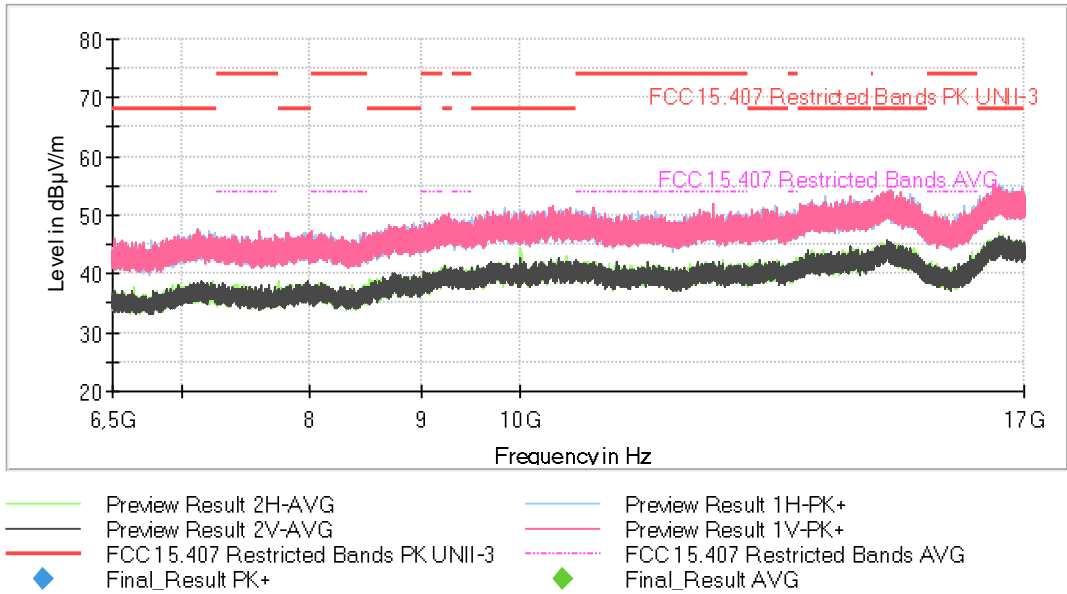
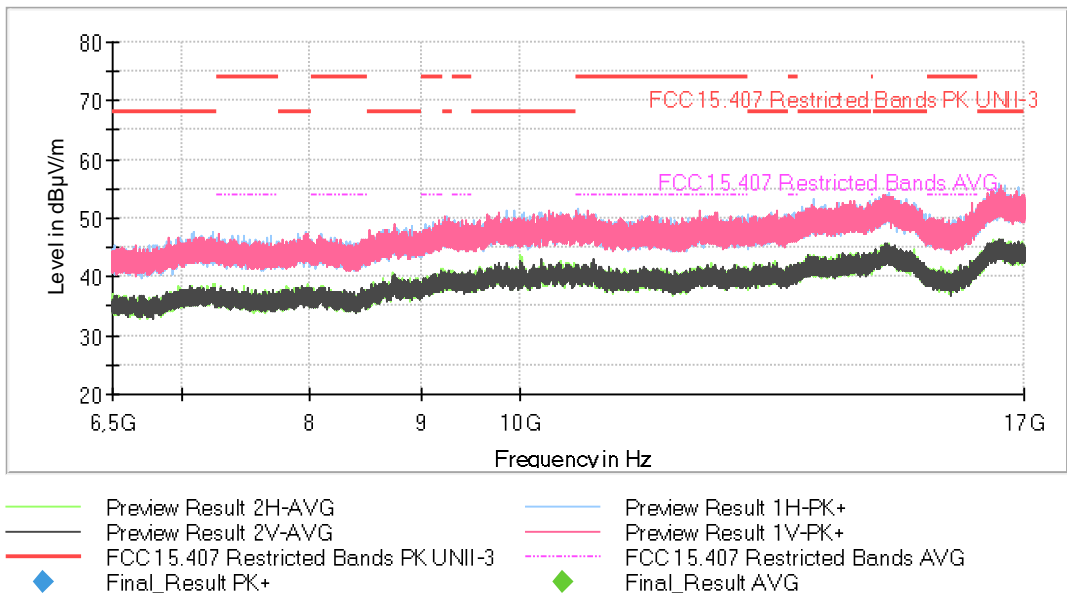


- Middle Channel:

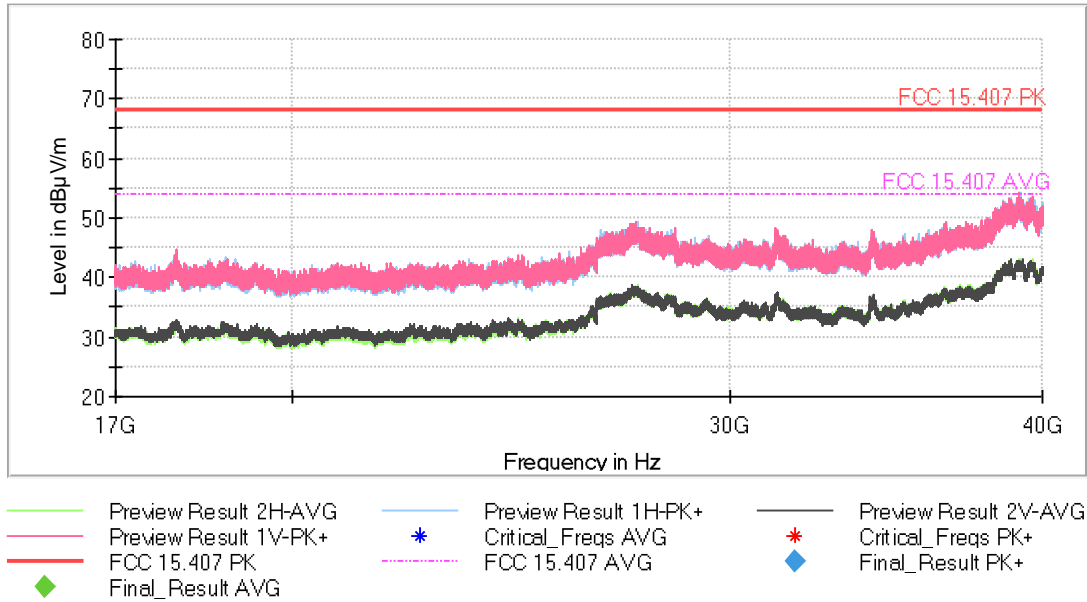


- High Channel:



FREQUENCY RANGE 17 - 40 GHz (SISO worst-case):

This plot is valid for all the Channels and all the modulation modes and bandwidths.



MIMO worst-case:

- Preliminary tests determined as the MIMO worst-case: **Chain 0+1.**

Worst-case (OFDM/OFDMA): **802.11 n20**

Frequency range 30 MHz - 1 GHz (MIMO worst-case):

The spurious emissions below 1 GHz do not depend on either the operating channel or the modulation mode selected in the EUT.

Spurious frequencies detected at less than 20 dB below the limit:

Spurious frequency (MHz)	Emission Level (dBµV/m)	Polarization	Detector
32.500278	30.73	V	Peak
	23.99		QP
37.424747	29.56	V	Peak
	23.15		QP
43.047858	36.49	V	Peak
	34.14		QP
45.951472	36.87	V	Peak
	34.41		QP
50.430625	35.92	V	Peak
	34.57		QP
55.917188	36.29	V	Peak
	32.21		QP
64.768438	30.91	V	Peak
	26.72		QP
90.321875	37.95	V	Peak
	34.72		QP
104.750625	32.91	V	Peak
	28.39		QP
141.186250	35.04	V	Peak
	31.33		QP
192.596250	24.65	V	Peak
	17.26		QP
209.450000	28.67	V	Peak
	21.49		QP
333.488750	40.38	H	Peak
	36.46		QP

Frequency range 1 - 40 GHz (MIMO worst-case):

Spurious frequencies with peak levels above the average limit (54 dBµV/m at 3 m) are measured with an average detector for checking compliance with the average limit.

No spurious frequencies detected at less than 20 dB below the limit.

Verdict: PASS

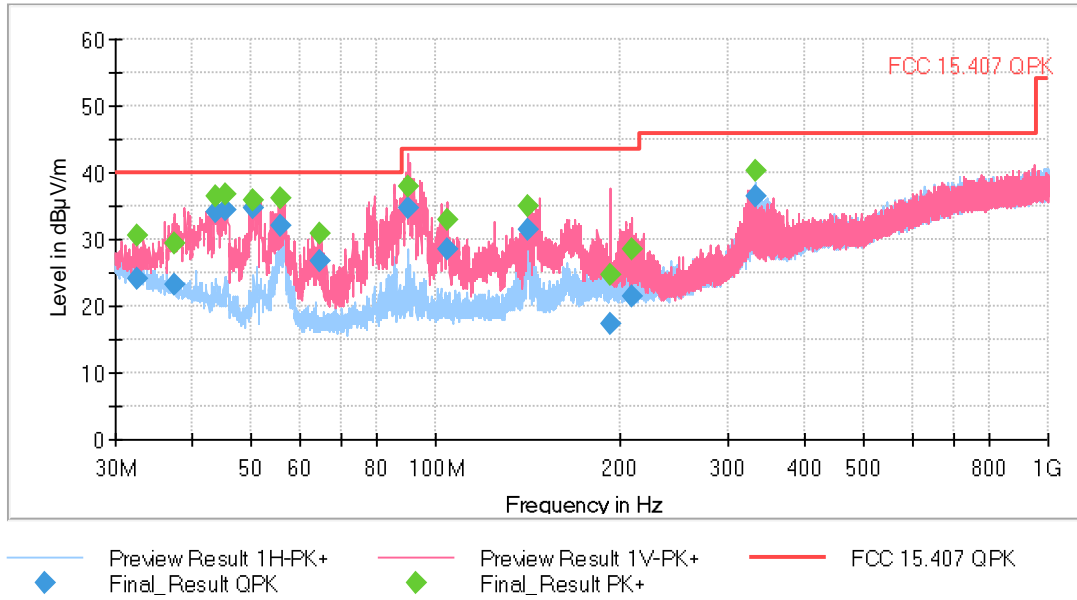
The measurement settings for each range of frequency is as follows:

Subrange	Step Size	Detectors	Bandwidth	Sweep Time	Preamp
Receiver: [ESW 44] 30 MHz - 1 GHz	30,312 kHz	PK+	100 kHz	1 s	0 dB
Receiver: [ESW 44] 1 GHz - 6,5 GHz	100 kHz	PK+ ; AVG	1 MHz	1 s	0 dB
Receiver: [ESW 44] 6,5 GHz - 17 GHz	105 kHz	PK+ ; AVG	1 MHz	1 s	30 dB
Receiver: [ESW 44] 17 GHz - 40 GHz	766,667 kHz	PK+ ; AVG	1 MHz	1 s	0 dB

MIMO worst-case:

FREQUENCY RANGE 30 MHz - 1 GHz (MIMO worst-case):

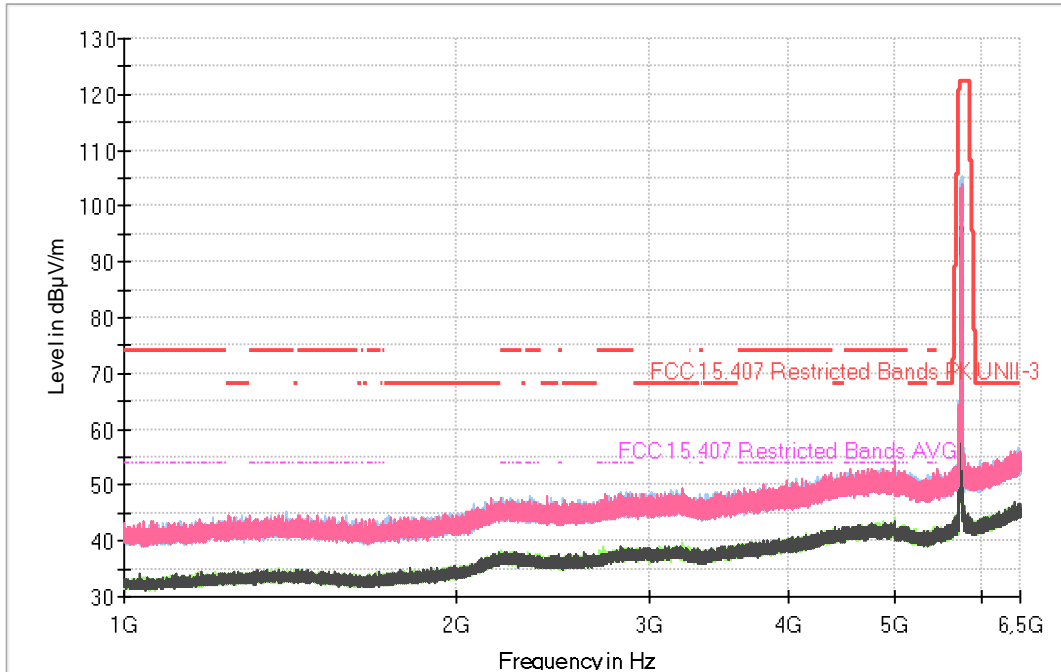
This plot is valid for all the Channels and all the modulation modes and bandwidths.



FREQUENCY RANGE 1 – 6.5 GHz (MIMO worst-case):

- Low Channel:

Full Spectrum

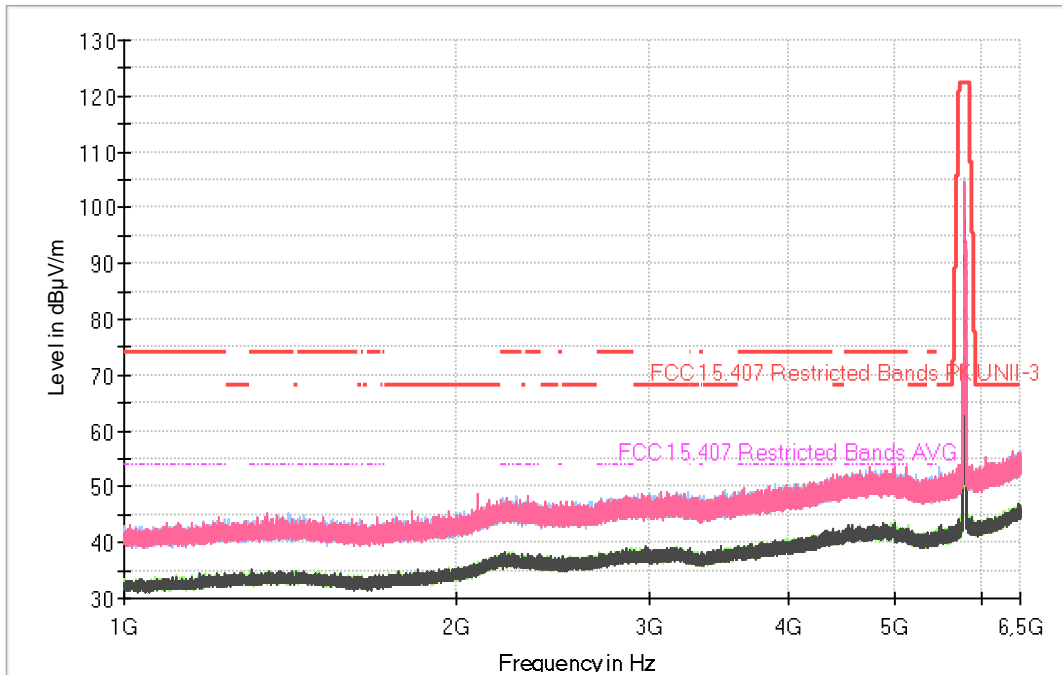


- Preview Result 2H-AVG
- Preview Result 2V-AVG
- Preview Result 1H-PK+
- Preview Result 1V-PK+
- FCC 15.407 Restricted Bands PK UNII-3
- FCC 15.407 Restricted Bands AVG
- ◆ Final_Result PK+
- ◆ Final_Result AVG

Note: The peak shown in the plot above the limit is the carrier frequency.

- Middle Channel:

Full Spectrum

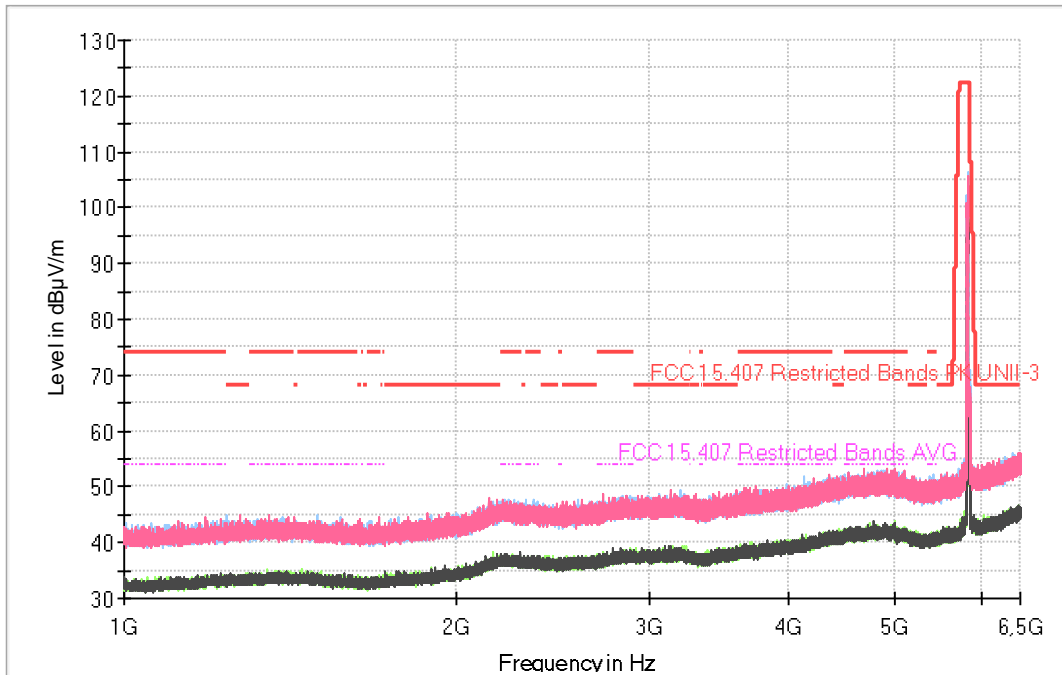


- Preview Result 2H-AVG
- Preview Result 2V-AVG
- Preview Result 1H-PK+
- Preview Result 1V-PK+
- - - FCC 15.407 Restricted Bands PK UNII-3
- · · FCC 15.407 Restricted Bands AVG
- ◆ Final_Result PK+
- ◆ Final_Result AVG

Note: The peak shown in the plot above the limit is the carrier frequency.

- High Channel:

Full Spectrum

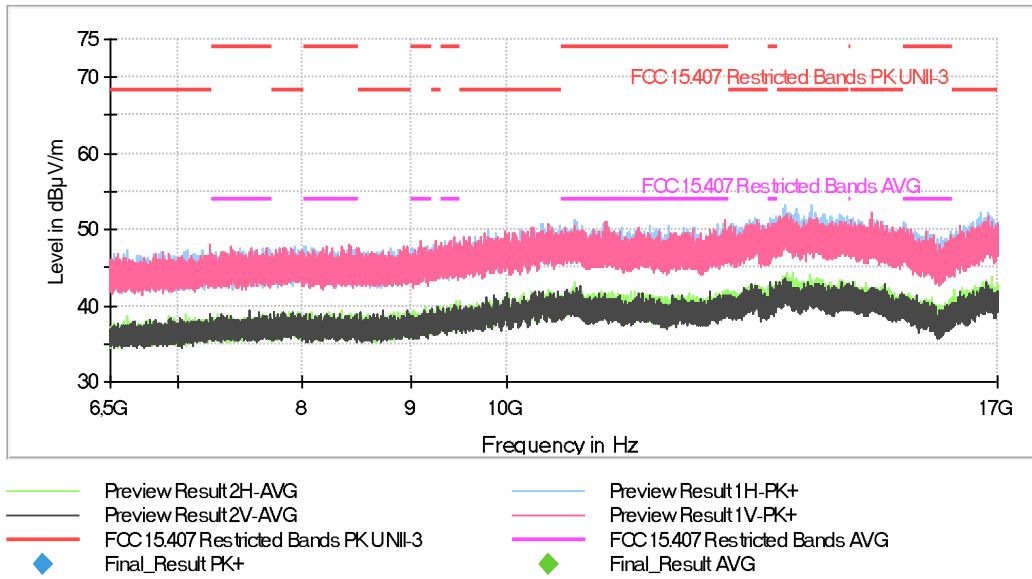


- Preview Result 2H-AVG
- Preview Result 2V-AVG
- FCC 15.407 Restricted Bands PK UNII-3
- Preview Result 1H-PK+
- Preview Result 1V-PK+
- - - FCC 15.407 Restricted Bands AVG
- ◆ Final_Result PK+
- ◆ Final_Result AVG

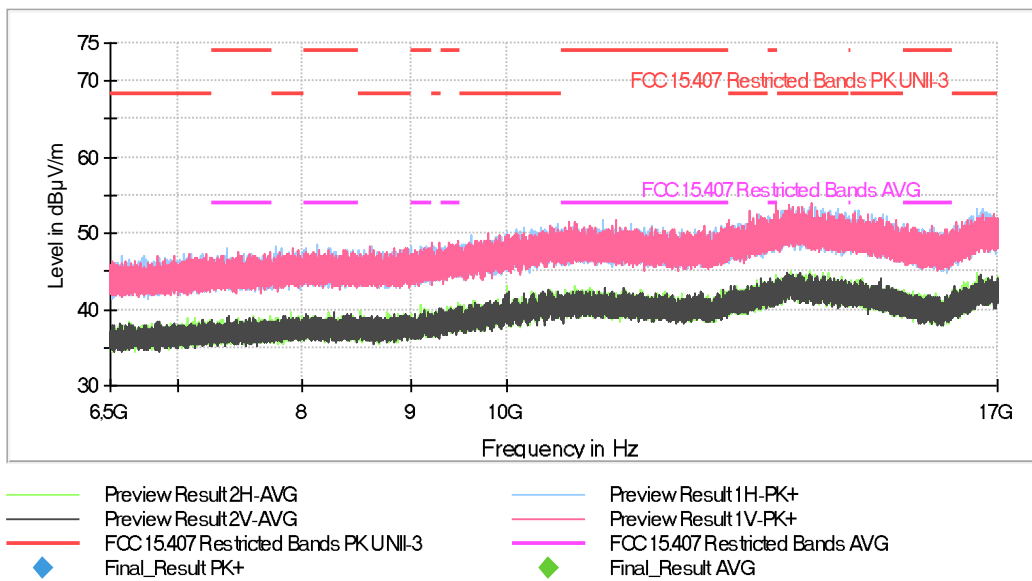
Note: The peak shown in the plot above the limit is the carrier frequency.

FREQUENCY RANGE 6.5 - 17 GHz (MIMO worst-case):

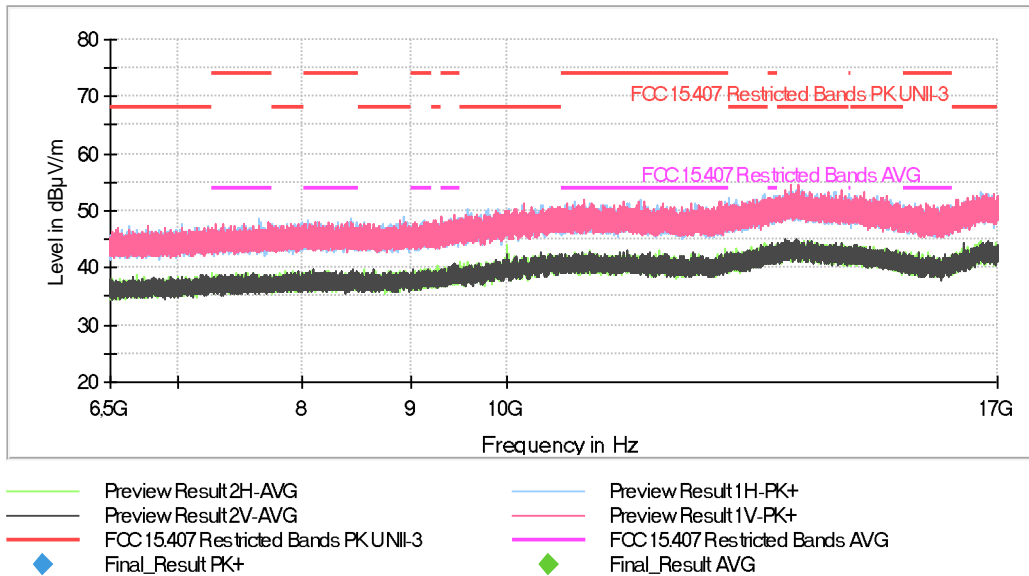
- Low Channel:



- Middle Channel:

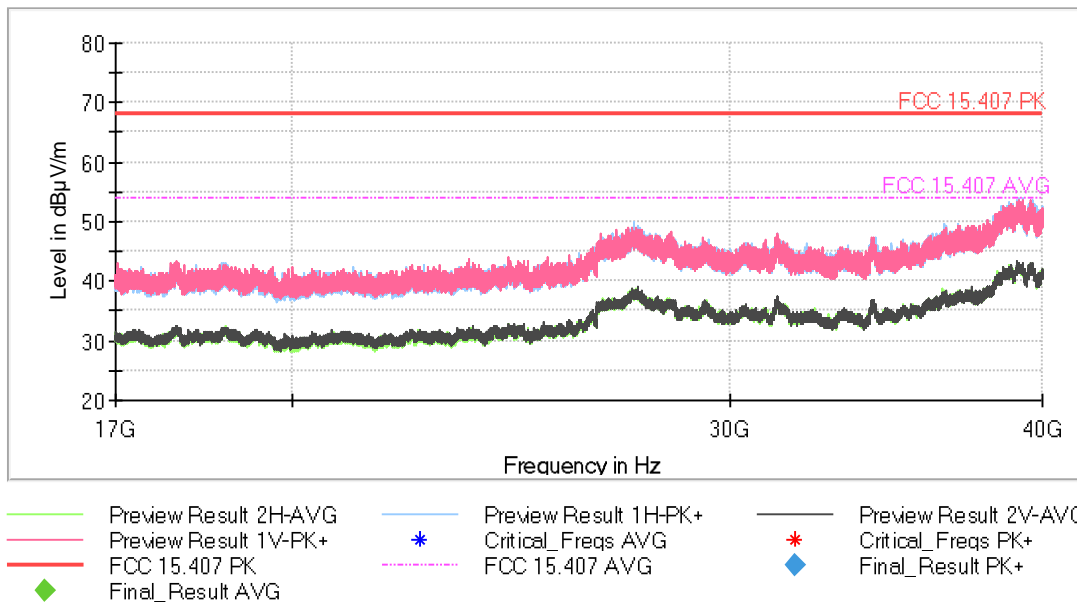


- High Channel:



FREQUENCY RANGE 17 - 40 GHz (MIMO worst-case):

This plot is valid for all the Channels and all the modulation modes and bandwidths.



BAND EDGE EMISSIONS:

SISO worst-case:

- **SISO 802.11 a20. Spurious emissions inside of the mask 5.65-5.925 GHz:**

- LOW CHANNEL:

No spurious frequencies found at less than 20 dB below the limit.

- MIDDLE CHANNEL:

No spurious frequencies found at less than 20 dB below the limit.

- HIGH CHANNEL:

No spurious frequencies found at less than 20 dB below the limit.

- **SISO 802.11 n20. Spurious emissions inside of the mask 5.65-5.925 GHz:**

- LOW CHANNEL:

No spurious frequencies found at less than 20 dB below the limit.

- MIDDLE CHANNEL:

No spurious frequencies found at less than 20 dB below the limit.

- HIGH CHANNEL:

No spurious frequencies found at less than 20 dB below the limit.

- **SISO 802.11 ac20. Spurious emissions inside of the mask 5.65-5.925 GHz:**

- LOW CHANNEL:

No spurious frequencies found at less than 20 dB below the limit.

- MIDDLE CHANNEL:

No spurious frequencies found at less than 20 dB below the limit.

- HIGH CHANNEL:

No spurious frequencies found at less than 20 dB below the limit.

- **SISO 802.11 n40. Spurious emissions inside of the mask 5.65-5.925 GHz:**

- LOW CHANNEL:

No spurious frequencies found at less than 20 dB below the limit.

- HIGH CHANNEL:

No spurious frequencies found at less than 20 dB below the limit.

- **SISO 802.11 ac40. Spurious emissions inside of the mask 5.65-5.925 GHz:**

- LOW CHANNEL:

No spurious frequencies found at less than 20 dB below the limit.

- HIGH CHANNEL:

No spurious frequencies found at less than 20 dB below the limit.

- **SISO 802.11 ac80. Spurious emissions inside of the mask 5.65-5.925 GHz:**

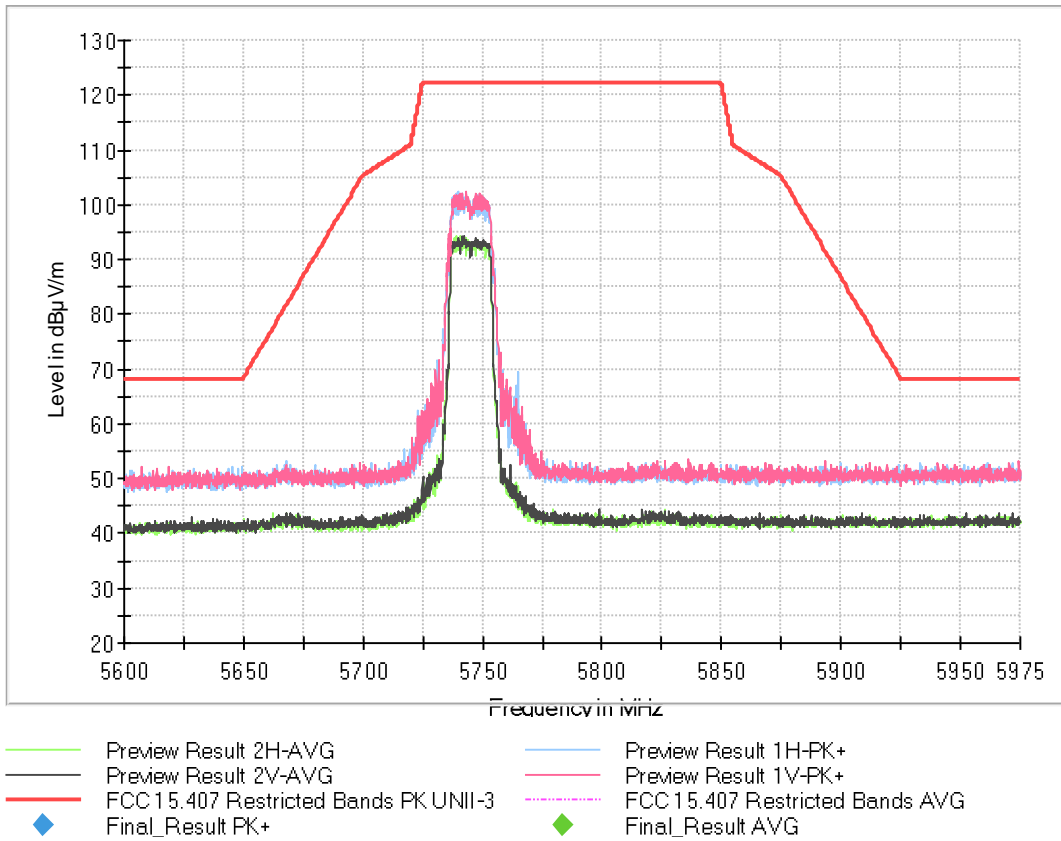
- SINGLE CHANNEL:

No spurious frequencies found at less than 20 dB below the limit.

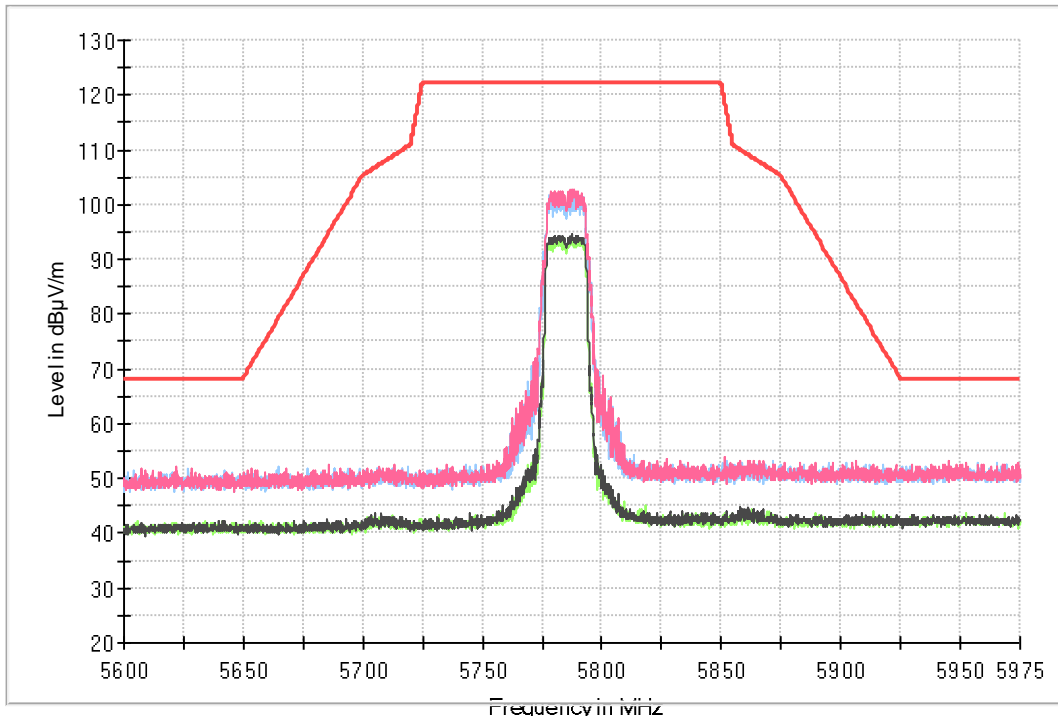
Verdict: PASS

- **SISO 802.11 a20:**

- Low Channel:

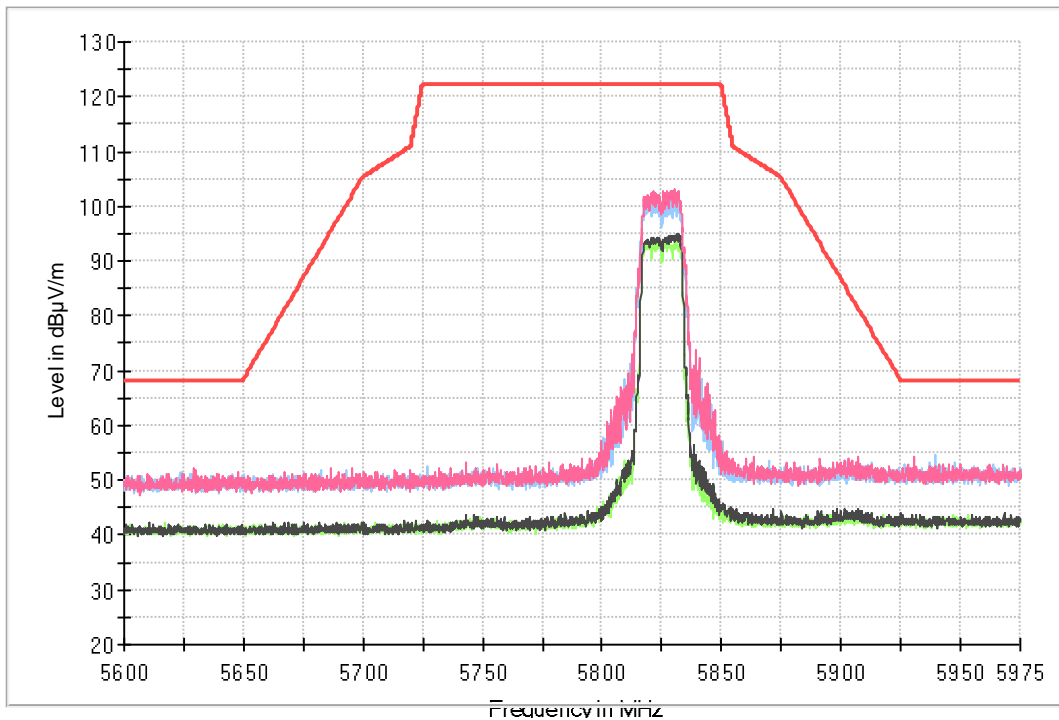


- Middle Channel:



- Preview Result 2H-AVG
- Preview Result 2V-AVG
- FCC 15.407 Restricted Bands PK UNII-3
- Preview Result 1H-PK+
- Preview Result 1V-PK+
- - - FCC 15.407 Restricted Bands AVG
- ◆ Final_Result PK+
- ◆ Final_Result AVG

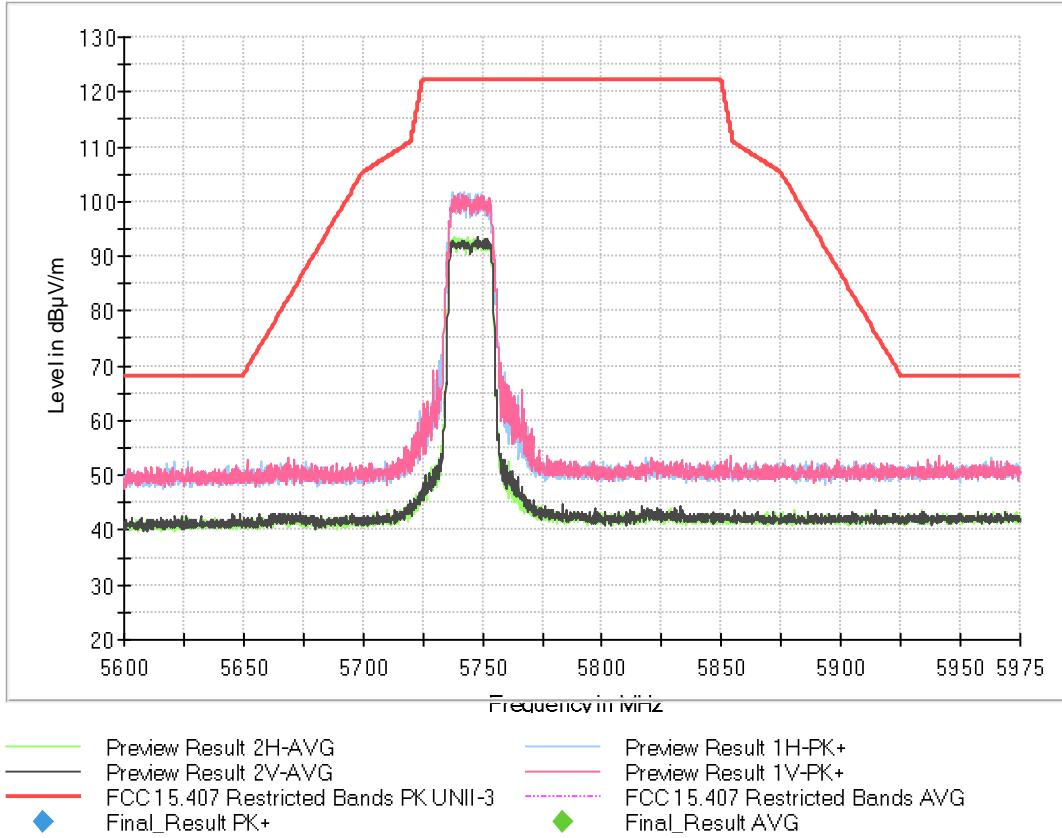
- High Channel:



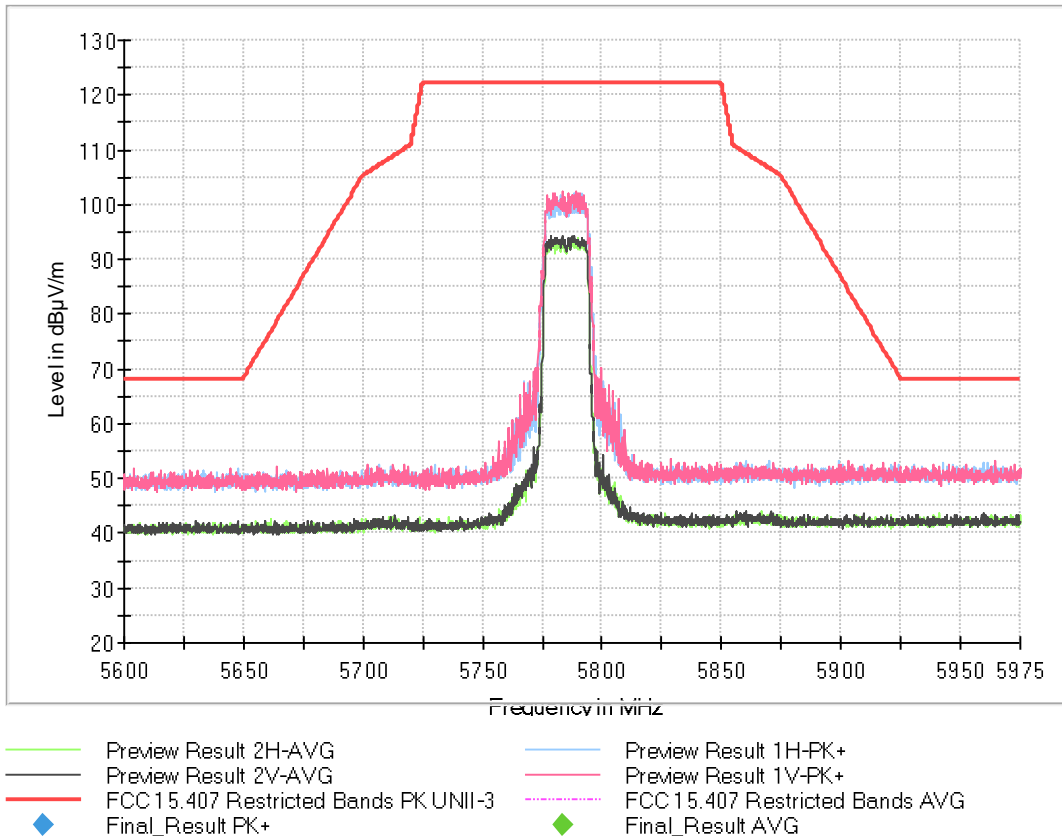
- Preview Result 2H-AVG
- Preview Result 2V-AVG
- FCC 15.407 Restricted Bands PK UNII-3
- Preview Result 1H-PK+
- Preview Result 1V-PK+
- - - FCC 15.407 Restricted Bands AVG
- ◆ Final_Result PK+
- ◆ Final_Result AVG

• SISO 802.11 n20:

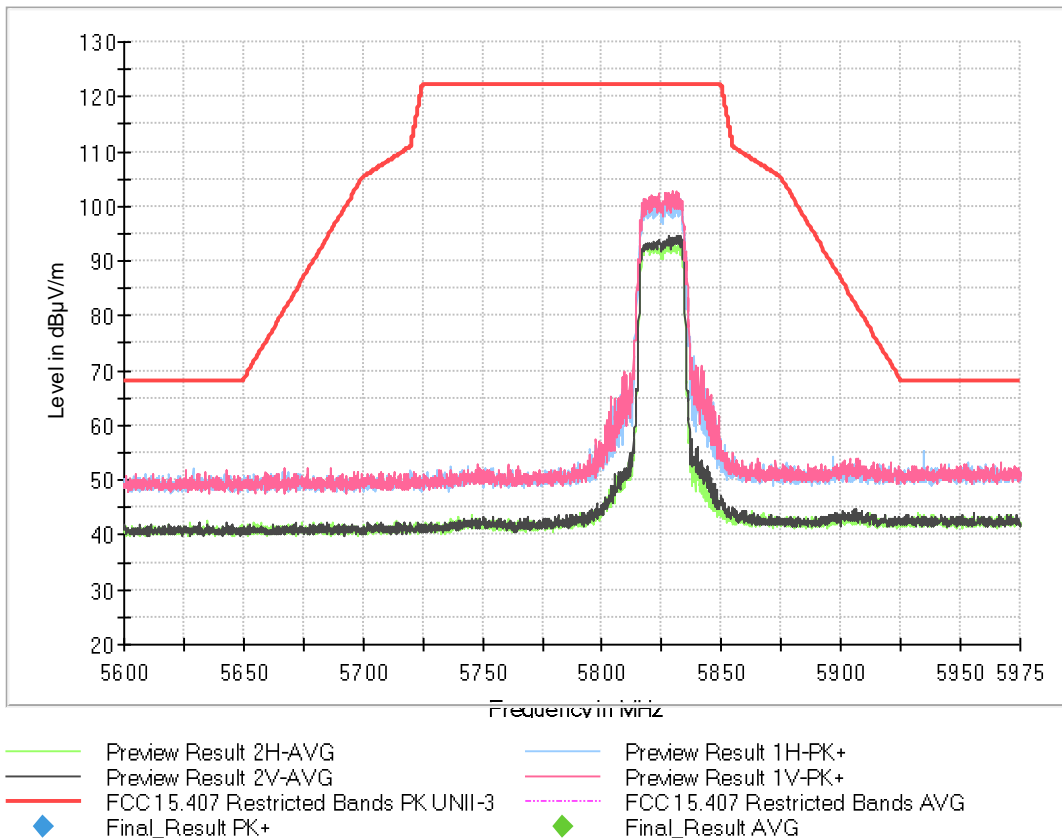
- Low Channel:



- Middle Channel:

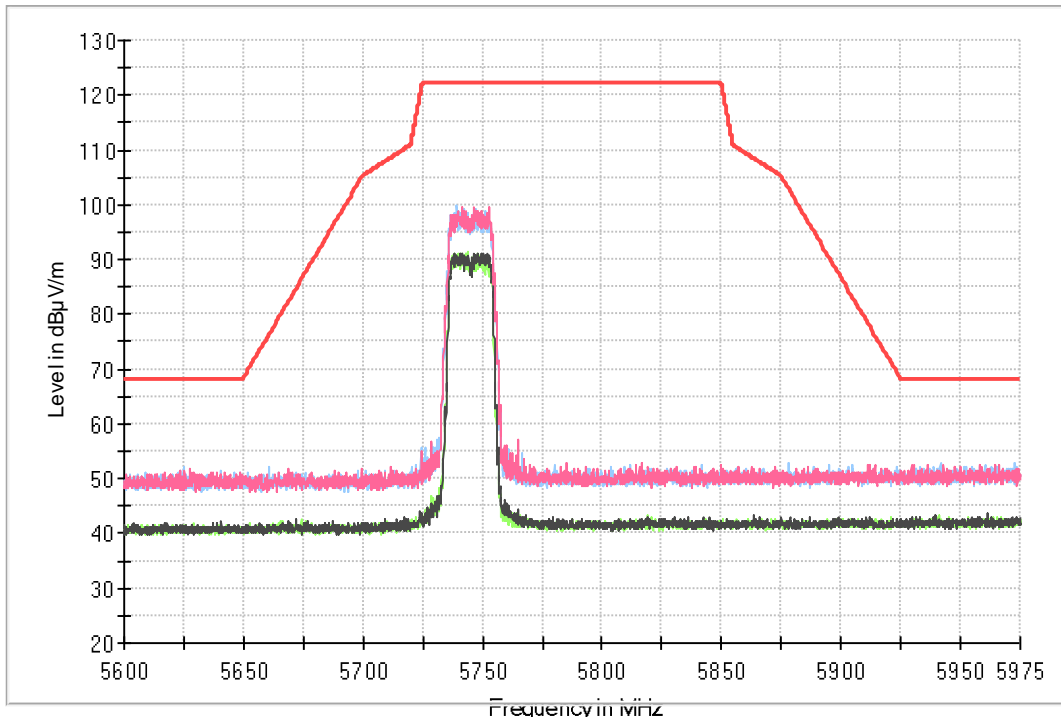


- High Channel:



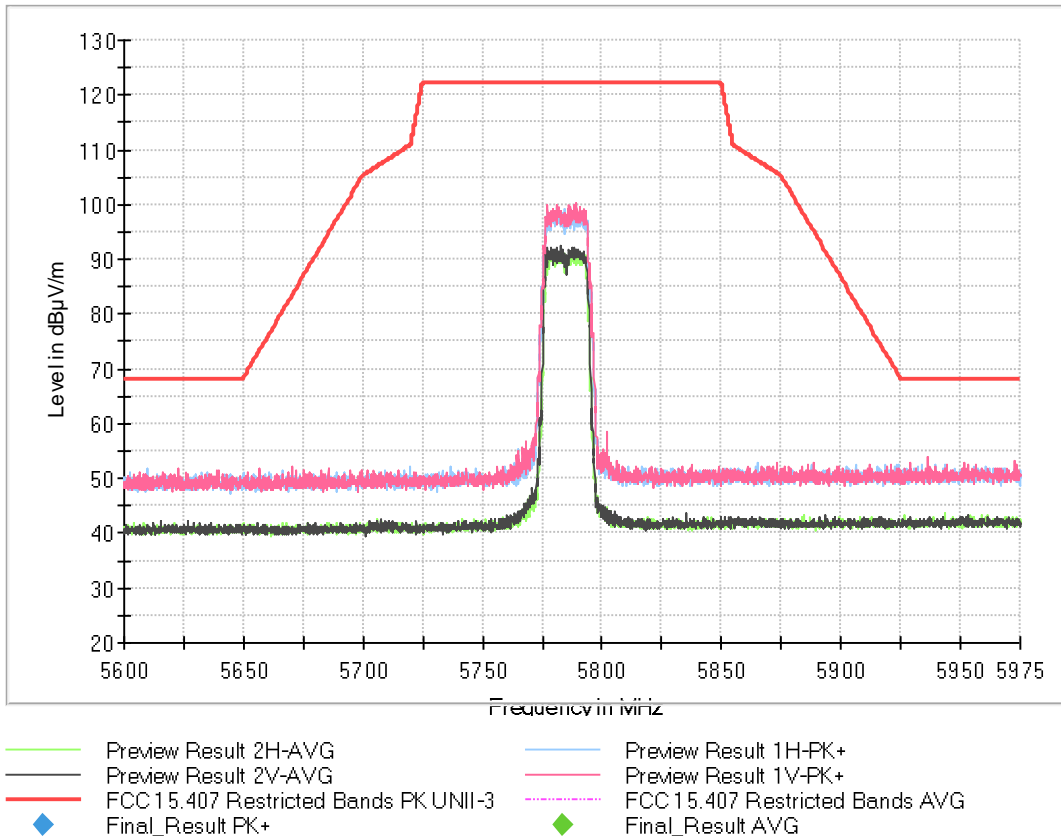
- **SISO 802.11 ac20:**

- Low Channel:

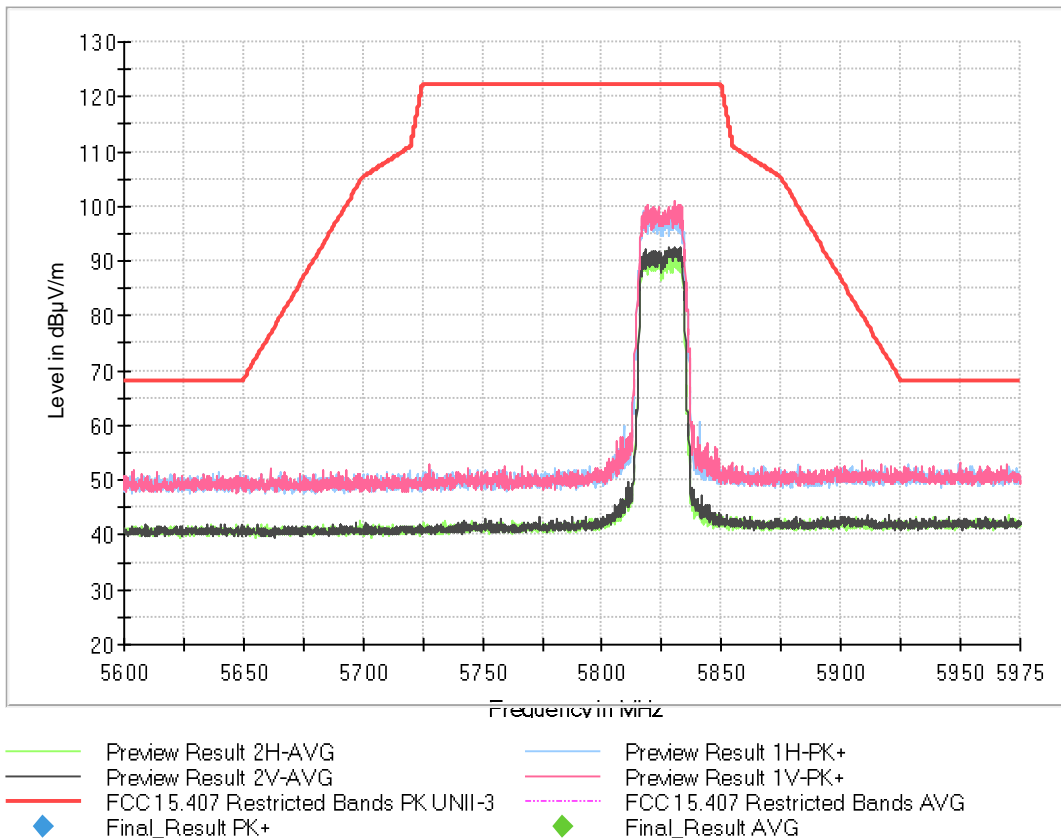


- Preview Result 2H-AVG
- Preview Result 2V-AVG
- Preview Result 1H-PK+
- Preview Result 1V-PK+
- FCC 15.407 Restricted Bands PK UNII-3
- FCC 15.407 Restricted Bands AVG
- Final_Result PK+
- Final_Result AVG

- Middle Channel:

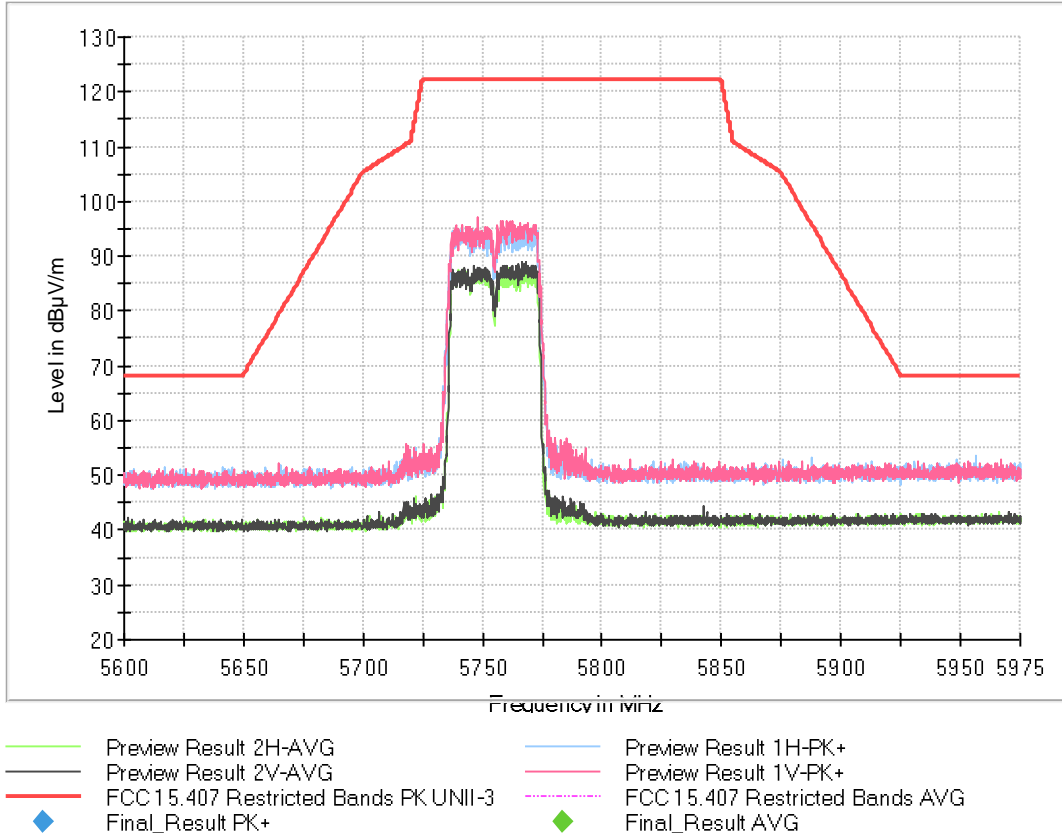


- High Channel:

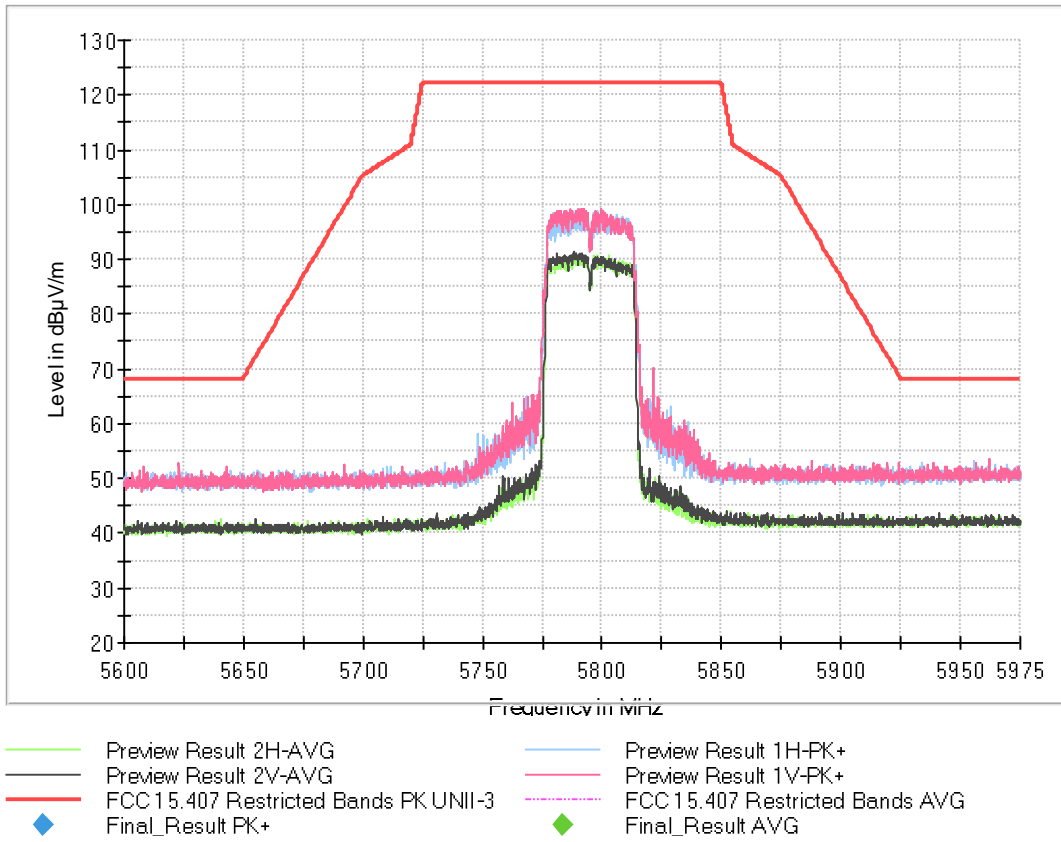


• **SISO 802.11 n40:**

- Low Channel:

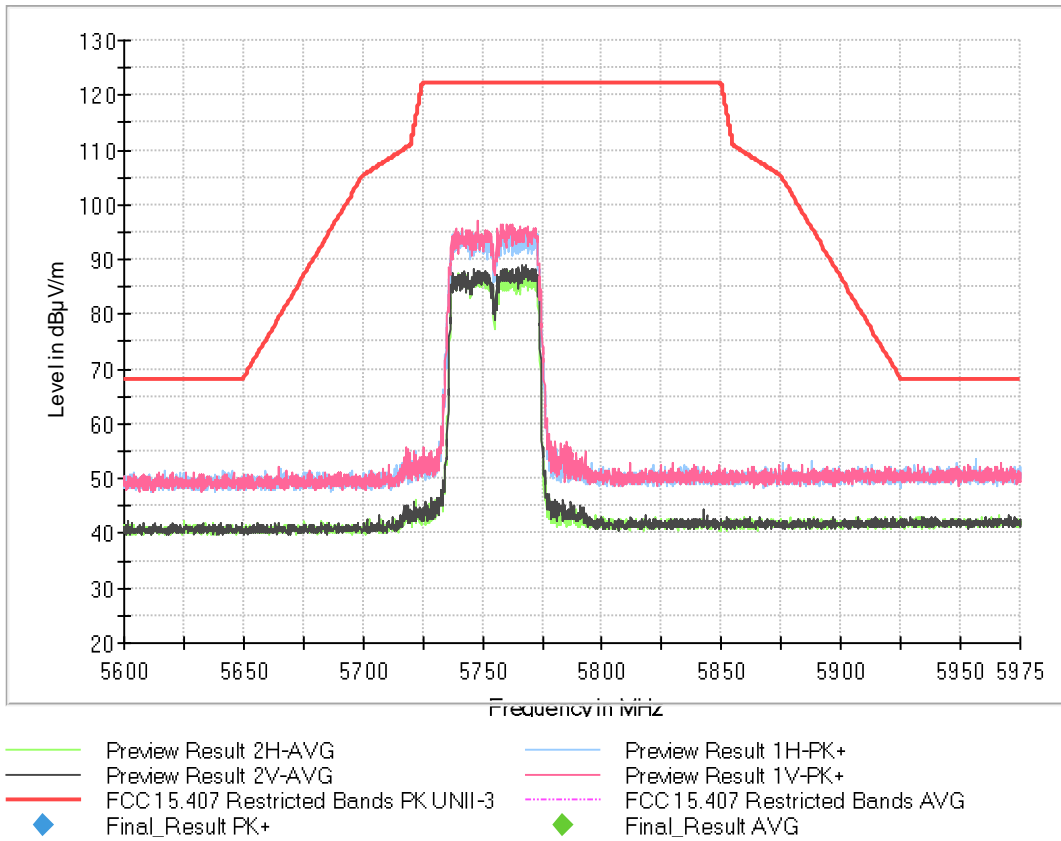


- High Channel:

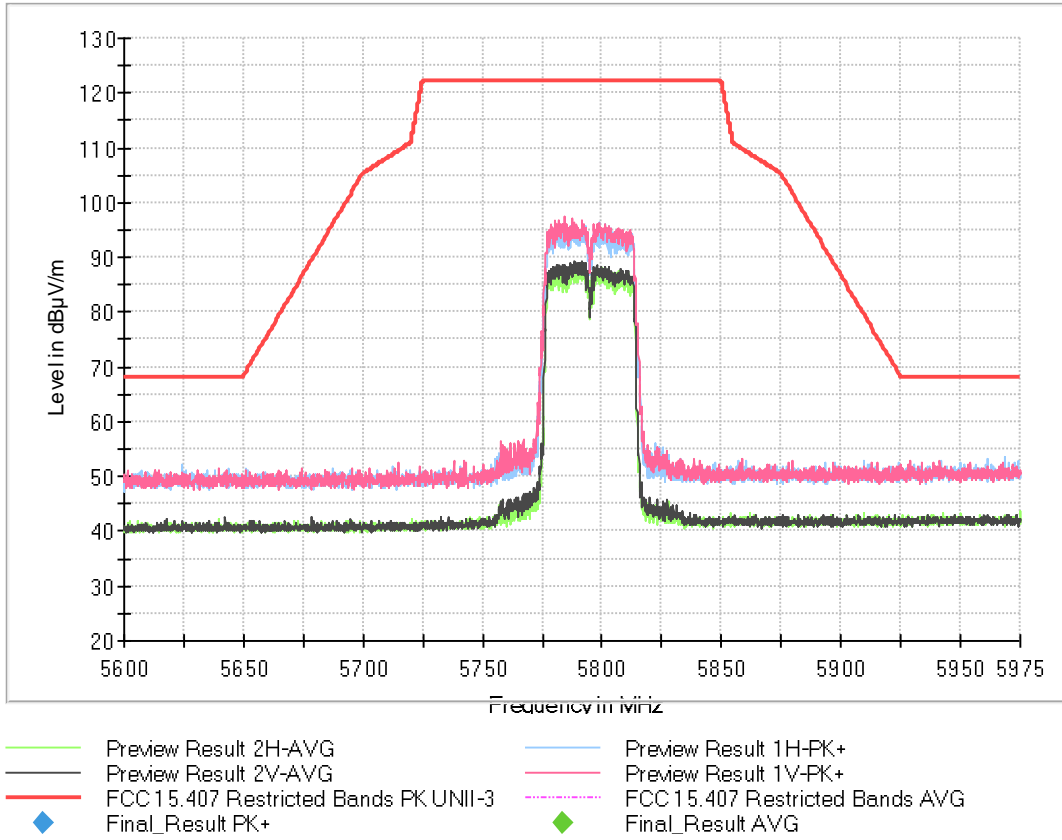


• SISO 802.11 ac40:

- Low Channel:

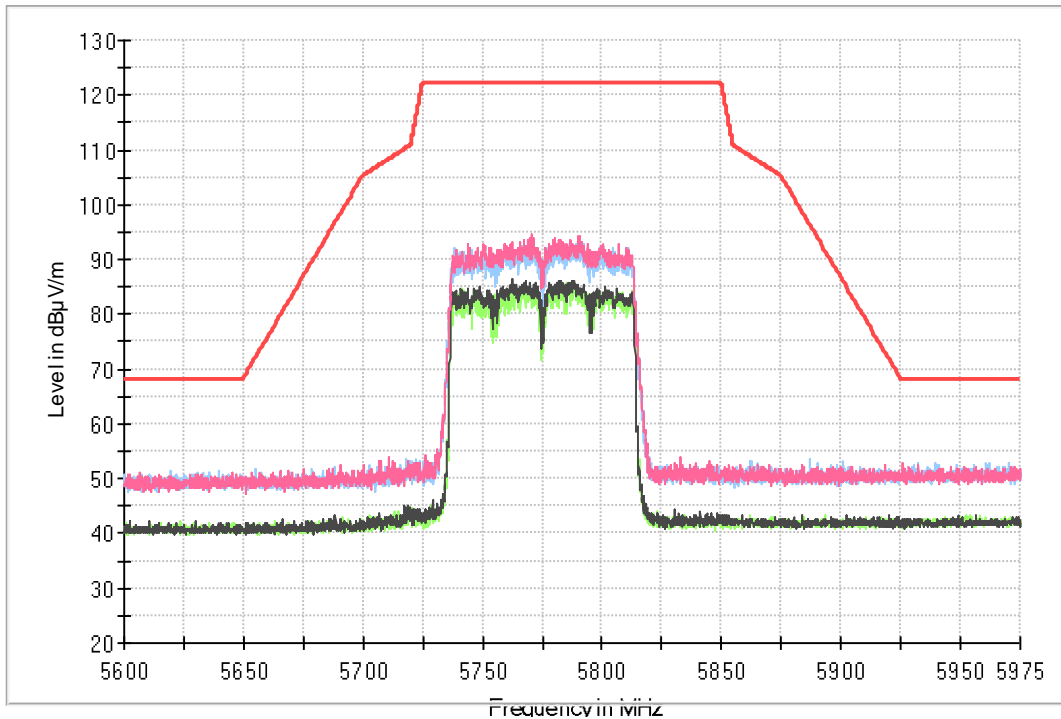


- High Channel:



• SISO 802.11 ac80:

- Single Channel:



- Preview Result 2H-AVG
- Preview Result 2V-AVG
- Preview Result 1H-PK+
- Preview Result 1V-PK+
- ◆ Final_Result PK+
- ◆ Final_Result AVG
- FCC 15.407 Restricted Bands PK UNII-3
- FCC 15.407 Restricted Bands AVG

MIMO worst-case:

- **MIMO 802.11 n20. Spurious emissions inside of the mask 5.65-5.925 GHz:**

- LOW CHANNEL:

No spurious frequencies found at less than 20 dB below the limit.

- MIDDLE CHANNEL:

No spurious frequencies found at less than 20 dB below the limit.

- HIGH CHANNEL:

No spurious frequencies found at less than 20 dB below the limit.

- **MIMO 802.11 ac20. Spurious emissions inside of the mask 5.65-5.925 GHz:**

- LOW CHANNEL:

No spurious frequencies found at less than 20 dB below the limit.

- MIDDLE CHANNEL:

No spurious frequencies found at less than 20 dB below the limit.

- HIGH CHANNEL:

No spurious frequencies found at less than 20 dB below the limit.

- **MIMO 802.11 n40. Spurious emissions inside of the mask 5.65-5.925 GHz:**

- LOW CHANNEL:

No spurious frequencies found at less than 20 dB below the limit.

- HIGH CHANNEL:

No spurious frequencies found at less than 20 dB below the limit.

- **MIMO 802.11 ac40. Spurious emissions inside of the mask 5.65-5.925 GHz:**

- LOW CHANNEL:

No spurious frequencies found at less than 20 dB below the limit.

- HIGH CHANNEL:

No spurious frequencies found at less than 20 dB below the limit.

- **MIMO 802.11 ac80. Spurious emissions inside of the mask 5.65-5.925 GHz:**

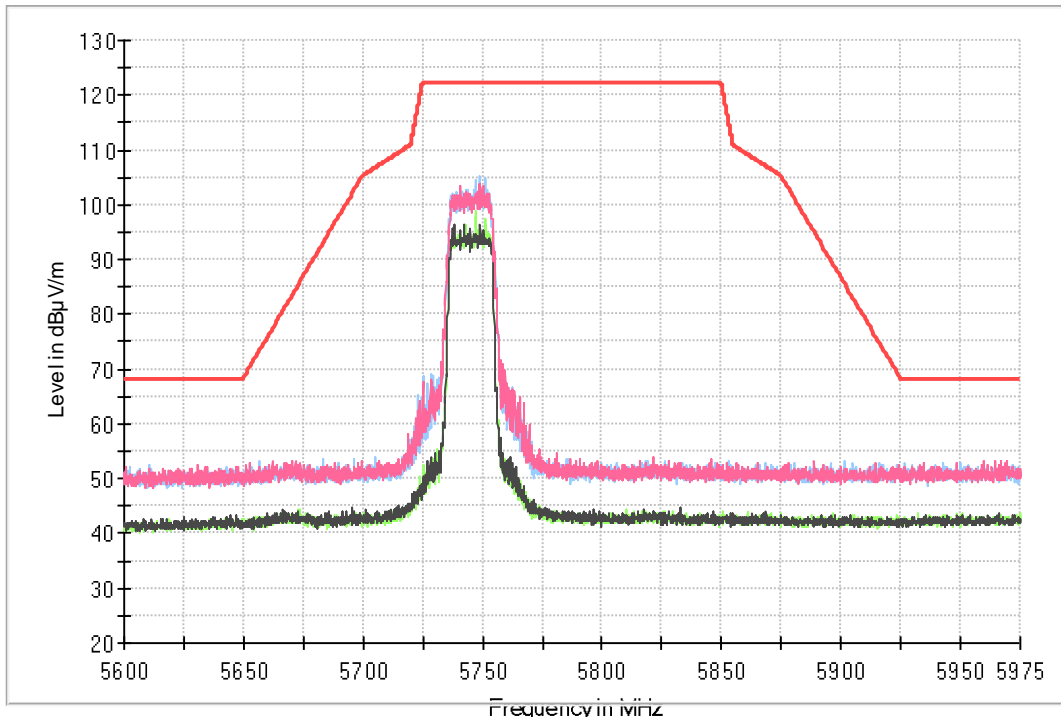
- SINGLE CHANNEL:

No spurious frequencies found at less than 20 dB below the limit.

Verdict: PASS

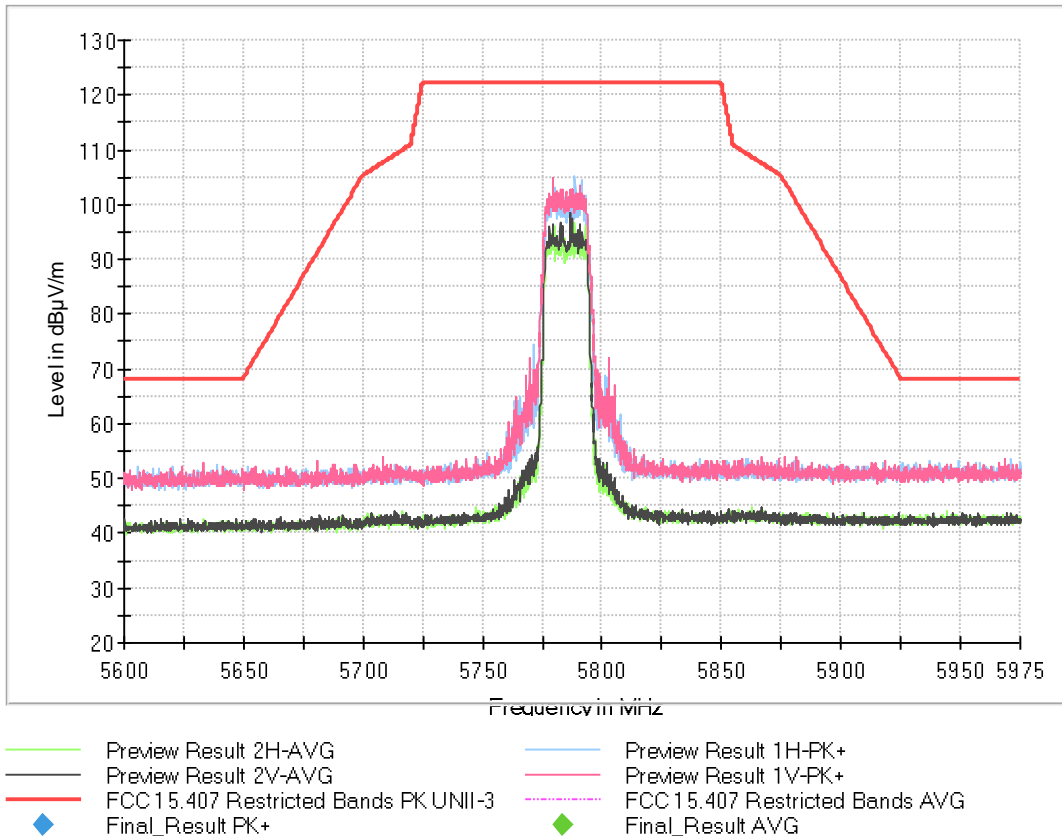
• MIMO 802.11 n20:

- Low Channel:

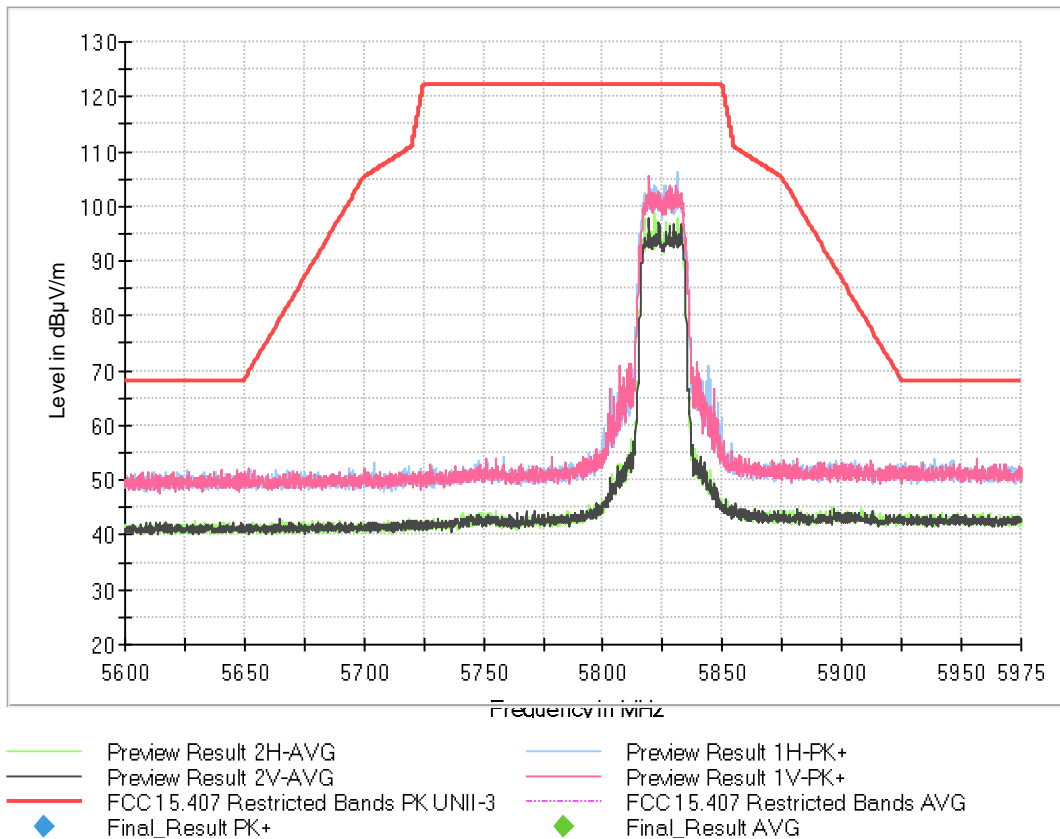


- Preview Result 2H-AVG
- Preview Result 2V-AVG
- FCC 15.407 Restricted Bands PK UNII-3
- Final_Result PK+
- Preview Result 1H-PK+
- Preview Result 1V-PK+
- FCC 15.407 Restricted Bands AVG
- Final_Result AVG

- Middle Channel:

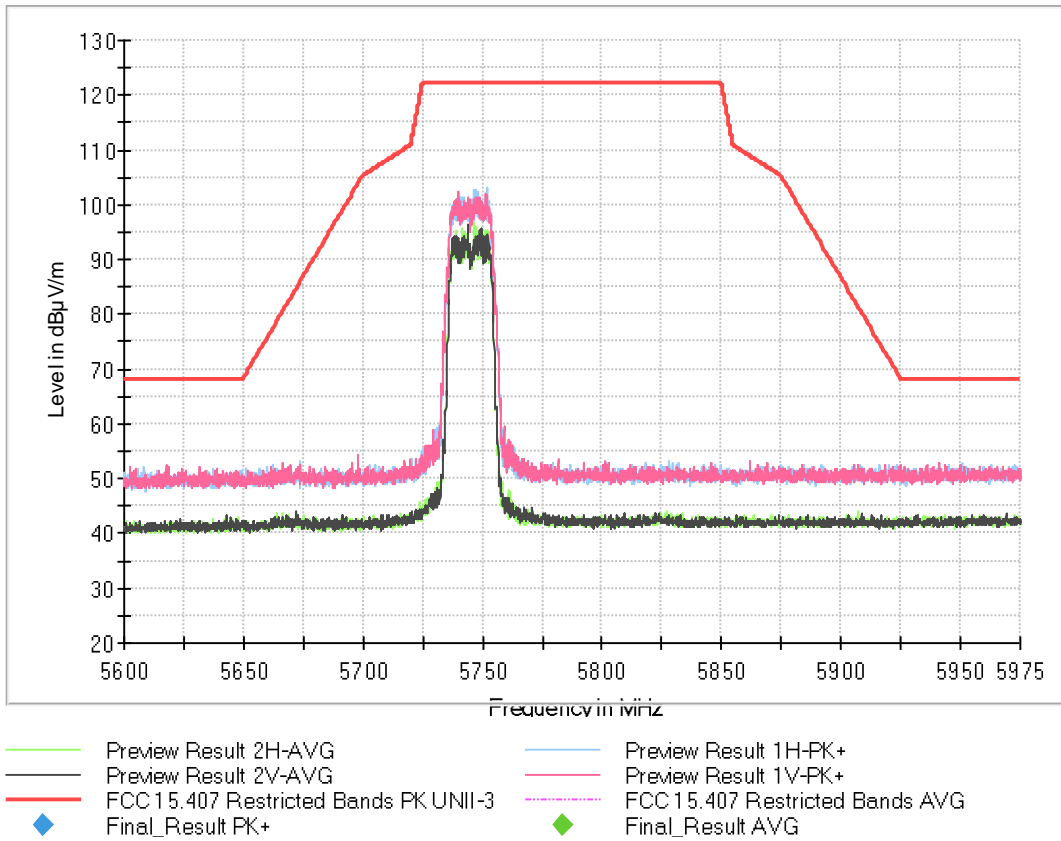


- High Channel:

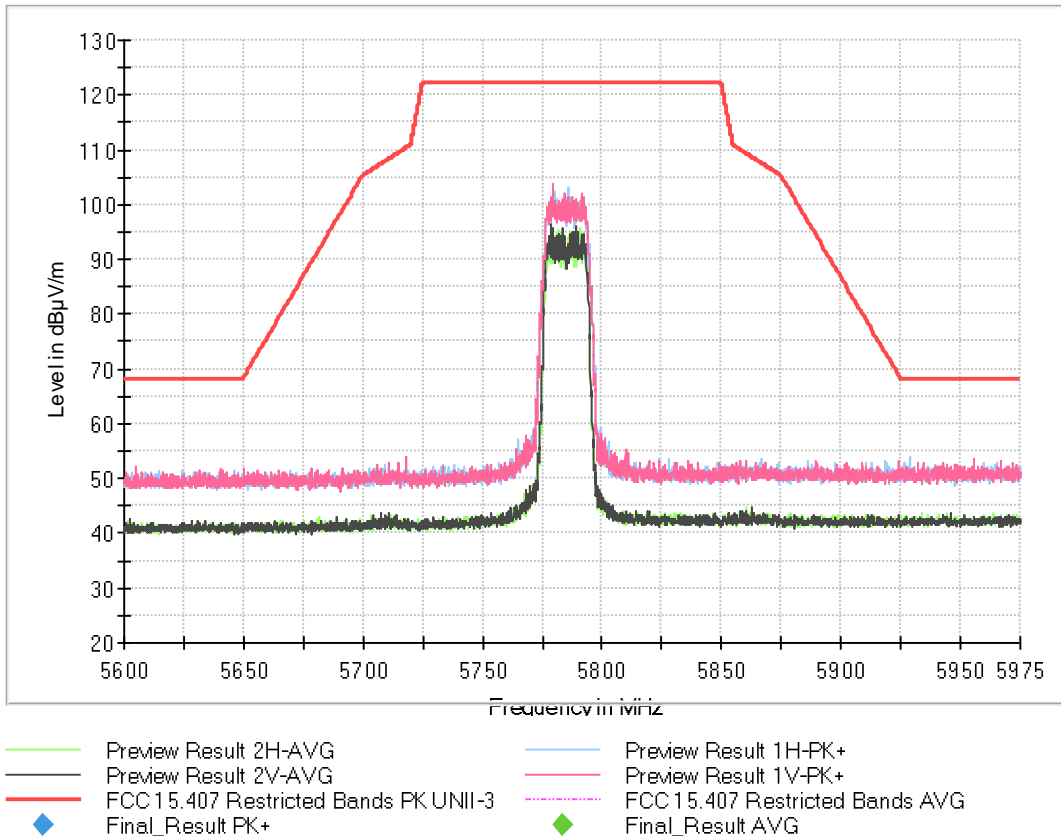


• **MIMO 802.11 ac20:**

- Low Channel:



- Middle Channel:



- High Channel:

