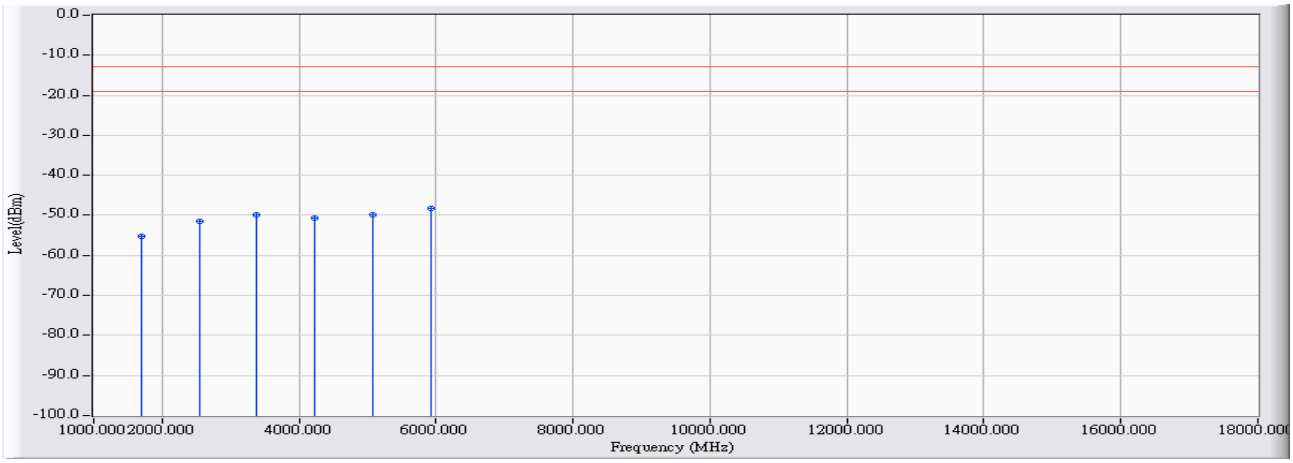


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1673.200	10.380	-65.530	-55.150	-42.150	-13.000	PEAK
2		2509.800	15.368	-67.580	-52.212	-39.212	-13.000	PEAK
3		3346.400	18.377	-68.600	-50.224	-37.224	-13.000	PEAK
4	*	4183.000	20.433	-69.050	-48.617	-35.617	-13.000	PEAK
5		5019.600	19.924	-69.990	-50.066	-37.066	-13.000	PEAK
6		5856.200	21.613	-70.300	-48.686	-35.686	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_PART22_850_00M_PK	**Margin : 6**
Probe : CB4-H_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 1: WCDMA Band 5_Link Mode_846.6MHz**

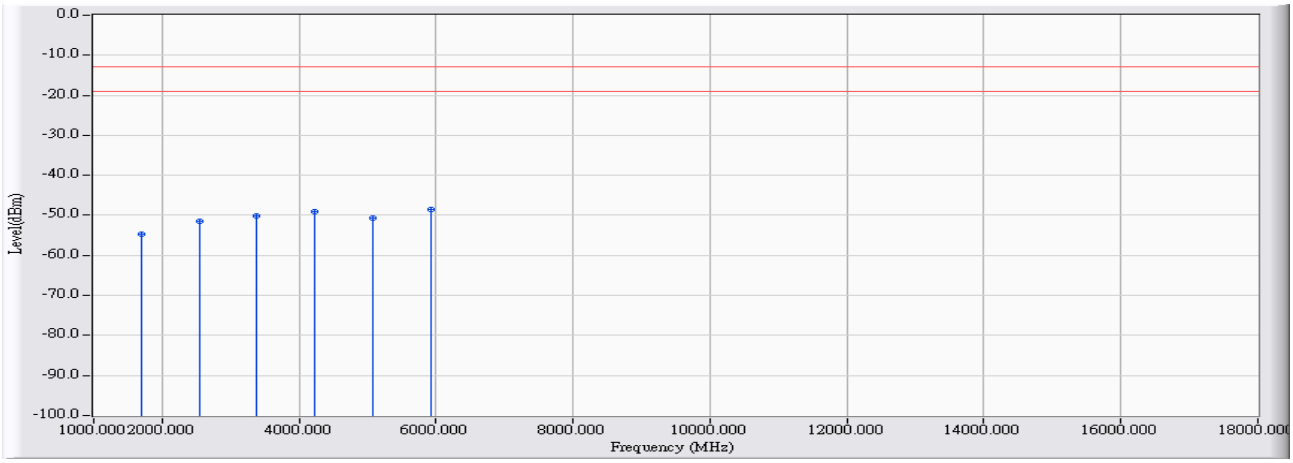


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1693.200	9.793	-65.120	-55.327	-42.327	-13.000	PEAK
2		2539.800	15.059	-66.660	-51.601	-38.601	-13.000	PEAK
3		3386.400	17.845	-67.840	-49.995	-36.995	-13.000	PEAK
4		4233.000	19.552	-70.180	-50.628	-37.628	-13.000	PEAK
5		5079.600	20.327	-70.160	-49.833	-36.833	-13.000	PEAK
6	*	5926.200	22.013	-70.200	-48.186	-35.186	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_PART22_850_00M_PK	**Margin : 6**
Probe : CB4-H_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 1: WCDMA Band 5_Link Mode_846.6MHz**

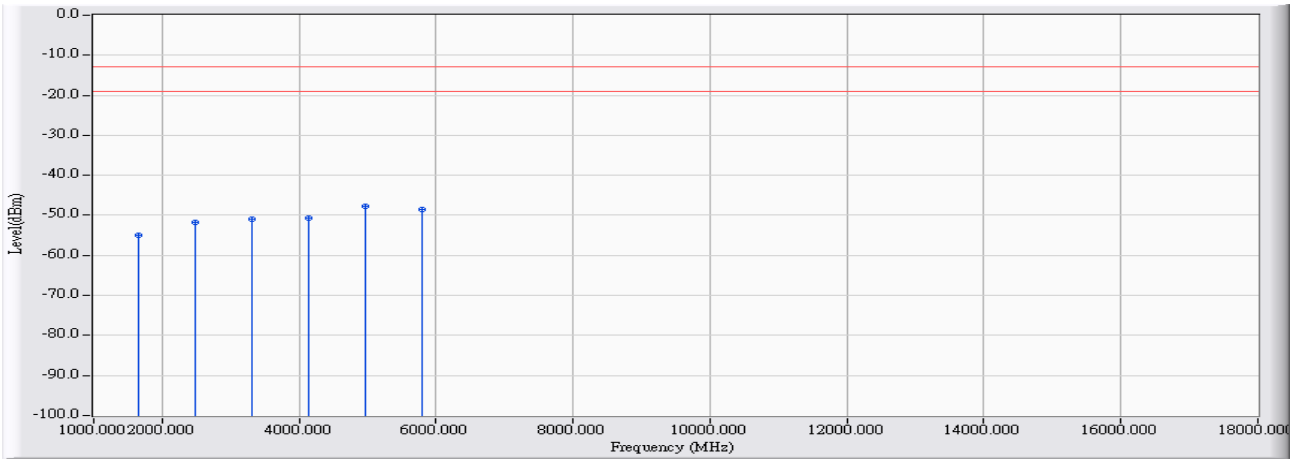


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1693.200	10.395	-65.190	-54.795	-41.795	-13.000	PEAK
2		2539.800	15.438	-66.850	-51.413	-38.413	-13.000	PEAK
3		3386.400	18.533	-68.610	-50.077	-37.077	-13.000	PEAK
4		4233.000	20.568	-69.510	-48.942	-35.942	-13.000	PEAK
5		5079.600	19.993	-70.530	-50.538	-37.538	-13.000	PEAK
6	*	5926.200	21.838	-70.370	-48.531	-35.531	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_PART22_850_00M_PK	**Margin : 6**
Probe : CB4-H_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 2: WCDMA Band 5_Idle Mode_826.4MHz**

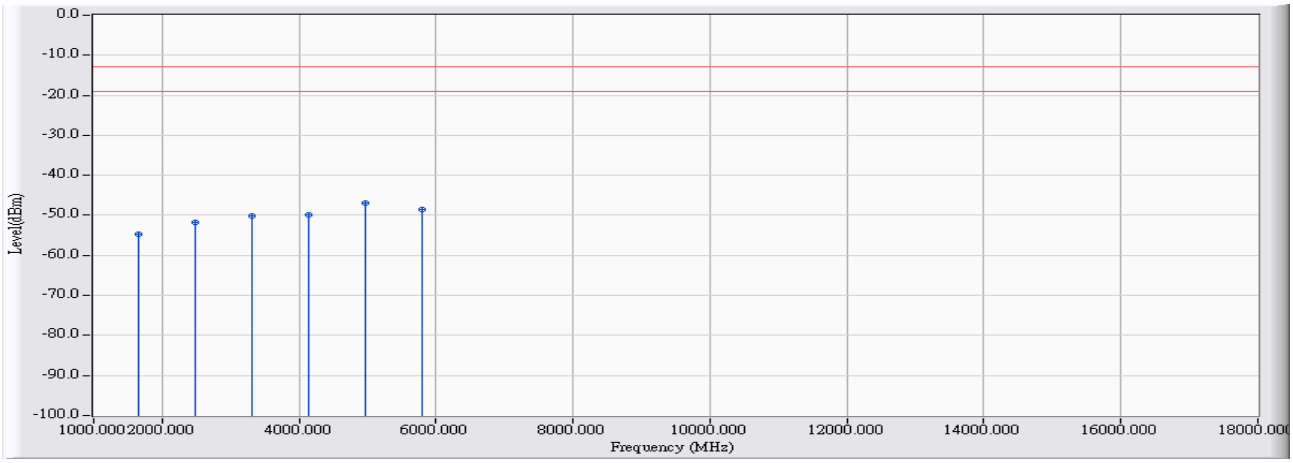


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1652.800	9.838	-64.700	-54.863	-41.863	-13.000	PEAK
2		2479.200	15.006	-66.750	-51.744	-38.744	-13.000	PEAK
3		3305.600	17.624	-68.670	-51.046	-38.046	-13.000	PEAK
4		4132.000	19.410	-70.050	-50.640	-37.640	-13.000	PEAK
5	*	4958.400	22.535	-70.300	-47.765	-34.765	-13.000	PEAK
6		5784.800	21.552	-69.960	-48.408	-35.408	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_PART22_850_00M_PK	**Margin : 6**
Probe : CB4-H_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 2: WCDMA Band 5_Idle Mode_826.4MHz**

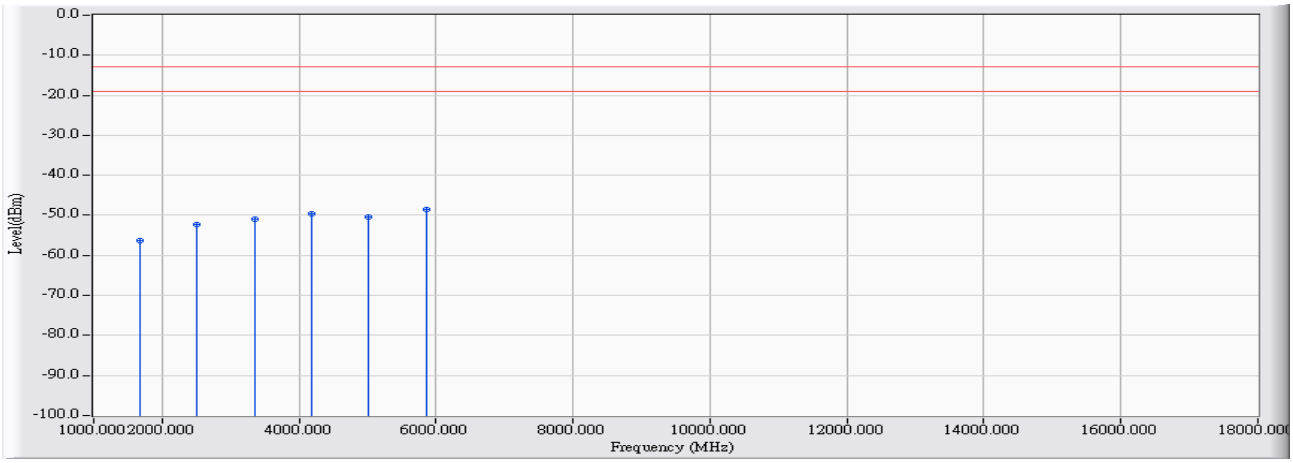


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1652.800	10.366	-64.990	-54.625	-41.625	-13.000	PEAK
2		2479.200	15.357	-67.000	-51.643	-38.643	-13.000	PEAK
3		3305.600	18.217	-68.400	-50.183	-37.183	-13.000	PEAK
4		4132.000	20.292	-70.260	-49.969	-36.969	-13.000	PEAK
5	*	4958.400	23.039	-69.890	-46.851	-33.851	-13.000	PEAK
6		5784.800	21.385	-69.810	-48.425	-35.425	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_PART22_850_00M_PK	**Margin : 6**
Probe : CB4-H_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 2: WCDMA Band 5_Idle Mode_836.6MHz**

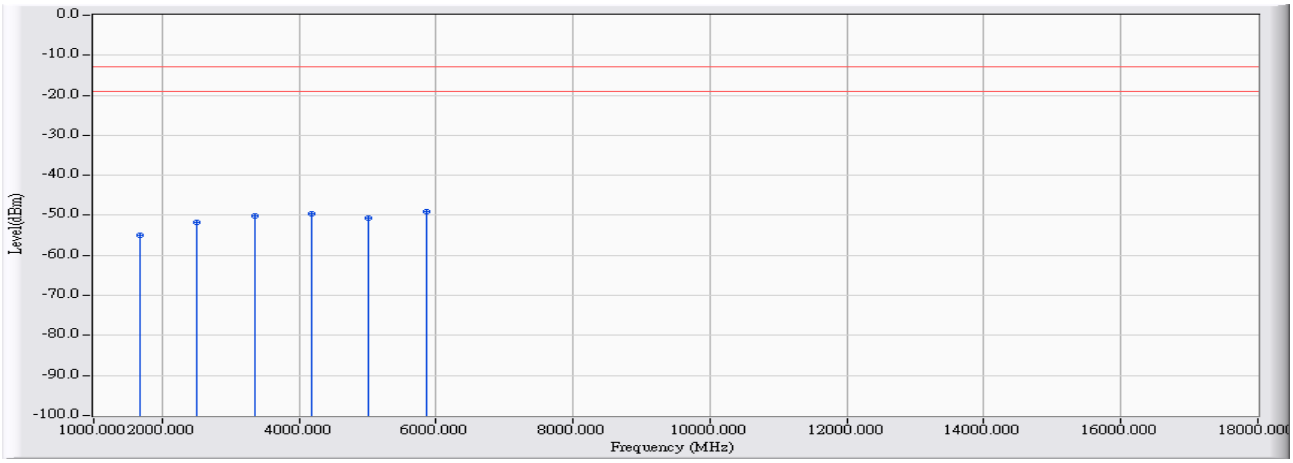


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1673.200	9.815	-66.000	-56.185	-43.185	-13.000	PEAK
2		2509.800	14.979	-67.380	-52.401	-39.401	-13.000	PEAK
3		3346.400	17.736	-68.580	-50.844	-37.844	-13.000	PEAK
4		4183.000	19.483	-69.150	-49.667	-36.667	-13.000	PEAK
5		5019.600	20.285	-70.660	-50.375	-37.375	-13.000	PEAK
6	*	5856.200	21.785	-70.390	-48.605	-35.605	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_PART22_850_00M_PK	**Margin : 6**
Probe : CB4-H_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 2: WCDMA Band 5_Idle Mode_836.6MHz**

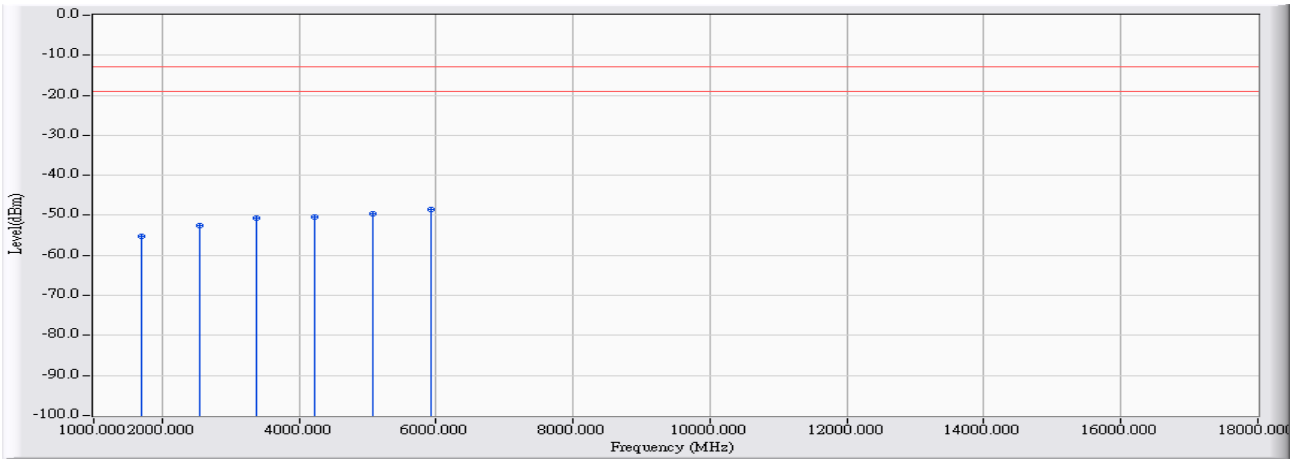


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1673.200	10.380	-65.460	-55.080	-42.080	-13.000	PEAK
2		2509.800	15.368	-67.090	-51.722	-38.722	-13.000	PEAK
3		3346.400	18.377	-68.520	-50.144	-37.144	-13.000	PEAK
4		4183.000	20.433	-70.070	-49.637	-36.637	-13.000	PEAK
5		5019.600	19.924	-70.540	-50.616	-37.616	-13.000	PEAK
6	*	5856.200	21.613	-70.730	-49.116	-36.116	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_PART22_850_00M_PK	**Margin : 6**
Probe : CB4-H_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 2: WCDMA Band 5_Idle Mode_846.6MHz**

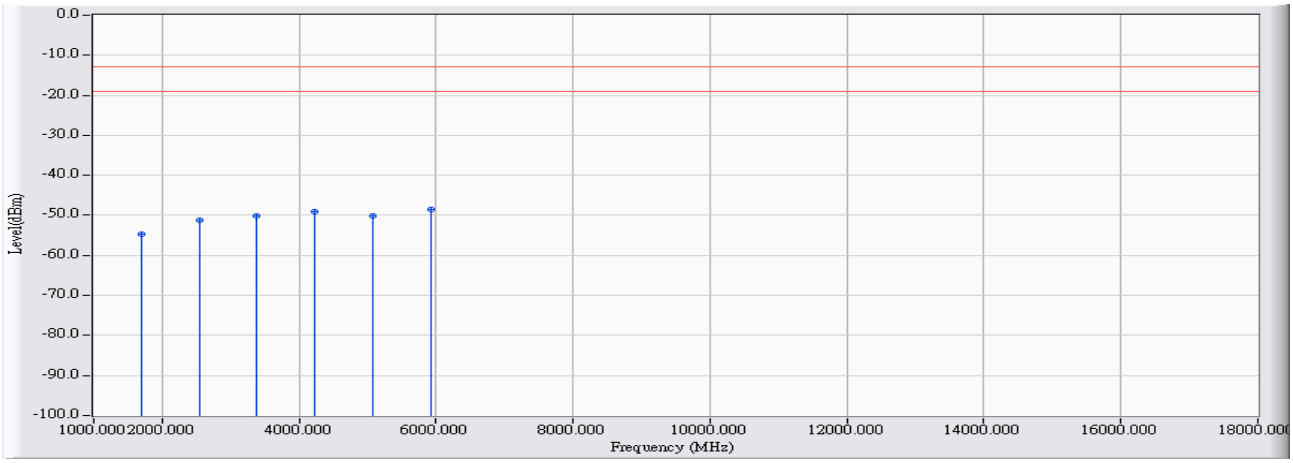


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1693.200	9.793	-65.070	-55.277	-42.277	-13.000	PEAK
2		2539.800	15.059	-67.530	-52.471	-39.471	-13.000	PEAK
3		3386.400	17.845	-68.610	-50.765	-37.765	-13.000	PEAK
4		4233.000	19.552	-69.940	-50.388	-37.388	-13.000	PEAK
5		5079.600	20.327	-70.000	-49.673	-36.673	-13.000	PEAK
6	*	5926.200	22.013	-70.640	-48.626	-35.626	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_PART22_850_00M_PK	**Margin : 6**
Probe : CB4-H_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 2: WCDMA Band 5_Idle Mode_846.6MHz**

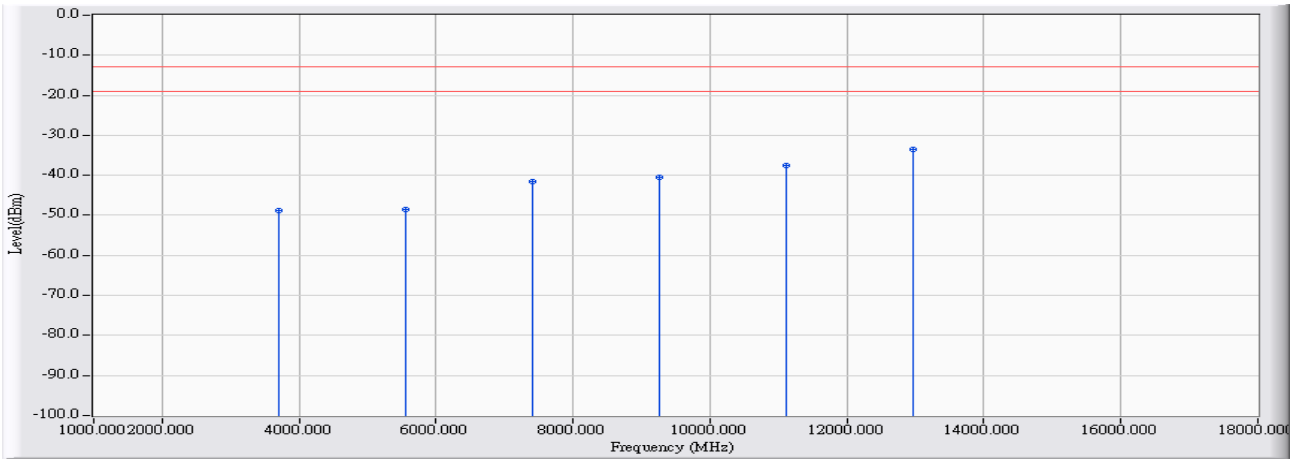


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1693.200	10.395	-64.980	-54.585	-41.585	-13.000	PEAK
2		2539.800	15.438	-66.670	-51.233	-38.233	-13.000	PEAK
3		3386.400	18.533	-68.800	-50.267	-37.267	-13.000	PEAK
4		4233.000	20.568	-69.700	-49.132	-36.132	-13.000	PEAK
5		5079.600	19.993	-70.180	-50.188	-37.188	-13.000	PEAK
6	*	5926.200	21.838	-70.380	-48.541	-35.541	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_PART24_1900_00M_PK	**Margin : 6**
Probe : CB4-H_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 3: WCDMA Band 2_Link Mode_1852.4MHz**

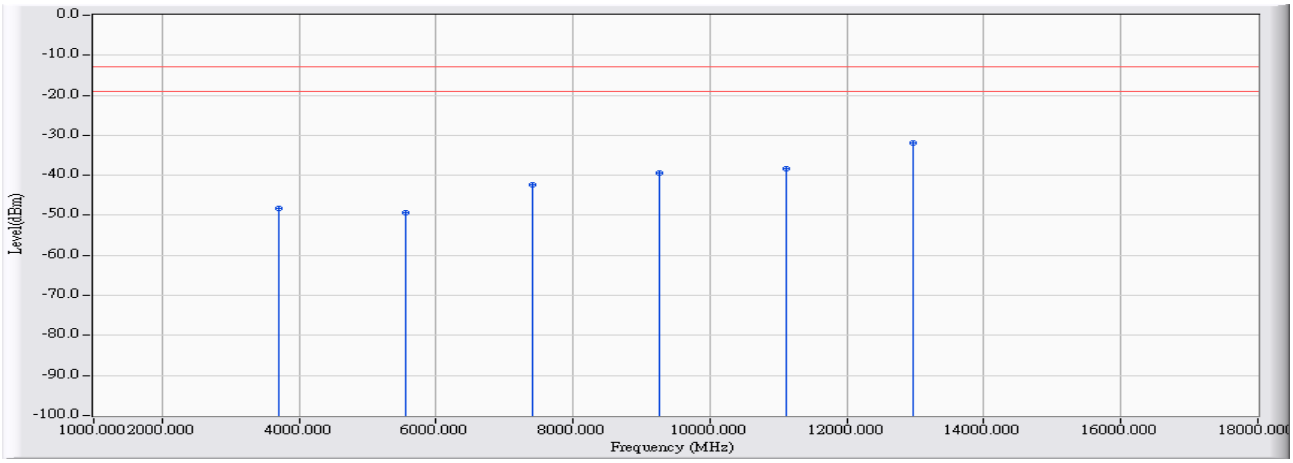


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3705.278	18.711	-67.460	-48.749	-35.749	-13.000	PEAK
2		5557.200	20.808	-69.420	-48.612	-35.612	-13.000	PEAK
3		7409.600	26.180	-67.860	-41.680	-28.680	-13.000	PEAK
4		9262.000	28.693	-69.250	-40.557	-27.557	-13.000	PEAK
5		11114.400	31.722	-69.140	-37.418	-24.418	-13.000	PEAK
6	*	12966.800	35.814	-69.300	-33.487	-20.487	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_PART24_1900_00M_PK	**Margin : 6**
Probe : CB4-H_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 3: WCDMA Band 2_Link Mode_1852.4MHz**

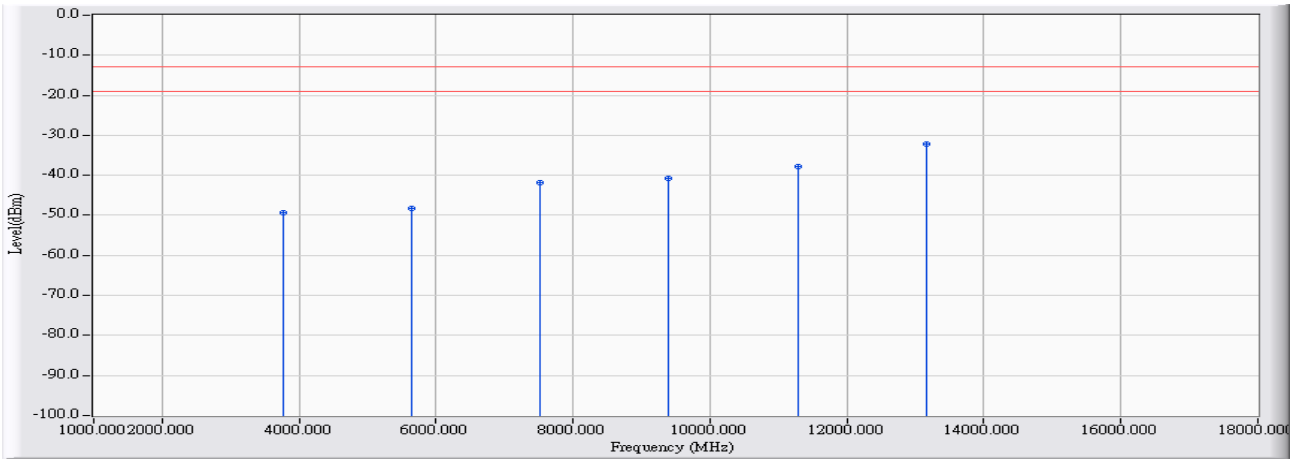


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3704.800	19.510	-67.720	-48.210	-35.210	-13.000	PEAK
2		5557.200	20.654	-69.940	-49.286	-36.286	-13.000	PEAK
3		7409.600	25.994	-68.270	-42.275	-29.275	-13.000	PEAK
4		9262.000	29.964	-69.470	-39.506	-26.506	-13.000	PEAK
5		11114.400	30.633	-69.090	-38.457	-25.457	-13.000	PEAK
6	*	12966.800	37.000	-69.020	-32.020	-19.020	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_PART24_1900_00M_PK	**Margin : 6**
Probe : CB4-H_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 3: WCDMA Band 2_Link Mode_1880MHz**

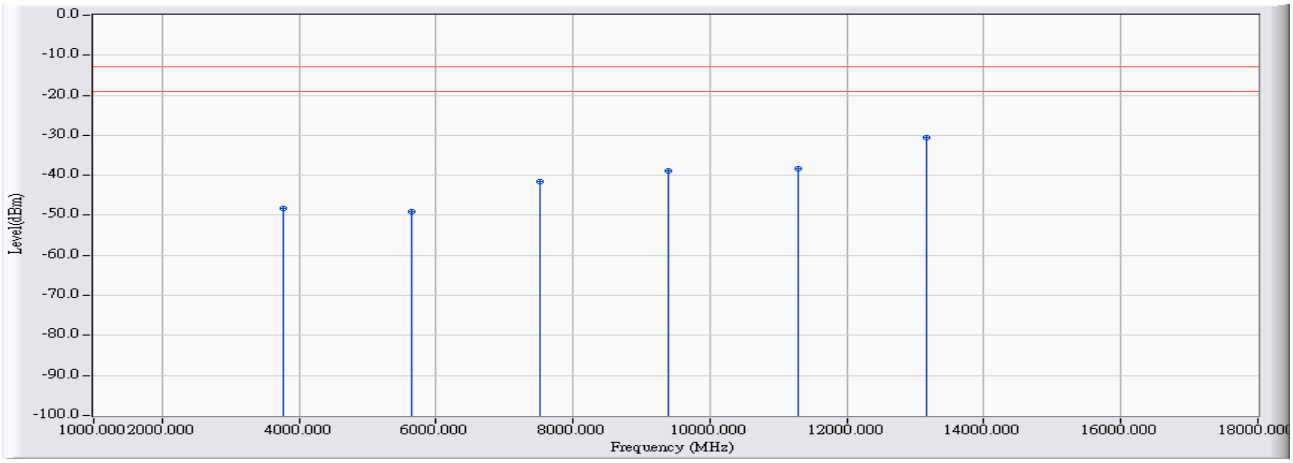


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3760.000	18.848	-68.230	-49.382	-36.382	-13.000	PEAK
2		5640.000	21.078	-69.400	-48.322	-35.322	-13.000	PEAK
3		7520.000	26.289	-68.080	-41.791	-28.791	-13.000	PEAK
4		9400.000	28.663	-69.370	-40.707	-27.707	-13.000	PEAK
5		11280.000	31.954	-69.680	-37.726	-24.726	-13.000	PEAK
6	*	13160.000	36.800	-68.970	-32.169	-19.169	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_PART24_1900_00M_PK	**Margin : 6**
Probe : CB4-H_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 3: WCDMA Band 2_Link Mode_1880MHz**

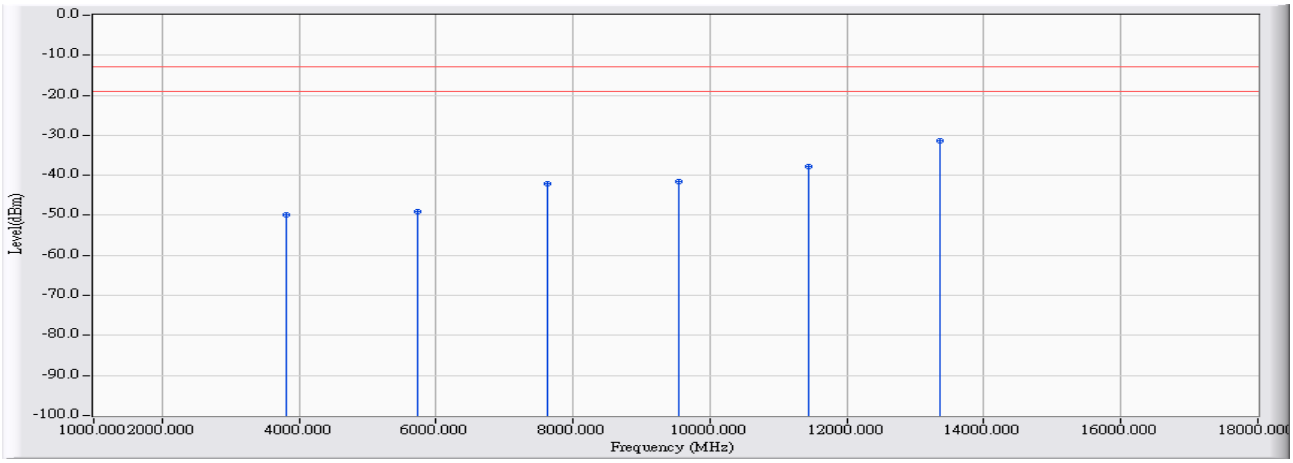


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3760.000	19.640	-67.930	-48.290	-35.290	-13.000	PEAK
2		5640.000	20.920	-69.940	-49.020	-36.020	-13.000	PEAK
3		7520.000	26.375	-68.000	-41.625	-28.625	-13.000	PEAK
4		9400.000	30.125	-69.020	-38.895	-25.895	-13.000	PEAK
5		11280.000	31.328	-69.590	-38.262	-25.262	-13.000	PEAK
6	*	13160.000	38.120	-68.610	-30.490	-17.490	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_PART24_1900_00M_PK	**Margin : 6**
Probe : CB4-H_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 3: WCDMA Band 2_Link Mode_1907.6MHz**

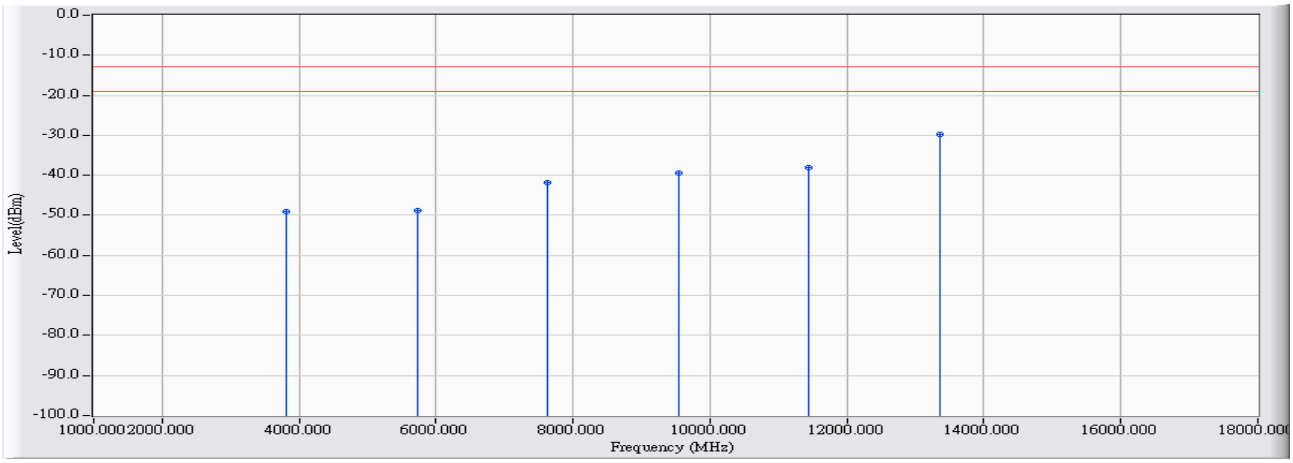


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3815.200	18.934	-68.790	-49.856	-36.856	-13.000	PEAK
2		5722.800	21.349	-70.290	-48.941	-35.941	-13.000	PEAK
3		7630.400	26.620	-68.810	-42.190	-29.190	-13.000	PEAK
4		9538.000	28.689	-70.210	-41.520	-28.520	-13.000	PEAK
5		11445.600	32.185	-69.910	-37.725	-24.725	-13.000	PEAK
6	*	13353.200	37.747	-69.150	-31.403	-18.403	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_PART24_1900_00M_PK	**Margin : 6**
Probe : CB4-H_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 3: WCDMA Band 2_Link Mode_1907.6MHz**

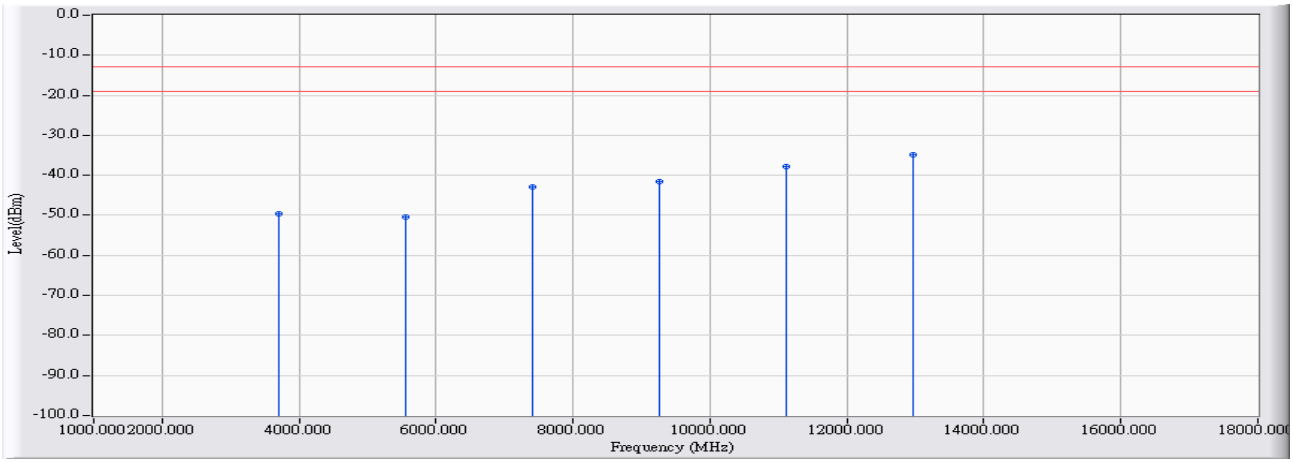


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3815.200	19.706	-68.680	-48.974	-35.974	-13.000	PEAK
2		5722.800	21.186	-70.060	-48.874	-35.874	-13.000	PEAK
3		7630.400	26.516	-68.220	-41.704	-28.704	-13.000	PEAK
4		9538.000	30.226	-69.770	-39.543	-26.543	-13.000	PEAK
5		11445.600	32.022	-70.120	-38.097	-25.097	-13.000	PEAK
6	*	13353.200	39.271	-68.970	-29.699	-16.699	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_PART24_1900_00M_PK	**Margin : 6**
Probe : CB4-H_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 4: WCDMA Band 2_Idle Mode_1852.4MHz**

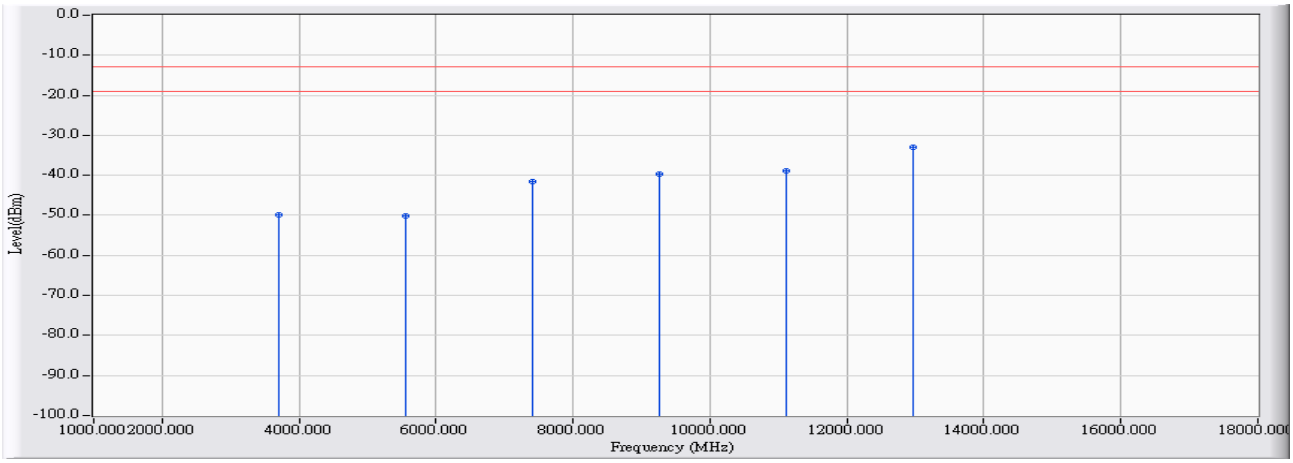


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3704.800	18.709	-68.260	-49.551	-36.551	-13.000	PEAK
2		5557.200	20.808	-71.200	-50.392	-37.392	-13.000	PEAK
3		7409.600	26.180	-69.040	-42.860	-29.860	-13.000	PEAK
4		9262.000	28.693	-70.380	-41.687	-28.687	-13.000	PEAK
5		11114.400	31.722	-69.640	-37.918	-24.918	-13.000	PEAK
6	*	12966.800	35.814	-70.640	-34.827	-21.827	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_PART24_1900_00M_PK	**Margin : 6**
Probe : CB4-H_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 4: WCDMA Band 2_Idle Mode_1852.4MHz**

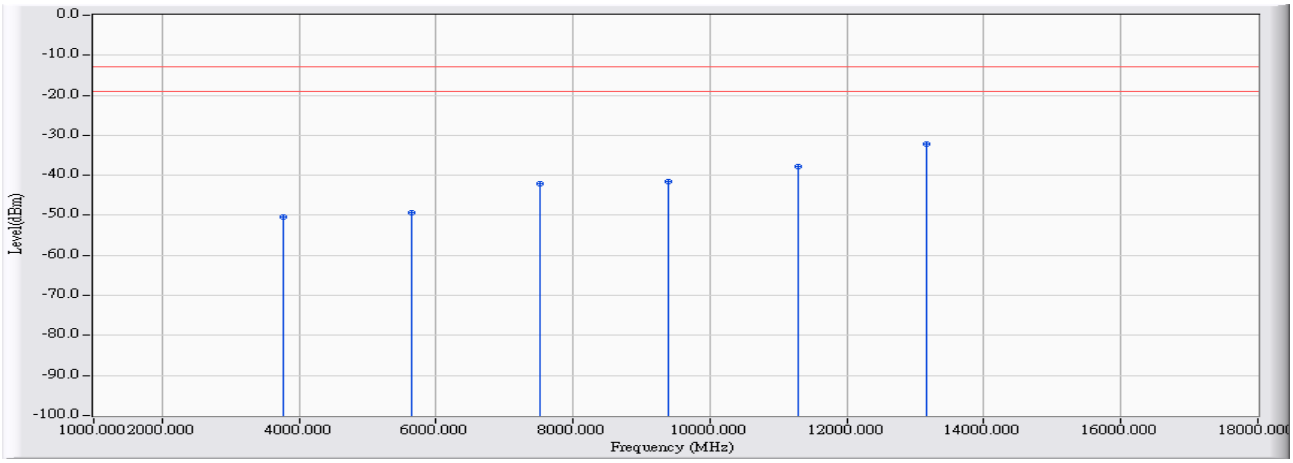


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3704.800	19.510	-69.370	-49.860	-36.860	-13.000	PEAK
2		5557.200	20.654	-70.900	-50.246	-37.246	-13.000	PEAK
3		7409.600	25.994	-67.660	-41.665	-28.665	-13.000	PEAK
4		9262.000	29.964	-69.650	-39.686	-26.686	-13.000	PEAK
5		11114.400	30.633	-69.430	-38.797	-25.797	-13.000	PEAK
6	*	12966.800	37.000	-69.930	-32.930	-19.930	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_PART24_1900_00M_PK	**Margin : 6**
Probe : CB4-H_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 4: WCDMA Band 2_Idle Mode_1880MHz**

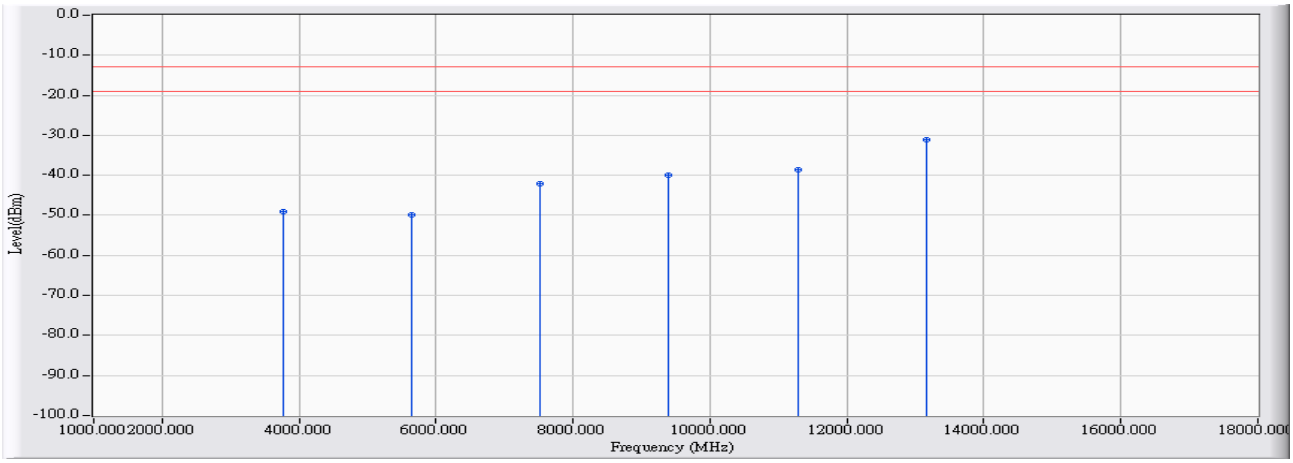


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3760.000	18.848	-69.290	-50.442	-37.442	-13.000	PEAK
2		5640.000	21.078	-70.490	-49.412	-36.412	-13.000	PEAK
3		7520.000	26.289	-68.430	-42.141	-29.141	-13.000	PEAK
4		9400.000	28.663	-70.240	-41.577	-28.577	-13.000	PEAK
5		11280.000	31.954	-69.700	-37.746	-24.746	-13.000	PEAK
6	*	13160.000	36.800	-69.090	-32.289	-19.289	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_PART24_1900_00M_PK	**Margin : 6**
Probe : CB4-H_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 4: WCDMA Band 2_Idle Mode_1880MHz**

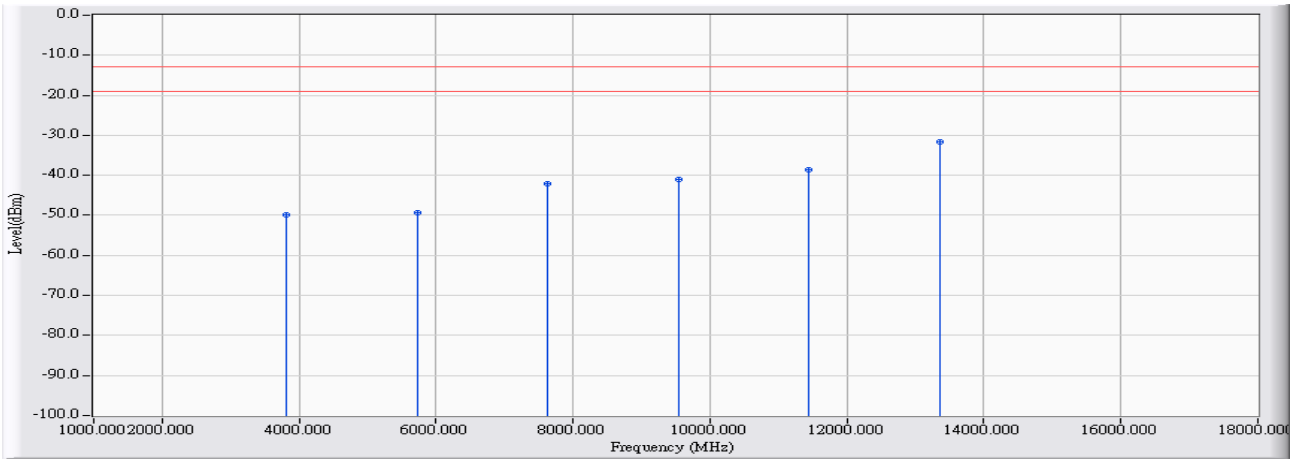


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3760.000	19.640	-68.780	-49.140	-36.140	-13.000	PEAK
2		5640.000	20.920	-70.690	-49.770	-36.770	-13.000	PEAK
3		7520.000	26.375	-68.570	-42.195	-29.195	-13.000	PEAK
4		9400.000	30.125	-70.100	-39.975	-26.975	-13.000	PEAK
5		11280.000	31.328	-70.010	-38.682	-25.682	-13.000	PEAK
6	*	13160.000	38.120	-69.130	-31.010	-18.010	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_PART24_1900_00M_PK	**Margin : 6**
Probe : CB4-H_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 4: WCDMA Band 2_Idle Mode_1907.6MHz**

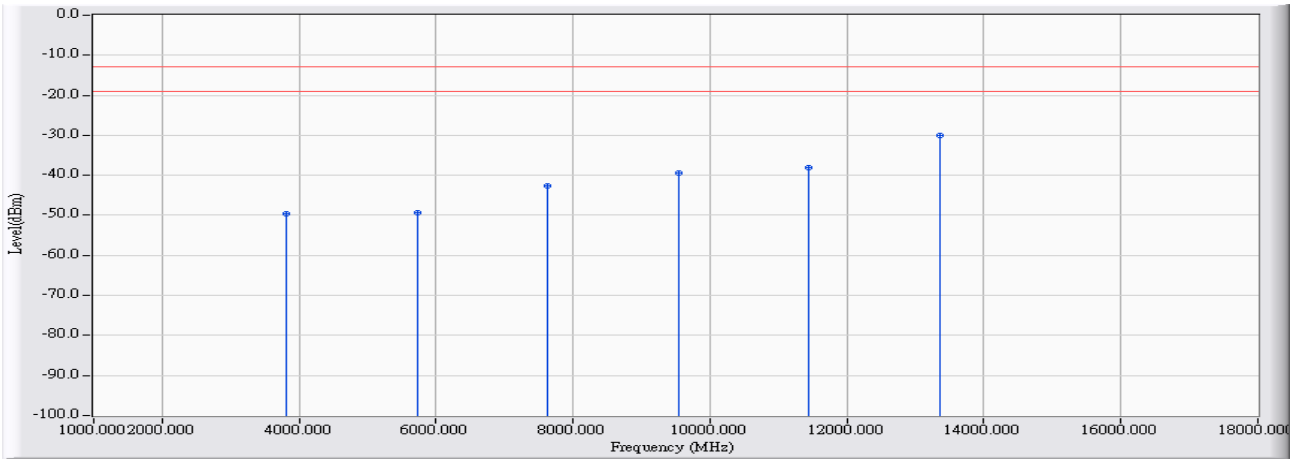


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3815.200	18.934	-68.880	-49.946	-36.946	-13.000	PEAK
2		5722.800	21.349	-70.610	-49.261	-36.261	-13.000	PEAK
3		7630.400	26.620	-68.700	-42.080	-29.080	-13.000	PEAK
4		9538.000	28.689	-69.810	-41.120	-28.120	-13.000	PEAK
5		11445.600	32.185	-70.660	-38.475	-25.475	-13.000	PEAK
6	*	13353.200	37.747	-69.400	-31.653	-18.653	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/04**
Limit : FCC_PART24_1900_00M_PK	**Margin : 6**
Probe : CB4-H_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 4: WCDMA Band 2_Idle Mode_1907.6MHz**

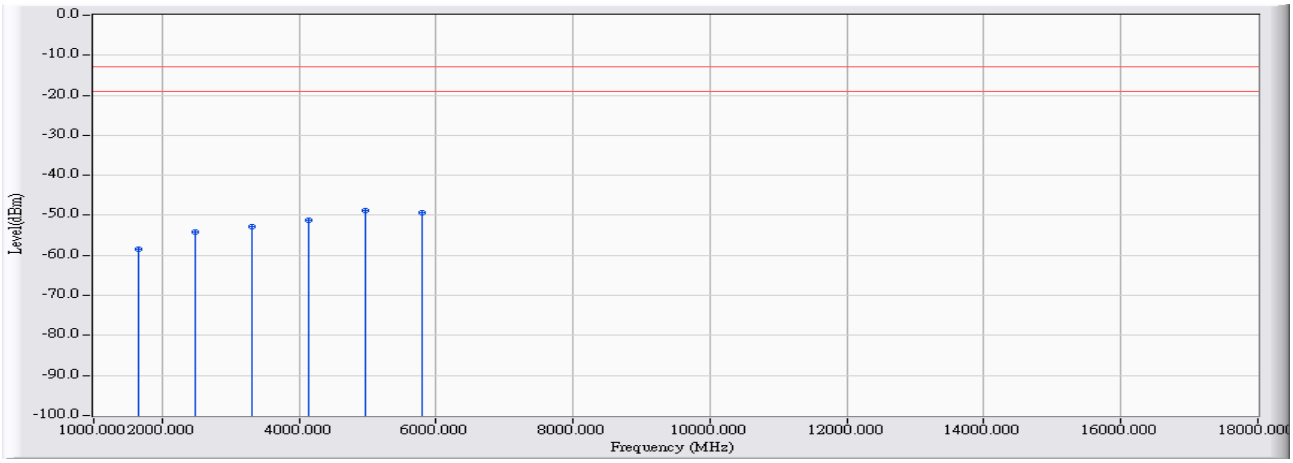


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3815.200	19.706	-69.240	-49.534	-36.534	-13.000	PEAK
2		5722.800	21.186	-70.530	-49.344	-36.344	-13.000	PEAK
3		7630.400	26.516	-69.020	-42.504	-29.504	-13.000	PEAK
4		9538.000	30.226	-69.770	-39.543	-26.543	-13.000	PEAK
5		11445.600	32.022	-70.040	-38.017	-25.017	-13.000	PEAK
6	*	13353.200	39.271	-69.180	-29.909	-16.909	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 5: WCDMA Band 5_HSUPA Mode _826.4_HSUPA_Link**

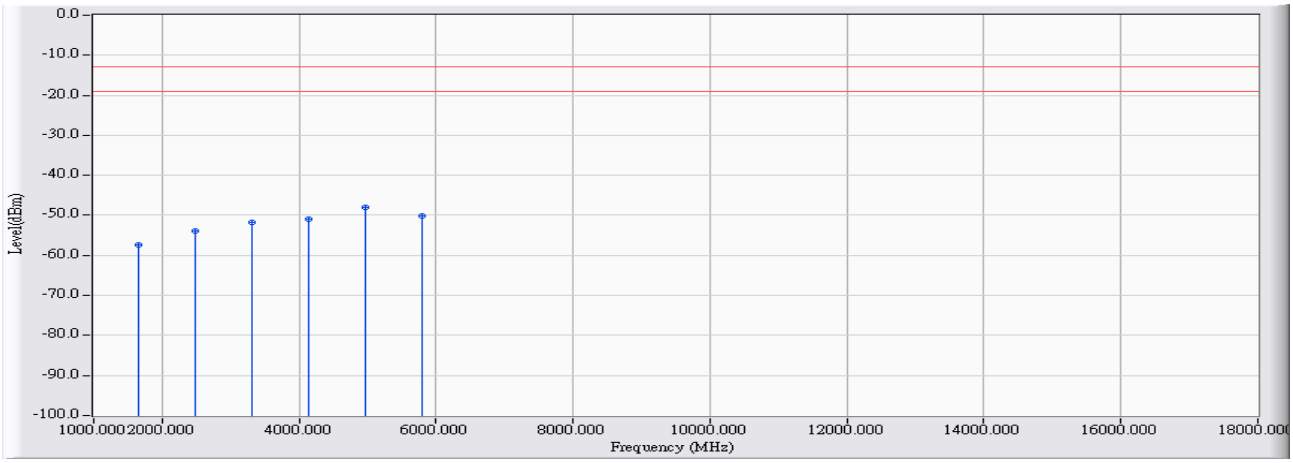


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1652.800	9.627	-68.070	-58.444	-45.444	-13.000	PEAK
2		2479.200	14.570	-68.700	-54.130	-41.130	-13.000	PEAK
3		3305.600	17.229	-69.960	-52.731	-39.731	-13.000	PEAK
4		4132.000	18.938	-70.250	-51.311	-38.311	-13.000	PEAK
5	*	4958.400	22.387	-71.060	-48.672	-35.672	-13.000	PEAK
6		5784.800	21.675	-71.130	-49.455	-36.455	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 5: WCDMA Band 5_HSUPA Mode _826.4_HSUPA_Link**

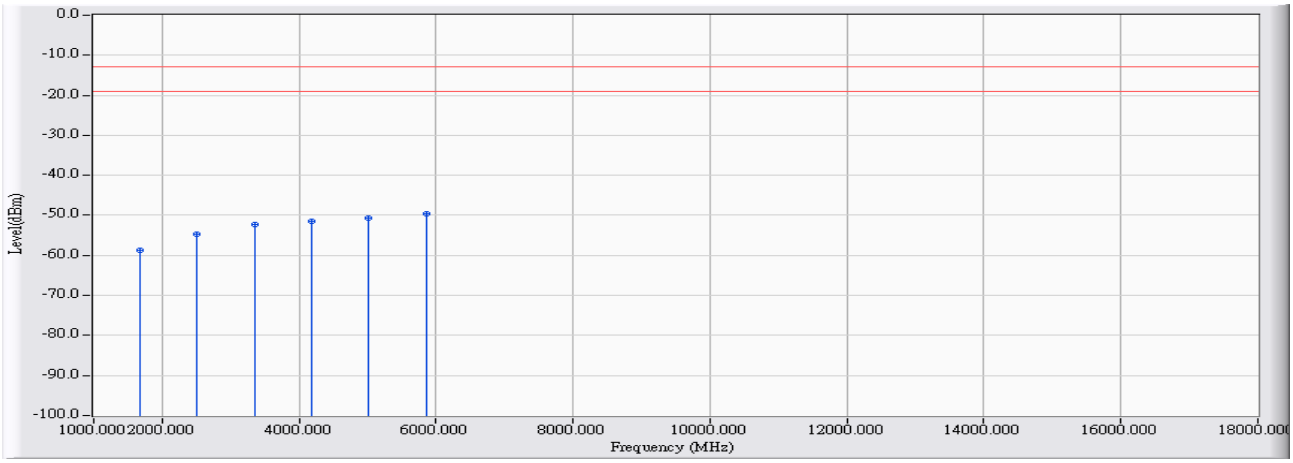


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1652.800	10.155	-67.550	-57.396	-44.396	-13.000	PEAK
2		2479.200	14.921	-68.820	-53.900	-40.900	-13.000	PEAK
3		3305.600	17.822	-69.660	-51.838	-38.838	-13.000	PEAK
4		4132.000	19.820	-70.660	-50.840	-37.840	-13.000	PEAK
5	*	4958.400	22.891	-70.810	-47.918	-34.918	-13.000	PEAK
6		5784.800	21.508	-71.550	-50.042	-37.042	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 5: WCDMA Band 5_HSUPA Mode _836.6_HSUPA_Link**

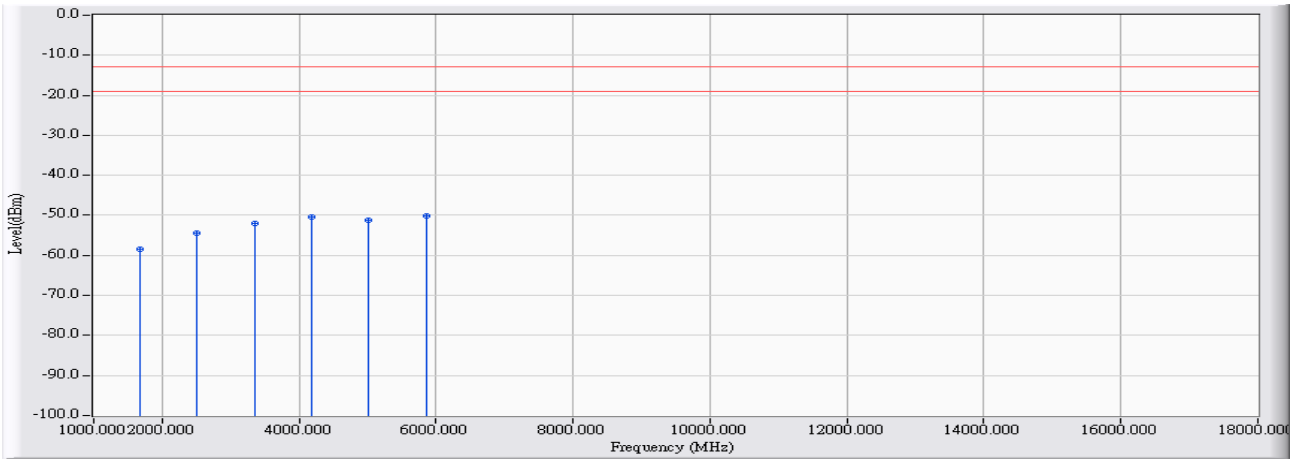


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1673.200	9.596	-68.340	-58.744	-45.744	-13.000	PEAK
2		2509.800	14.541	-69.110	-54.569	-41.569	-13.000	PEAK
3		3346.400	17.333	-69.720	-52.387	-39.387	-13.000	PEAK
4		4183.000	18.999	-70.460	-51.461	-38.461	-13.000	PEAK
5		5019.600	20.183	-70.770	-50.587	-37.587	-13.000	PEAK
6	*	5856.200	21.914	-71.600	-49.686	-36.686	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 5: WCDMA Band 5_HSUPA Mode _836.6_HSUPA_Link**

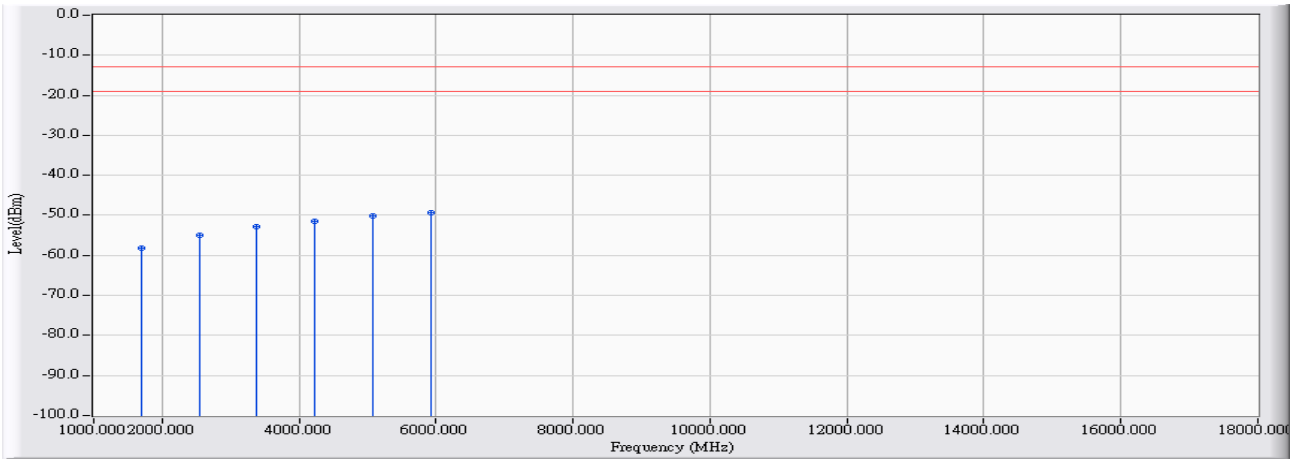


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1673.200	10.161	-68.480	-58.319	-45.319	-13.000	PEAK
2		2509.800	14.930	-69.310	-54.380	-41.380	-13.000	PEAK
3		3346.400	17.974	-70.070	-52.096	-39.096	-13.000	PEAK
4		4183.000	19.949	-70.260	-50.311	-37.311	-13.000	PEAK
5		5019.600	19.822	-70.910	-51.088	-38.088	-13.000	PEAK
6	*	5856.200	21.742	-71.820	-50.077	-37.077	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 5: WCDMA Band 5_HSUPA Mode _846.6_HSUPA_Link**

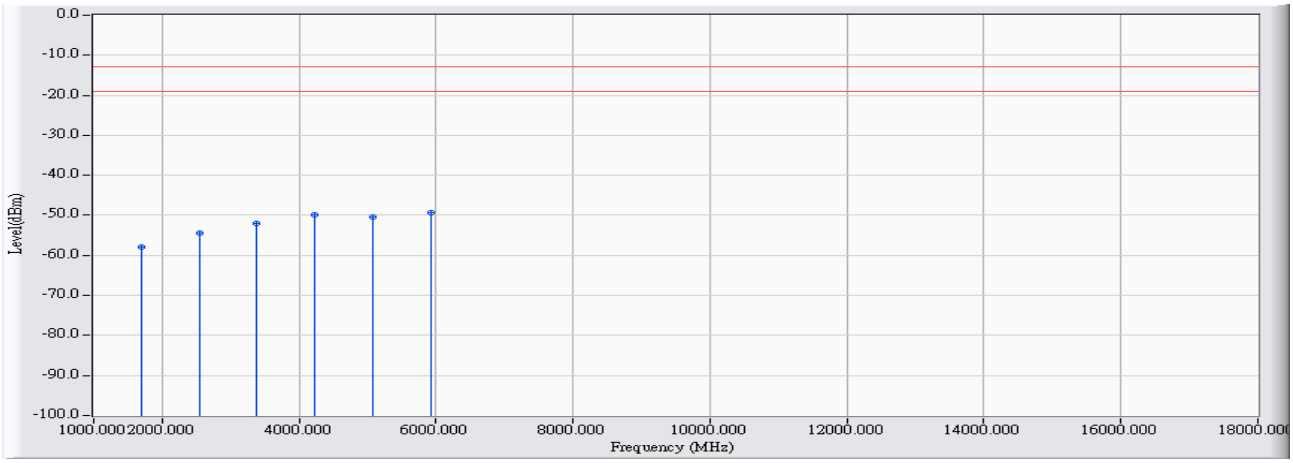


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1693.200	9.566	-67.760	-58.194	-45.194	-13.000	PEAK
2		2539.800	14.627	-69.470	-54.843	-41.843	-13.000	PEAK
3		3386.400	17.435	-70.280	-52.845	-39.845	-13.000	PEAK
4		4233.000	19.056	-70.490	-51.434	-38.434	-13.000	PEAK
5		5079.600	20.251	-70.360	-50.109	-37.109	-13.000	PEAK
6	*	5926.200	22.148	-71.550	-49.402	-36.402	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 5: WCDMA Band 5_HSUPA Mode _846.6_HSUPA_Link**

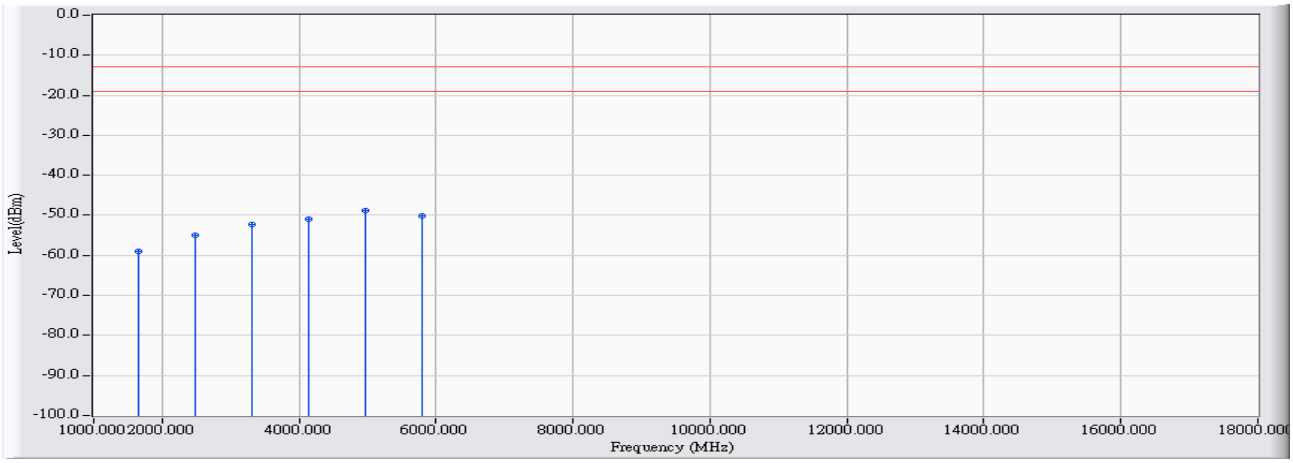


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1693.200	10.168	-68.060	-57.892	-44.892	-13.000	PEAK
2		2539.800	15.006	-69.550	-54.545	-41.545	-13.000	PEAK
3		3386.400	18.123	-70.140	-52.017	-39.017	-13.000	PEAK
4		4233.000	20.072	-69.830	-49.758	-36.758	-13.000	PEAK
5		5079.600	19.917	-70.290	-50.374	-37.374	-13.000	PEAK
6	*	5926.200	21.973	-71.400	-49.427	-36.427	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 5: WCDMA Band 5_HSUPA Mode 826.4_HSUPA_Idle**

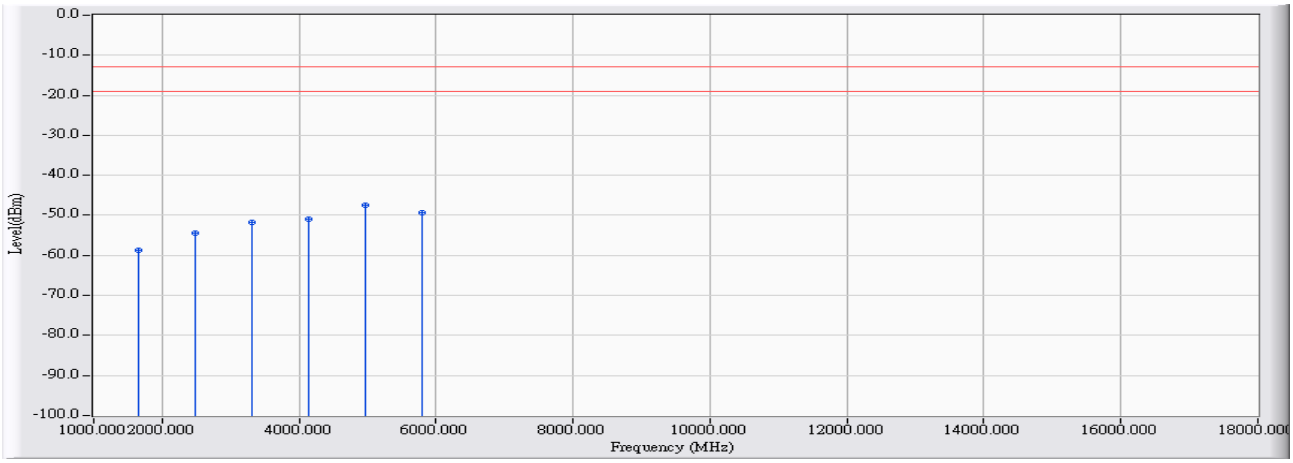


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1652.800	9.627	-68.490	-58.864	-45.864	-13.000	PEAK
2		2479.200	14.570	-69.510	-54.940	-41.940	-13.000	PEAK
3		3305.600	17.229	-69.550	-52.321	-39.321	-13.000	PEAK
4		4132.000	18.938	-69.770	-50.831	-37.831	-13.000	PEAK
5	*	4958.400	22.387	-71.170	-48.782	-35.782	-13.000	PEAK
6		5784.800	21.675	-71.920	-50.245	-37.245	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 5: WCDMA Band 5_HSUPA Mode _826.4_HSUPA_Idle**

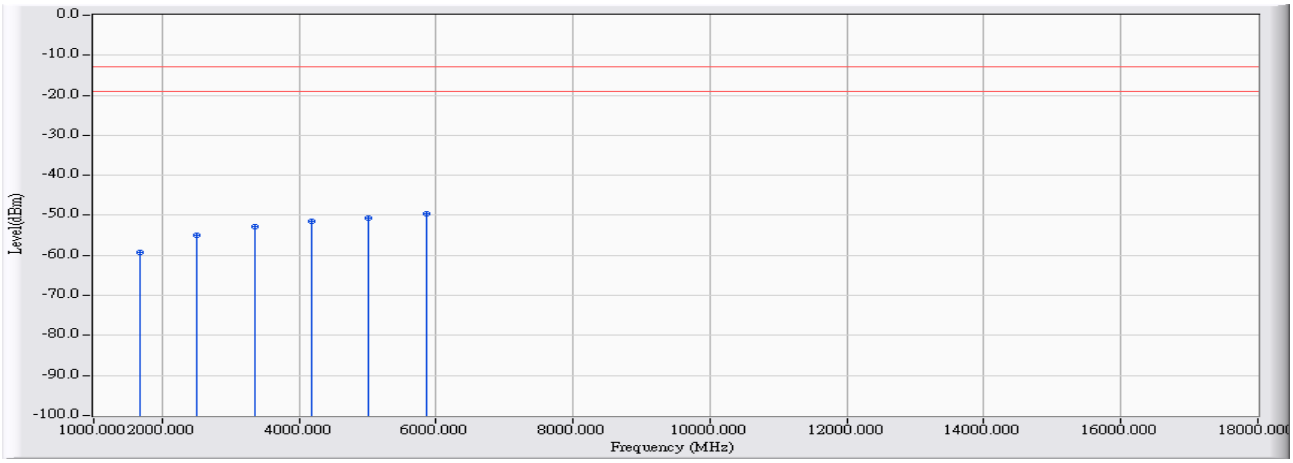


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1652.800	10.155	-68.860	-58.706	-45.706	-13.000	PEAK
2		2479.200	14.921	-69.330	-54.410	-41.410	-13.000	PEAK
3		3305.600	17.822	-69.650	-51.828	-38.828	-13.000	PEAK
4		4132.000	19.820	-70.710	-50.890	-37.890	-13.000	PEAK
5	*	4958.400	22.891	-70.380	-47.488	-34.488	-13.000	PEAK
6		5784.800	21.508	-70.970	-49.462	-36.462	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 5: WCDMA Band 5_HSUPA Mode _836.6_HSUPA_Idle**

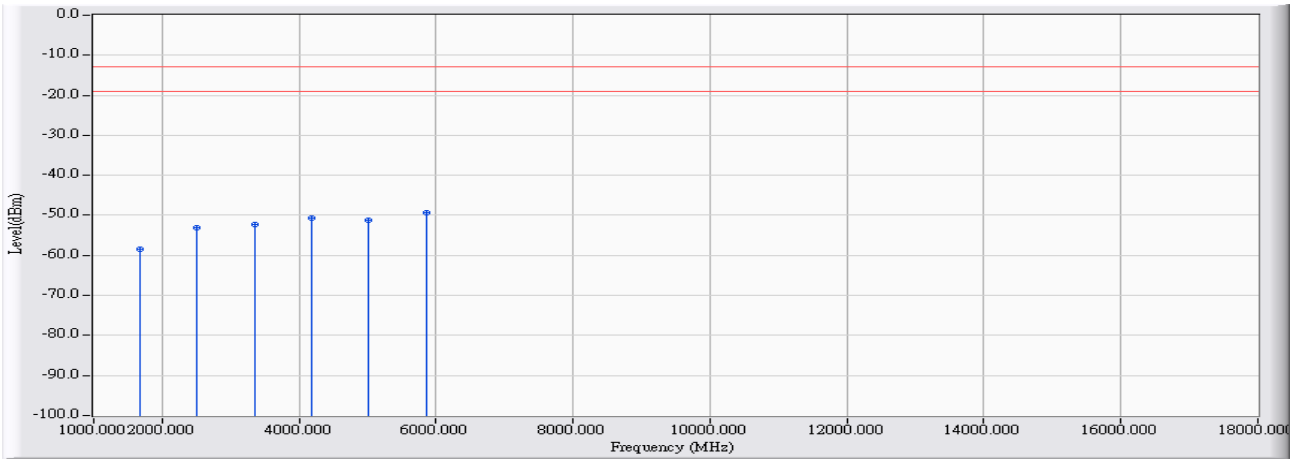


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1673.200	9.596	-68.850	-59.254	-46.254	-13.000	PEAK
2		2509.800	14.541	-69.540	-54.999	-41.999	-13.000	PEAK
3		3346.400	17.333	-70.200	-52.867	-39.867	-13.000	PEAK
4		4183.000	18.999	-70.390	-51.391	-38.391	-13.000	PEAK
5		5019.600	20.183	-70.980	-50.797	-37.797	-13.000	PEAK
6	*	5856.200	21.914	-71.550	-49.636	-36.636	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 5: WCDMA Band 5_HSUPA Mode _836.6_HSUPA_Idle**

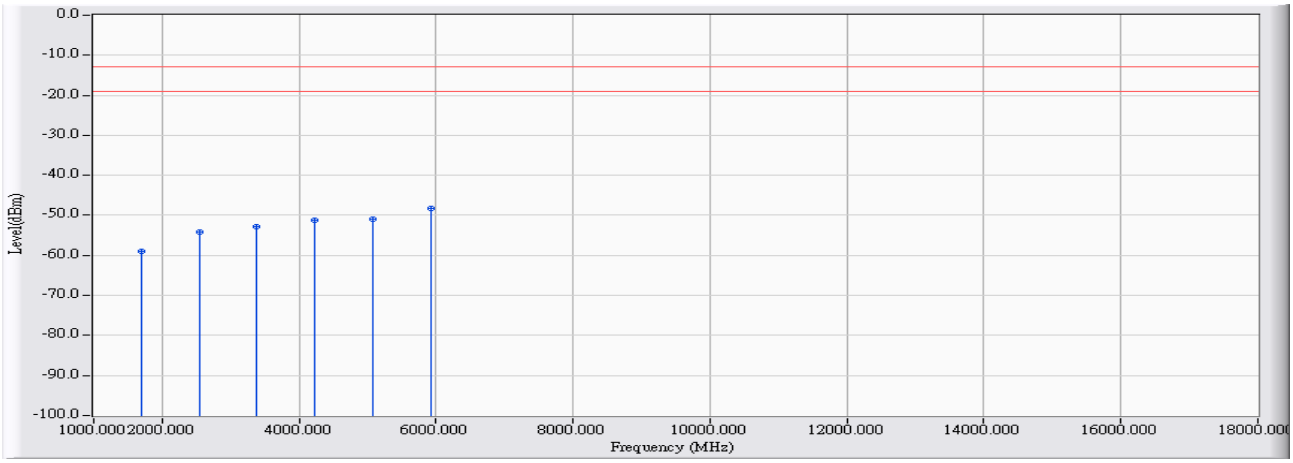


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1673.200	10.161	-68.550	-58.389	-45.389	-13.000	PEAK
2		2509.800	14.930	-68.080	-53.150	-40.150	-13.000	PEAK
3		3346.400	17.974	-70.280	-52.306	-39.306	-13.000	PEAK
4		4183.000	19.949	-70.580	-50.631	-37.631	-13.000	PEAK
5		5019.600	19.822	-70.930	-51.108	-38.108	-13.000	PEAK
6	*	5856.200	21.742	-71.200	-49.457	-36.457	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 5: WCDMA Band 5_HSUPA Mode _846.6_HSUPA_Idle**

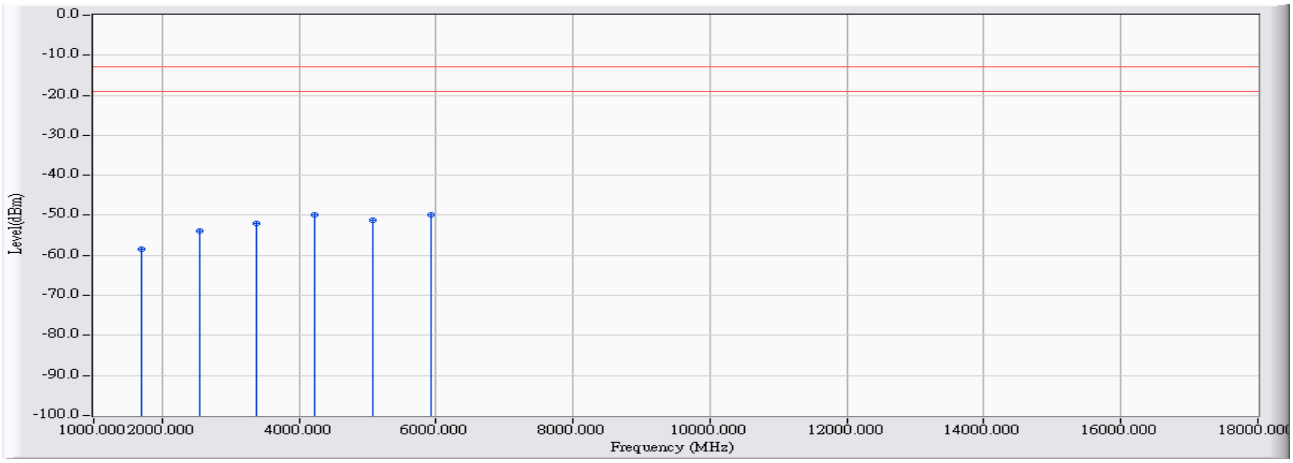


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1693.200	9.566	-68.450	-58.884	-45.884	-13.000	PEAK
2		2539.800	14.627	-68.860	-54.233	-41.233	-13.000	PEAK
3		3386.400	17.435	-70.140	-52.705	-39.705	-13.000	PEAK
4		4233.000	19.056	-70.150	-51.094	-38.094	-13.000	PEAK
5		5079.600	20.251	-71.150	-50.899	-37.899	-13.000	PEAK
6	*	5926.200	22.148	-70.350	-48.202	-35.202	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 5: WCDMA Band 5_HSUPA Mode _846.6_HSUPA_Idle**

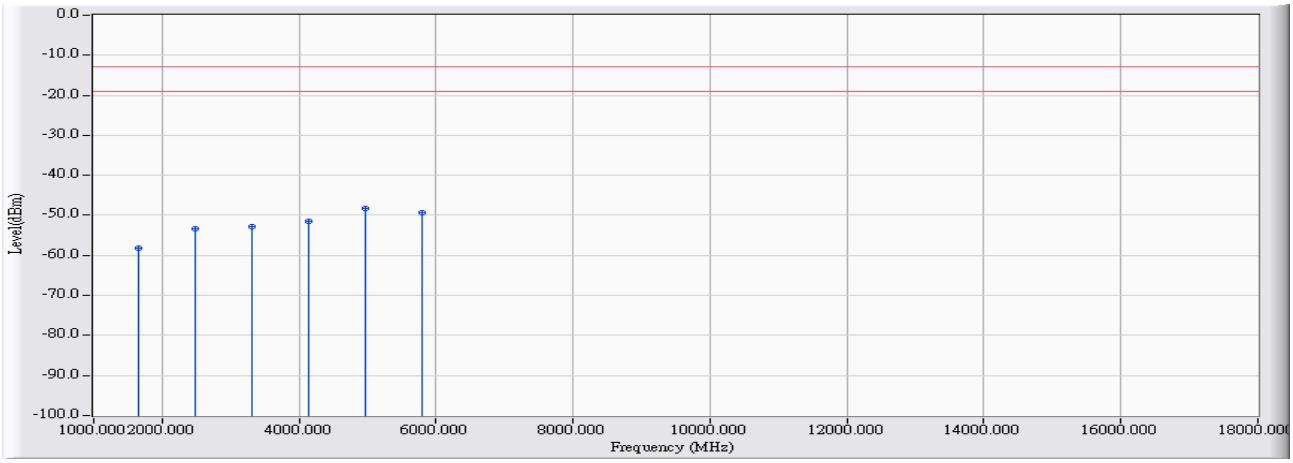


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1693.200	10.168	-68.700	-58.532	-45.532	-13.000	PEAK
2		2539.800	15.006	-68.900	-53.895	-40.895	-13.000	PEAK
3		3386.400	18.123	-70.150	-52.027	-39.027	-13.000	PEAK
4	*	4233.000	20.072	-69.880	-49.808	-36.808	-13.000	PEAK
5		5079.600	19.917	-71.130	-51.214	-38.214	-13.000	PEAK
6		5926.200	21.973	-71.790	-49.817	-36.817	-13.000	PEAK

Note:

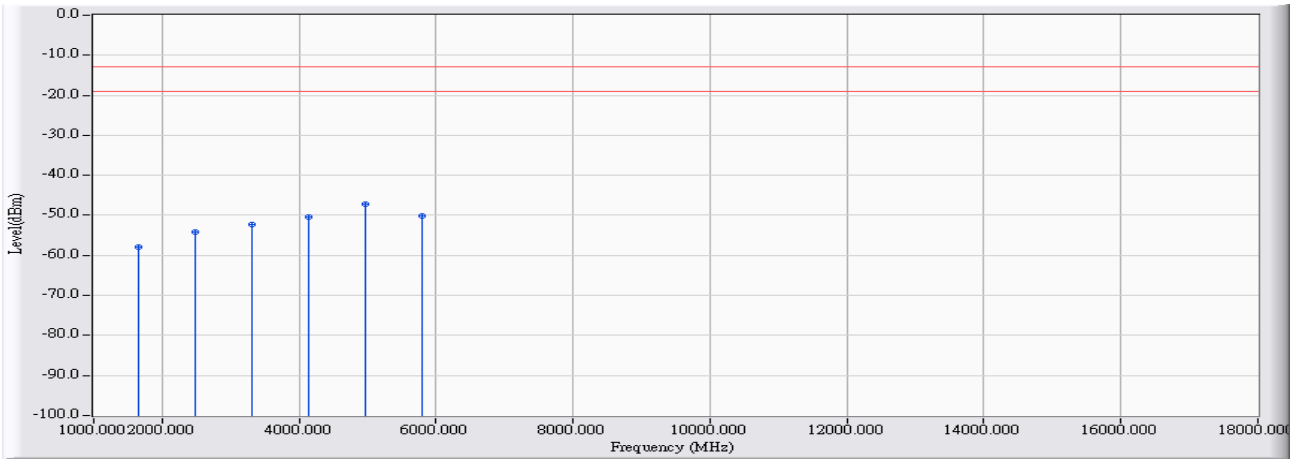
1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 6: WCDMA Band 5_HSDPA Mode _826.4_HSDPA_Link**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1652.800	9.627	-67.770	-58.144	-45.144	-13.000	PEAK
2		2479.200	14.570	-68.030	-53.460	-40.460	-13.000	PEAK
3		3305.600	17.229	-69.980	-52.751	-39.751	-13.000	PEAK
4		4132.000	18.938	-70.340	-51.401	-38.401	-13.000	PEAK
5	*	4958.400	22.387	-70.730	-48.342	-35.342	-13.000	PEAK
6		5784.800	21.675	-70.980	-49.305	-36.305	-13.000	PEAK

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 6: WCDMA Band 5_HSDPA Mode _826.4_HSDPA_Link**

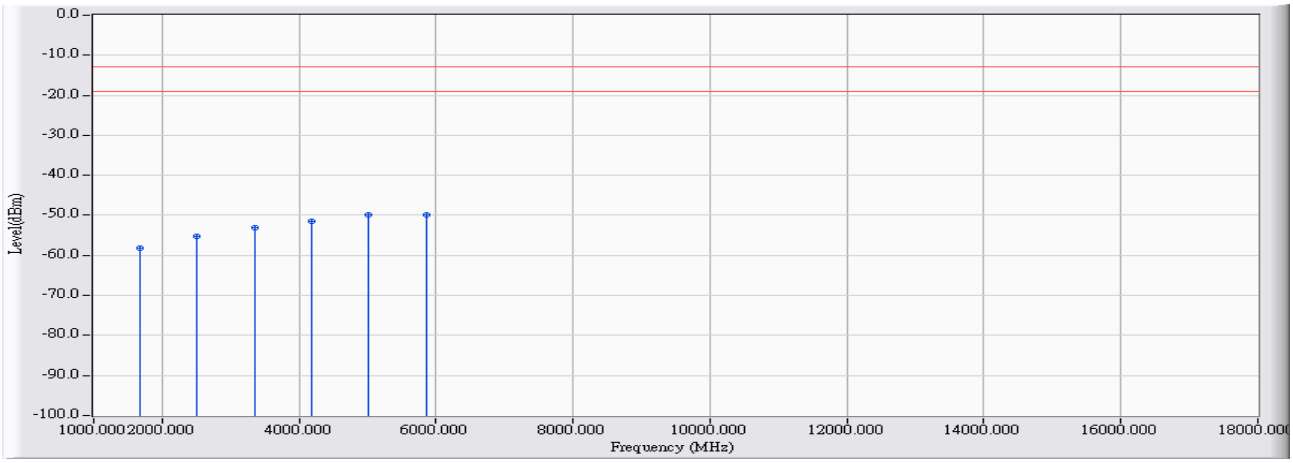


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1652.800	10.155	-68.000	-57.846	-44.846	-13.000	PEAK
2		2479.200	14.921	-68.960	-54.040	-41.040	-13.000	PEAK
3		3305.600	17.822	-70.220	-52.398	-39.398	-13.000	PEAK
4		4132.000	19.820	-70.230	-50.410	-37.410	-13.000	PEAK
5	*	4958.400	22.891	-70.130	-47.238	-34.238	-13.000	PEAK
6		5784.800	21.508	-71.620	-50.112	-37.112	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 6: WCDMA Band 5_HSDPA Mode _836.6_HSDPA_Link**

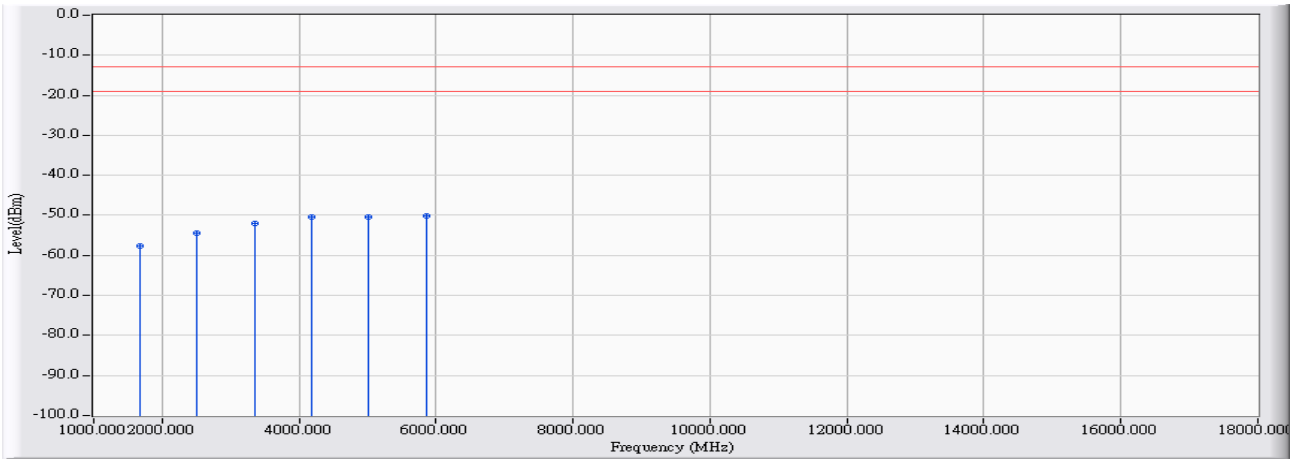


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1673.200	9.596	-67.830	-58.234	-45.234	-13.000	PEAK
2		2509.800	14.541	-69.700	-55.159	-42.159	-13.000	PEAK
3		3346.400	17.333	-70.500	-53.167	-40.167	-13.000	PEAK
4		4183.000	18.999	-70.490	-51.491	-38.491	-13.000	PEAK
5		5019.600	20.183	-70.170	-49.987	-36.987	-13.000	PEAK
6	*	5856.200	21.914	-71.780	-49.866	-36.866	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 6: WCDMA Band 5_HSDPA Mode _836.6_HSDPA_Link**

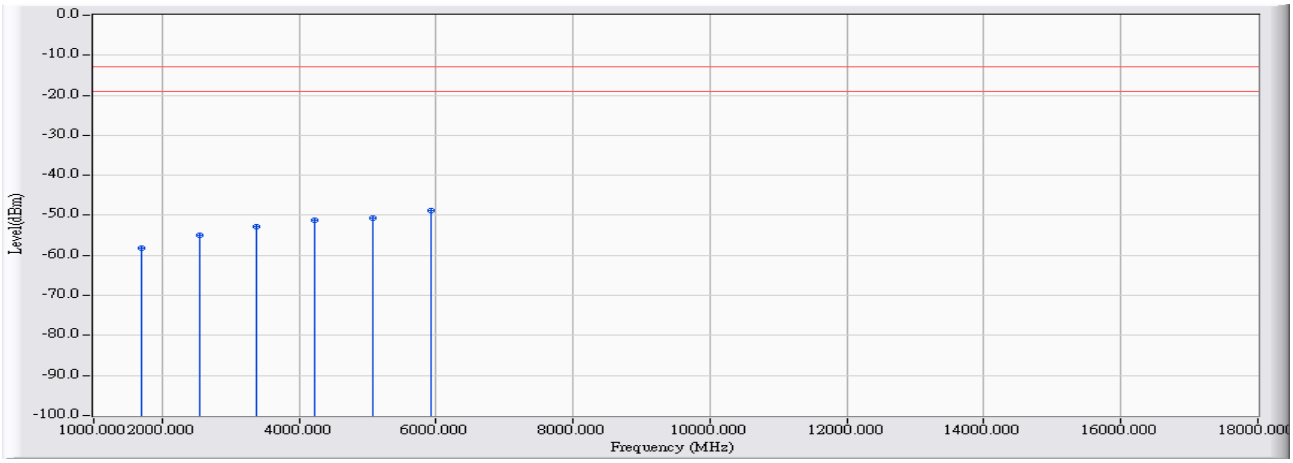


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1673.200	10.161	-67.820	-57.659	-44.659	-13.000	PEAK
2		2509.800	14.930	-69.470	-54.540	-41.540	-13.000	PEAK
3		3346.400	17.974	-69.970	-51.996	-38.996	-13.000	PEAK
4		4183.000	19.949	-70.480	-50.531	-37.531	-13.000	PEAK
5		5019.600	19.822	-70.100	-50.278	-37.278	-13.000	PEAK
6	*	5856.200	21.742	-71.830	-50.087	-37.087	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 6: WCDMA Band 5_HSDPA Mode _846.6_HSDPA_Link**

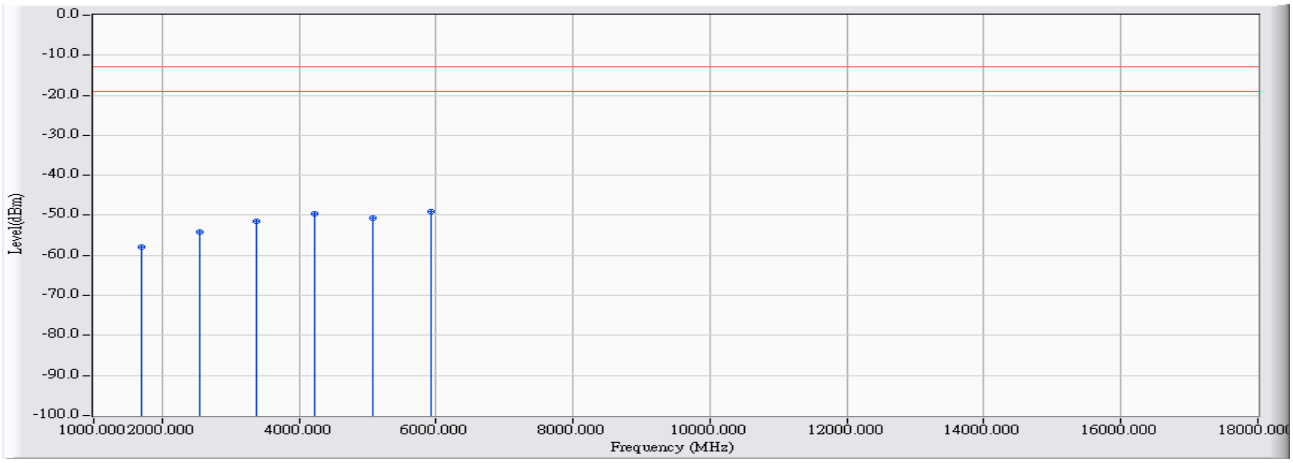


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1693.200	9.566	-67.800	-58.234	-45.234	-13.000	PEAK
2		2539.800	14.627	-69.560	-54.933	-41.933	-13.000	PEAK
3		3386.400	17.435	-70.160	-52.725	-39.725	-13.000	PEAK
4		4233.000	19.056	-70.220	-51.164	-38.164	-13.000	PEAK
5		5079.600	20.251	-70.900	-50.649	-37.649	-13.000	PEAK
6	*	5926.200	22.148	-71.010	-48.862	-35.862	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 6: WCDMA Band 5_HSDPA Mode _846.6_HSDPA_Link**

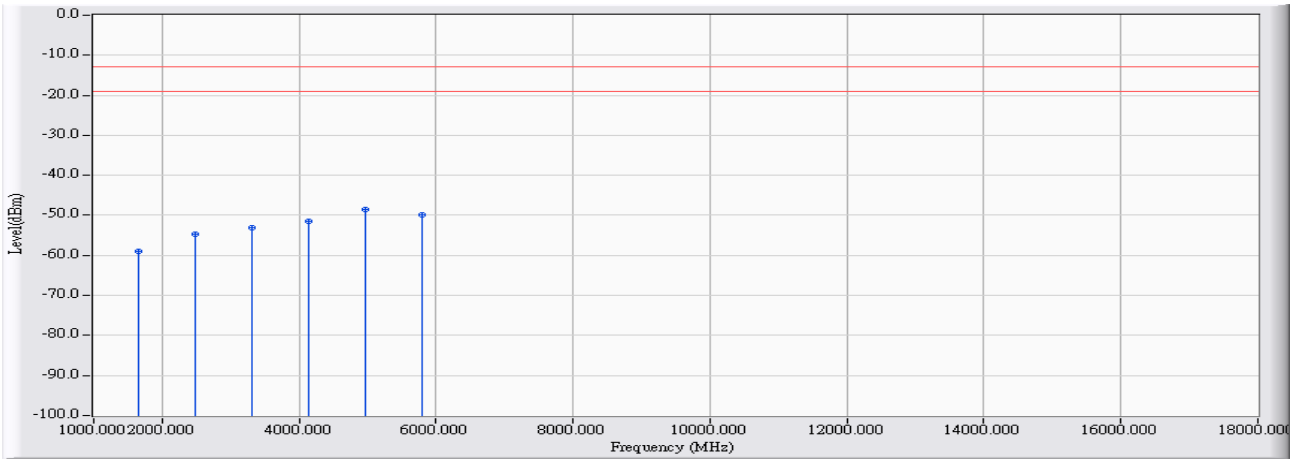


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1693.200	10.168	-68.150	-57.982	-44.982	-13.000	PEAK
2		2539.800	15.006	-69.200	-54.195	-41.195	-13.000	PEAK
3		3386.400	18.123	-69.600	-51.477	-38.477	-13.000	PEAK
4		4233.000	20.072	-69.720	-49.648	-36.648	-13.000	PEAK
5		5079.600	19.917	-70.660	-50.744	-37.744	-13.000	PEAK
6	*	5926.200	21.973	-71.160	-49.187	-36.187	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 6: WCDMA Band 5_HSDPA Mode _826.4_HSDPA_Idle**

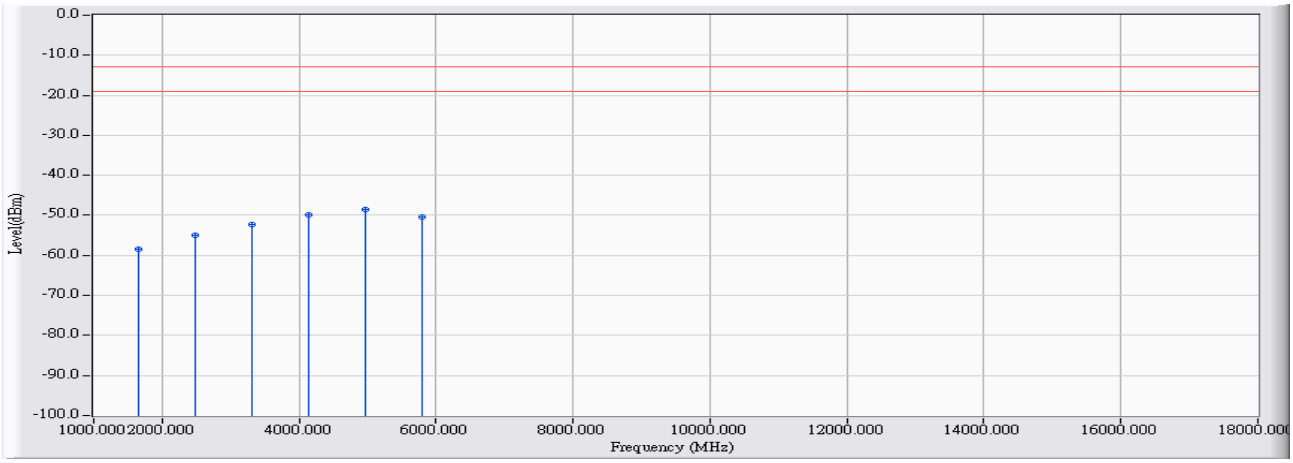


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1652.800	9.627	-68.650	-59.024	-46.024	-13.000	PEAK
2		2479.200	14.570	-69.330	-54.760	-41.760	-13.000	PEAK
3		3305.600	17.229	-70.310	-53.081	-40.081	-13.000	PEAK
4		4132.000	18.938	-70.460	-51.521	-38.521	-13.000	PEAK
5	*	4958.400	22.387	-70.780	-48.392	-35.392	-13.000	PEAK
6		5784.800	21.675	-71.580	-49.905	-36.905	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 6: WCDMA Band 5_HSDPA Mode _826.4_HSDPA_Idle**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1652.800	10.155	-68.660	-58.506	-45.506	-13.000	PEAK
2		2479.200	14.921	-69.800	-54.880	-41.880	-13.000	PEAK
3		3305.600	17.822	-70.120	-52.298	-39.298	-13.000	PEAK
4		4132.000	19.820	-69.660	-49.840	-36.840	-13.000	PEAK
5	*	4958.400	22.891	-71.350	-48.458	-35.458	-13.000	PEAK
6		5784.800	21.508	-71.940	-50.432	-37.432	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
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6. The average measurement was not performed when the peak measured data under the limit of average detection.
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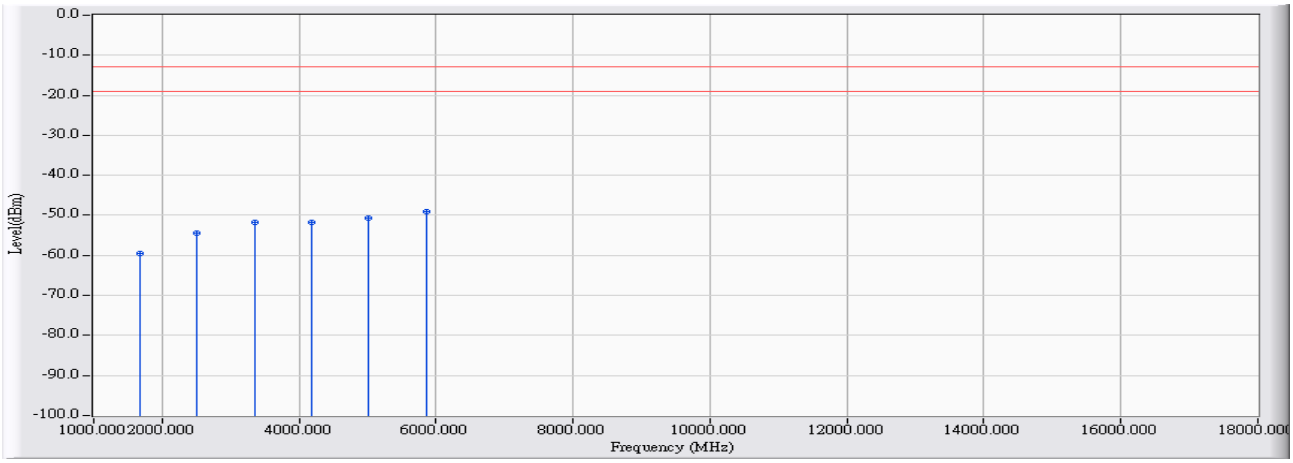
Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 6: WCDMA Band 5_HSDPA Mode _836.6_HSDPA_Idle**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1673.200	9.596	-69.140	-59.544	-46.544	-13.000	PEAK
2		2509.800	14.541	-69.040	-54.499	-41.499	-13.000	PEAK
3		3346.400	17.333	-69.150	-51.817	-38.817	-13.000	PEAK
4		4183.000	18.999	-70.790	-51.791	-38.791	-13.000	PEAK
5		5019.600	20.183	-70.740	-50.557	-37.557	-13.000	PEAK
6	*	5856.200	21.914	-71.070	-49.156	-36.156	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
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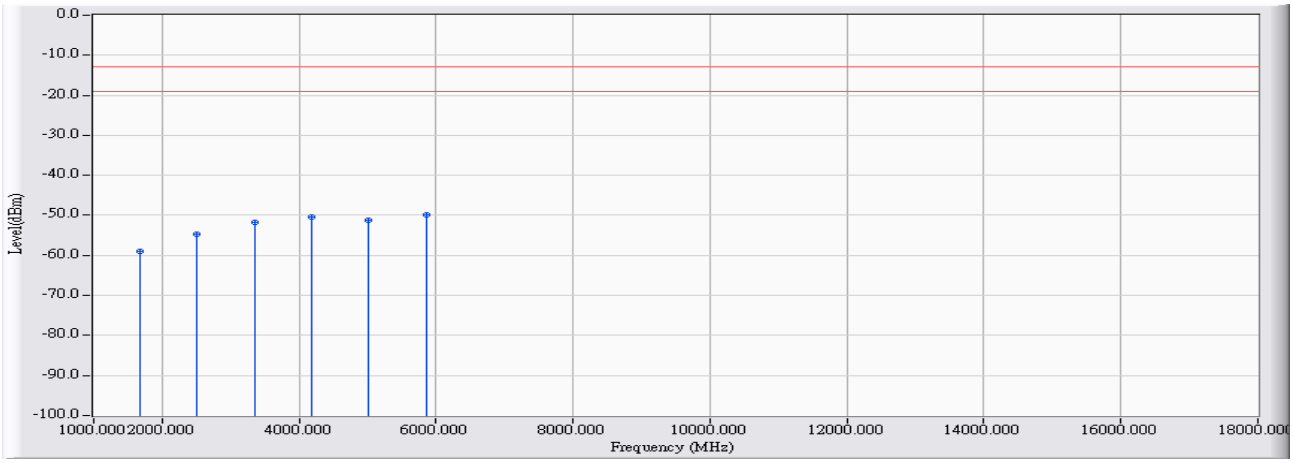
Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 6: WCDMA Band 5_HSDPA Mode _836.6_HSDPA_Idle**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1673.200	10.161	-69.080	-58.919	-45.919	-13.000	PEAK
2		2509.800	14.930	-69.540	-54.610	-41.610	-13.000	PEAK
3		3346.400	17.974	-69.810	-51.836	-38.836	-13.000	PEAK
4		4183.000	19.949	-70.260	-50.311	-37.311	-13.000	PEAK
5		5019.600	19.822	-71.070	-51.248	-38.248	-13.000	PEAK
6	*	5856.200	21.742	-71.560	-49.817	-36.817	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
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5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
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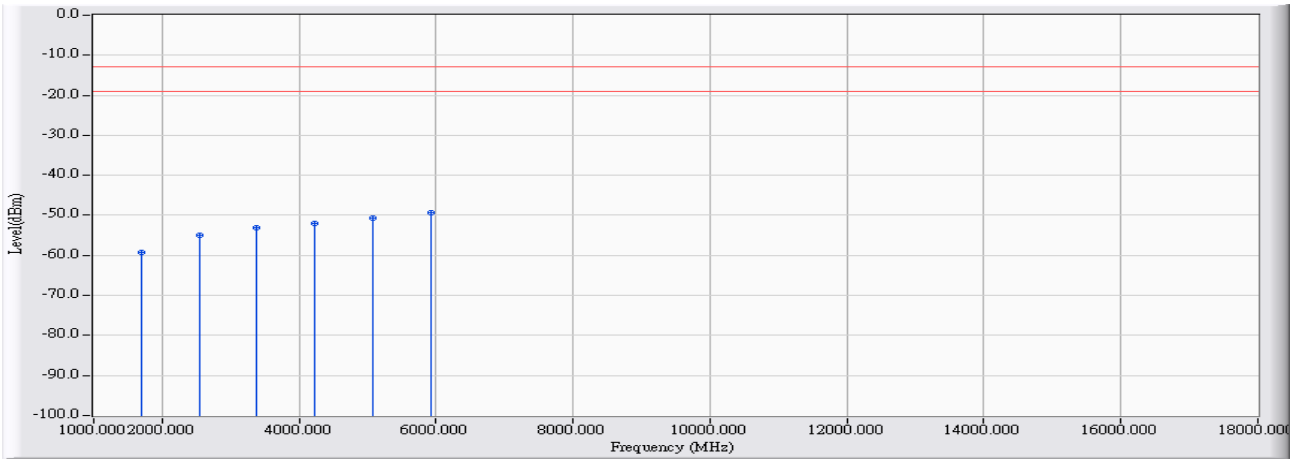
Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 6: WCDMA Band 5_HSDPA Mode _846.6_HSDPA_Idle**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1693.200	9.566	-68.800	-59.234	-46.234	-13.000	PEAK
2		2539.800	14.627	-69.570	-54.943	-41.943	-13.000	PEAK
3		3386.400	17.435	-70.400	-52.965	-39.965	-13.000	PEAK
4		4233.000	19.056	-70.990	-51.934	-38.934	-13.000	PEAK
5		5079.600	20.251	-70.960	-50.709	-37.709	-13.000	PEAK
6	*	5926.200	22.148	-71.490	-49.342	-36.342	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
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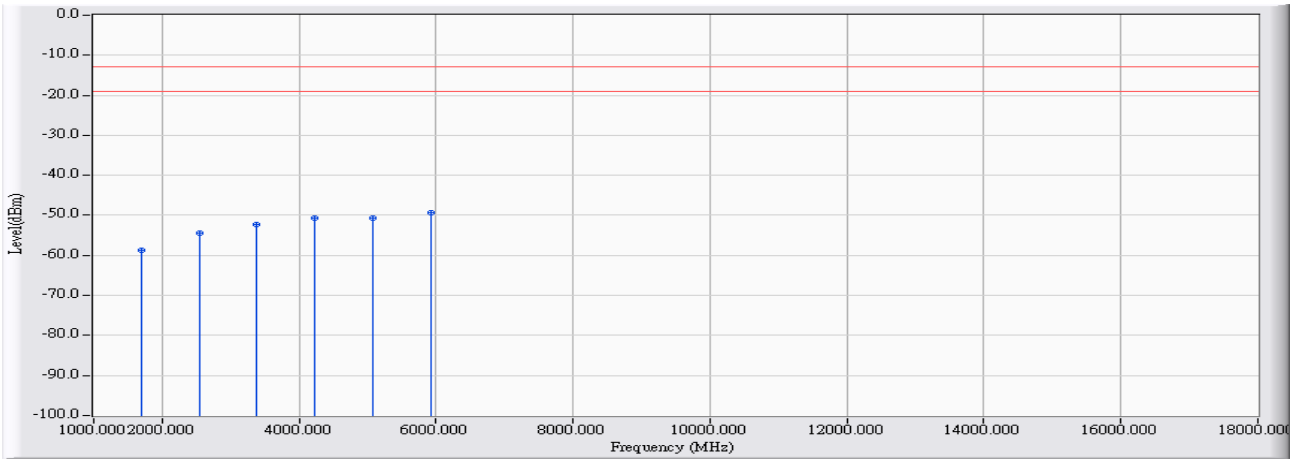
Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 6: WCDMA Band 5_HSDPA Mode _846.6_HSDPA_Idle**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		1693.200	10.168	-68.820	-58.652	-45.652	-13.000	PEAK
2		2539.800	15.006	-69.310	-54.305	-41.305	-13.000	PEAK
3		3386.400	18.123	-70.310	-52.187	-39.187	-13.000	PEAK
4		4233.000	20.072	-70.830	-50.758	-37.758	-13.000	PEAK
5		5079.600	19.917	-70.590	-50.674	-37.674	-13.000	PEAK
6	*	5926.200	21.973	-71.270	-49.297	-36.297	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
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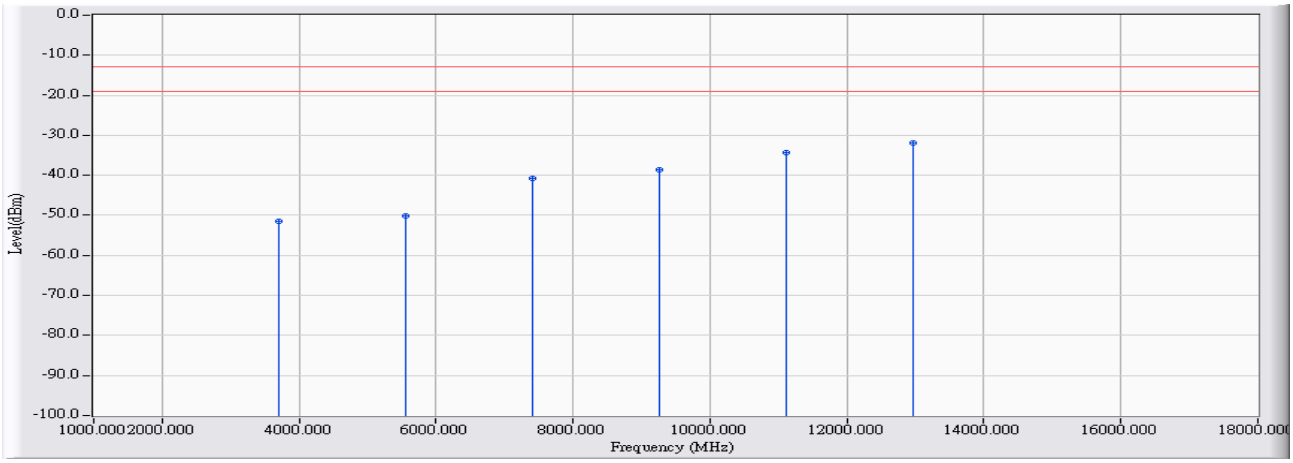
Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 7: WCDMA Band 2_HSUPA Mode _1852.4_HSUPA_Link**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3704.800	18.275	-69.650	-51.375	-38.375	-13.000	PEAK
2		5557.200	20.912	-71.080	-50.168	-37.168	-13.000	PEAK
3		7409.600	28.145	-68.910	-40.765	-27.765	-13.000	PEAK
4		9262.000	32.636	-71.110	-38.474	-25.474	-13.000	PEAK
5		11114.400	35.328	-69.650	-34.321	-21.321	-13.000	PEAK
6	*	12966.800	38.781	-70.790	-32.009	-19.009	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
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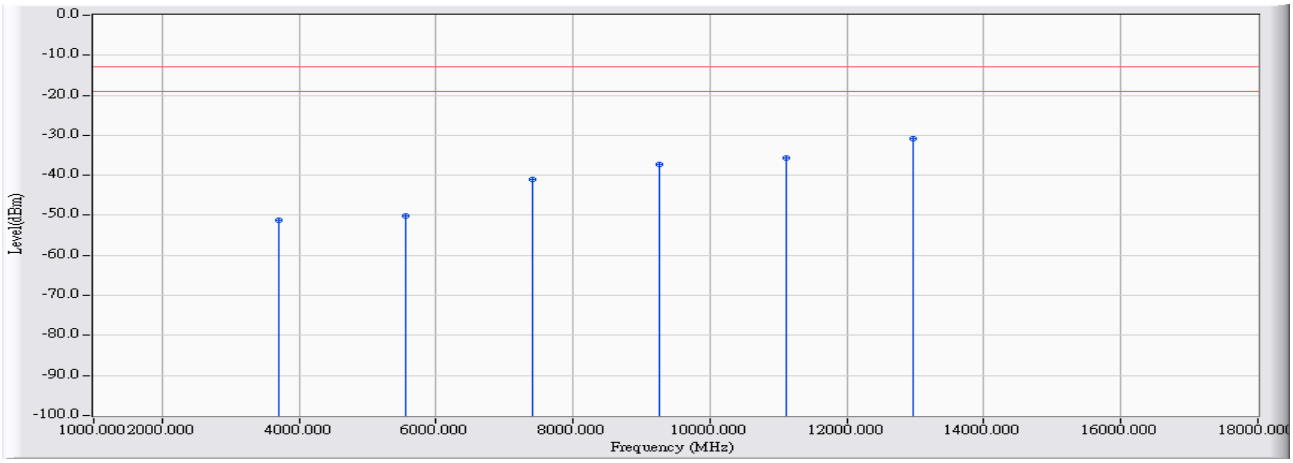
Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 7: WCDMA Band 2_HSUPA Mode _1852.4_HSUPA_Link**

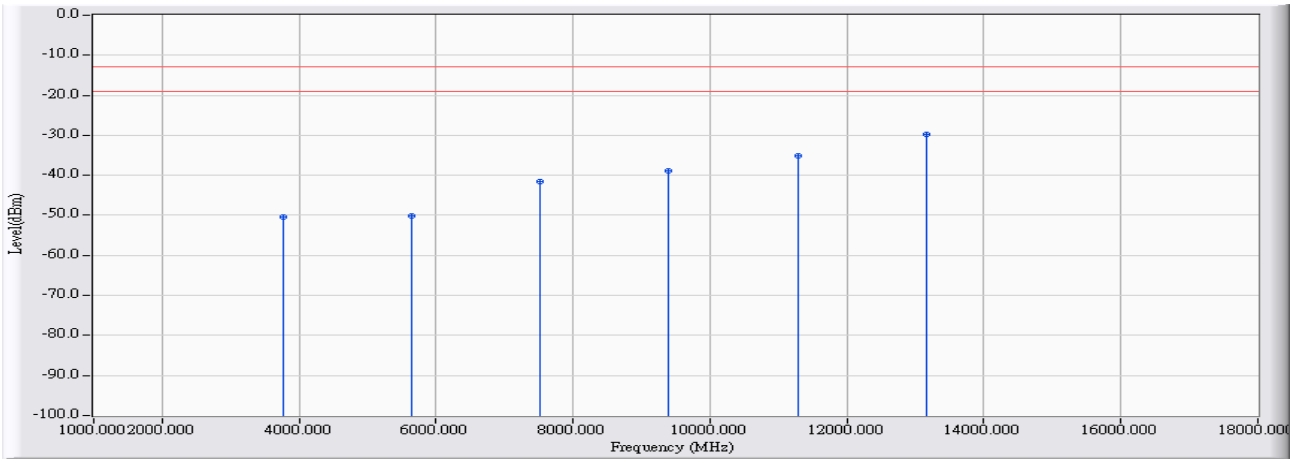


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3704.800	19.076	-70.250	-51.174	-38.174	-13.000	PEAK
2		5557.200	20.758	-70.870	-50.111	-37.111	-13.000	PEAK
3		7409.600	27.959	-69.050	-41.090	-28.090	-13.000	PEAK
4		9262.000	33.907	-71.190	-37.283	-24.283	-13.000	PEAK
5		11114.400	34.239	-69.990	-35.751	-22.751	-13.000	PEAK
6	*	12966.800	39.967	-70.850	-30.883	-17.883	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 7: WCDMA Band 2_HSUPA Mode _1880_HSUPA_Link**

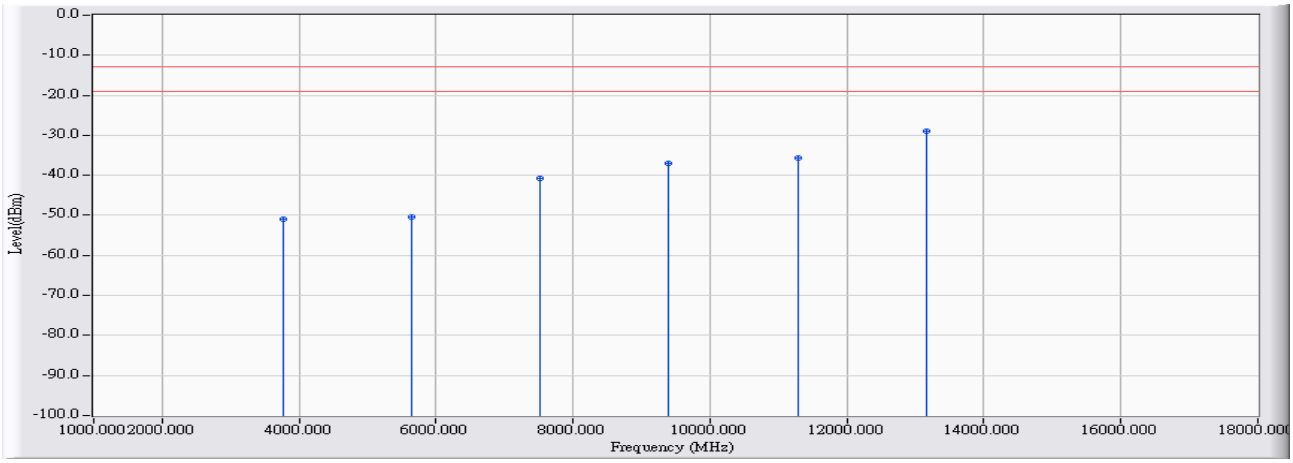


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3760.000	18.413	-68.790	-50.377	-37.377	-13.000	PEAK
2		5640.000	21.189	-71.200	-50.010	-37.010	-13.000	PEAK
3		7520.000	28.355	-69.800	-41.445	-28.445	-13.000	PEAK
4		9400.000	32.761	-71.540	-38.779	-25.779	-13.000	PEAK
5		11280.000	35.382	-70.370	-34.989	-21.989	-13.000	PEAK
6	*	13160.000	39.718	-69.520	-29.802	-16.802	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 7: WCDMA Band 2_HSUPA Mode _1880_HSUPA_Link**

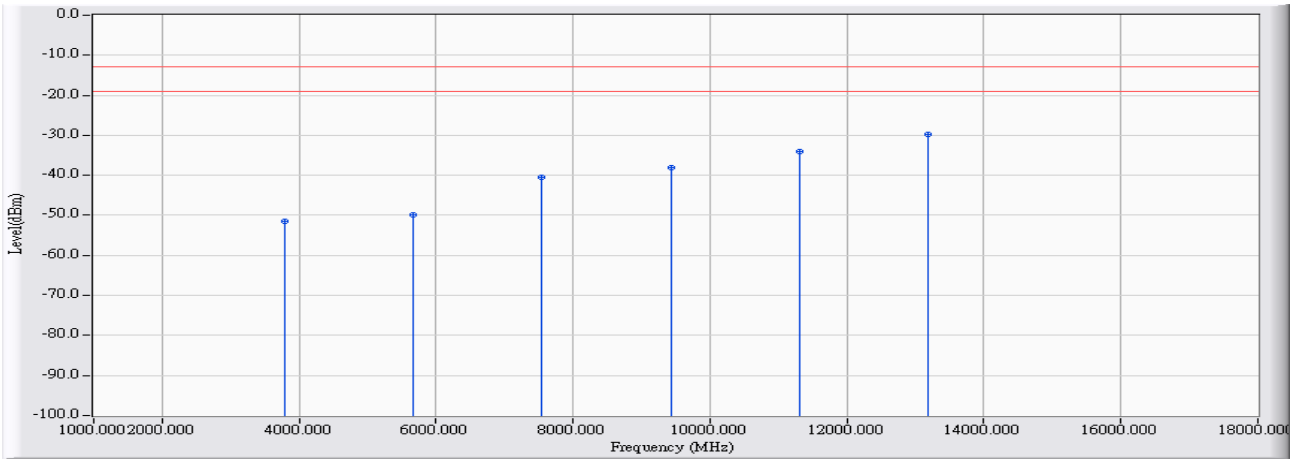


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3760.000	19.205	-70.270	-51.065	-38.065	-13.000	PEAK
2		5640.000	21.031	-71.410	-50.379	-37.379	-13.000	PEAK
3		7520.000	28.441	-69.280	-40.839	-27.839	-13.000	PEAK
4		9400.000	34.223	-71.240	-37.017	-24.017	-13.000	PEAK
5		11280.000	34.756	-70.350	-35.595	-22.595	-13.000	PEAK
6	*	13160.000	41.038	-69.880	-28.842	-15.842	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 7: WCDMA Band 2_HSUPA Mode _1907.6_HSUPA_Link**

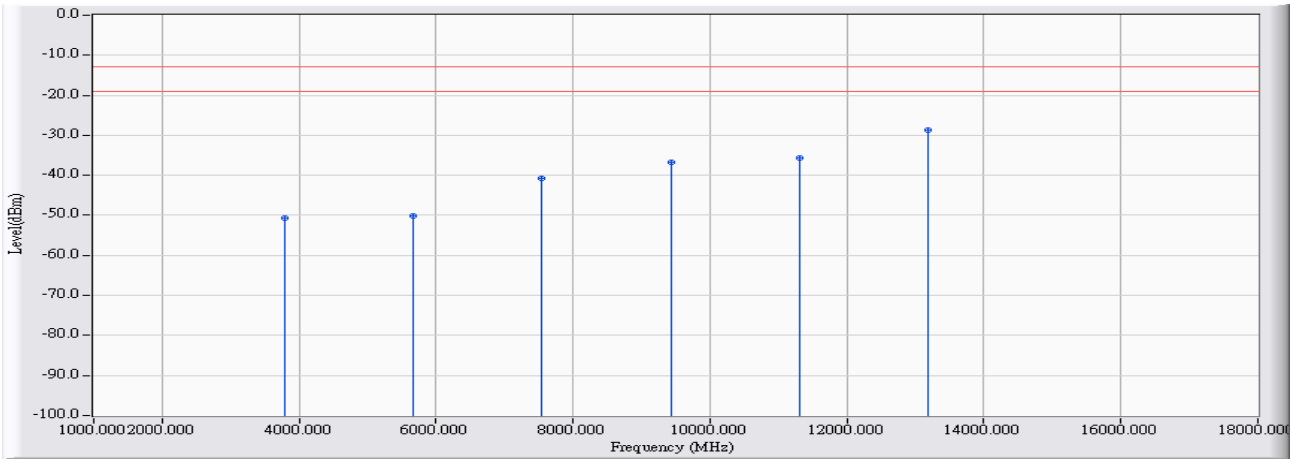


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3787.600	18.455	-69.930	-51.475	-38.475	-13.000	PEAK
2		5667.600	21.281	-71.160	-49.878	-36.878	-13.000	PEAK
3		7547.600	28.459	-68.970	-40.511	-27.511	-13.000	PEAK
4		9427.600	32.786	-70.830	-38.044	-25.044	-13.000	PEAK
5		11307.600	35.390	-69.530	-34.140	-21.140	-13.000	PEAK
6	*	13187.600	39.849	-69.710	-29.860	-16.860	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 7: WCDMA Band 2_HSUPA Mode _1907.6_HSUPA_Link**

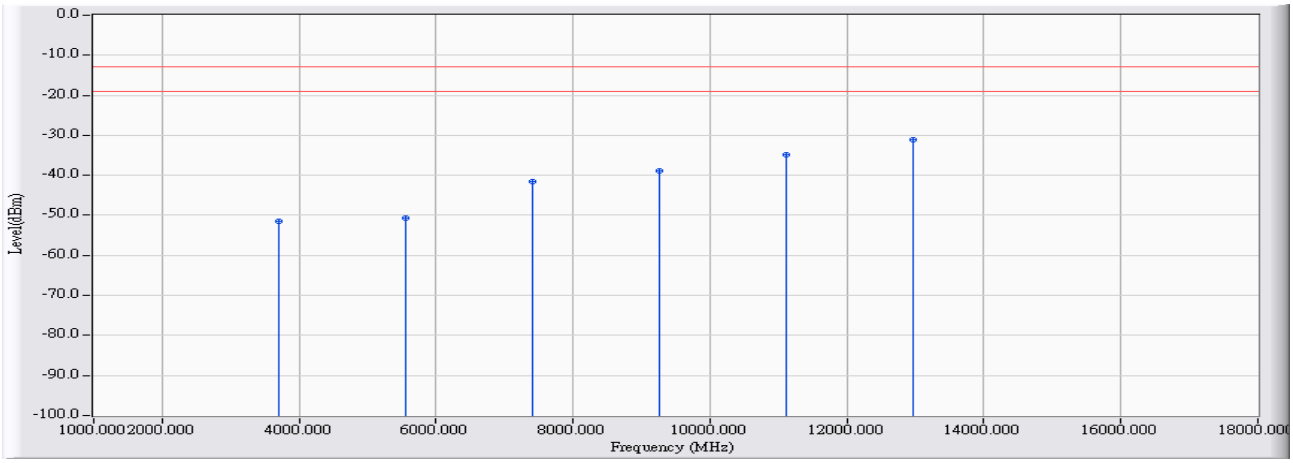


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3787.600	19.237	-69.830	-50.593	-37.593	-13.000	PEAK
2		5667.600	21.121	-71.240	-50.118	-37.118	-13.000	PEAK
3		7547.600	28.497	-69.170	-40.673	-27.673	-13.000	PEAK
4		9427.600	34.286	-71.080	-36.794	-23.794	-13.000	PEAK
5		11307.600	34.842	-70.490	-35.649	-22.649	-13.000	PEAK
6	*	13187.600	41.198	-69.860	-28.662	-15.662	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 7: WCDMA Band 2_HSUPA Mode _1852.4_HSUPA_Idle**

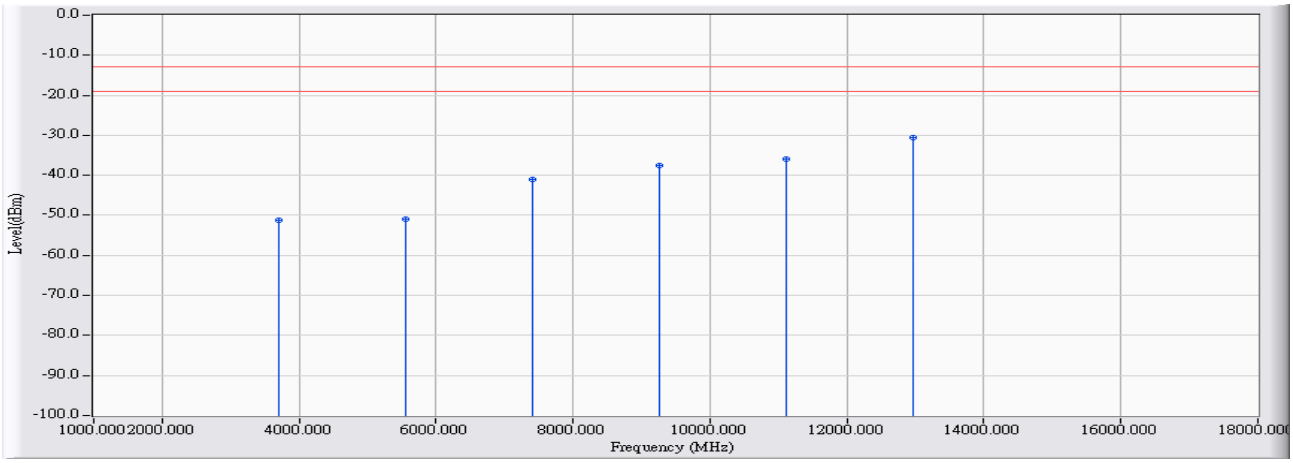


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3704.800	18.275	-69.730	-51.455	-38.455	-13.000	PEAK
2		5557.200	20.912	-71.480	-50.568	-37.568	-13.000	PEAK
3		7409.600	28.145	-69.810	-41.665	-28.665	-13.000	PEAK
4		9262.000	32.636	-71.500	-38.864	-25.864	-13.000	PEAK
5		11114.400	35.328	-70.240	-34.911	-21.911	-13.000	PEAK
6	*	12966.800	38.781	-69.760	-30.979	-17.979	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 7: WCDMA Band 2_HSUPA Mode _1852.4_HSUPA_Idle**

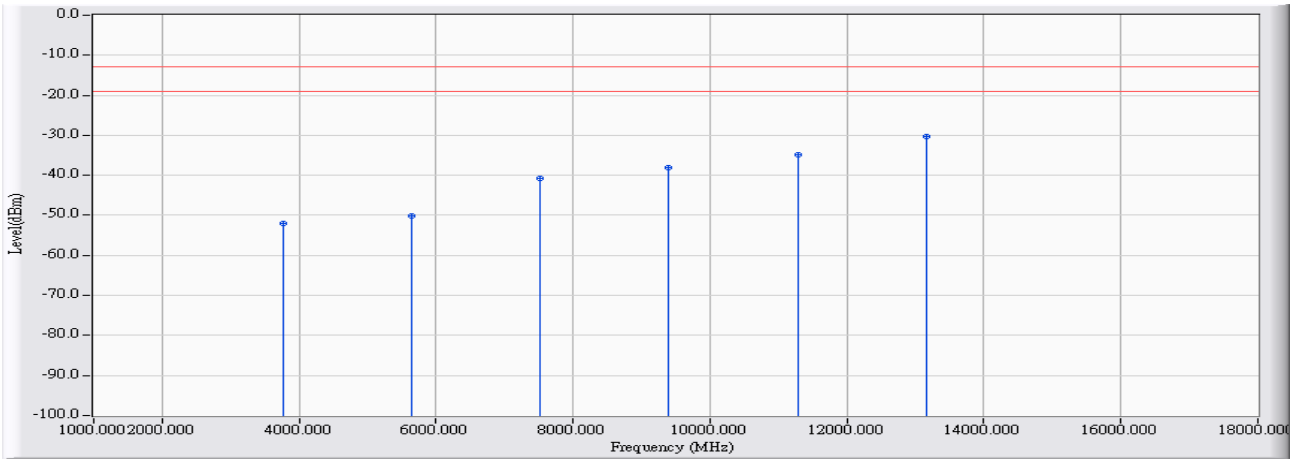


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3704.800	19.076	-70.310	-51.234	-38.234	-13.000	PEAK
2		5557.200	20.758	-71.680	-50.921	-37.921	-13.000	PEAK
3		7409.600	27.959	-69.070	-41.110	-28.110	-13.000	PEAK
4		9262.000	33.907	-71.570	-37.663	-24.663	-13.000	PEAK
5		11114.400	34.239	-70.110	-35.871	-22.871	-13.000	PEAK
6	*	12966.800	39.967	-70.630	-30.663	-17.663	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 7: WCDMA Band 2_HSUPA Mode _1880_HSUPA_Idle**

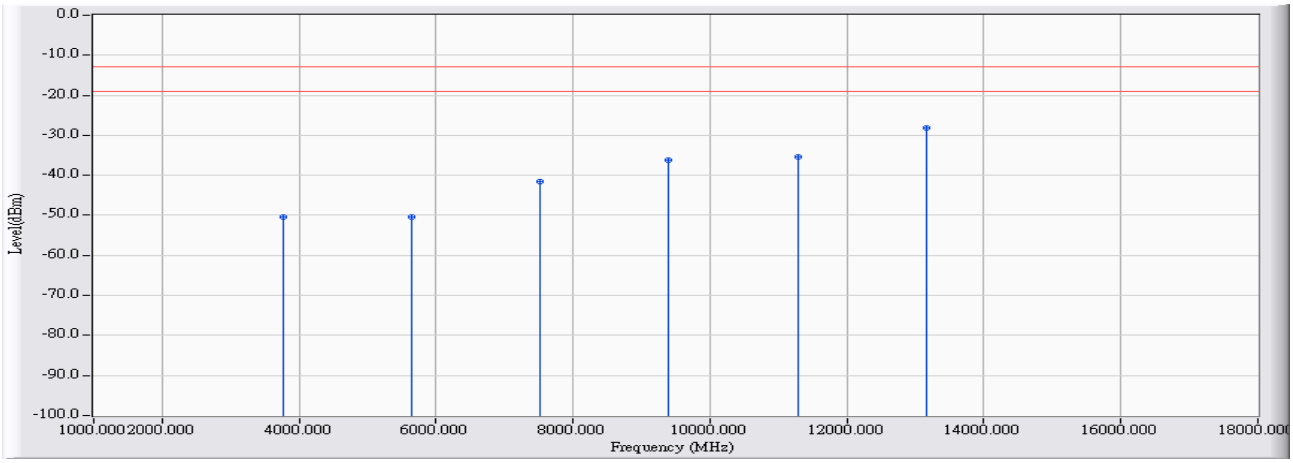


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3760.000	18.413	-70.390	-51.977	-38.977	-13.000	PEAK
2		5640.000	21.189	-71.320	-50.130	-37.130	-13.000	PEAK
3		7520.000	28.355	-69.010	-40.655	-27.655	-13.000	PEAK
4		9400.000	32.761	-70.710	-37.949	-24.949	-13.000	PEAK
5		11280.000	35.382	-70.340	-34.959	-21.959	-13.000	PEAK
6	*	13160.000	39.718	-70.020	-30.302	-17.302	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 7: WCDMA Band 2_HSUPA Mode _1880_HSUPA_Idle**

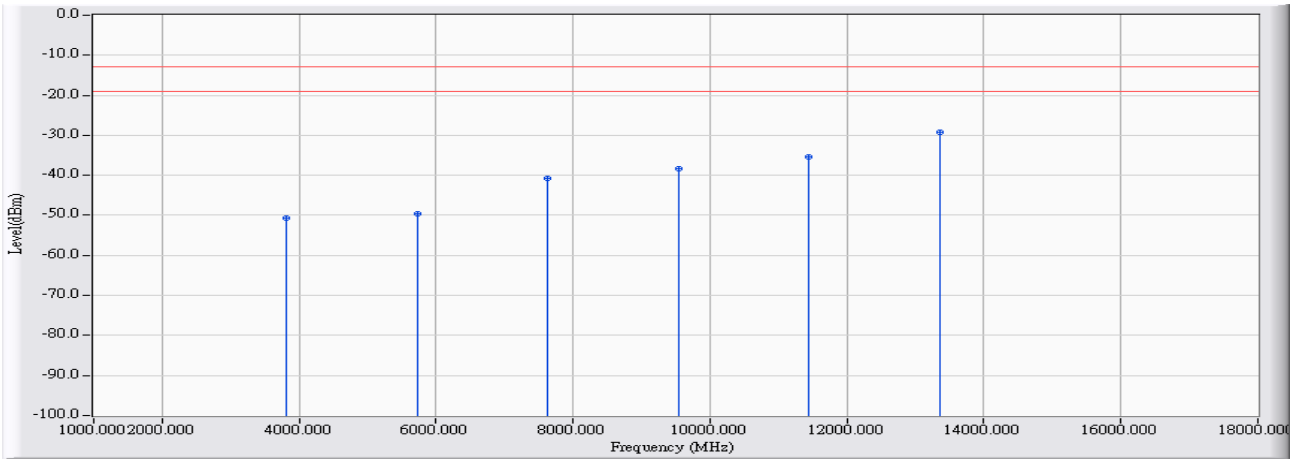


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3760.000	19.205	-69.620	-50.415	-37.415	-13.000	PEAK
2		5640.000	21.031	-71.480	-50.449	-37.449	-13.000	PEAK
3		7520.000	28.441	-70.060	-41.619	-28.619	-13.000	PEAK
4		9400.000	34.223	-70.330	-36.107	-23.107	-13.000	PEAK
5		11280.000	34.756	-70.200	-35.445	-22.445	-13.000	PEAK
6	*	13160.000	41.038	-69.260	-28.222	-15.222	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 7: WCDMA Band 2_HSUPA Mode _1907.6_HSUPA_Idle**

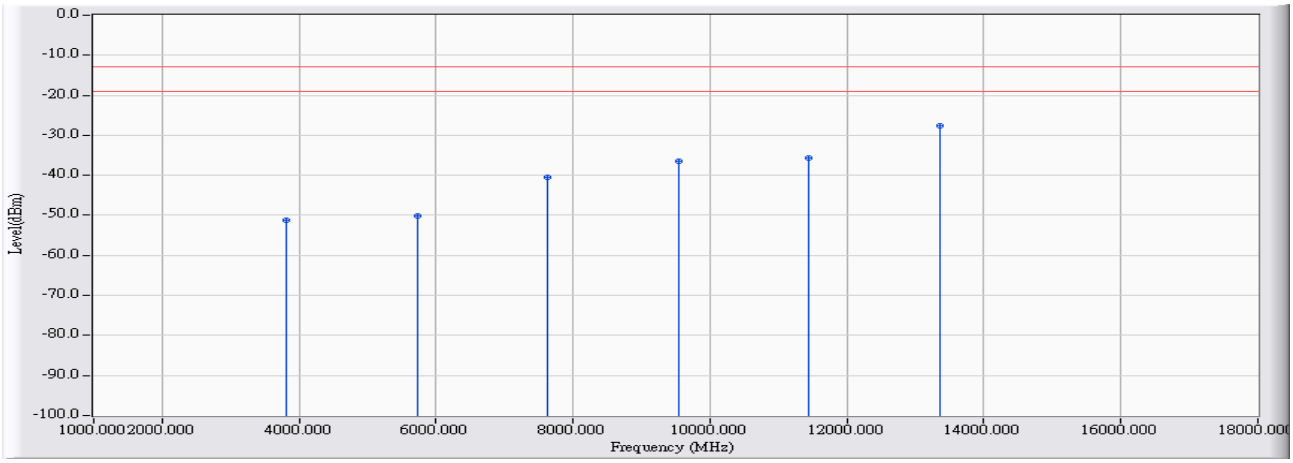


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3815.200	18.498	-69.200	-50.703	-37.703	-13.000	PEAK
2		5722.800	21.467	-71.020	-49.553	-36.553	-13.000	PEAK
3		7630.400	28.772	-69.480	-40.708	-27.708	-13.000	PEAK
4		9538.000	32.910	-71.380	-38.469	-25.469	-13.000	PEAK
5		11445.600	35.434	-70.860	-35.426	-22.426	-13.000	PEAK
6	*	13353.200	40.637	-69.940	-29.303	-16.303	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 7: WCDMA Band 2_HSUPA Mode _1907.6_HSUPA_Idle**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3815.200	19.270	-70.440	-51.171	-38.171	-13.000	PEAK
2		5722.800	21.304	-71.370	-50.066	-37.066	-13.000	PEAK
3		7630.400	28.668	-69.270	-40.602	-27.602	-13.000	PEAK
4		9538.000	34.447	-70.860	-36.412	-23.412	-13.000	PEAK
5		11445.600	35.271	-71.040	-35.769	-22.769	-13.000	PEAK
6	*	13353.200	42.161	-69.870	-27.708	-14.708	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
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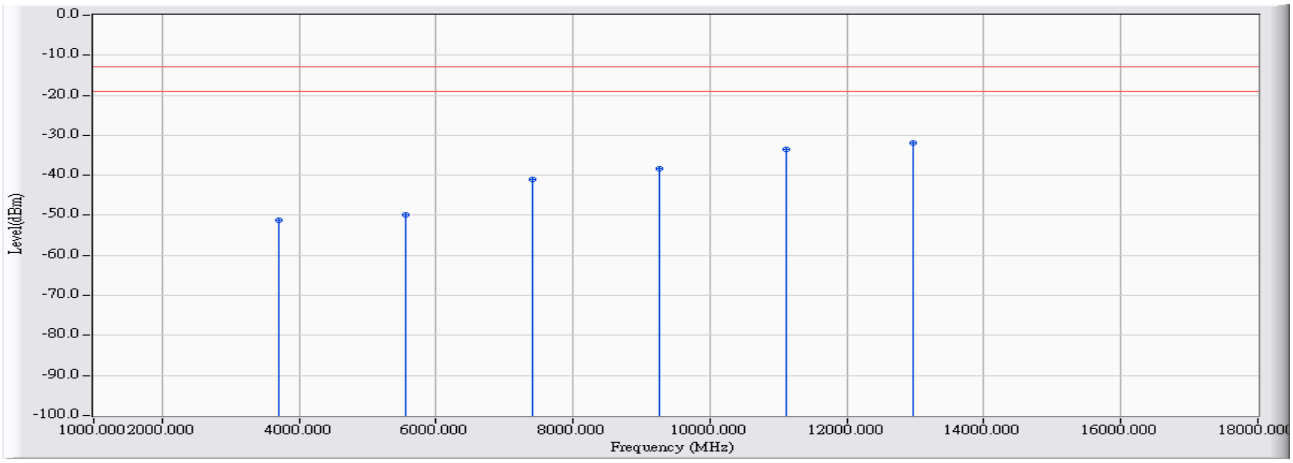
Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 8: WCDMA Band 2_HSDPA Mode _1852.4_HSDPA_Link**

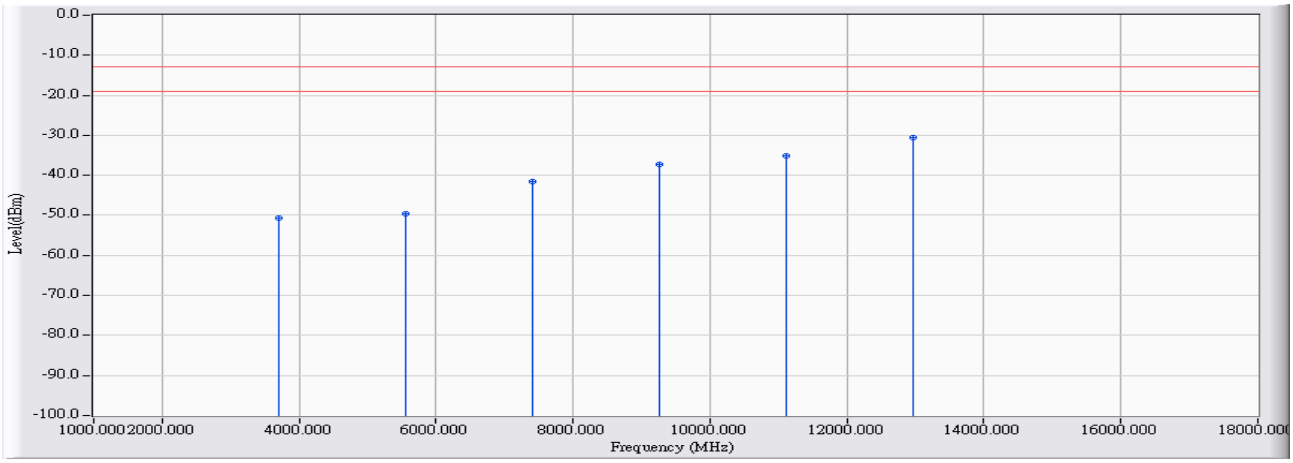


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3704.800	18.275	-69.510	-51.235	-38.235	-13.000	PEAK
2		5557.200	20.912	-70.710	-49.798	-36.798	-13.000	PEAK
3		7409.600	28.145	-69.150	-41.005	-28.005	-13.000	PEAK
4		9262.000	32.636	-70.850	-38.214	-25.214	-13.000	PEAK
5		11114.400	35.328	-68.950	-33.621	-20.621	-13.000	PEAK
6	*	12966.800	38.781	-70.700	-31.919	-18.919	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 8: WCDMA Band 2_HSDPA Mode _1852.4_HSDPA_Link**

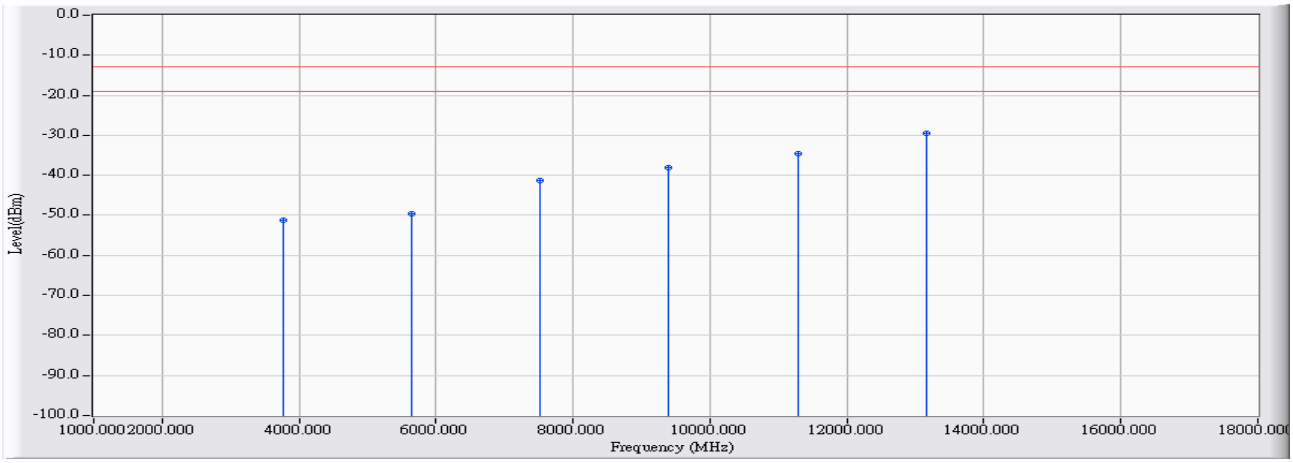


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3704.800	19.076	-69.680	-50.604	-37.604	-13.000	PEAK
2		5557.200	20.758	-70.450	-49.691	-36.691	-13.000	PEAK
3		7409.600	27.959	-69.590	-41.630	-28.630	-13.000	PEAK
4		9262.000	33.907	-71.280	-37.373	-24.373	-13.000	PEAK
5		11114.400	34.239	-69.470	-35.231	-22.231	-13.000	PEAK
6	*	12966.800	39.967	-70.400	-30.433	-17.433	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 8: WCDMA Band 2_HSDPA Mode _1880_HSDPA_Link**

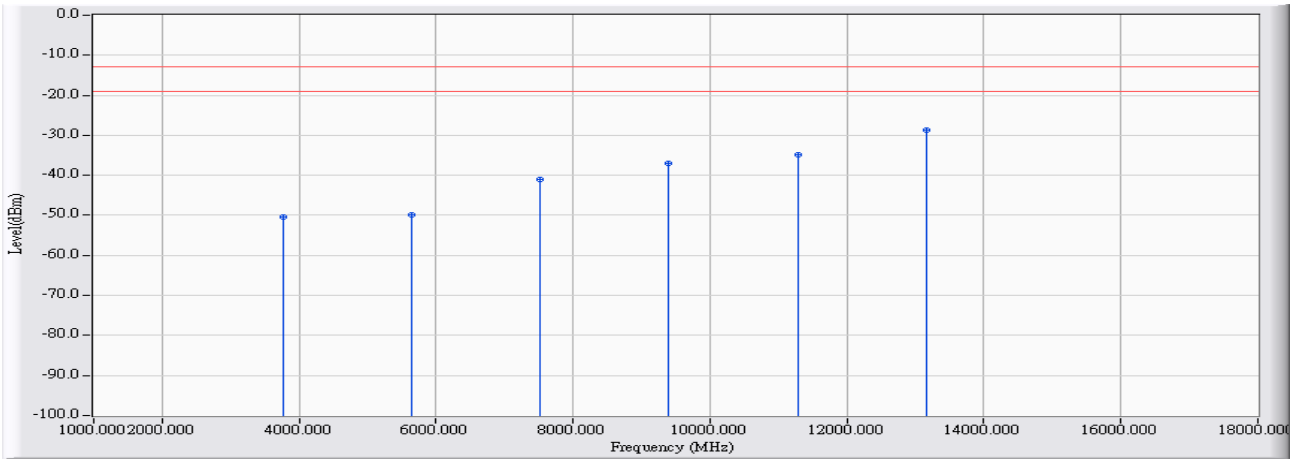


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3760.000	18.413	-69.710	-51.297	-38.297	-13.000	PEAK
2		5640.000	21.189	-70.890	-49.700	-36.700	-13.000	PEAK
3		7520.000	28.355	-69.540	-41.185	-28.185	-13.000	PEAK
4		9400.000	32.761	-70.850	-38.089	-25.089	-13.000	PEAK
5		11280.000	35.382	-69.980	-34.599	-21.599	-13.000	PEAK
6	*	13160.000	39.718	-69.100	-29.382	-16.382	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 8: WCDMA Band 2_HSDPA Mode _1880_HSDPA_Link**

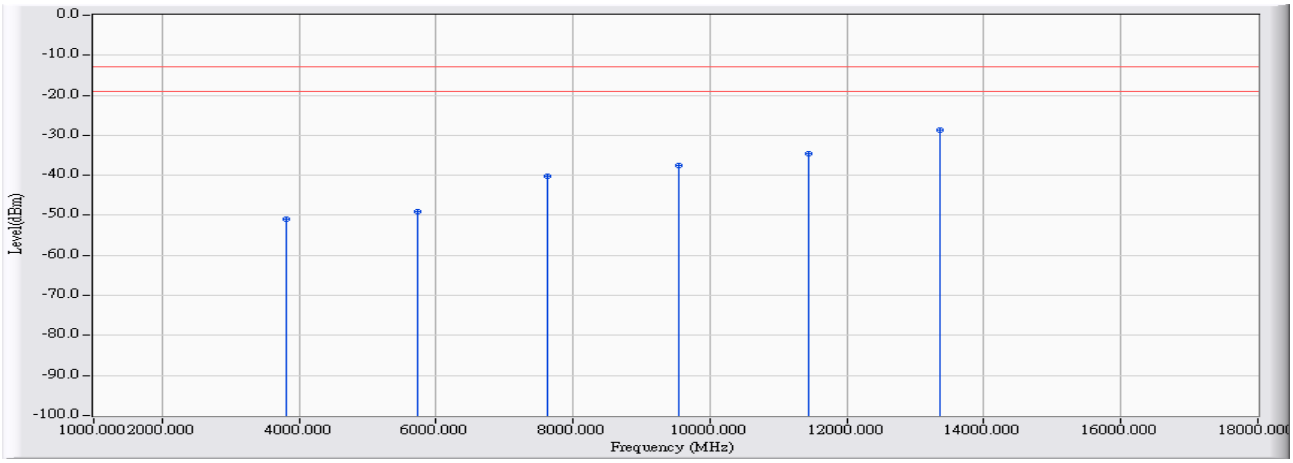


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3760.000	19.205	-69.640	-50.435	-37.435	-13.000	PEAK
2		5640.000	21.031	-70.840	-49.809	-36.809	-13.000	PEAK
3		7520.000	28.441	-69.510	-41.069	-28.069	-13.000	PEAK
4		9400.000	34.223	-71.170	-36.947	-23.947	-13.000	PEAK
5		11280.000	34.756	-69.700	-34.945	-21.945	-13.000	PEAK
6	*	13160.000	41.038	-69.600	-28.562	-15.562	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 8: WCDMA Band 2_HSDPA Mode _1907.6_HSDPA_Link**

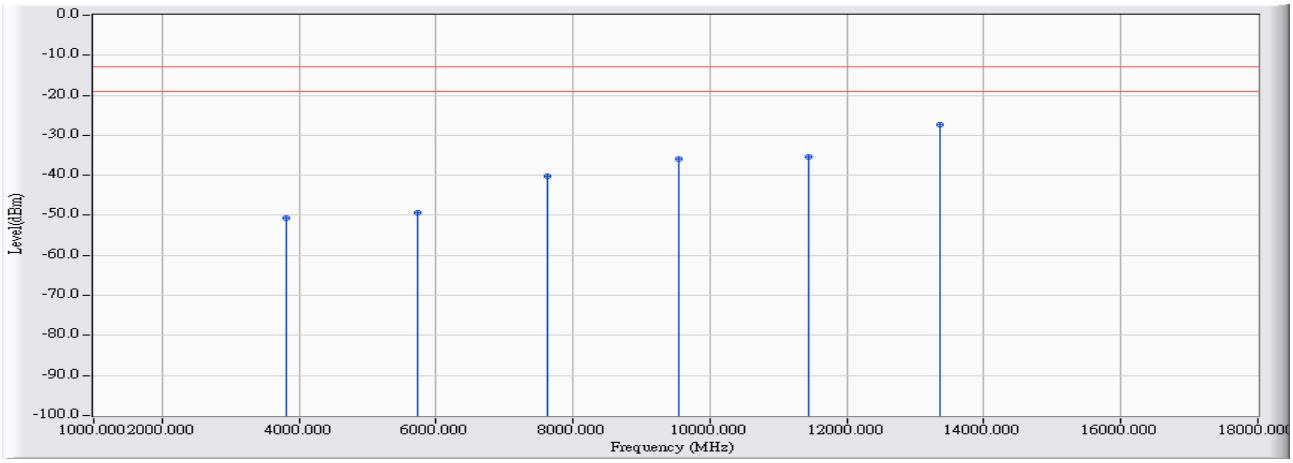


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3815.200	18.498	-69.540	-51.043	-38.043	-13.000	PEAK
2		5722.800	21.467	-70.460	-48.993	-35.993	-13.000	PEAK
3		7630.400	28.772	-68.860	-40.088	-27.088	-13.000	PEAK
4		9538.000	32.910	-70.550	-37.639	-24.639	-13.000	PEAK
5		11445.600	35.434	-70.120	-34.686	-21.686	-13.000	PEAK
6	*	13353.200	40.637	-69.360	-28.723	-15.723	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 8: WCDMA Band 2_HSDPA Mode _1907.6_HSDPA_Link**

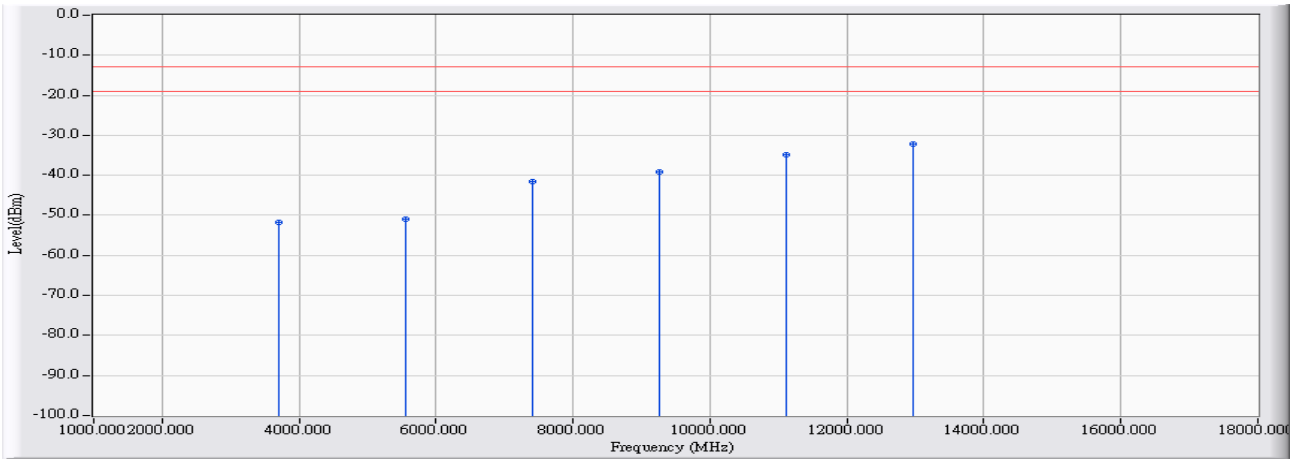


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3815.200	19.270	-69.930	-50.661	-37.661	-13.000	PEAK
2		5722.800	21.304	-70.740	-49.436	-36.436	-13.000	PEAK
3		7630.400	28.668	-68.890	-40.222	-27.222	-13.000	PEAK
4		9538.000	34.447	-70.410	-35.962	-22.962	-13.000	PEAK
5		11445.600	35.271	-70.590	-35.319	-22.319	-13.000	PEAK
6	*	13353.200	42.161	-69.530	-27.368	-14.368	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 8: WCDMA Band 2_HSDPA Mode _1852.4_HSDPA_Idle**

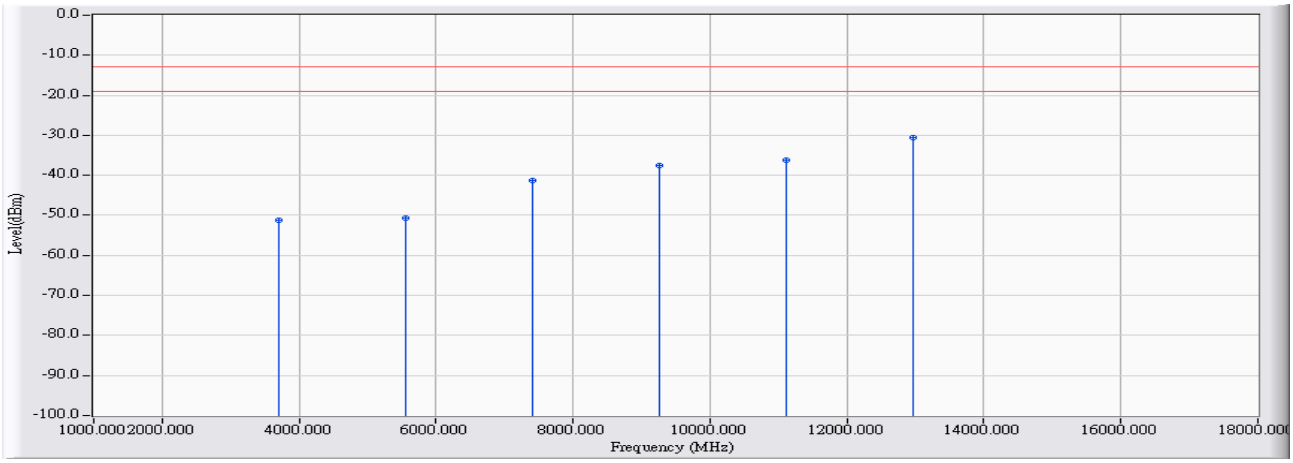


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3704.800	18.275	-69.970	-51.695	-38.695	-13.000	PEAK
2		5557.200	20.912	-71.840	-50.928	-37.928	-13.000	PEAK
3		7409.600	28.145	-69.680	-41.535	-28.535	-13.000	PEAK
4		9262.000	32.636	-71.800	-39.164	-26.164	-13.000	PEAK
5		11114.400	35.328	-70.220	-34.891	-21.891	-13.000	PEAK
6	*	12966.800	38.781	-70.950	-32.169	-19.169	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. “ * ”, means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 8: WCDMA Band 2_HSDPA Mode _1852.4_HSDPA_Idle**

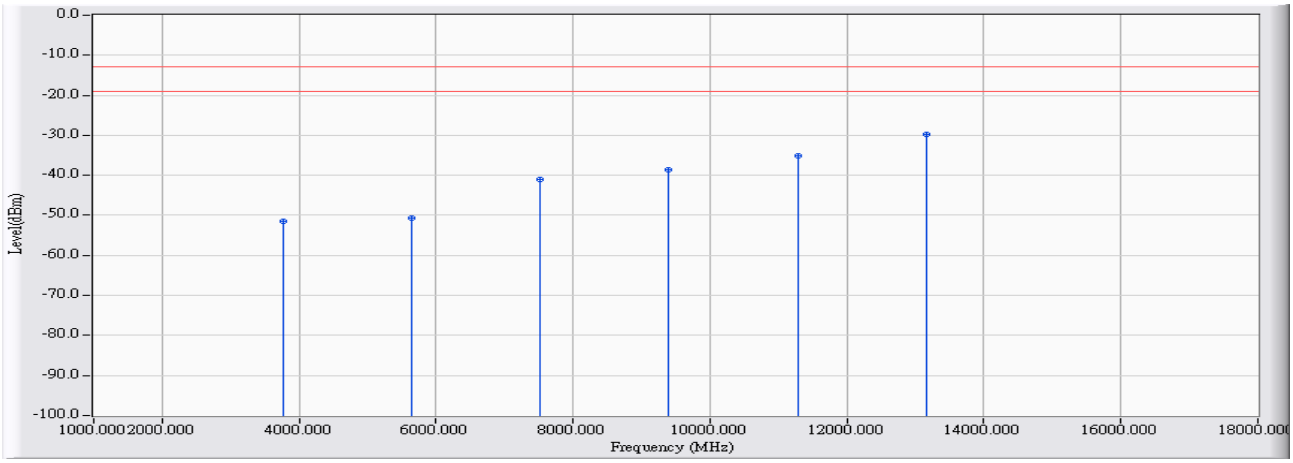


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3704.800	19.076	-70.300	-51.224	-38.224	-13.000	PEAK
2		5557.200	20.758	-71.390	-50.631	-37.631	-13.000	PEAK
3		7409.600	27.959	-69.260	-41.300	-28.300	-13.000	PEAK
4		9262.000	33.907	-71.460	-37.553	-24.553	-13.000	PEAK
5		11114.400	34.239	-70.460	-36.221	-23.221	-13.000	PEAK
6	*	12966.800	39.967	-70.640	-30.673	-17.673	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 8: WCDMA Band 2_HSDPA Mode _1880_HSDPA_Idle**

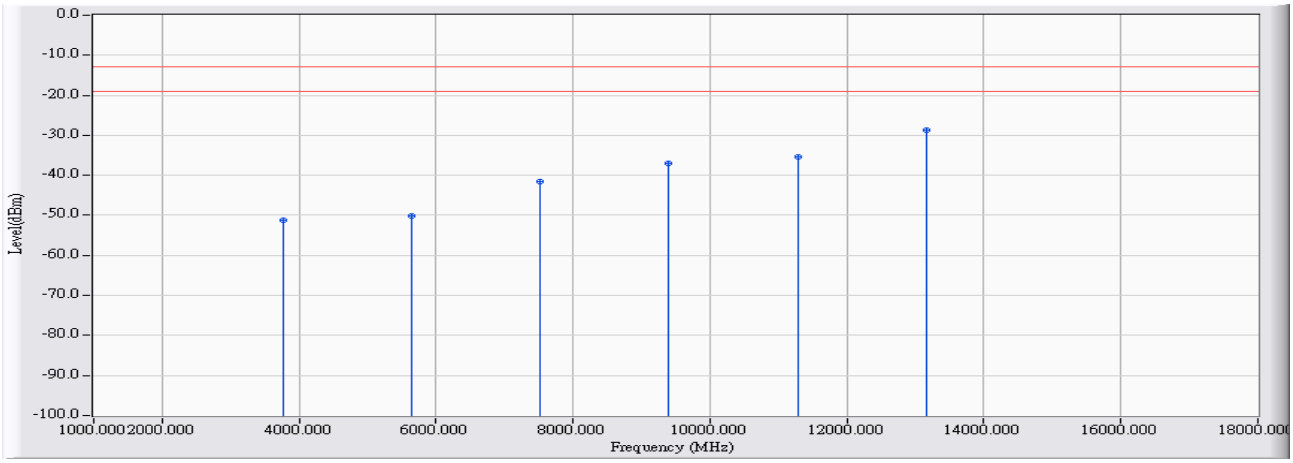


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3760.000	18.413	-69.830	-51.417	-38.417	-13.000	PEAK
2		5640.000	21.189	-71.800	-50.610	-37.610	-13.000	PEAK
3		7520.000	28.355	-69.330	-40.975	-27.975	-13.000	PEAK
4		9400.000	32.761	-71.330	-38.569	-25.569	-13.000	PEAK
5		11280.000	35.382	-70.400	-35.019	-22.019	-13.000	PEAK
6	*	13160.000	39.718	-69.600	-29.882	-16.882	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 8: WCDMA Band 2_HSDPA Mode _1880_HSDPA_Idle**

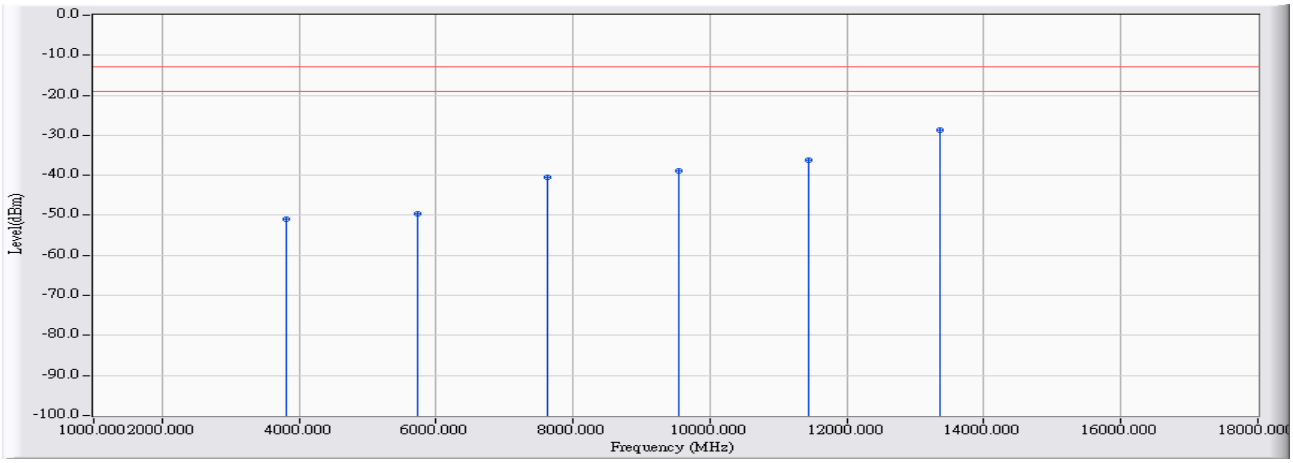


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3760.000	19.205	-70.310	-51.105	-38.105	-13.000	PEAK
2		5640.000	21.031	-71.180	-50.149	-37.149	-13.000	PEAK
3		7520.000	28.441	-69.900	-41.459	-28.459	-13.000	PEAK
4		9400.000	34.223	-71.330	-37.107	-24.107	-13.000	PEAK
5		11280.000	34.756	-70.250	-35.495	-22.495	-13.000	PEAK
6	*	13160.000	41.038	-69.670	-28.632	-15.632	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - HORIZONTAL	**Power : AC 120V / 60Hz**
EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 8: WCDMA Band 2_HSDPA Mode _1907.6_HSDPA_Idle**

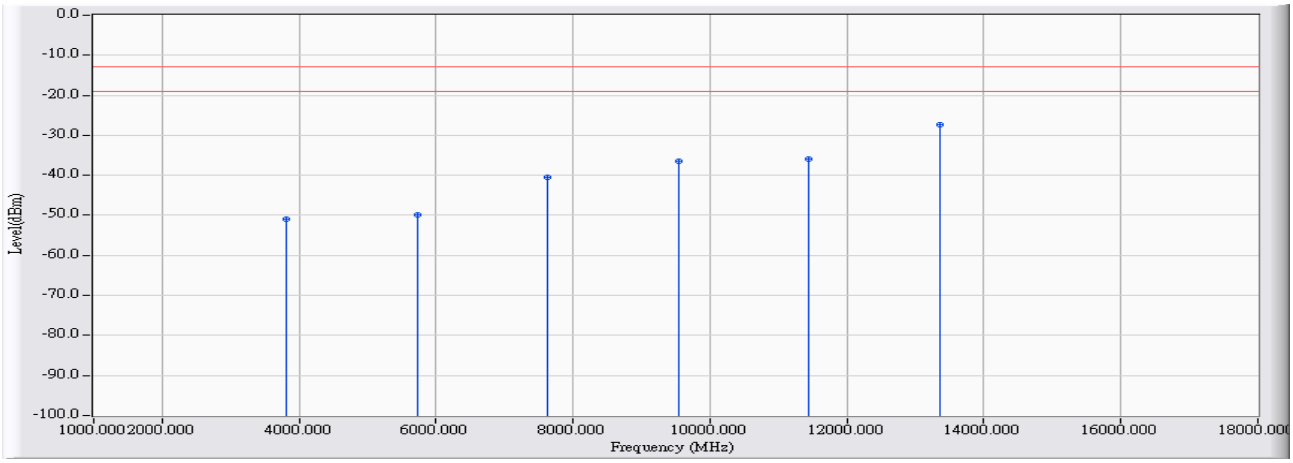


		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3815.200	18.498	-69.520	-51.023	-38.023	-13.000	PEAK
2		5722.800	21.467	-71.160	-49.693	-36.693	-13.000	PEAK
3		7630.400	28.772	-69.240	-40.468	-27.468	-13.000	PEAK
4		9538.000	32.910	-71.810	-38.899	-25.899	-13.000	PEAK
5		11445.600	35.434	-71.570	-36.136	-23.136	-13.000	PEAK
6	*	13353.200	40.637	-69.440	-28.803	-15.803	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

Site : CB4-H	**Time : 2017/02/24**
Limit : FCC_Part22/24_00M_00M_PK	**Margin : 6**
Probe : CB4_CE_Sub_B432_1-18GHz_3M_1116 - VERTICAL	**Power : AC 120V / 60Hz**
EUT : MX-200 EUT : Advanced Industrial 4G/LTE Router, WWAN Failover Manager	**Note : Mode 8: WCDMA Band 2_HSDPA Mode _1907.6_HSDPA_Idle**



		Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm)	Margin (dB)	Limit (dBm)	Detector Type
1		3815.200	19.270	-70.170	-50.901	-37.901	-13.000	PEAK
2		5722.800	21.304	-71.190	-49.886	-36.886	-13.000	PEAK
3		7630.400	28.668	-69.280	-40.612	-27.612	-13.000	PEAK
4		9538.000	34.447	-71.030	-36.582	-23.582	-13.000	PEAK
5		11445.600	35.271	-71.100	-35.829	-22.829	-13.000	PEAK
6	*	13353.200	42.161	-69.410	-27.248	-14.248	-13.000	PEAK

Note:

1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
2. Peak measurements: RBW = 1MHz, VBW = 1MHz, Sweep: Auto.
3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
4. " * ", means this data is the worst emission level.
5. Measurement Level = Reading Level + Correct Factor.
6. The average measurement was not performed when the peak measured data under the limit of average detection.
7. The Emission above 18GHz were not included is because their levels are too low.

7. Frequency Stability Under Temperature & Voltage Variations

7.1. Test Equipment

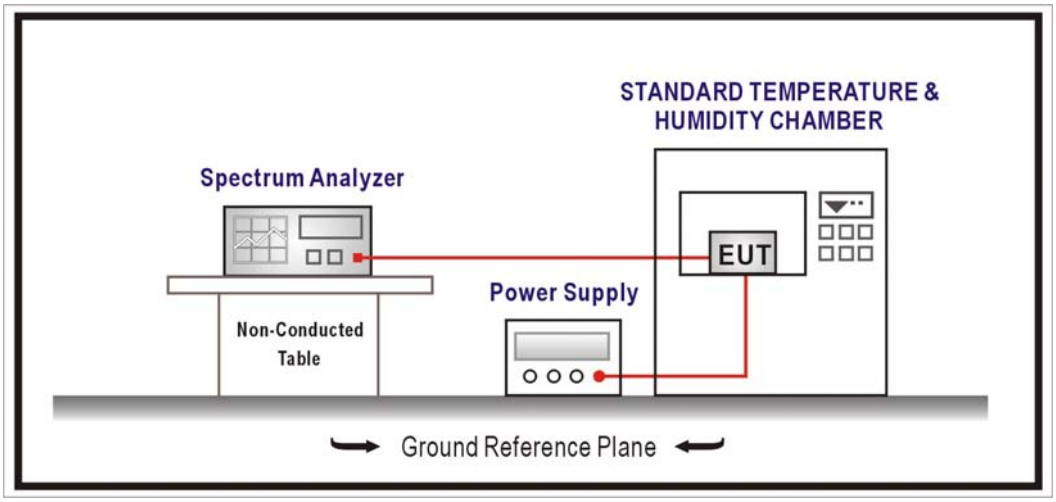
The following test equipments are used during the RF power output tests:

Frequency Stability Under Temperature & Voltage Variations/SR10-H

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Signal & Spectrum Analyzer	R&S	FSV40	101049	2018/01/22
Multisystem UE Tester	Japan radio	NJZ-2000	ET00477	2017/09/19
Temperature & Humidity Chamber	WIT	TH-1S-B	1082101	2018/01/18
Signal & Spectrum Analyzer	R&S	FSV40	101049	2018/01/22

Note: All equipments upon which need to be calibrated are with calibration period of 1 year.

7.2. Test Setup



7.3. Limit

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Limit	< ± 2.5 ppm

7.4. Test Procedure

Frequency Stability Under Temperature Variations:

The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20℃ operating frequency as reference frequency. Turn EUT off and set the chamber temperature to -30℃. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10℃ increased per stage until the highest temperature of +50℃ reached.

Frequency Stability Under Voltage Variations:

Set chamber temperature to 20℃. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.
Reduce the input voltage to specify extreme voltage variation (±15%) and endpoint, record the maximum frequency change.

7.5. Uncertainty

The measurement uncertainty is defined as ± 10 Hz.

7.6. Test Result

Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Item	Frequency Stability Under Temperature & Voltage Variations		
Test Mode	Mode 1: WCDMA Band 5_Link Mode		
Date of Test	2017/02/06	Test Site	SR10-H

826.4 MHz

Voltage

Voltage (VDC)	Frequency Error(Hz)	Frequency Error(ppm)
4.2	3	-0.0038
3.7	3	-0.0042
3.4	3	-0.0041

Temperature

TEMPERATURE	Frequency Error(Hz)	Frequency Error (ppm)
-30	-2	0.0027
-20	-2	0.0027
-10	-3	0.0030
0	2	-0.0024
+10	3	-0.0031
+20	4	-0.0045
+30	4	-0.0046
+40	5	-0.0055
+50	5	-0.0065

Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Item	Frequency Stability Under Temperature & Voltage Variations		
Test Mode	Mode 1: WCDMA Band 5_Link Mode		
Date of Test	2017/02/06	Test Site	SR10-H

836.6 MHz

Voltage

Voltage (VDC)	Frequency Error(Hz)	Frequency Error(ppm)
4.2	-2	0.0022
3.7	3	-0.0031
3.4	-2	0.0022

Temperature

TEMPERATURE	Frequency Error(Hz)	Frequency Error (ppm)
-30	-2	0.0028
-20	-2	0.0027
-10	-3	0.0031
0	-2	0.0028
+10	-3	0.0034
+20	-3	0.0035
+30	-3	0.0030
+40	-3	0.0040
+50	-4	0.0044

Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Item	Frequency Stability Under Temperature & Voltage Variations		
Test Mode	Mode 1: WCDMA Band 5_Link Mode		
Date of Test	2017/02/06	Test Site	SR10-H

846.6MHz

Voltage

Voltage (VDC)	Frequency Error(Hz)	Frequency Error(ppm)
4.2	15	-0.0179
3.7	-4	0.0045
3.4	-4	0.0048

Temperature

TEMPERATURE	Frequency Error(Hz)	Frequency Error (ppm)
-30	3	-0.0039
-20	4	-0.0043
-10	3	-0.0031
0	-3	0.0030
+10	-3	0.0034
+20	-4	0.0043
+30	-4	0.0049
+40	-4	0.0052
+50	-5	0.0063

Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Item	Frequency Stability Under Temperature & Voltage Variations		
Test Mode	Mode 3: WCDMA Band 2_Link Mode		
Date of Test	2017/02/06	Test Site	SR10-H

1852.4 MHz

Voltage

Voltage (VDC)	Frequency Error(Hz)	Frequency Error(ppm)
4.2	-21	0.0114
3.7	-7	0.0040
3.4	7	-0.0037

Temperature

TEMPERATURE	Frequency Error(Hz)	Frequency Error (ppm)
-30	-7	0.0039
-20	-6	0.0034
-10	-4	0.0021
0	4	-0.0021
+10	6	-0.0031
+20	7	-0.0040
+30	9	-0.0051
+40	10	-0.0053
+50	8	-0.0043

Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Item	Frequency Stability Under Temperature & Voltage Variations		
Test Mode	Mode 3: WCDMA Band 2_Link Mode		
Date of Test	2017/02/06	Test Site	SR10-H

1880.0 MHz

Voltage

Voltage (VDC)	Frequency Error(Hz)	Frequency Error(ppm)
4.2	-5	0.0024
3.7	5	-0.0026
3.4	-3	0.0018

Temperature

TEMPERATURE	Frequency Error(Hz)	Frequency Error (ppm)
-30	-4	0.0020
-20	-4	0.0023
-10	-4	0.0023
0	-5	0.0025
+10	-6	0.0033
+20	-4	0.0022
+30	-5	0.0029
+40	7	-0.0038
+50	-4	0.0019

Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager		
Test Item	Frequency Stability Under Temperature & Voltage Variations		
Test Mode	Mode 3: WCDMA Band 2_Link Mode		
Date of Test	2017/02/06	Test Site	SR10-H

1907.6 MHz

Voltage

Voltage (VDC)	Frequency Error(Hz)	Frequency Error(ppm)
4.2	-7	0.0039
3.7	-11	0.0060
3.4	-10	0.0050

Temperature

TEMPERATURE	Frequency Error(Hz)	Frequency Error (ppm)
-30	-4	0.0019
-20	-4	0.0019
-10	-4	0.0021
0	-6	0.0033
+10	-8	0.0040
+20	-9	0.0049
+30	-12	0.0060
+40	-11	0.0055
+50	-10	0.0051

8. Peak to Average Ratio

8.1. Test Equipment

The following test equipments are used during the test:

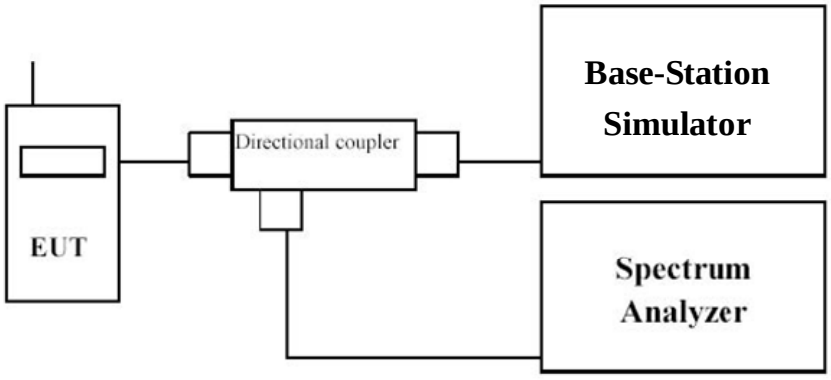
Peak to Average Ratio / SR10-H

Instrument	Manufacturer	Model No.	Serial No.	Next Cal. Date
Signal & Spectrum Analyzer	R&S	FSV40	101049	2018/01/22
Multisystem UE Tester	Japan radio	NJZ-2000	ET00477	2017/09/19
Directional Coupler	Agilent	778D	20402	2017/10/06

Note: All equipments are calibrated with traceable calibrations.

Each calibration is traceable to the national or international standards.

8.2. Test Setup



8.3. Limits

The peak-to-average power ratio (PAPR) of the transmitter output power must not exceed 13 dB. The PAPR measurements should be made using either an instrument with complementary cumulative distribution function (CCDF) capabilities to determine that PAPR will not exceed 13 dB for more than 0.1 percent of the time or other Commission approved procedure.

8.4. Test Procedure

a) Refer to instrument's analyzer instruction manual for details on how to use the power statistics/CCDF function;

b) Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;

c) Set the number of counts to a value that stabilizes the measured CCDF curve;

d) Set the measurement interval as follows:

1) for continuous transmissions, set to 1 ms,

2) for burst transmissions, employ an external trigger that is synchronized with the EUT burst timing sequence, or use the internal burst trigger with a trigger level that allows

the burst to stabilize and set the measurement interval to a time that is less than or equal to the burst duration.

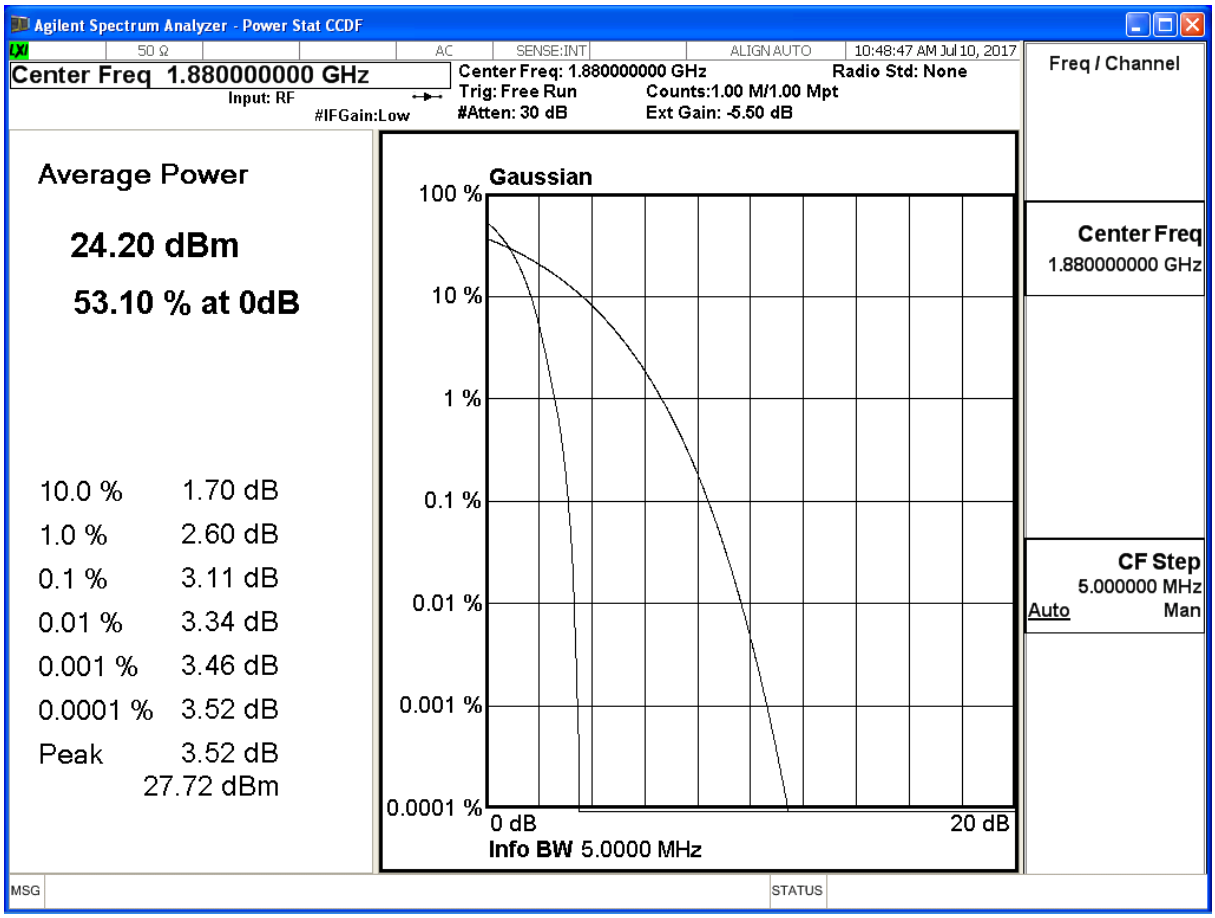
e) Record the maximum PAPR level associated with a probability of 0.1%.

8.5. Uncertainty

The measurement uncertainty is defined as ±1.5 dB

8.6. Test Result

Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager
Test Mode	Peak to Average Ratio
Test Condition	WCDMA_Band2



Product	Advanced Industrial 4G/LTE Router, WWAN Failover Manager
Test Mode	Peak to Average Ratio
Test Condition	WCDMA_Band5