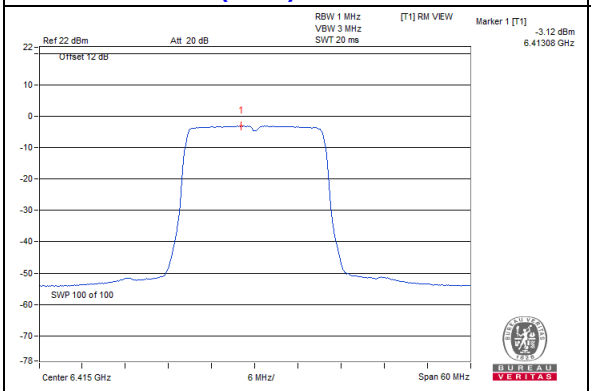
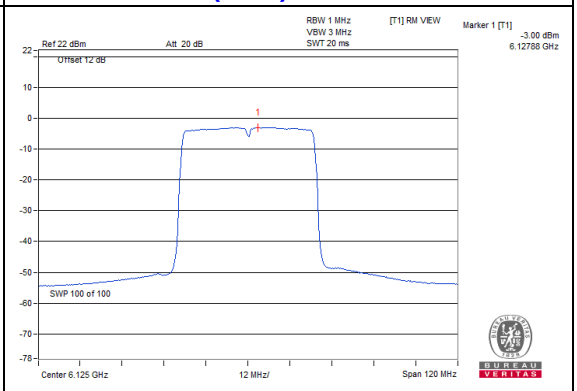
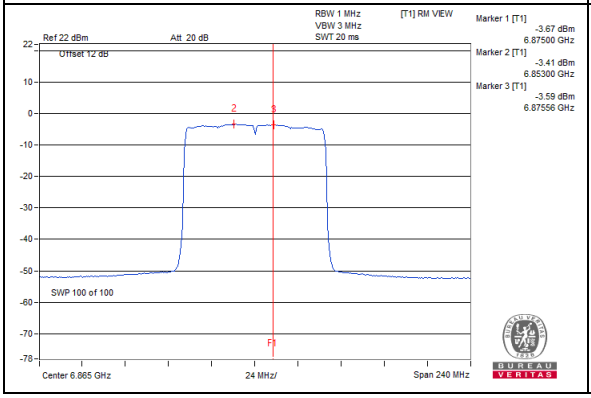
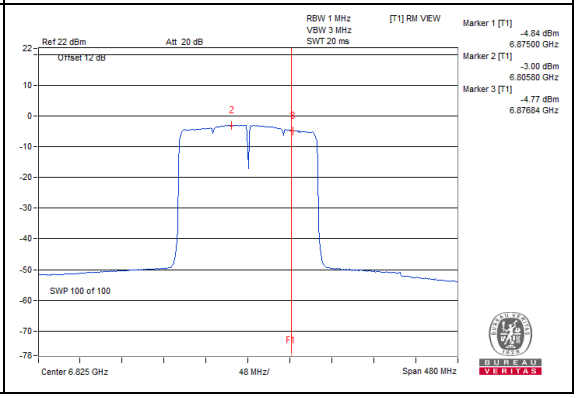
802.11ax (HE160)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3					
47	6185	-4.45	-4.20	-3.56	-4.18	1.94	2.90	4.84	5.00	Pass
79	6345	-3.81	-4.31	-4.13	-4.58	1.82	2.90	4.72	5.00	Pass
111 (U-NII-6 Band)	6505	-4.67	-3.64	-4.42	-3.83	1.90	2.98	4.88	5.00	Pass
111 (U-NII-7 Band)	6505	-4.81	-3.80	-4.41	-4.04	1.77	2.98	4.75	5.00	Pass
143	6665	-4.35	-3.84	-4.00	-3.94	1.99	2.95	4.94	5.00	Pass
175 (U-NII-7 Band)	6825	-4.10	-3.07	-4.11	-5.40	1.93	2.95	4.88	5.00	Pass
175 (U-NII-8 Band)	6825	-5.65	-4.78	-5.59	-6.98	0.34	2.95	3.29	5.00	Pass
207	6985	-3.77	-4.15	-4.34	-4.03	1.95	2.90	4.85	5.00	Pass

Note: 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

Spectrum Plot of Worst Value	
802.11ax (HE20)_Chain 0 / CH93	**802.11ax (HE40)_Chain 0 / CH35**
	
802.11ax (HE80)_Chain 1 / CH183 (U-NII-7 Band)	**802.11ax (HE160)_Chain 1 / CH175 (U-NII-7 Band)**
	

Beamforming Mode:

802.11ax (HE20)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3					
33	6115	-4.04	-4.23	-4.44	-4.79	1.65	2.94	4.59	5.00	Pass
61	6255	-3.99	-4.52	-4.50	-4.68	1.61	2.94	4.55	5.00	Pass
93	6415	-3.02	-4.43	-5.11	-4.25	1.89	2.94	4.83	5.00	Pass
97	6435	-4.97	-4.06	-4.74	-4.13	1.56	2.97	4.53	5.00	Pass
105	6475	-4.75	-4.05	-4.95	-4.04	1.59	2.97	4.56	5.00	Pass
113	6515	-4.78	-4.18	-4.47	-4.03	1.67	2.97	4.64	5.00	Pass
117	6535	-4.59	-4.19	-4.60	-3.83	1.73	2.91	4.64	5.00	Pass
153	6715	-4.86	-4.39	-3.87	-4.54	1.62	2.91	4.53	5.00	Pass
181	6855	-3.84	-3.50	-4.38	-5.68	1.75	2.91	4.66	5.00	Pass
185 (U-NII-7 Band)	6875	-3.94	-3.78	-4.45	-5.69	1.62	2.91	4.53	5.00	Pass
185 (U-NII-8 Band)	6875	-3.99	-3.82	-4.44	-5.79	1.58	2.95	4.53	5.00	Pass
213	7015	-4.63	-4.14	-5.07	-4.01	1.58	2.95	4.53	5.00	Pass
229	7095	-4.21	-3.89	-4.40	-3.86	1.94	2.95	4.89	5.00	Pass
233	7115	-10.97	-10.85	-10.60	-12.10	-5.07	2.95	-2.12	5.00	Pass

Note: 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

802.11ax (HE40)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3					
35	6125	-3.19	-4.10	-4.12	-4.66	2.04	2.94	4.98	5.00	Pass
59	6245	-3.60	-4.25	-4.56	-4.87	1.73	2.94	4.67	5.00	Pass
91	6405	-3.79	-4.59	-5.22	-4.24	1.59	2.94	4.53	5.00	Pass
99	6445	-4.68	-3.53	-4.65	-3.60	1.94	2.97	4.91	5.00	Pass
107	6485	-4.66	-3.88	-4.68	-3.83	1.78	2.97	4.75	5.00	Pass
115 (U-NII-6 Band)	6525	-4.67	-3.84	-4.49	-3.88	1.82	2.97	4.79	5.00	Pass
115 (U-NII-7 Band)	6525	-4.67	-3.77	-4.51	-3.85	1.84	2.91	4.75	5.00	Pass
123	6565	-4.60	-3.88	-4.35	-3.90	1.85	2.91	4.76	5.00	Pass
155	6725	-4.45	-3.90	-4.04	-4.13	1.90	2.91	4.81	5.00	Pass
179	6845	-3.33	-3.57	-3.98	-5.48	2.01	2.91	4.92	5.00	Pass
187 (U-NII-7 Band)	6885	-3.77	-3.98	-4.42	-5.85	1.59	2.91	4.50	5.00	Pass
187 (U-NII-8 Band)	6885	-3.46	-3.79	-4.13	-5.51	1.86	2.95	4.81	5.00	Pass
211	7005	-4.49	-4.10	-5.05	-3.64	1.73	2.95	4.68	5.00	Pass
227	7085	-4.07	-3.69	-4.41	-3.94	2.00	2.95	4.95	5.00	Pass

Note: 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

802.11ax (HE80)

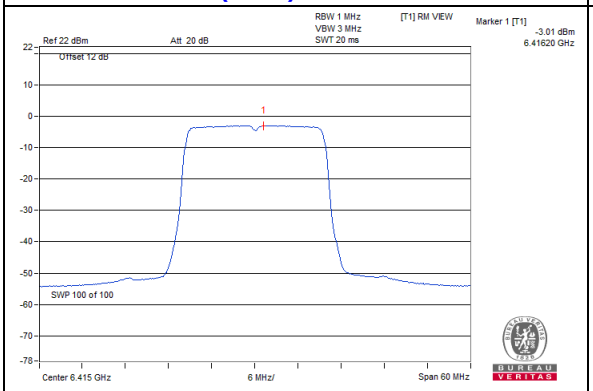
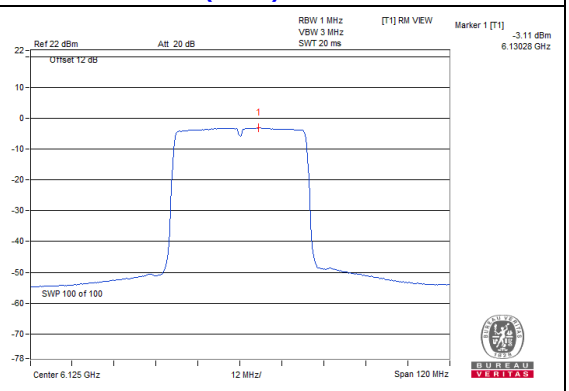
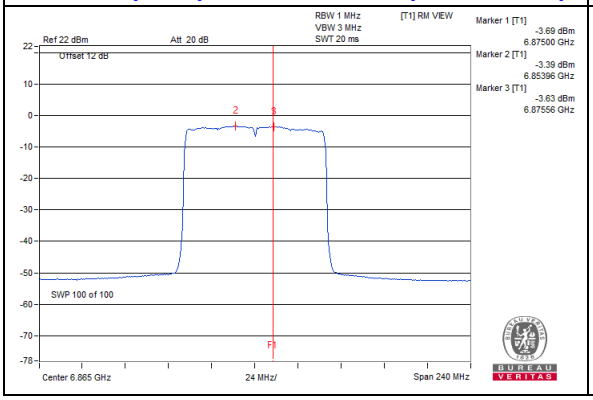
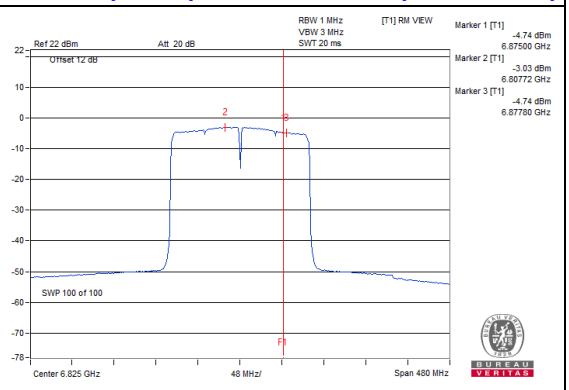
Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3					
39	6145	-4.03	-4.08	-4.46	-4.35	1.79	2.94	4.73	5.00	Pass
55	6225	-3.71	-3.96	-4.46	-4.00	2.00	2.94	4.94	5.00	Pass
87	6385	-3.86	-4.60	-4.55	-4.01	1.78	2.94	4.72	5.00	Pass
103	6465	-4.22	-3.54	-4.85	-4.13	1.86	2.97	4.83	5.00	Pass
119 (U-NII-6 Band)	6545	-5.28	-4.46	-5.41	-4.96	1.01	2.97	3.98	5.00	Pass
119 (U-NII-7 Band)	6545	-4.55	-3.74	-4.84	-4.37	1.66	2.91	4.57	5.00	Pass
135	6625	-4.74	-3.98	-4.22	-4.08	1.78	2.91	4.69	5.00	Pass
151	6705	-4.64	-3.69	-4.18	-4.13	1.87	2.91	4.78	5.00	Pass
167	6785	-3.73	-3.57	-4.19	-5.92	1.76	2.91	4.67	5.00	Pass
183 (U-NII-7 Band)	6865	-3.42	-3.39	-3.84	-5.54	2.06	2.91	4.97	5.00	Pass
183 (U-NII-8 Band)	6865	-3.62	-3.59	-3.95	-5.75	1.88	2.91	4.79	5.00	Pass
199	6945	-4.47	-3.66	-5.02	-3.52	1.90	2.95	4.85	5.00	Pass
215	7025	-4.30	-3.77	-5.06	-3.49	1.91	2.95	4.86	5.00	Pass

Note: 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

802.11ax (HE160)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)				Total PSD (dBm/MHz)	Directional Gain (dBi)	EIRP PSD (dBm/MHz)	EIRP PSD Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1	Chain 2	Chain 3					
47	6185	-4.33	-4.32	-3.68	-4.30	1.87	2.94	4.81	5.00	Pass
79	6345	-3.64	-4.26	-4.08	-4.43	1.93	2.94	4.87	5.00	Pass
111 (U-NII-6 Band)	6505	-4.58	-3.80	-4.57	-3.89	1.83	2.97	4.80	5.00	Pass
111 (U-NII-7 Band)	6505	-4.77	-3.91	-4.48	-3.97	1.75	2.97	4.72	5.00	Pass
143	6665	-4.63	-3.91	-4.01	-4.06	1.88	2.91	4.79	5.00	Pass
175 (U-NII-7 Band)	6825	-4.03	-3.13	-4.11	-5.46	1.92	2.91	4.83	5.00	Pass
175 (U-NII-8 Band)	6825	-5.62	-4.86	-5.70	-6.85	0.32	2.91	3.23	5.00	Pass
207	6985	-3.87	-4.18	-4.26	-3.96	1.96	2.95	4.91	5.00	Pass

Note: 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.

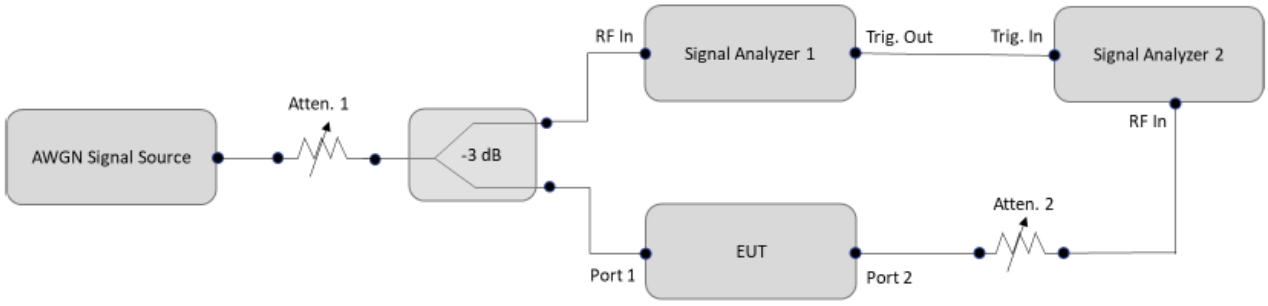
Spectrum Plot of Worst Value	
802.11ax (HE20)_Chain 0 / CH93	**802.11ax (HE40)_Chain 0 / CH35**
	
802.11ax (HE80)_Chain 1 / CH183 (U-NII-7 Band)	**802.11ax (HE160)_Chain 1 / CH175 (U-NII-7 Band)**
	

4.7 Contention Based Protocol Measurement

4.7.1 Limits of Contention Based Protocol Measurement

Unlicensed indoor low-power devices must detect co-channel radio frequency power that is at least -62 dBm (The threshold is referenced to a 0 dBi antenna gain.) or lower. Additionally, indoor low-power devices must detect co-channel energy with 90% or greater certainty.

4.7.2 Test Setup



4.7.3 Test Instruments

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Spectrum Analyzer R&S	FSW8	101497	Nov 10, 2020	Nov 09, 2021
Spectrum Analyzer R&S	FSV40	101516	Mar. 04, 2020	Mar. 03, 2021
MXG X-Series RF Vector Signal Generator Agilent	N5182B	MY59100182	Apr. 10, 2020	Apr. 09, 2021
Power Splitter/combiner Mini-Circuits	ZN2PD-9G	ZN2PD-9G	Jun. 16, 2020	Jun. 15, 2021

NOTE: 1. The test was performed in Femtocell room.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
3. Tested Date: Dec. 29, 2020

4.7.4 Test Procedure

a. Set the signal analyzer center frequency to the nominal EUT channel center frequency. The span range of the signal analyzer shall be between two times and five times the OBW of the EUT. Connect the output port of the EUT to the signal analyzer 2. Ensure that the attenuator 2 provides enough attenuation to not overload the signal analyzer 2 receiver.
b. Monitoring the signal analyzer 2, verify the EUT is operating and transmitting with the parameters (set as following section 4.7.5 EUT operating condition).

c. Determine number of times detection threshold test as following table,

If	Number of Tests	Placement of Incumbent Transmission
$BW_{EUT} \leqq BW_{Inc}$	Once	Same as EUT transmission
$BW_{Inc} < BW_{EUT} \leqq 2xBW_{Inc}$	Once	Contained within BW_{EUT}
$2xBW_{Inc} < BW_{EUT} \leqq 4xBW_{Inc}$	Twice. (Incumbent transmission is contained within BW_{EUT})	Closely to the lower edge and upper edge of the EUT Channel
$BW_{EUT} > 4xBW_{Inc}$	Three times	Closely to the lower edge ,in the middle and upper edge of the EUT Channel

d. Using an AWGN signal source, generate (but do not transmit, i.e., RF OFF) a 10 MHz-wide AWGN signal. Use step c table to determine the center frequency of the 10 MHz AWGN signal relative to the EUT's channel bandwidth and center frequency.
e. Set the AWGN signal power to an extremely low level (more than 20 dB below the -62 dBm threshold). Connect the AWGN signal source, via a 3-dB splitter, to the signal analyzer 1 and the EUT.
f. Transmit the AWGN signal (RF ON) and verify its characteristics on the signal analyzer 1.
g. Monitor the signal analyzer 2 to verify if the AWGN signal has been detected and the EUT has ceased transmission. If the EUT continues to transmit, then incrementally increase the AWGN signal power level until the EUT stops transmitting.
h. (Including all losses in the RF paths) Determine and record the AWGN signal power level (at the EUT's antenna port) at which the EUT ceased transmission. Repeat the procedure at least 10 times to verify the EUT can detect an AWGN signal with 90% (or better) level of certainty.
i. Refer to step c table to determine number of times the detection threshold testing needs to be repeated. If testing is required more than once, then go back to step d, choose a different center frequency for the AWGN signal and repeat the process.

4.7.5 EUT Operating Condition

Set the EUT to transmit with a constant duty cycle and relative operating parameters which including power level, operating frequency,modulation and bandwidth.

4.7.6 Test Results

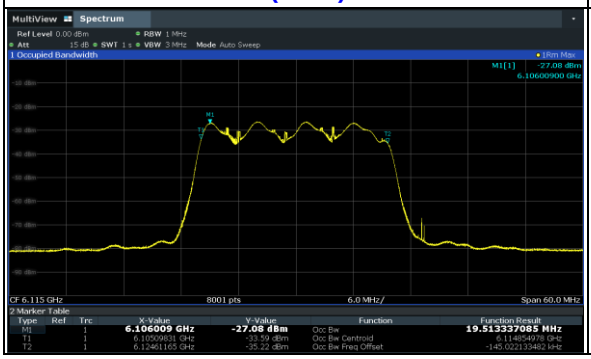
For U-NII-5 band

Contention Based Protocol Measurement										
Measurement Mode：	Conducted measurement			**Device Type：**	Indoor AP		at the antenna connector			
The Incumbent Signal (AWGN) Level (dBm)	-62 dBm			**Anttenna Gain：**	0	dBi				
Operation Band	**Operation Mode**	**Channel Bandwidth (MHz)**	**Channel Number**	**Channel Frequency (MHz)**	**Test Result**					
					AWGN Signals Freq. (MHz)	**Number of Times**	**Number of Detected**	**Detection Rate**	**Limit**	**Pass/Fail**
U-NII 5	802.11ax	20MHz	33	6115	6115	10	10	100%	90%	Pass
		160MHz	47	6185	6110	10	10	100%	90%	Pass
					6185	10	10	100%	90%	Pass
					6260	10	10	100%	90%	Pass
Result	Complied									

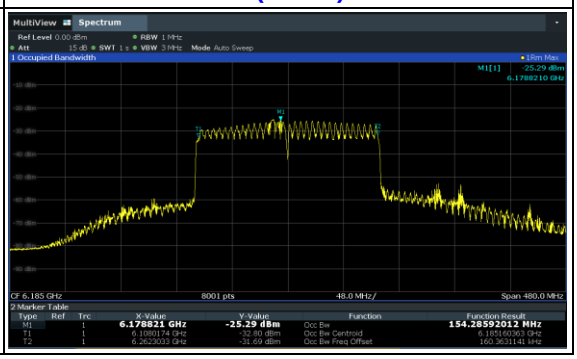
Lowest Interference (AWGN) Level Check							
Operation Band	**Operation Mode**	**Channel Bandwidth (MHz)**	**Channel Number**	**Channel Frequency (MHz)**	**AWGN Signal Frequency (MHz)**	**Threshold Level (dBm)**	**EUT Status**
U-NII 5	802.11ax	20MHz	33	6115	6115	-63	Start transmitting
		160MHz	47	6185	6110	-63	Start transmitting
					6185	-63	Start transmitting
					6260	-63	Start transmitting

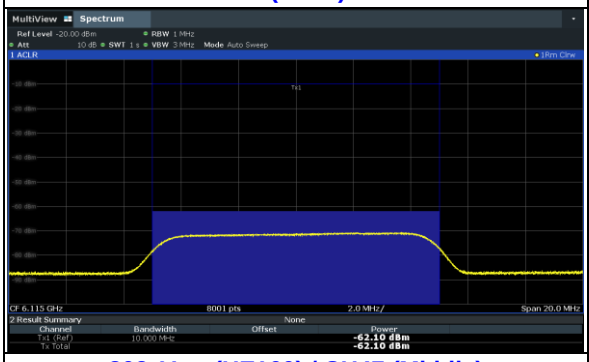
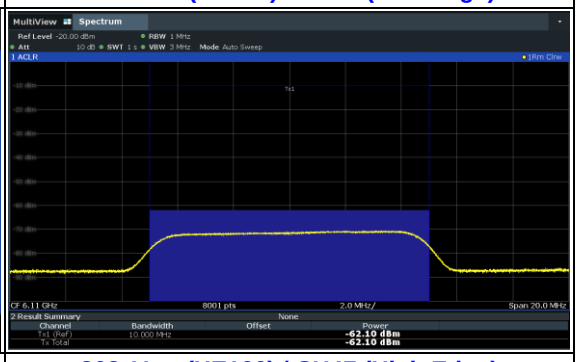
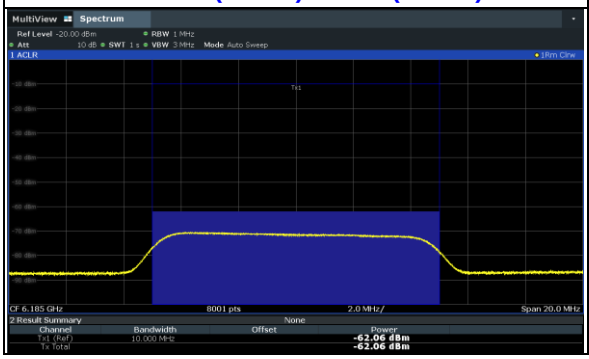
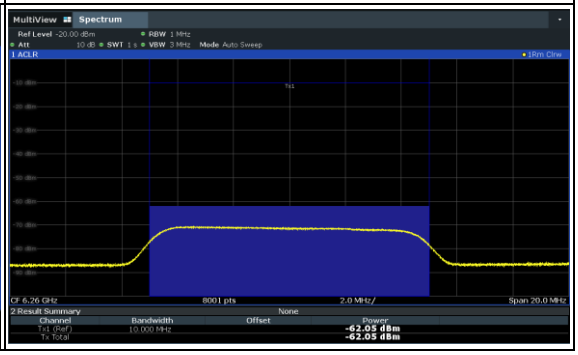
Plots of EUT Tx waveform

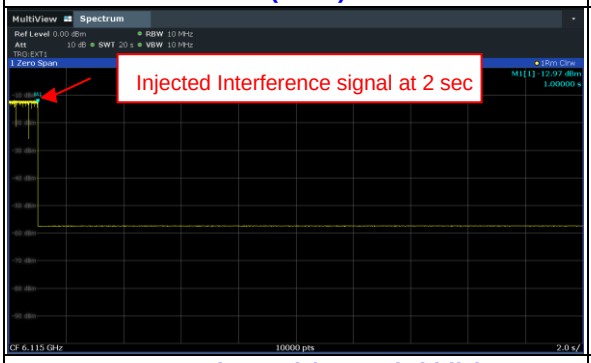
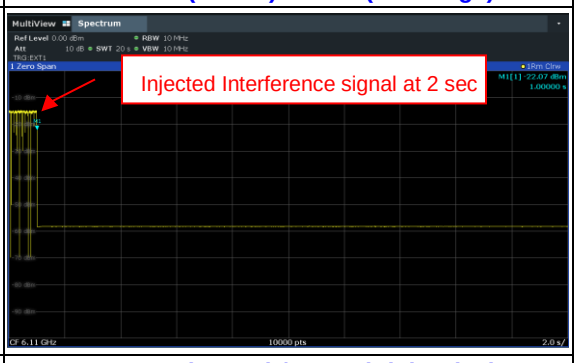
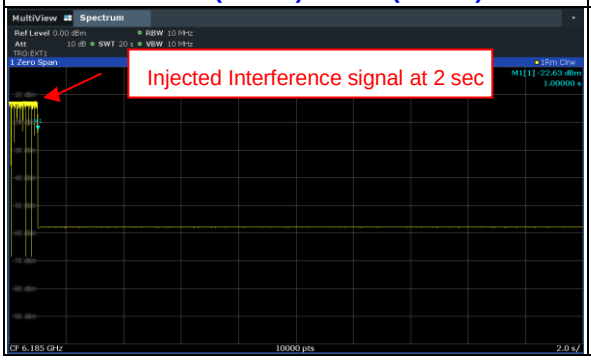
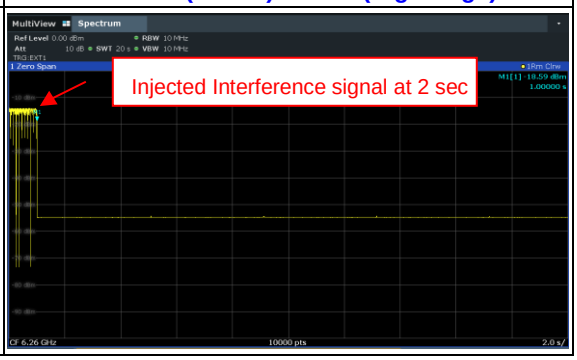
802.11ax (HE20) / CH33



802.11ax (HE160) / CH47



Plots of shows Incumbent signal level	
802.11ax (HE20) / CH33	**802.11ax (HE160) / CH47 (Low Edge)**
	
802.11ax (HE160) / CH47 (Middle)	**802.11ax (HE160) / CH47 (High Edge)**
	

Plots of EUT ceased transmission in the time domain	
802.11ax (HE20) / CH33	**802.11ax (HE160) / CH47 (Low Edge)**
	
802.11ax (HE160) / CH47 (Middle)	**802.11ax (HE160) / CH47 (High Edge)**
	

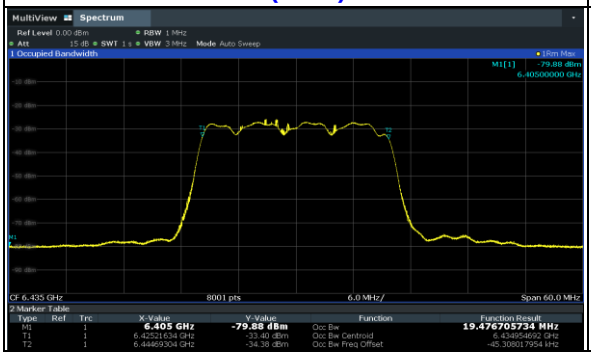
For U-NII-6 band

Contention Based Protocol Measurement										
Measurement Mode :	Conducted measurement			**Device Type :**	Indoor AP		at the antenna connector			
The Incumbent Signal (AWGN) Level (dBm)	-62 dBm			**Anttenna Gain :**	0	dBi				
Operation Band	**Operation Mode**	**Channel Bandwidth (MHz)**	**Channel Number**	**Channel Frequency (MHz)**	**Test Result**					
					AWGN Signals Freq. (MHz)	**Number of Times**	**Number of Detected**	**Detection Rate**	**Limit**	**Pass/Fail**
U-NII 6	802.11ax	20MHz	97	6435	6435	10	10	100%	90%	Pass
		80MHz	103	6465	6430	10	10	100%	90%	Pass
					6465	10	10	100%	90%	Pass
					6500	10	10	100%	90%	Pass
Result	Complied									

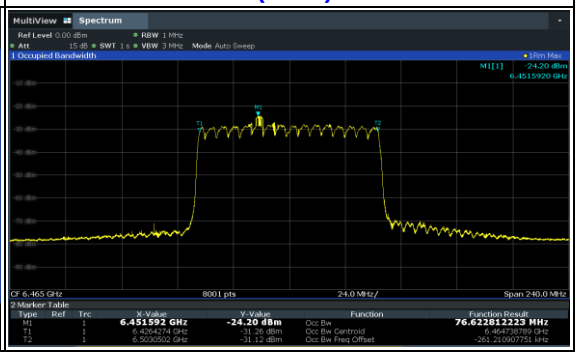
Lowest Interference (AWGN) Level Check							
Operation Band	**Operation Mode**	**Channel Bandwidth (MHz)**	**Channel Number**	**Channel Frequency (MHz)**	**AWGN Signal Frequency (MHz)**	**Threshold Level (dBm)**	**EUT Status**
U-NII 6	802.11ax	20MHz	97	6435	6435	-63	Start transmitting
		80MHz	103	6465	6430	-63	Start transmitting
					6465	-63	Start transmitting
					6500	-63	Start transmitting

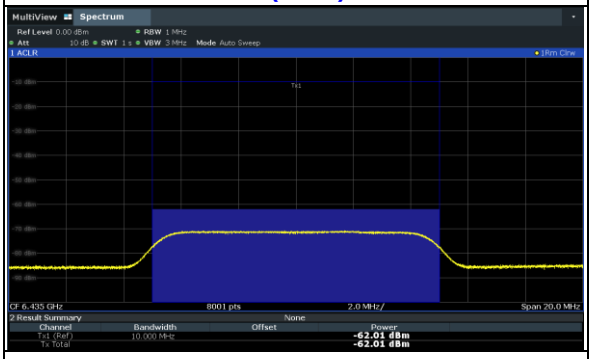
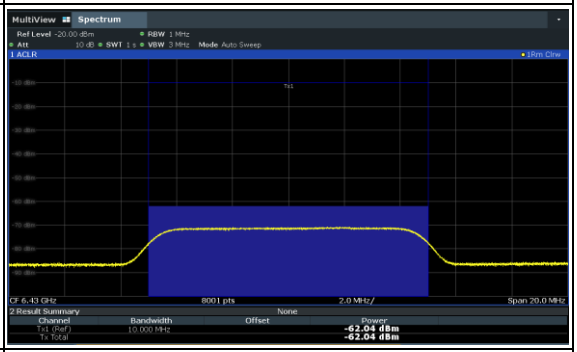
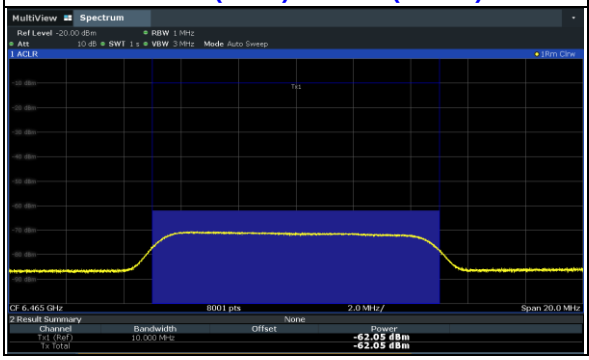
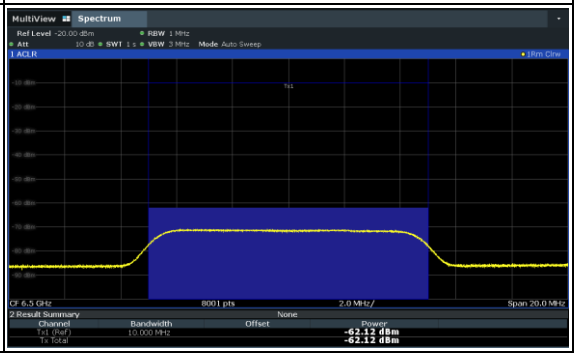
Plots of EUT Tx waveform

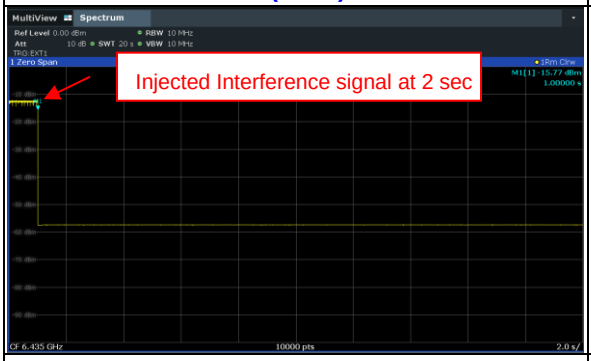
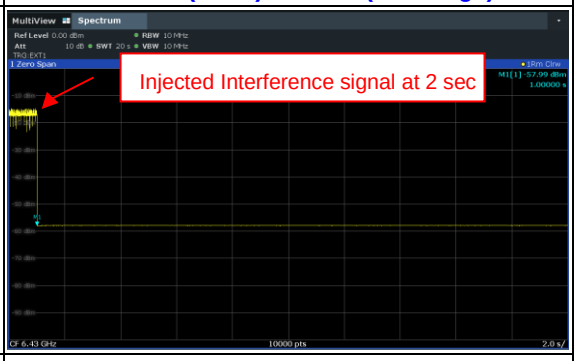
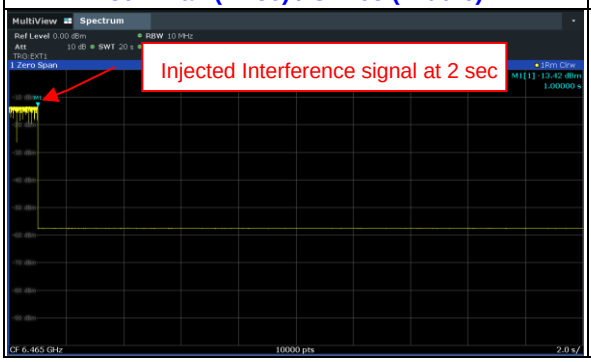
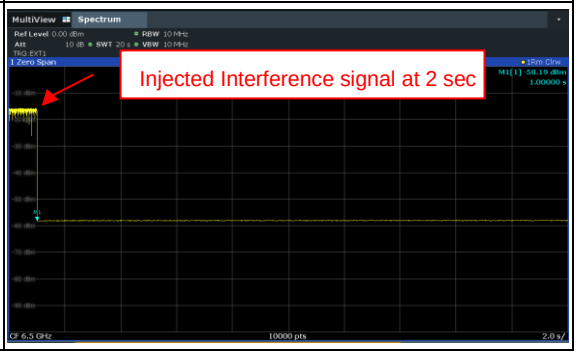
802.11ax (HE20) / CH97



802.11ax (HE80) / CH103



Plots of shows Incumbent signal level	
802.11ax (HE20) / CH97	**802.11ax (HE80) / CH103 (Low Edge)**
	
802.11ax (HE80) / CH103 (Middle)	**802.11ax (HE80) / CH103 (High Edge)**
	

Plots of EUT ceased transmission in the time domain	
802.11ax (HE20) / CH97	**802.11ax (HE80) / CH103 (Low Edge)**
	
802.11ax (HE80) / CH103 (Middle)	**802.11ax (HE80) / CH103 (High Edge)**
	

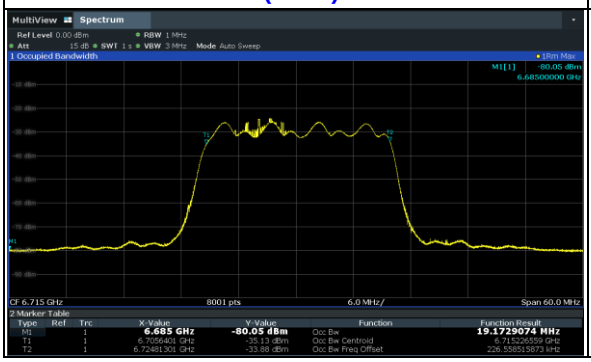
For U-NII-7 band

Contention Based Protocol Measurement										
Measurement Mode :	Conducted measurement			**Device Type :**	Indoor AP		at the antenna connector			
The Incumbent Signal (AWGN) Level (dBm)	-62 dBm			**Anttenna Gain :**	0	dBi				
Operation Band	**Operation Mode**	**Channel Bandwidth (MHz)**	**Channel Number**	**Channel Frequency (MHz)**	**Test Result**					
					AWGN Signals Freq. (MHz)	**Number of Times**	**Number of Detected**	**Detection Rate**	**Limit**	**Pass/Fail**
U-NII 7	802.11ax	20MHz	153	6715	6715	10	10	100%	90%	Pass
		160MHz	143	6665	6590	10	10	100%	90%	Pass
					6665	10	10	100%	90%	Pass
					6740	10	10	100%	90%	Pass
Result	Complied									

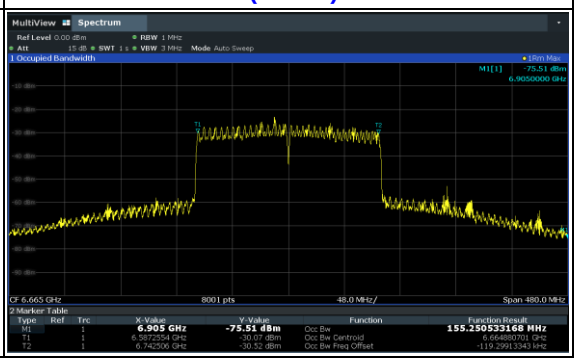
Lowest Interference (AWGN) Level Check							
Operation Band	**Operation Mode**	**Channel Bandwidth (MHz)**	**Channel Number**	**Channel Frequency (MHz)**	**AWGN Signal Frequency (MHz)**	**Threshold Level (dBm)**	**EUT Status**
U-NII 7	802.11ax	20MHz	153	6715	6715	-63	Start transmitting
		160MHz	143	6665	6590	-63	Start transmitting
					6665	-63	Start transmitting
					6740	-63	Start transmitting

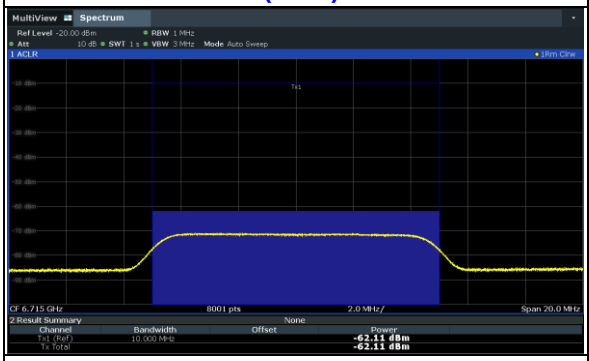
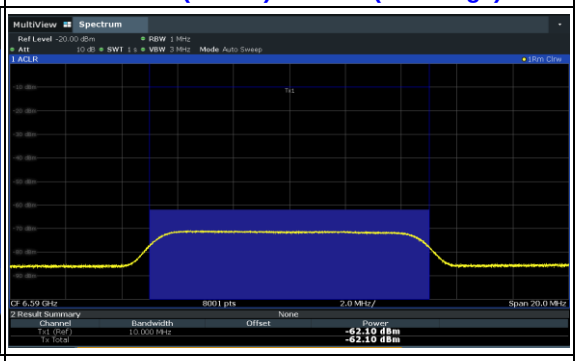
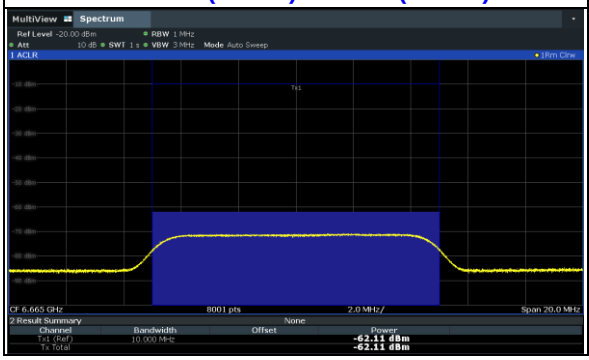
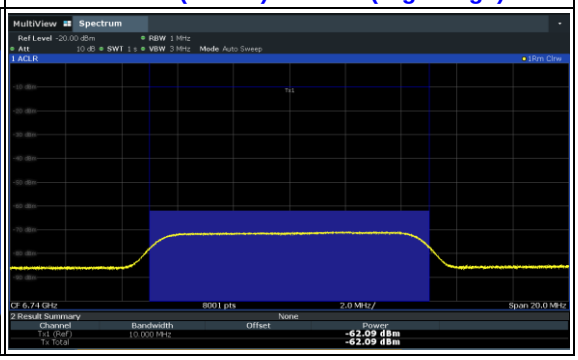
Plots of EUT Tx waveform

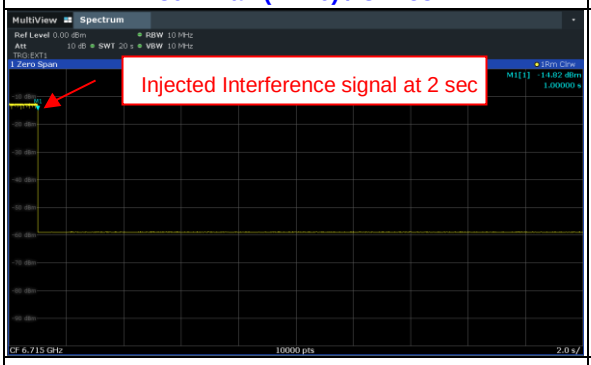
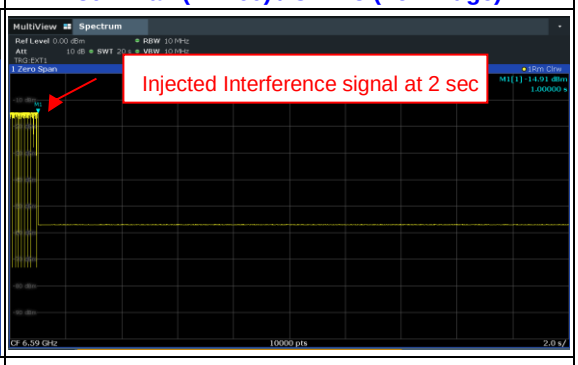
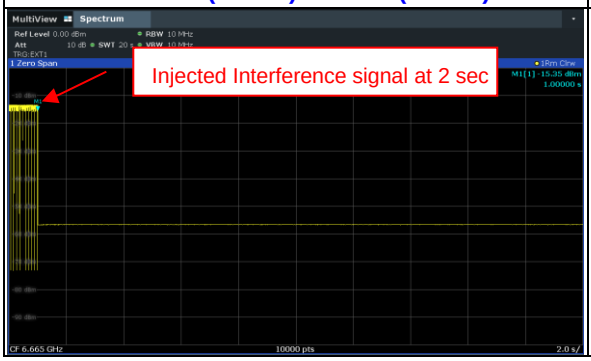
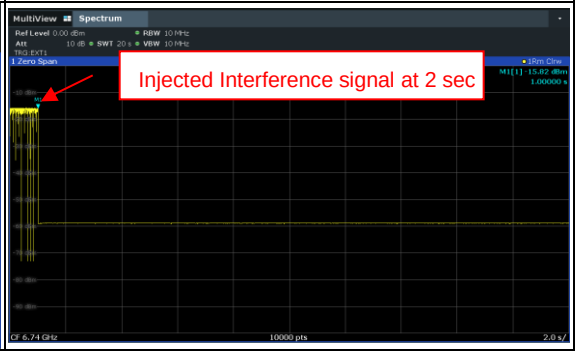
802.11ax (HE20) / CH153



802.11ax (HE160) / CH143



Plots of shows Incumbent signal level	
802.11ax (HE20) / CH153	**802.11ax (HE160) / CH143 (Low Edge)**
	
802.11ax (HE160) / CH143 (Middle)	**802.11ax (HE160) / CH143 (High Edge)**
	

Plots of EUT ceased transmission in the time domain	
802.11ax (HE20) / CH153	**802.11ax (HE160) / CH143 (Low Edge)**
	
802.11ax (HE160) / CH143 (Middle)	**802.11ax (HE160) / CH143 (High Edge)**
	

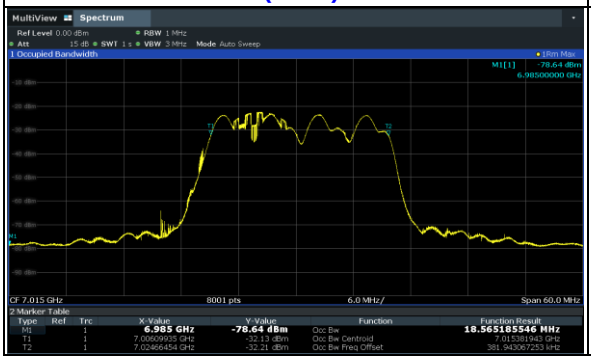
For U-NII-8 band

Contention Based Protocol Measurement										
Measurement Mode：	Conducted measurement			**Device Type：**	Indoor AP		at the antenna connector			
The Incumbent Signal (AWGN) Level (dBm)	-62 dBm			**Anttenna Gain：**	0	dBi				
Operation Band	**Operation Mode**	**Channel Bandwidth (MHz)**	**Channel Number**	**Channel Frequency (MHz)**	**Test Result**					
					AWGN Signals Freq. (MHz)	**Number of Times**	**Number of Detected**	**Detection Rate**	**Limit**	**Pass/Fail**
U-NII 8	802.11ax	20MHz	213	7015	7015	10	10	100%	90%	Pass
		160MHz	207	6985	6910	10	10	100%	90%	Pass
					6985	10	10	100%	90%	Pass
					7060	10	10	100%	90%	Pass
Result	Complied									

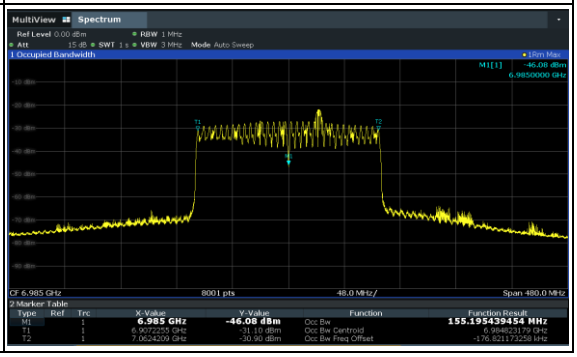
Lowest Interference (AWGN) Level Check							
Operation Band	**Operation Mode**	**Channel Bandwidth (MHz)**	**Channel Number**	**Channel Frequency (MHz)**	**AWGN Signal Frequency (MHz)**	**Threshold Level (dBm)**	**EUT Status**
U-NII 8	802.11ax	20MHz	213	7015	7015	-63	Start transmitting
		160MHz	207	6985	6910	-63	Start transmitting
					6985	-63	Start transmitting
					7060	-63	Start transmitting

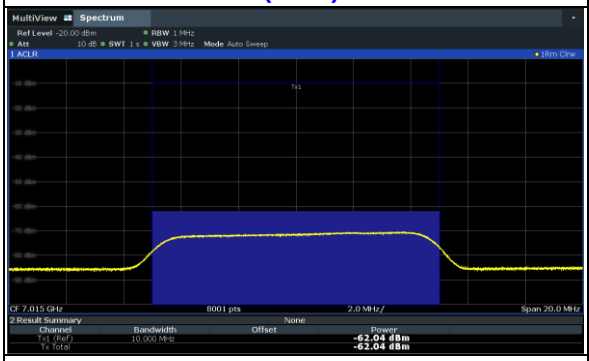
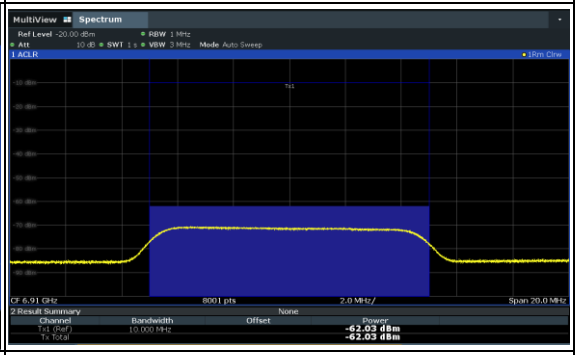
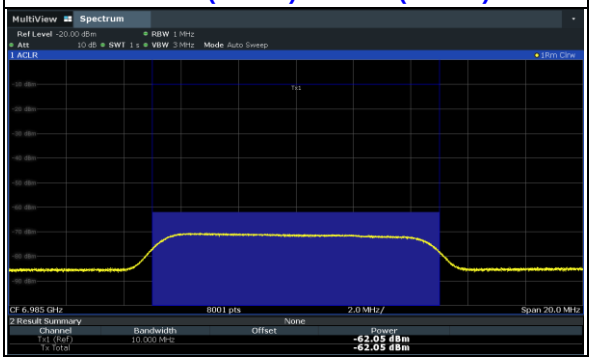
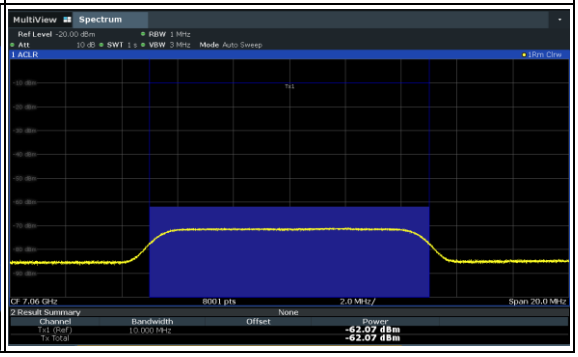
Plots of EUT Tx waveform

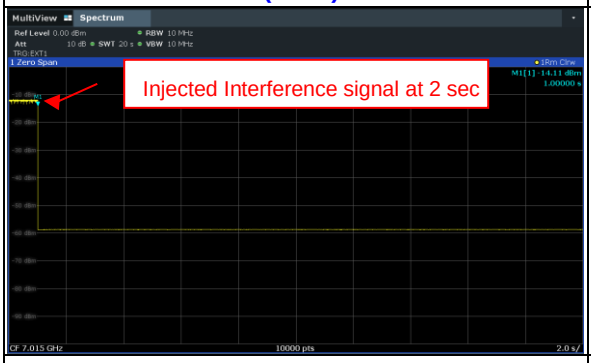
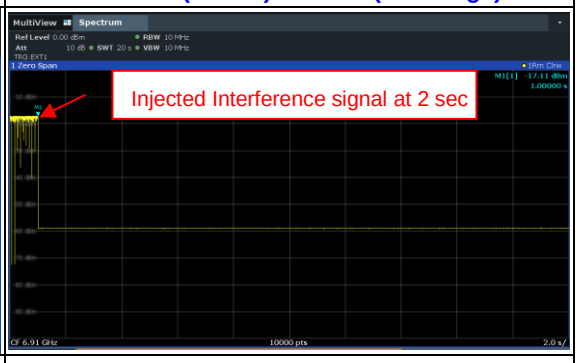
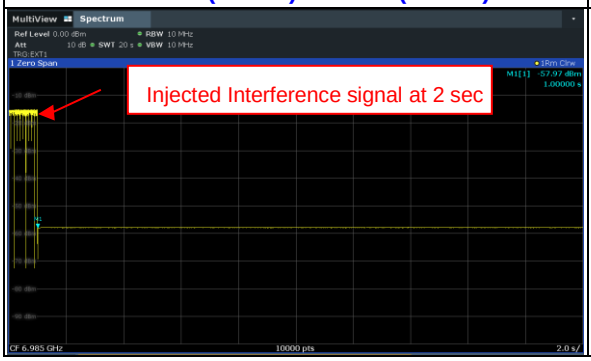
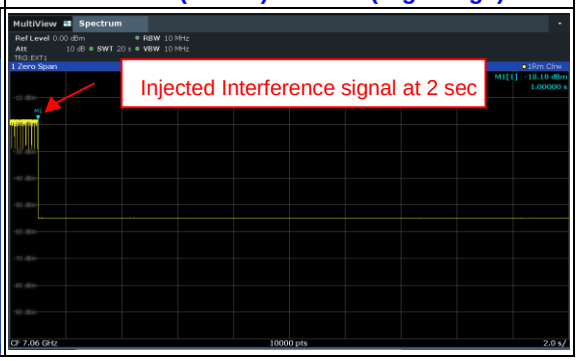
802.11ax (HE20) / CH213



802.11ax (HE160) / CH207



Plots of shows Incumbent signal level	
802.11ax (HE20) / CH213	**802.11ax (HE160) / CH207 (Low Edge)**
	
802.11ax (HE160) / CH207 (Middle)	**802.11ax (HE160) / CH207 (High Edge)**
	

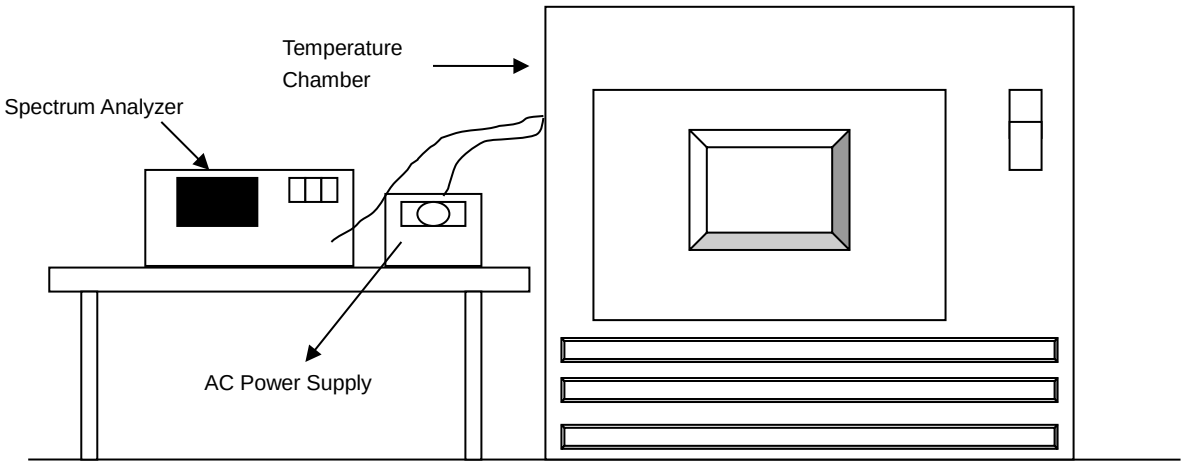
Plots of EUT ceased transmission in the time domain	
802.11ax (HE20) / CH213	**802.11ax (HE160) / CH207 (Low Edge)**
	
802.11ax (HE160) / CH207 (Middle)	**802.11ax (HE160) / CH207 (High Edge)**
	

4.8 Frequency Stability Measurement

4.8.1 Limits of Frequency Stability Measurement

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

4.8.2 Test Setup



4.8.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.8.4 Test Procedure

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

.

4.8.5 EUT Operating Condition

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

4.8.6 Test Results

802.11a

Frequency Stability Versus Temp.									
Operating Frequency: 6115 MHz									
TEMP. (℃)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail
40	120	6114.9899	PASS	6114.9924	PASS	6114.9913	PASS	6114.9919	PASS
30	120	6115.0053	PASS	6115.004	PASS	6115.0063	PASS	6115.004	PASS
20	120	6114.9956	PASS	6114.9958	PASS	6114.9948	PASS	6114.9935	PASS
10	120	6115.0019	PASS	6115.0012	PASS	6115.0056	PASS	6115.0064	PASS
0	120	6114.9882	PASS	6114.9861	PASS	6114.9899	PASS	6114.9903	PASS

Frequency Stability Versus Voltage									
Operating Frequency: 6115 MHz									
TEMP. (℃)	Power Supply (Vac)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail
20	138	6115.0012	PASS	6115.0002	PASS	6115.0049	PASS	6115.007	PASS
	120	6115.0019	PASS	6115.0012	PASS	6115.0056	PASS	6115.0064	PASS
	102	6115.0012	PASS	6115.0012	PASS	6115.0055	PASS	6115.0065	PASS

4.9 Operational Restrictions for 6 GHz U-NII Devices

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

(1) Operation of indoor access points in the 5.925-7.125 GHz band is prohibited on oil platforms, cars, trains, boats, and aircraft, except that indoor access points are permitted to operate in the 5.925-6.425 GHz bands in large aircraft while flying above 10,000 feet.

(2) Operation of transmitters in the 5.925-7.125 GHz band is prohibited for control of or communications with unmanned aircraft systems.

(3) Transmitters operating under the provisions of paragraphs (a)(5), (a)(6), and (a)(8) of this section are limited to indoor locations.

(4) In the 5.925-7.125 GHz band, indoor access points must bear the following statement in a conspicuous location on the device and in the user's manual: FCC regulations restrict operation of this device to indoor use only. The operation of this device is prohibited on oil platforms, cars, trains, boats, and aircraft, except that operation of this device is permitted in large aircraft while flying above 10,000 feet.

(5) In the 5.925-7.125 GHz band, Access points and subordinate devices may connect to other access points or subordinate devices.

(6) Indoor access points, operating in the 5.925-7.125 GHz band must employ a contention-based protocol.

4.9.2 Test Setup

N/A

4.9.3 Test Instruments

N/A

4.9.4 Test Procedure

N/A.

4.9.5 Test Results

Device is an indoor access point, all restrictions are meet the §15.407 (d) requirements. Please refer to the Attestation letter exhibit supplied within this application.

5 Pictures of Test Arrangements

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

Appendix A– Information of the Testing Laboratories

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

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

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

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

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

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

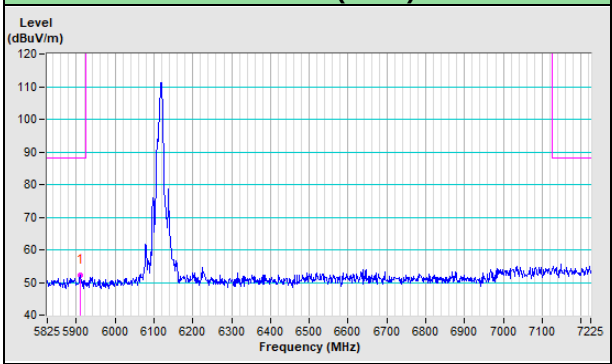
The address and road map of all our labs can be found in our web site also.

--- END ---

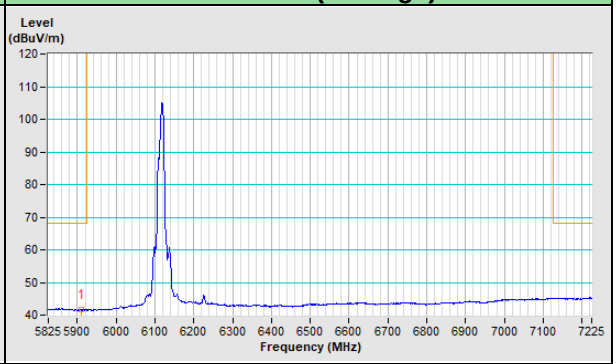
Annex B.1 - Band-Edge Measurement (Mode 1)

802.11a 6G Channel 33

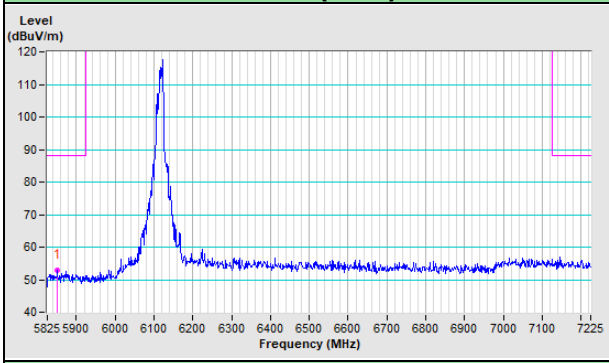
Horizontal (Peak)



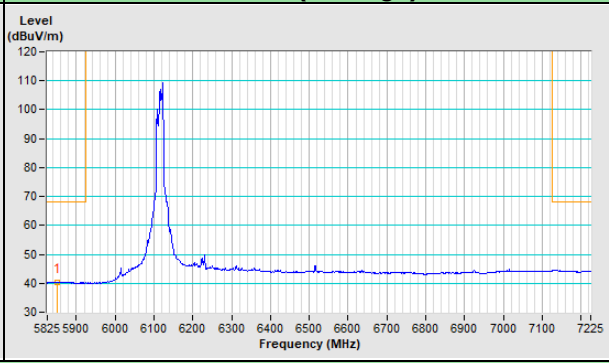
Horizontal (Average)



Vertical (Peak)

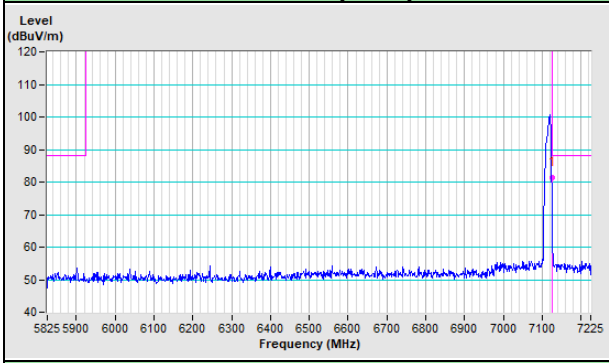


Vertical (Average)

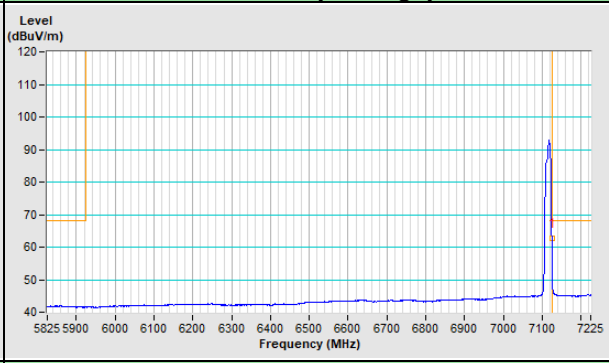


802.11a 6G Channel 233

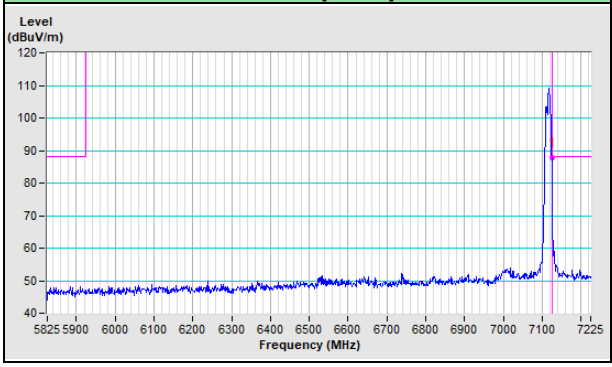
Horizontal (Peak)



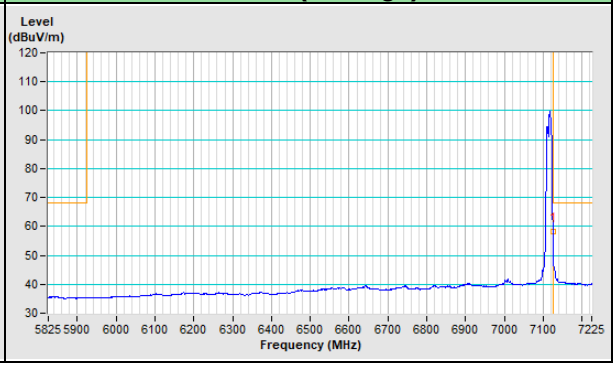
Horizontal (Average)



Vertical (Peak)

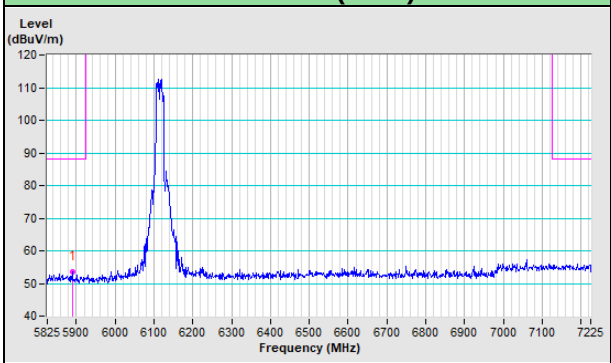


Vertical (Average)

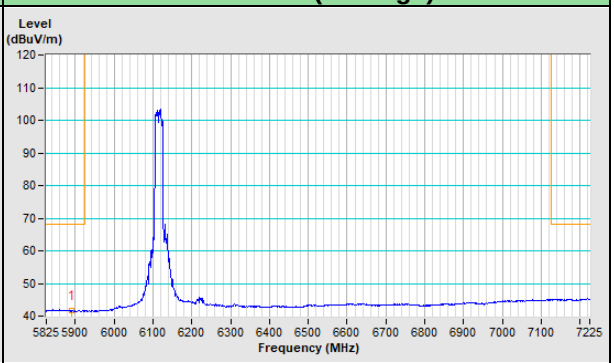


802.11ax (HE20) Channel 33

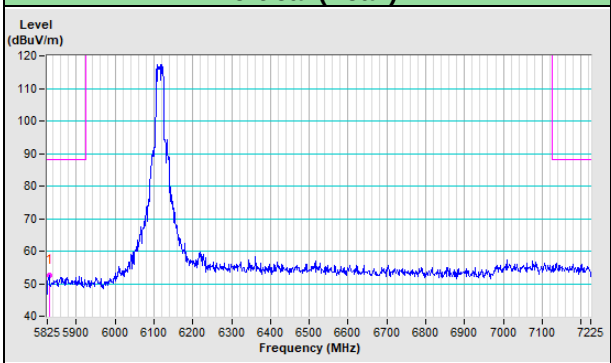
Horizontal (Peak)



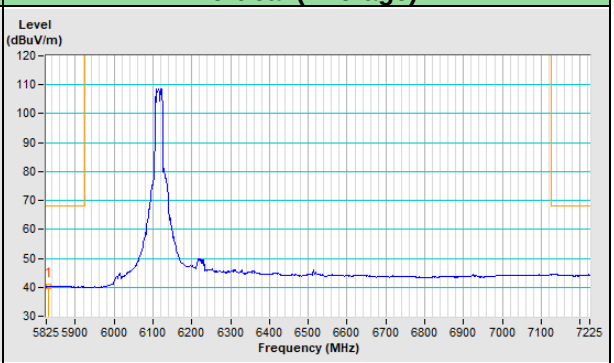
Horizontal (Average)



Vertical (Peak)

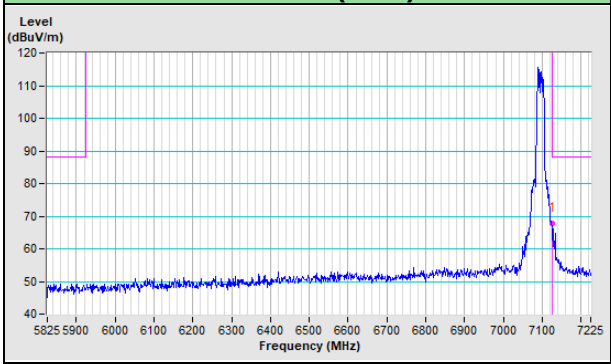


Vertical (Average)

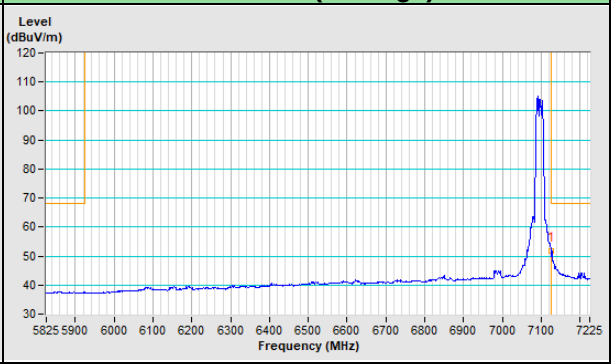


802.11ax (HE20) Channel 229

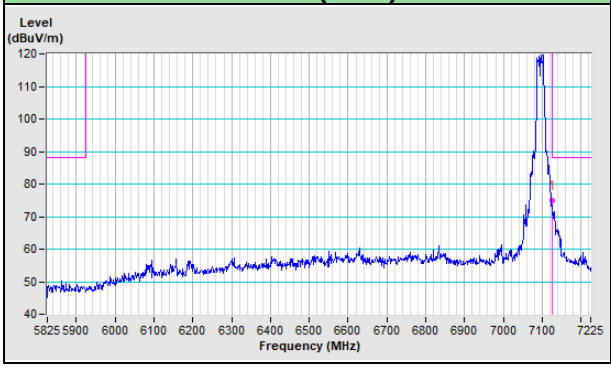
Horizontal (Peak)



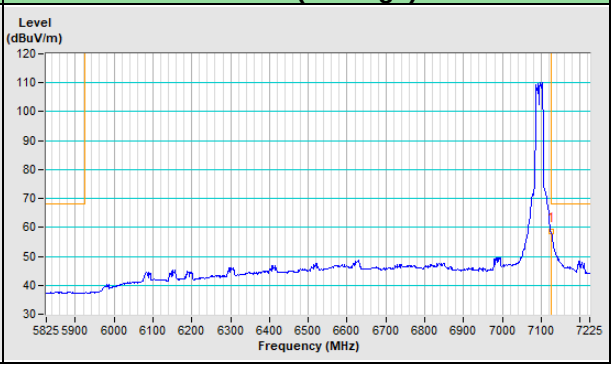
Horizontal (Average)

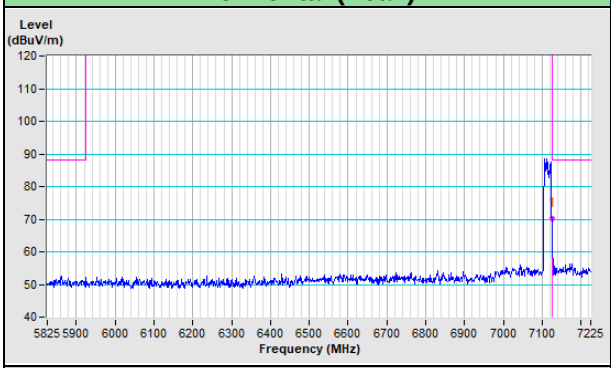
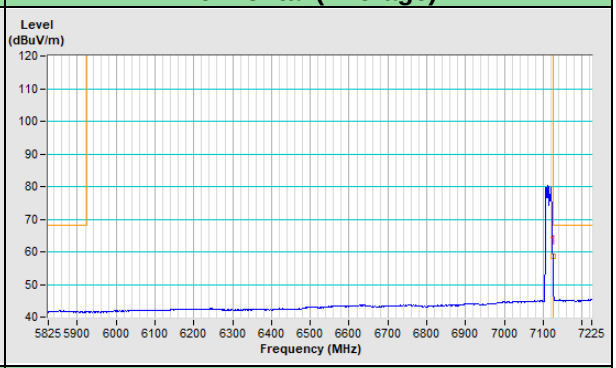
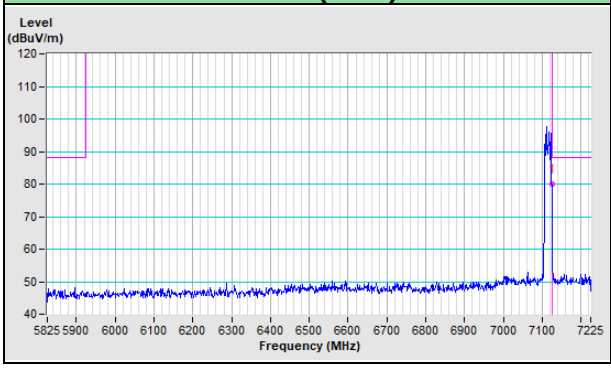
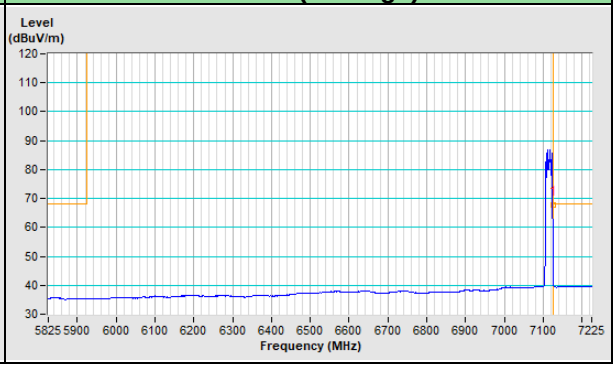


Vertical (Peak)



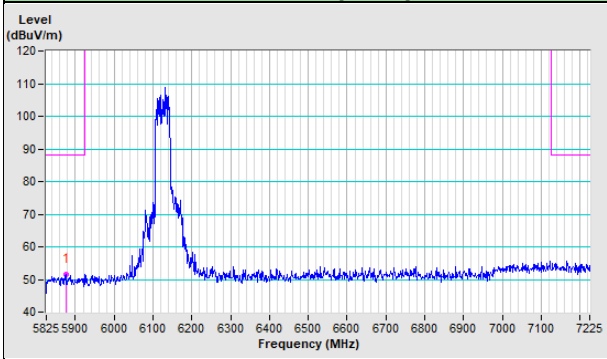
Vertical (Average)



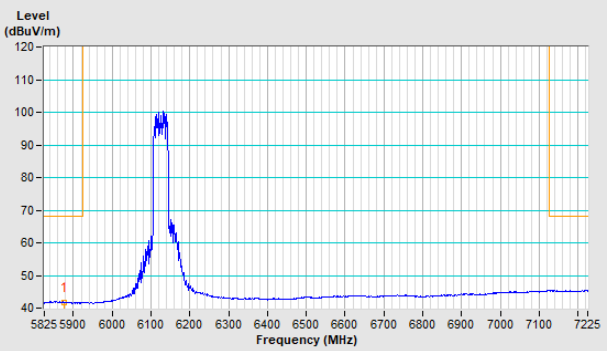
802.11ax (HE20) Channel 233	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ax (HE40) Channel 35

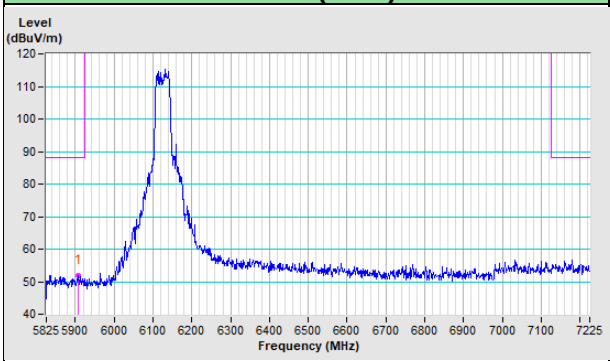
Horizontal (Peak)



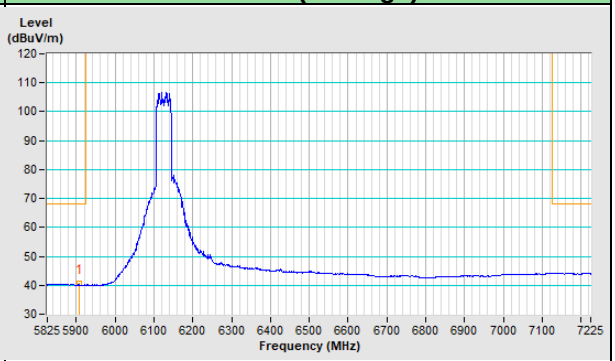
Horizontal (Average)



Vertical (Peak)

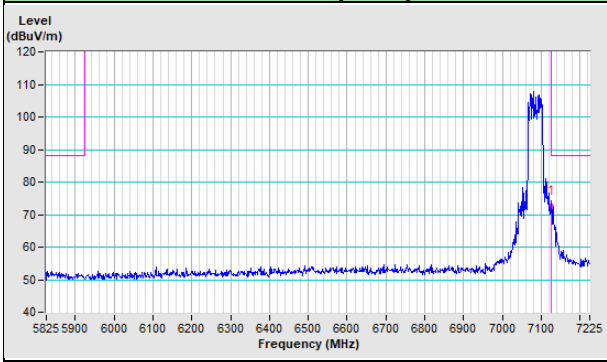


Vertical (Average)

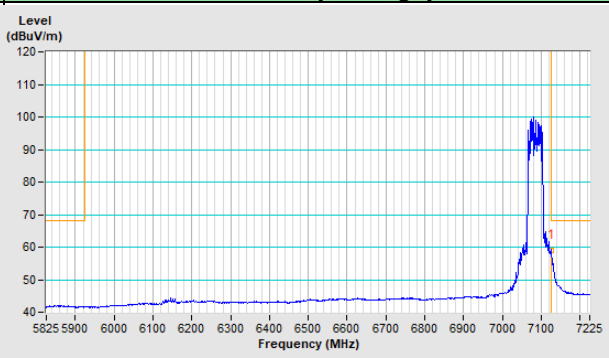


802.11ax (HE40) Channel 227

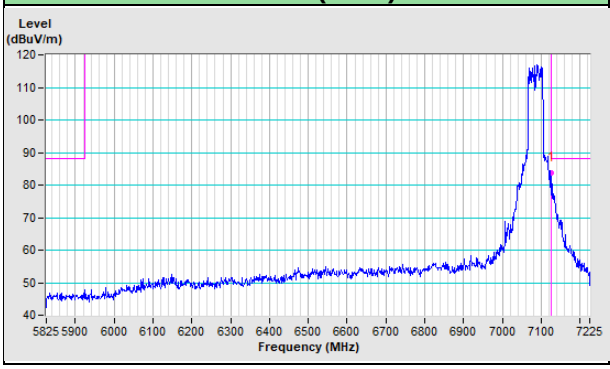
Horizontal (Peak)



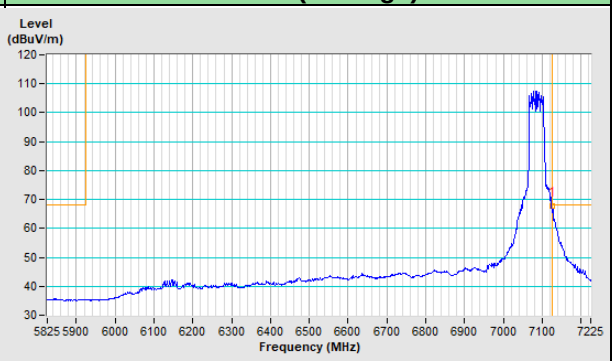
Horizontal (Average)



Vertical (Peak)

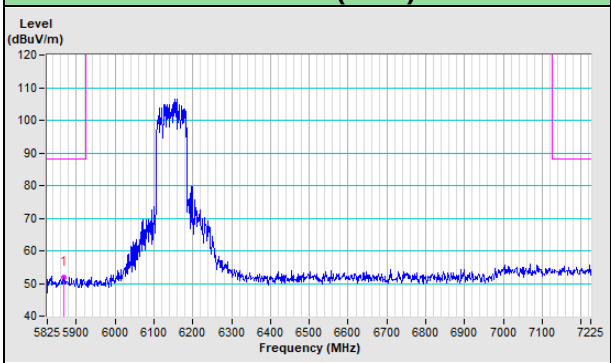


Vertical (Average)

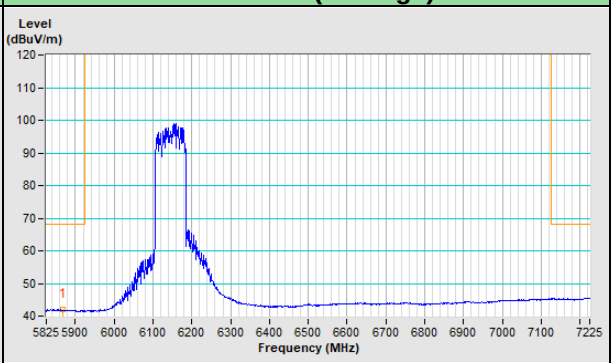


802.11ax (HE80) Channel 39

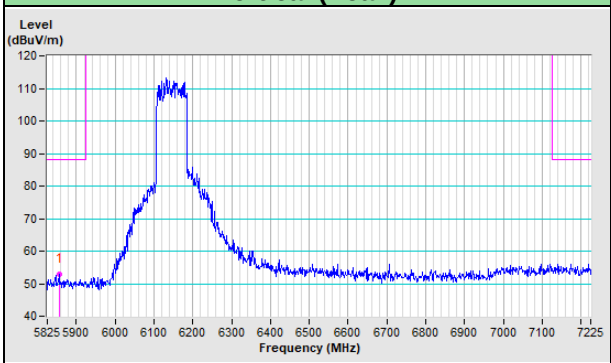
Horizontal (Peak)



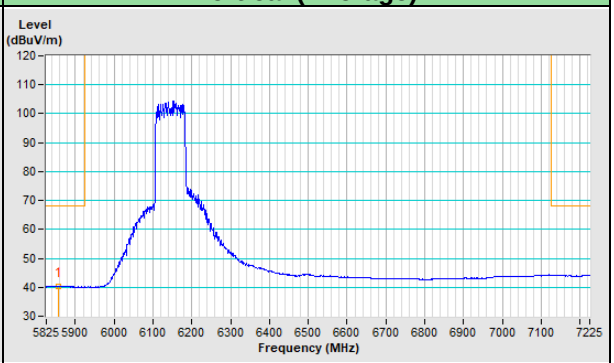
Horizontal (Average)



Vertical (Peak)

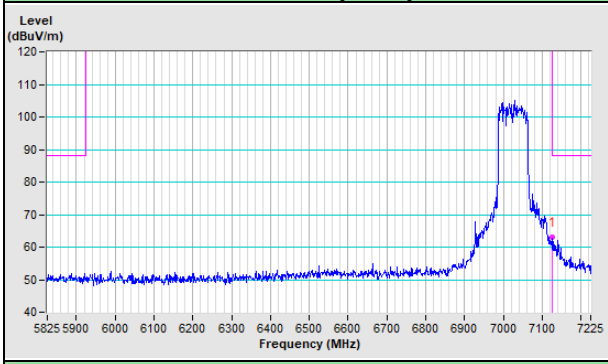


Vertical (Average)

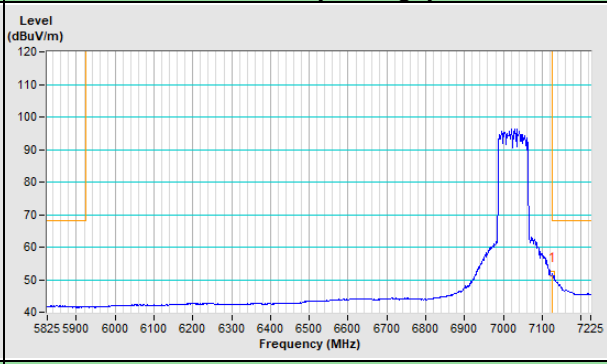


802.11ax (HE80) Channel 215

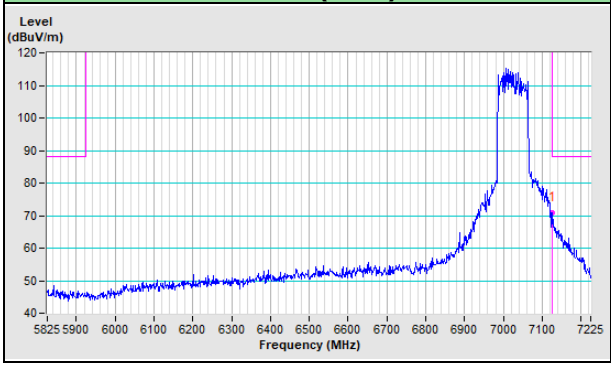
Horizontal (Peak)



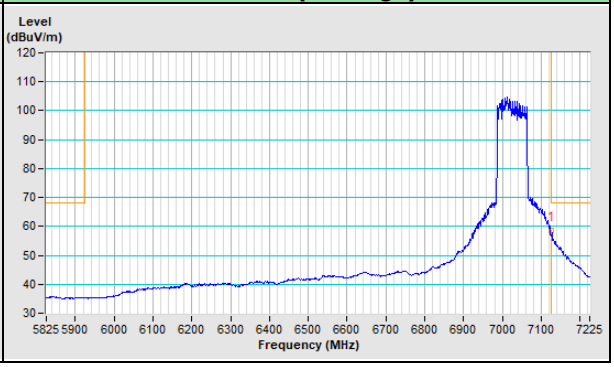
Horizontal (Average)



Vertical (Peak)

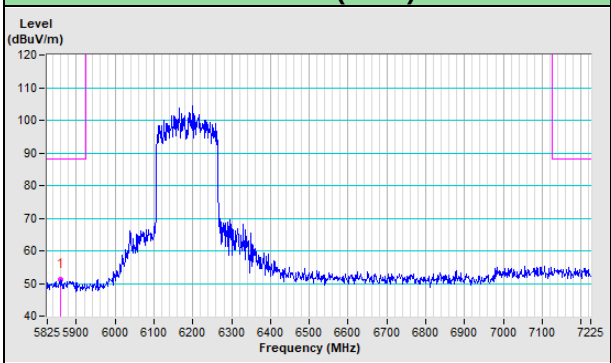


Vertical (Average)

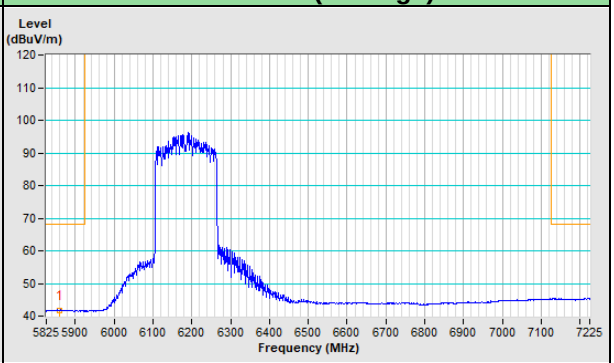


802.11ax (HE160) Channel 47

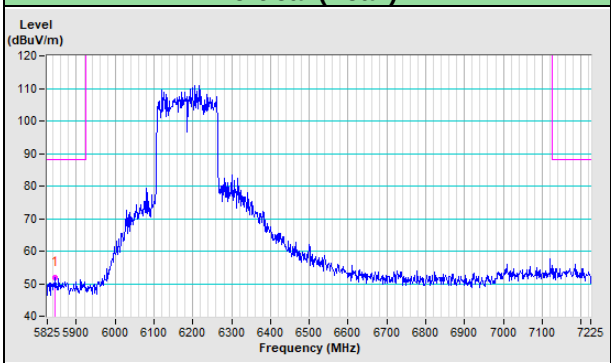
Horizontal (Peak)



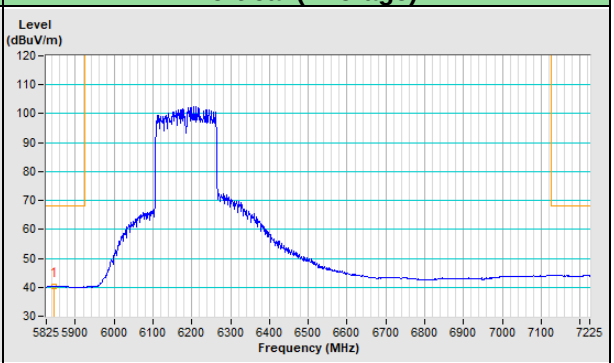
Horizontal (Average)



Vertical (Peak)

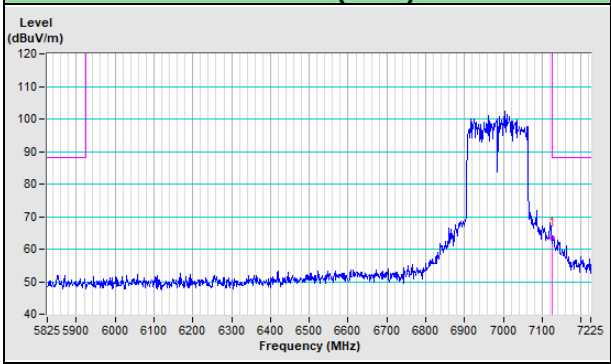


Vertical (Average)

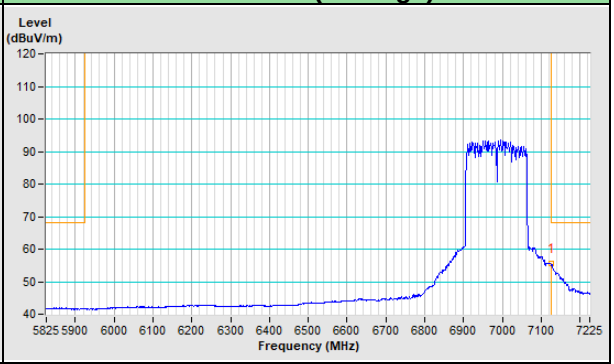


802.11ax (HE160) Channel 207

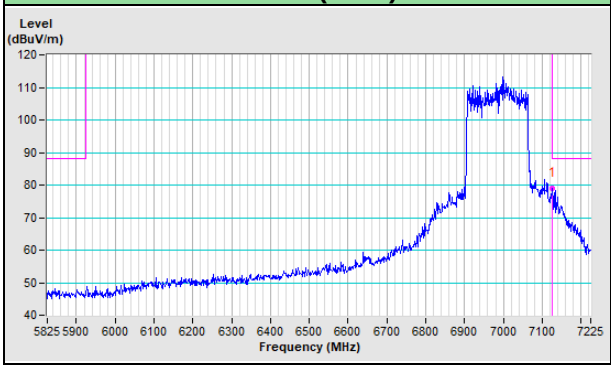
Horizontal (Peak)



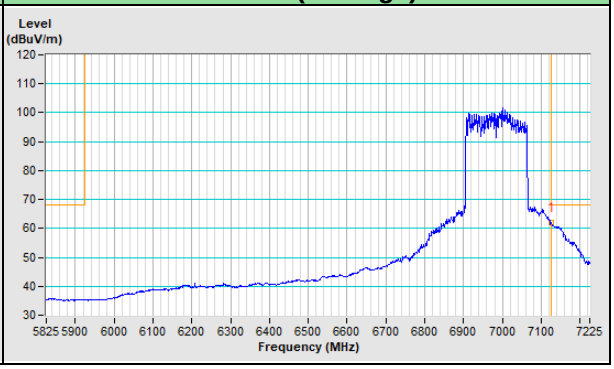
Horizontal (Average)



Vertical (Peak)



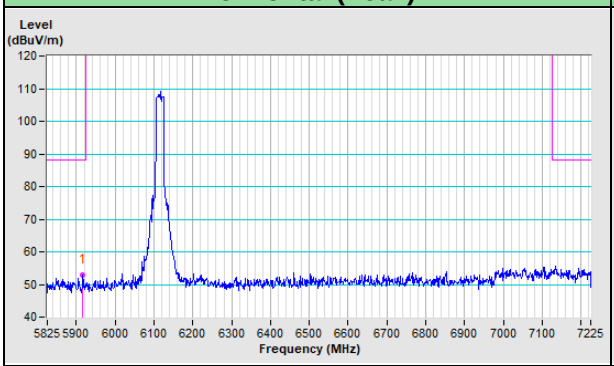
Vertical (Average)



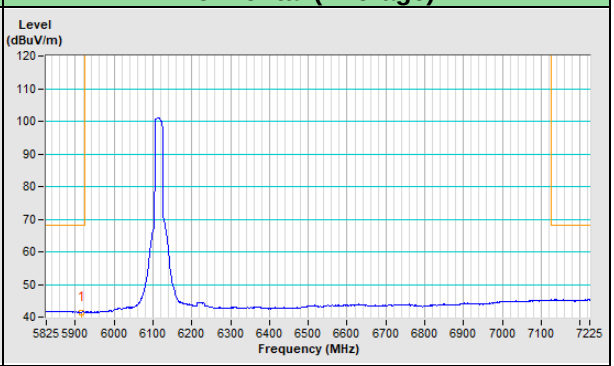
Annex B.2 - Band-Edge Measurement (Mode 2)

802.11ax (HE20) Channel 33

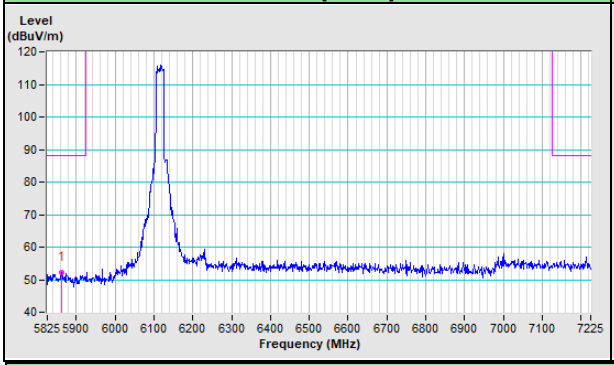
Horizontal (Peak)



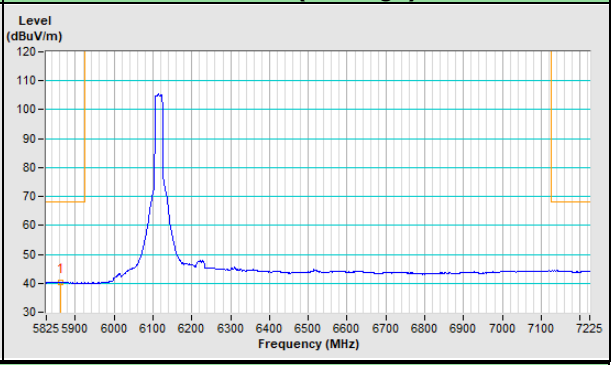
Horizontal (Average)



Vertical (Peak)

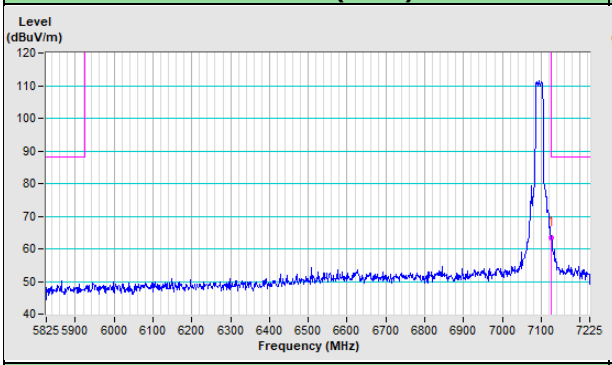


Vertical (Average)

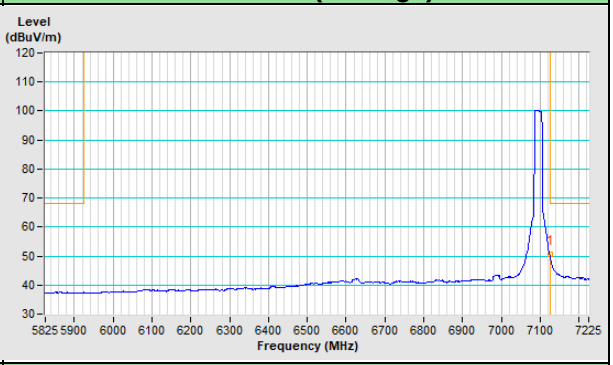


802.11ax (HE20) Channel 229

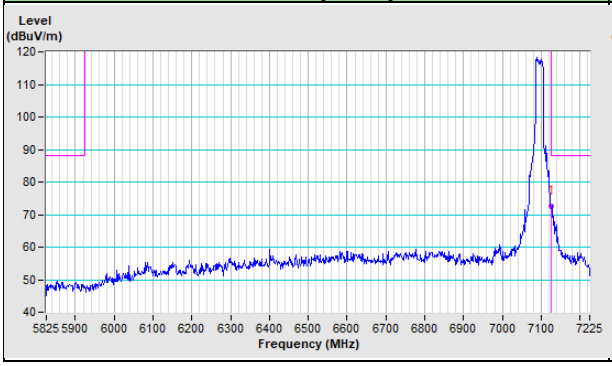
Horizontal (Peak)



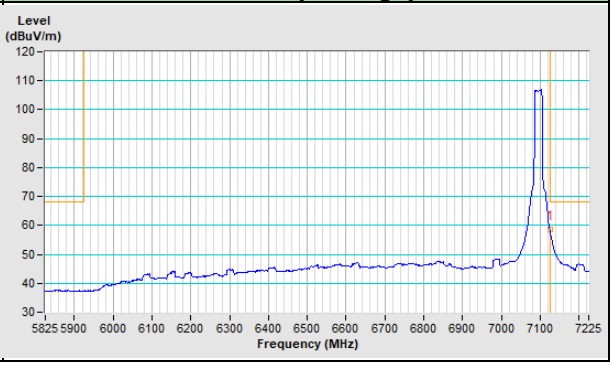
Horizontal (Average)

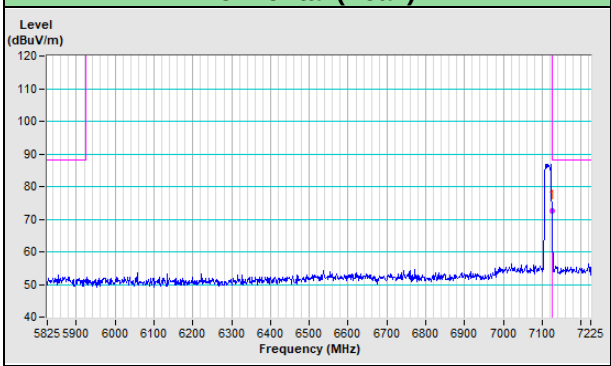
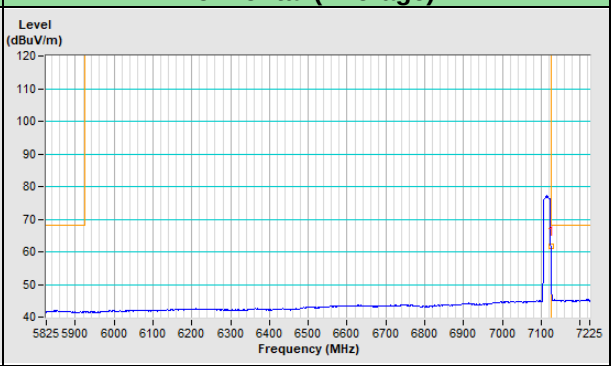
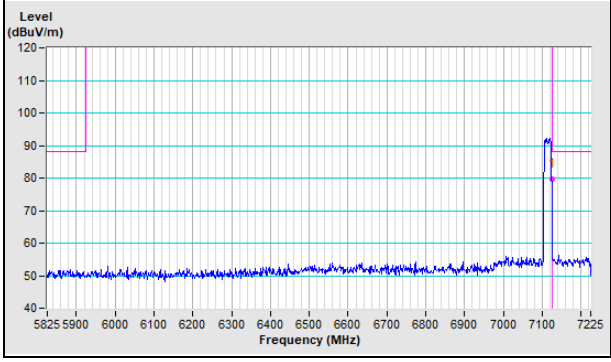
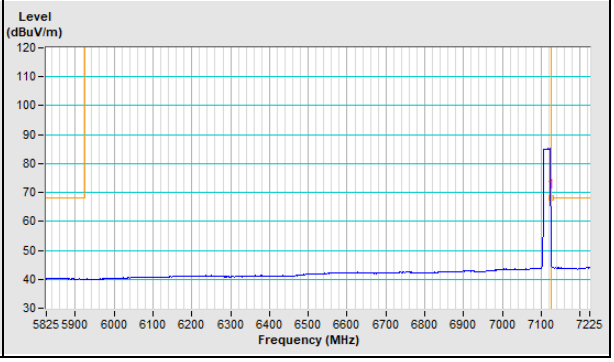


Vertical (Peak)



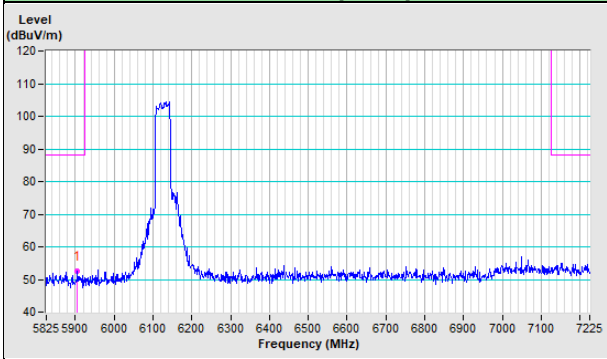
Vertical (Average)



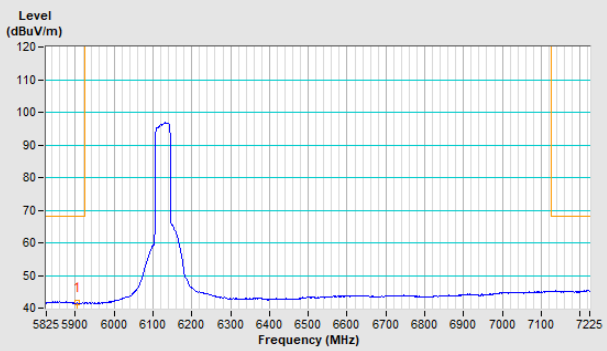
802.11ax (HE20) Channel 233	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ax (HE40) Channel 35

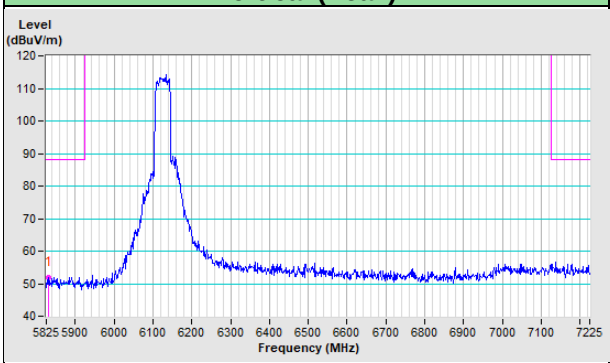
Horizontal (Peak)



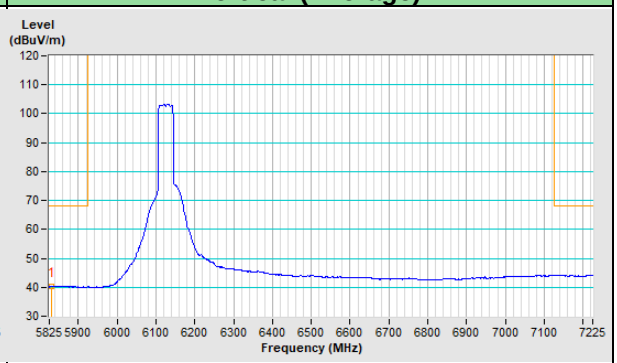
Horizontal (Average)



Vertical (Peak)

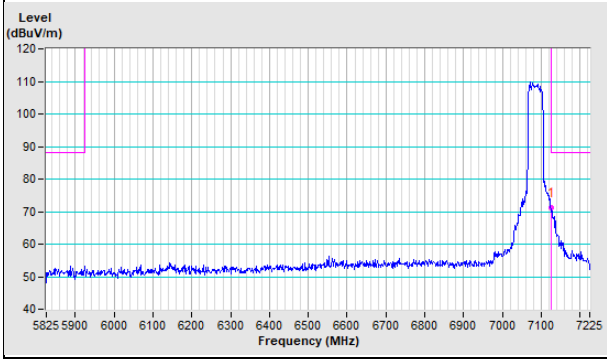


Vertical (Average)

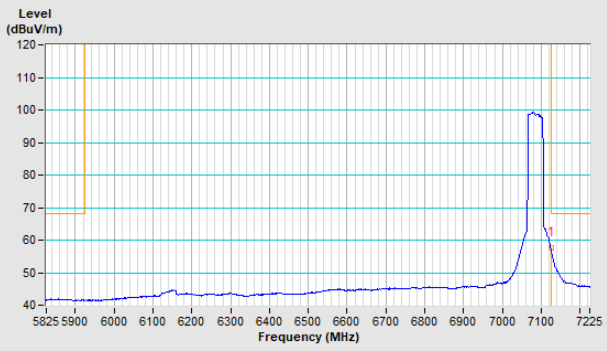


802.11ax (HE40) Channel 227

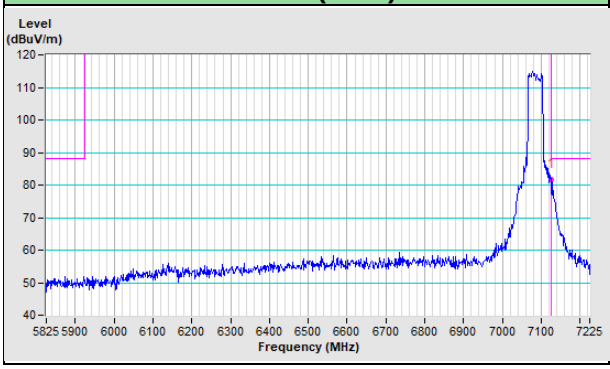
Horizontal (Peak)



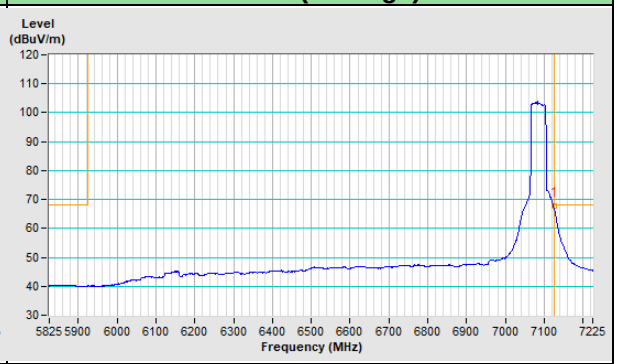
Horizontal (Average)

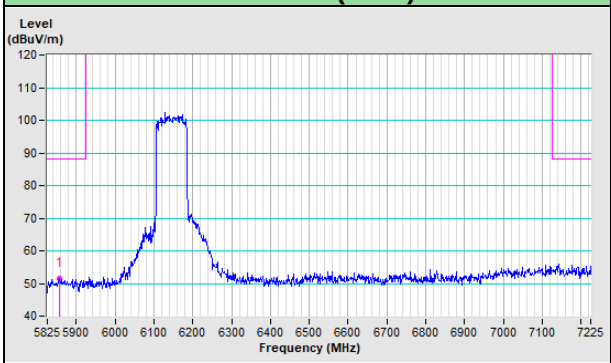
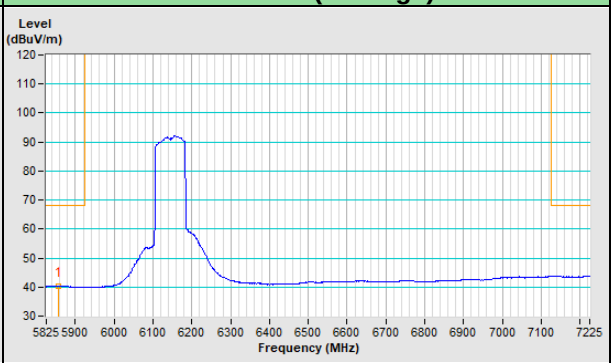
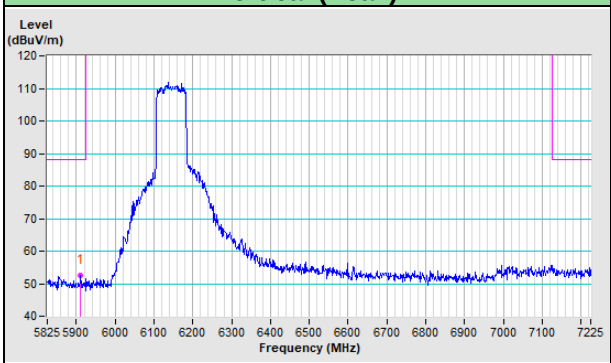
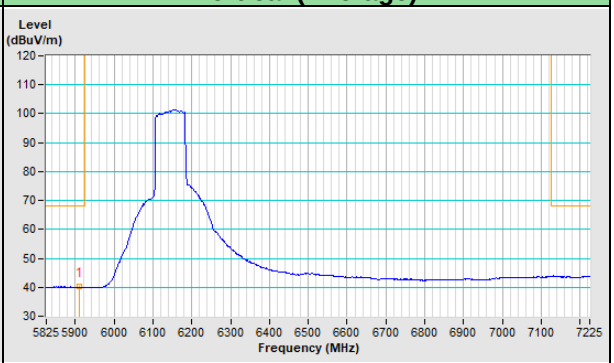
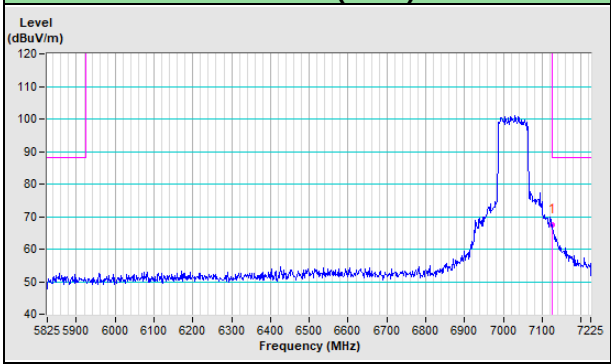
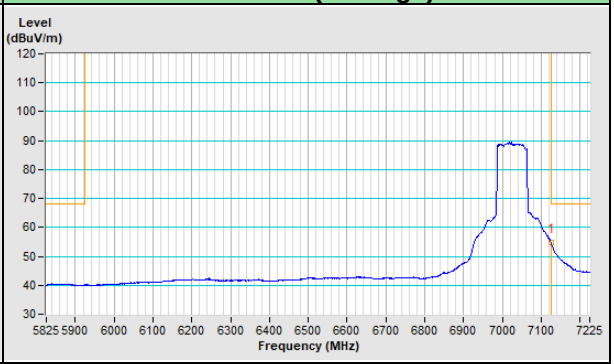
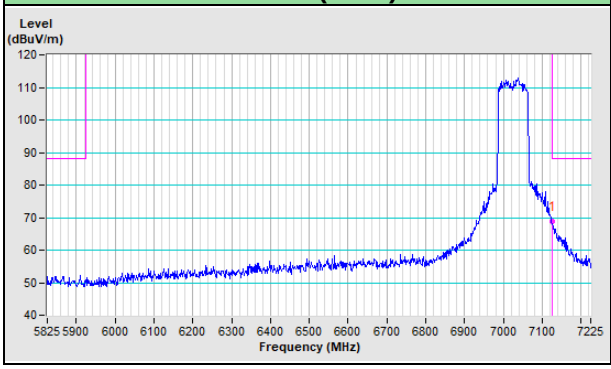
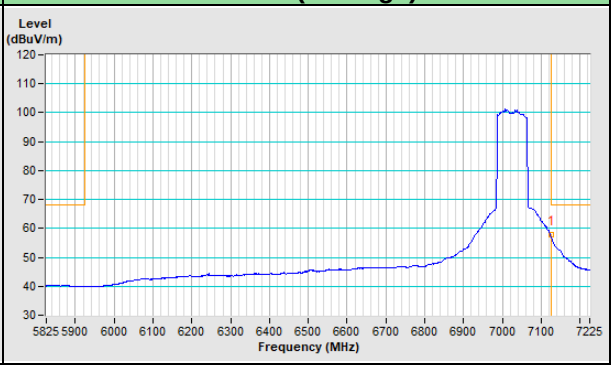


Vertical (Peak)



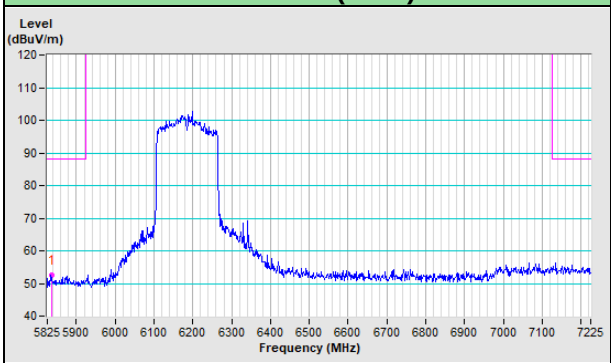
Vertical (Average)



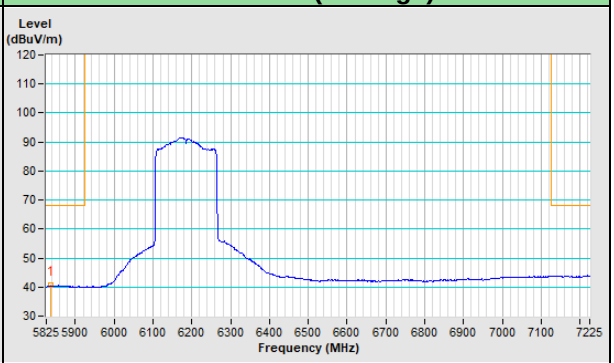
802.11ax (HE80) Channel 39	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	
802.11ax (HE80) Channel 215	
Horizontal (Peak)	Horizontal (Average)
	
Vertical (Peak)	Vertical (Average)
	

802.11ax (HE160) Channel 47

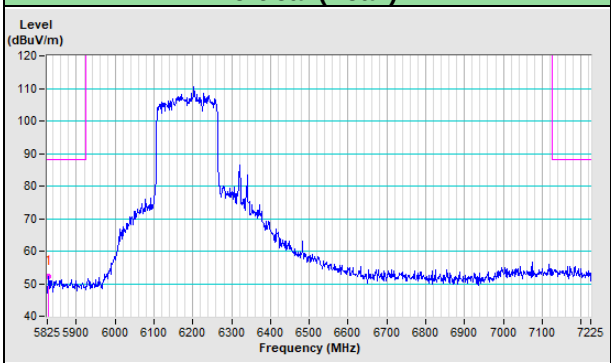
Horizontal (Peak)



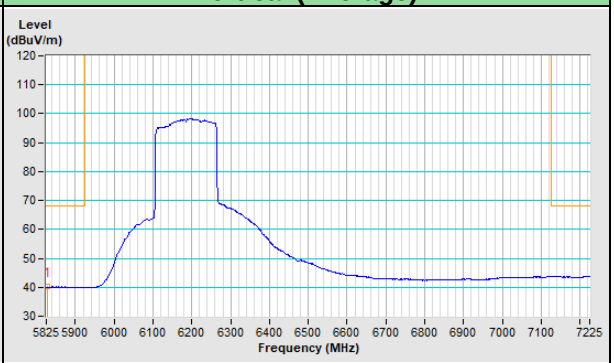
Horizontal (Average)



Vertical (Peak)

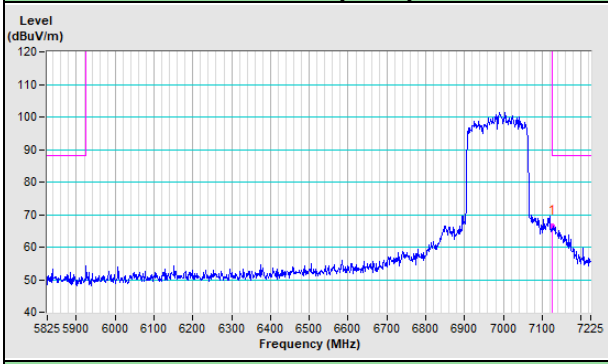


Vertical (Average)

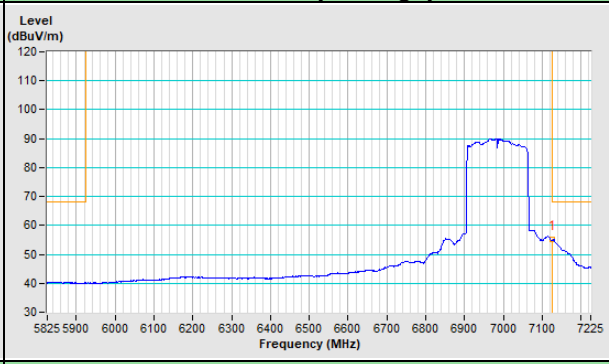


802.11ax (HE160) Channel 207

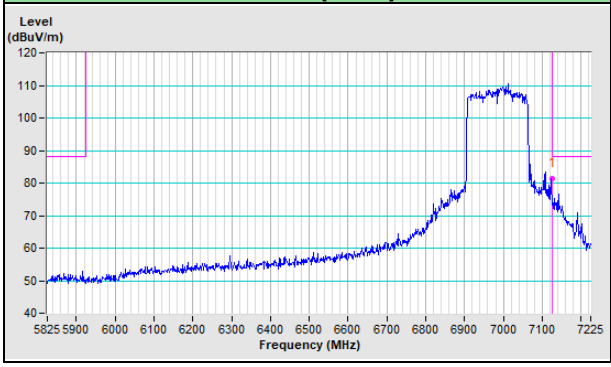
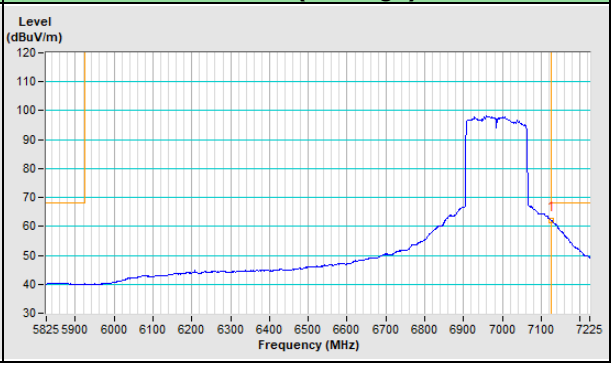
Horizontal (Peak)



Horizontal (Average)



Vertical (Peak)



Vertical (Average)