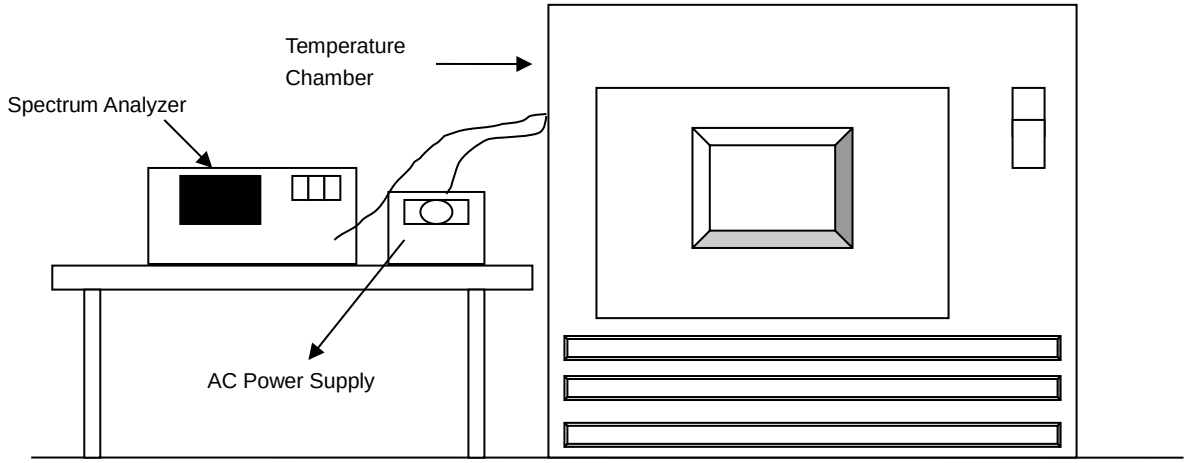
4.8 Frequency Stability Measurement

4.8.1 Limits of Frequency Stability Measurement

The frequency of the carrier signal shall be maintained within band of operation

4.8.2 Test Setup



4.8.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.8.4 Test Procedure

a. The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.
b. Turn the EUT on and couple its output to a spectrum analyzer.
c. Turn the EUT off and set the chamber to the highest temperature specified.
d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 Minutes.
e. Repeat step (d) with the temperature chamber set to the next desired temperature until measurements down to the lowest specified temperature have been completed..
f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 Minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

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4.8.5 EUT Operating Condition

Set the EUT transmit at un-modulation mode to test frequency stability.

4.8.6 Test Results

802.11ax (HE20)

Frequency Stability Versus Temp.									
Operating Frequency: 5955MHz									
TEMP. (℃)	Power Supply (Vdc)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail
70	3.3	5955.0214	Pass	5955.0168	Pass	5955.0166	Pass	5955.0213	Pass
60	3.3	5954.9945	Pass	5954.9959	Pass	5954.9908	Pass	5954.9905	Pass
50	3.3	5954.9881	Pass	5954.9839	Pass	5954.9882	Pass	5954.9838	Pass
40	3.3	5955.0007	Pass	5954.9983	Pass	5954.9967	Pass	5955.0009	Pass
30	3.3	5955.0034	Pass	5955.0085	Pass	5955.0062	Pass	5955.0075	Pass
20	3.3	5955.0189	Pass	5955.0214	Pass	5955.0215	Pass	5955.0222	Pass
10	3.3	5954.9817	Pass	5954.9814	Pass	5954.9824	Pass	5954.9805	Pass
0	3.3	5954.9887	Pass	5954.9879	Pass	5954.9854	Pass	5954.9865	Pass
-10	3.3	5955.0123	Pass	5955.0144	Pass	5955.0152	Pass	5955.0139	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5955MHz									
TEMP. (℃)	Power Supply (Vdc)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail
20	3.795	5955.0197	Pass	5955.0204	Pass	5955.0203	Pass	5955.0218	Pass
	3.3	5955.0189	Pass	5955.0214	Pass	5955.0215	Pass	5955.0222	Pass
	2.805	5955.02	Pass	5955.0223	Pass	5955.0207	Pass	5955.0225	Pass

802.11ax (HE80)

Frequency Stability Versus Temp.									
Operating Frequency: 5985MHz									
TEMP. (℃)	Power Supply (Vdc)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail
70	3.3	5984.9834	Pass	5984.9817	Pass	5984.9786	Pass	5984.9803	Pass
60	3.3	5984.9832	Pass	5984.9877	Pass	5984.9855	Pass	5984.9883	Pass
50	3.3	5985.0097	Pass	5985.0084	Pass	5985.0097	Pass	5985.0083	Pass
40	3.3	5984.9895	Pass	5984.99	Pass	5984.9914	Pass	5984.9926	Pass
30	3.3	5985.0311	Pass	5985.0273	Pass	5985.028	Pass	5985.0263	Pass
20	3.3	5985.0138	Pass	5985.0132	Pass	5985.0104	Pass	5985.014	Pass
10	3.3	5985.0034	Pass	5985.006	Pass	5985.004	Pass	5985.0051	Pass
0	3.3	5984.9774	Pass	5984.9796	Pass	5984.98	Pass	5984.9782	Pass
-10	3.3	5984.9742	Pass	5984.9733	Pass	5984.977	Pass	5984.9727	Pass

Frequency Stability Versus Voltage									
Operating Frequency: 5985MHz									
TEMP. (℃)	Power Supply (Vdc)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail
20	3.795	5985.0143	PASS	5985.0143	PASS	5985.0113	PASS	5985.0133	PASS
	3.3	5985.0138	PASS	5985.0132	PASS	5985.0104	PASS	5985.014	PASS
	2.805	5985.0134	PASS	5985.0126	PASS	5985.0105	PASS	5985.0152	PASS

4.9 Operational Restrictions for 6 GHz U-NII Devices

4.9.1 Limits of Operational Restrictions for 6 GHz U-NII Devices

In the 5.925-7.125 GHz band, client devices, except fixed client devices, must operate under the control of a standard power access point, indoor access point or subordinate devices; Subordinate devices must operate under the control of an indoor access point.

4.9.2 Test Setup

N/A

4.9.3 Test Instruments

N/A

4.9.4 Test Procedure

N/A.

4.9.5 Test Results

Device is an indoor client device under the control of a low power indoor access point. Please refer to the declaration letter exhibit supplied within this application.

5 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo).

Appendix A– Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are FCC recognized accredited test firms and accredited according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

Lin Kou EMC/RF Lab
Tel: 886-2-26052180
Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab
Tel: 886-3-6668565
Fax: 886-3-6668323

Hwa Ya EMC/RF/Safety Lab
Tel: 886-3-3183232
Fax: 886-3-3270892

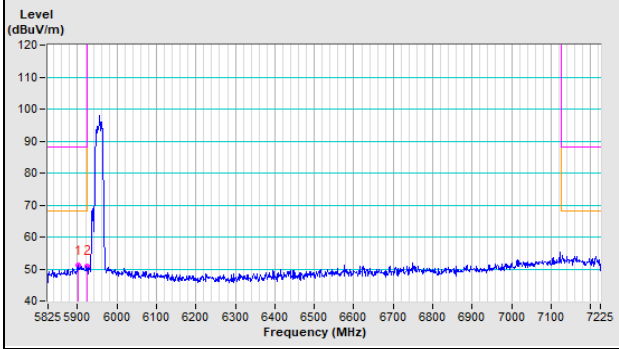
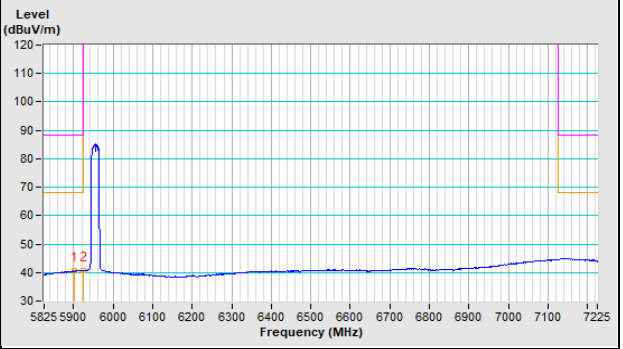
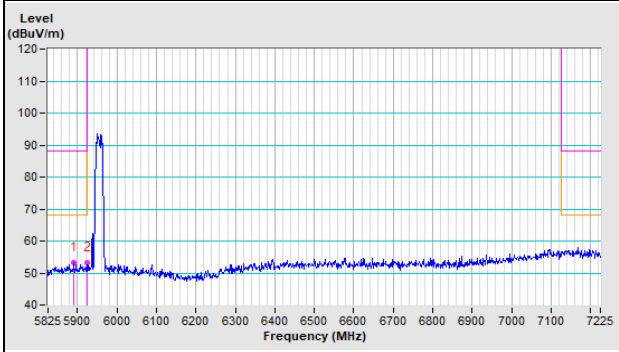
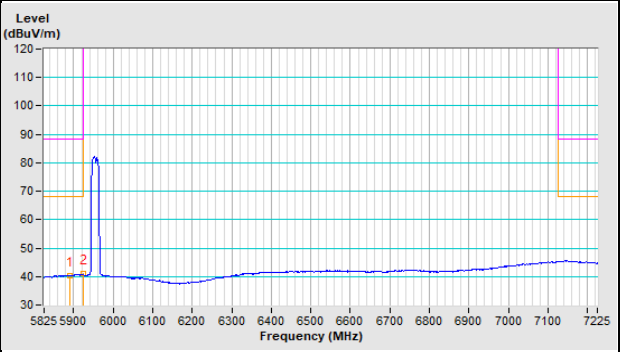
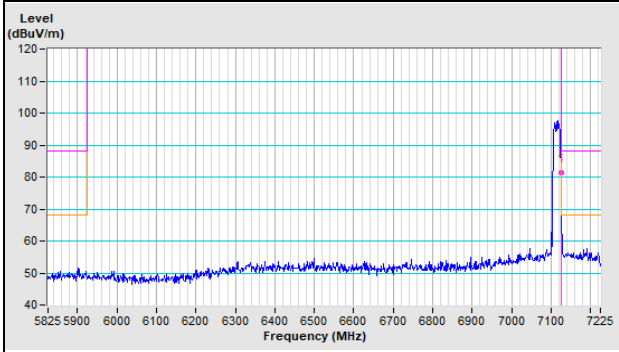
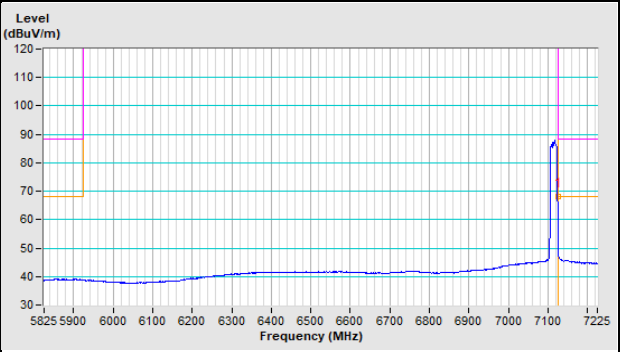
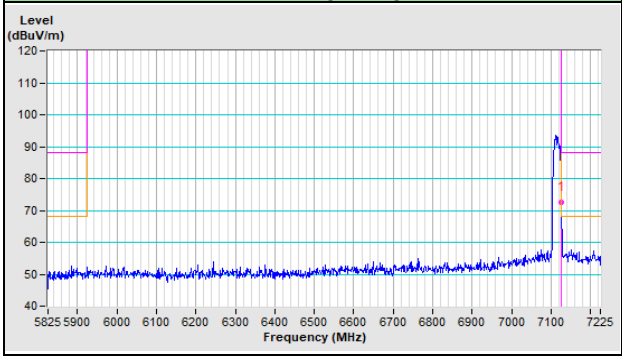
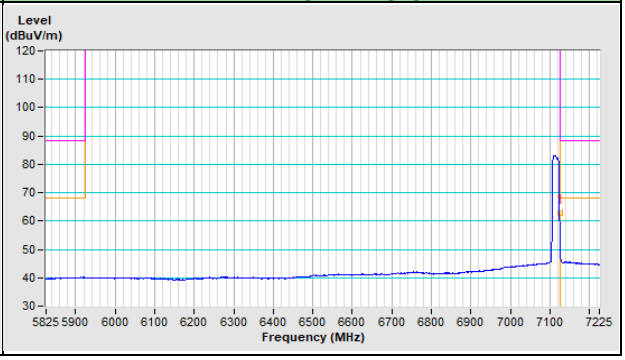
Email: service.adt@tw.bureauveritas.com
Web Site: www.bureauveritas-adt.com

The address and road map of all our labs can be found in our web site also.

--- END ---

Annex B - Band-Edge Measurement

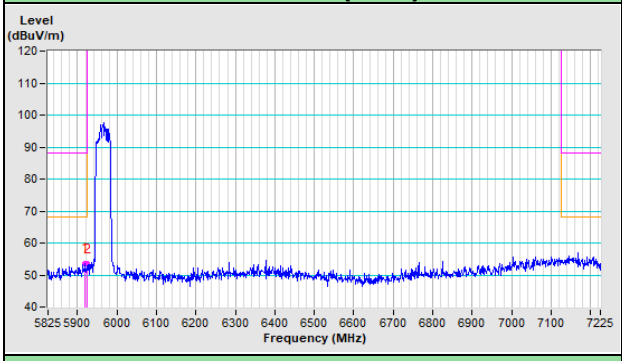
802.11ax (HE20)

Channel 1	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
Channel 233	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

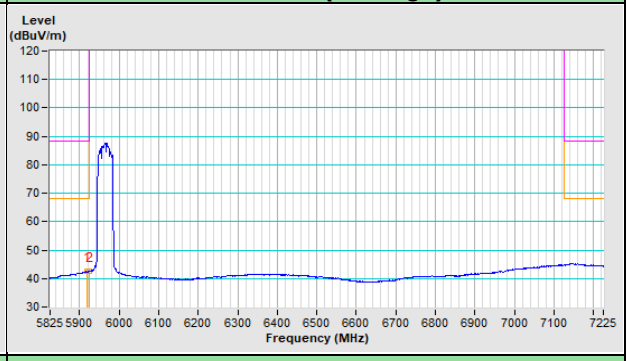
802.11ax (HE40)

Channel 3

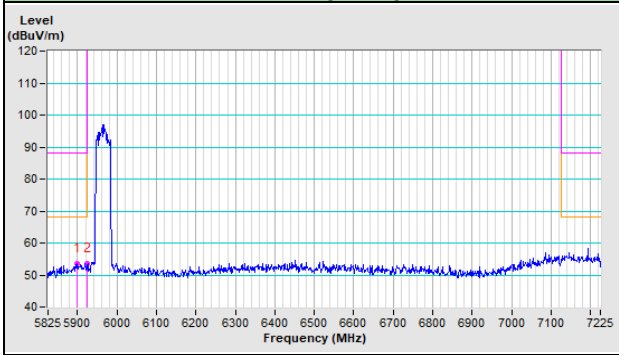
Horizontal (Peak)



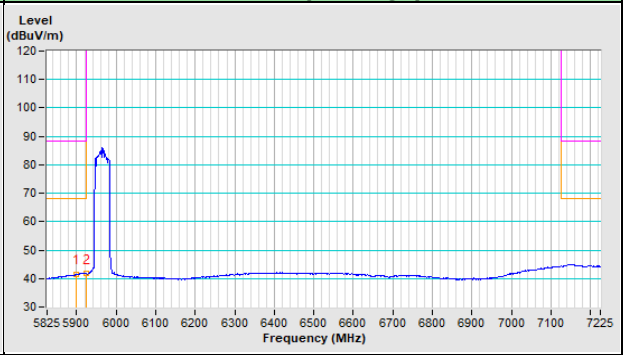
Horizontal (Average)



Vertical (Peak)

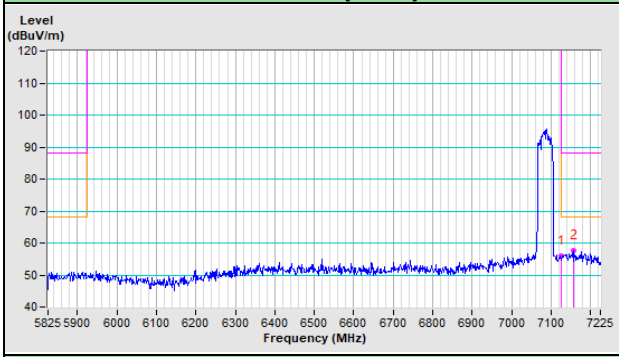


Vertical (Average)

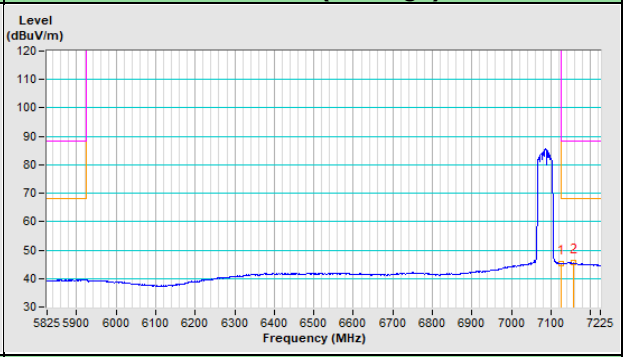


Channel 227

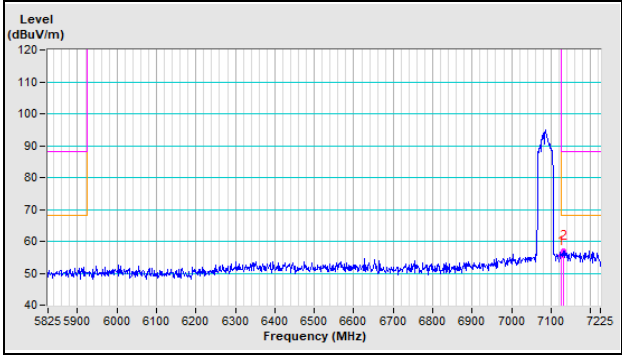
Horizontal (Peak)



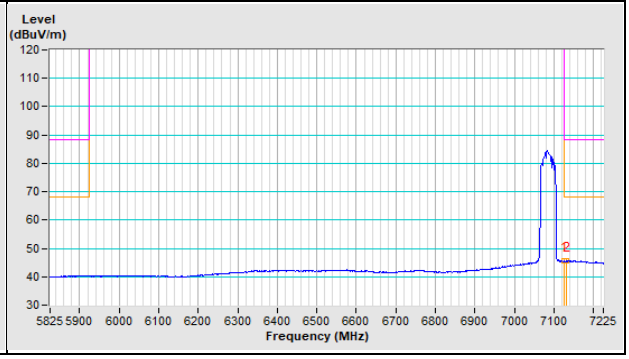
Horizontal (Average)



Vertical (Peak)



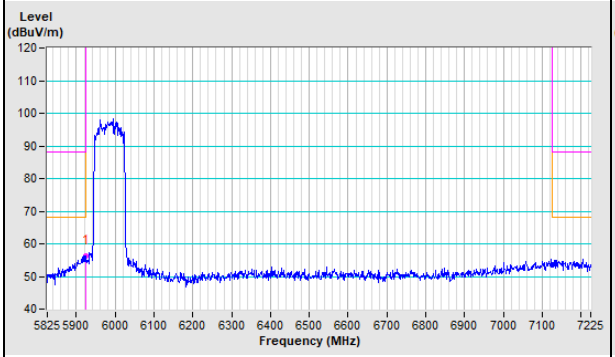
Vertical (Average)



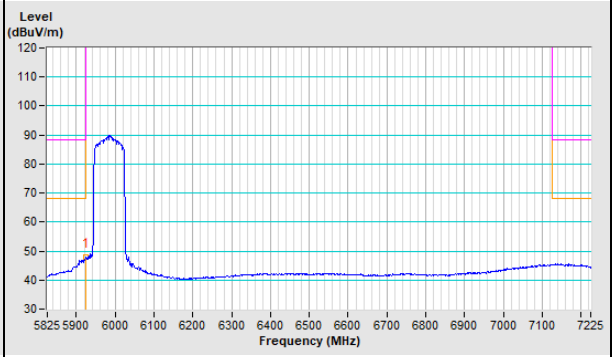
802.11ax (HE80)

Channel 7

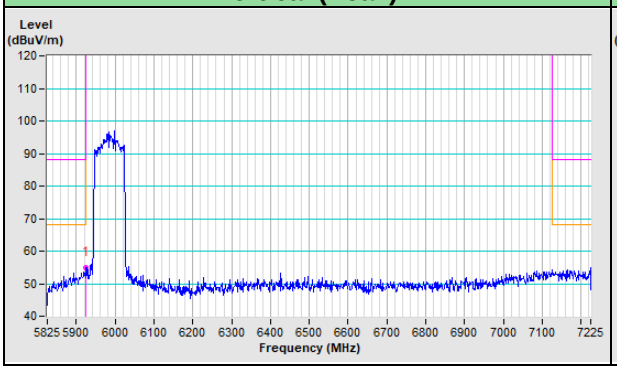
Horizontal (Peak)



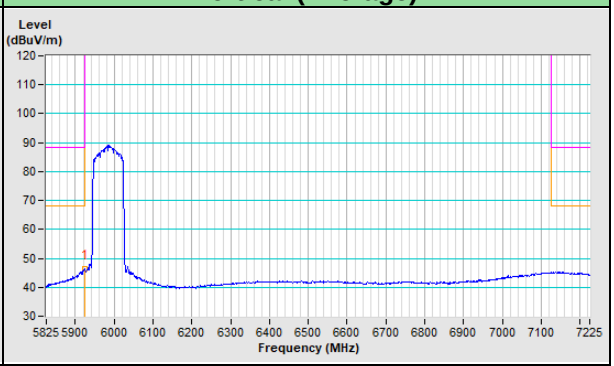
Horizontal (Average)



Vertical (Peak)

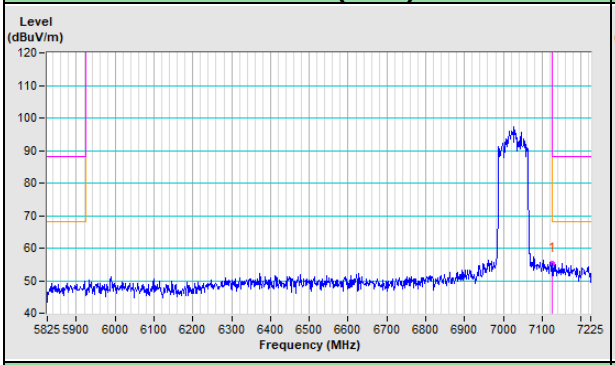


Vertical (Average)

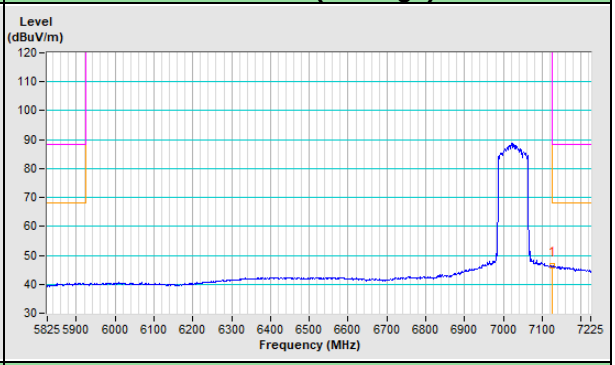


Channel 215

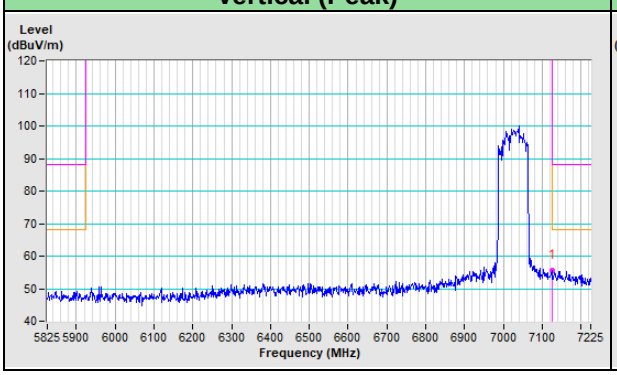
Horizontal (Peak)



Horizontal (Average)



Vertical (Peak)



Vertical (Average)