

#### 4.3.7 Test Result (Mode 1)

##### 802.11b

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
1	2412	10.14	10.14	0.5	Pass
6	2437	10.14	10.13	0.5	Pass
11	2462	10.13	10.13	0.5	Pass
12	2467	10.15	10.15	0.5	Pass
13	2472	10.16	10.14	0.5	Pass

##### 802.11g

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
1	2412	15.72	15.99	0.5	Pass
6	2437	15.77	16	0.5	Pass
11	2462	15.76	16	0.5	Pass
12	2467	15.76	15.98	0.5	Pass
13	2472	16.37	16.39	0.5	Pass

##### VHT20

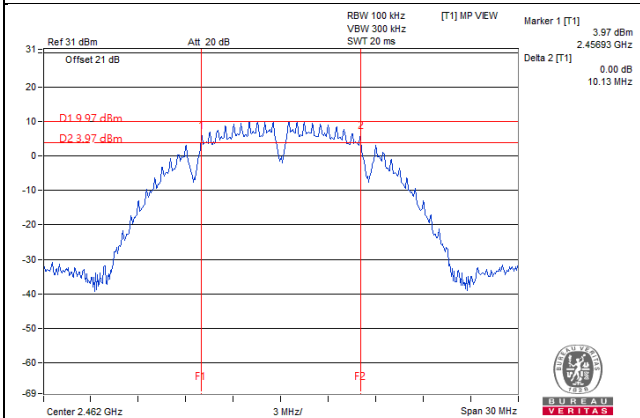
Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
1	2412	16.34	16.34	0.5	Pass
6	2437	16.33	16.33	0.5	Pass
11	2462	16.09	16.69	0.5	Pass
12	2467	16.33	16.33	0.5	Pass
13	2472	17.61	17.61	0.5	Pass

##### VHT40

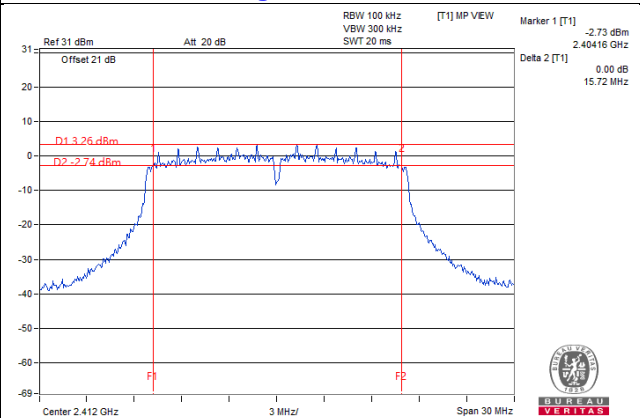
Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
3	2422	35.32	35.31	0.5	Pass
6	2437	35.4	35.37	0.5	Pass
9	2452	35.41	35.38	0.5	Pass
10	2457	35.36	35.6	0.5	Pass
11	2462	35.61	35.36	0.5	Pass

### Spectrum Plot of Worst Value

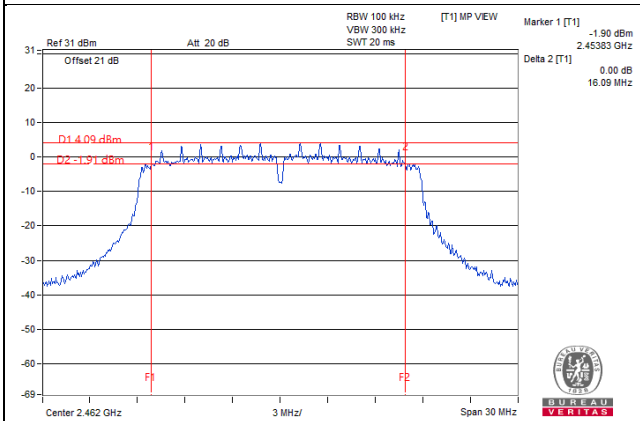
#### 802.11b / Chain 0 : CH11



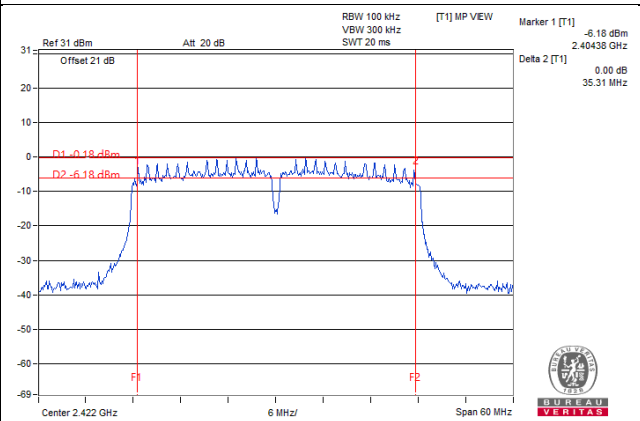
#### 802.11g / Chain 0 : CH1



#### VHT20 / Chain 0 : CH11



#### VHT40 / Chain 1 : CH3



#### 4.3.8 Test Result (Mode 2)

##### 802.11b

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
1	2412	10.15	0.5	Pass
6	2437	10.14	0.5	Pass
11	2462	10.14	0.5	Pass
12	2467	10.15	0.5	Pass
13	2472	10.15	0.5	Pass

##### 802.11g

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
1	2412	15.69	0.5	Pass
6	2437	15.76	0.5	Pass
11	2462	15.73	0.5	Pass
12	2467	15.75	0.5	Pass
13	2472	16.37	0.5	Pass

##### VHT20

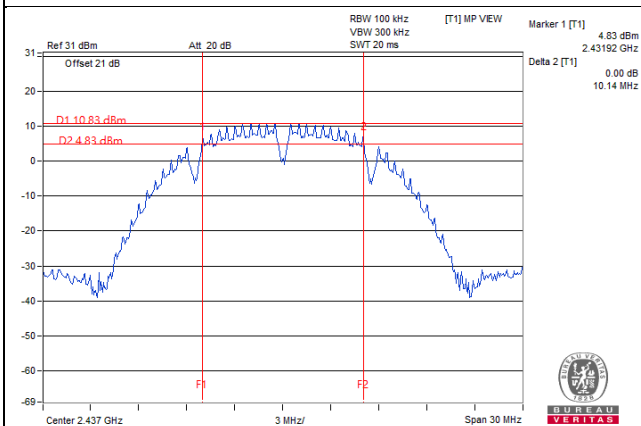
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
1	2412	16.1	0.5	Pass
6	2437	16.34	0.5	Pass
11	2462	16.33	0.5	Pass
12	2467	16.33	0.5	Pass
13	2472	17.61	0.5	Pass

##### VHT40

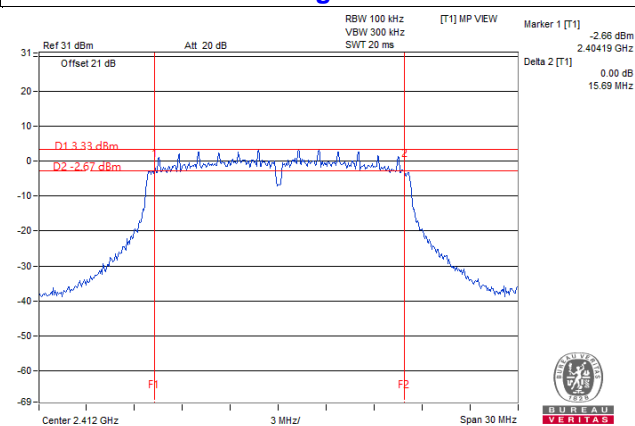
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
3	2422	35.33	0.5	Pass
6	2437	35.39	0.5	Pass
9	2452	35.4	0.5	Pass
10	2457	35.35	0.5	Pass
11	2462	35.34	0.5	Pass

## Spectrum Plot of Worst Value

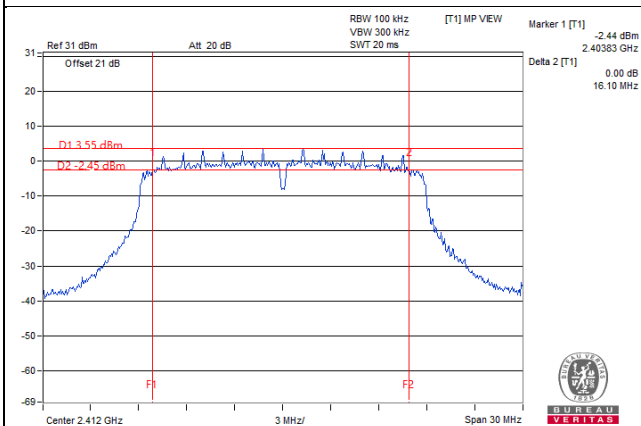
### 802.11b / CH6



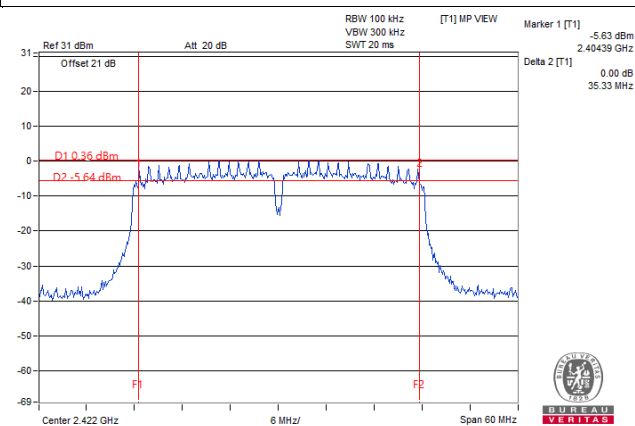
### 802.11g / CH1



### VHT20 / CH1



### VHT40 / CH3



## 4.4 Conducted Output Power Measurement

### 4.4.1 Limits of Conducted Output Power Measurement

For systems using digital modulation in the 2400–2483.5 MHz bands: 1 Watt (30dBm)

Per KDB 662911 D01 Multiple Transmitter Output Method of conducted output power measurement on IEEE 802.11 devices,

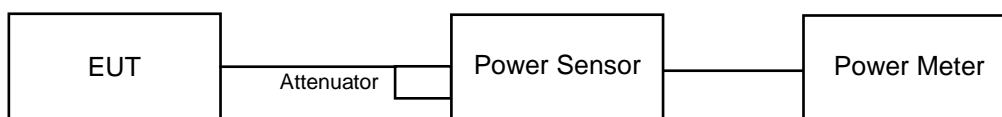
Array Gain = 0 dB (i.e., no array gain) for  $N_{ANT} \leq 4$ ;

Array Gain = 0 dB (i.e., no array gain) for channel widths  $\geq 40$  MHz for any  $N_{ANT}$ ;

Array Gain =  $5 \log(N_{ANT}/N_{SS})$  dB or 3 dB, whichever is less for 20-MHz channel widths with  $N_{ANT} \geq 5$ .

For power measurements on all other devices: Array Gain =  $10 \log(N_{ANT}/N_{SS})$  dB.

### 4.4.2 Test Setup



### 4.4.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

### 4.4.4 Test Procedures

Average power sensor was used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

### 4.4.5 Deviation from Test Standard

No deviation.

### 4.4.6 EUT Operating Conditions

Same as Item 4.3.6.

#### 4.4.7 Test Results (Mode 1)

##### CDD Mode

##### 802.11b

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
1	2412	19.58	19.54	180.732	22.57	30.00	Pass
6	2437	20.54	20.57	227.265	23.57	30.00	Pass
11	2462	19.51	19.56	179.695	22.55	30.00	Pass
12	2467	14.70	14.62	58.486	17.67	30.00	Pass
13	2472	12.93	13.16	40.335	16.06	30.00	Pass

##### 802.11g

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
1	2412	14.52	14.88	59.075	17.71	30.00	Pass
6	2437	20.78	20.70	237.164	23.75	30.00	Pass
11	2462	14.59	14.56	57.35	17.59	30.00	Pass
12	2467	11.60	11.54	28.71	14.58	30.00	Pass
13	2472	8.51	8.66	14.441	11.60	30.00	Pass

##### VHT20

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
1	2412	14.62	14.53	57.353	17.59	30.00	Pass
6	2437	20.82	20.78	240.455	23.81	30.00	Pass
11	2462	14.62	14.56	57.549	17.60	30.00	Pass
12	2467	11.73	11.61	29.381	14.68	30.00	Pass
13	2472	8.72	8.55	14.609	11.65	30.00	Pass

**VHT40**

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
3	2422	13.61	13.52	45.452	16.58	30.00	Pass
6	2437	17.57	17.56	114.164	20.58	30.00	Pass
9	2452	14.67	14.77	59.301	17.73	30.00	Pass
10	2457	11.81	11.66	29.826	14.75	30.00	Pass
11	2462	7.95	7.97	12.503	10.97	30.00	Pass

## Beamforming Mode

### VHT20

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
1	2412	14.62	14.53	57.353	17.59	29.49	Pass
6	2437	20.82	20.78	240.455	23.81	29.49	Pass
11	2462	14.62	14.56	57.549	17.60	29.49	Pass
12	2467	11.73	11.61	29.381	14.68	29.49	Pass
13	2472	8.72	8.55	14.609	11.65	29.49	Pass

**Note:** 1. Directional gain = 3.5 dBi +10 log(2) = 6.51dBi > 6dBi , so the power limit shall be reduced to 30-(6.51-6) = 29.49dBm.

### VHT40

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
3	2422	13.61	13.52	45.452	16.58	29.49	Pass
6	2437	17.57	17.56	114.164	20.58	29.49	Pass
9	2452	14.67	14.77	59.301	17.73	29.49	Pass
10	2457	11.81	11.66	29.826	14.75	29.49	Pass
11	2462	7.95	7.97	12.503	10.97	29.49	Pass

**Note:** 1. Directional gain = 3.5 dBi +10 log(2) = 6.51dBi > 6dBi , so the power limit shall be reduced to 30-(6.51-6) = 29.49dBm.



#### 4.4.8 Test Results (Mode 2)

##### 802.11b

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Limit (dBm)	Pass / Fail
1	2412	90.157	19.55	30	Pass
6	2437	114.551	20.59	30	Pass
11	2462	92.257	19.65	30	Pass
12	2467	28.314	14.52	30	Pass
13	2472	22.909	13.60	30	Pass

##### 802.11g

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Limit (dBm)	Pass / Fail
1	2412	29.174	14.65	30	Pass
6	2437	116.95	20.68	30	Pass
11	2462	29.242	14.66	30	Pass
12	2467	14.723	11.68	30	Pass
13	2472	7.079	8.50	30	Pass

##### VHT20

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Limit (dBm)	Pass / Fail
1	2412	29.04	14.63	30	Pass
6	2437	115.08	20.61	30	Pass
11	2462	29.174	14.65	30	Pass
12	2467	14.421	11.59	30	Pass
13	2472	7.499	8.75	30	Pass

VHT40

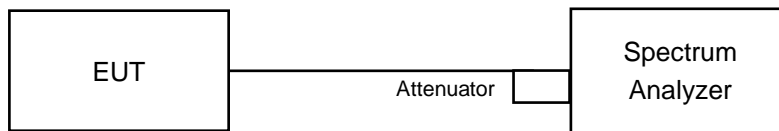
Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)	Limit (dBm)	Pass / Fail
3	2422	29.923	14.76	30	Pass
6	2437	56.494	17.52	30	Pass
9	2452	30.061	14.78	30	Pass
10	2457	14.723	11.68	30	Pass
11	2462	7.551	8.78	30	Pass

## 4.5 Power Spectral Density Measurement

### 4.5.1 Limits of Power Spectral Density Measurement

The Maximum of Power Spectral Density Measurement is 8dBm in any 3 kHz.

### 4.5.2 Test Setup



### 4.5.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

### 4.5.4 Test Procedure

- a) Set instrument center frequency to DTS channel center frequency.
- b) Set span to at least 1.5 times the OBW.
- c) Set RBW to:  $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$ .
- d) Set VBW  $\geq 3 \times \text{RBW}$ .
- e) Detector = power averaging (RMS) or sample detector (when RMS not available).
- f) Ensure that the number of measurement points in the sweep  $\geq 2 \times \text{span}/\text{RBW}$ .
- g) Sweep time = auto couple.
- h) Employ trace averaging (RMS) mode over a minimum of 100 traces.
- i) Use the peak marker function to determine the maximum amplitude level.

### 4.5.5 Deviation from Test Standard

No deviation.

### 4.5.6 EUT Operating Condition

Same as Item 4.3.6

#### 4.5.7 Test Results (Mode 1)

##### 802.11b

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)		Total PSD (mW/3kHz)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Pass / Fail
		Chain0	Chain1				
1	2412	-11.03	-11.33	0.15241	-8.17	7.49	PASS
6	2437	-9.77	-10.30	0.19861	-7.02	7.49	PASS
11	2462	-11.86	-11.45	0.13677	-8.64	7.49	PASS
12	2467	-15.67	-15.37	0.0561	-12.51	7.49	PASS
13	2472	-18.43	-17.76	0.03112	-15.07	7.49	PASS

- Note:**
- Method b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
  - Directional gain =  $3.5 \text{ dBi} + 10\log(2) = 6.51 \text{ dBi}$ , so the power density limit shall be reduced to  $8 - (6.51 - 6) = 7.49 \text{ dBm}$ .

##### 802.11g

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)		Total PSD (mW/3kHz)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Pass / Fail
		Chain0	Chain1				
1	2412	-16.51	-16.60	0.04426	-13.54	7.49	PASS
6	2437	-10.40	-11.36	0.16444	-7.84	7.49	PASS
11	2462	-16.74	-16.53	0.04345	-13.62	7.49	PASS
12	2467	-18.72	-19.34	0.02506	-16.01	7.49	PASS
13	2472	-22.08	-23.14	0.011041	-19.57	7.49	PASS

- Note:**
- Method b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
  - Directional gain =  $3.5 \text{ dBi} + 10\log(2) = 6.51 \text{ dBi}$ , so the power density limit shall be reduced to  $8 - (6.51 - 6) = 7.49 \text{ dBm}$ .

### VHT20

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)		Total PSD (mW/3kHz)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Pass / Fail
		Chain0	Chain1				
1	2412	-16.28	-15.49	0.05176	-12.86	7.49	PASS
6	2437	-9.78	-10.84	0.1875	-7.27	7.49	PASS
11	2462	-16.09	-17.00	0.04457	-13.51	7.49	PASS
12	2467	-19.44	-17.60	0.02877	-15.41	7.49	PASS
13	2472	-21.63	-21.66	0.013709	-18.63	7.49	PASS

- Note:**
- Method b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
  - Directional gain =  $3.5 \text{ dBi} + 10\log(2) = 6.51 \text{ dBi}$ , so the power density limit shall be reduced to  $8 - (6.51 - 6) = 7.49 \text{ dBm}$ .

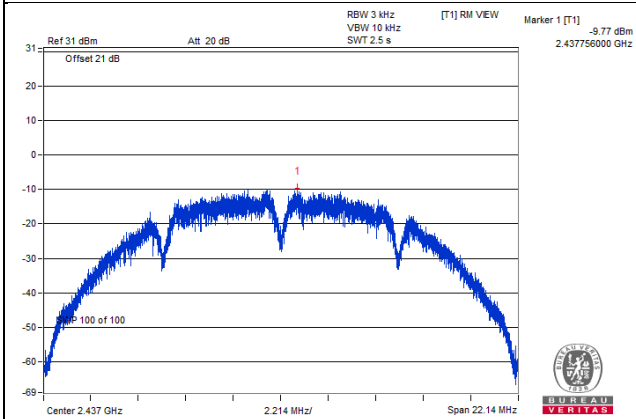
### VHT40

Chan.	Chan. Freq. (MHz)	PSD (dBm/3kHz)		Total PSD (mW/3kHz)	Total PSD (dBm/3kHz)	PSD Limit (dBm/3kHz)	Pass / Fail
		Chain0	Chain1				
3	2422	-18.18	-19.95	0.02529	-15.97	7.49	PASS
6	2437	-15.04	-15.19	0.06166	-12.10	7.49	PASS
9	2452	-17.78	-18.00	0.03251	-14.88	7.49	PASS
10	2457	-20.75	-21.15	0.016069	-17.94	7.49	PASS
11	2462	-25.34	-24.28	0.006653	-21.77	7.49	PASS

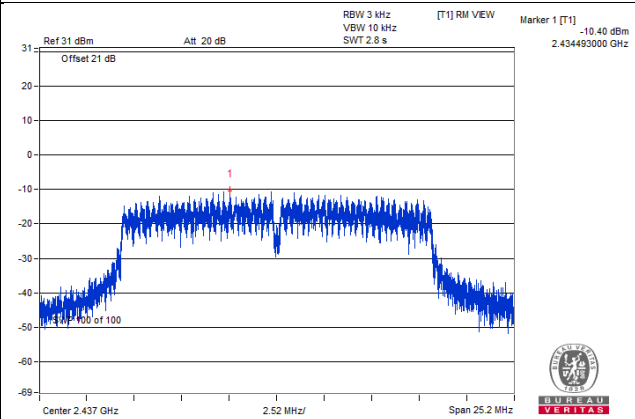
- Note:**
- Method b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
  - Directional gain =  $3.5 \text{ dBi} + 10\log(2) = 6.51 \text{ dBi}$ , so the power density limit shall be reduced to  $8 - (6.51 - 6) = 7.49 \text{ dBm}$ .

Spectrum Plot of Worst Value

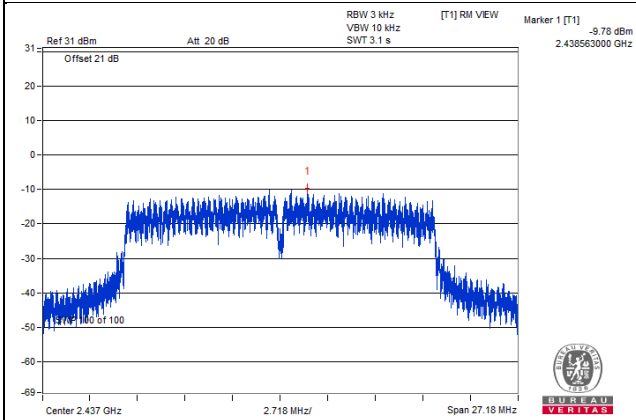
802.11b / Chain 0: CH6



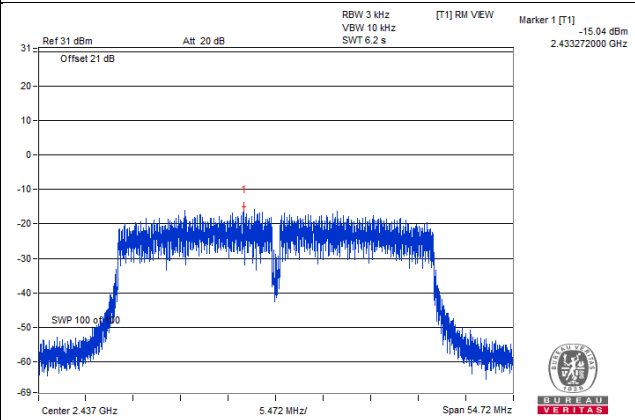
802.11g / Chain 0 : CH6



VHT20 / Chain 0: CH6



VHT40 / Chain 0: CH6



#### 4.5.8 Test Results (Mode 2)

##### 802.11b

Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Pass /Fail
1	2412	-11.23	8	Pass
6	2437	-10.68	8	Pass
11	2462	-10.70	8	Pass
12	2467	-15.97	8	Pass
13	2472	-16.36	8	Pass

##### 802.11g

Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Pass /Fail
1	2412	-16.62	8	Pass
6	2437	-10.02	8	Pass
11	2462	-16.59	8	Pass
12	2467	-19.28	8	Pass
13	2472	-23.07	8	Pass

##### VHT20

Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Pass /Fail
1	2412	-16.70	8	Pass
6	2437	-10.06	8	Pass
11	2462	-16.94	8	Pass
12	2467	-20.13	8	Pass
13	2472	-22.32	8	Pass

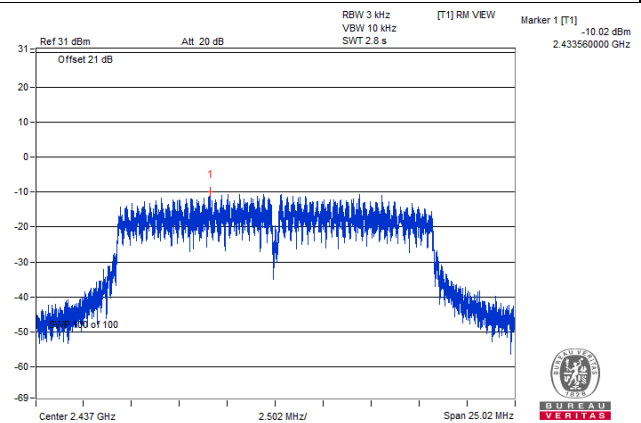
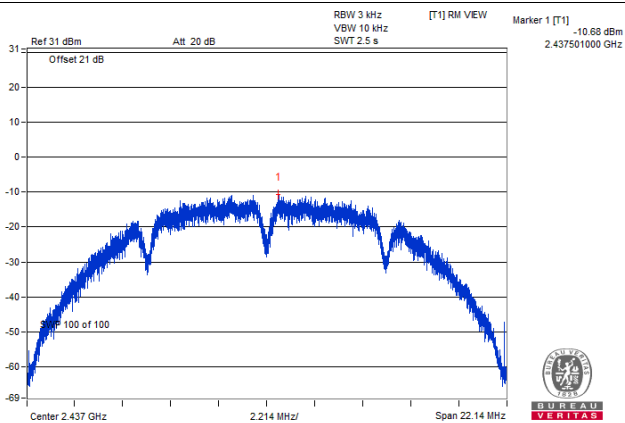
##### VHT40

Channel	Frequency (MHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Pass /Fail
3	2422	-17.74	8	Pass
6	2437	-16.02	8	Pass
9	2452	-18.79	8	Pass
10	2457	-20.82	8	Pass
11	2462	-23.14	8	Pass

### Spectrum Plot of Worst Value

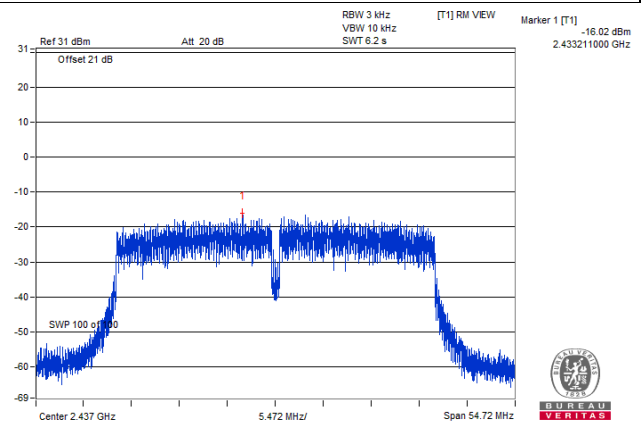
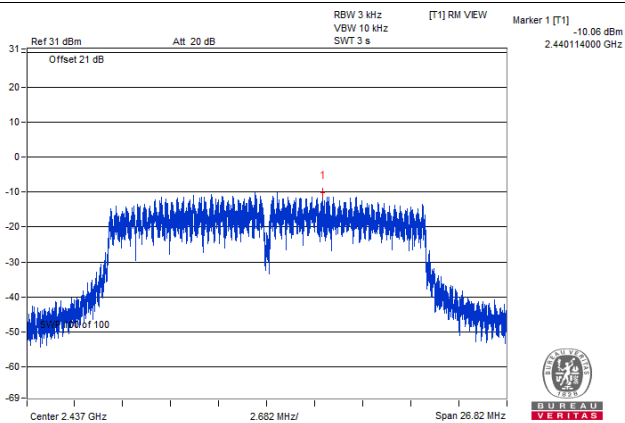
#### 802.11b / CH6

#### 802.11g / CH6



#### VHT20 / CH6

#### VHT40 / CH6



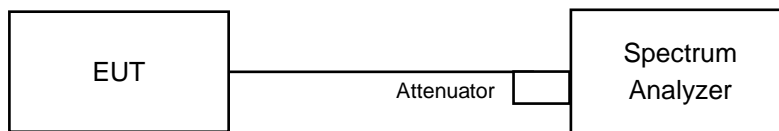


## 4.6 Conducted Out of Band Emission Measurement

### 4.6.1 Limits of Conducted Out of Band Emission Measurement

Below -30dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).

### 4.6.2 Test Setup



### 4.6.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

### 4.6.4 Test Procedure

#### MEASUREMENT PROCEDURE REF

1. Set the RBW = 100 kHz.
2. Set the VBW  $\geq$  300 kHz.
3. Detector = peak.
4. Sweep time = auto couple.
5. Trace mode = max hold.
6. Allow trace to fully stabilize.
7. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

#### MEASUREMENT PROCEDURE OOB

1. Set RBW = 100 kHz.
2. Set VBW  $\geq$  300 kHz.
3. Detector = peak.
4. Sweep = auto couple.
5. Trace Mode = max hold.
6. Allow trace to fully stabilize.
7. Use the peak marker function to determine the maximum amplitude level.

### 4.6.5 Deviation from Test Standard

No deviation.

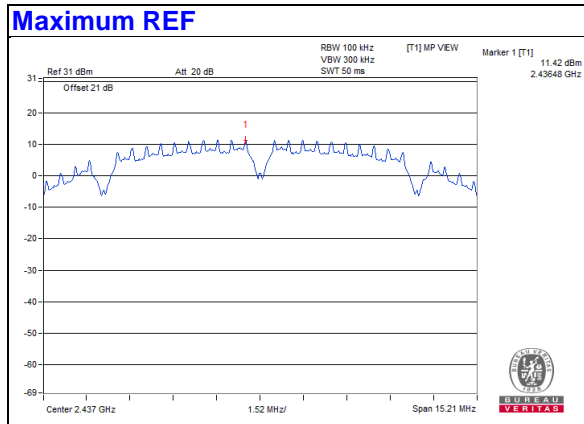
### 4.6.6 EUT Operating Condition

Same as Item 4.3.6

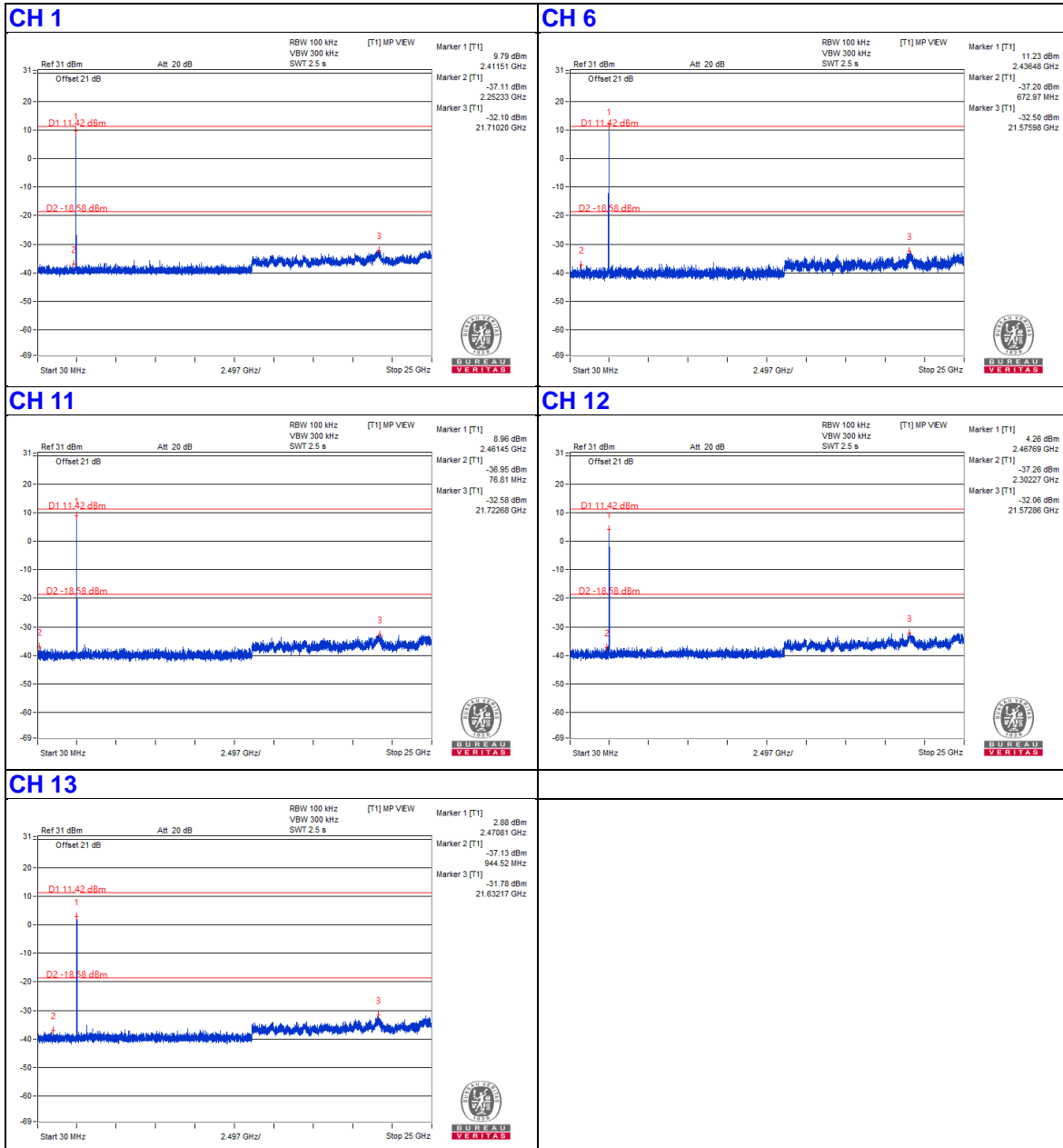
### 4.6.7 Test Results

The spectrum plots are attached on the following pages. D1 line indicates the highest level, and D2 line indicates the 30dB offset below D1. It shows compliance with the requirement.

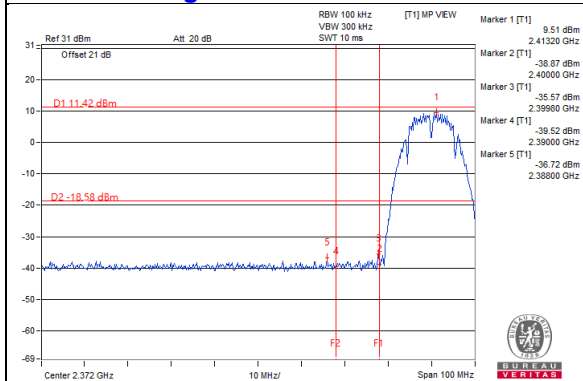
**For Mode 1**  
**802.11b**



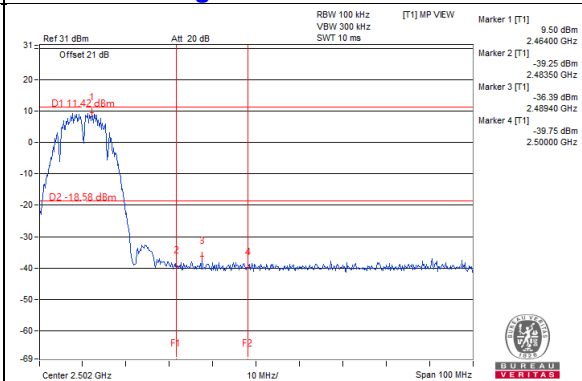
**Chain 0**



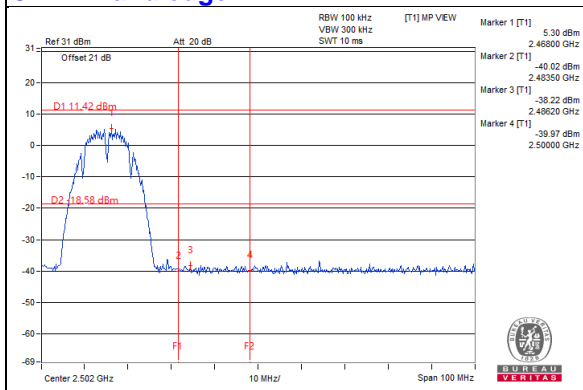
### CH 1 Band edge



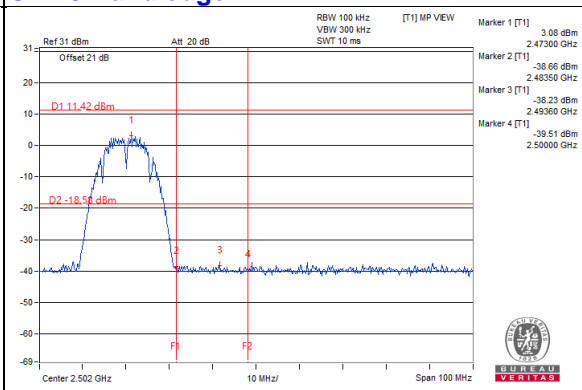
### CH 11 Band edge



### CH 12 Band edge

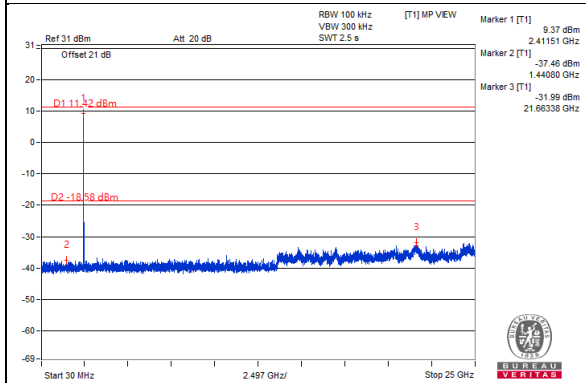


### CH 13 Band edge

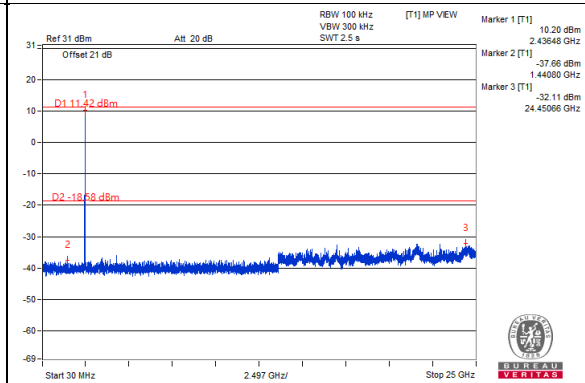


# Chain 1

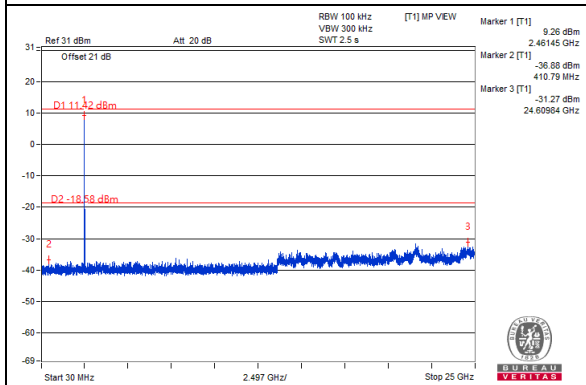
## CH 1



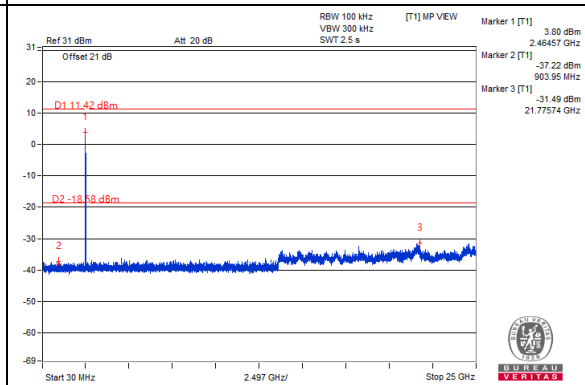
## CH 6



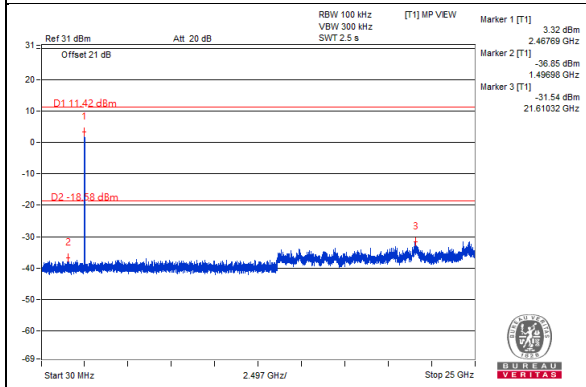
## CH 11



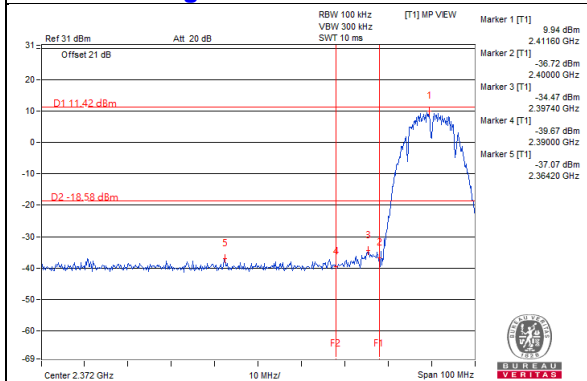
## CH 12



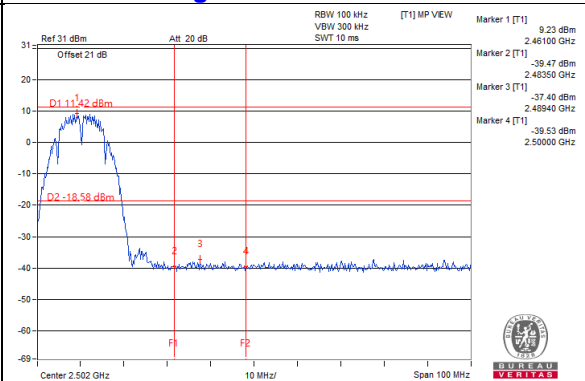
## CH 13



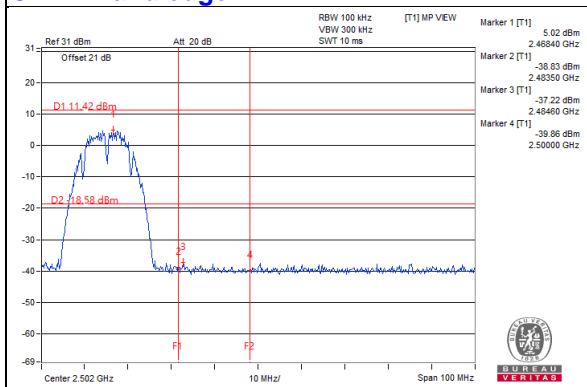
### CH 1 Band edge



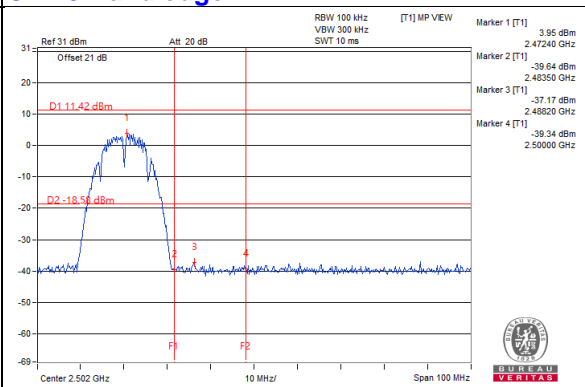
### CH 11 Band edge



### CH 12 Band edge

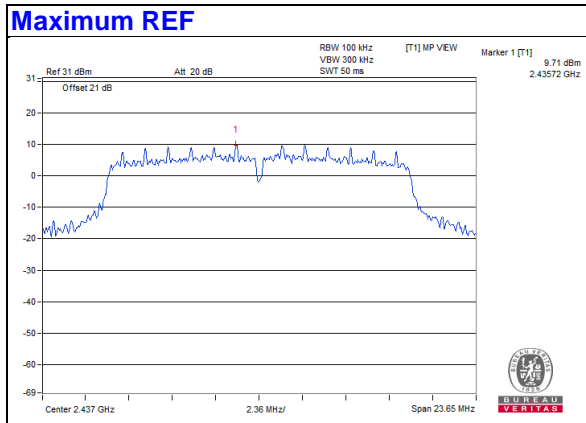


### CH 13 Band edge



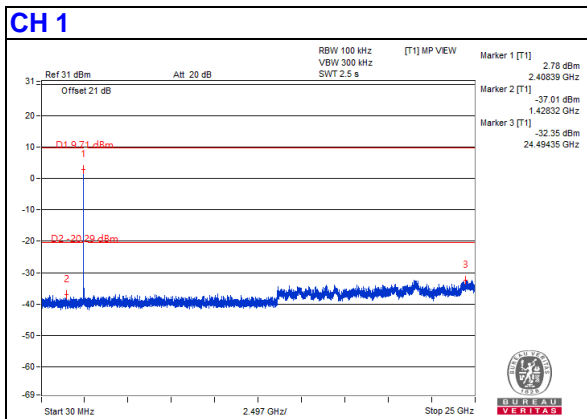
802.11g

Maximum REF

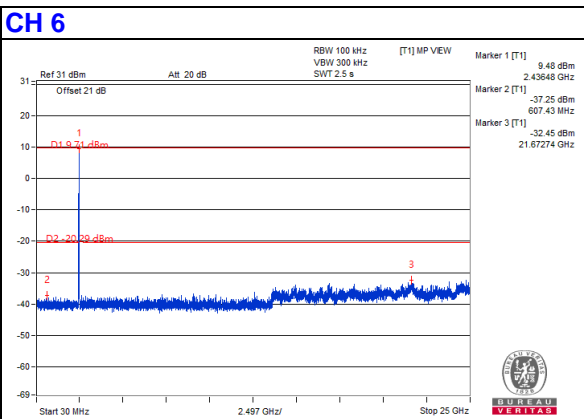


Chain 0

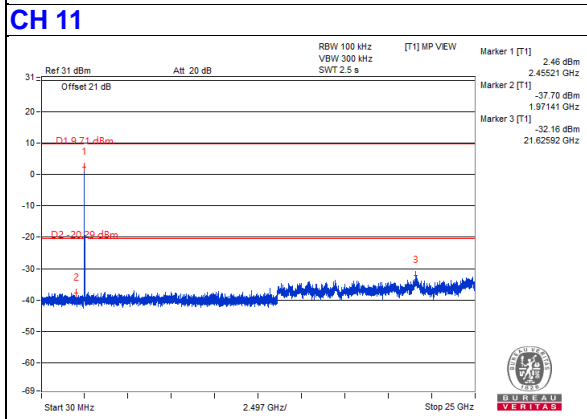
CH 1



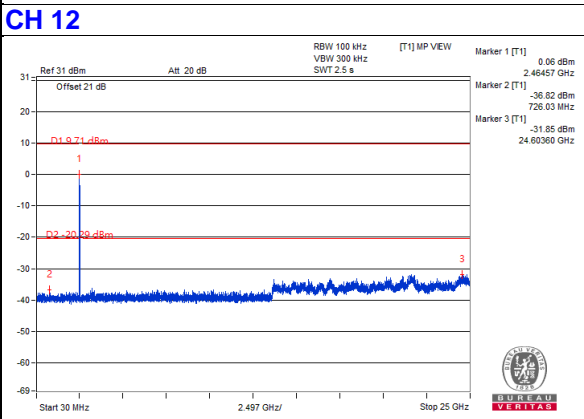
CH 6



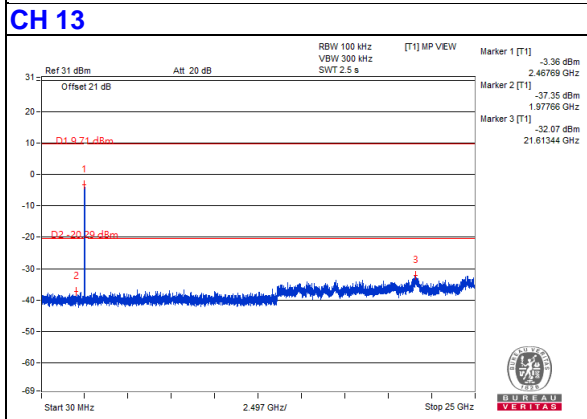
CH 11



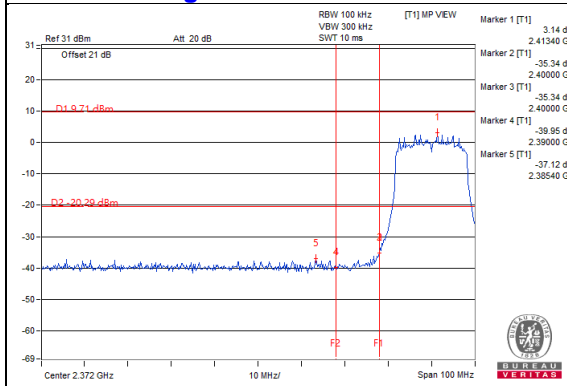
CH 12



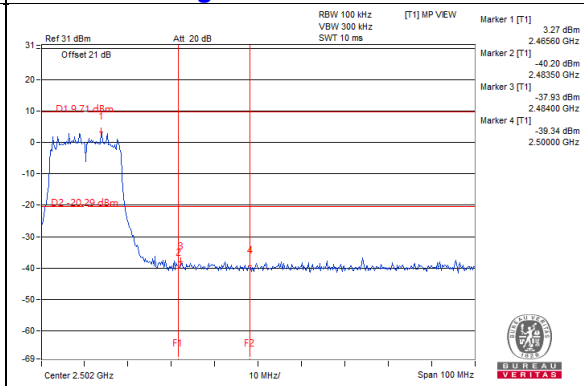
CH 13



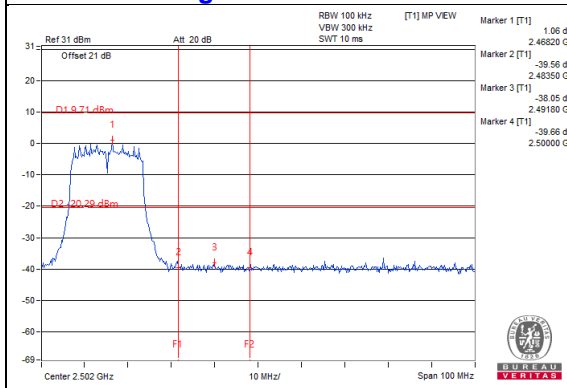
### CH 1 Band edge



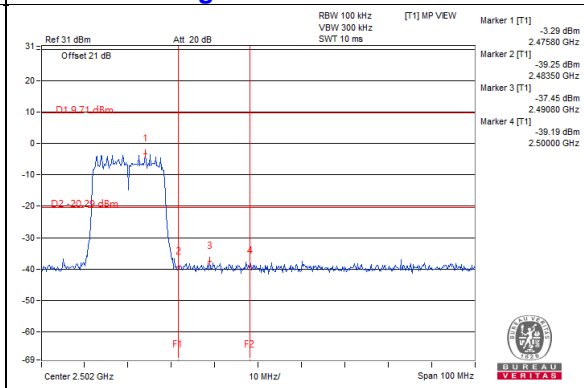
### CH 11 Band edge



### CH 12 Band edge

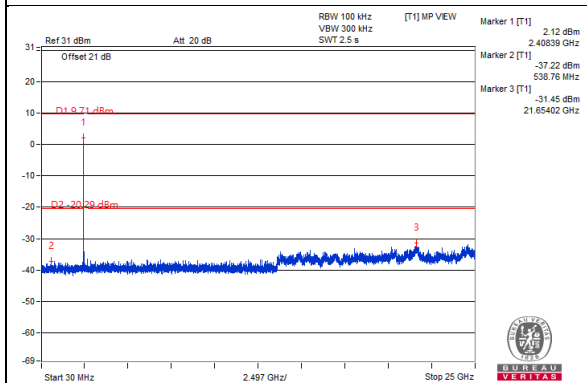


### CH 13 Band edge

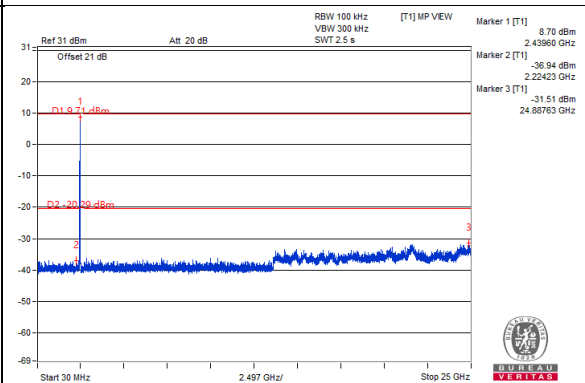


Chain 1

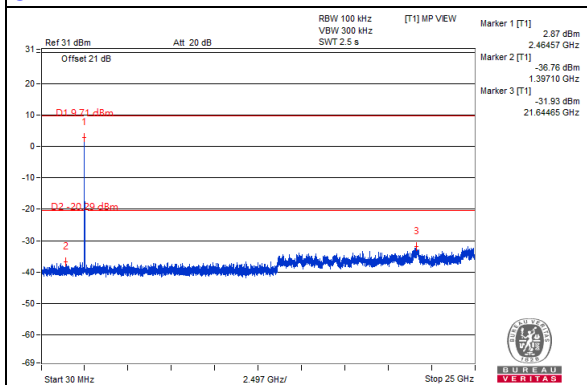
CH 1



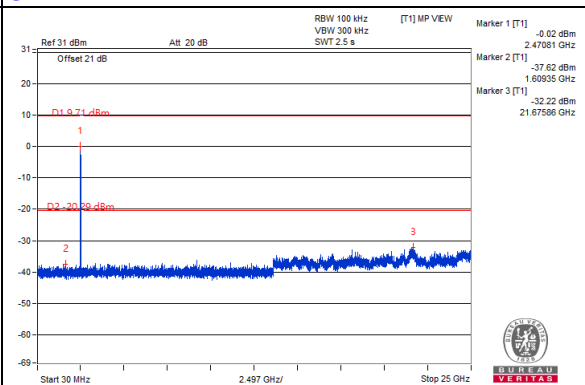
CH 6



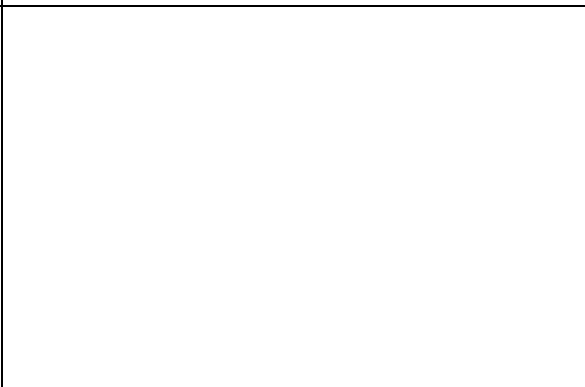
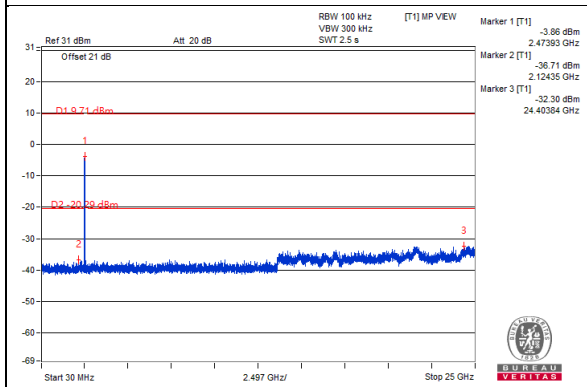
CH 11



CH 12

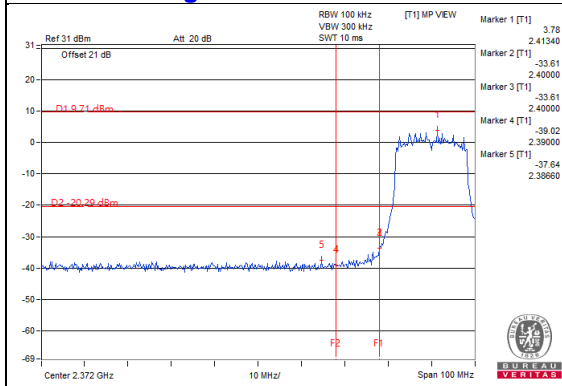


CH 13

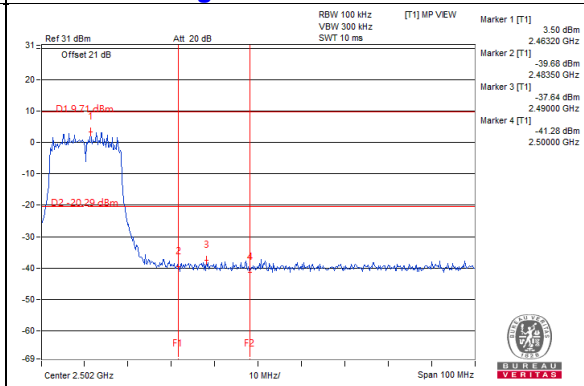




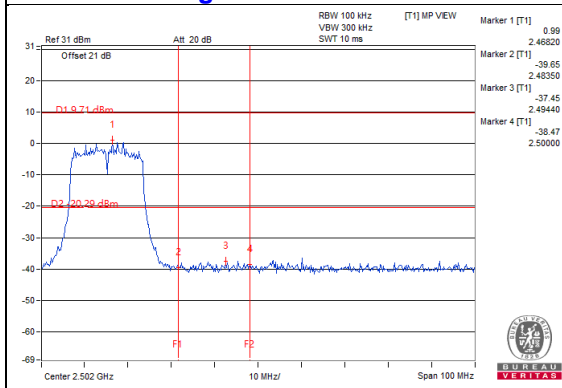
### CH 1 Band edge



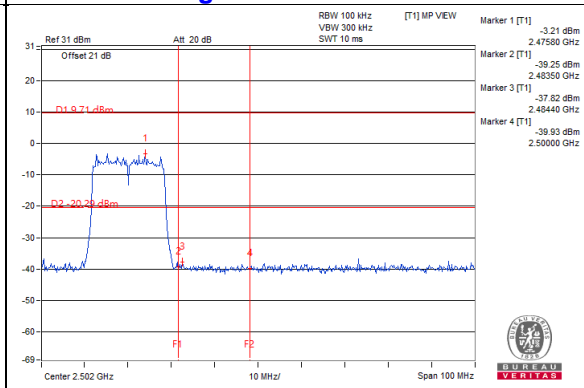
### CH 11 Band edge



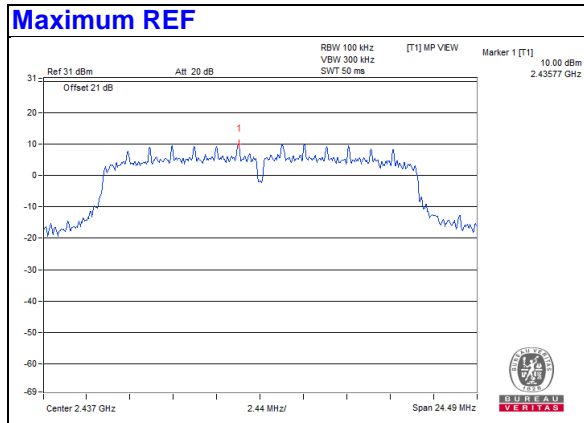
### CH 12 Band edge



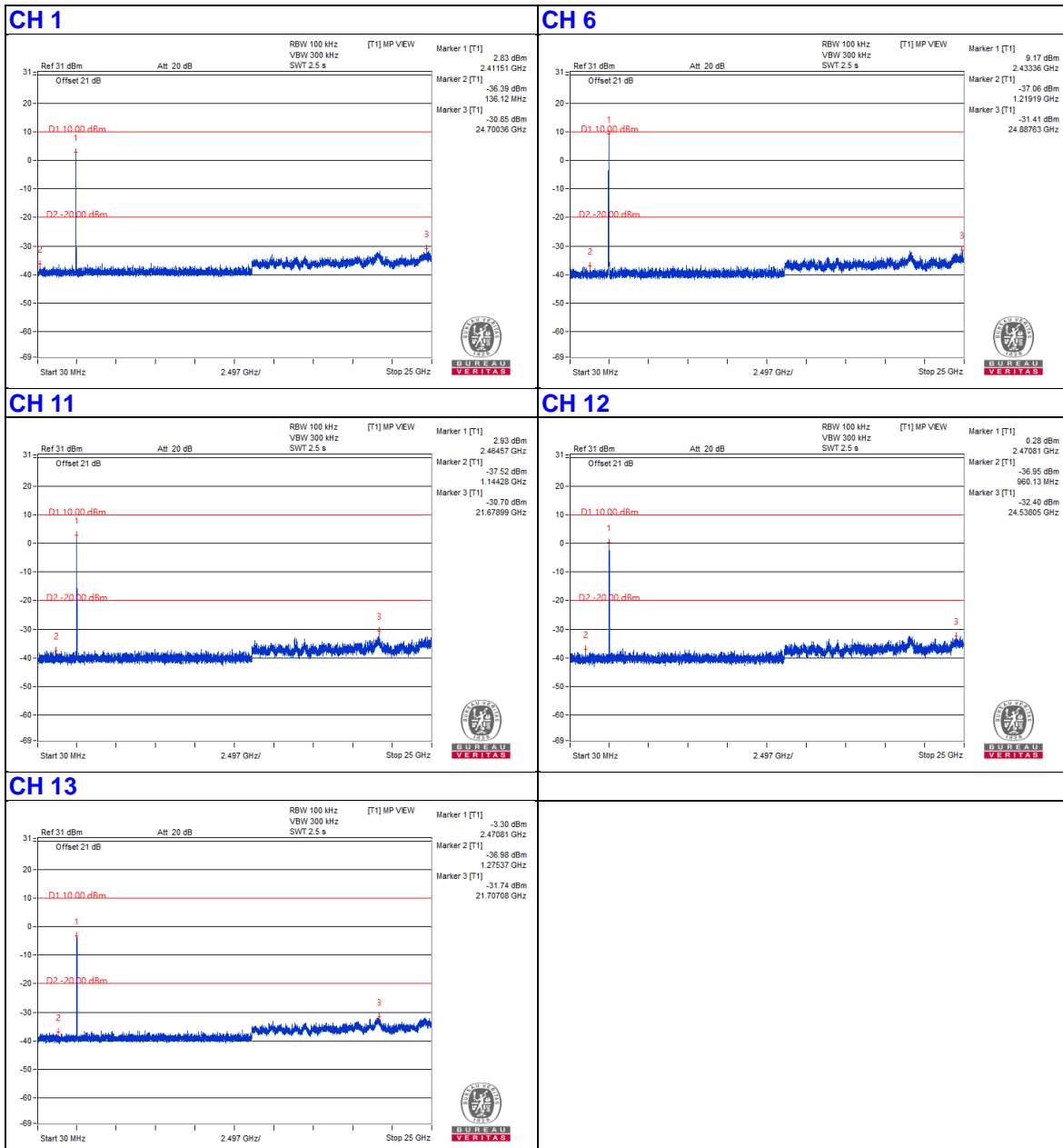
### CH 13 Band edge



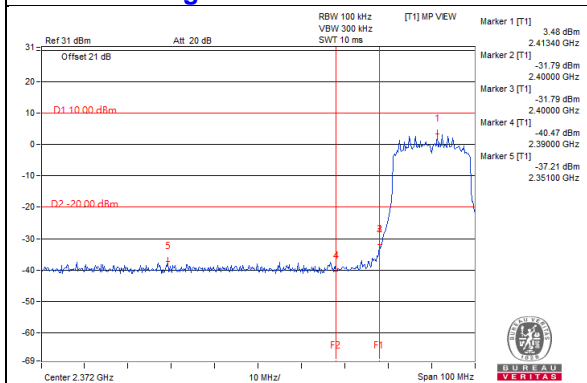
# VHT20



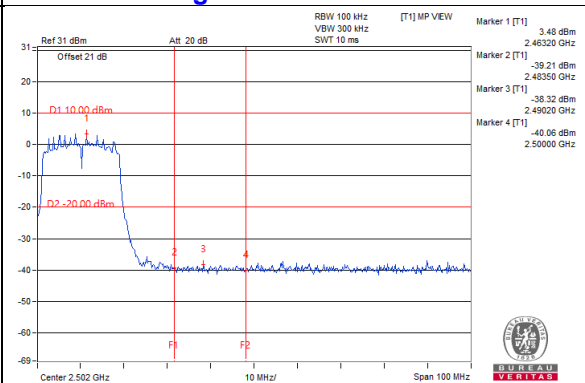
## Chain 0



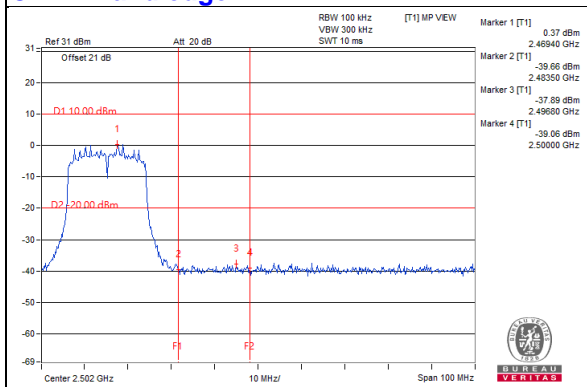
### CH 1 Band edge



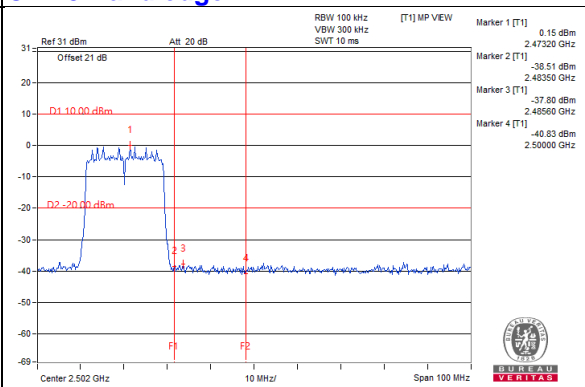
### CH 11 Band edge



### CH 12 Band edge

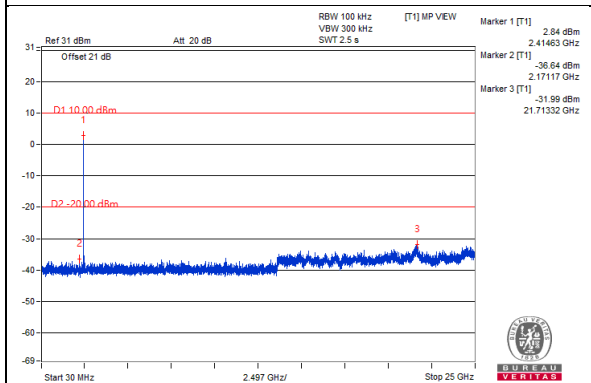


### CH 13 Band edge

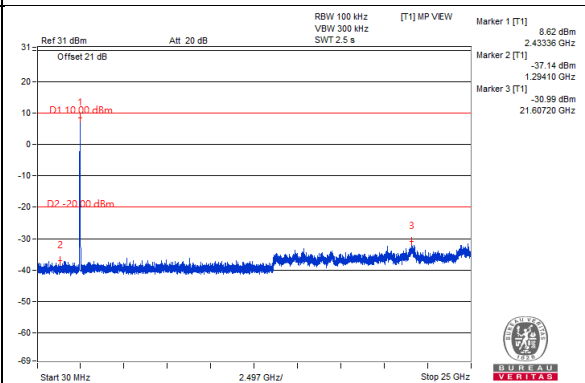


Chain 1

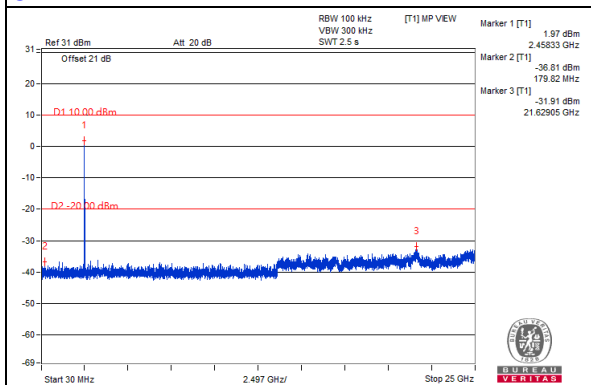
CH 1



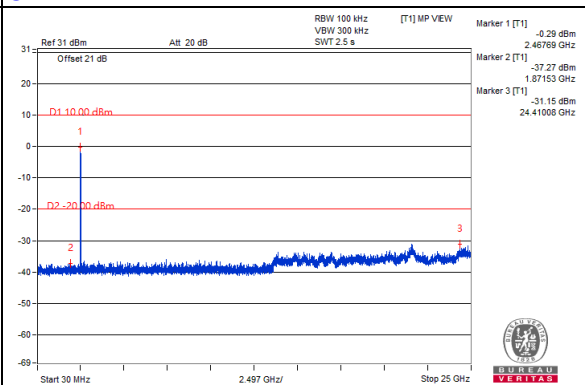
CH 6



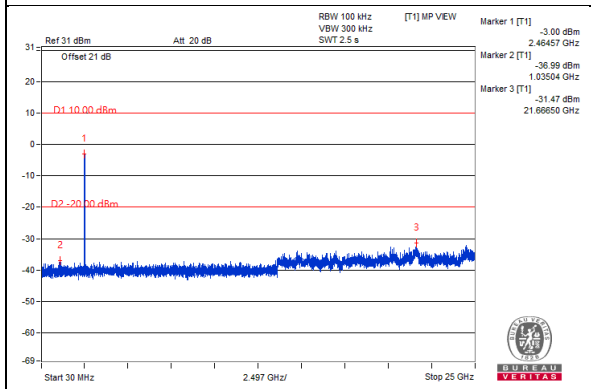
CH 11



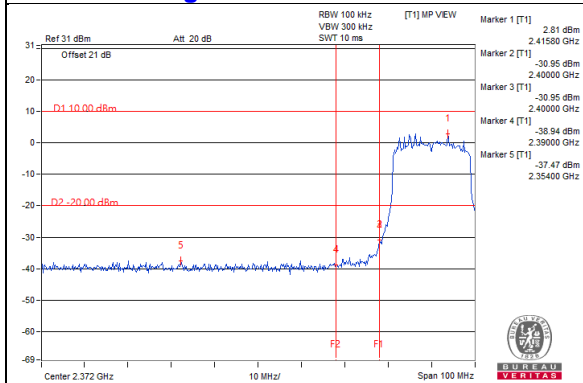
CH 12



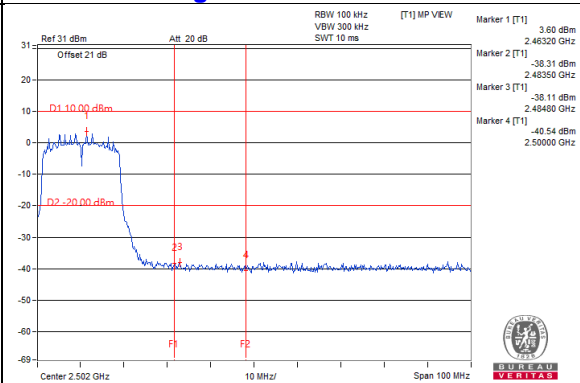
CH 13



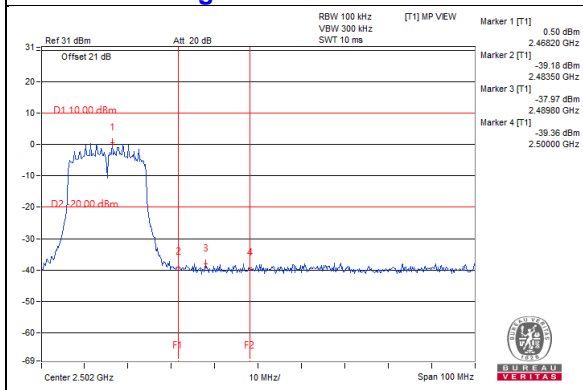
### CH 1 Band edge



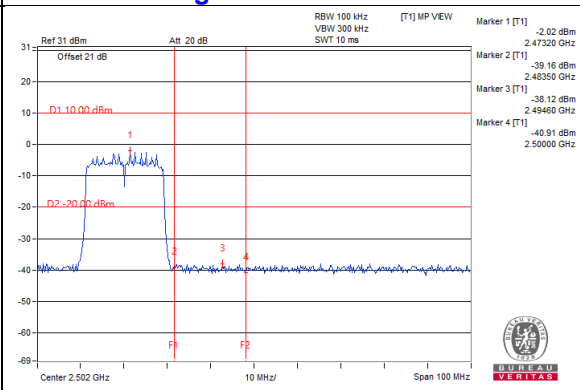
### CH 11 Band edge



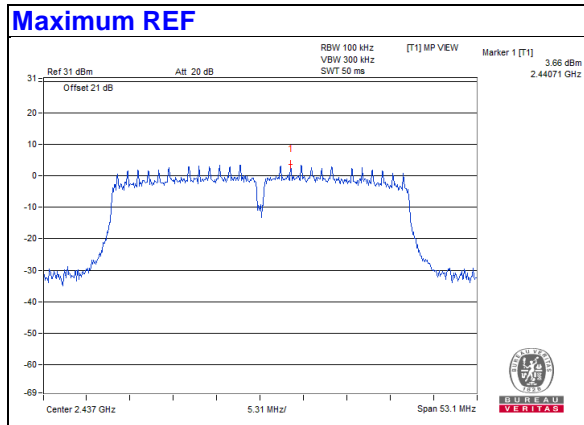
### CH 12 Band edge



### CH 13 Band edge

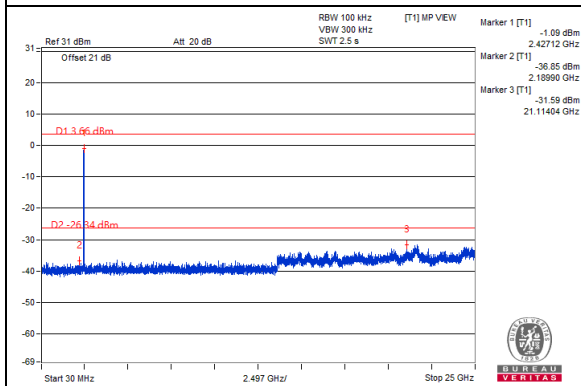


# VHT40

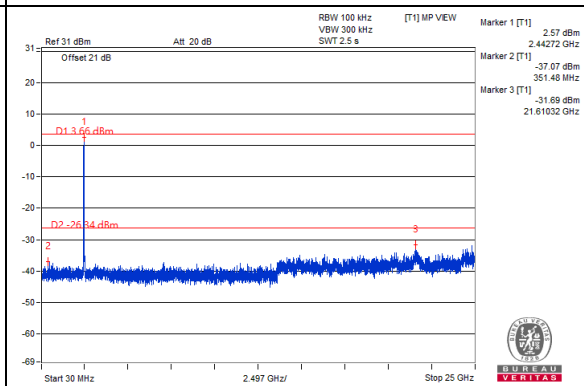


## Chain 0

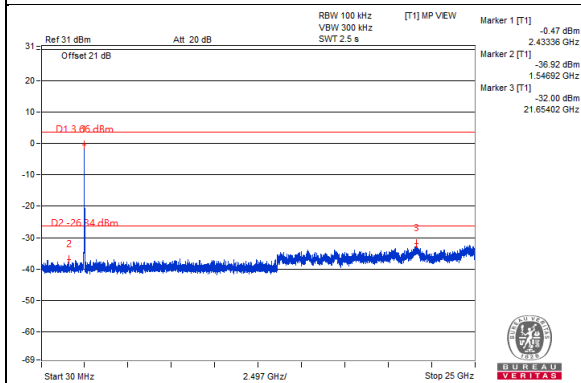
### CH 3



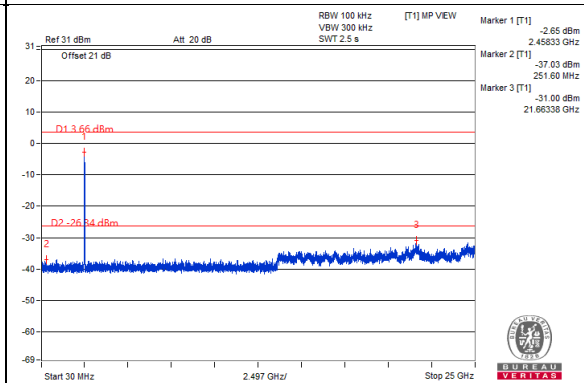
### CH 6



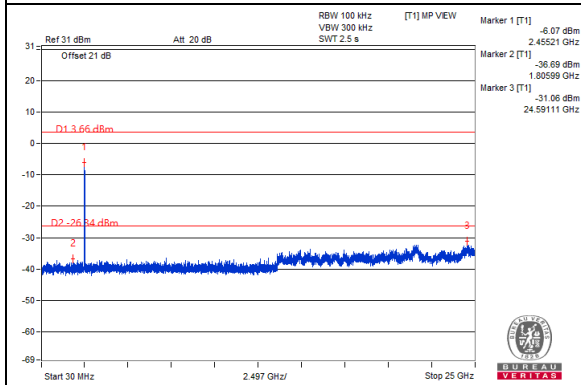
### CH 9



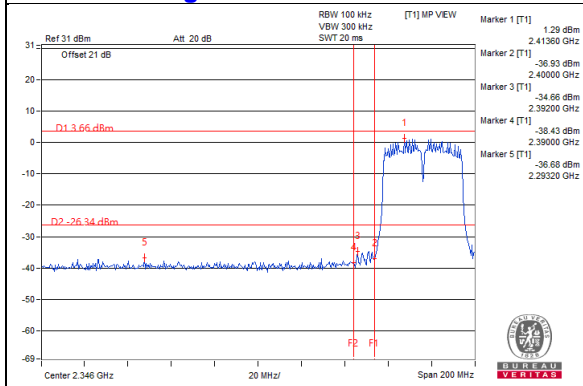
### CH 10



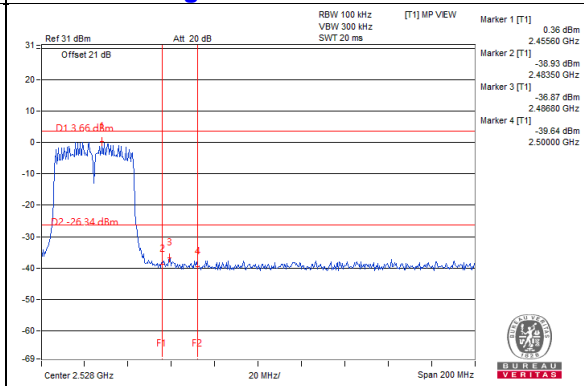
### CH 11



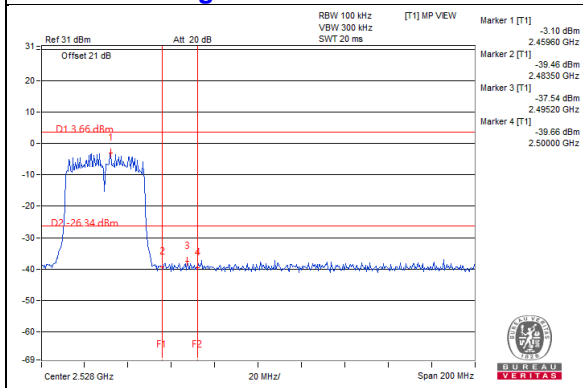
### CH 3 Band edge



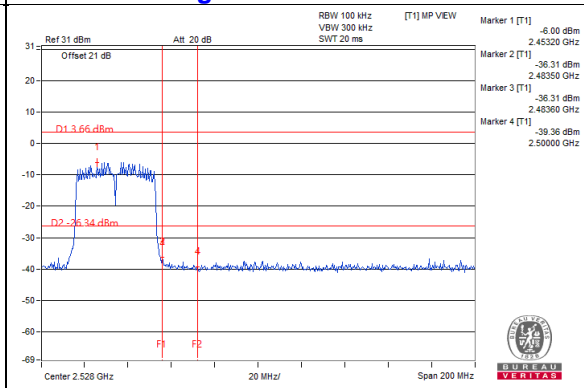
### CH 9 Band edge



### CH 10 Band edge

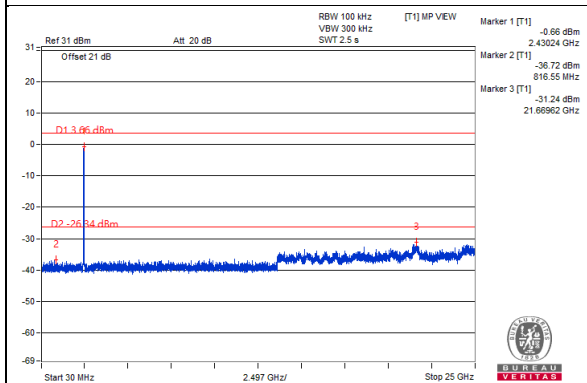


### CH 11 Band edge

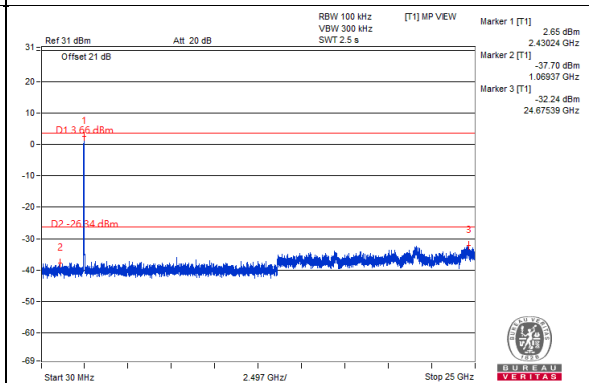


Chain 1

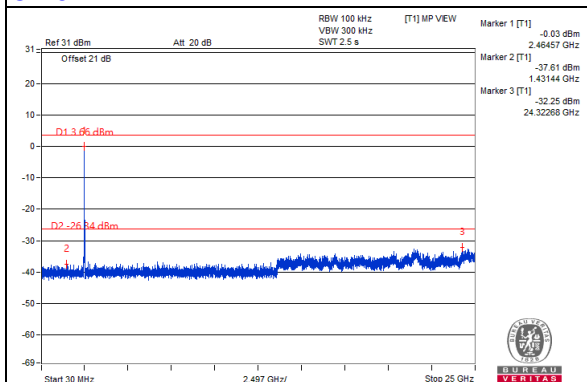
CH 3



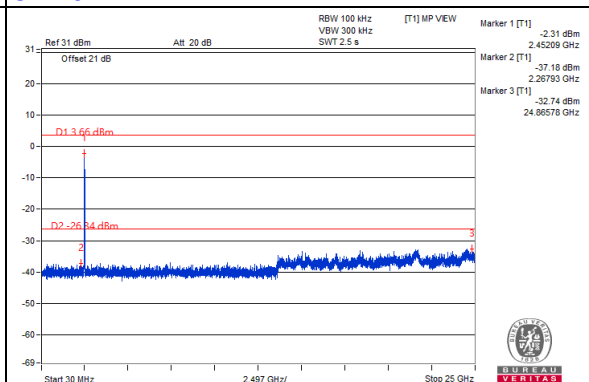
CH 6



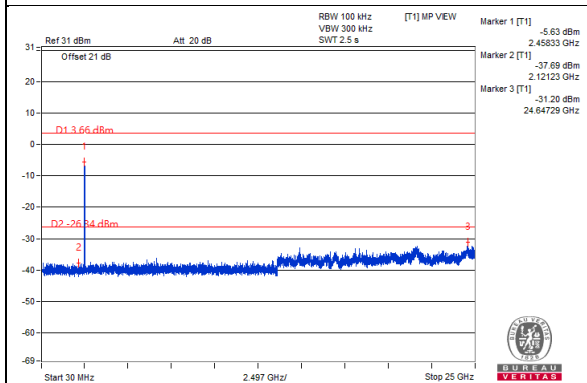
CH 9



CH 10

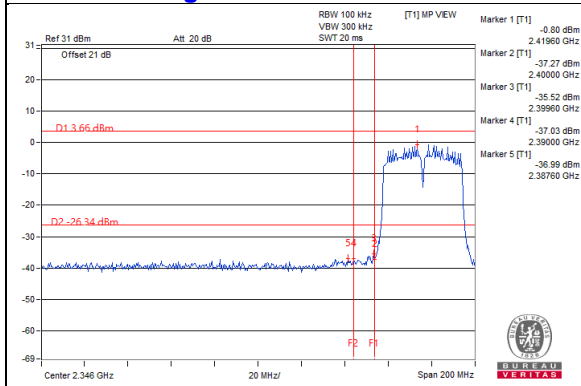


CH 11

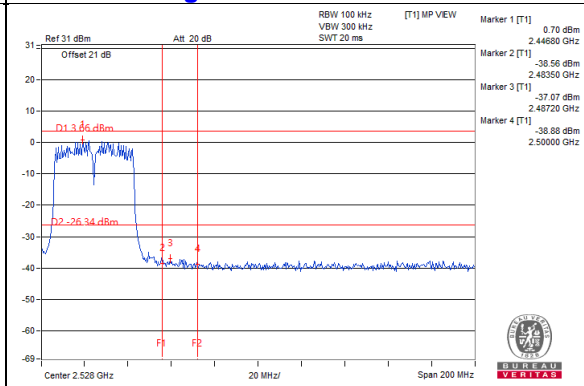




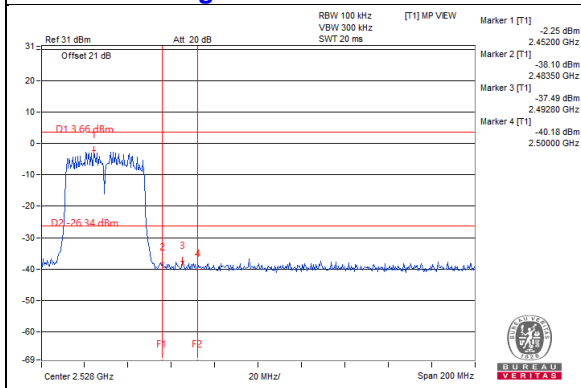
### CH 3 Band edge



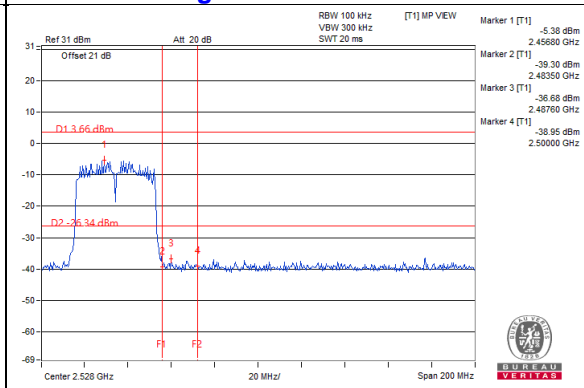
### CH 9 Band edge



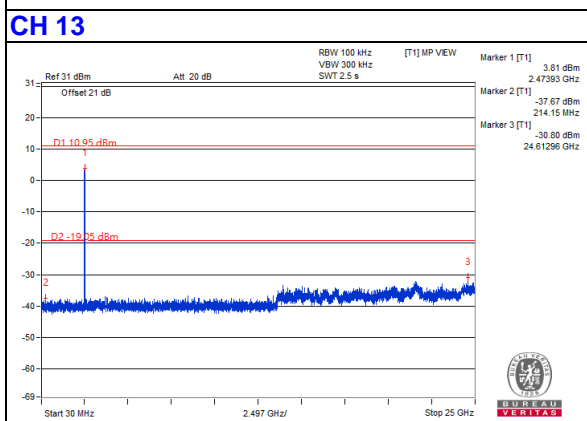
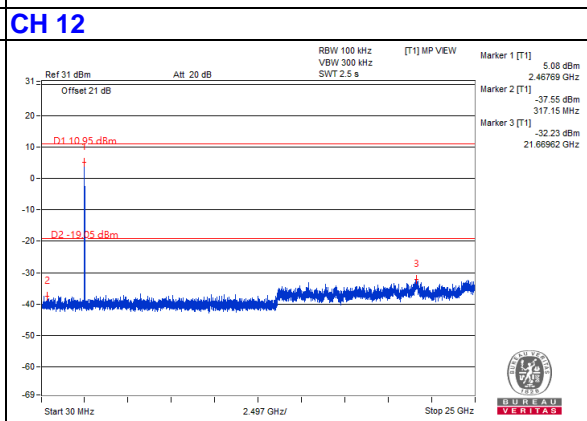
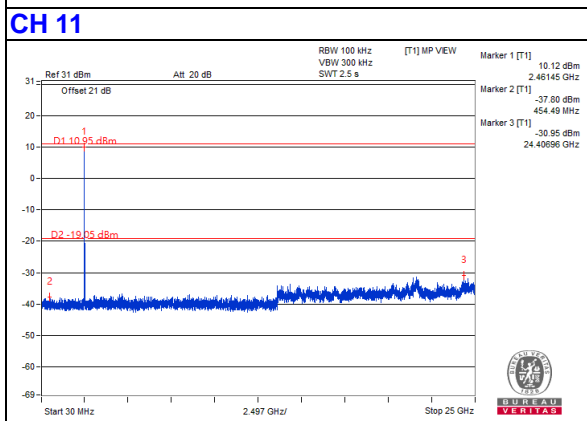
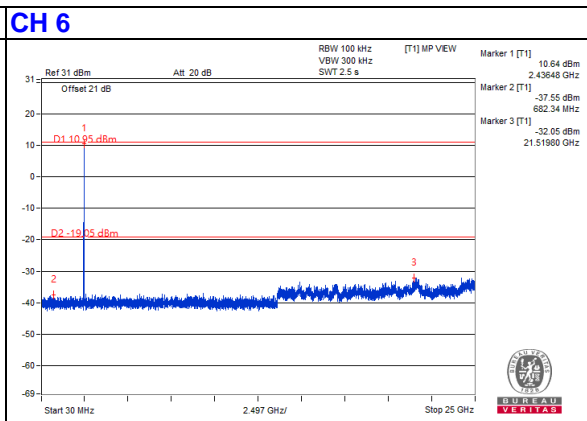
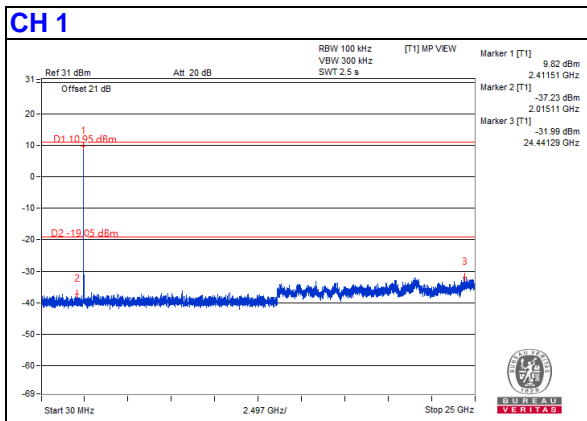
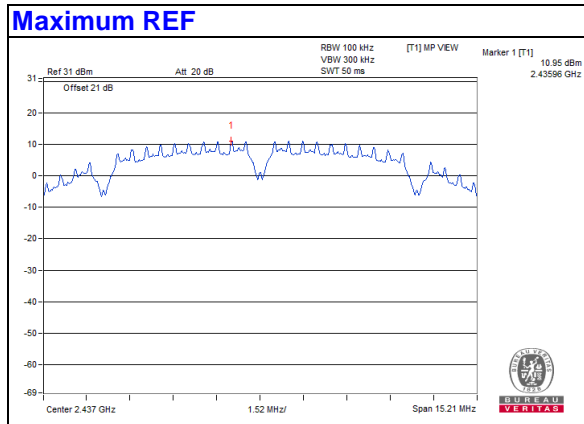
### CH 10 Band edge



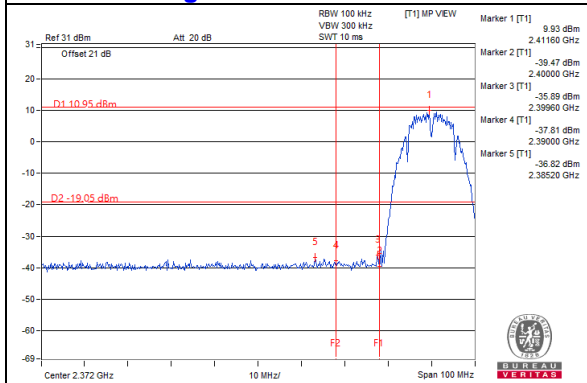
### CH 11 Band edge



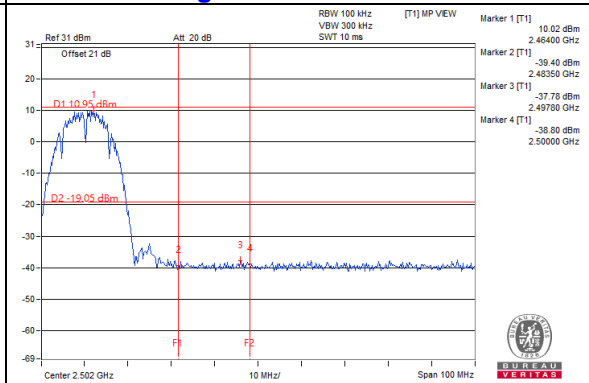
**For Mode 2**  
**802.11b**



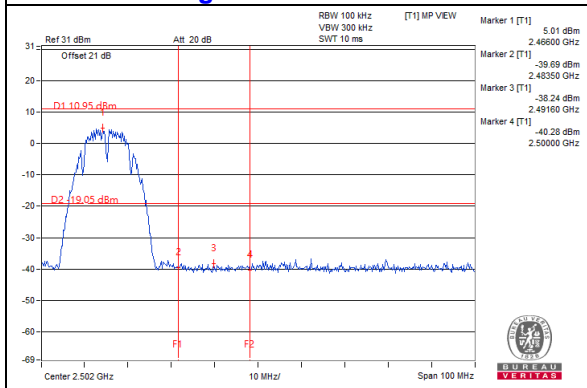
### CH 1 Band edge



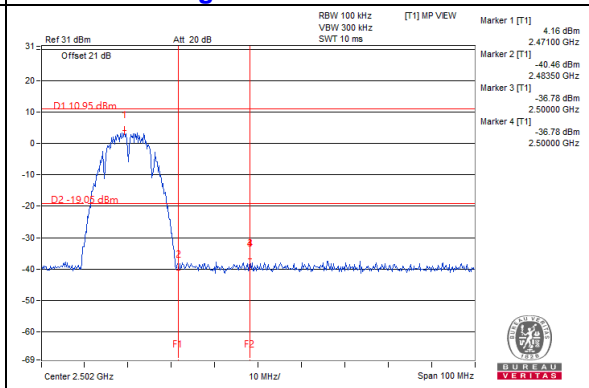
### CH 11 Band edge



### CH 12 Band edge

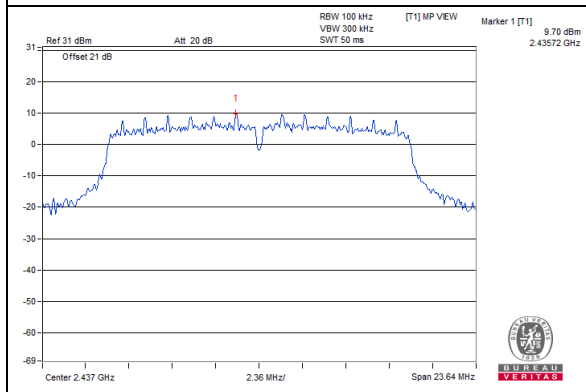


### CH 13 Band edge

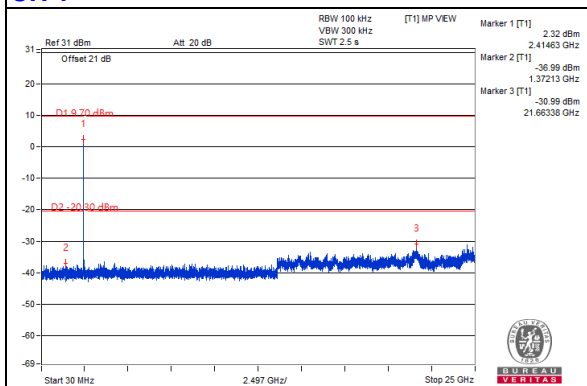


802.11g

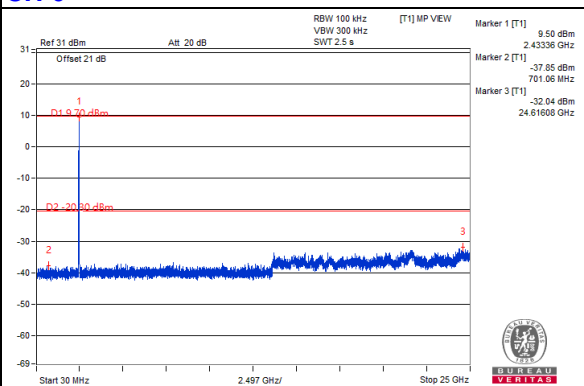
Maximum REF



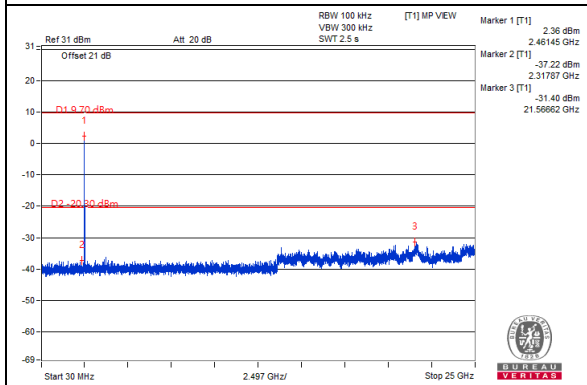
CH 1



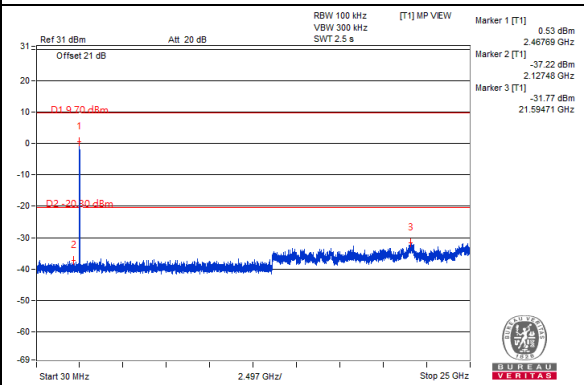
CH 6



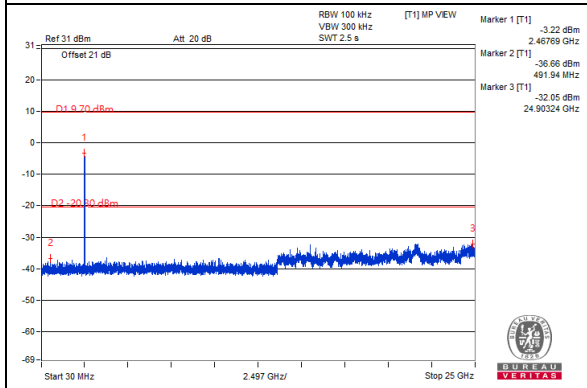
CH 11



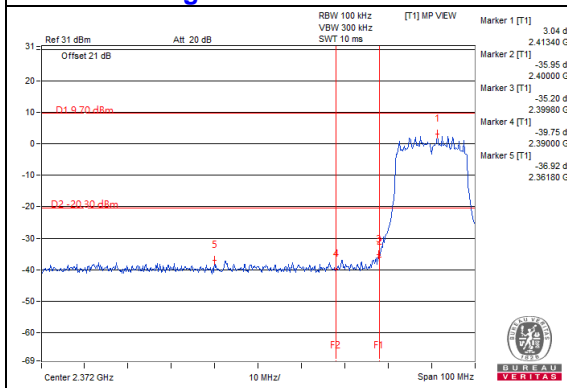
CH 12



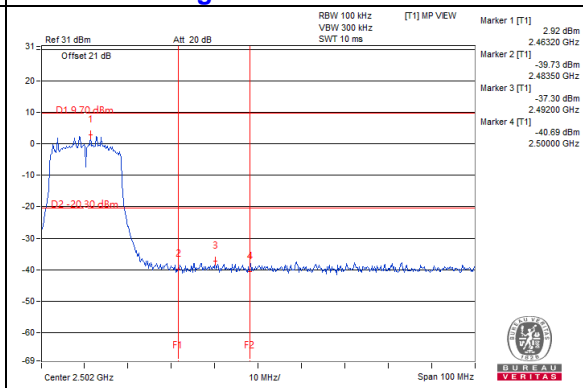
CH 13



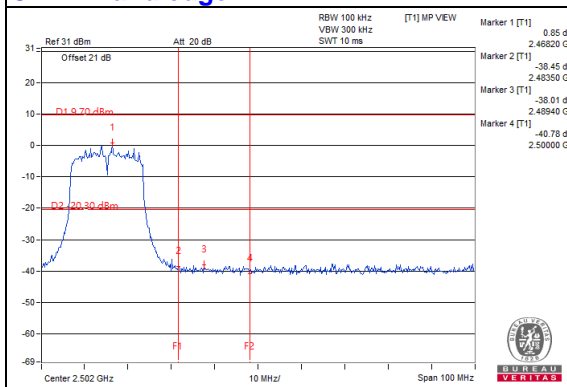
### CH 1 Band edge



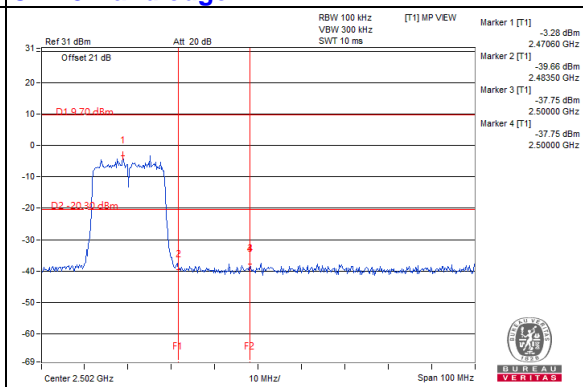
### CH 11 Band edge



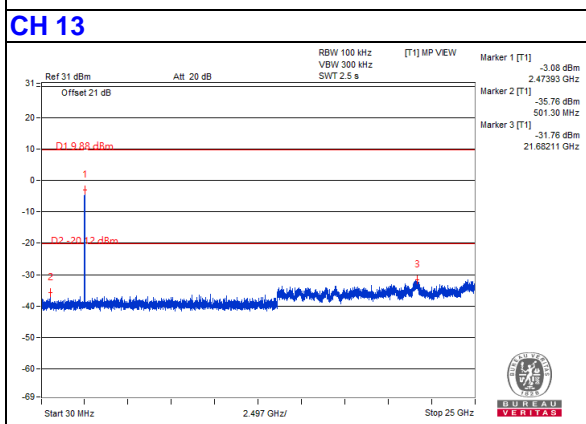
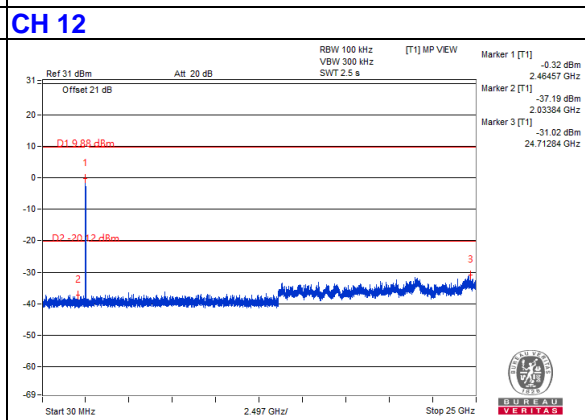
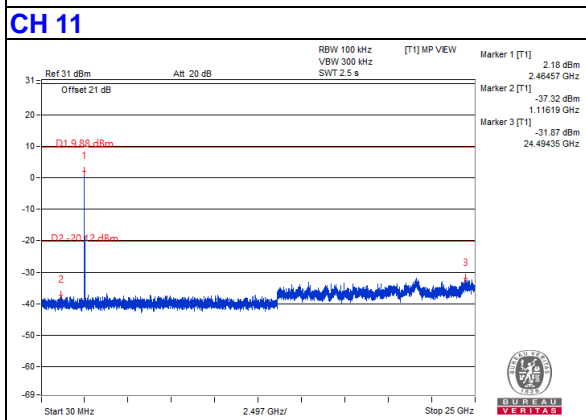
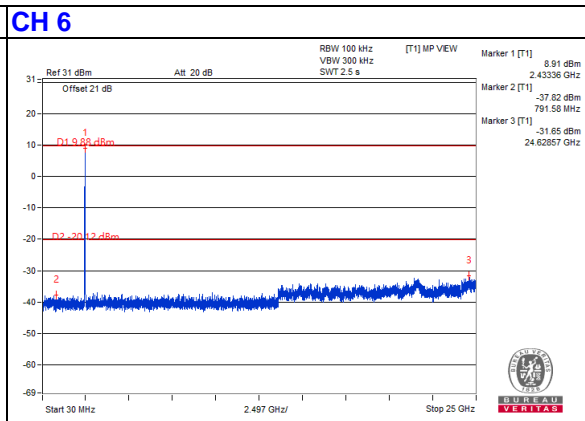
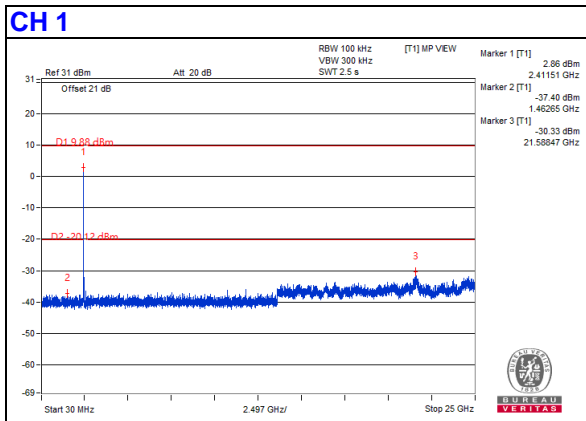
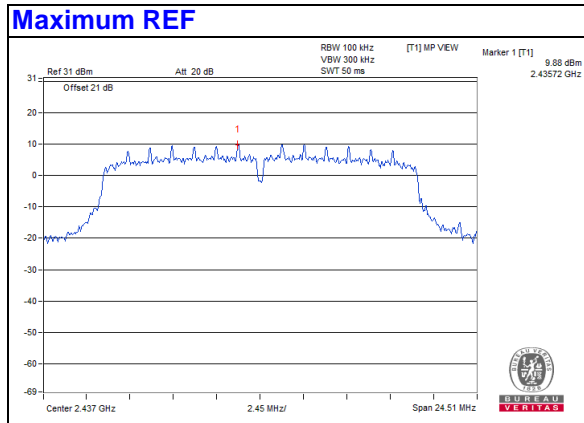
### CH 12 Band edge



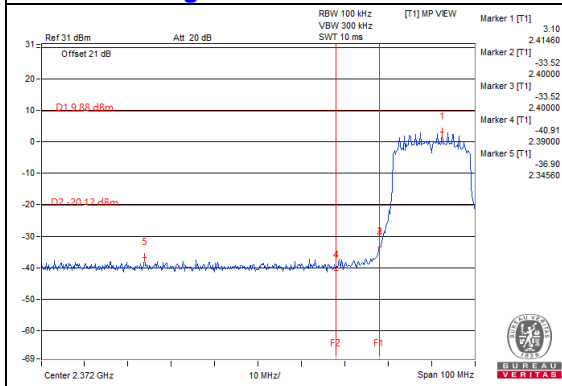
### CH 13 Band edge



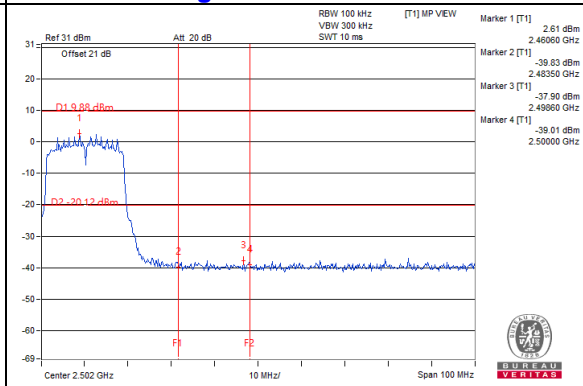
# VHT20



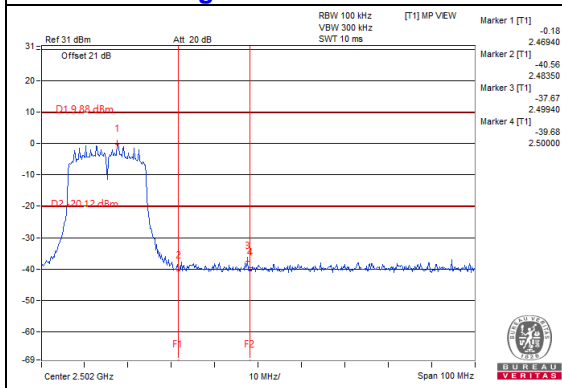
### CH 1 Band edge



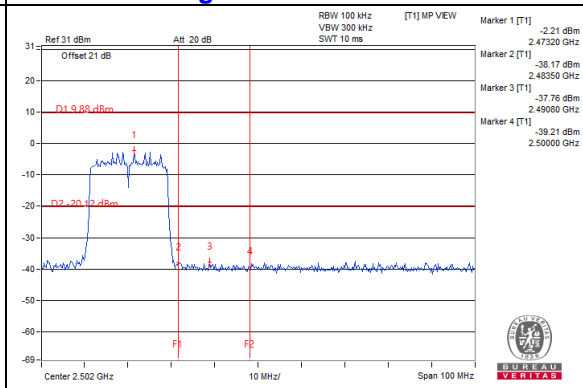
### CH 11 Band edge



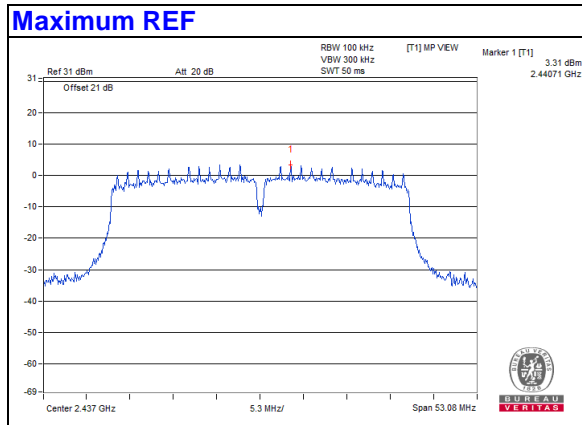
### CH 12 Band edge



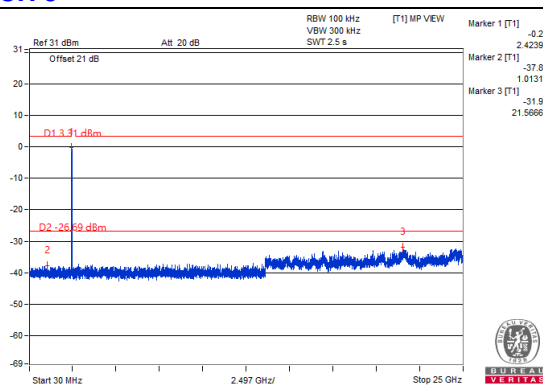
### CH 13 Band edge



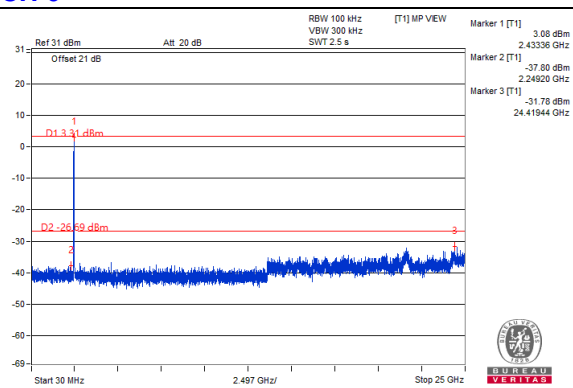
# VHT40



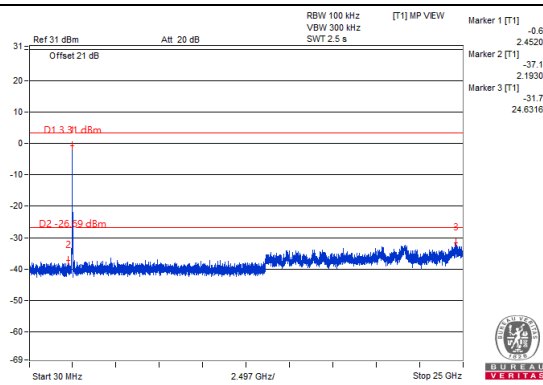
## CH 3



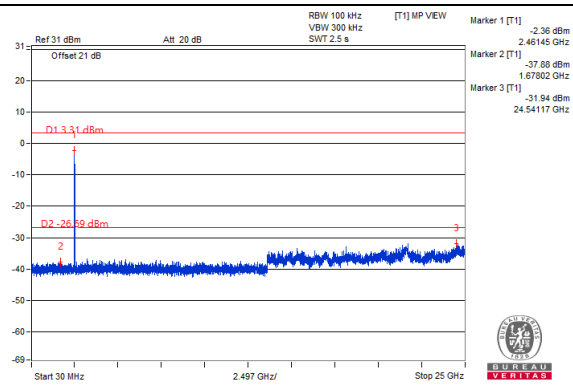
## CH 6



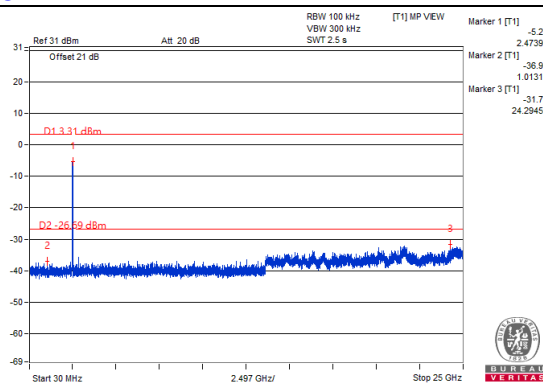
## CH 9



## CH 10

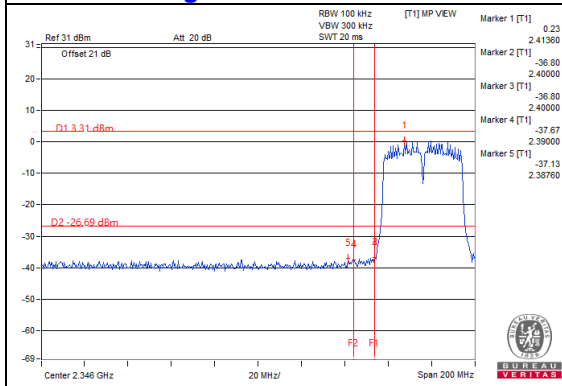


## CH 11

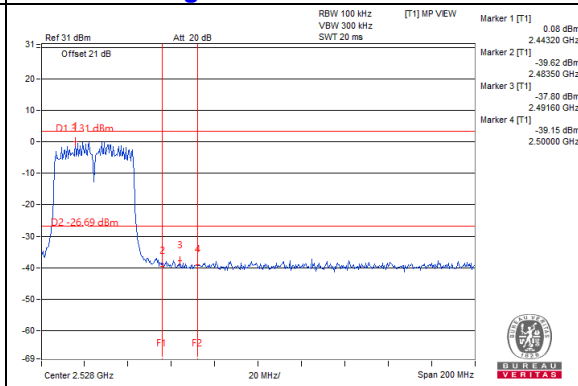




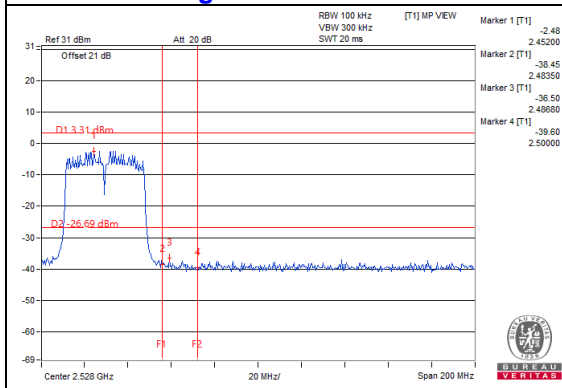
### CH 3 Band edge



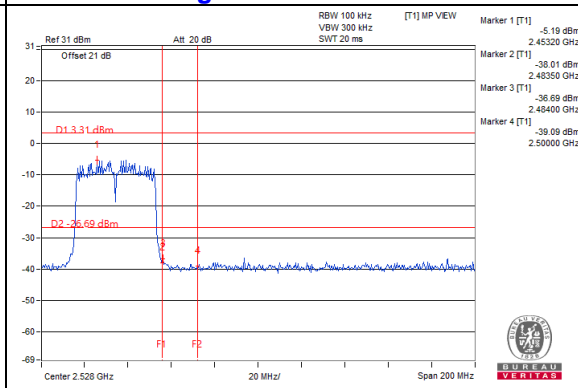
### CH 9 Band edge



### CH 10 Band edge



### CH 11 Band edge



## 5 Pictures of Test Arrangements

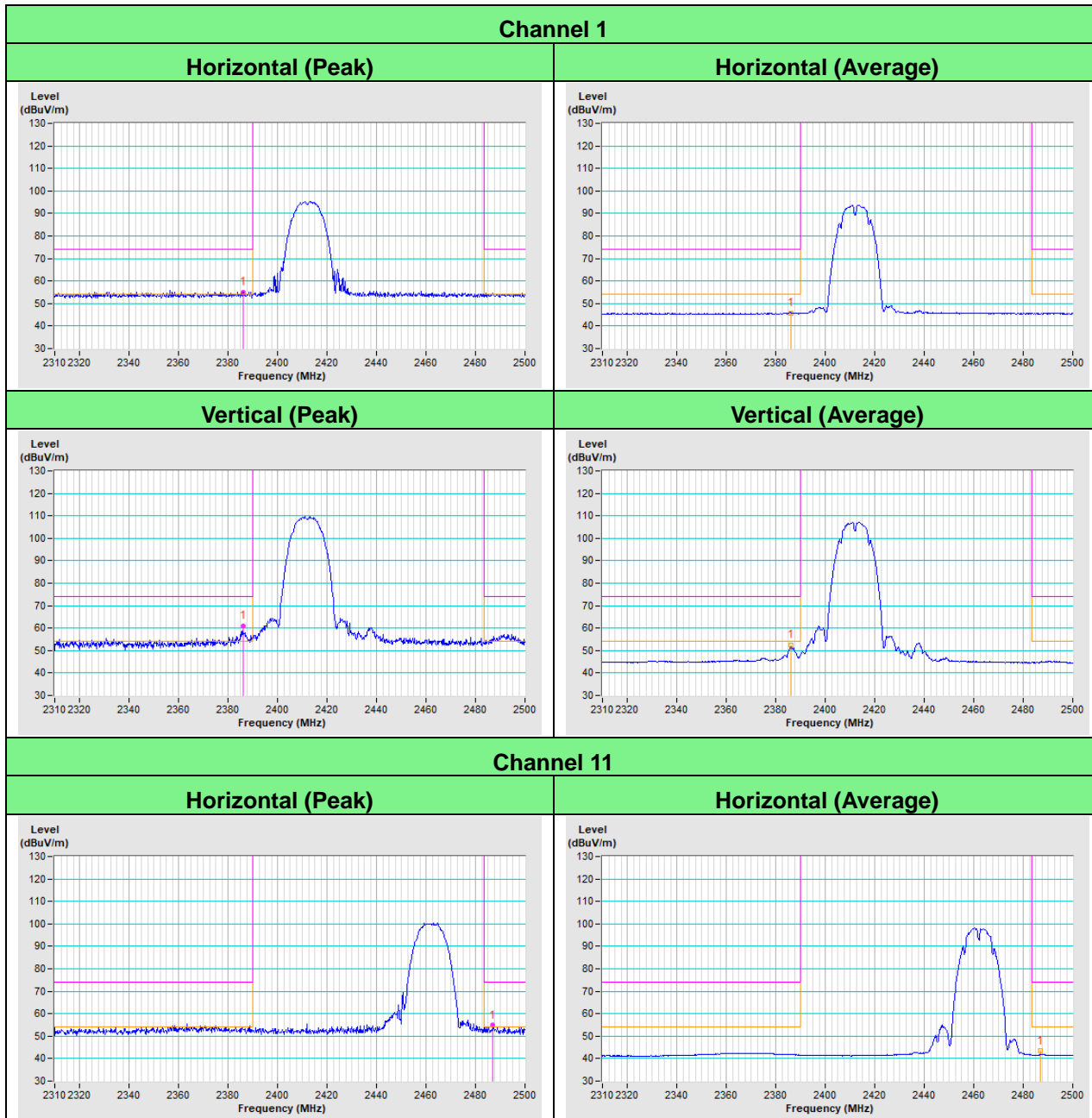
Please refer to the attached file (Test Setup Photo).

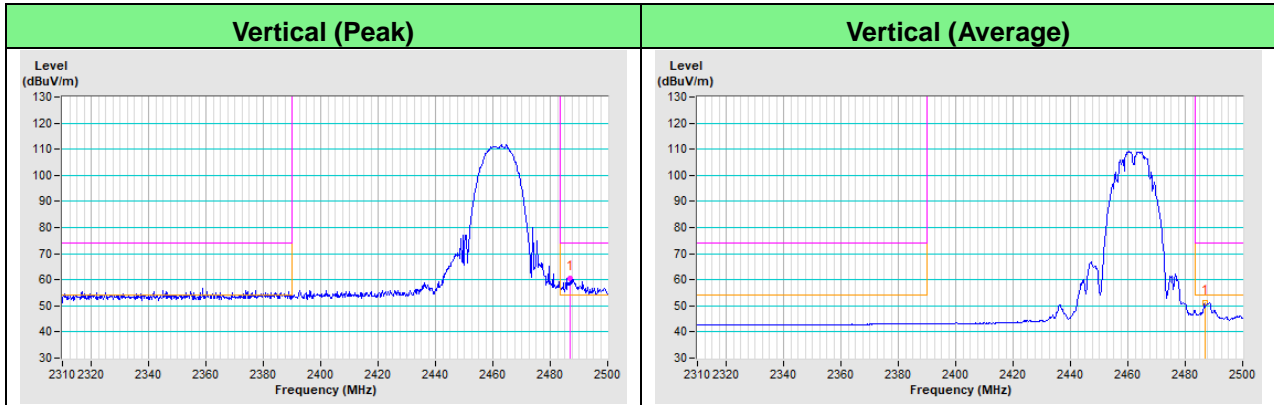
# Annex A - Band-Edge Measurement

## Annex A.1 - Test Results (Mode 1)

### Dipole Antenna

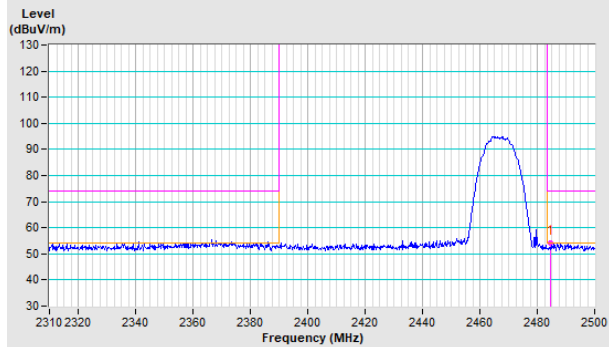
#### 802.11b



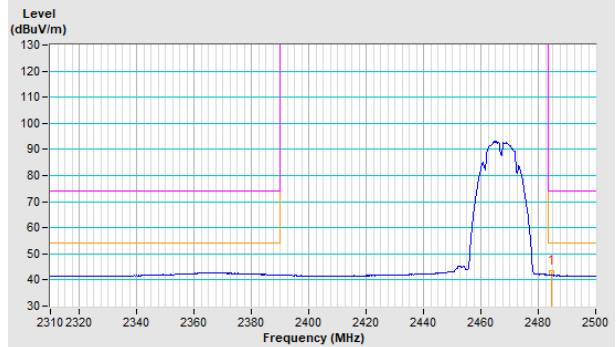


### Channel 12

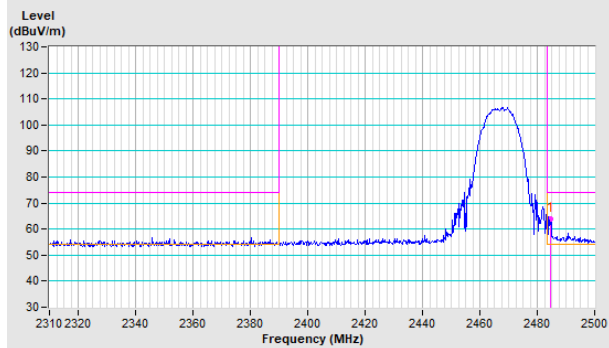
#### Horizontal (Peak)



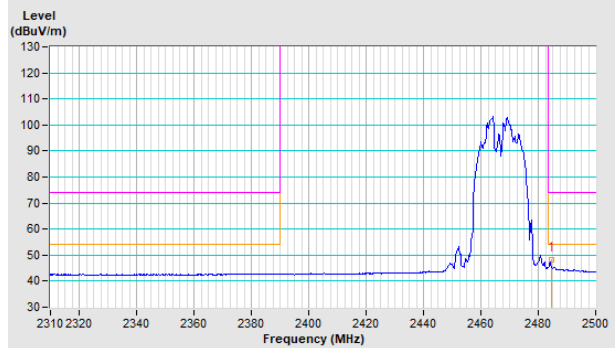
#### Horizontal (Average)



#### Vertical (Peak)

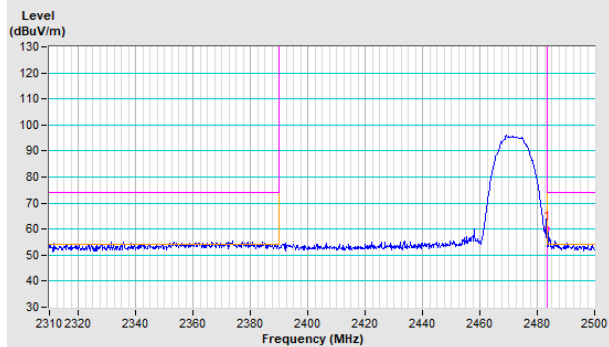


#### Vertical (Average)

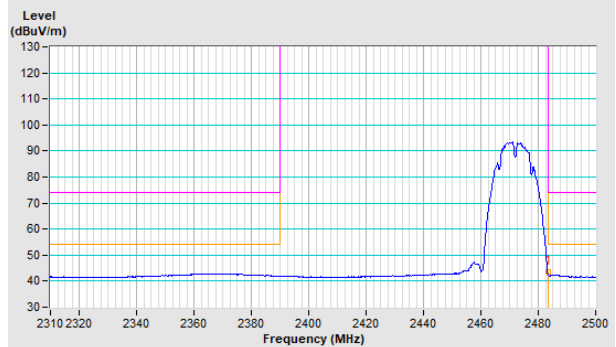


### Channel 13

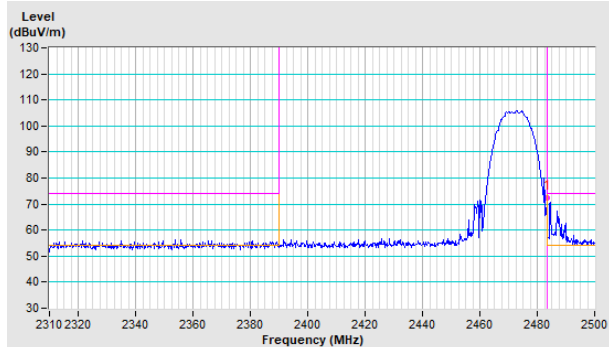
#### Horizontal (Peak)



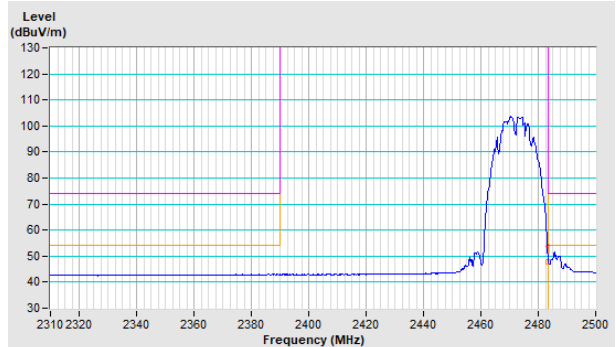
#### Horizontal (Average)



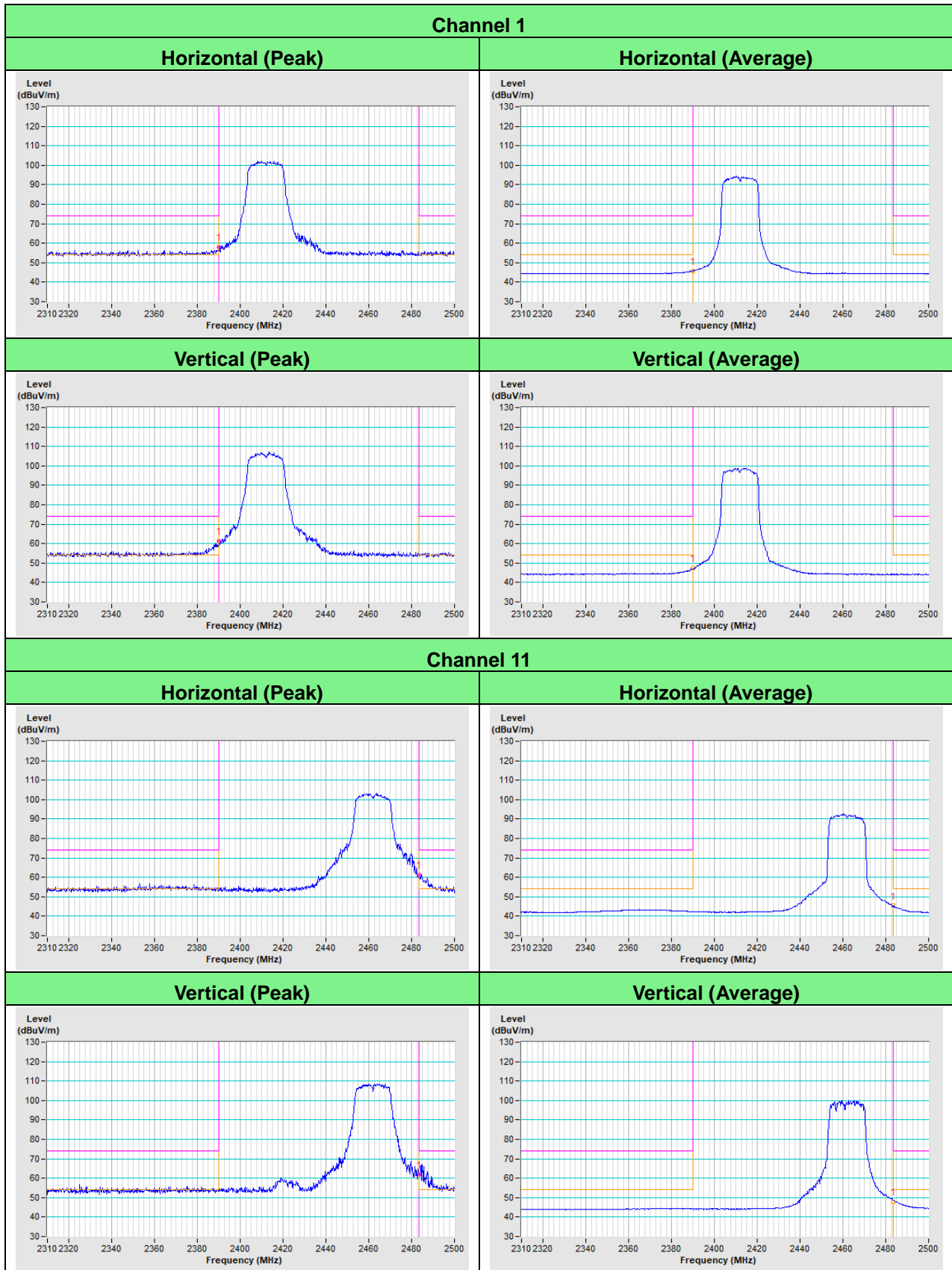
#### Vertical (Peak)



#### Vertical (Average)

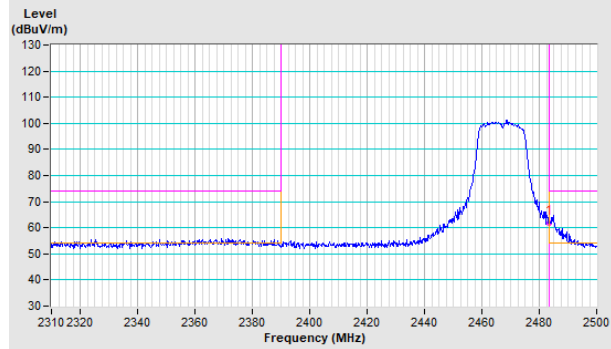


802.11g

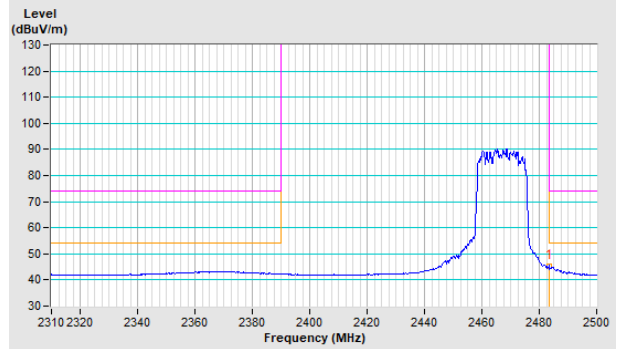


### Channel 12

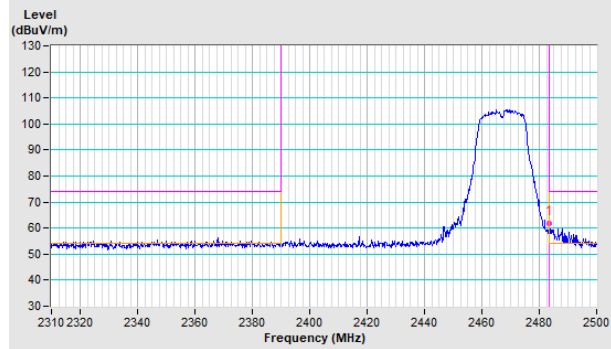
#### Horizontal (Peak)



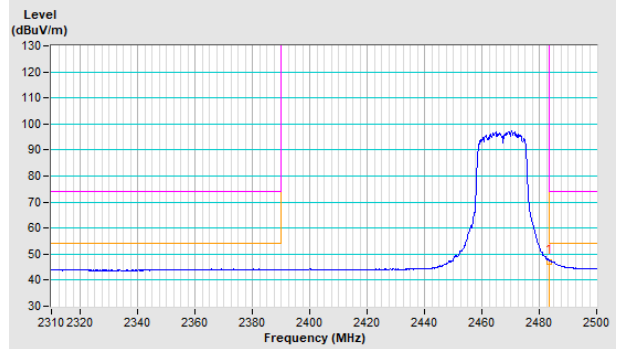
#### Horizontal (Average)



#### Vertical (Peak)

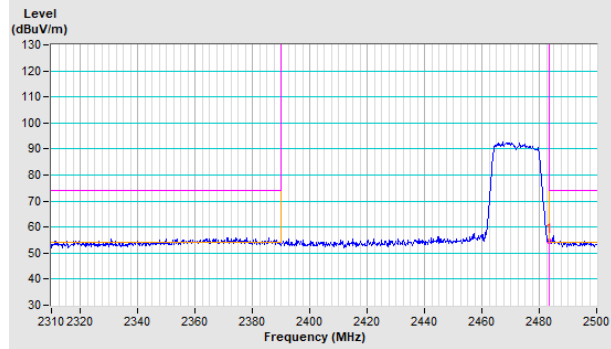


#### Vertical (Average)

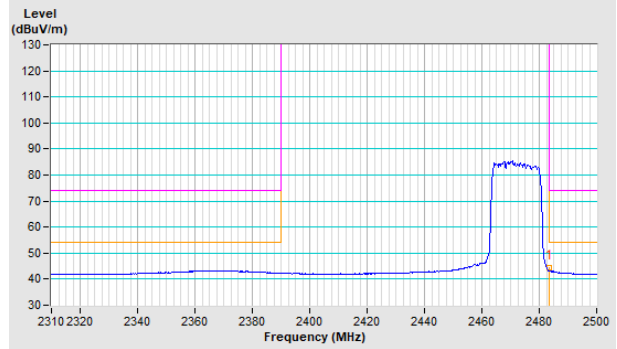


### Channel 13

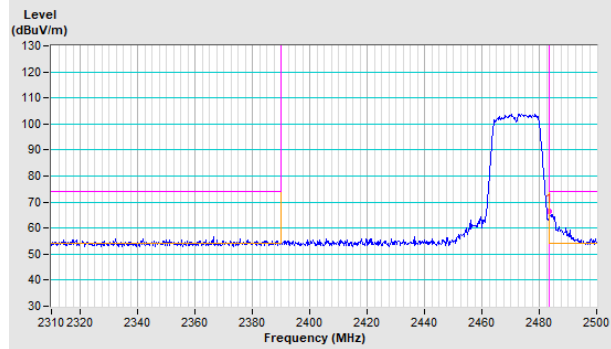
#### Horizontal (Peak)



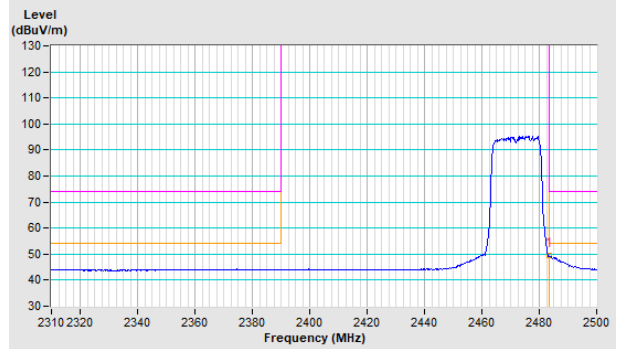
#### Horizontal (Average)



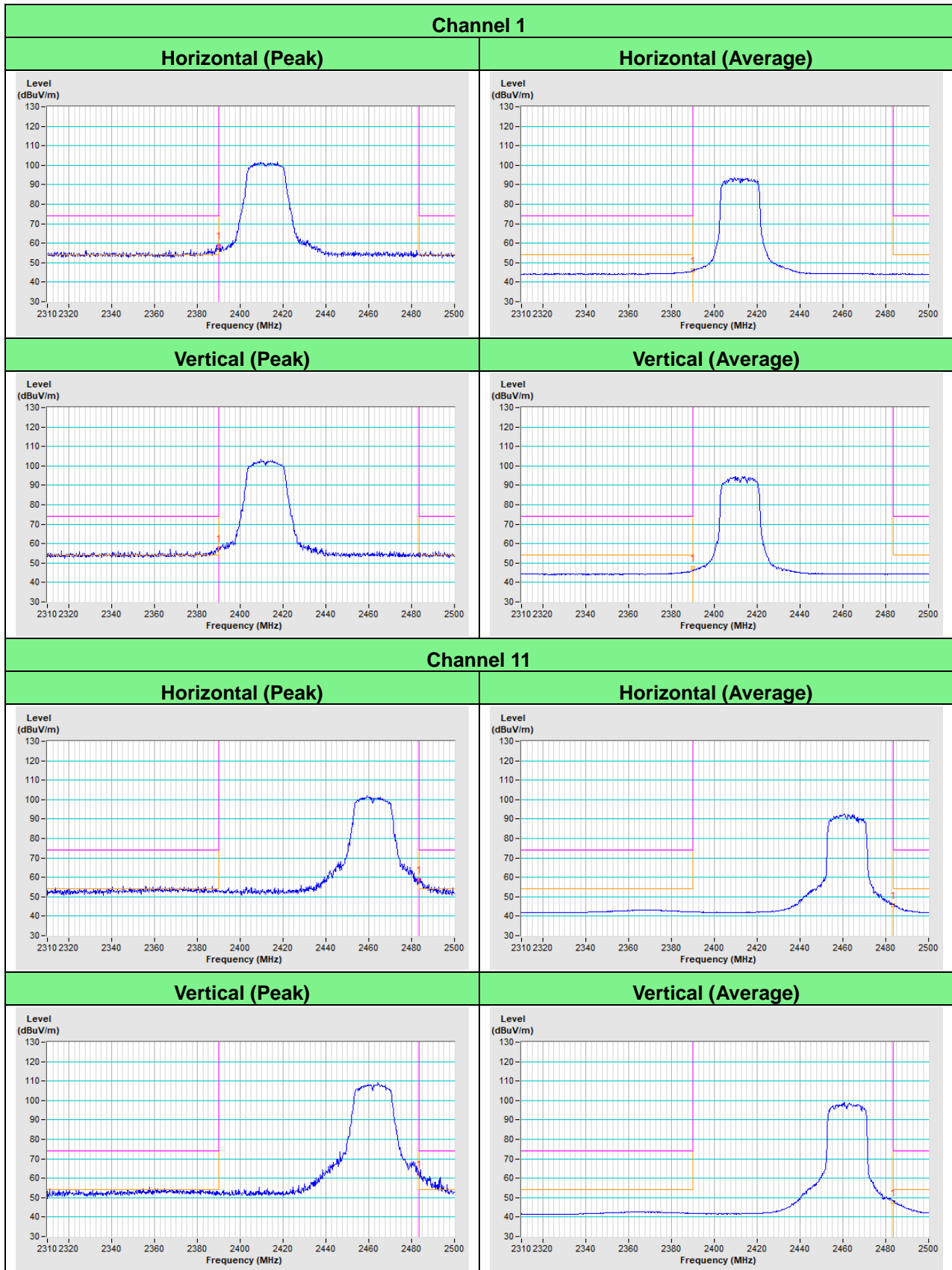
#### Vertical (Peak)



#### Vertical (Average)



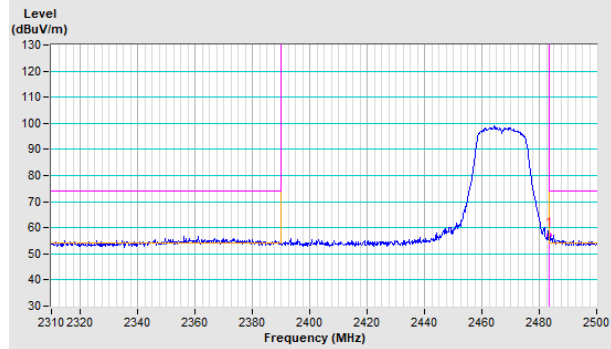
VHT20



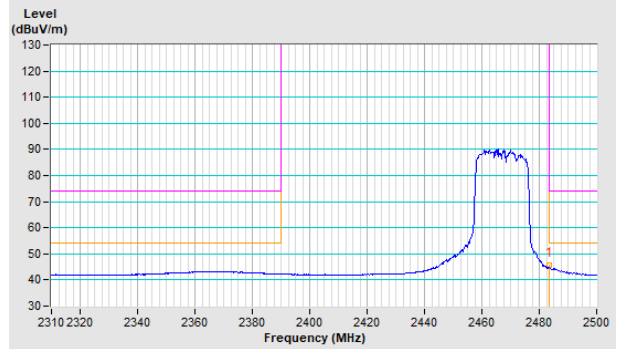


### Channel 12

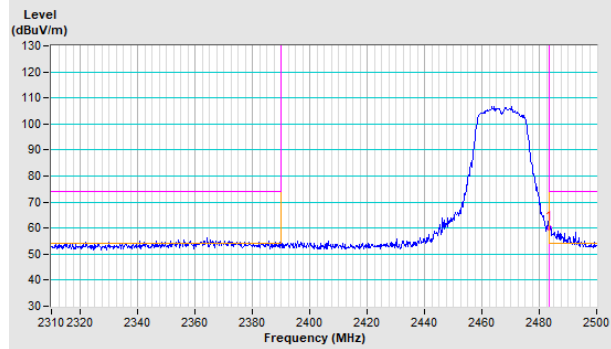
#### Horizontal (Peak)



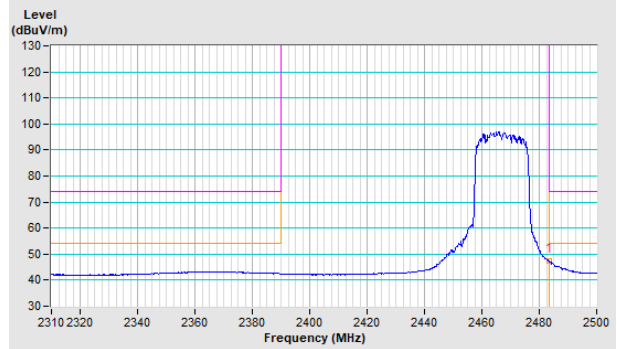
#### Horizontal (Average)



#### Vertical (Peak)

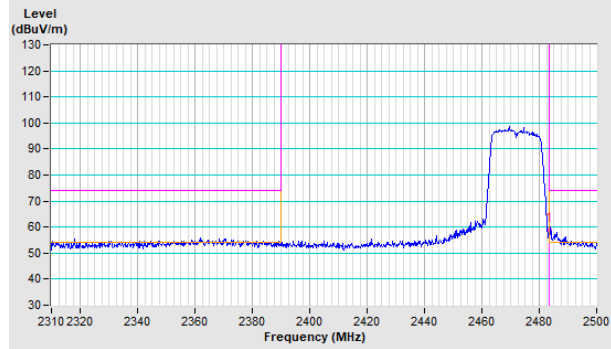


#### Vertical (Average)

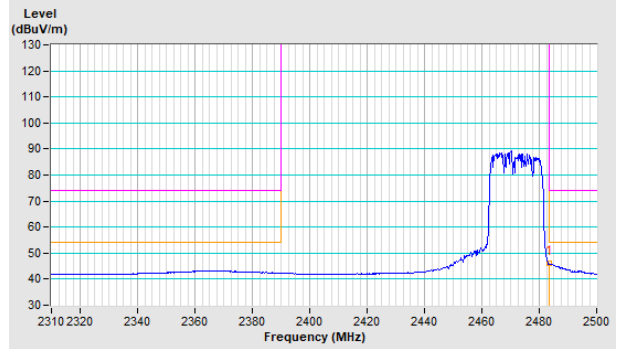


### Channel 13

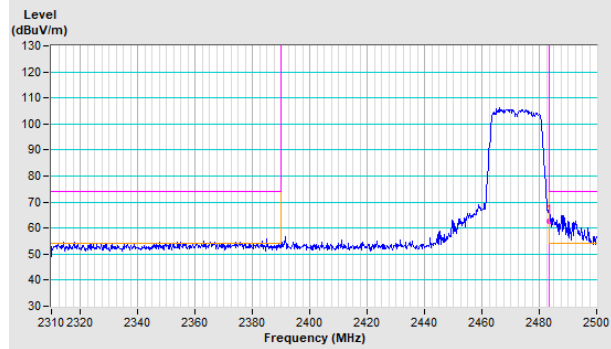
#### Horizontal (Peak)



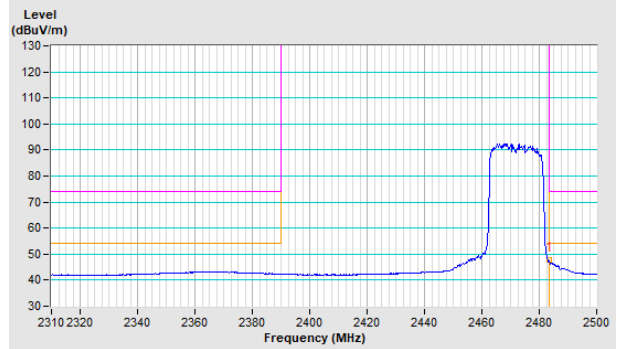
#### Horizontal (Average)



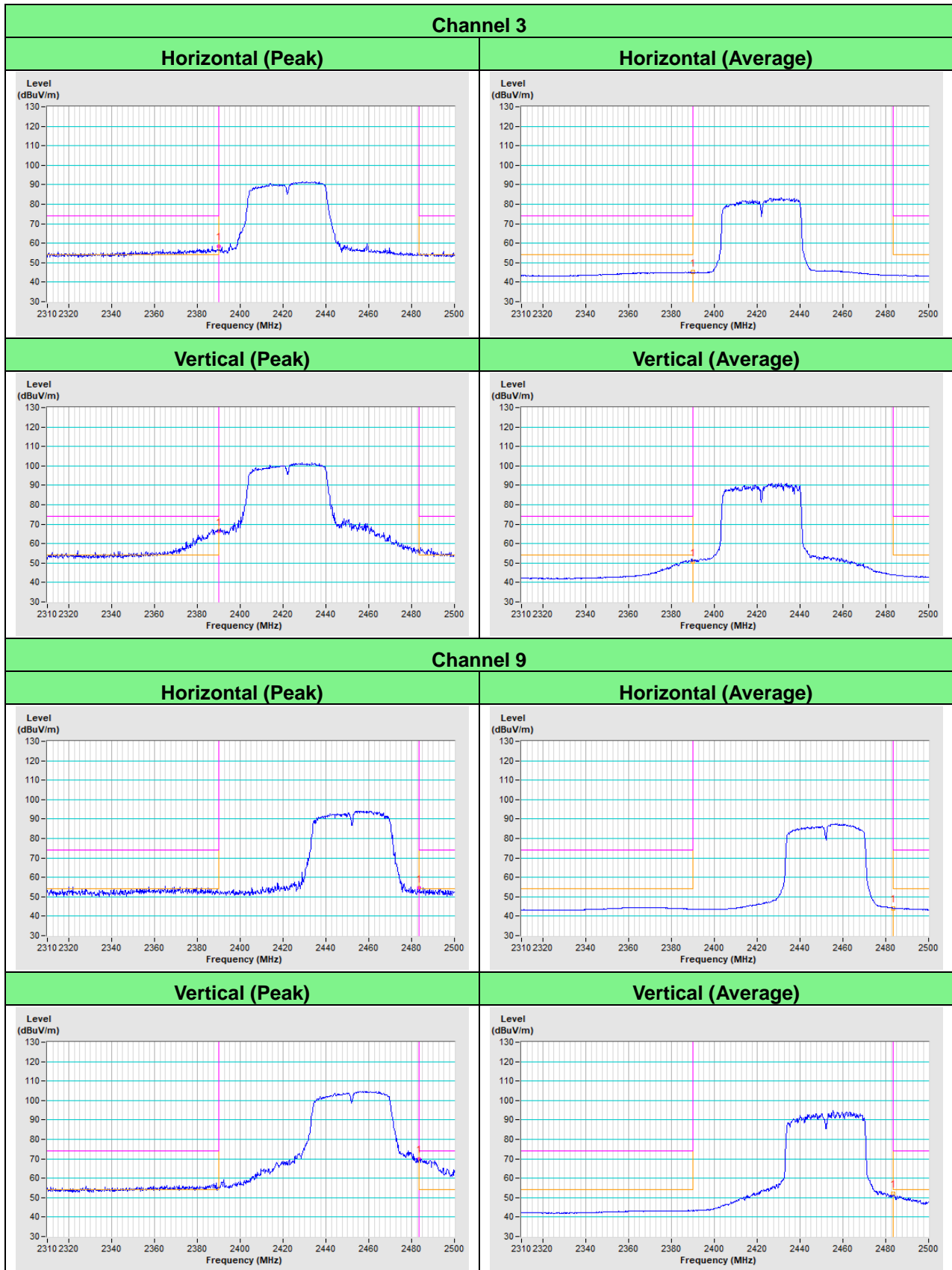
#### Vertical (Peak)



#### Vertical (Average)

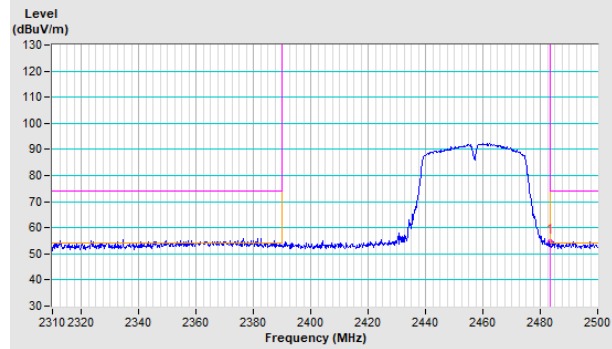


VHT40

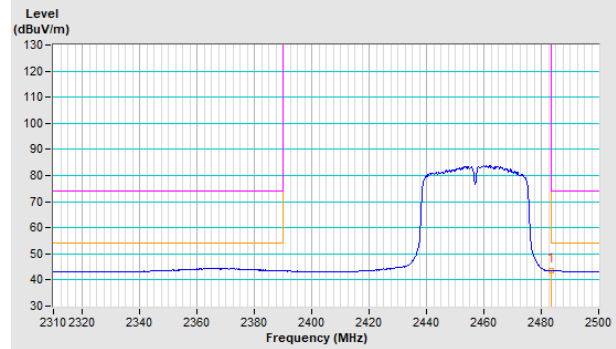


### Channel 10

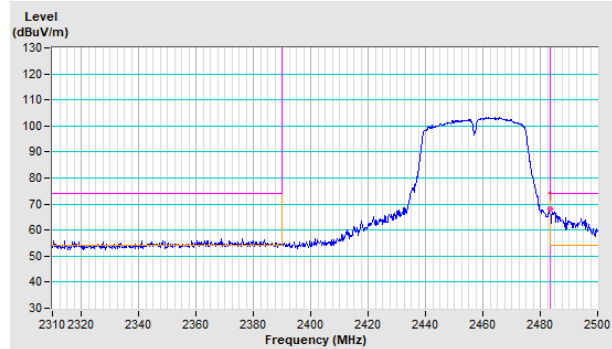
#### Horizontal (Peak)



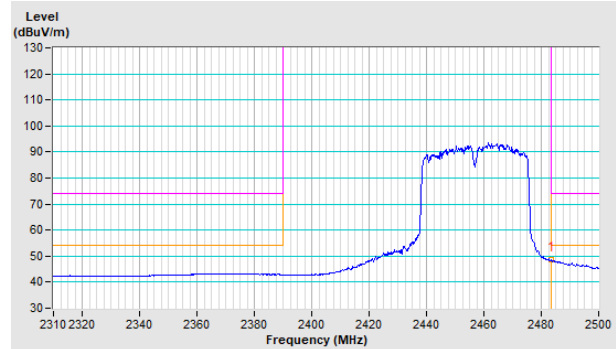
#### Horizontal (Average)



#### Vertical (Peak)

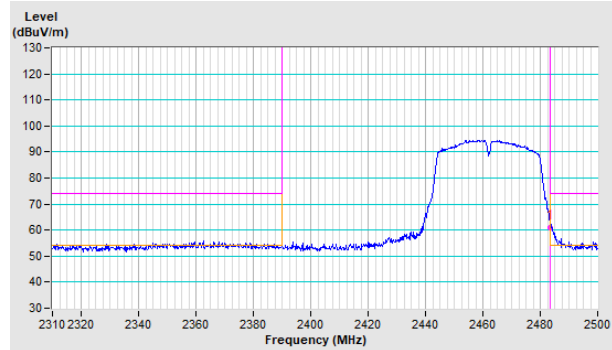


#### Vertical (Average)

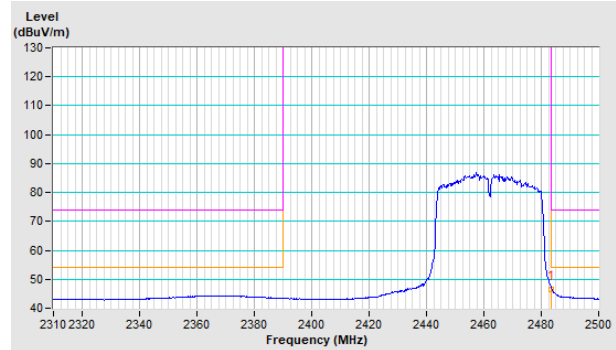


### Channel 11

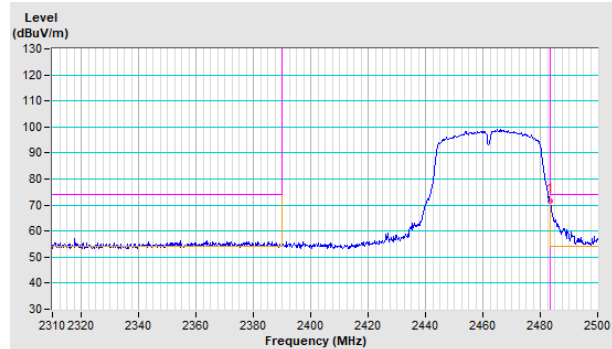
#### Horizontal (Peak)



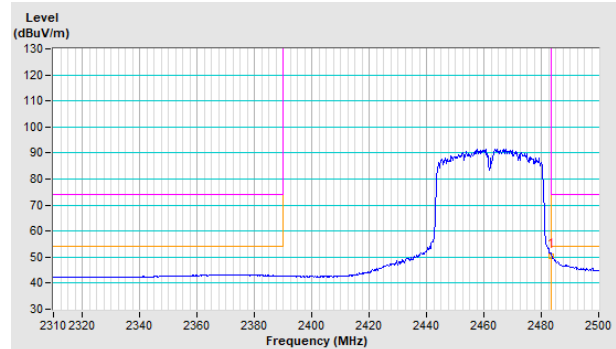
#### Horizontal (Average)



#### Vertical (Peak)

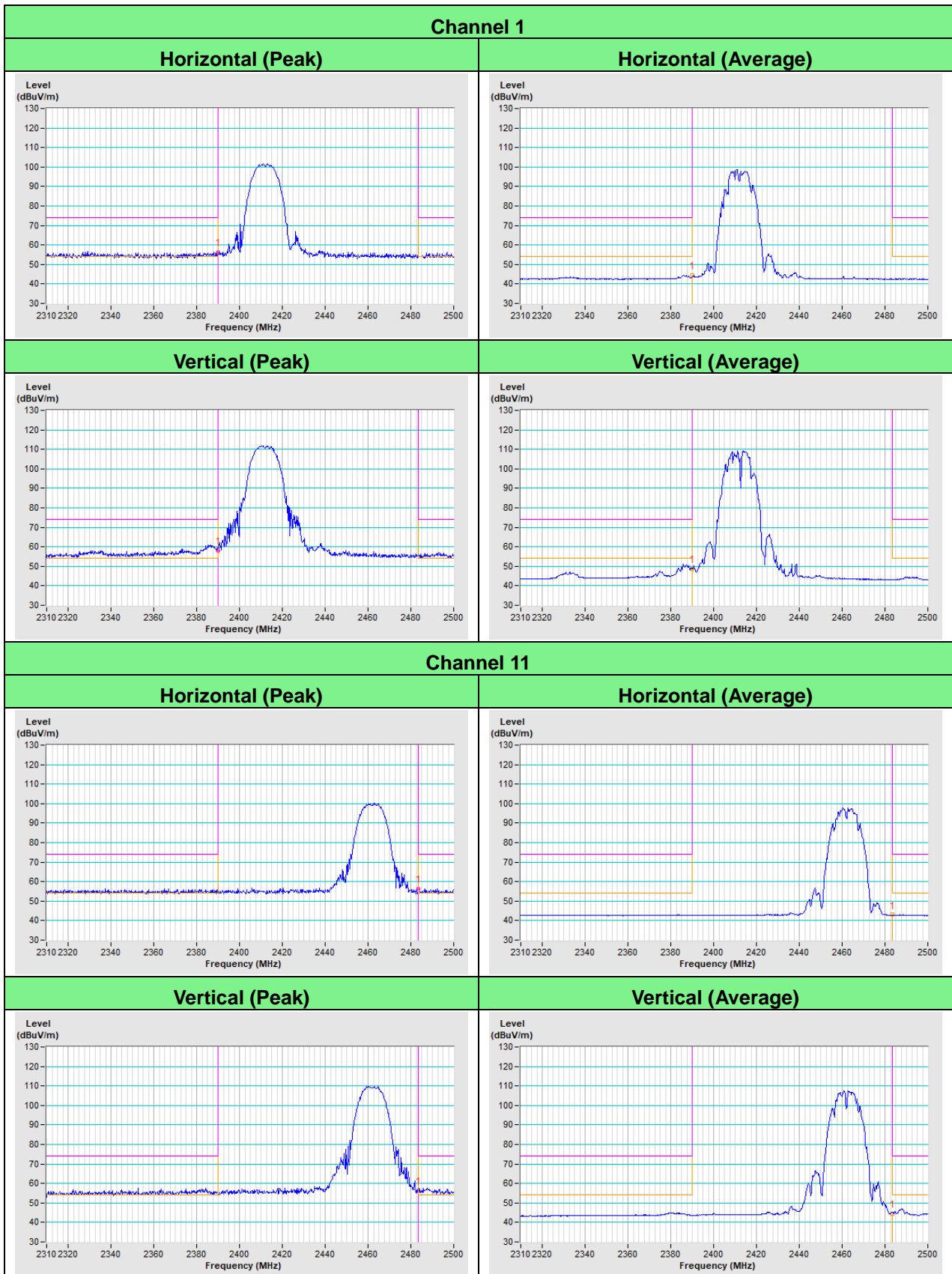


#### Vertical (Average)



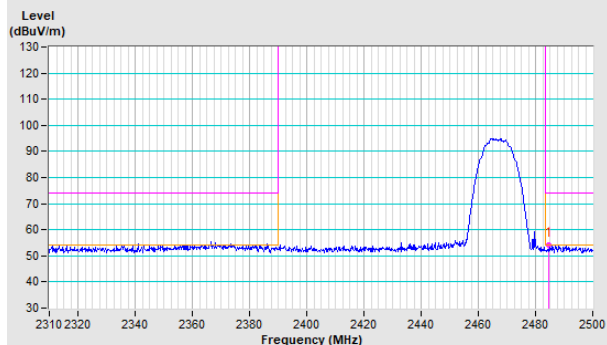
**PIFA Antenna**

**802.11b**

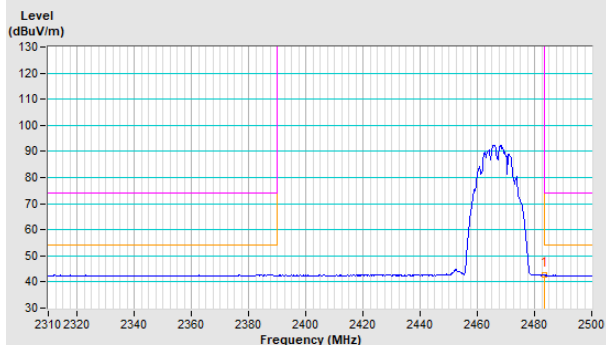


### Channel 12

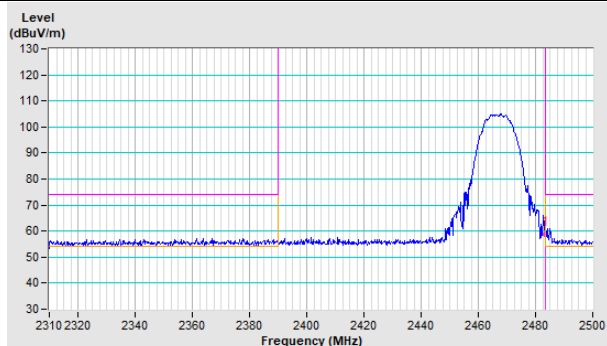
#### Horizontal (Peak)



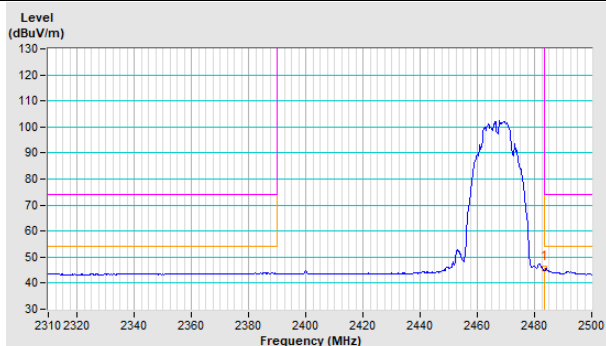
#### Horizontal (Average)



#### Vertical (Peak)

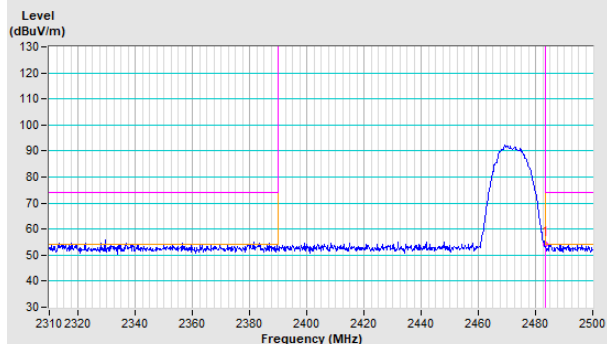


#### Vertical (Average)

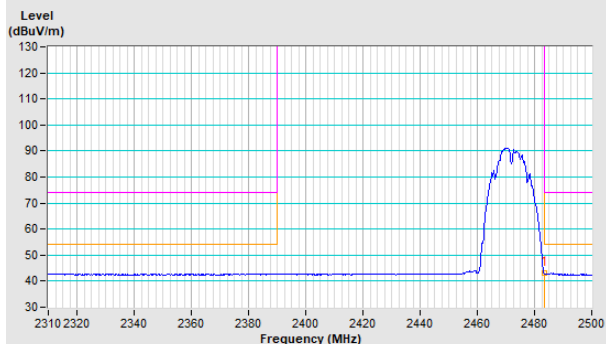


### Channel 13

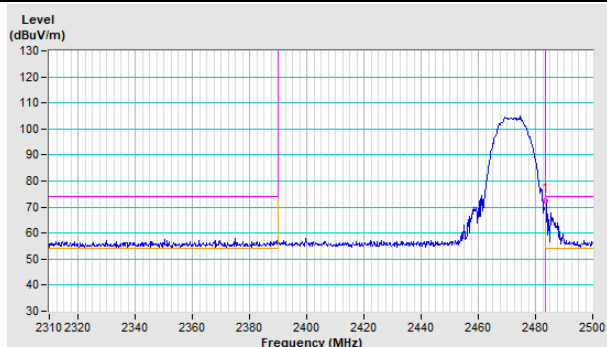
#### Horizontal (Peak)



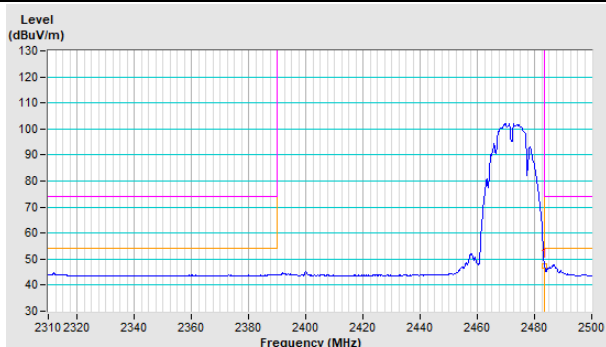
#### Horizontal (Average)



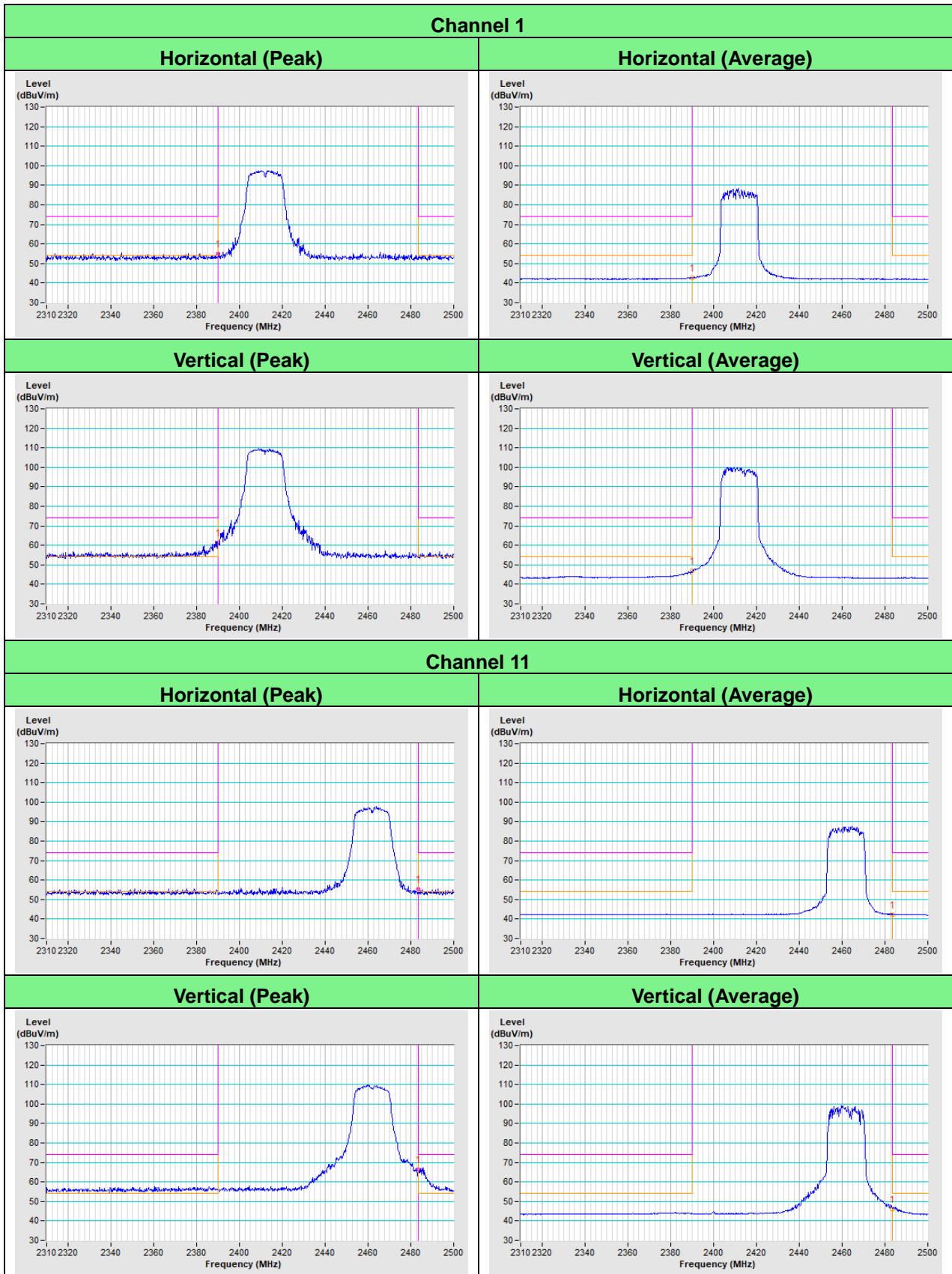
#### Vertical (Peak)



#### Vertical (Average)

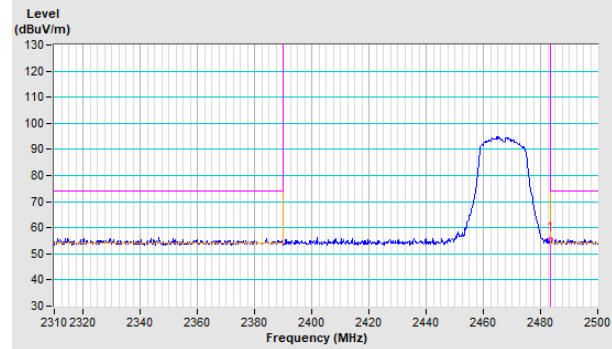


802.11g

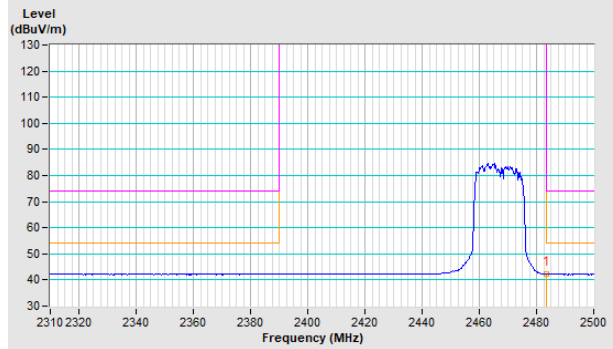


### Channel 12

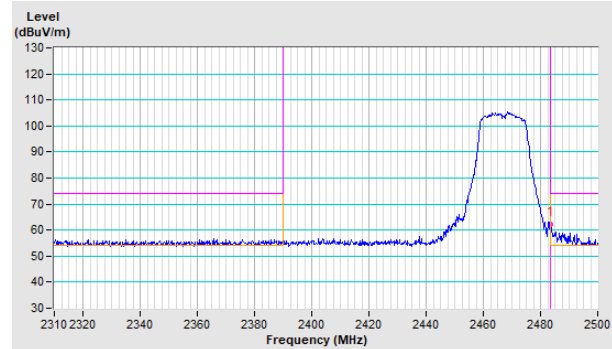
#### Horizontal (Peak)



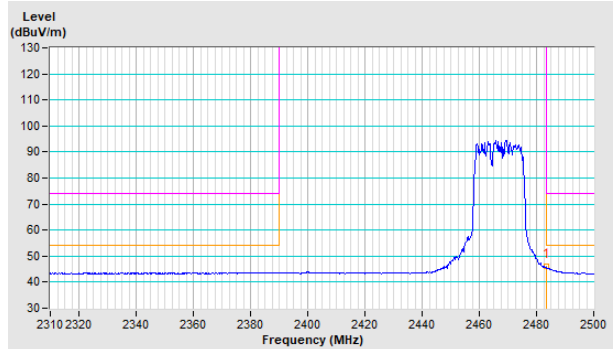
#### Horizontal (Average)



#### Vertical (Peak)

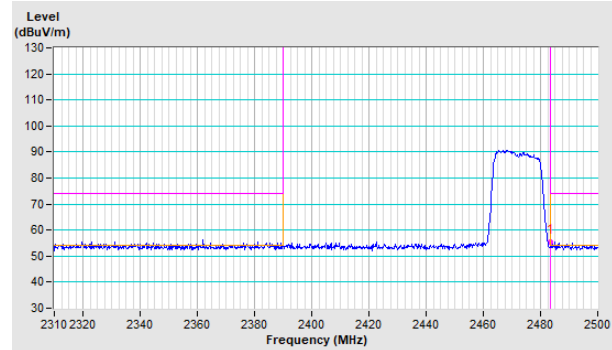


#### Vertical (Average)

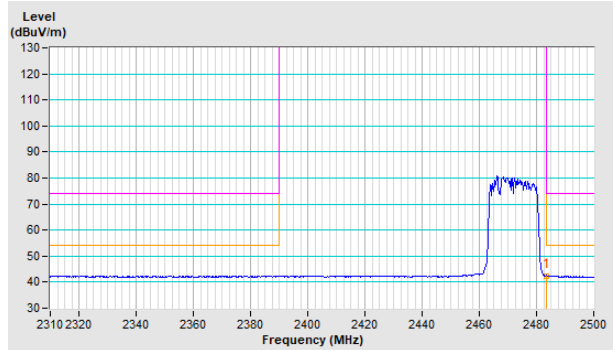


### Channel 13

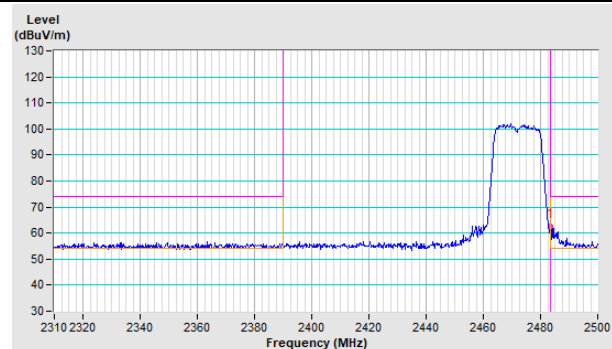
#### Horizontal (Peak)



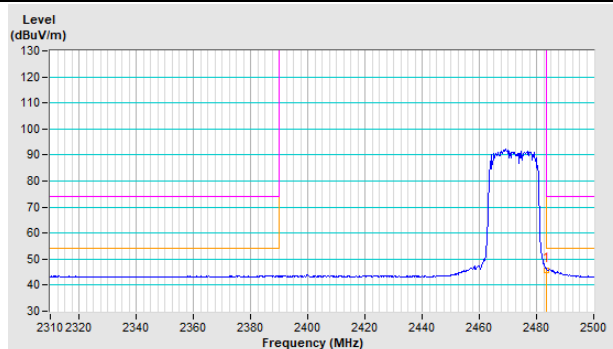
#### Horizontal (Average)



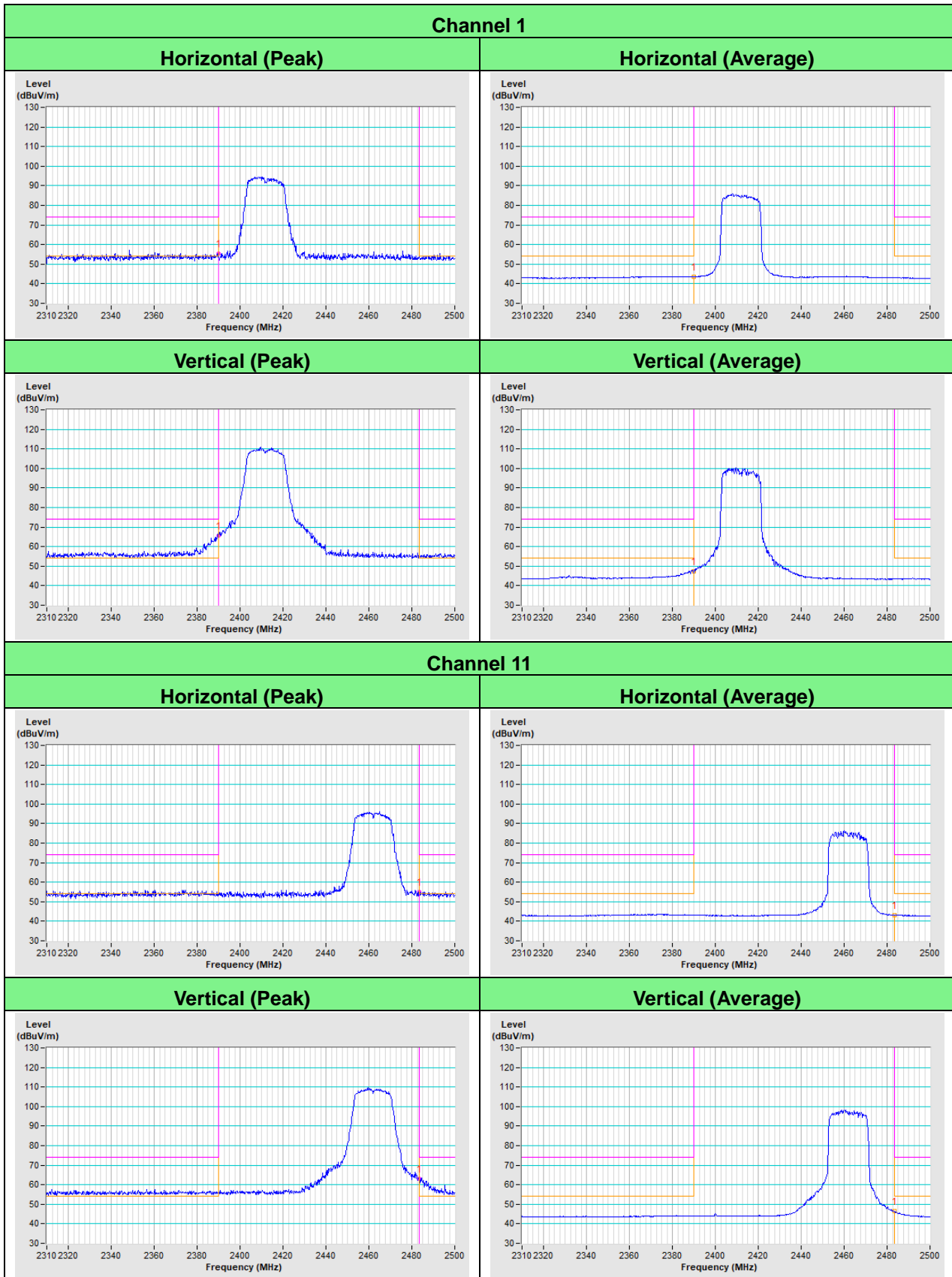
#### Vertical (Peak)



#### Vertical (Average)



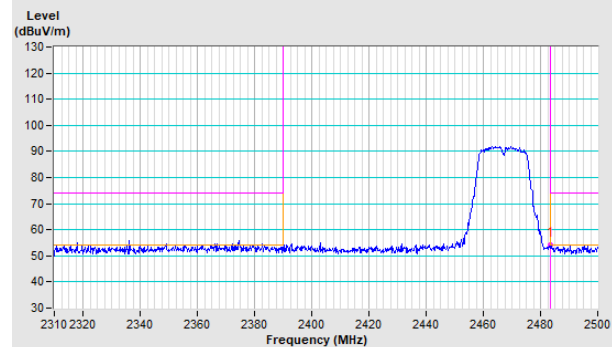
VHT20



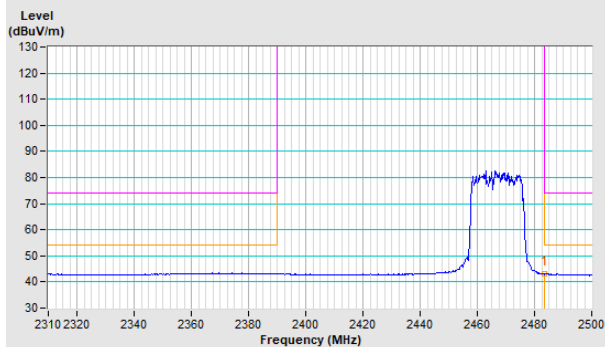


### Channel 12

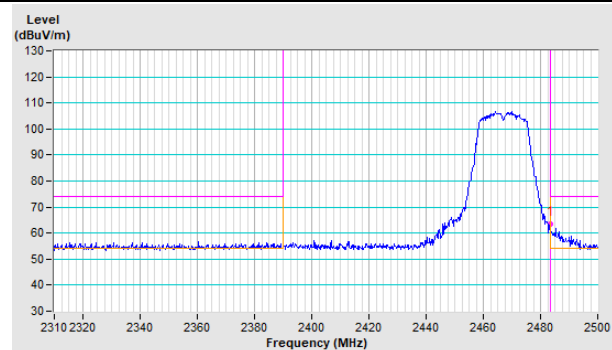
#### Horizontal (Peak)



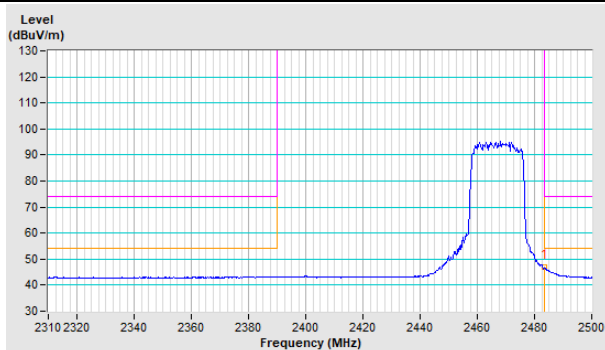
#### Horizontal (Average)



#### Vertical (Peak)

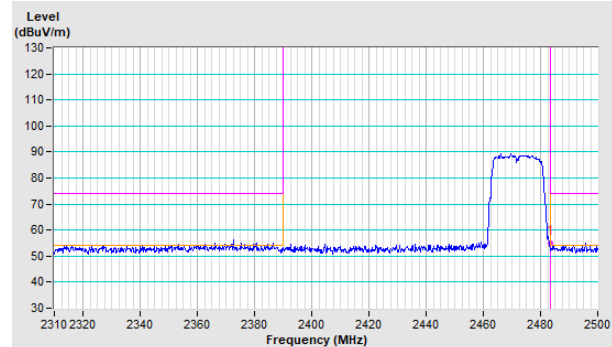


#### Vertical (Average)

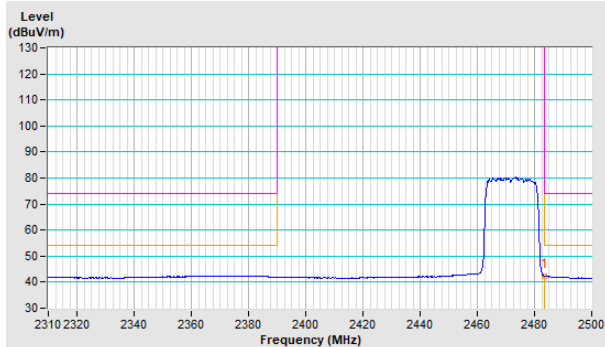


### Channel 13

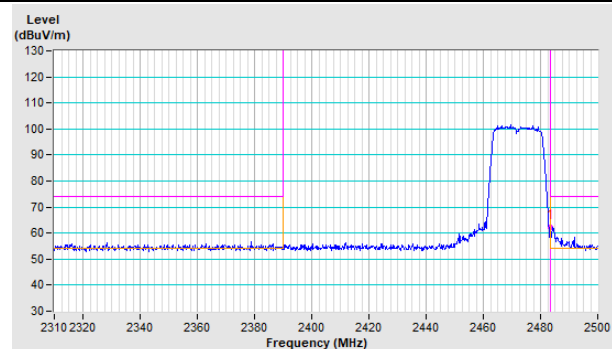
#### Horizontal (Peak)



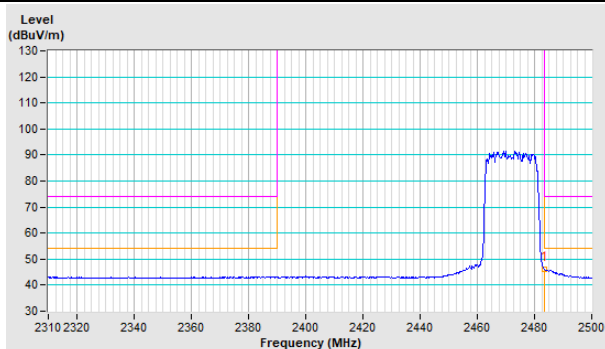
#### Horizontal (Average)



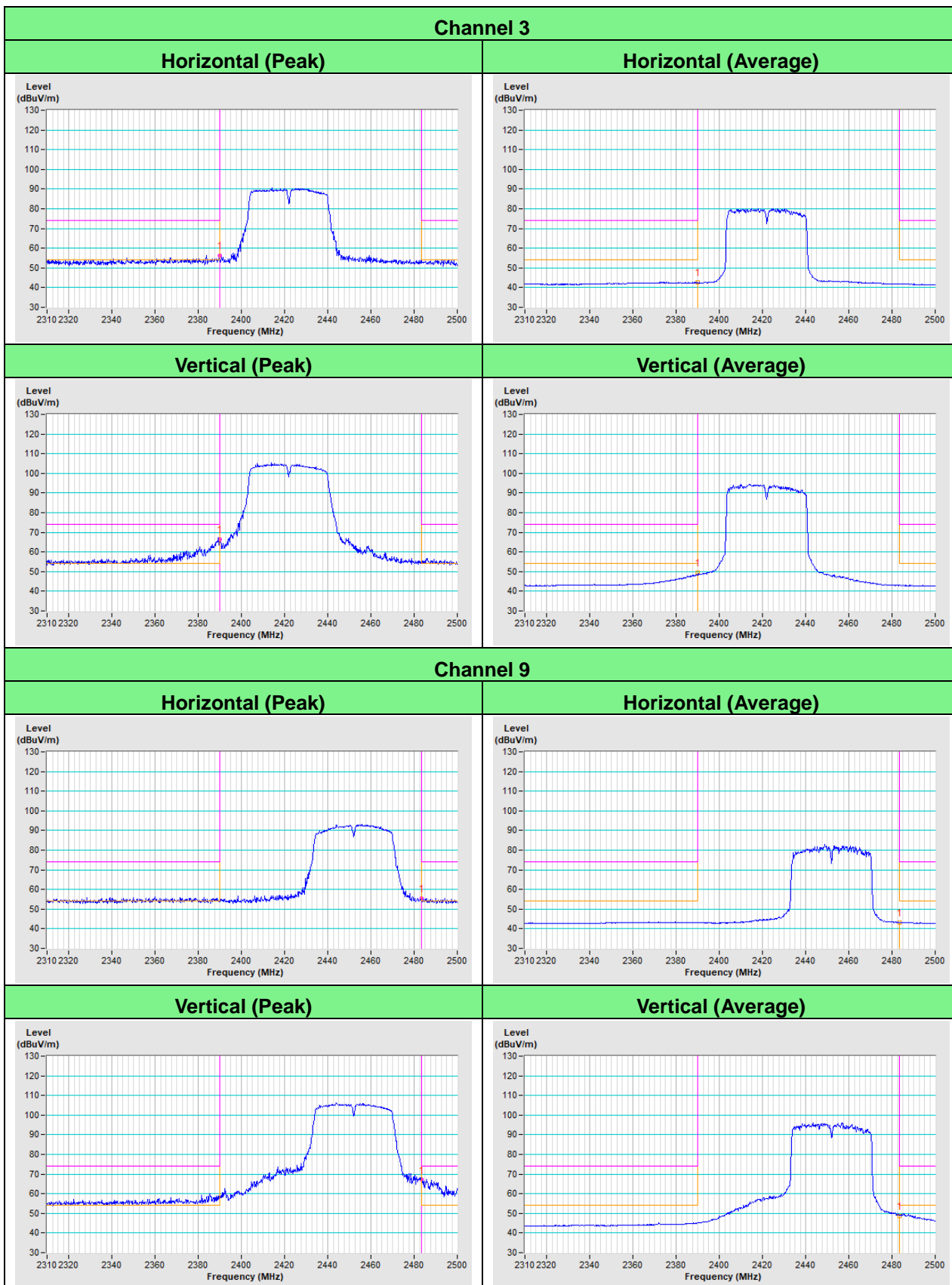
#### Vertical (Peak)



#### Vertical (Average)

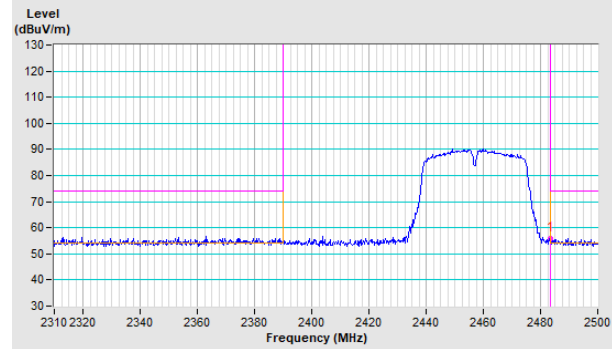


VHT40

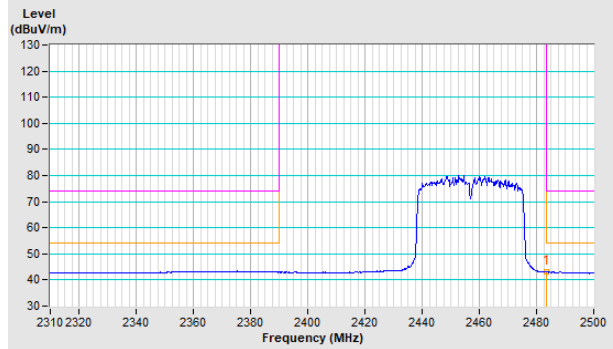


### Channel 10

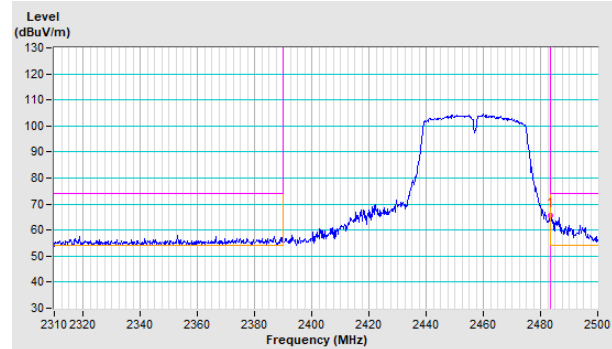
#### Horizontal (Peak)



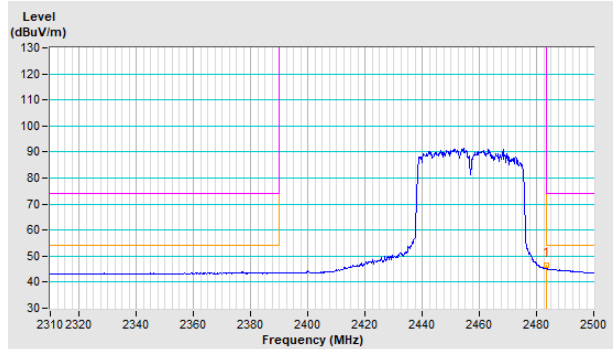
#### Horizontal (Average)



#### Vertical (Peak)

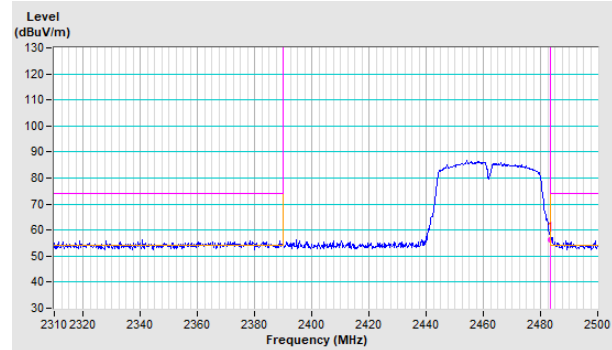


#### Vertical (Average)

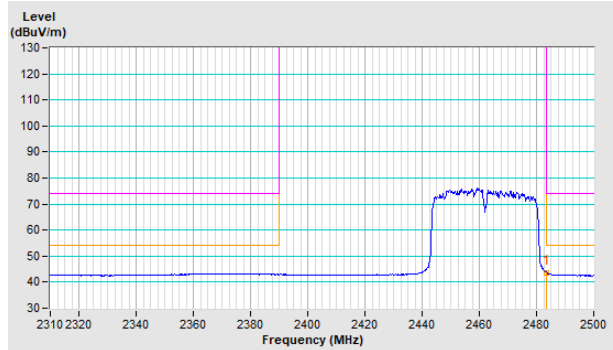


### Channel 11

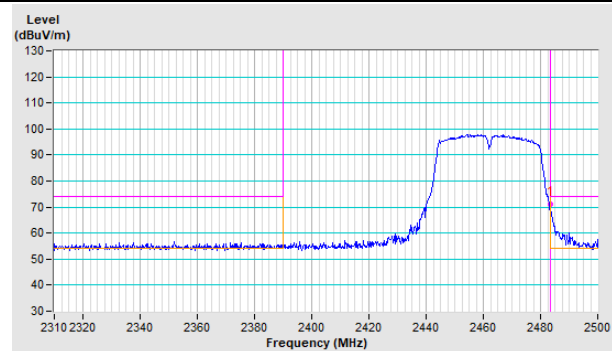
#### Horizontal (Peak)



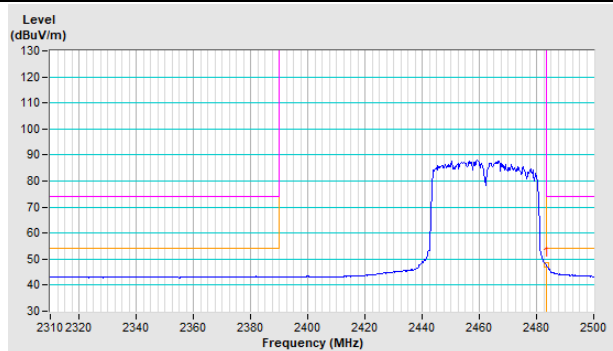
#### Horizontal (Average)



#### Vertical (Peak)



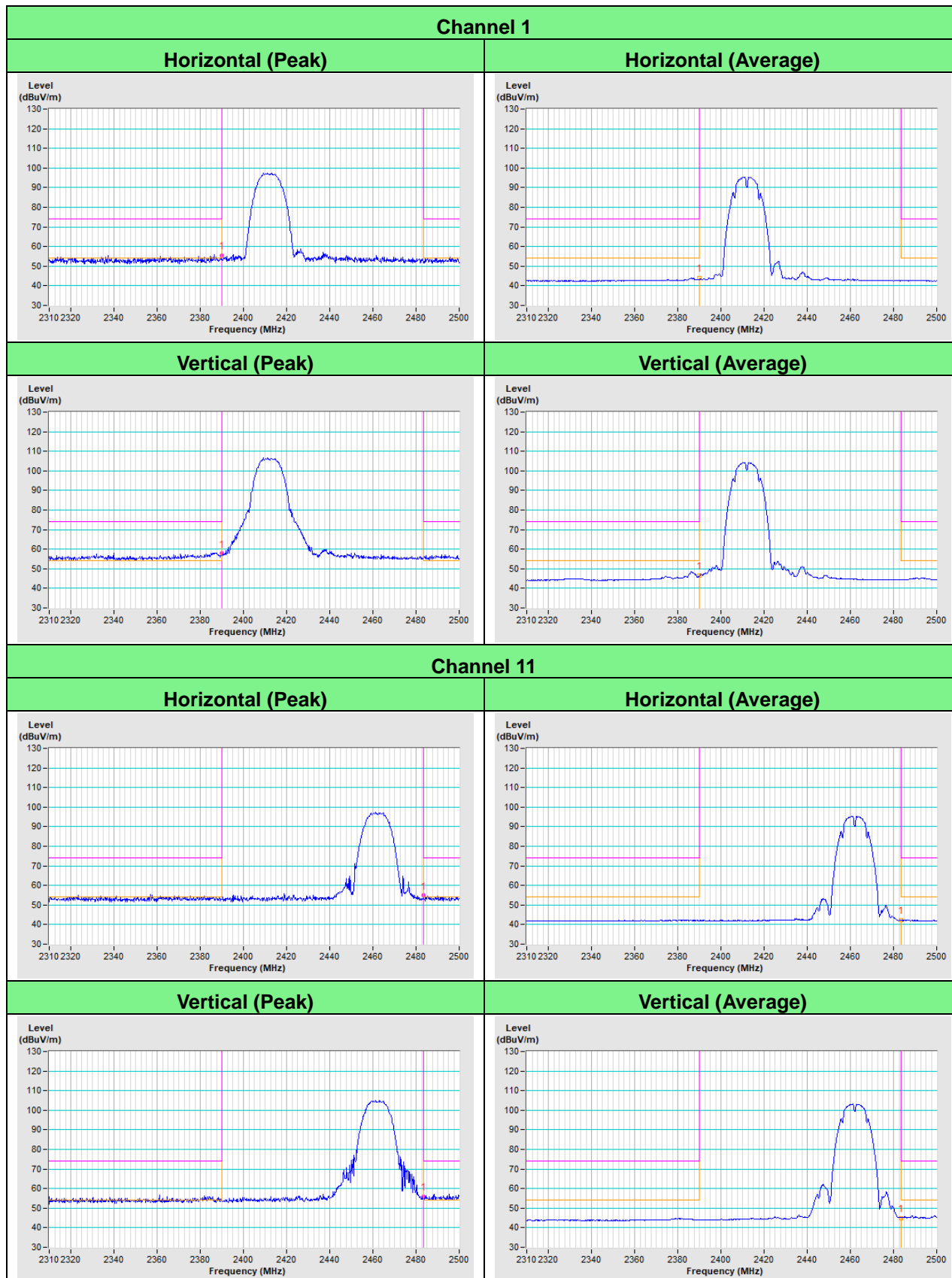
#### Vertical (Average)



## Annex A.2 - Test Results (Mode 2)

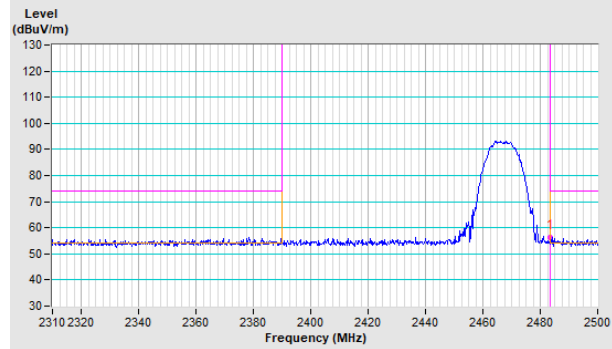
### Dipole Antenna

802.11b

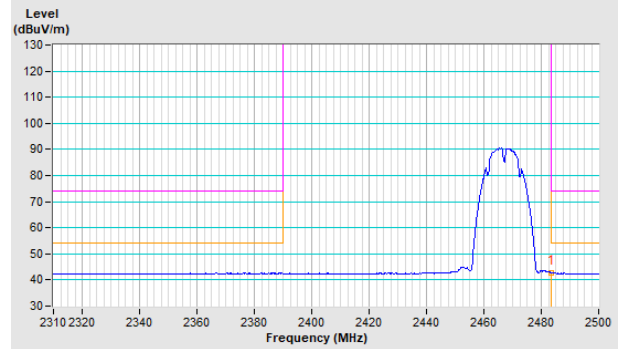


### Channel 12

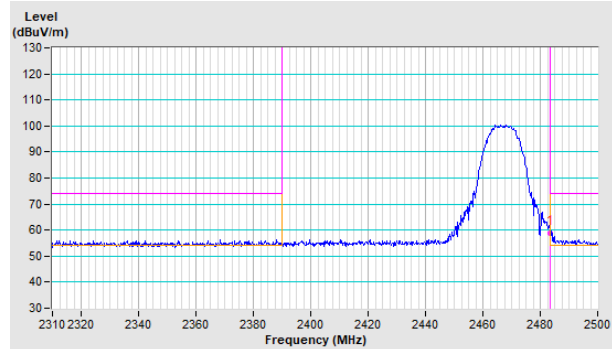
#### Horizontal (Peak)



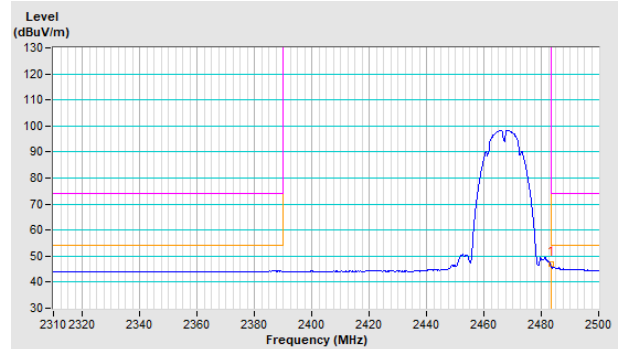
#### Horizontal (Average)



#### Vertical (Peak)

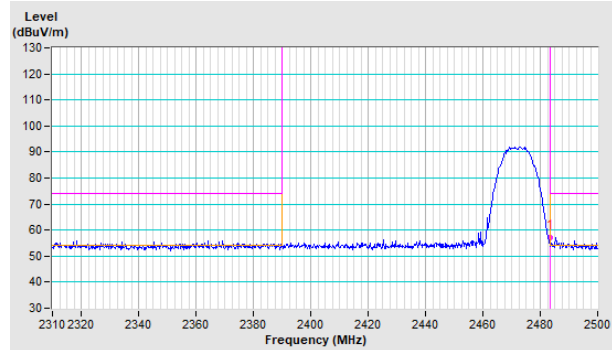


#### Vertical (Average)

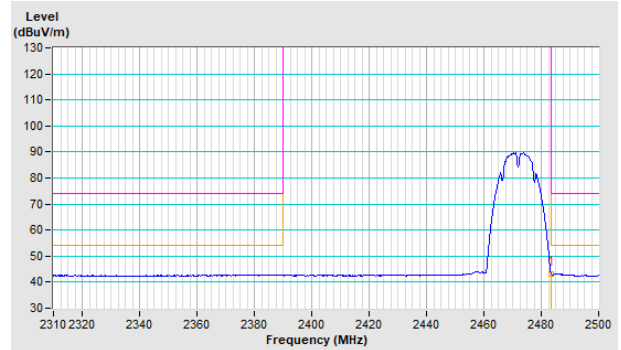


### Channel 13

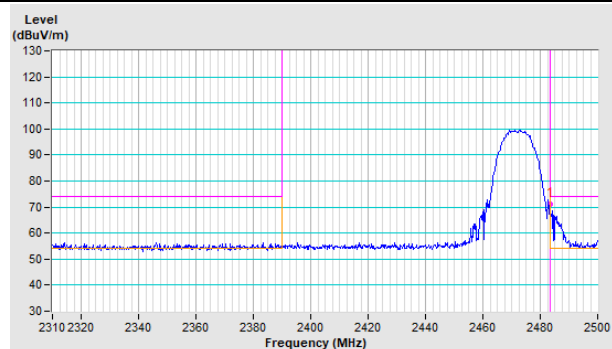
#### Horizontal (Peak)



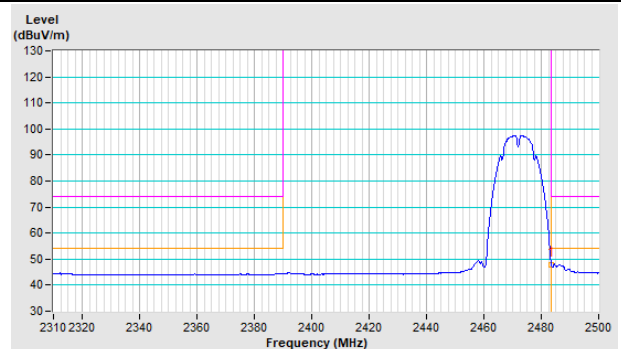
#### Horizontal (Average)



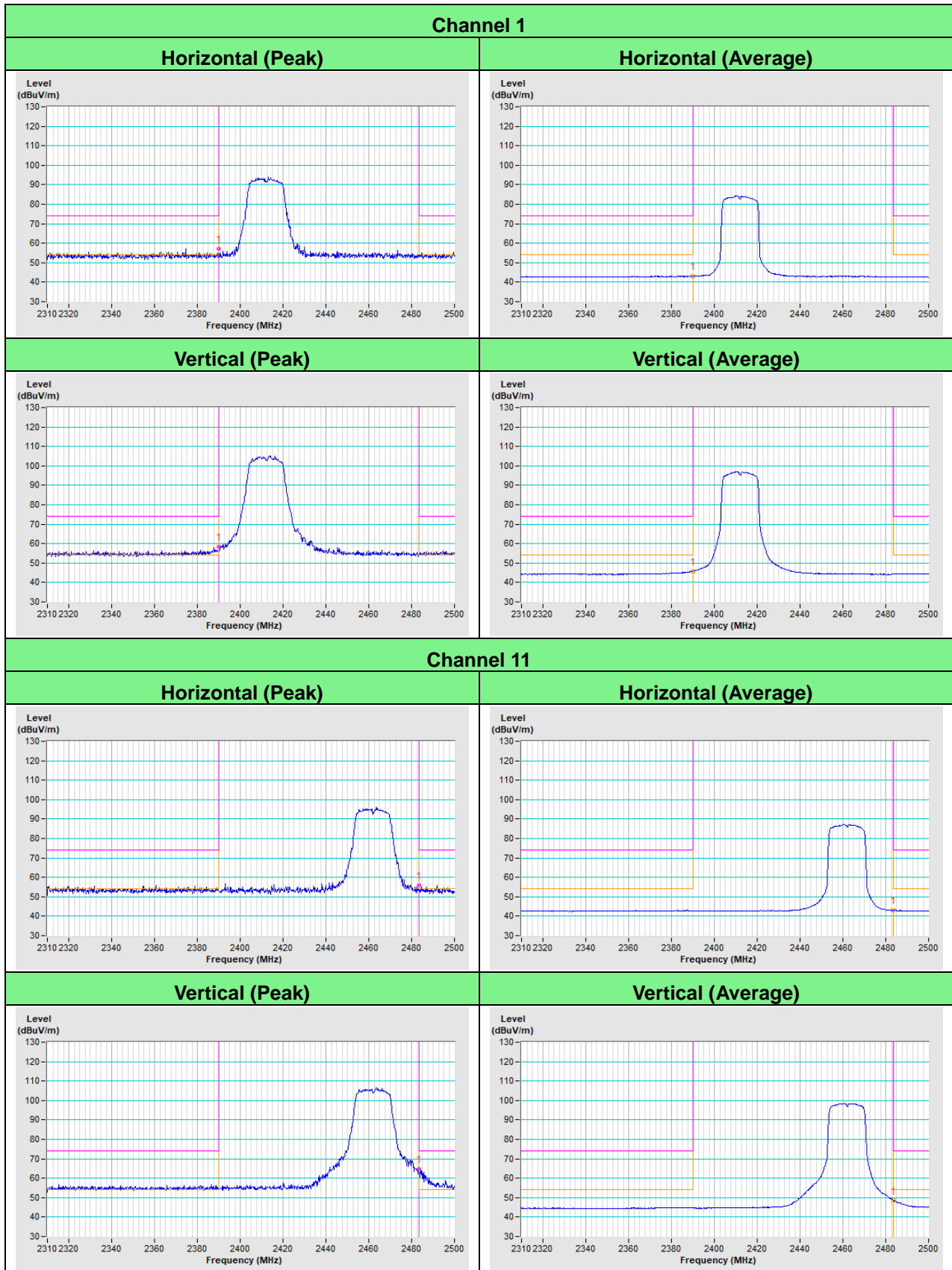
#### Vertical (Peak)



#### Vertical (Average)

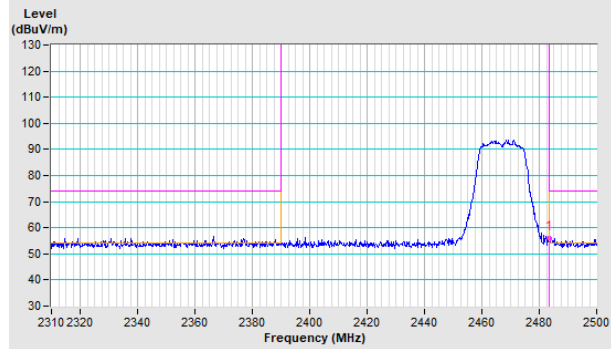


802.11g

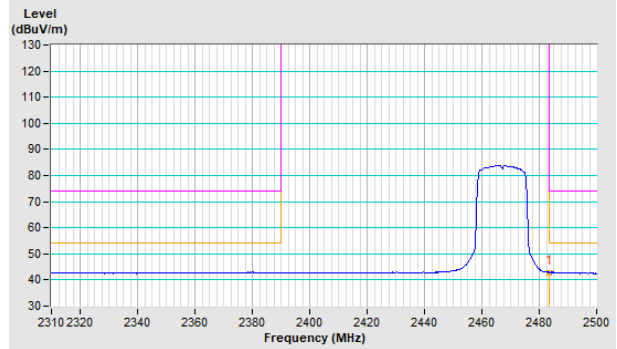


### Channel 12

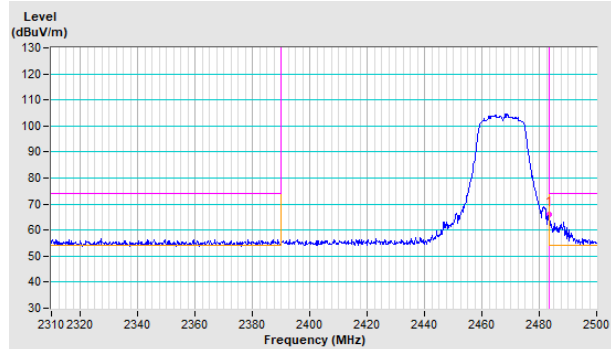
#### Horizontal (Peak)



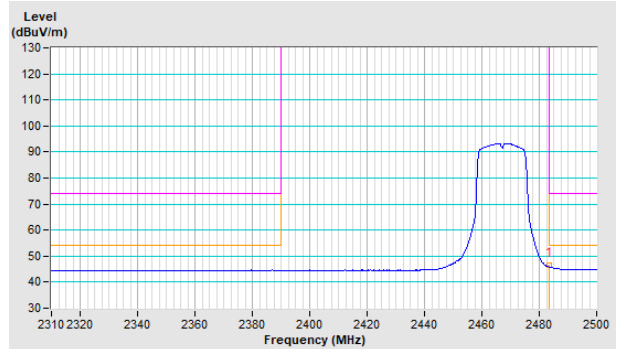
#### Horizontal (Average)



#### Vertical (Peak)

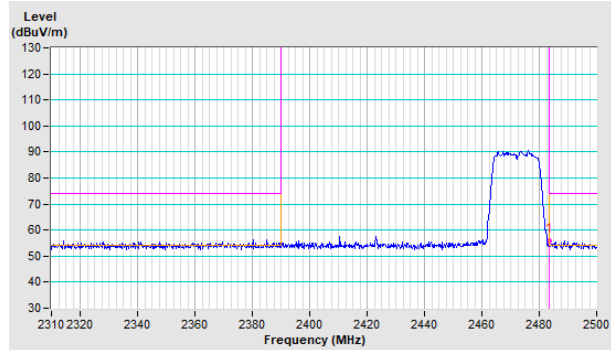


#### Vertical (Average)

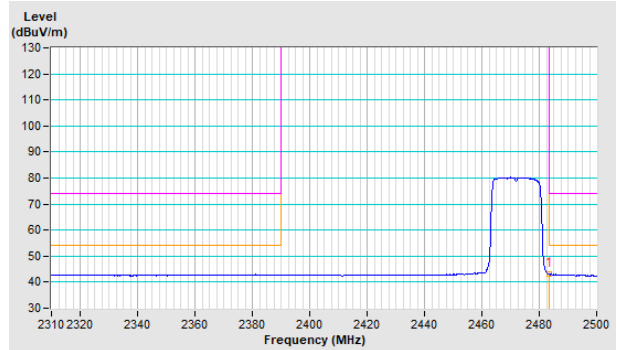


### Channel 13

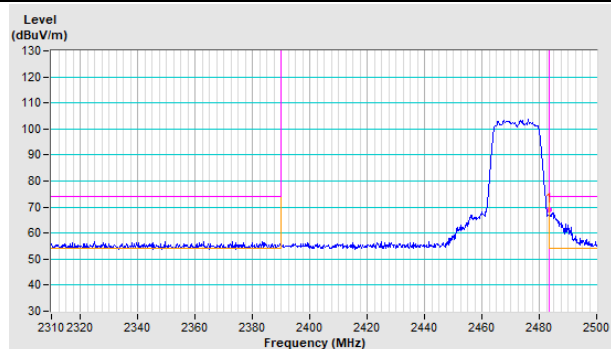
#### Horizontal (Peak)



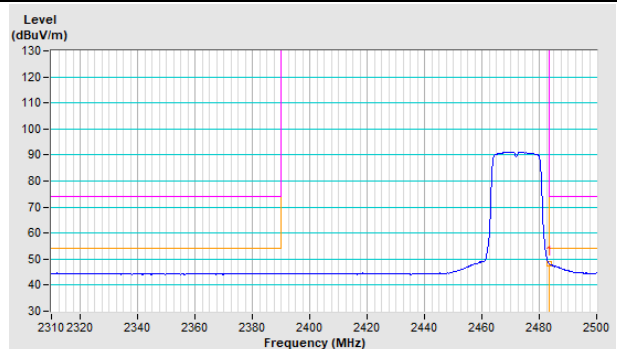
#### Horizontal (Average)



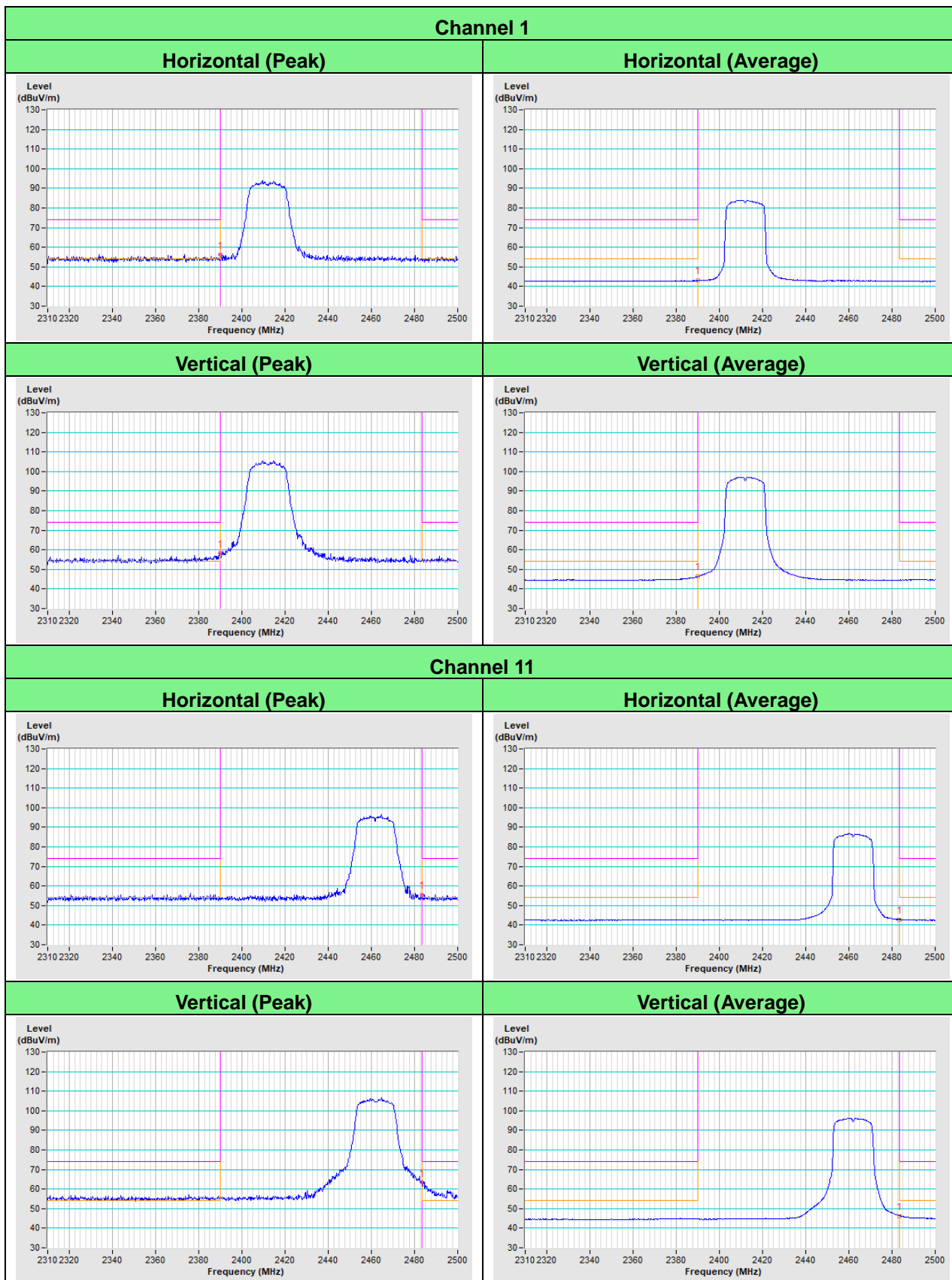
#### Vertical (Peak)



#### Vertical (Average)



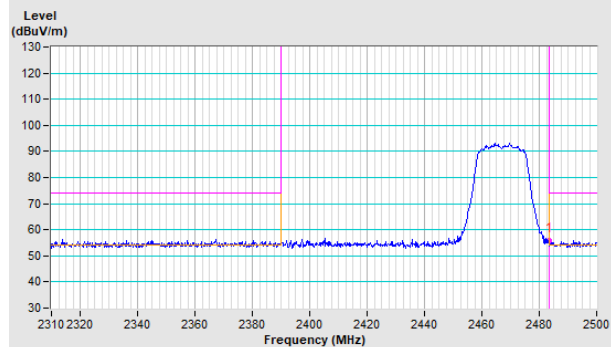
VHT20



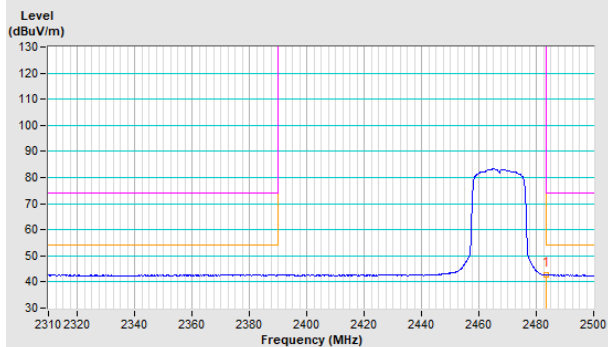


### Channel 12

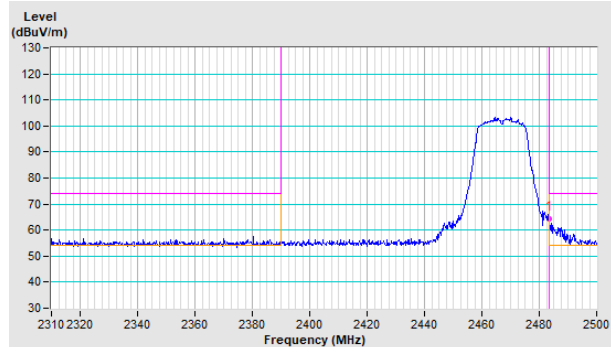
#### Horizontal (Peak)



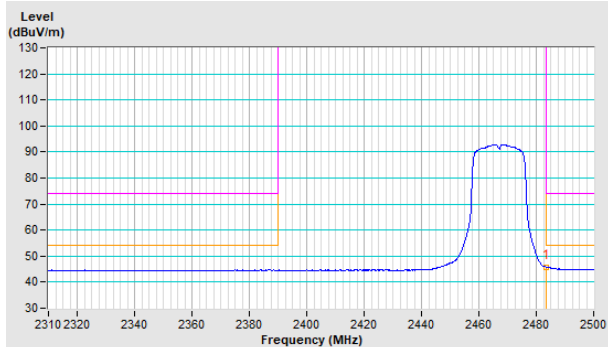
#### Horizontal (Average)



#### Vertical (Peak)

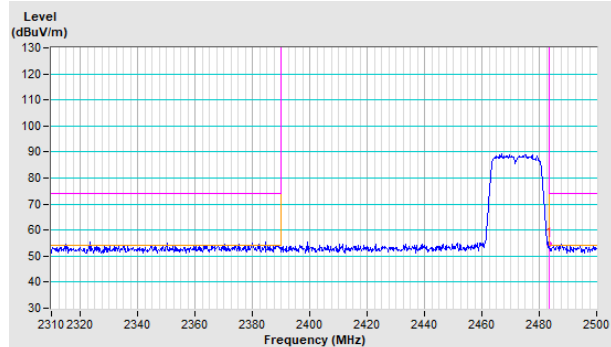


#### Vertical (Average)

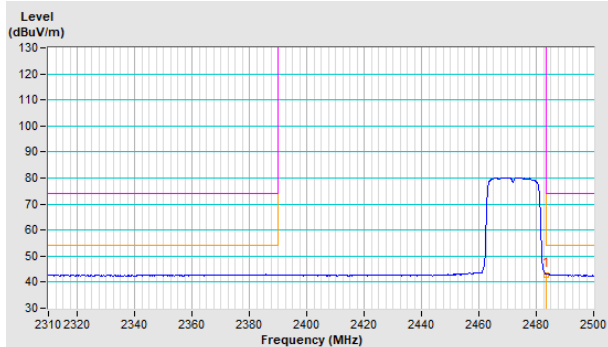


### Channel 13

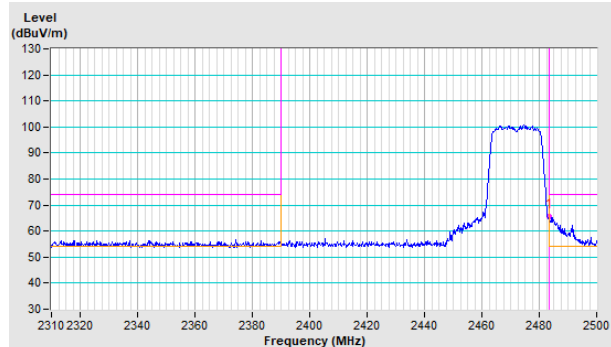
#### Horizontal (Peak)



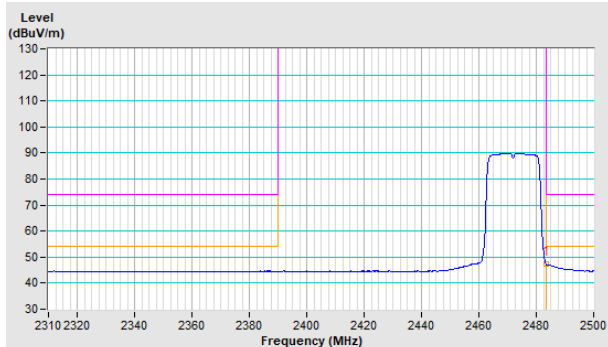
#### Horizontal (Average)



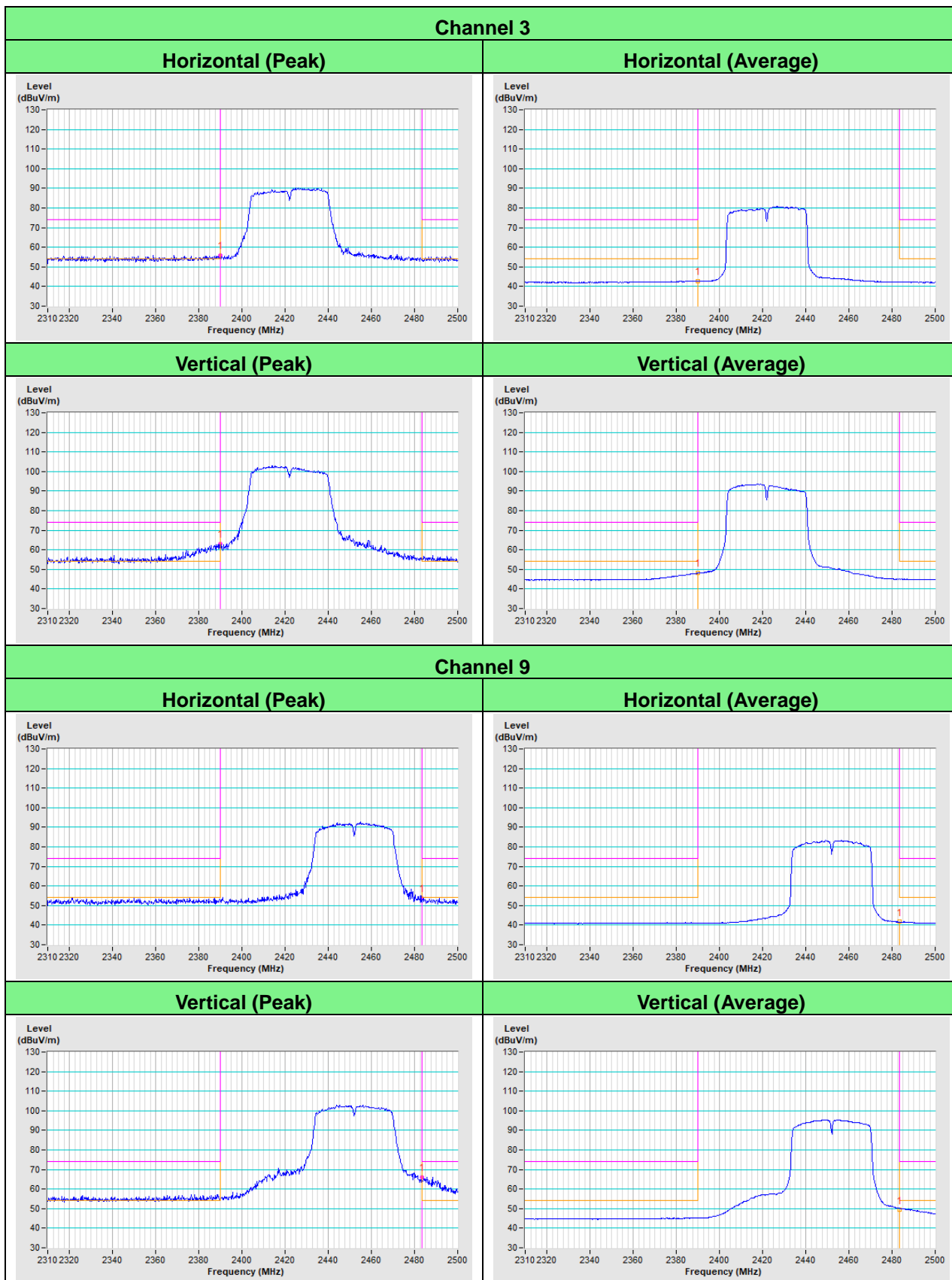
#### Vertical (Peak)



#### Vertical (Average)

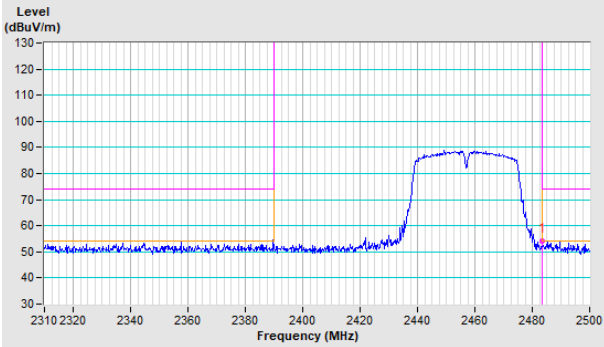


VHT40

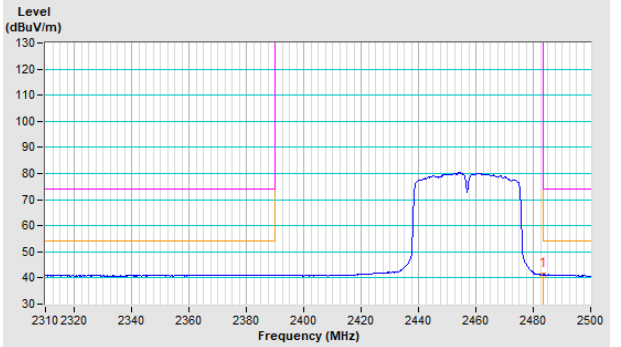


**Channel 10**

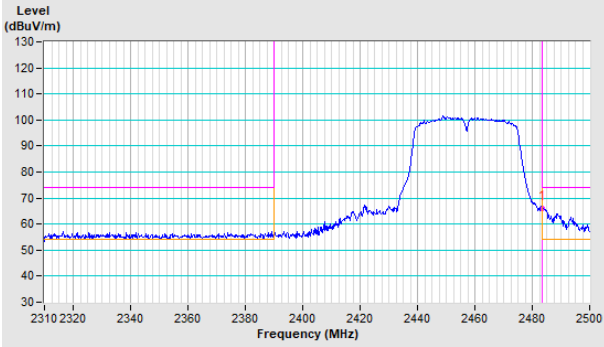
**Horizontal (Peak)**



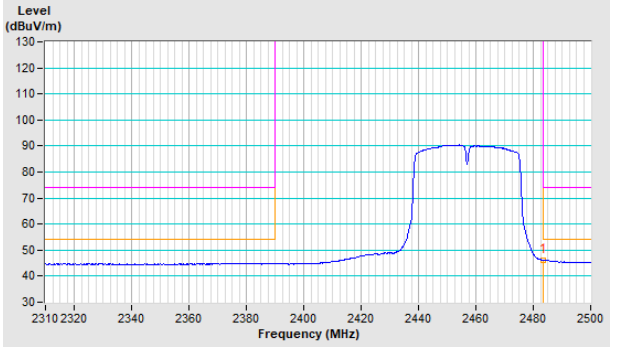
**Horizontal (Average)**



**Vertical (Peak)**

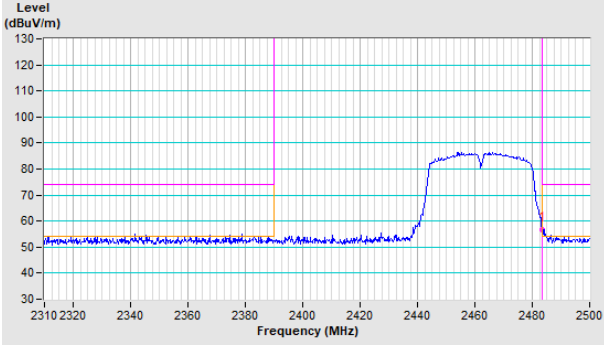


**Vertical (Average)**

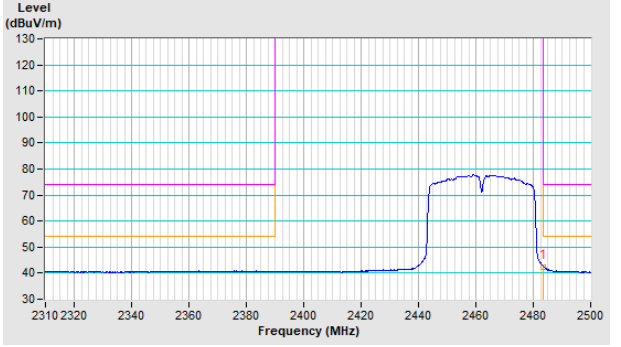


**Channel 11**

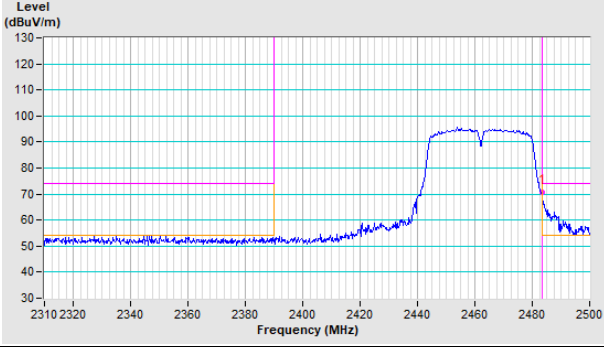
**Horizontal (Peak)**



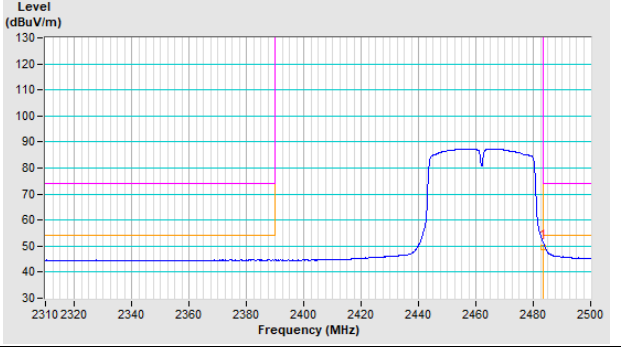
**Horizontal (Average)**



**Vertical (Peak)**

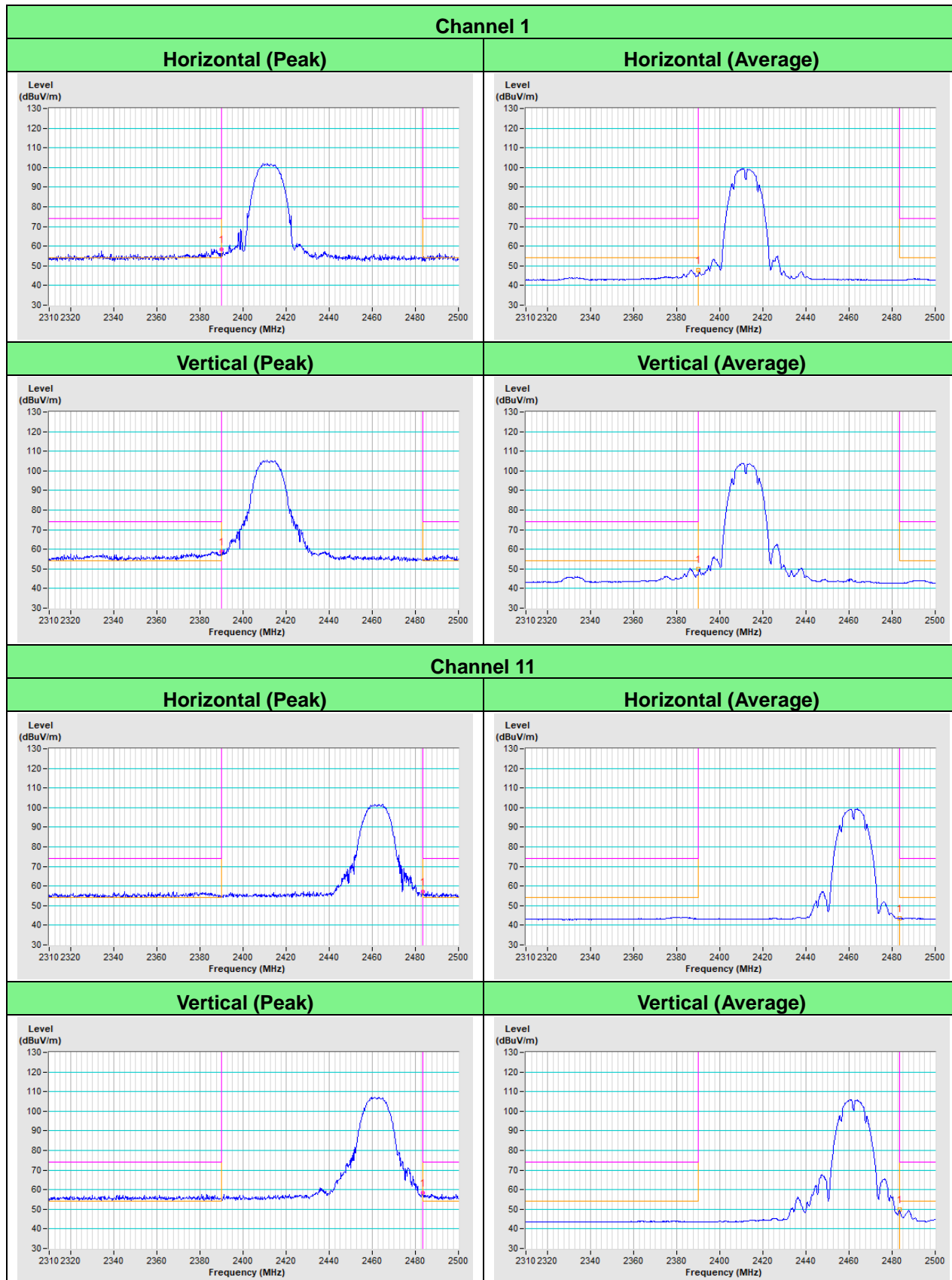


**Vertical (Average)**

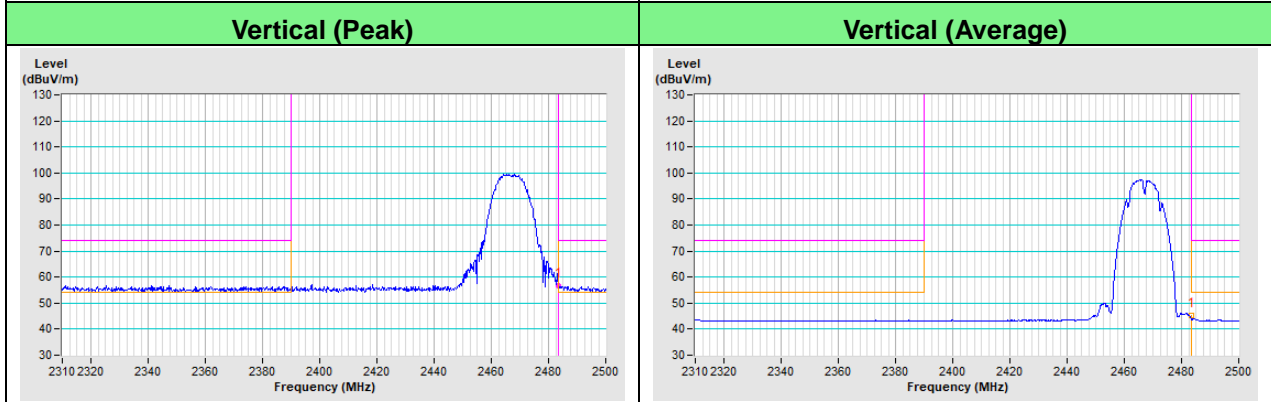
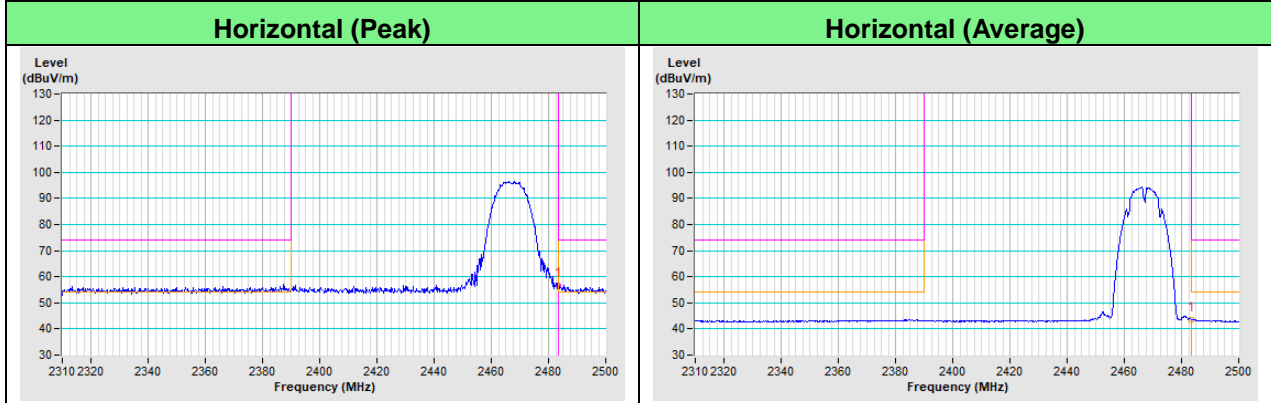


**PIFA Antenna**

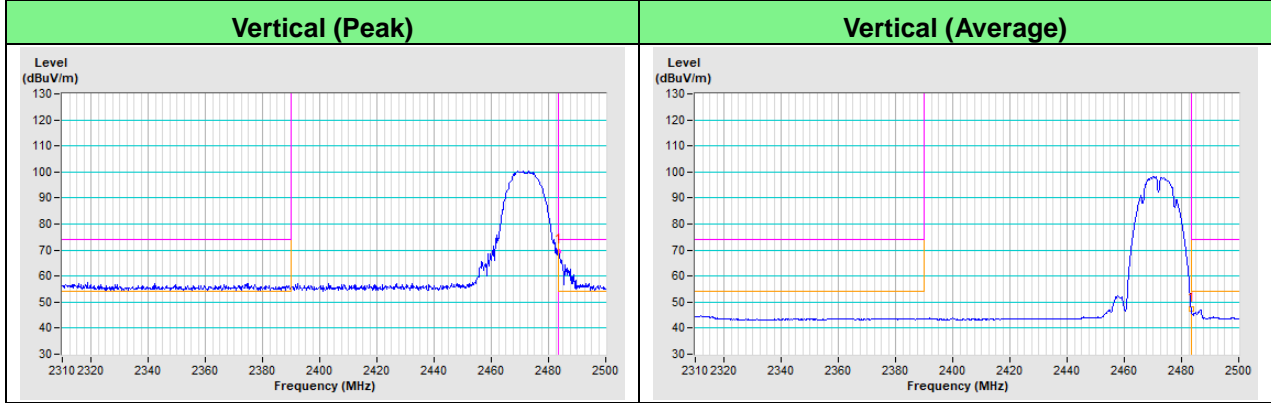
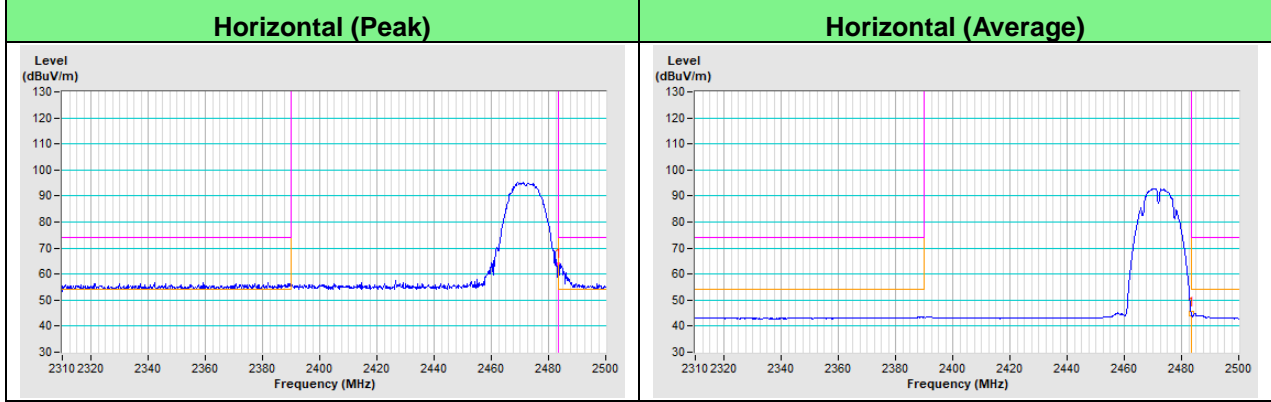
**802.11b**



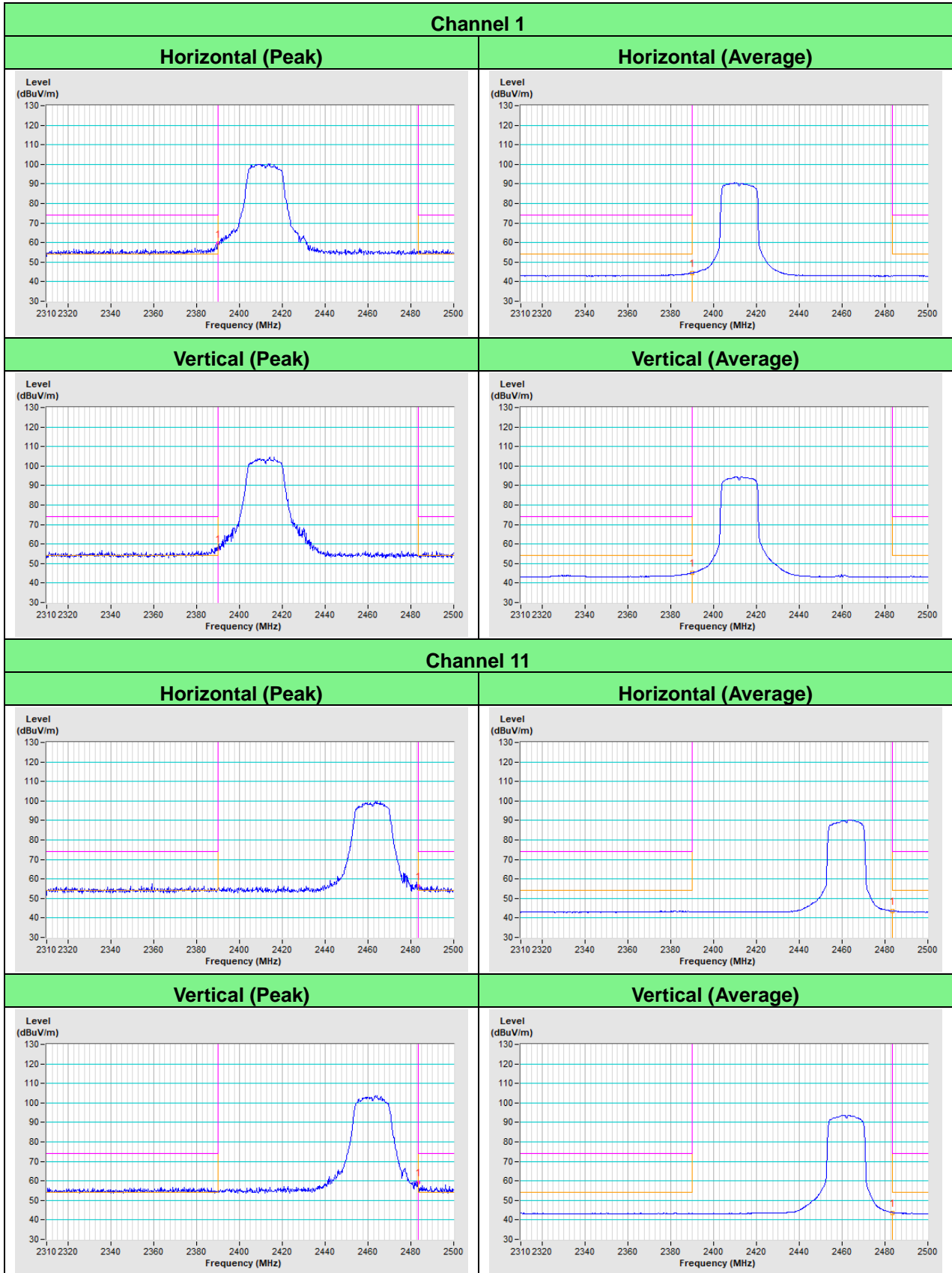
### Channel 12



### Channel 13

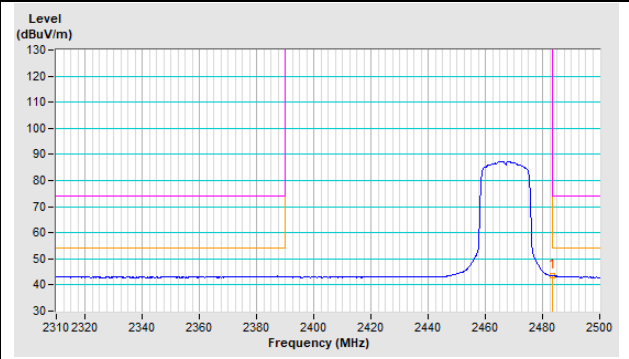
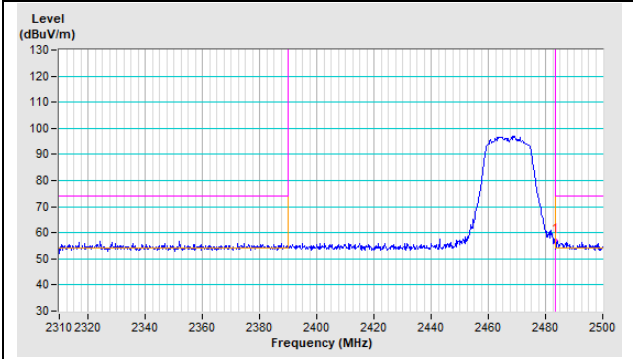


802.11g

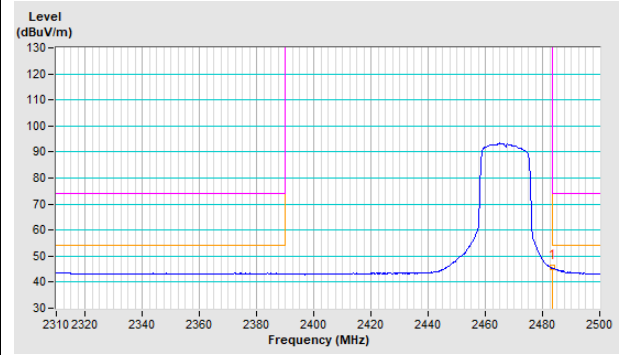
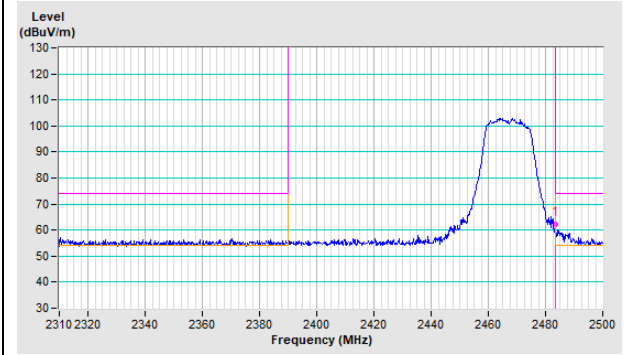


### Channel 12

Horizontal (Peak)	Horizontal (Average)
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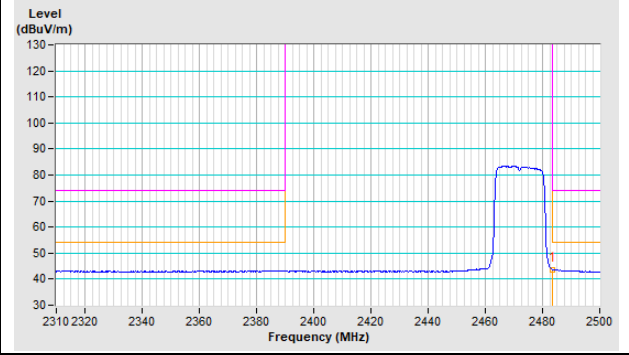
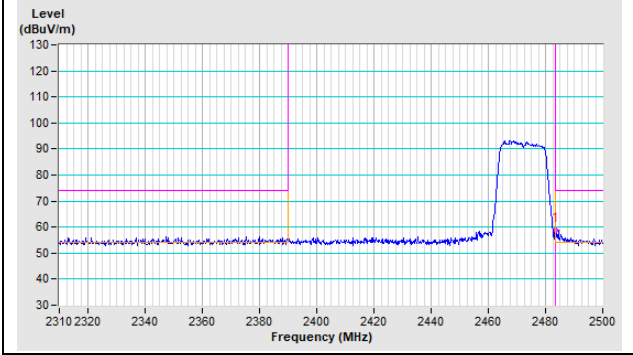


Vertical (Peak)	Vertical (Average)
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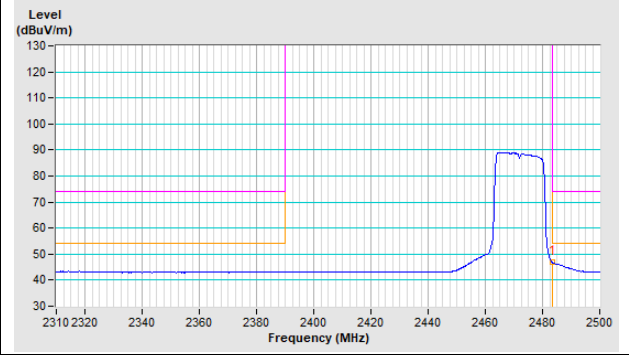
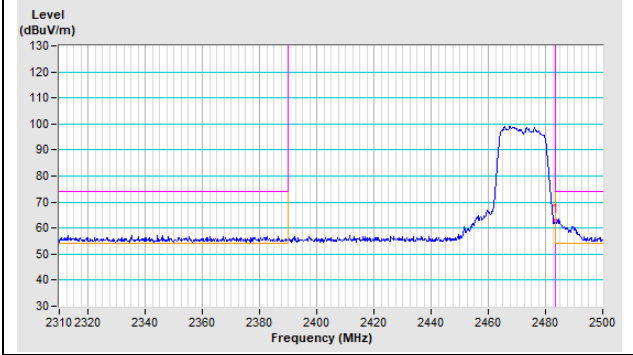


### Channel 13

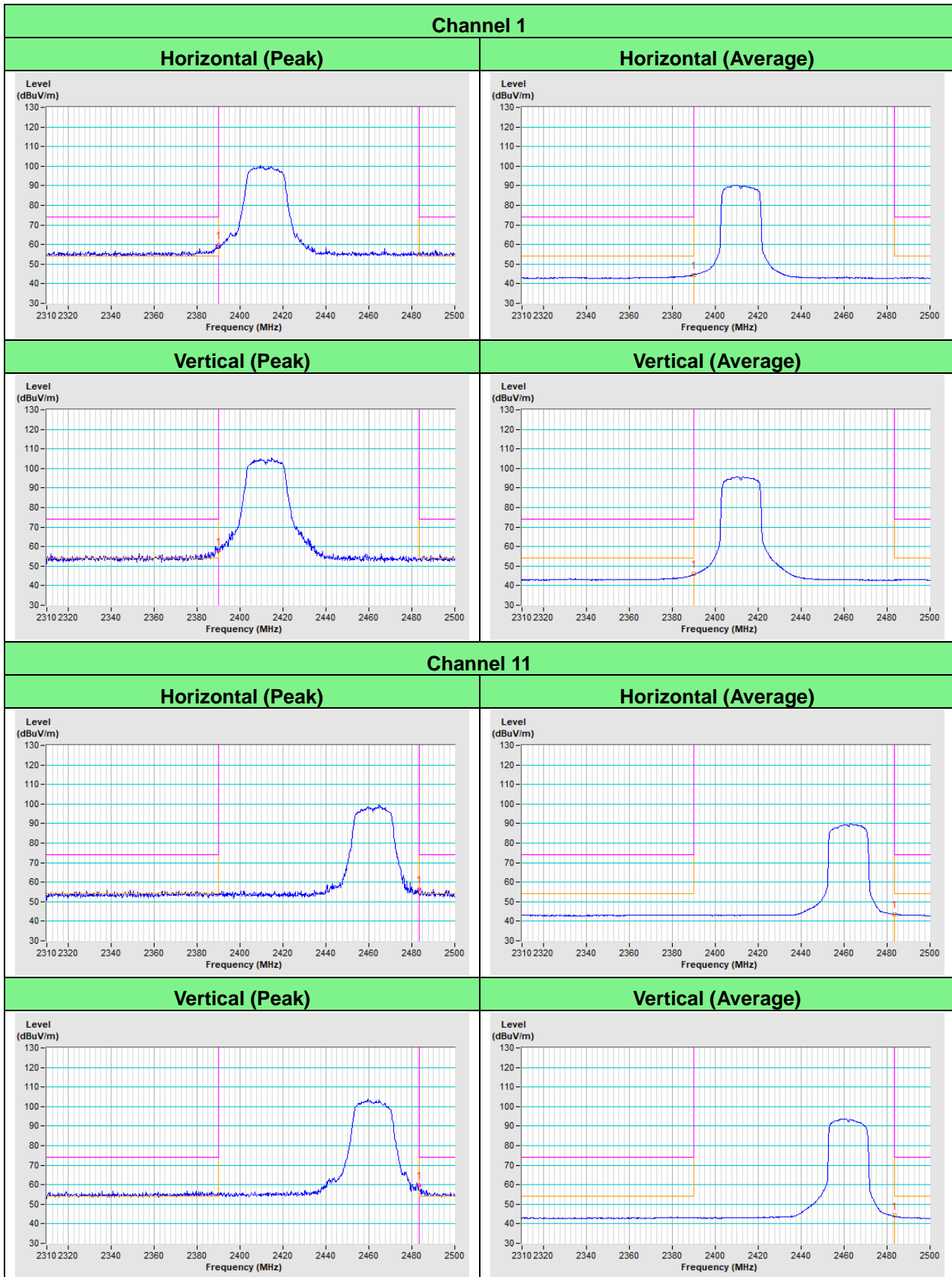
Horizontal (Peak)	Horizontal (Average)
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Vertical (Peak)	Vertical (Average)
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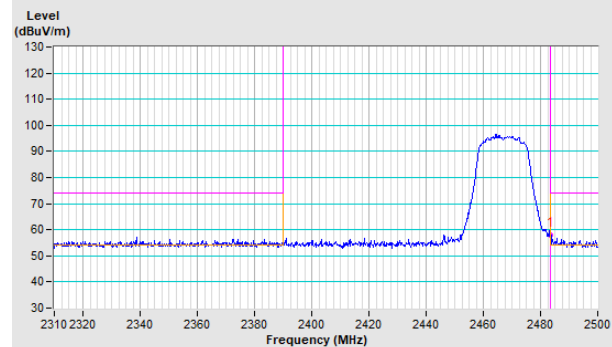
VHT20



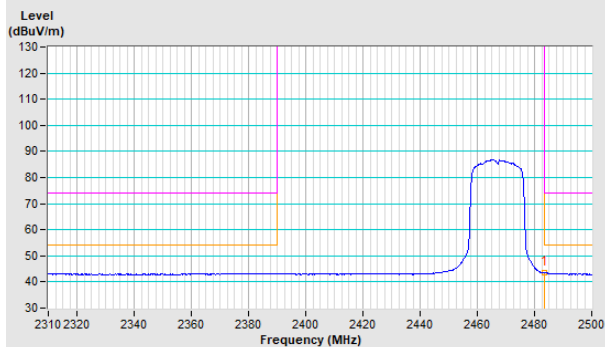


### Channel 12

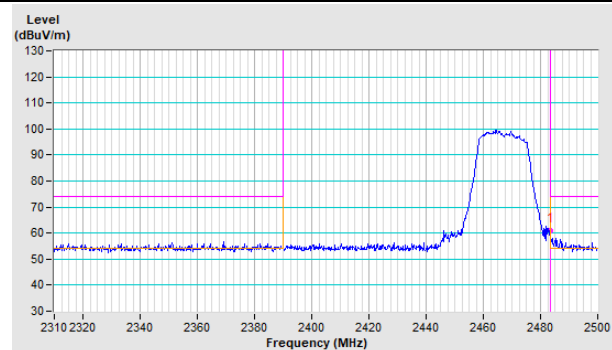
#### Horizontal (Peak)



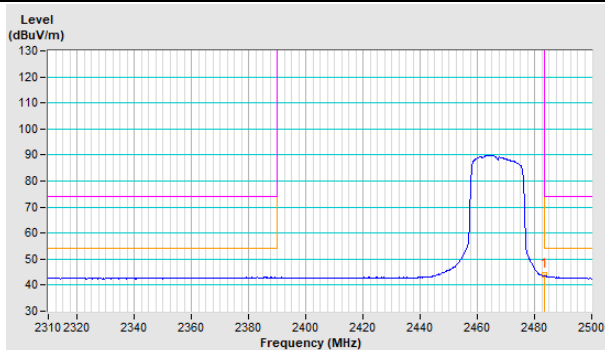
#### Horizontal (Average)



#### Vertical (Peak)

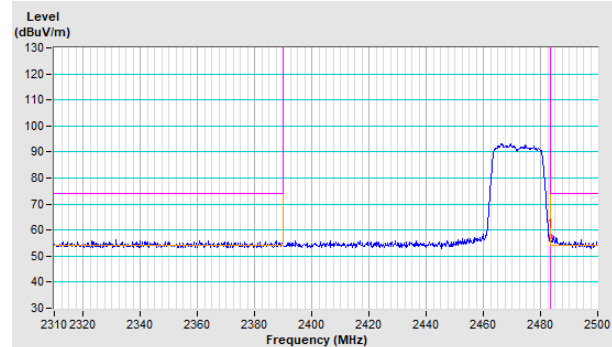


#### Vertical (Average)

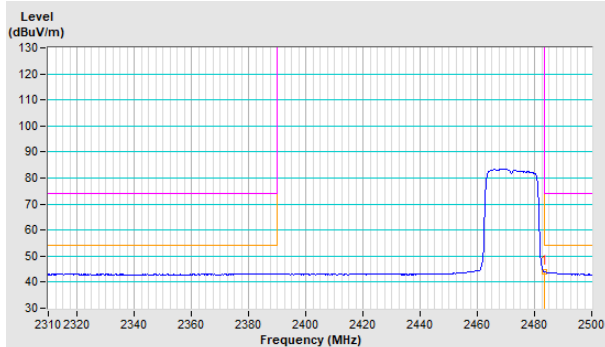


### Channel 13

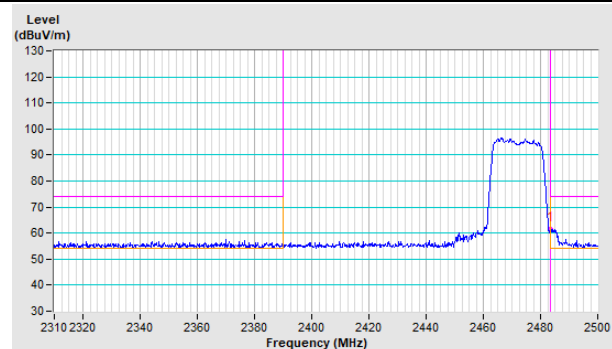
#### Horizontal (Peak)



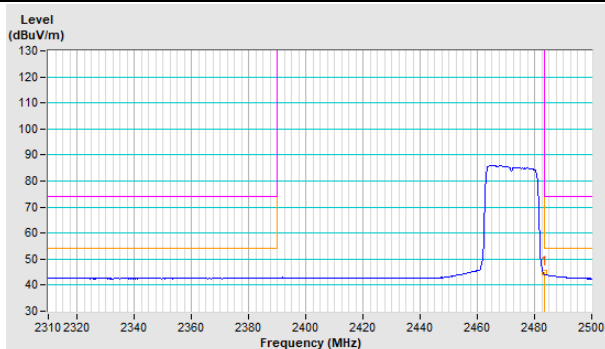
#### Horizontal (Average)



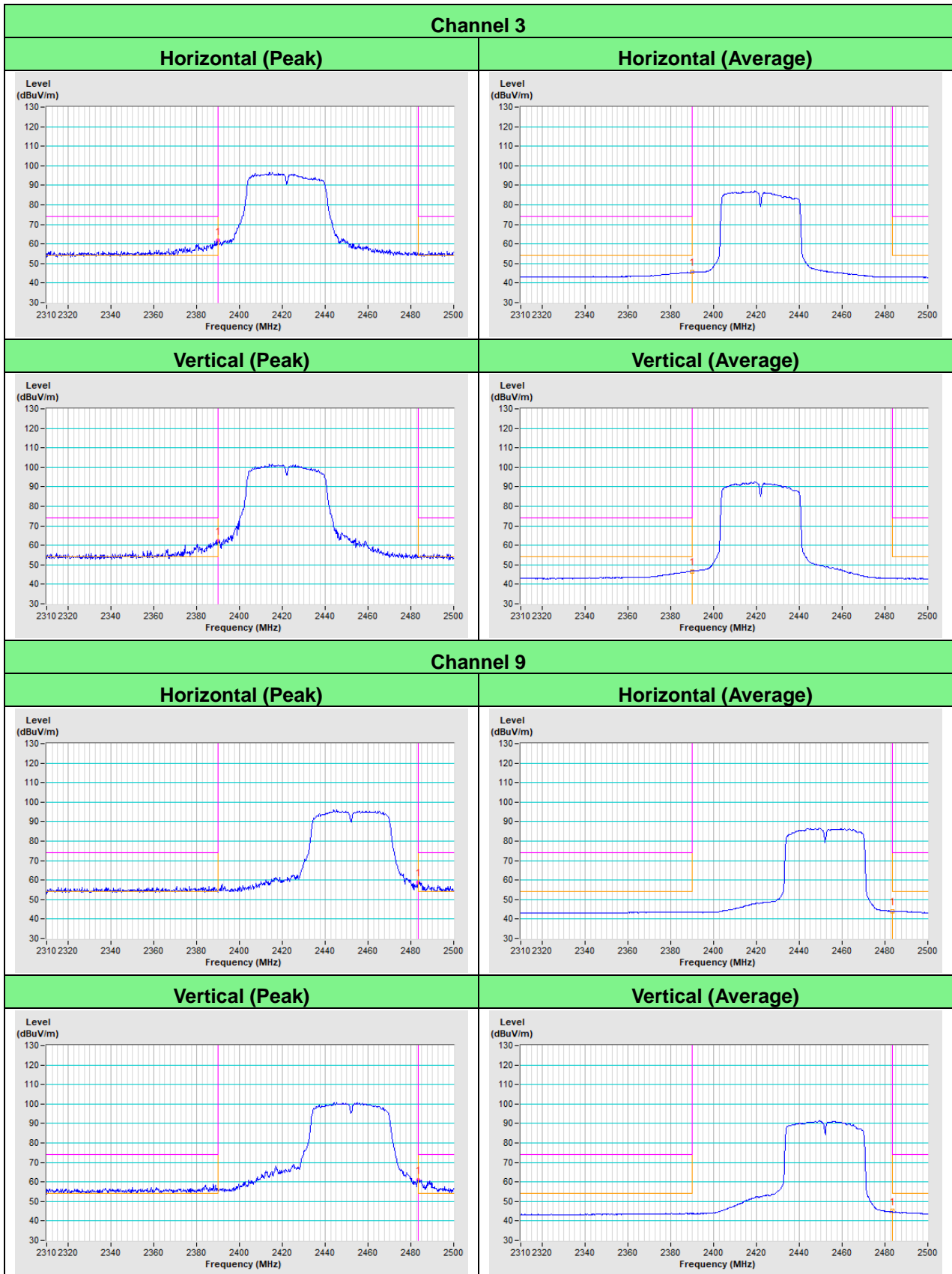
#### Vertical (Peak)



#### Vertical (Average)

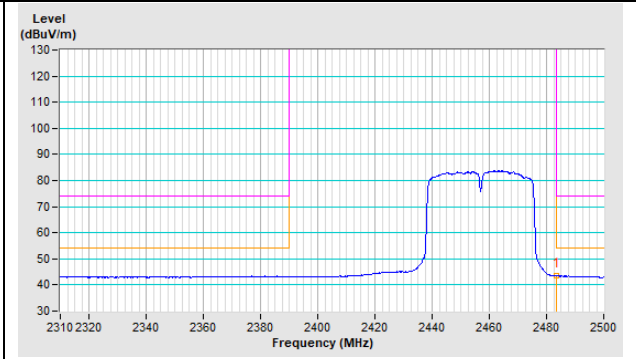
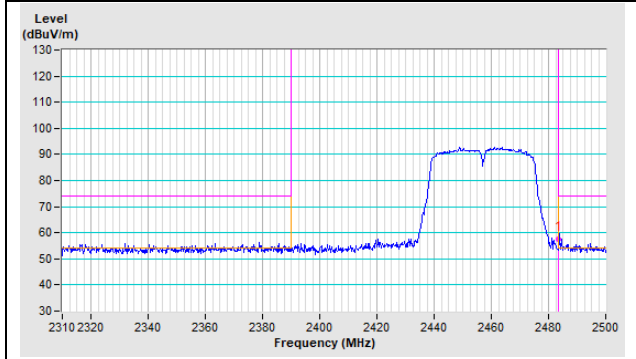


VHT40

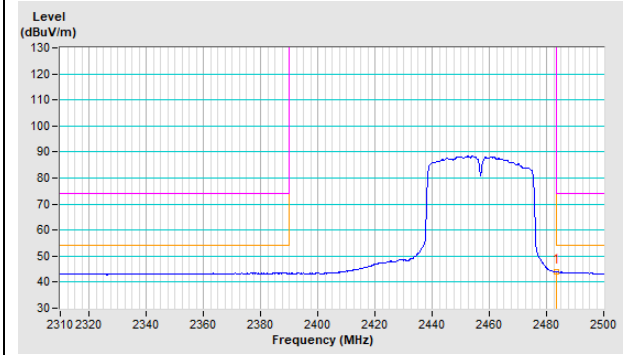
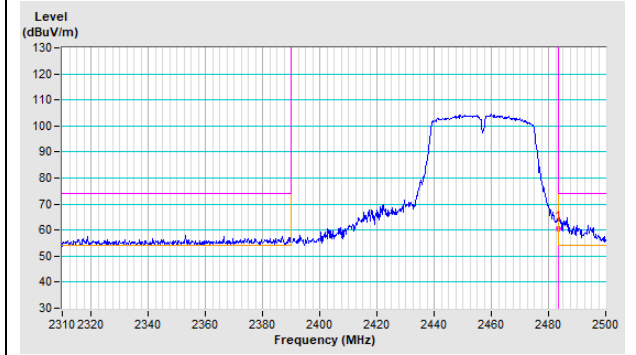


### Channel 10

<b>Horizontal (Peak)</b>	<b>Horizontal (Average)</b>
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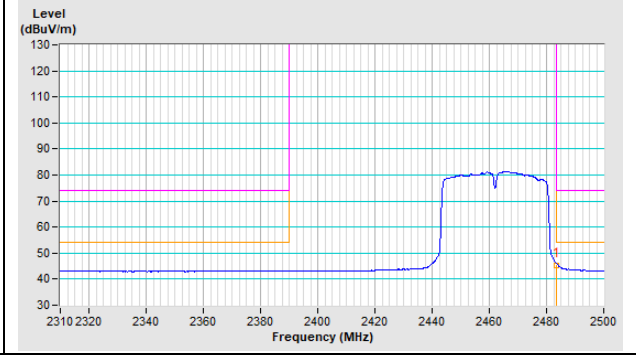
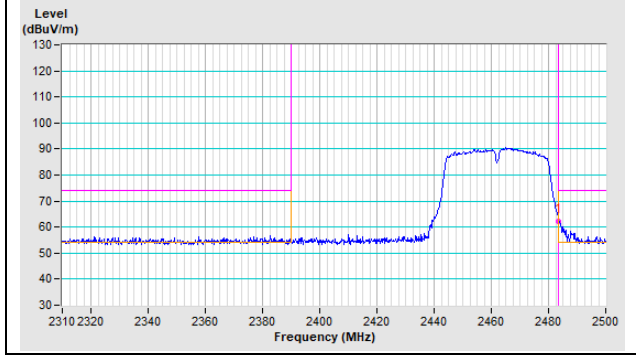


<b>Vertical (Peak)</b>	<b>Vertical (Average)</b>
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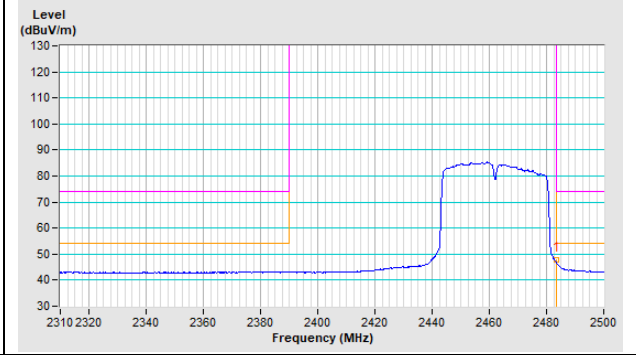
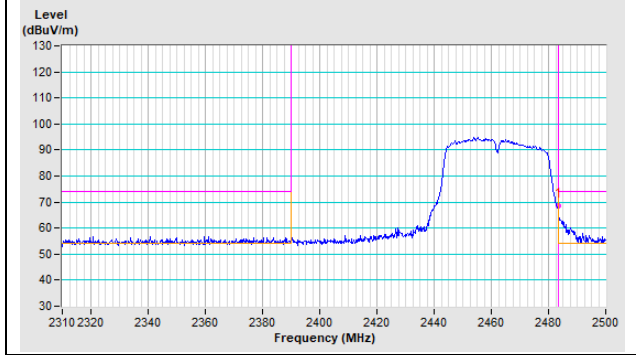


### Channel 11

<b>Horizontal (Peak)</b>	<b>Horizontal (Average)</b>
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<b>Vertical (Peak)</b>	<b>Vertical (Average)</b>
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## Appendix – 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:

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**Web Site:** [www.bureauveritas-adt.com](http://www.bureauveritas-adt.com)

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

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