



## Test Data

### For U-NII-1 band

#### Non-Beamforming Mode

##### 802.11a

Channel	Frequency (MHz)	PSD w/o duty factor (dBm/MHz)		Total PSD with duty factor (dBm/MHz)	PSD Maximum Limit (dBm/MHz)	Pass/Fail
		Chain 0	Chain 1			
36	5180	3.846	1.8	5.95	16.09	PASS
44	5220	11.594	9.901	13.84	16.09	PASS
48	5240	11.005	9.106	13.17	16.09	PASS

#### Note:

- 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.
- Directional gain = 6.91 dBi > 6 dBi , so the limit shall be reduced.
- Refer to section 6.6 for duty cycle spectrum plot.

##### 802.11ax (HE20)

Channel	Frequency (MHz)	PSD w/o duty factor (dBm/MHz)		Total PSD with duty factor (dBm/MHz)	PSD Maximum Limit (dBm/MHz)	Pass/Fail
		Chain 0	Chain 1			
36	5180	3.145	0.674	5.09	16.09	PASS
44	5220	10.405	8.629	12.62	16.09	PASS
48	5240	10.587	8.559	12.70	16.09	PASS

#### Note:

- 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.
- Directional gain = 6.91 dBi > 6 dBi , so the limit shall be reduced.
- Refer to section 6.6 for duty cycle spectrum plot.

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### 802.11ax (HE40)

Channel	Frequency (MHz)	PSD w/o duty factor (dBm/MHz)		Total PSD with duty factor (dBm/MHz)	PSD Maximum Limit (dBm/MHz)	Pass/Fail
		Chain 0	Chain 1			
38	5190	-5.406	-6.555	-2.93	16.09	PASS
46	5230	1.813	1.085	4.47	16.09	PASS

**Note:**

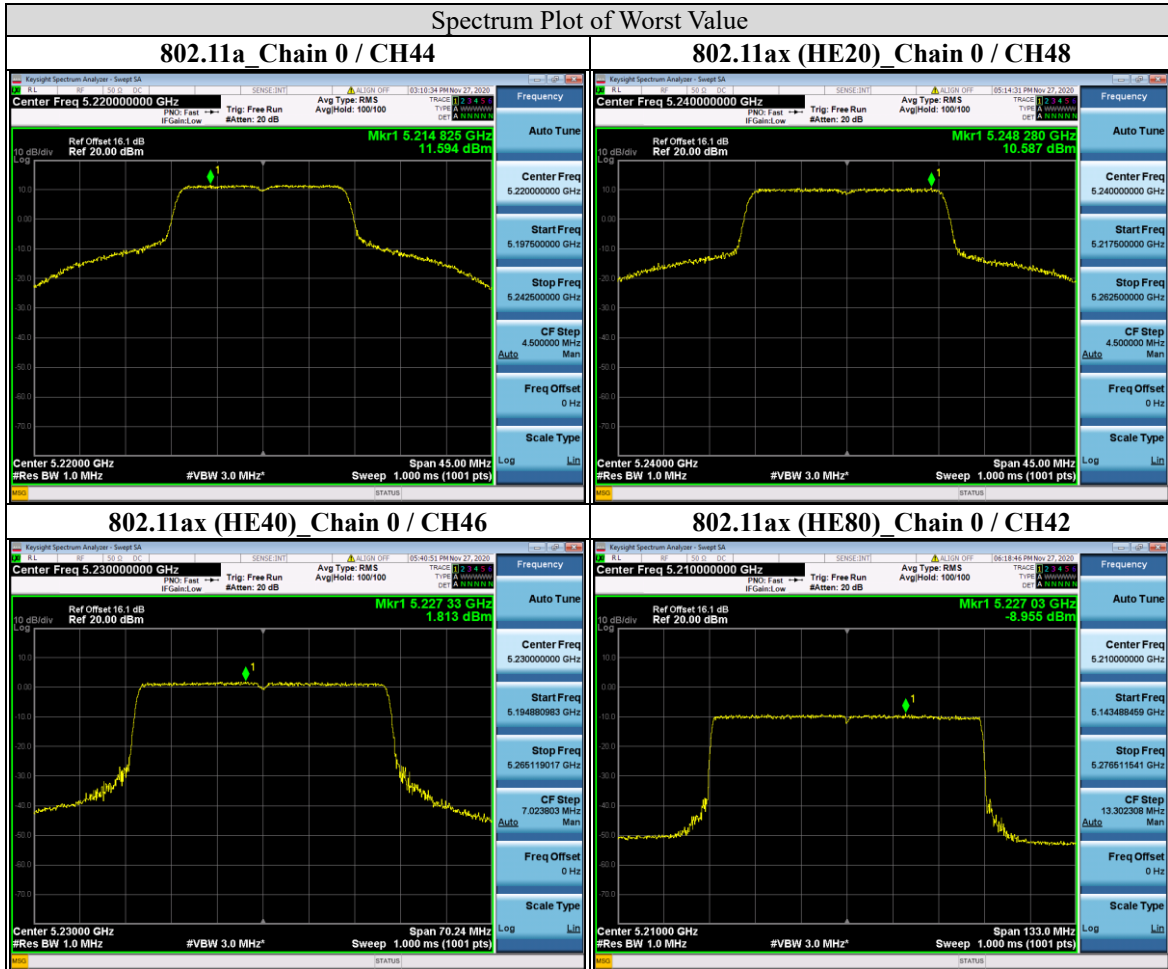
1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. Directional gain = 6.91 dBi > 6 dBi , so the limit shall be reduced.
3. Refer to section 6.6 for duty cycle spectrum plot.

### 802.11ax (HE80)

Channel	Frequency (MHz)	PSD w/o duty factor (dBm/MHz)		Total PSD with duty factor (dBm/MHz)	PSD Maximum Limit (dBm/MHz)	Pass/Fail
		Chain 0	Chain 1			
42	5210	-8.955	-10.729	-6.74	16.09	42

**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.
2. Directional gain = 6.91 dBi > 6 dBi , so the limit shall be reduced.
3. Refer to section 6.6 for duty cycle spectrum plot.



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## Beamforming Mode

### 802.11ax (HE20)

Channel	Frequency (MHz)	PSD w/o duty factor (dBm/MHz)		Total PSD with duty factor (dBm/MHz)	PSD Maximum Limit (dBm/MHz)	Pass/Fail
		Chain 0	Chain 1			
36	5180	-4.357	-5.85	-1.90	16.09	PASS
44	5220	1.948	0.066	4.25	16.09	PASS
48	5240	1.913	-0.321	4.08	16.09	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.
2. Directional gain = 6.91 dBi > 6 dBi , so the limit shall be reduced.
3. Refer to section 6.6 for duty cycle spectrum plot.

### 802.11ax (HE40)

Channel	Frequency (MHz)	PSD w/o duty factor (dBm/MHz)		Total PSD with duty factor (dBm/MHz)	PSD Maximum Limit (dBm/MHz)	Pass/Fail
		Chain 0	Chain 1			
38	5190	-10.474	-12.057	-8.05	16.09	PASS
46	5230	-0.886	-2.006	1.73	16.09	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.
2. Directional gain = 6.91 dBi > 6 dBi , so the limit shall be reduced.
3. Refer to section 6.6 for duty cycle spectrum plot.

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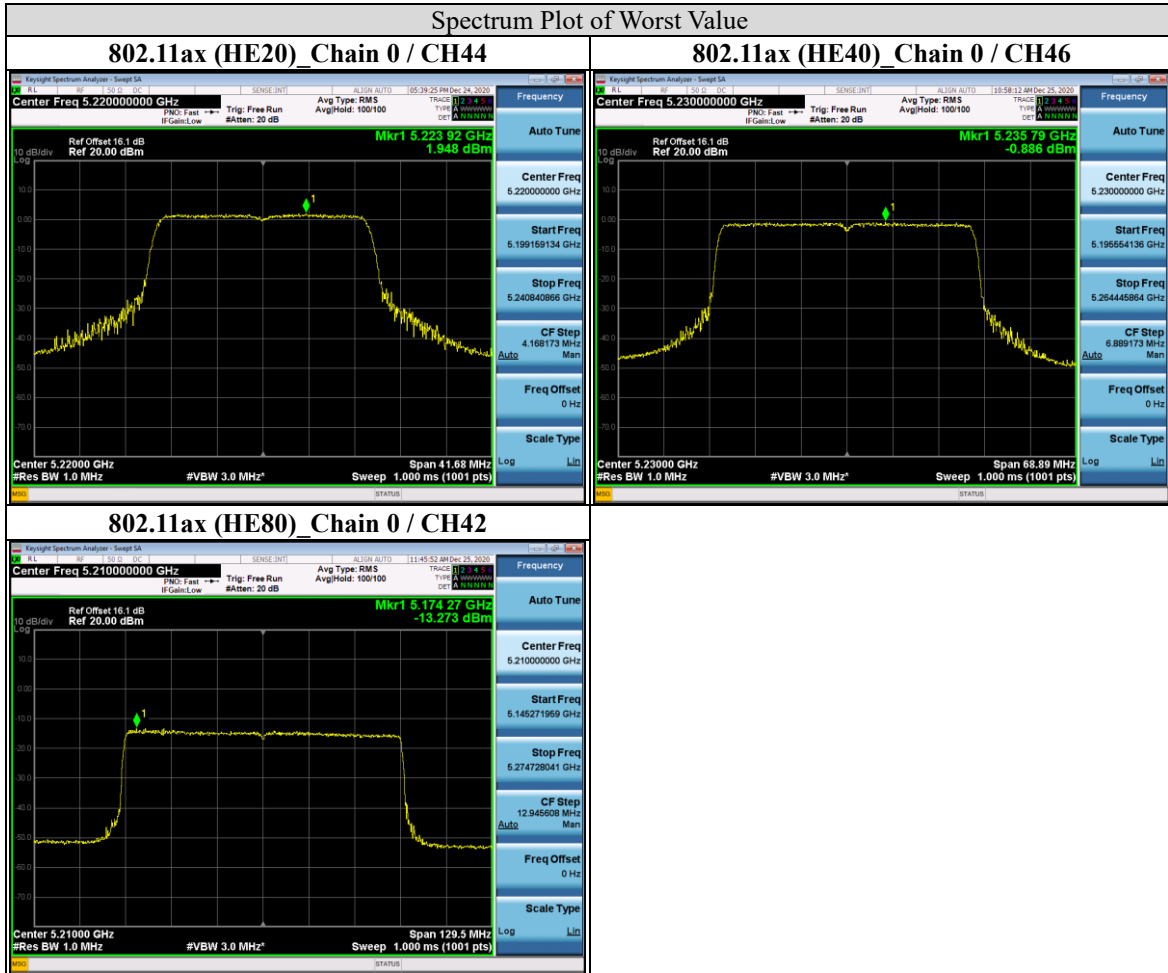


**802.11ax (HE80)**

Channel	Frequency (MHz)	PSD w/o duty factor (dBm/MHz)		Total PSD with duty factor (dBm/MHz)	PSD Maximum Limit (dBm/MHz)	Pass/Fail
		Chain 0	Chain 1			
42	5210	-13.273	-15.202	-11.12	16.09	42

**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.
2. Directional gain = 6.91 dBi > 6 dBi , so the limit shall be reduced.
3. Refer to section 6.6 for duty cycle spectrum plot.



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**For U-NII-3 Band**

**Non-Beamforming Mode**

**802.11a**

TX Chain	Channel	Frequency (MHz)	PSD w/o BWCF (dBm/300 kHz)	10 * Log (500kHz/300 kHz)	PSD with BWCF (dBm/500 kHz)	10 log (N=2) dB	Total PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
0	149	5745	7.554	2.22	9.77	3.01	12.78	29.09	Pass
	157	5785	7.23	2.22	9.45	3.01	12.46	29.09	Pass
	165	5825	6.238	2.22	8.46	3.01	11.47	29.09	Pass
1	149	5745	5	2.22	7.22	3.01	10.23	29.09	Pass
	157	5785	4.734	2.22	6.95	3.01	9.96	29.09	Pass
	165	5825	4.397	2.22	6.62	3.01	9.63	29.09	Pass

**Note:**

1. Directional gain = 6.91 dBi > 6 dBi , so the limit shall be reduced.
2. Refer to section 6.6 for duty cycle spectrum plot.
3. Scale the observed power level to an equivalent value in 500 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where  $BWCF = 10\log(500 \text{ kHz}/300\text{kHz})$ .
4.  $PSD \text{ with BWCF (dBm/500 kHz)} = PSD \text{ with BWCF (dBm/300 kHz)} + 10*\text{Log} (500/300)$

**802.11ax (HE20)**

TX Chain	Channel	Frequency (MHz)	PSD w/o BWCF (dBm/300 kHz)	10 * Log (500kHz/300 kHz)	PSD with BWCF (dBm/500 kHz)	10 log (N=2) dB	Total PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
0	149	5745	6.93	2.22	9.15	3.01	12.16	29.09	Pass
	157	5785	6.951	2.22	9.17	3.01	12.18	29.09	Pass
	165	5825	5.774	2.22	7.99	3.01	11.00	29.09	Pass
1	149	5745	4.314	2.22	6.53	3.01	9.54	29.09	Pass
	157	5785	4.02	2.22	6.24	3.01	9.25	29.09	Pass
	165	5825	3.855	2.22	6.08	3.01	9.09	29.09	Pass

**Note:**

1. Directional gain = 6.91 dBi > 6 dBi , so the limit shall be reduced.
2. Refer to section 6.6 for duty cycle spectrum plot.
3. Scale the observed power level to an equivalent value in 500 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where  $BWCF = 10\log(500 \text{ kHz}/300\text{kHz})$ .

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### 802.11ax (HE40)

TX Chain	Channel	Frequency (MHz)	PSD w/o BWCF (dBm/300 kHz)	10 * Log (500kHz/300 kHz)	PSD with BWCF (dBm/500 kHz)	10 log (N=2) dB	Total PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
0	151	5755	3.526	2.22	5.75	3.01	8.76	29.09	Pass
	159	5795	4.011	2.22	6.23	3.01	9.24	29.09	Pass
1	151	5755	1.648	2.22	3.87	3.01	6.88	29.09	Pass
	159	5795	1.487	2.22	3.71	3.01	6.72	29.09	Pass

**Note:**

1. Directional gain = 6.91 dBi > 6 dBi , so the limit shall be reduced.
2. Refer to section 6.6 for duty cycle spectrum plot.
3. Scale the observed power level to an equivalent value in 500 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where  $BWCF = 10\log(500 \text{ kHz}/300\text{kHz})$ .

### 802.11ax (HE80)

TX Chain	Channel	Frequency (MHz)	PSD w/o BWCF (dBm/300 kHz)	10 * Log (500kHz/300 kHz)	PSD with BWCF (dBm/500 kHz)	10 log (N=2) dB	Total PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
0	155	5775	-4.662	2.22	-2.44	3.01	0.57	29.09	Pass
1	155	5775	-4.613	2.22	-2.39	3.01	0.62	29.09	Pass

**Note:**

1. Directional gain = 6.91 dBi > 6 dBi , so the limit shall be reduced.
2. Refer to section 6.6 for duty cycle spectrum plot.
3. Scale the observed power level to an equivalent value in 500 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where  $BWCF = 10\log(500 \text{ kHz}/300\text{kHz})$ .

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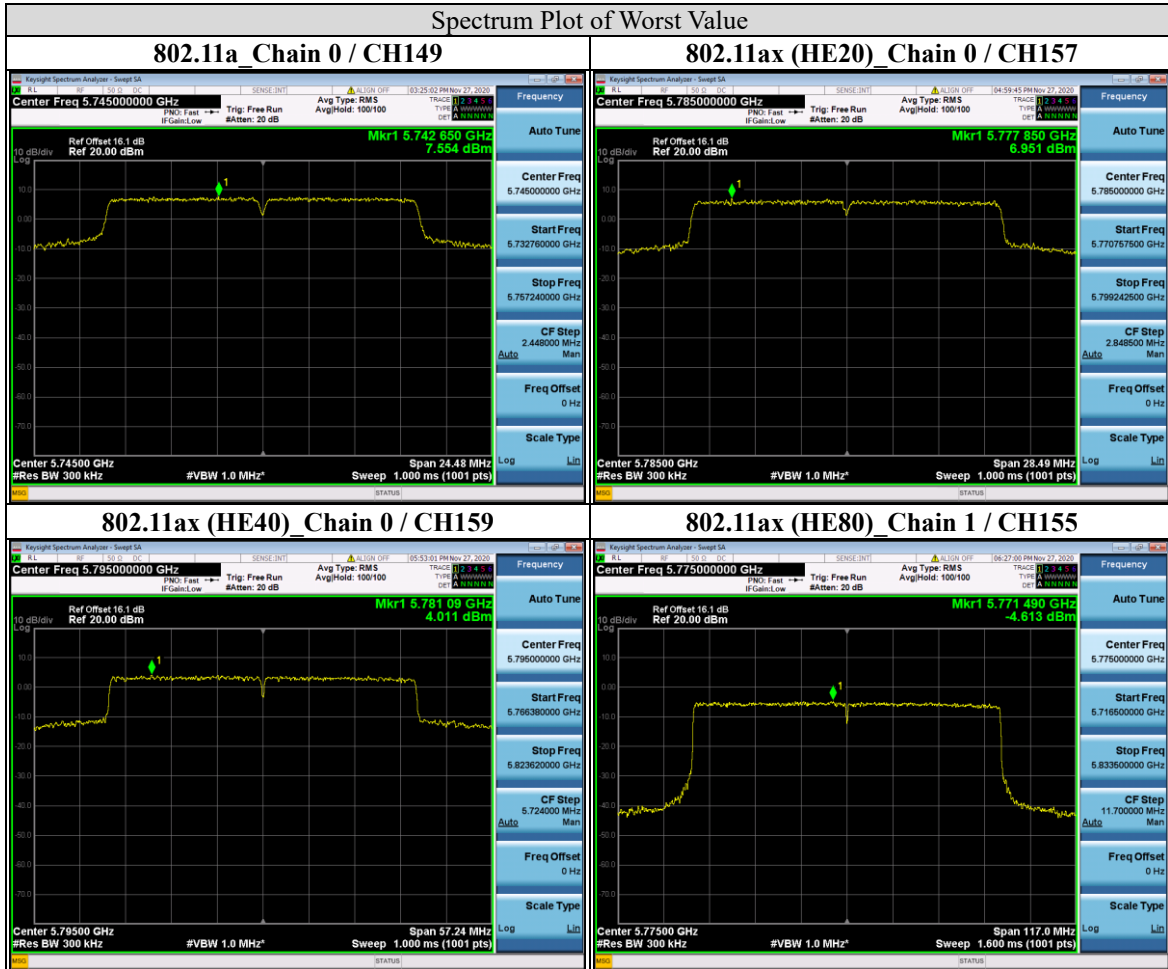
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Doc No: 17-EM-F0878 / 5.0







## Beamforming Mode

### 802.11ax (HE20)

TX Chain	Channel	Frequency (MHz)	PSD w/o BWCF (dBm/300 kHz)	10 * Log (500kHz/300 kHz)	PSD with BWCF (dBm/500 kHz)	10 log (N=2) dB	Total PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
0	149	5745	4.541	2.22	6.76	3.01	9.90	29.09	Pass
	157	5785	4.429	2.22	6.65	3.01	9.79	29.09	Pass
	165	5825	4.359	2.22	6.58	3.01	9.72	29.09	Pass
1	149	5745	4.031	2.22	6.25	3.01	9.39	29.09	Pass
	157	5785	4.174	2.22	6.39	3.01	9.53	29.09	Pass
	165	5825	3.77	2.22	5.99	3.01	9.13	29.09	Pass

**Note:**

1. Directional gain = 6.91 dBi > 6 dBi , so the limit shall be reduced.
2. Refer to section 6.6 for duty cycle spectrum plot.
3. Scale the observed power level to an equivalent value in 500 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where  $BWCF = 10\log(500 \text{ kHz}/300\text{kHz})$ .

### 802.11ax (HE40)

TX Chain	Channel	Frequency (MHz)	PSD w/o BWCF (dBm/300 kHz)	10 * Log (500kHz/300 kHz)	PSD with BWCF (dBm/500 kHz)	10 log (N=2) dB	Total PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
0	151	5755	2.175	2.22	4.40	3.01	7.54	29.09	Pass
	159	5795	1.714	2.22	3.93	3.01	7.07	29.09	Pass
1	151	5755	1.299	2.22	3.52	3.01	6.66	29.09	Pass
	159	5795	1.365	2.22	3.59	3.01	6.73	29.09	Pass

**Note:**

1. Directional gain = 6.91 dBi > 6 dBi , so the limit shall be reduced.
2. Refer to section 6.6 for duty cycle spectrum plot.
3. Scale the observed power level to an equivalent value in 500 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where  $BWCF = 10\log(500 \text{ kHz}/300\text{kHz})$ .

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**802.11ax (HE80)**

TX Chain	Channel	Frequency (MHz)	PSD w/o BWCF (dBm/300 kHz)	10 * Log (500kHz/300 kHz)	PSD with BWCF (dBm/500 kHz)	10 log (N=2) dB	Total PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
0	155	5775	-6.283	2.22	-4.06	3.01	-1.05	29.09	Pass
1	155	5775	-5.539	2.22	-3.32	3.01	-0.31	29.09	Pass

**Note:**

1. Directional gain = 6.91 dBi > 6 dBi , so the limit shall be reduced.
2. Refer to section 6.6 for duty cycle spectrum plot.
3. Scale the observed power level to an equivalent value in 500 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where  $BWCF = 10\log(500 \text{ kHz}/300\text{kHz})$ .

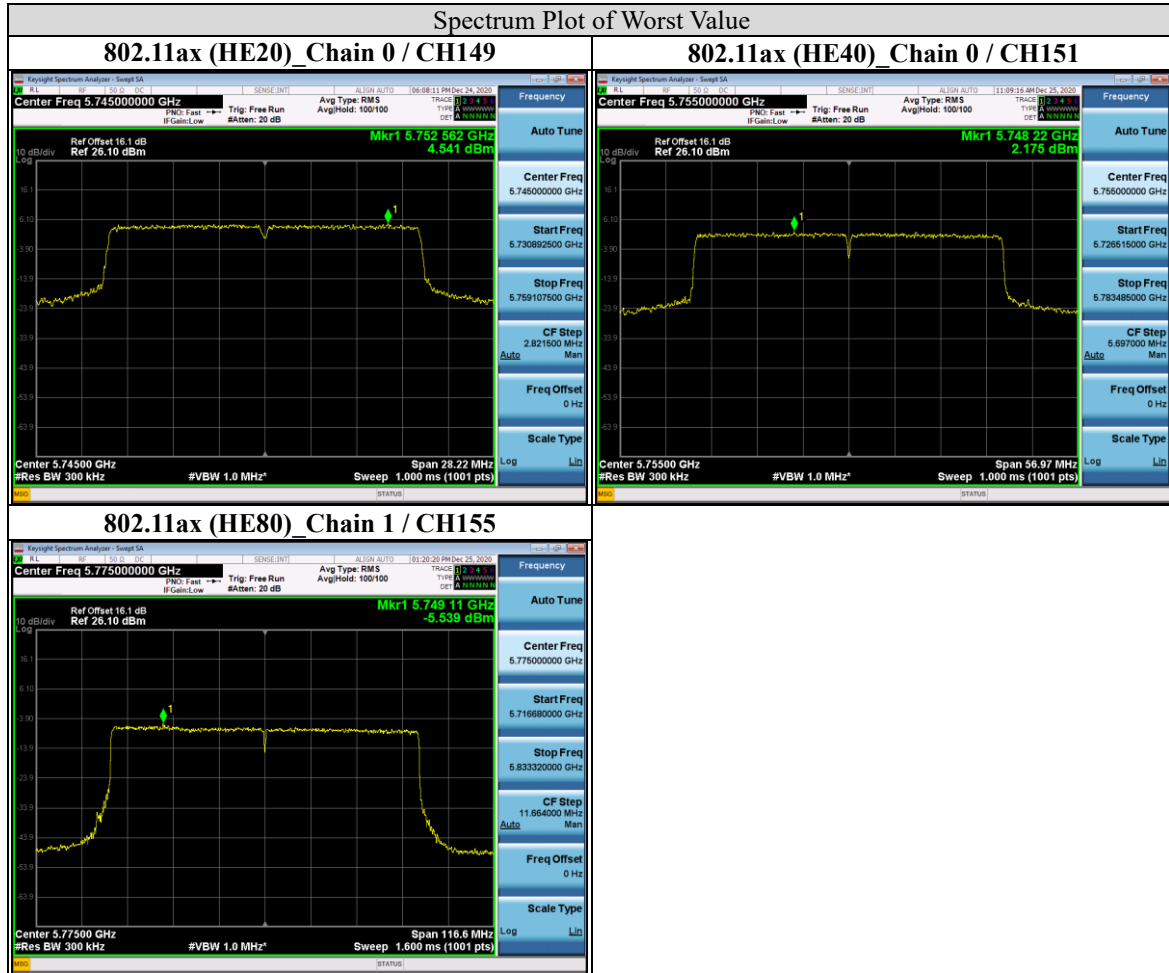
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## 9.6. Frequency Stability

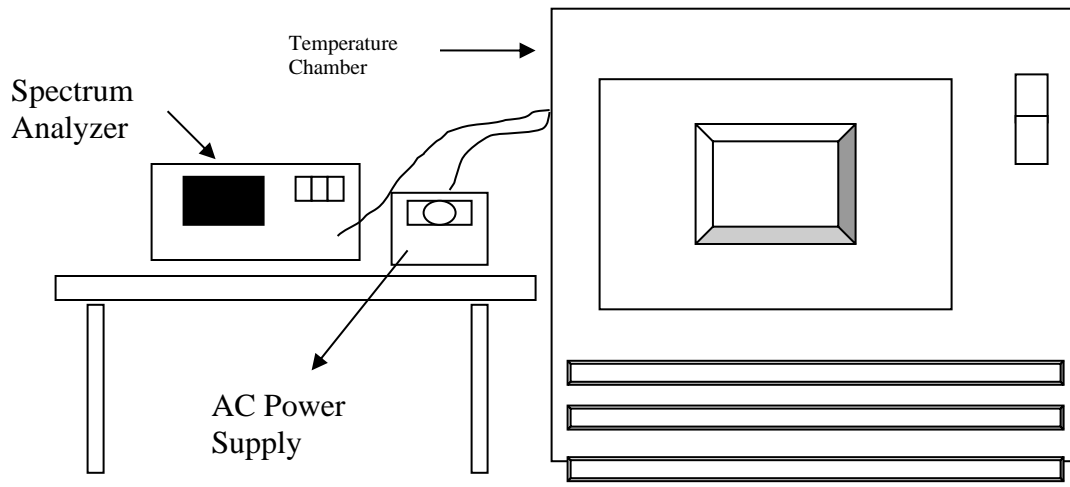
### Requirements

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

### Test procedure

- The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.
- Turn the EUT on and couple its output to a spectrum analyzer.
- Turn the EUT off and set the chamber to the highest temperature specified.
- 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.
- Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
- 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.

### Test Setup





**Test Data**

**Non-Beamforming Mode**

Frequency Stability Versus Temp.									
Operating Frequency: 5180 MHz									
TEMP. (°C)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Freq. Drift (ppm)	Measured Frequency (MHz)	Freq. Drift (ppm)	Measured Frequency (MHz)	Freq. Drift (ppm)	Measured Frequency (MHz)	Freq. Drift (ppm)
50	120	5179.9821	-3.46	5179.9822	-3.44	5179.9831	-3.26	5179.9812	-3.63
40	120	5179.9865	-2.61	5179.9863	-2.64	5179.9867	-2.57	5179.9863	-2.64
30	120	5180.0167	3.22	5180.0168	3.24	5180.0161	3.11	5180.0162	3.13
20	120	5180.0258	4.98	5180.0257	4.96	5180.0242	4.67	5180.0244	4.71
10	120	5180.0316	6.10	5180.0317	6.12	5180.0316	6.10	5180.0321	6.20
0	120	5180.0214	4.13	5180.0213	4.11	5180.0214	4.13	5180.0212	4.09
-10	120	5180.0392	7.57	5180.0381	7.36	5180.0382	7.37	5180.0381	7.36
-20	120	5180.0411	7.93	5180.0414	7.99	5180.0421	8.13	5180.0415	8.01
-30	120	5180.0517	9.98	5180.0512	9.88	5180.051	9.85	5180.0503	9.71
TEMP. (°C)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Freq. Drift (ppm)	Measured Frequency (MHz)	Freq. Drift (ppm)	Measured Frequency (MHz)	Freq. Drift (ppm)	Measured Frequency (MHz)	Freq. Drift (ppm)
20	102	5180.0259	5.00	5180.026	5.02	5180.0258	4.98	5180.0261	5.04
20	138	5180.0249	4.81	5180.0244	4.71	5180.0248	4.79	5180.0244	4.71

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**Beamforming Mode**

Frequency Stability Versus Temp.									
Operating Frequency: 5180 MHz									
TEMP. (°C)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Freq. Drift (ppm)	Measured Frequency (MHz)	Freq. Drift (ppm)	Measured Frequency (MHz)	Freq. Drift (ppm)	Measured Frequency (MHz)	Freq. Drift (ppm)
50	120	5179.9811	-3.65	5179.9823	-3.42	5179.9821	-3.46	5179.9812	-3.63
40	120	5179.9855	-2.80	5179.9853	-2.84	5179.9857	-2.76	5179.9853	-2.84
30	120	5180.0177	3.42	5180.0171	3.30	5180.0172	3.32	5180.0169	3.26
20	120	5180.0258	4.98	5180.0256	4.94	5180.0252	4.86	5180.0243	4.69
10	120	5180.0325	6.27	5180.0319	6.16	5180.032	6.18	5180.0328	6.33
0	120	5180.0215	4.15	5180.0214	4.13	5180.0213	4.11	5180.0209	4.03
-10	120	5180.0382	7.37	5180.0389	7.51	5180.0386	7.45	5180.0388	7.49
-20	120	5180.0421	8.13	5180.0424	8.19	5180.0423	8.17	5180.0419	8.09
-30	120	5180.0514	9.92	5180.0518	10.00	5180.054	10.42	5180.0513	9.90
TEMP. (°C)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Freq. Drift (ppm)	Measured Frequency (MHz)	Freq. Drift (ppm)	Measured Frequency (MHz)	Freq. Drift (ppm)	Measured Frequency (MHz)	Freq. Drift (ppm)
20	102	5180.0261	5.04	5180.0262	5.06	5180.0258	4.98	5180.0259	5.00
20	138	5180.0251	4.85	5180.0247	4.77	5180.0246	4.75	5180.0243	4.69

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## 9.7. Radiated Spurious Emission

### Requirements

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table.

Frequency(MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

**NOTE:**

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

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Limits of unwanted emission out of the restricted bands

Applicable To		Limit	
789033 D02 General UNII Test Procedure New Rules v02r01		Field Strength at 3m	
		PK:74 (dBμV/m)	AV:54 (dBμV/m)
Frequency Band	Applicable To	EIRP Limit	Equivalent Field Strength at 3m
5150~5250 MHz	15.407(b)(1)	PK:-27 (dBm/MHz)	PK:68.2(dBμV/m)
5725~5850 MHz	15.407(b)(4)(i)	PK:-27 (dBm/MHz) <sup>*1</sup> PK:10 (dBm/MHz) <sup>*2</sup> PK:15.6 (dBm/MHz) <sup>*3</sup> PK:27 (dBm/MHz) <sup>*4</sup>	PK: 68.2(dBμV/m) <sup>*1</sup> PK:105.2 (dBμV/m) <sup>*2</sup> PK: 110.8(dBμV/m) <sup>*3</sup> PK:122.2 (dBμV/m) <sup>*4</sup>
<p>*1 beyond 75 MHz or more above of the band edge.            *2 below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.            *3 below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.            *4 from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.</p>			

**Note:**

The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = \frac{1000000\sqrt{30P}}{3} \mu\text{V/m, where P is the eirp (Watts).}$$

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## **Test Procedures**

[For 9 kHz ~ 30 MHz]

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. For measurement below 30MHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.

[For above 30 MHz]

- a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
- f. The test-receiver system was set to peak and average detects function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

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Note:

- a. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
- b. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
- c. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is  $\geq 1/T$  (Duty cycle < 98%) or 10Hz (Duty cycle  $\geq 98\%$ ) for Average detection (AV) at frequency above 1GHz.

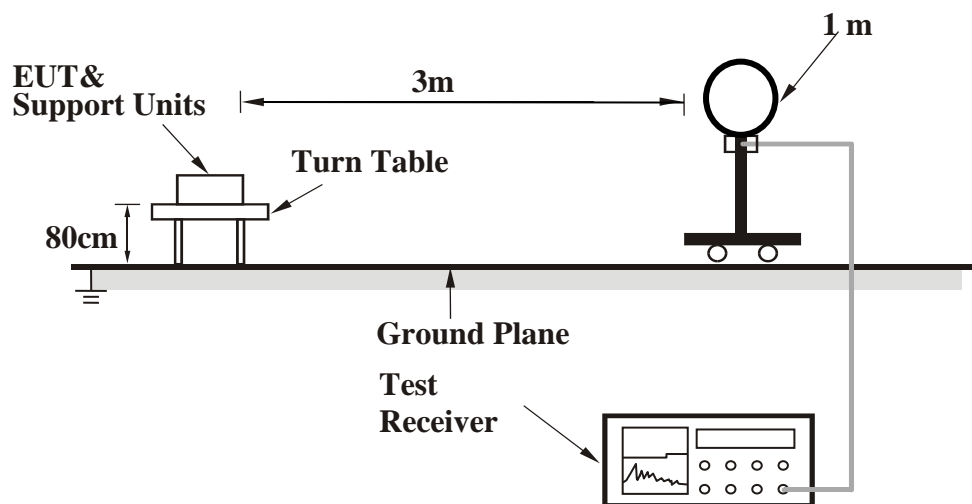
Configuration	Non-Beamforming Mode		Beamforming Mode	
	Average		Average	
	RBW	VBW	RBW	VBW
802.11a	1MHz	10 Hz	1MHz	-
802.11ax (HE20)		10 Hz		1 kHz
802.11ax (HE40)		10 Hz		1 kHz
802.11ax (HE80)		10 Hz		10 Hz

Note: Refer to section 6.6 for duty cycle.

- d. All modes of operation were investigated (includes all external accessories) and the worst-case emissions are reported.

**Test Setup**

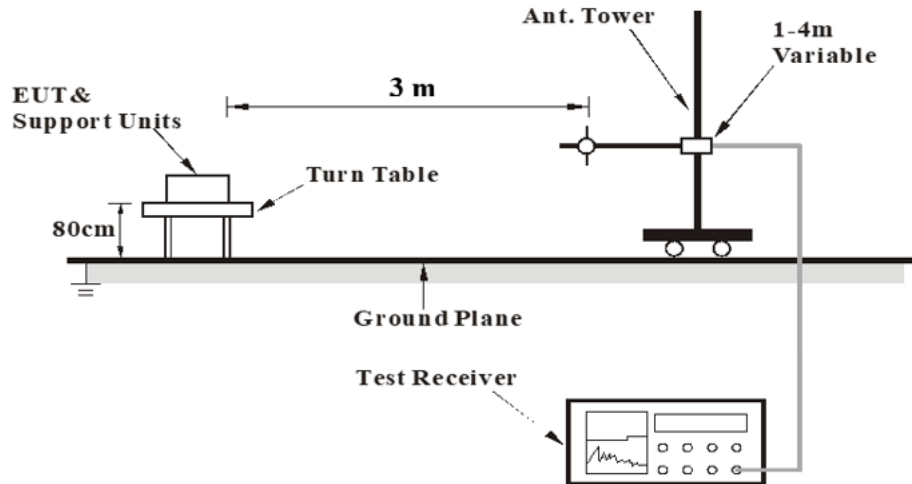
<Frequency Range 9 kHz ~ 30 MHz>



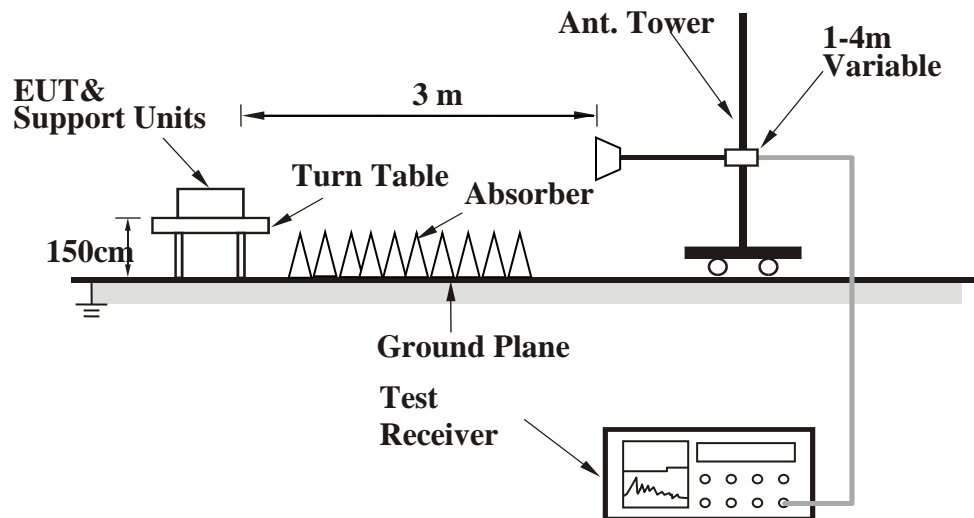
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<Frequency Range 30 MHz ~ 1 GHz >



<Frequency Range above 1 GHz>



For the actual test configuration, please refer to the Setup Configurations.



## Test Data

### Above 1GHz Data

#### Non-Beamforming Mode

#### 802.11a

EUT Test Condition		Measurement Detail	
Channel	Channel 36	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5117	41.48	14.45	55.93	74	-18.07	Peak
@	5180	91.68	14.55	106.23	-	-	Peak
-	5149.4	31.83	14.57	46.4	54	-7.6	Average
@	5180	83.33	14.55	97.88	-	-	Average
*	3992	43.85	1.15	45	74	-29	Peak
-	10360	31.3	18.92	50.22	68.2	-17.98	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5148.2	48.5	14.57	63.07	74	-10.93	Peak
@	5180	101.05	14.55	115.6	-	-	Peak
-	5150	38.77	14.57	53.34	54	-0.66	Average
@	5180	93.55	14.55	108.1	-	-	Average
*	3992	48.93	1.15	50.08	74	-23.92	Peak
-	10360	31.38	18.92	50.3	68.2	-17.9	Peak

#### Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\* \* ": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail	
Channel	Channel 44	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5123.6	41.82	14.48	56.3	74	-17.7	Peak
@	5220	99.06	14.36	113.42	-	-	Peak
-	5144.9	31.94	14.55	46.49	54	-7.51	Average
@	5220	90.95	14.36	105.31	-	-	Average
*	3992	45.58	1.15	46.73	74	-27.27	Peak
-	10440	32.26	19.23	51.49	68.2	-16.71	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5150	49.17	14.57	63.74	74	-10.26	Peak
@	5220	104.71	14.36	119.07	-	-	Peak
-	5148.8	38.78	14.57	53.35	54	-0.65	Average
@	5220	97.41	14.36	111.77	-	-	Average
*	3992	48.08	1.15	49.23	74	-24.77	Peak
-	10435	37.37	19.21	56.58	68.2	-11.62	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\* \* ": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail	
Channel	Channel 48	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5086.7	41.68	14.33	56.01	74	-17.99	Peak
@	5240	95.21	14.18	109.39	-	-	Peak
-	5099.6	31.91	14.41	46.32	54	-7.68	Average
@	5240	89.3	14.18	103.48	-	-	Average
*	3992	44.78	1.15	45.93	74	-28.07	Peak
-	10480	31.04	19.37	50.41	68.2	-17.79	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5147.3	43.46	14.55	58.01	74	-15.99	Peak
@	5240	103.66	14.18	117.84	-	-	Peak
-	5150	34.96	14.57	49.53	54	-4.47	Average
@	5240	97.26	14.18	111.44	-	-	Average
*	3992	48.8	1.15	49.95	74	-24.05	Peak
-	10480	34.52	19.37	53.89	68.2	-14.31	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\* \* ": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail	
Channel	Channel 149	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5603.5	41.62	15.07	56.69	68.2	-11.51	Peak
-	5724	70.31	15.4	85.71	119.92	-34.21	Peak
@	5745	89.65	15.57	105.22	-	-	Average
@	5745	99.52	15.57	115.09	-	-	Peak
-	11490	26.23	20.73	46.96	54	-7.04	Average
-	11490	35.12	20.73	55.85	74	-18.15	Peak
-	17235	29.63	29.88	59.51	68.2	-8.69	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5646	43.37	15.14	58.51	68.2	-9.69	Peak
-	5724	80.65	15.4	96.05	119.92	-23.87	Peak
@	5745	93.35	15.57	108.92	-	-	Average
@	5745	103.37	15.57	118.94	-	-	Peak
-	11490	31.59	20.73	52.32	54	-1.68	Average
-	11490	40.58	20.73	61.31	74	-12.69	Peak
-	17235	31.47	29.88	61.35	68.2	-6.85	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail	
Channel	Channel 157	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5562.5	41.38	15.01	56.39	68.2	-11.81	Peak
-	5724	43.31	15.4	58.71	119.92	-61.21	Peak
@	5785	89.65	15.65	105.3	-	-	Average
@	5785	99.44	15.65	115.09	-	-	Peak
-	5905	40.43	16.33	56.76	82.96	-26.2	Peak
-	6007	40.94	16.37	57.31	68.2	-10.89	Peak
-	11570	26.07	20.51	46.58	54	-7.42	Average
-	11570	36	20.51	56.51	74	-17.49	Peak
-	17355	30.26	30.79	61.05	68.2	-7.15	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5537.5	42.26	14.97	57.23	68.2	-10.97	Peak
-	5724	51.26	15.4	66.66	119.92	-53.26	Peak
@	5785	94.31	15.65	109.96	-	-	Average
@	5785	104.13	15.65	119.78	-	-	Peak
-	5851	48.86	15.96	64.82	119.92	-55.1	Peak
-	5935	40.48	16.37	56.85	68.2	-11.35	Peak
-	11570	30.86	20.51	51.37	54	-2.63	Average
-	11570	39.21	20.51	59.72	74	-14.28	Peak
-	17355	29.33	30.79	60.12	68.2	-8.08	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail	
Channel	Channel 165	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
@	5825	88.62	15.81	104.43	-	-	Average
@	5825	98.01	15.81	113.82	-	-	Peak
-	5851	67.73	15.96	83.69	119.92	-36.23	Peak
-	5984.5	40.51	16.37	56.88	68.2	-11.32	Peak
-	11650	24.75	20.28	45.03	54	-8.97	Average
-	11650	34.49	20.28	54.77	74	-19.23	Peak
-	17475	29.36	31.91	61.27	68.2	-6.93	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
@	5825	94.11	15.81	109.92	-	-	Average
@	5825	103.34	15.81	119.15	-	-	Peak
-	5850.5	76.45	15.95	92.4	121.06	-28.66	Peak
-	5932.5	44.07	16.37	60.44	68.2	-7.76	Peak
-	11650	28.87	20.28	49.15	54	-4.85	Average
-	11650	37.78	20.28	58.06	74	-15.94	Peak
-	17475	31.69	31.91	63.6	68.2	-4.6	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. The other emission levels were very low against the limit.

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**802.11ax (HE20)**

EUT Test Condition		Measurement Detail	
Channel	Channel 36	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5083.1	41.73	14.31	56.04	74	-17.96	Peak
@	5180	90.12	14.55	104.67	-	-	Peak
-	5149.4	31.84	14.57	46.41	54	-7.59	Average
@	5180	81.86	14.55	96.41	-	-	Average
*	3992	44.24	1.15	45.39	74	-28.61	Peak
-	10360	30.66	18.92	49.58	68.2	-18.62	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5147.3	51.71	14.55	66.26	74	-7.74	Peak
@	5180	100.93	14.55	115.48	-	-	Peak
-	5149.1	38.54	14.57	53.11	54	-0.89	Average
@	5180	92.13	14.55	106.68	-	-	Average
*	3992	48.76	1.15	49.91	74	-24.09	Peak
-	10360	31.09	18.92	50.01	68.2	-18.19	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\*": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail	
Channel	Channel 44	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5076.5	42.32	14.29	56.61	74	-17.39	Peak
@	5220	96.65	14.36	111.01	-	-	Peak
-	5130.8	32.01	14.51	46.52	54	-7.48	Average
@	5220	88.82	14.36	103.18	-	-	Average
*	3992	44.39	1.15	45.54	74	-28.46	Peak
-	10440	31.91	19.23	51.14	68.2	-17.06	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5143.4	48.88	14.55	63.43	74	-10.57	Peak
@	5220	105.83	14.36	120.19	-	-	Peak
-	5150	38.49	14.57	53.06	54	-0.94	Average
@	5220	96.76	14.36	111.12	-	-	Average
*	3992	48.64	1.15	49.79	74	-24.21	Peak
-	10440	35.13	19.23	54.36	68.2	-13.84	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\* \* ": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail	
Channel	Channel 48	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5125.1	42.59	14.49	57.08	74	-16.92	Peak
@	5240	96.63	14.18	110.81	-	-	Peak
-	5107.1	31.95	14.43	46.38	54	-7.62	Average
@	5240	88.79	14.18	102.97	-	-	Average
*	3992	43.91	1.15	45.06	74	-28.94	Peak
-	10480	32.33	19.37	51.7	68.2	-16.5	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5147.9	44.96	14.56	59.52	74	-14.48	Peak
@	5240	104.22	14.18	118.4	-	-	Peak
-	5150	35.26	14.57	49.83	54	-4.17	Average
@	5240	96.31	14.18	110.49	-	-	Average
*	3992	48.09	1.15	49.24	74	-24.76	Peak
-	10480	37.61	19.37	56.98	68.2	-11.22	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\* \* ": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail	
Channel	Channel 149	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5593	41.14	15.05	56.19	68.2	-12.01	Peak
-	5724	74.37	15.4	89.77	119.92	-30.15	Peak
@	5745	89.35	15.57	104.92	-	-	Average
@	5745	99.09	15.57	114.66	-	-	Peak
-	11490	26.02	20.73	46.75	54	-7.25	Average
-	11490	33.25	20.73	53.98	74	-20.02	Peak
-	17235	30.47	29.88	60.35	68.2	-7.85	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5647	46.67	15.14	61.81	68.2	-6.39	Peak
-	5721.5	84.34	15.39	99.73	114.22	-14.49	Peak
@	5745	94.95	15.57	110.52	-	-	Average
@	5745	104.87	15.57	120.44	-	-	Peak
-	11490	28.99	20.73	49.72	54	-4.28	Average
-	11490	37.7	20.73	58.43	74	-15.57	Peak
-	17235	30.89	29.88	60.77	68.2	-7.43	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\*": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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Doc No: 17-EM-F0878 / 5.0



EUT Test Condition		Measurement Detail	
Channel	Channel 157	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5584	40.9	15.04	55.94	68.2	-12.26	Peak
-	5722.5	47.9	15.39	63.29	116.5	-53.21	Peak
@	5785	88.96	15.65	104.61	-	-	Average
@	5785	99.87	15.65	115.52	-	-	Peak
-	5852	44.09	15.97	60.06	117.64	-57.58	Peak
-	5946	41.36	16.39	57.75	68.2	-10.45	Peak
-	11570	25.59	20.51	46.1	54	-7.9	Average
-	11570	34.86	20.51	55.37	74	-18.63	Peak
-	17355	29.04	30.79	59.83	68.2	-8.37	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5540	40.99	14.97	55.96	68.2	-12.24	Peak
-	5725	53.26	15.41	68.67	122.2	-53.53	Peak
@	5785	94.53	15.65	110.18	-	-	Average
@	5785	105.79	15.65	121.44	-	-	Peak
-	5856	53.83	16	69.83	110.52	-40.69	Peak
-	5963	40.6	16.39	56.99	68.2	-11.21	Peak
-	11570	29.52	20.51	50.03	54	-3.97	Average
-	11570	39.99	20.51	60.5	74	-13.5	Peak
-	17355	29.58	30.79	60.37	68.2	-7.83	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail	
Channel	Channel 165	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
@	5825	86.7	15.81	102.51	-	-	Average
@	5825	96.29	15.81	112.1	-	-	Peak
-	5850	66.44	15.95	82.39	122.2	-39.81	Peak
-	5944	40.59	16.39	56.98	68.2	-11.22	Peak
-	11650	25.07	20.28	45.35	54	-8.65	Average
-	11650	33.1	20.28	53.38	74	-20.62	Peak
-	17475	29.26	31.91	61.17	68.2	-7.03	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
@	5825	93.45	15.81	109.26	-	-	Average
@	5825	105.31	15.81	121.12	-	-	Peak
-	5850	77.92	15.95	93.87	122.2	-28.33	Peak
-	5926	43.47	16.36	59.83	68.2	-8.37	Peak
-	11650	30.34	20.28	50.62	54	-3.38	Average
-	11650	39.58	20.28	59.86	74	-14.14	Peak
-	17475	32.91	31.91	64.82	68.2	-3.38	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. The other emission levels were very low against the limit.

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Doc No: 17-EM-F0878 / 5.0





**802.11ax (HE40)**

EUT Test Condition		Measurement Detail	
Channel	Channel 38	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5066.9	42.55	14.23	56.78	74	-17.22	Peak
@	5190	82.38	14.54	96.92	-	-	Peak
-	5149.1	31.59	14.57	46.16	54	-7.84	Average
@	5190	73.81	14.54	88.35	-	-	Average
*	3992	43.54	1.15	44.69	74	-29.31	Peak
-	10380	31.6	18.99	50.59	68.2	-17.61	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5149.1	48.08	14.57	62.65	74	-11.35	Peak
@	5190	93.57	14.54	108.11	-	-	Peak
-	5147.6	38.55	14.56	53.11	54	-0.89	Average
@	5190	84.03	14.54	98.57	-	-	Average
*	3992	47.93	1.15	49.08	74	-24.92	Peak
-	10380	31.66	18.99	50.65	68.2	-17.55	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\*": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

**Underwriters Laboratories Taiwan Co., Ltd.**



EUT Test Condition		Measurement Detail	
Channel	Channel 46	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5118.2	41.52	14.47	55.99	74	-18.01	Peak
@	5230	89.91	14.28	104.19	-	-	Peak
-	5148.5	31.57	14.57	46.14	54	-7.86	Average
@	5230	81.39	14.28	95.67	-	-	Average
*	3992	42.77	1.15	43.92	74	-30.08	Peak
-	10460	31.8	19.29	51.09	68.2	-17.11	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5147.3	51.34	14.55	65.89	74	-8.11	Peak
@	5230	99.37	14.28	113.65	-	-	Peak
-	5149.4	38.54	14.57	53.11	54	-0.89	Average
@	5230	91.09	14.28	105.37	-	-	Average
*	3992	48.65	1.15	49.8	74	-24.2	Peak
-	10460	32.3	19.29	51.59	68.2	-16.61	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\*": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail	
Channel	Channel 151	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5642	44.06	15.13	59.19	68.2	-9.01	Peak
-	5721.5	72.02	15.39	87.41	114.22	-26.81	Peak
@	5755	85.57	15.6	101.17	-	-	Average
@	5755	97.92	15.6	113.52	-	-	Peak
-	11510	24.82	20.72	45.54	54	-8.46	Average
-	11510	33.22	20.72	53.94	74	-20.06	Peak
-	17265	30.21	30.09	60.3	68.2	-7.9	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5644.5	51.86	15.13	66.99	68.2	-1.21	Peak
-	5719.5	82.82	15.37	98.19	110.66	-12.47	Peak
@	5755	90.98	15.6	106.58	-	-	Average
@	5755	102.61	15.6	118.21	-	-	Peak
-	11510	28.88	20.72	49.6	54	-4.4	Average
-	11510	38.39	20.72	59.11	74	-14.89	Peak
-	17265	30.65	30.09	60.74	68.2	-7.46	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail	
Channel	Channel 159	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
@	5795	86.07	15.67	101.74	-	-	Average
@	5795	97.65	15.67	113.32	-	-	Peak
-	5852	60.11	15.97	76.08	117.64	-41.56	Peak
-	5925.5	42.85	16.36	59.21	68.2	-8.99	Peak
-	11590	24.5	20.44	44.94	54	-9.06	Average
-	11590	33.06	20.44	53.5	74	-20.5	Peak
-	17385	29.95	31.05	61	68.2	-7.2	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
@	5795	90.95	15.67	106.62	-	-	Average
@	5795	101.41	15.67	117.08	-	-	Peak
-	5898.5	58.35	16.31	74.66	87.77	-13.11	Peak
-	5925	50.79	16.36	67.15	68.2	-1.05	Peak
-	11590	26.15	20.44	46.59	54	-7.41	Average
-	11590	34.77	20.44	55.21	74	-18.79	Peak
-	17385	29.67	31.05	60.72	68.2	-7.48	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. The other emission levels were very low against the limit.

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**802.11ax (HE80)**

EUT Test Condition		Measurement Detail	
Channel	Channel 42	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5100.8	42.55	14.41	56.96	74	-17.04	Peak
@	5210	78.25	14.45	92.7	-	-	Peak
-	5120.9	31.56	14.47	46.03	54	-7.97	Average
@	5210	70.72	14.45	85.17	-	-	Average
*	3992	43.43	1.15	44.58	74	-29.42	Peak
-	10420	31.44	19.15	50.59	68.2	-17.61	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5146.4	46.9	14.55	61.45	74	-12.55	Peak
@	5210	91.01	14.45	105.46	-	-	Peak
-	5150	38.58	14.57	53.15	54	-0.85	Average
@	5210	80.96	14.45	95.41	-	-	Average
*	3992	48.17	1.15	49.32	74	-24.68	Peak
-	10420	31.7	19.15	50.85	68.2	-17.35	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\*": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail	
Channel	Channel 155	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5644.5	42.36	15.13	57.49	68.2	-10.71	Peak
-	5724	56.24	15.4	71.64	119.92	-48.28	Peak
@	5775	79.01	15.64	94.65	-	-	Average
@	5775	90.55	15.64	106.19	-	-	Peak
-	11550	24.27	20.57	44.84	54	-9.16	Average
-	11550	32.48	20.57	53.05	74	-20.95	Peak
-	17325	29.66	30.53	60.19	68.2	-8.01	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5639	51.14	15.12	66.26	68.2	-1.94	Peak
-	5718.5	71.93	15.36	87.29	110.38	-23.09	Peak
@	5775	85.69	15.64	101.33	-	-	Average
@	5775	97.16	15.64	112.8	-	-	Peak
-	11550	28.37	20.57	48.94	54	-5.06	Average
-	11550	34.9	20.57	55.47	74	-18.53	Peak
-	17325	29.65	30.53	60.18	68.2	-8.02	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\*": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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## Beamforming Mode

### 802.11ax (HE20)

EUT Test Condition		Measurement Detail	
Channel	Channel 36	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5080.4	42.06	14.29	56.35	74	-17.65	Peak
@	5180	79.46	14.55	94.01	-	-	Peak
-	5122.4	31.51	14.47	45.98	54	-8.02	Average
@	5180	72.44	14.55	86.99	-	-	Average
-	7290	33.69	12.15	45.84	74	-28.16	Peak
-	10360	30.38	18.92	49.3	68.2	-18.9	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5131.7	43.82	14.51	58.33	74	-15.67	Peak
@	5180	91.75	14.55	106.3	-	-	Peak
-	5137.4	31.93	14.53	46.46	54	-7.54	Average
@	5180	82.88	14.55	97.43	-	-	Average
*	7681	36.91	12.46	49.37	74	-24.63	Peak
-	10360	31.9	18.92	50.82	68.2	-17.38	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\*": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail	
Channel	Channel 44	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5092.4	42.38	14.36	56.74	74	-17.26	Peak
@	5220	84.21	14.36	98.57	-	-	Peak
-	5059.4	31.76	14.19	45.95	54	-8.05	Average
@	5220	78.62	14.36	92.98	-	-	Average
*	7290	33.2	12.15	45.35	74	-28.65	Peak
-	10440	30.55	19.23	49.78	68.2	-18.42	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5101.4	44.12	14.41	58.53	74	-15.47	Peak
@	5220	97.05	14.36	111.41	-	-	Peak
-	5145.8	32.72	14.55	47.27	54	-6.73	Average
@	5220	87.97	14.36	102.33	-	-	Average
*	7681	35.82	12.46	48.28	74	-25.72	Peak
-	10440	31.57	19.23	50.8	68.2	-17.4	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\* \* ": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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Doc No: 17-EM-F0878 / 5.0





EUT Test Condition		Measurement Detail	
Channel	Channel 48	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5083.4	42.3	14.31	56.61	74	-17.39	Peak
@	5240	85.99	14.18	100.17	-	-	Peak
-	5082.5	31.89	14.31	46.2	54	-7.8	Average
@	5240	79.42	14.18	93.6	-	-	Average
-	7154	34.95	11.68	46.63	68.2	-21.57	Peak
-	10480	30.6	19.37	49.97	68.2	-18.23	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5146.4	42.92	14.55	57.47	74	-16.53	Peak
@	5240	97.16	14.18	111.34	-	-	Peak
-	5136.8	32.27	14.53	46.8	54	-7.2	Average
@	5240	90.46	14.18	104.64	-	-	Average
-	7681	37.28	12.46	49.74	74	-24.26	Peak
-	10480	32.89	19.37	52.26	68.2	-15.94	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. The other emission levels were very low against the limit.

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Doc No: 17-EM-F0878 / 5.0



EUT Test Condition		Measurement Detail	
Channel	Channel 149	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5563	40.72	15.01	55.73	68.2	-12.47	Peak
-	5724	65.34	15.4	80.74	119.92	-39.18	Peak
@	5745	83.61	15.57	99.18	-	-	Average
@	5745	93.59	15.57	109.16	-	-	Peak
-	6542	34.33	8.97	43.3	68.2	-24.9	Peak
-	7902	32.01	13.27	45.28	68.2	-22.92	Peak
*	11490	30.7	20.73	51.43	74	-22.57	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5588	42.57	15.05	57.62	68.2	-10.58	Peak
-	5725	78.69	15.41	94.1	122.2	-28.1	Peak
@	5745	90.84	15.57	106.41	-	-	Average
@	5745	100.71	15.57	116.28	-	-	Peak
*	7681	36.57	12.46	49.03	74	-24.97	Peak
-	11490	30.15	20.73	50.88	54	-3.12	Average
-	11490	35.95	20.73	56.68	74	-17.32	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\*": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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Doc No: 17-EM-F0878 / 5.0



EUT Test Condition		Measurement Detail	
Channel	Channel 157	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5583.5	40.94	15.04	55.98	68.2	-12.22	Peak
-	5719.5	41.5	15.37	56.87	110.66	-53.79	Peak
@	5785	84.12	15.65	99.77	-	-	Average
@	5785	94	15.65	109.65	-	-	Peak
-	5892	40.88	16.26	57.14	92.58	-35.44	Peak
-	5941.5	40.83	16.38	57.21	68.2	-10.99	Peak
*	7494	34.01	12.59	46.6	74	-27.4	Peak
-	8718	32.15	14.82	46.97	68.2	-21.23	Peak
*	11570	30.64	20.51	51.15	74	-22.85	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5567	41.79	15.02	56.81	68.2	-11.39	Peak
-	5695.5	48.13	15.21	63.34	101.88	-38.54	Peak
@	5785	91.16	15.65	106.81	-	-	Average
@	5785	101.06	15.65	116.71	-	-	Peak
-	5850	46.83	15.95	62.78	122.2	-59.42	Peak
-	5928	41.25	16.36	57.61	68.2	-10.59	Peak
*	7681	34.58	12.46	47.04	74	-26.96	Peak
-	11570	29.07	20.51	49.58	54	-4.42	Average
-	11570	35.01	20.51	55.52	74	-18.48	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\* \* ": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail	
Channel	Channel 165	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
@	5825	84.06	15.81	99.87	-	-	Average
@	5825	93.95	15.81	109.76	-	-	Peak
-	5850	59.95	15.95	75.9	122.2	-46.3	Peak
-	5965.5	40.4	16.39	56.79	68.2	-11.41	Peak
-	7171	33.77	11.73	45.5	68.2	-22.7	Peak
-	8582	32.09	14.32	46.41	68.2	-21.79	Peak
*	11650	31.06	20.28	51.34	74	-22.66	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
@	5825	90.93	15.81	106.74	-	-	Average
@	5825	100.86	15.81	116.67	-	-	Peak
-	5852	71.34	15.97	87.31	117.64	-30.33	Peak
-	5927	41.57	16.36	57.93	68.2	-10.27	Peak
*	7681	35.24	12.46	47.7	74	-26.3	Peak
-	11650	31.73	20.28	52.01	54	-1.99	Average
-	11650	37.03	20.28	57.31	74	-16.69	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\*": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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Doc No: 17-EM-F0878 / 5.0



**802.11ax (HE40)**

EUT Test Condition		Measurement Detail	
Channel	Channel 38	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5042.9	42.26	14.1	56.36	74	-17.64	Peak
@	5190	82.04	14.54	96.58	-	-	Peak
-	5126	31.41	14.49	45.9	54	-8.1	Average
@	5190	70.98	14.54	85.52	-	-	Average
*	7341	33.5	12.29	45.79	74	-28.21	Peak
-	10380	30.8	18.99	49.79	68.2	-18.41	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5058.8	41.76	14.19	55.95	74	-18.05	Peak
@	5190	84.48	14.54	99.02	-	-	Peak
-	5096.9	31.74	14.39	46.13	54	-7.87	Average
@	5190	75.46	14.54	90	-	-	Average
*	7681	35.78	12.46	48.24	74	-25.76	Peak
-	10380	31	18.99	49.99	68.2	-18.21	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\*": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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Doc No: 17-EM-F0878 / 5.0



EUT Test Condition		Measurement Detail	
Channel	Channel 46	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5087.9	41.85	14.34	56.19	74	-17.81	Peak
@	5230	83.37	14.28	97.65	-	-	Peak
-	5138.3	31.42	14.54	45.96	54	-8.04	Average
@	5230	79.43	14.28	93.71	-	-	Average
*	7324	33.29	12.23	45.52	74	-28.48	Peak
-	10460	30.97	19.29	50.26	68.2	-17.94	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5134.7	43.28	14.52	57.8	74	-16.2	Peak
@	5230	95.09	14.28	109.37	-	-	Peak
-	5147.9	32.72	14.56	47.28	54	-6.72	Average
@	5230	88.05	14.28	102.33	-	-	Average
*	7681	37.67	12.46	50.13	74	-23.87	Peak
-	10460	33.25	19.29	52.54	68.2	-15.66	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\* \* ": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail	
Channel	Channel 151	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5630	41.07	15.12	56.19	68.2	-12.01	Peak
-	5724	67.02	15.4	82.42	119.92	-37.5	Peak
@	5755	81.14	15.6	96.74	-	-	Average
@	5755	91.74	15.6	107.34	-	-	Peak
-	7018	33.66	10.93	44.59	68.2	-23.61	Peak
-	9857	32.17	18.3	50.47	68.2	-17.73	Peak
*	11506	30.72	20.73	51.45	74	-22.55	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5644.5	48.99	15.13	64.12	68.2	-4.08	Peak
-	5723.5	77.48	15.4	92.88	118.78	-25.9	Peak
@	5755	89.73	15.6	105.33	-	-	Average
@	5755	99.35	15.6	114.95	-	-	Peak
*	7681	35.06	12.46	47.52	74	-26.48	Peak
-	11510	30.64	20.72	51.36	54	-2.64	Average
-	11510	34.6	20.72	55.32	74	-18.68	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\*": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail	
Channel	Channel 159	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
@	5795	79.69	15.67	95.36	-	-	Average
@	5795	89.68	15.67	105.35	-	-	Peak
-	5851	52.92	15.96	68.88	119.92	-51.04	Peak
-	5953.5	40.93	16.39	57.32	68.2	-10.88	Peak
-	7239	33.17	12.04	45.21	68.2	-22.99	Peak
*	11590	29.81	20.44	50.25	74	-23.75	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
@	5795	88.37	15.67	104.04	-	-	Average
@	5795	98.33	15.67	114	-	-	Peak
-	5857	60.59	16	76.59	110.24	-33.65	Peak
-	5939.5	43.35	16.38	59.73	68.2	-8.47	Peak
*	7307	34.09	12.18	46.27	74	-27.73	Peak
*	11590	31.22	20.44	51.66	74	-22.34	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\* \* ": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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**802.11ax (HE80)**

EUT Test Condition		Measurement Detail	
Channel	Channel 42	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5011.4	42.4	13.94	56.34	74	-17.66	Peak
@	5210	72.68	14.45	87.13	-	-	Peak
-	5084.3	31.94	14.32	46.26	54	-7.74	Average
@	5210	64.12	14.45	78.57	-	-	Average
*	7579	33.53	12.51	46.04	74	-27.96	Peak
-	10420	30.86	19.15	50.01	68.2	-18.19	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5112.8	42.39	14.45	56.84	74	-17.16	Peak
@	5210	81.16	14.45	95.61	-	-	Peak
-	5099.6	31.95	14.41	46.36	54	-7.64	Average
@	5210	73.22	14.45	87.67	-	-	Average
*	7681	36.03	12.46	48.49	74	-25.51	Peak
-	10420	31.9	19.15	51.05	68.2	-17.15	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\*": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. The other emission levels were very low against the limit.

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EUT Test Condition		Measurement Detail	
Channel	Channel 155	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
--	5623.5	41.1	15.11	56.21	68.2	-11.99	Peak
--	5700	51.19	15.22	66.41	105.2	-38.79	Peak
@	5775	73.69	15.64	89.33	-	-	Average
@	5775	83.63	15.64	99.27	-	-	Peak
-	6967	34.19	10.8	44.99	68.2	-23.21	Peak
-	9789	31.04	18.11	49.15	68.2	-19.05	Peak
*	11550	30.39	20.57	50.96	74	-23.04	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	5629	45.43	15.12	60.55	68.2	-7.65	Peak
-	5718.5	63.3	15.36	78.66	110.38	-31.72	Peak
@	5775	81.49	15.64	97.13	-	-	Average
@	5775	91.49	15.64	107.13	-	-	Peak
*	7681	35.43	12.46	47.89	74	-26.11	Peak
-	11550	30.2	20.57	50.77	54	-3.23	Average
-	11550	34.4	20.57	54.97	74	-19.03	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. "@": Fundamental Frequency.
5. "\* \* ": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
6. " \* ": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
7. The other emission levels were very low against the limit.

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**Co-Location Mode**

**Non-Beamforming mode**

**802.11b + 802.11a**

EUT Test Condition		Measurement Detail	
Channel	Channel 11 + Channel 149	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
*	3992	42.93	1.15	44.08	74	-29.92	Peak
*	4924	39.26	3.69	42.95	74	-31.05	Peak
*	4995	41.02	3.85	44.87	74	-29.13	Peak
*	8208	34.03	13.65	47.68	74	-26.32	Peak
-	11490	26.73	20.73	47.46	54	-6.54	Average
-	11490	37.59	20.73	58.32	74	-15.68	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
*	3992	49.64	1.15	50.79	74	-23.21	Peak
*	4924	42.48	3.69	46.17	74	-27.83	Peak
*	4995	45.64	3.85	49.49	74	-24.51	Peak
*	7681	37.25	12.46	49.71	74	-24.29	Peak
-	11490	32.5	20.73	53.23	54	-0.77	Average
-	11490	42.41	20.73	63.14	74	-10.86	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. " \* " : The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

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## Beamforming mode

### 802.11ax (HE20) + 802.11ax (HE20)

EUT Test Condition		Measurement Detail	
Channel	Channel 6 + Channel 165	Frequency Range	1 GHz ~ 40 GHz

Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
*	1204	54.25	-8.29	45.96	74	-28.04	Peak
*	3839	41.98	0.64	42.62	74	-31.38	Peak
*	3992	39.33	1.15	40.48	74	-33.52	Peak
*	4874	36.68	3.63	40.31	74	-33.69	Peak
*	7613	33.2	12.43	45.63	74	-28.37	Peak
*	11650	31.01	20.28	51.29	74	-22.71	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
*	1204	56.68	-8.29	48.39	74	-25.61	Peak
*	3839	47.4	0.64	48.04	74	-25.96	Peak
*	3992	41.56	1.15	42.71	74	-31.29	Peak
*	4874	44.61	3.63	48.24	74	-25.76	Peak
-	11650	31.71	20.28	51.99	54	-2.01	Average
-	11650	37.02	20.28	57.3	74	-16.7	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. " \* ": The peak result under 20 dB above and complies with AVG limit, AVG result is deemed to comply with AVG limit.
5. The other emission levels were very low against the limit.

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Doc No: 17-EM-F0878 / 5.0



### 9 kHz ~ 30 MHz Data

For 9 kHz to 30 MHz radiated emission have performed all modes of operation were investigated. The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

No non-compliance noted:

#### **KDB 414788 D01 OATS and Chamber Correlation Justification**

- Base on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.

- OATs and chamber correlation testing had been performed and chamber measured test results is the worst case test result.

Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 30m open area test site. Therefore sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788.

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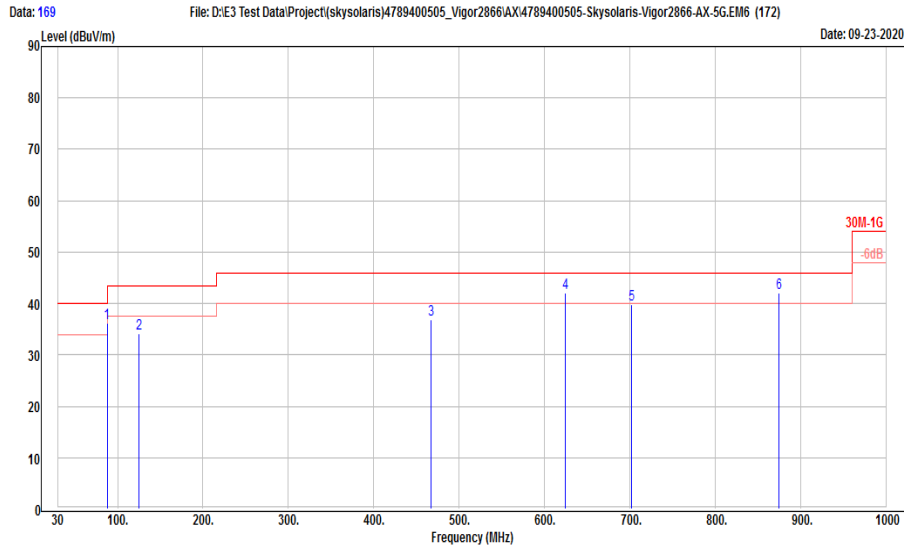
### 30 MHz ~ 1 GHz Data

### Non-Beamforming Mode

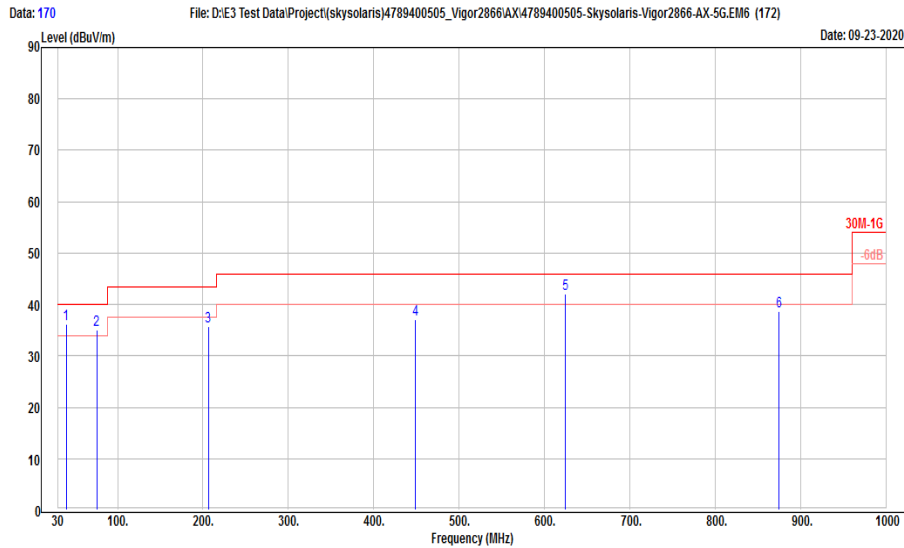
### 802.11a

EUT Test Condition		Measurement Detail	
Channel	Channel 149	Frequency Range	30 MHz ~ 1 GHz

### Horizontal



### Vertical



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Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	88.2	53.9	-17.61	36.29	43.5	-7.21	Peak
-	125.06	47.72	-13.51	34.21	43.5	-9.29	Peak
-	467.47	41.86	-5.08	36.78	46	-9.22	Peak
-	624.61	43.4	-1.33	42.07	46	-3.93	Peak
-	702.21	40.33	-0.49	39.84	46	-6.16	Peak
-	874.87	39.49	2.5	41.99	46	-4.01	Peak
Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	39.7	48.16	-11.91	36.25	40	-3.75	Peak
-	75.59	50.23	-15.26	34.97	40	-5.03	Peak
-	206.54	49.5	-13.85	35.65	43.5	-7.85	Peak
-	449.04	42.79	-5.78	37.01	46	-8.99	Peak
-	624.61	43.37	-1.33	42.04	46	-3.96	Peak
-	874.87	36.08	2.5	38.58	46	-7.42	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The peak result complies with QP limit, QP result is deemed to comply with QP limit.
5. The other emission levels were very low against the limit.

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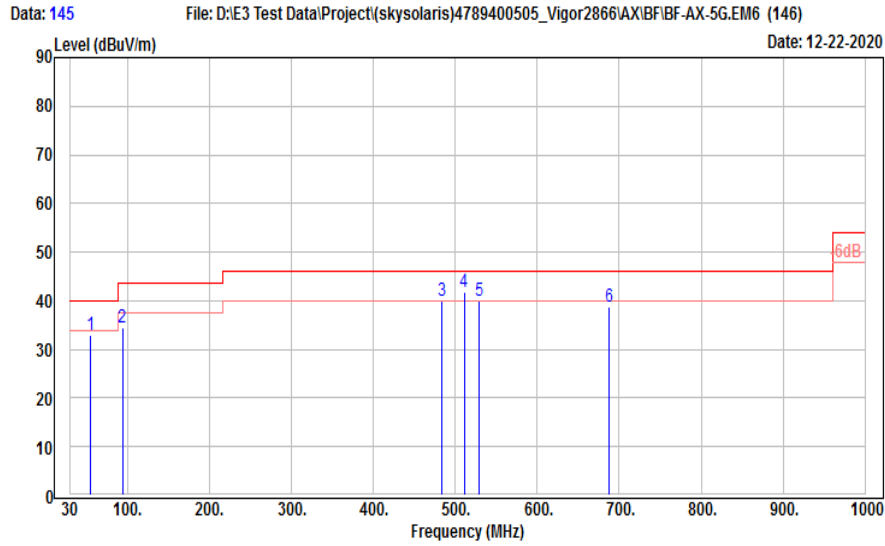


## Beamforming Mode

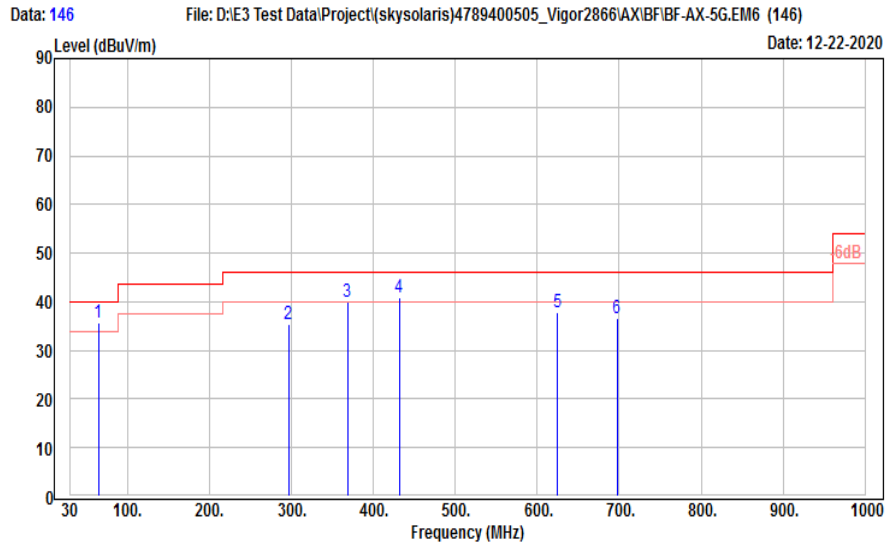
### 802.11ax (HE20)

EUT Test Condition		Measurement Detail	
Channel	Channel 165	Frequency Range	30 MHz ~ 1 GHz

### Horizontal



### Vertical



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Doc No: 17-EM-F0878 / 5.0





Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	55.22	44.43	-11.55	32.88	40	-7.12	Peak
-	94.02	51.91	-17.34	34.57	43.5	-8.93	Peak
-	483.96	44.87	-4.82	40.05	46	-5.95	Peak
-	511.12	46.08	-4.2	41.88	46	-4.12	Peak
-	529.55	43.55	-3.53	40.02	46	-5.98	Peak
-	687.66	39.6	-0.95	38.65	46	-7.35	Peak

Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	64.92	48.53	-12.76	35.77	40	-4.23	Peak
-	296.75	45.62	-10.17	35.45	46	-10.55	Peak
-	368.53	47.77	-7.77	40	46	-6	Peak
-	431.58	47.27	-6.31	40.96	46	-5.04	Peak
-	624.61	39.3	-1.33	37.97	46	-8.03	Peak
-	697.36	37.2	-0.65	36.55	46	-9.45	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The peak result complies with QP limit, QP result is deemed to comply with QP limit.
5. The other emission levels were very low against the limit.

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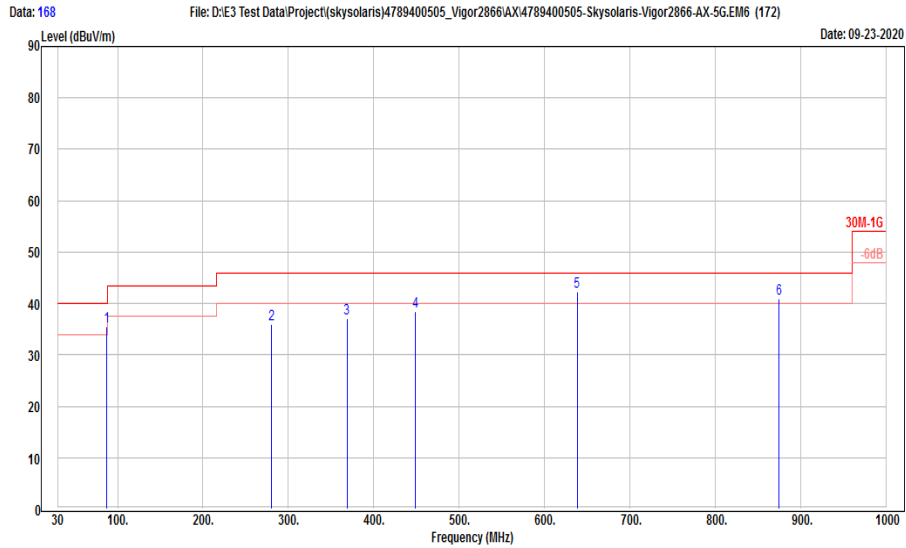
**Co-Location Mode**

**Non-Beamforming mode**

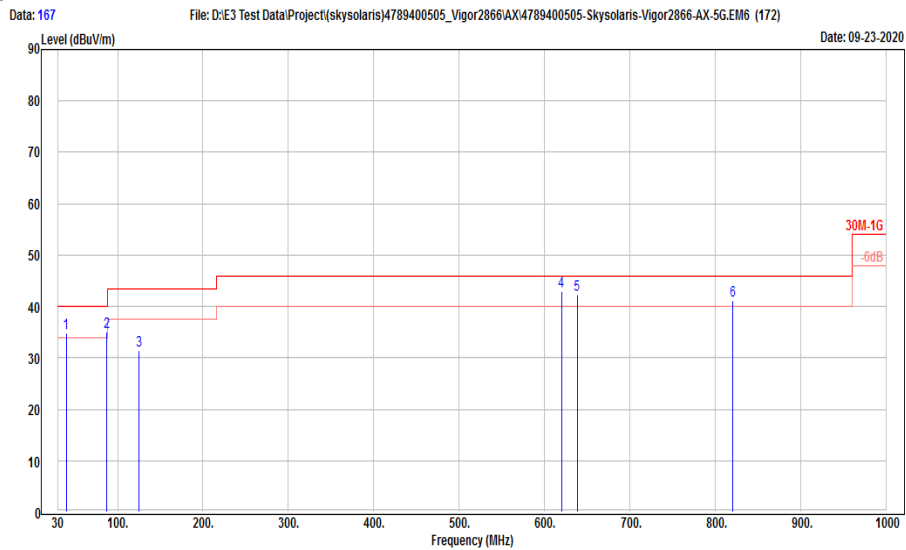
**802.11b + 802.11a**

EUT Test Condition		Measurement Detail	
Channel	Channel 11 + Channel 149	Frequency Range	30 MHz ~ 1 GHz

**Horizontal**



**Vertical**



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Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	87.23	52.99	-17.59	35.4	40	-4.6	Peak
-	280.26	46.31	-10.44	35.87	46	-10.13	Peak
-	368.53	44.94	-7.77	37.17	46	-8.83	Peak
-	449.04	44.23	-5.78	38.45	46	-7.55	Peak
-	638.19	43.52	-1.22	42.3	46	-3.7	Peak
-	874.87	38.32	2.5	40.82	46	-5.18	Peak

Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	39.7	46.79	-11.91	34.88	40	-5.12	Peak
-	87.23	52.75	-17.59	35.16	40	-4.84	Peak
-	125.06	44.97	-13.51	31.46	43.5	-12.04	Peak
-	619.76	44.29	-1.29	43	46	-3	Peak
-	638.19	43.45	-1.22	42.23	46	-3.77	Peak
-	820.55	39.77	1.29	41.06	46	-4.94	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The peak result complies with QP limit, QP result is deemed to comply with QP limit.
5. The other emission levels were very low against the limit.

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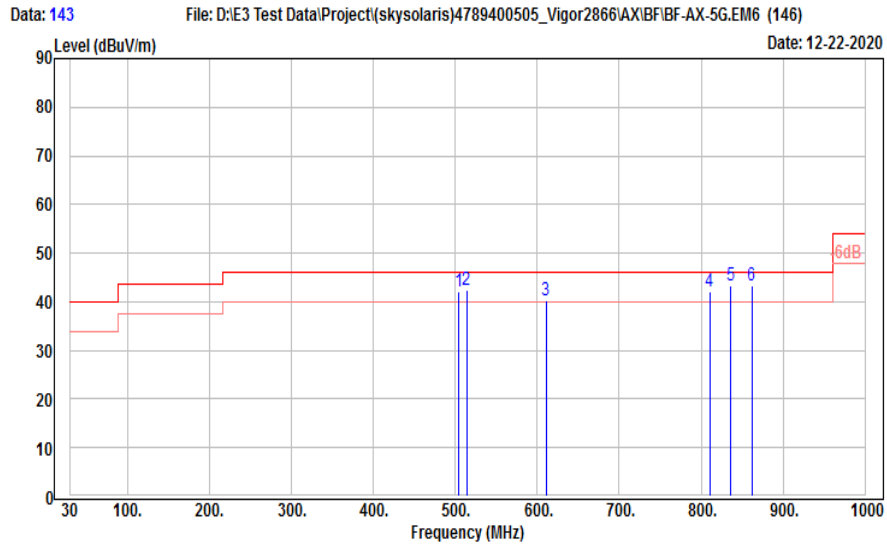


### Beamforming mode

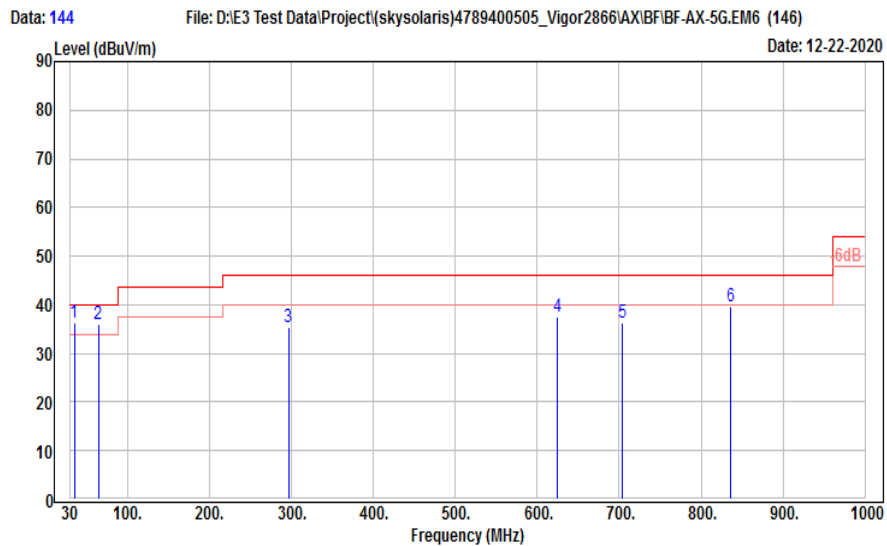
### 802.11ax (HE20) + 802.11ax (HE20)

EUT Test Condition		Measurement Detail	
Channel	Channel 6 + Channel 165	Frequency Range	30 MHz ~ 1 GHz

### Horizontal



### Vertical



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Antenna Polarity & Test Distance: Horizontal at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	504.33	46.58	-4.47	42.11	46	-3.89	Peak
-	514.03	46.53	-4.12	42.41	46	-3.59	Peak
-	611.03	42.46	-2.05	40.41	46	-5.59	Peak
-	810.85	40.98	1.2	42.18	46	-3.82	Peak
-	836.07	41.57	1.69	43.26	46	-2.74	Peak
-	862.26	41.26	2.08	43.34	46	-2.66	Peak

Antenna Polarity & Test Distance: Vertical at 3 m							
Notation	Frequency	Reading	Correct	Result	Limit	Margin	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	
-	34.85	48.79	-12.39	36.4	40	-3.6	Peak
-	64.92	48.89	-12.76	36.13	40	-3.87	Peak
-	296.75	45.54	-10.17	35.37	46	-10.63	Peak
-	624.61	38.89	-1.33	37.56	46	-8.44	Peak
-	704.15	36.59	-0.4	36.19	46	-9.81	Peak
-	836.07	38.06	1.69	39.75	46	-6.25	Peak

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The peak result complies with QP limit, QP result is deemed to comply with QP limit.
5. The other emission levels were very low against the limit.

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## 9.8. AC Power Line Conducted Emission

### Requirements

Frequency (MHz)	Conducted limit (dB $\mu$ V)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30	60	50

Note:

1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

### Test Procedures

- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

NOTE:

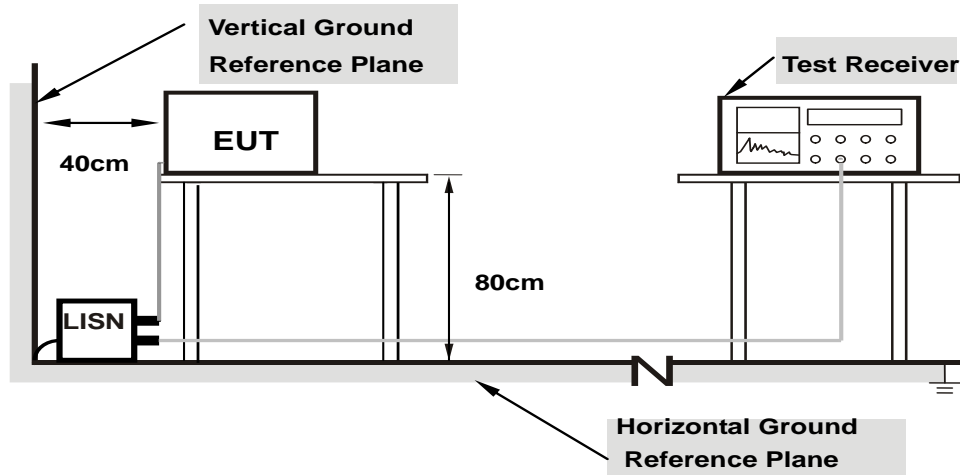
1. The resolution bandwidth and video bandwidth of test receiver is 9kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15MHz-30MHz.

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## Test Setup



**Note: 1.Support units were connected to second LISN.**

For the actual test configuration, please refer to the Setup Configurations.

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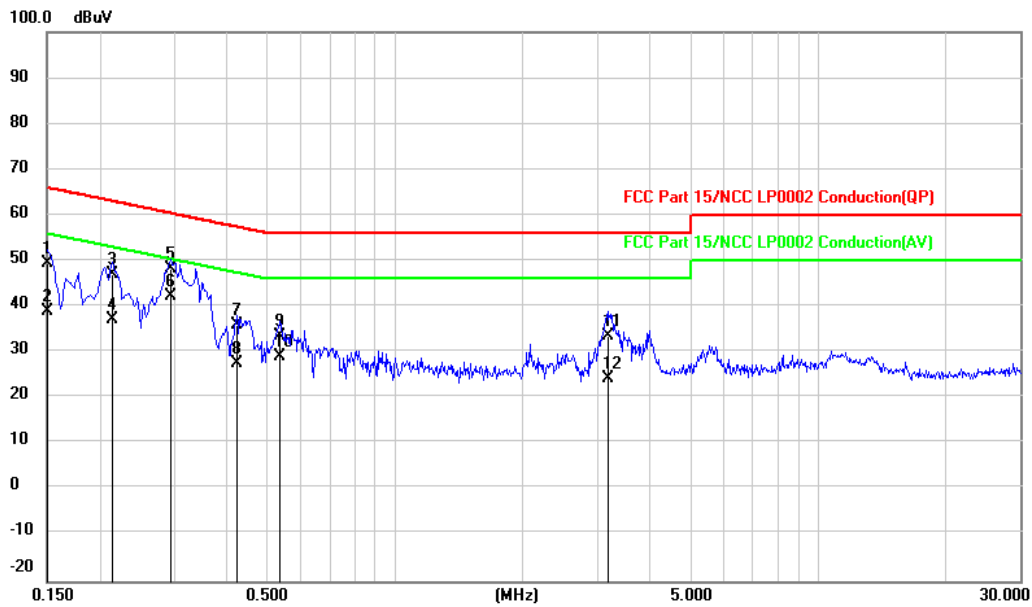
## Test Data

### Non-Beamforming Mode

#### 802.11a

EUT Test Condition		Measurement Detail	
Channel	Channel 149	Frequency Range	150 kHz ~ 30 MHz

### Phase of Power : Line (L)



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No.	Frequency (MHz)	Reading (dBuV)	Correct dB	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1500	30.05	19.54	49.59	66.00	-16.41	QP
2	0.1500	19.29	19.54	38.83	56.00	-17.17	AVG
3	0.2140	27.40	19.53	46.93	63.05	-16.12	QP
4	0.2140	17.74	19.53	37.27	53.05	-15.78	AVG
5	0.2940	28.80	19.53	48.33	60.41	-12.08	QP
6	0.2940	22.85	19.53	42.38	50.41	-8.03	AVG
7	0.4220	16.34	19.51	35.85	57.41	-21.56	QP
8	0.4220	8.11	19.51	27.62	47.41	-19.79	AVG
9	0.5340	14.13	19.52	33.65	56.00	-22.35	QP
10	0.5340	9.43	19.52	28.95	46.00	-17.05	AVG
11	3.1900	13.95	19.57	33.52	56.00	-22.48	QP
12	3.1900	4.83	19.57	24.40	46.00	-21.60	AVG

Remarks:

1. Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB)
2. Margin(dB) = Result value (dBuV) - Limit value (dBuV)
3. Correction Factor(dB) = Insertion loss(dB) + Cable loss(dB)
4. The other emission levels were very low against the limit.

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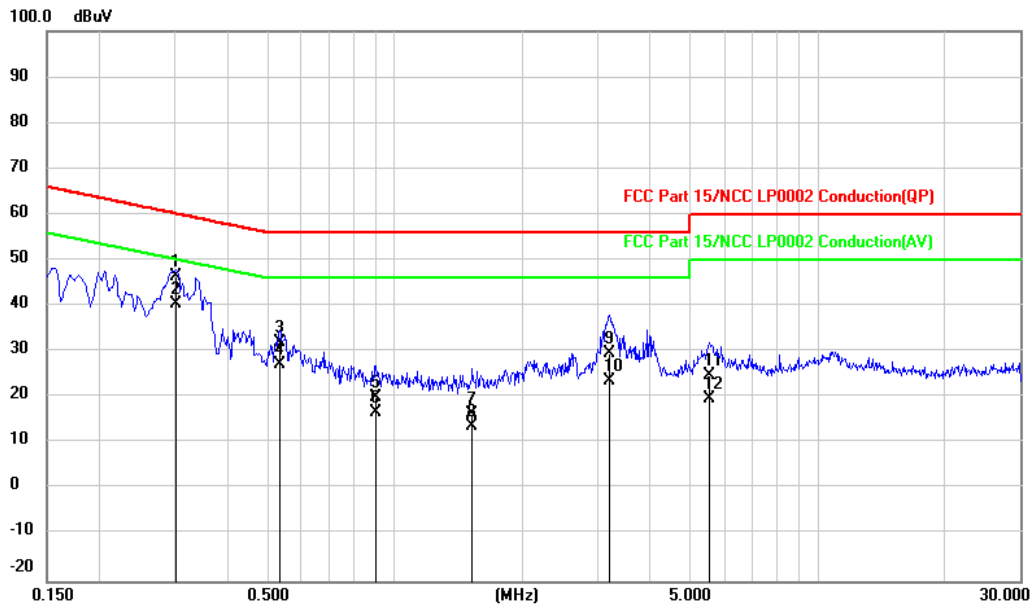
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Facsimile (FAX ) :+886-3-583-7948

Doc No: 17-EM-F0878 / 5.0



### Phase of Power : Neutral (N)



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No.	Frequency (MHz)	Reading (dBuV)	Correct dB	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.3020	26.98	19.51	46.49	60.19	-13.70	QP
2	0.3020	21.04	19.51	40.55	50.19	-9.64	AVG
3	0.5340	12.39	19.52	31.91	56.00	-24.09	QP
4	0.5340	7.68	19.52	27.20	46.00	-18.80	AVG
5	0.9020	0.63	19.53	20.16	56.00	-35.84	QP
6	0.9020	-2.81	19.53	16.72	46.00	-29.28	AVG
7	1.5220	-3.19	19.54	16.35	56.00	-39.65	QP
8	1.5220	-5.67	19.54	13.87	46.00	-32.13	AVG
9	3.2100	10.10	19.56	29.66	56.00	-26.34	QP
10	3.2100	3.96	19.56	23.52	46.00	-22.48	AVG
11	5.5380	5.24	19.60	24.84	60.00	-35.16	QP
12	5.5380	0.09	19.60	19.69	50.00	-30.31	AVG

Remarks:

1. Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB)
2. Margin(dB) = Result value (dBuV) - Limit value (dBuV)
3. Correction Factor(dB) = Insertion loss(dB) + Cable loss(dB)
4. The other emission levels were very low against the limit.

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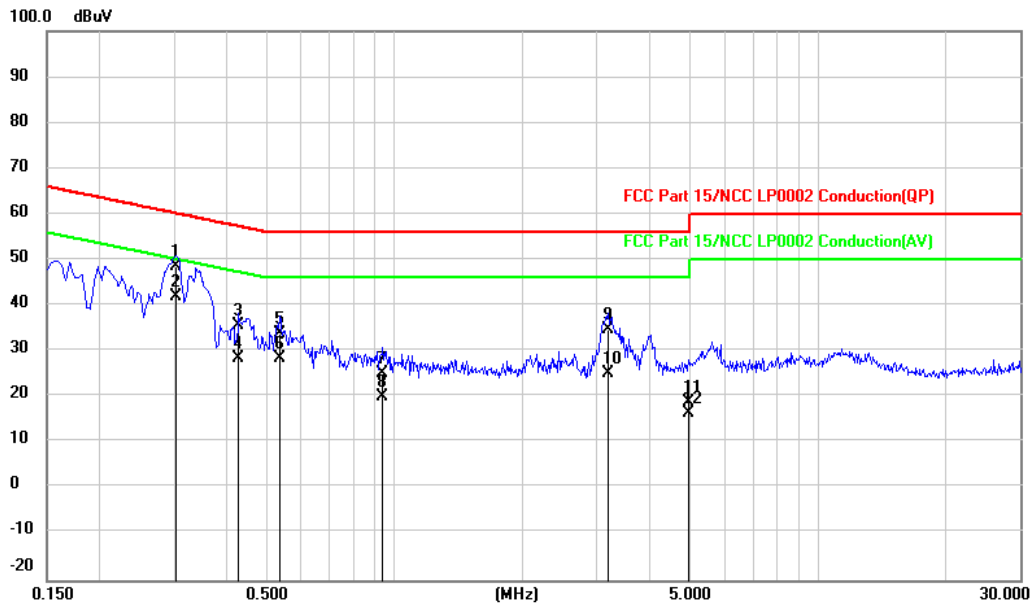


### Beamforming Mode

#### 802.11ax (HE20)

EUT Test Condition		Measurement Detail	
Channel	Channel 165	Frequency Range	150 kHz ~ 30 MHz

#### Phase of Power : Line (L)



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Doc No: 17-EM-F0878 / 5.0



No.	Frequency (MHz)	Reading (dBuV)	Correct dB	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.3020	29.00	19.51	48.51	60.19	-11.68	QP
2	0.3020	22.48	19.51	41.99	50.19	-8.20	AVG
3	0.4260	16.06	19.51	35.57	57.33	-21.76	QP
4	0.4260	8.91	19.51	28.42	47.33	-18.91	AVG
5	0.5340	14.33	19.52	33.85	56.00	-22.15	QP
6	0.5340	8.94	19.52	28.46	46.00	-17.54	AVG
7	0.9340	5.68	19.54	25.22	56.00	-30.78	QP
8	0.9340	0.65	19.54	20.19	46.00	-25.81	AVG
9	3.2060	15.16	19.57	34.73	56.00	-21.27	QP
10	3.2060	5.71	19.57	25.28	46.00	-20.72	AVG
11	4.9340	-0.82	19.60	18.78	56.00	-37.22	QP
12	4.9340	-3.26	19.60	16.34	46.00	-29.66	AVG

Remarks:

1. Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB)
2. Margin(dB) = Result value (dBuV) - Limit value (dBuV)
3. Correction Factor(dB) = Insertion loss(dB) + Cable loss(dB)
4. The other emission levels were very low against the limit.

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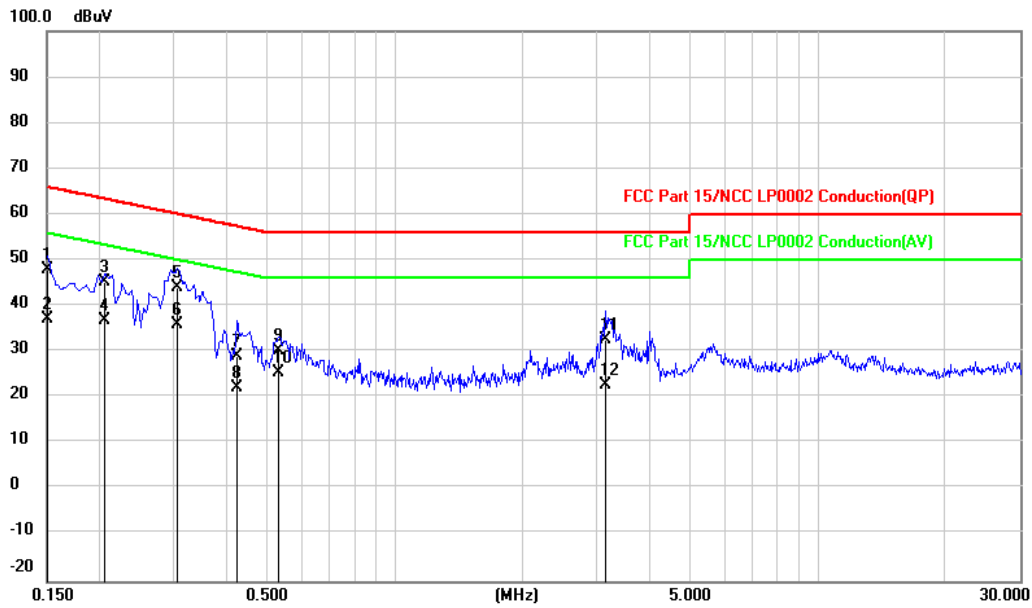
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Doc No: 17-EM-F0878 / 5.0



### Phase of Power : Neutral (N)



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No.	Frequency (MHz)	Reading (dBuV)	Correct dB	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.1500	28.51	19.54	48.05	66.00	-17.95	QP
2	0.1500	17.69	19.54	37.23	56.00	-18.77	AVG
3	0.2060	25.59	19.53	45.12	63.37	-18.25	QP
4	0.2060	17.21	19.53	36.74	53.37	-16.63	AVG
5	0.3060	24.54	19.51	44.05	60.08	-16.03	QP
6	0.3060	16.45	19.51	35.96	50.08	-14.12	AVG
7	0.4220	9.53	19.51	29.04	57.41	-28.37	QP
8	0.4220	2.57	19.51	22.08	47.41	-25.33	AVG
9	0.5299	10.61	19.52	30.13	56.00	-25.87	QP
10	0.5299	5.96	19.52	25.48	46.00	-20.52	AVG
11	3.1420	13.18	19.56	32.74	56.00	-23.26	QP
12	3.1420	3.20	19.56	22.76	46.00	-23.24	AVG

Remarks:

1. Result value (dBuV) = Reading value (dBuV) + Correction Factor (dB)
2. Margin(dB) = Result value (dBuV) - Limit value (dBuV)
3. Correction Factor(dB) = Insertion loss(dB) + Cable loss(dB)
4. The other emission levels were very low against the limit.

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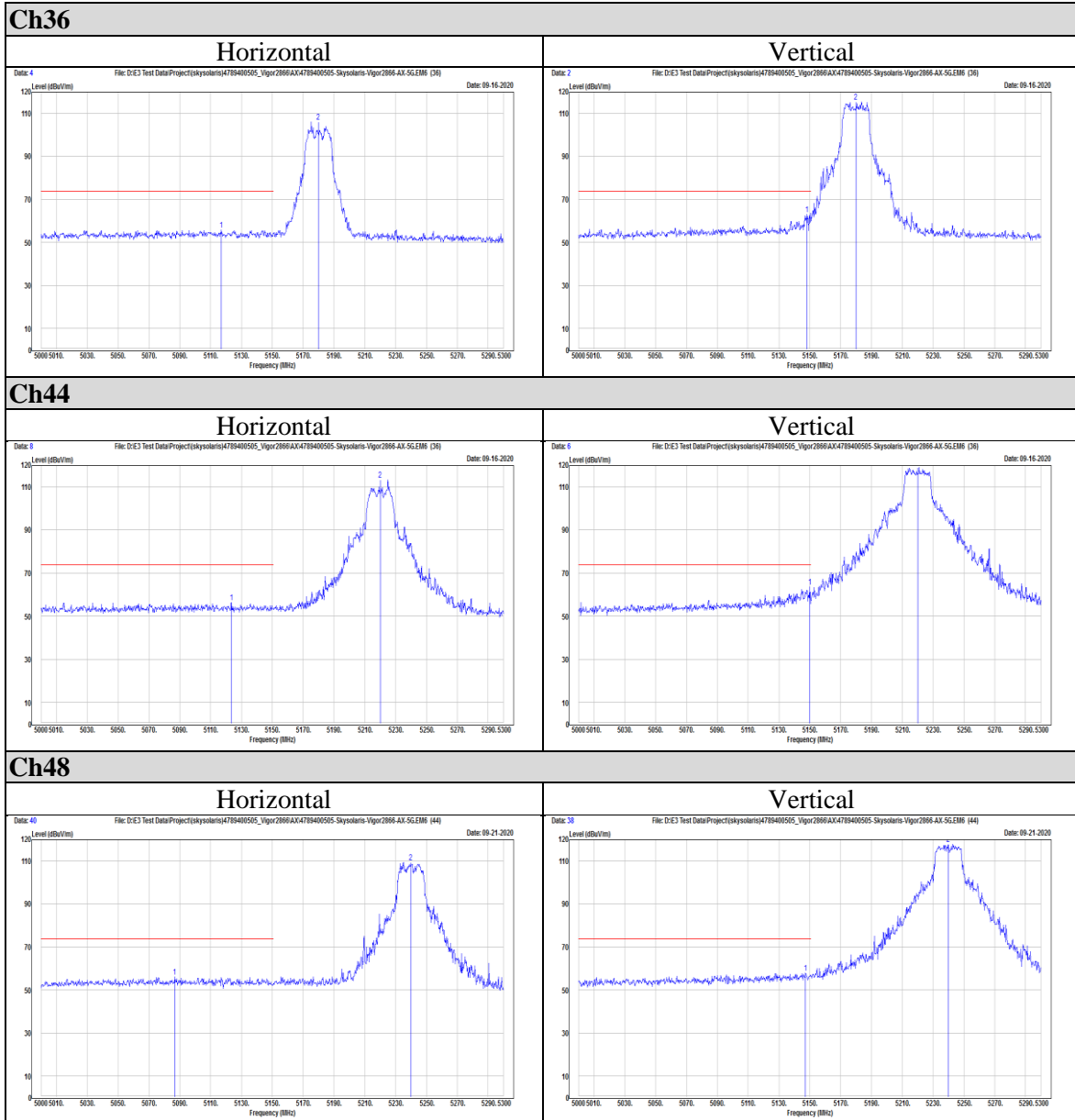


## Appendix I Radiated Band Edge and OOB Measurement

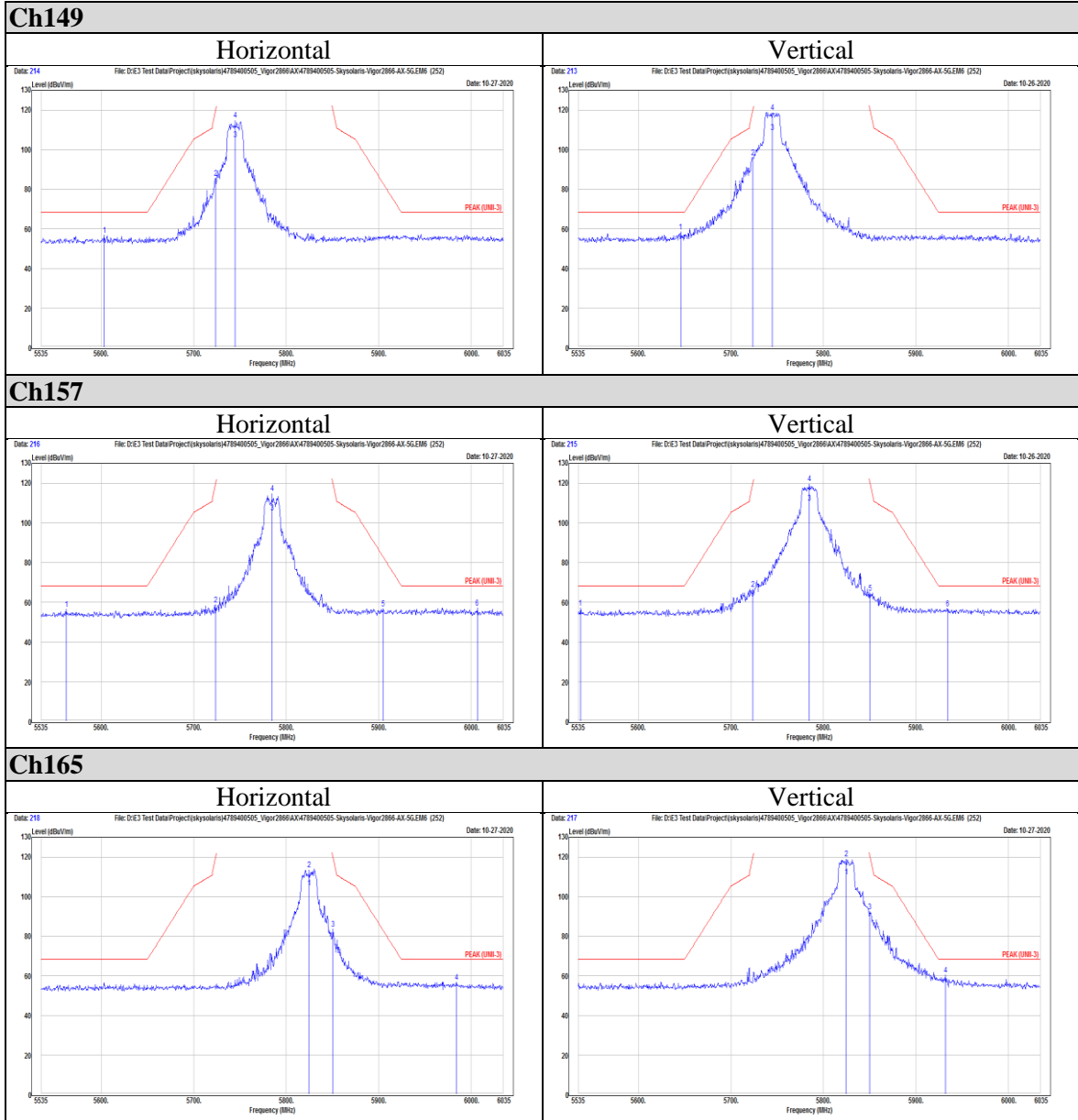
### Non-Beamforming Mode

#### 802.11a

#### Peak

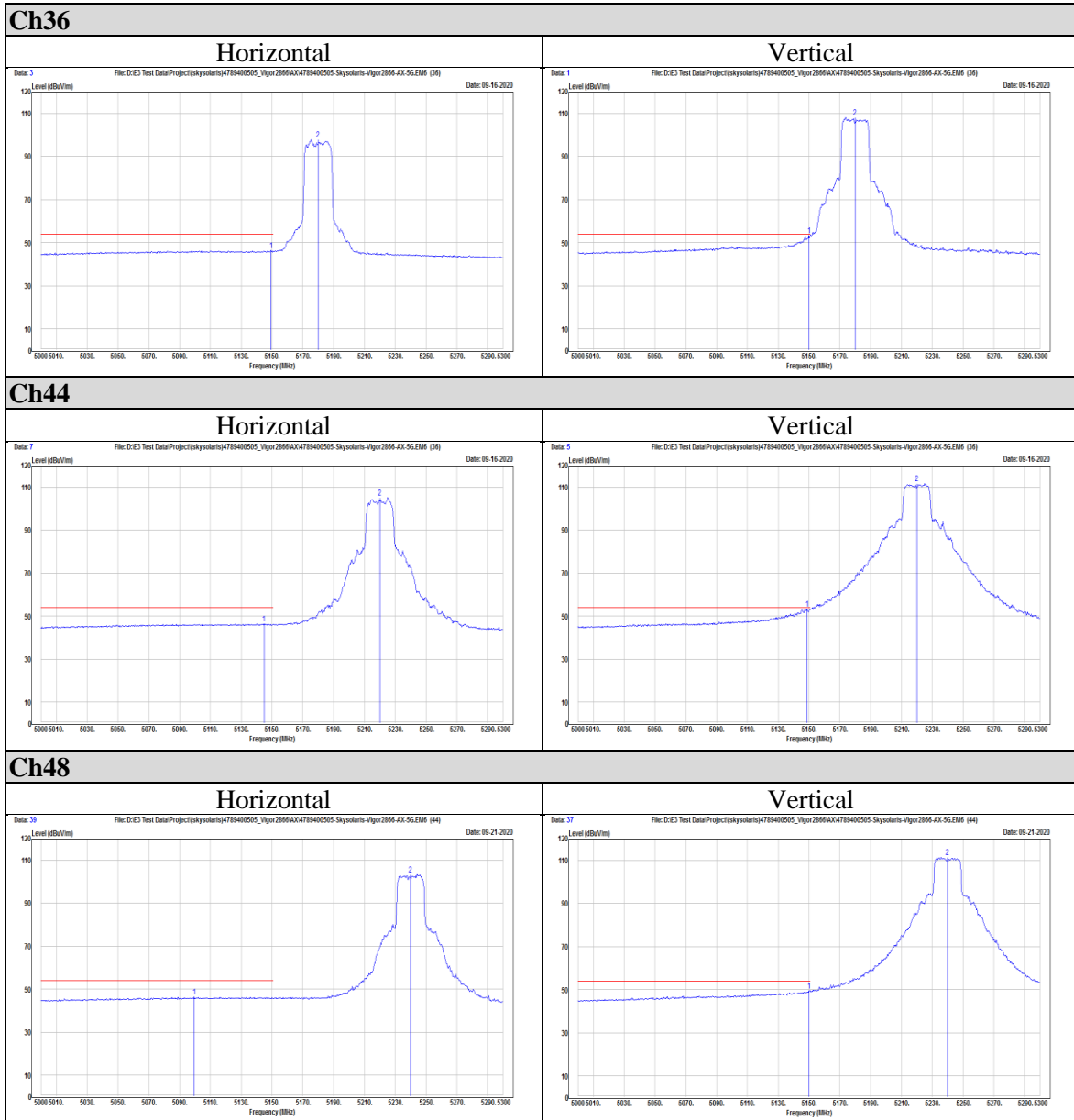








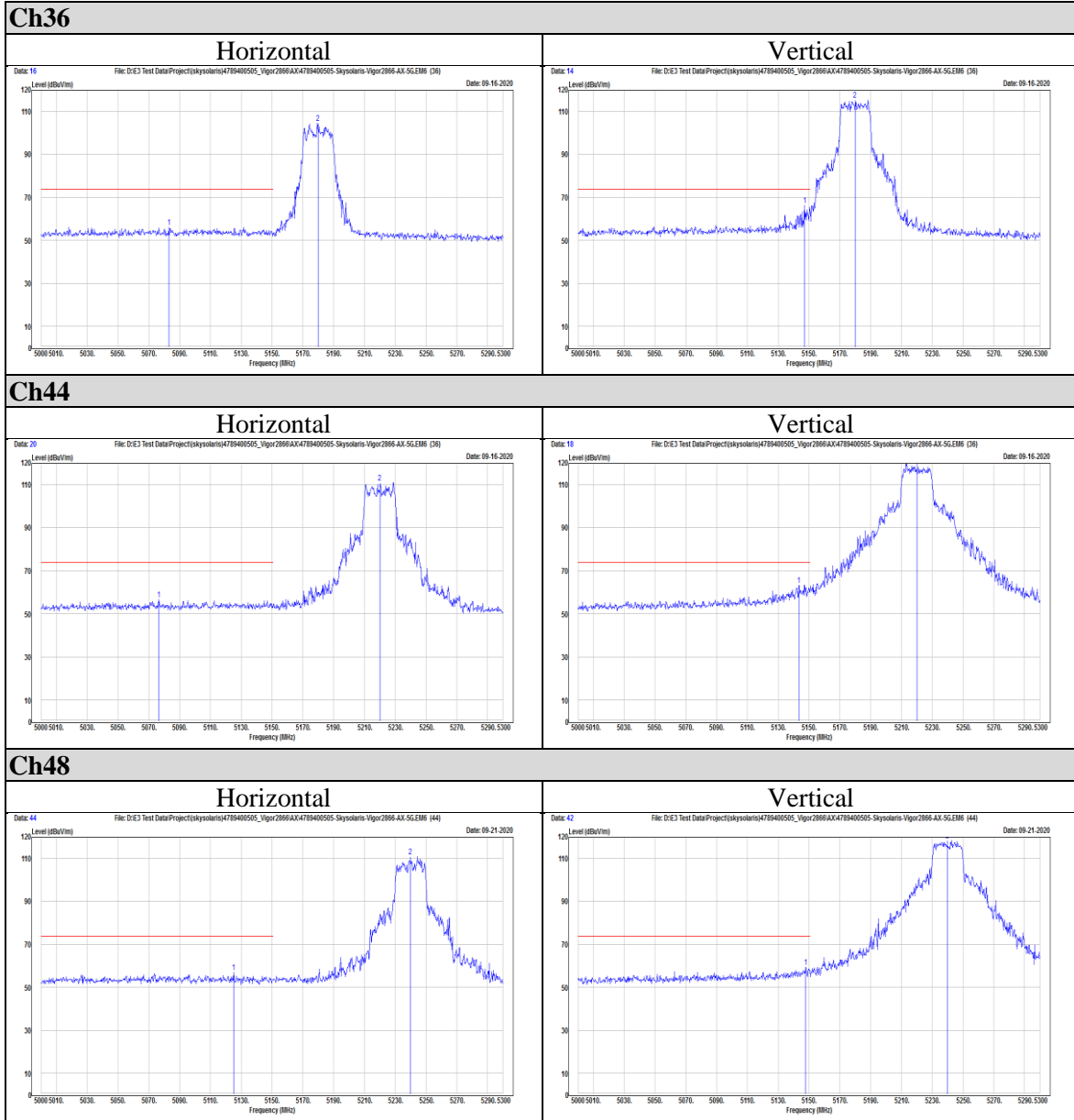
Average

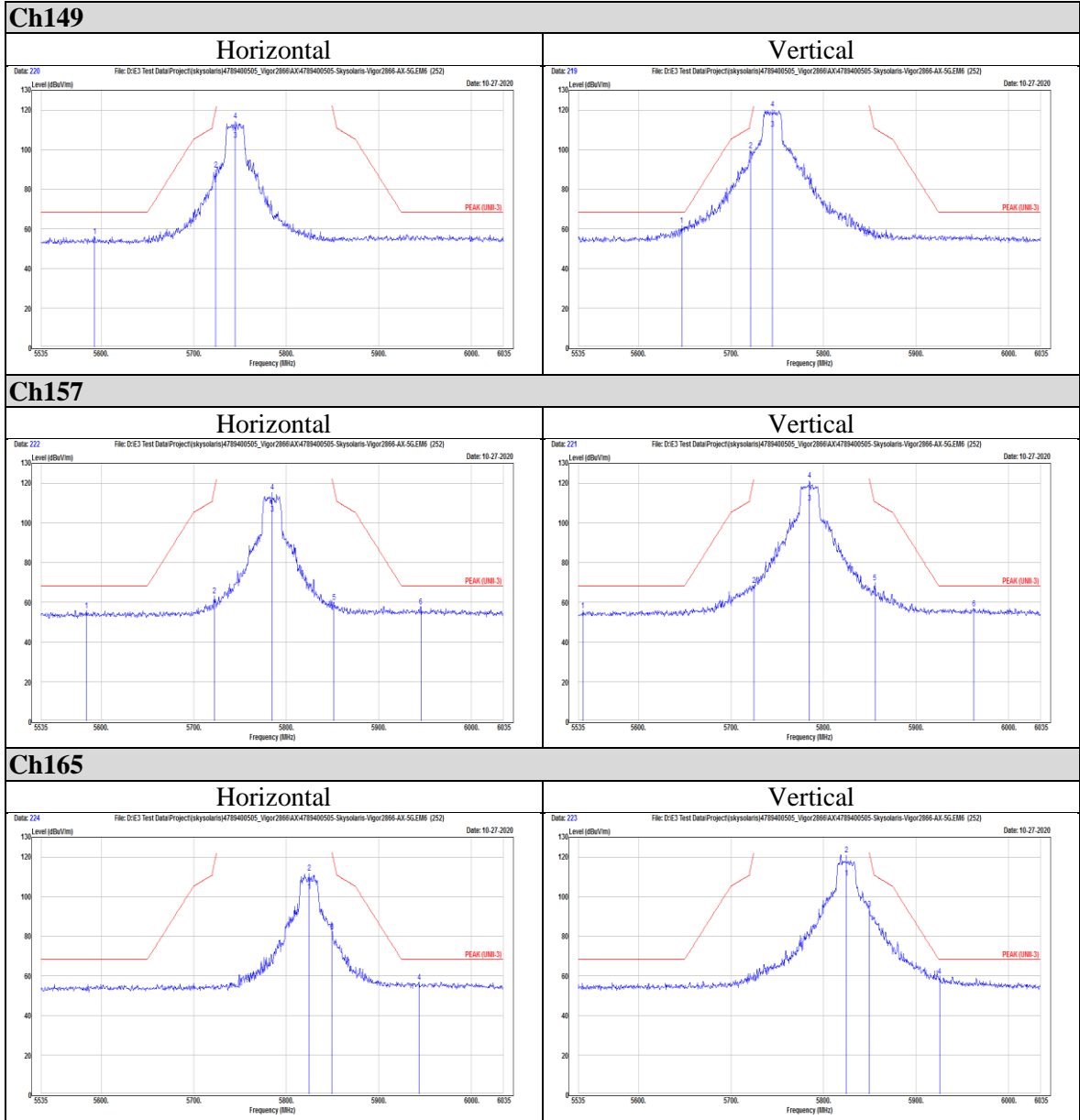




### 802.11ax (HE20)

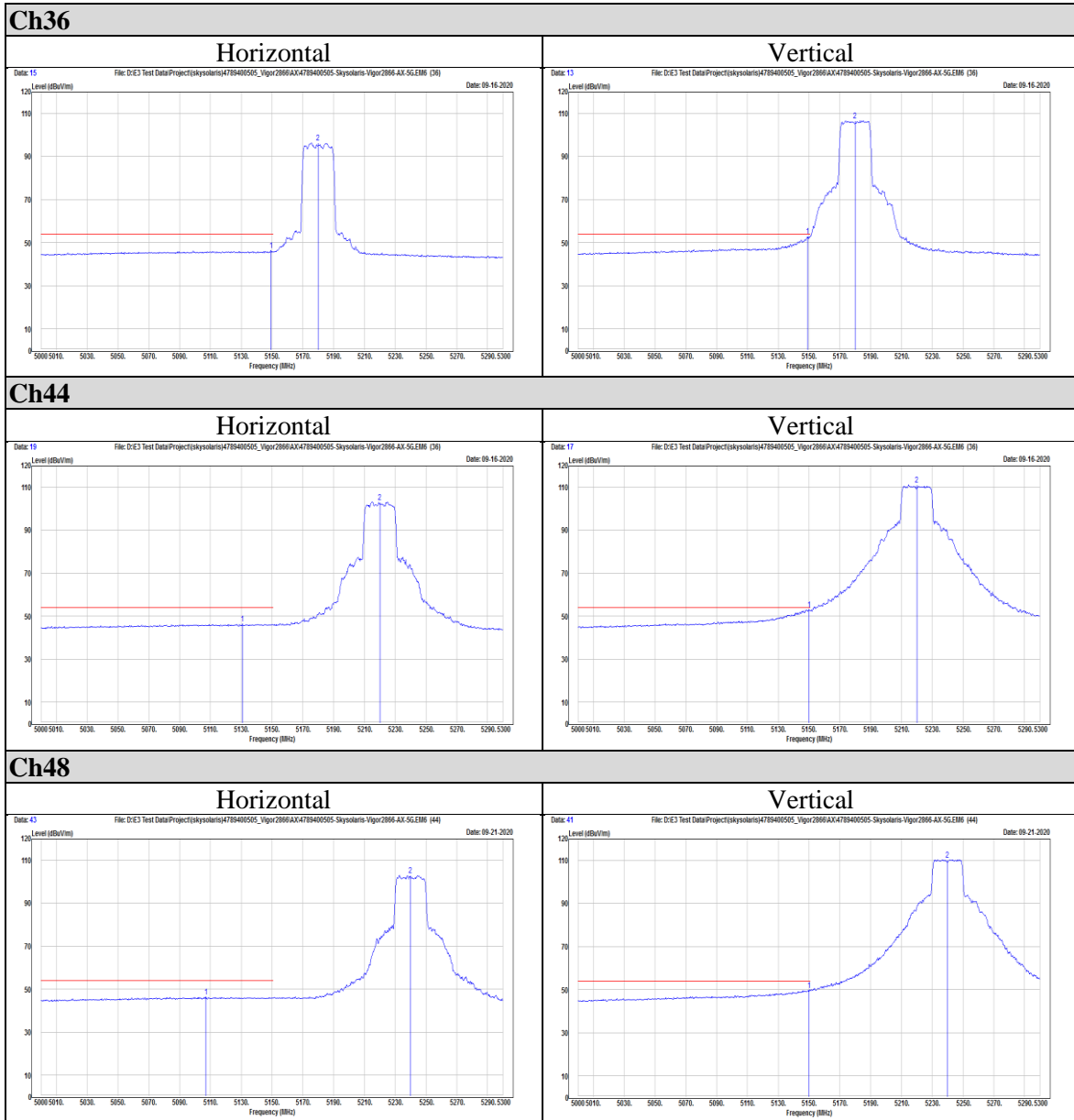
#### Peak







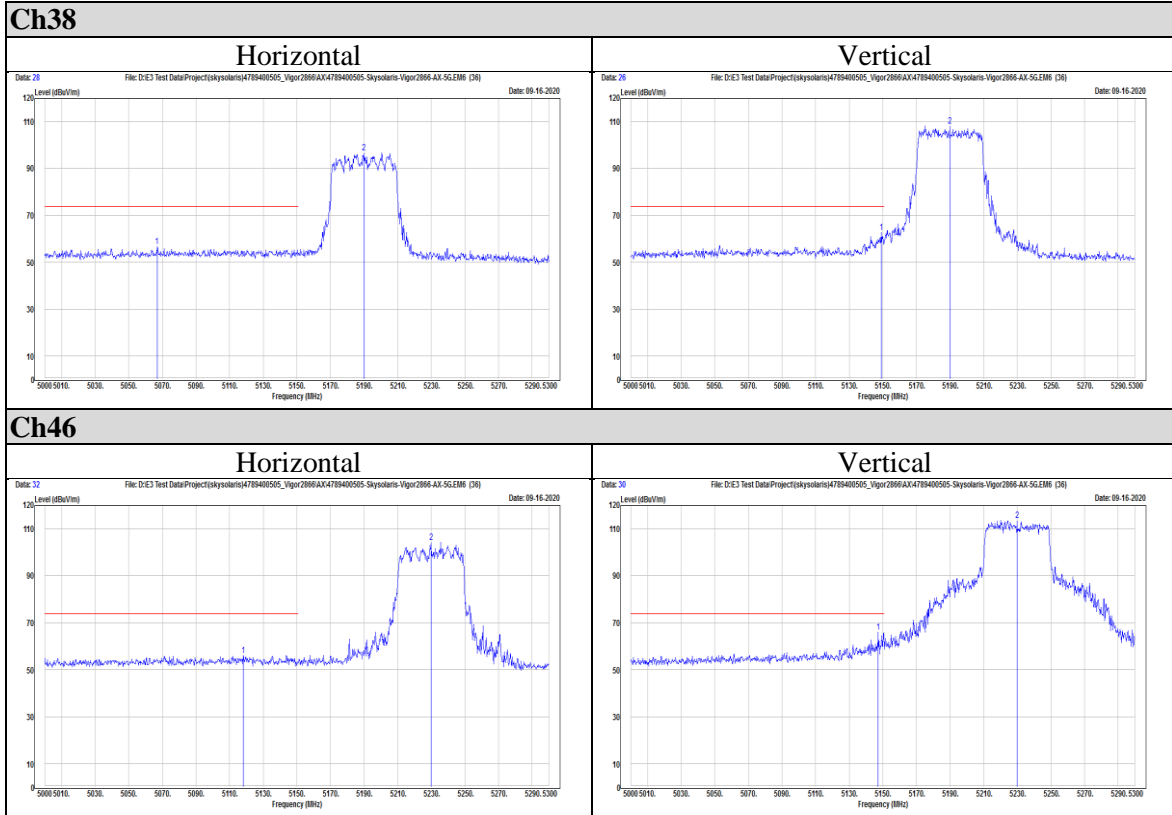
Average

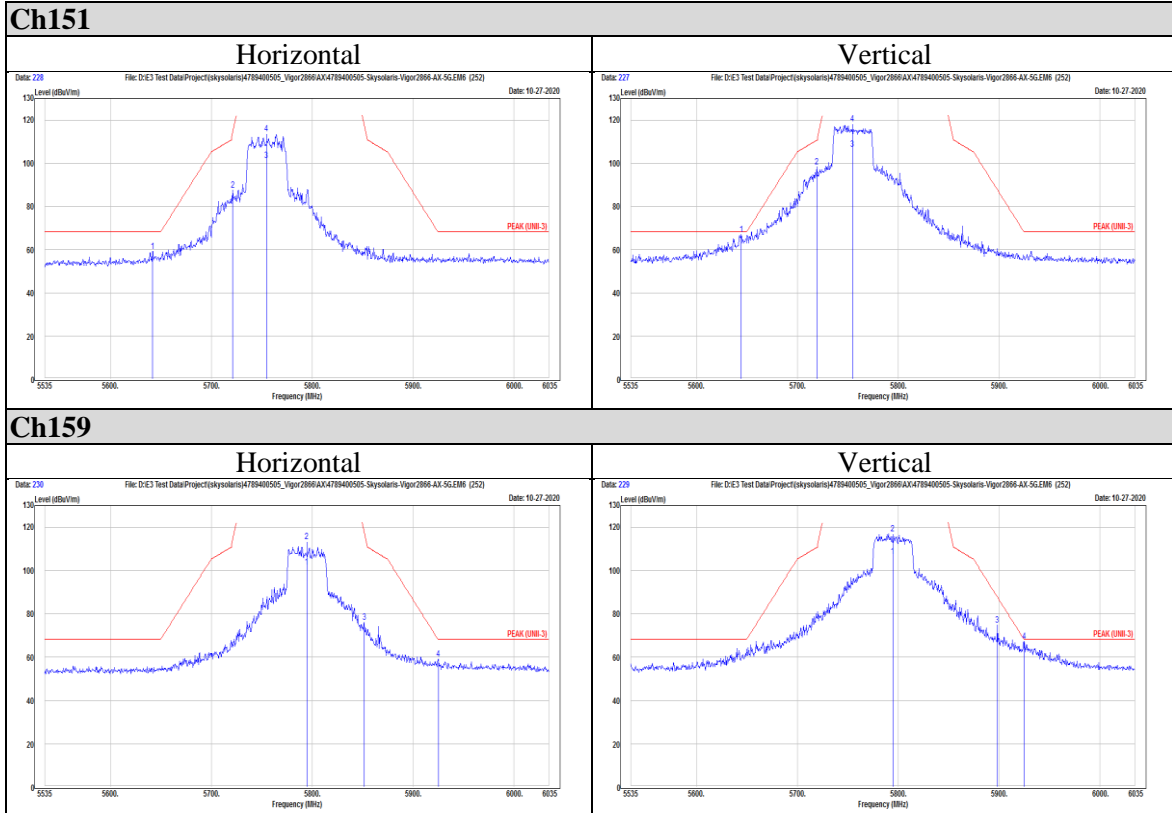




### 802.11ax (HE40)

#### Peak





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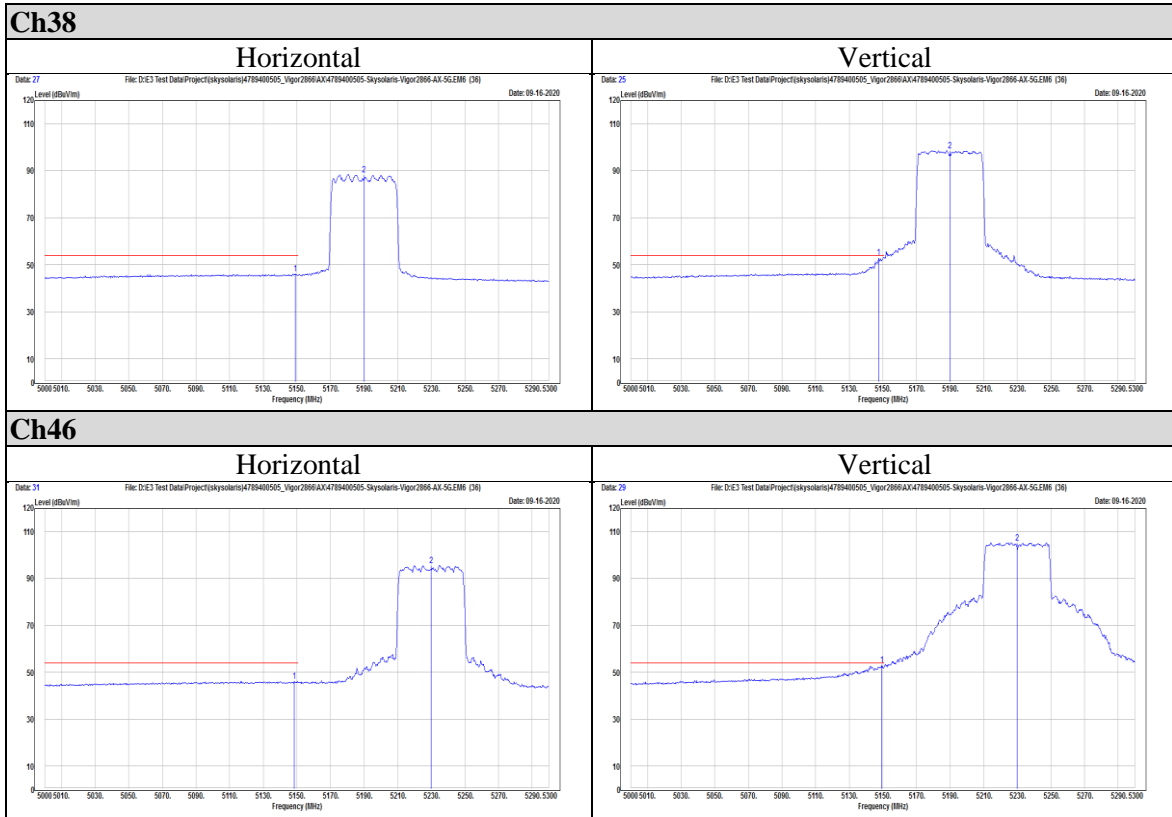
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### Average

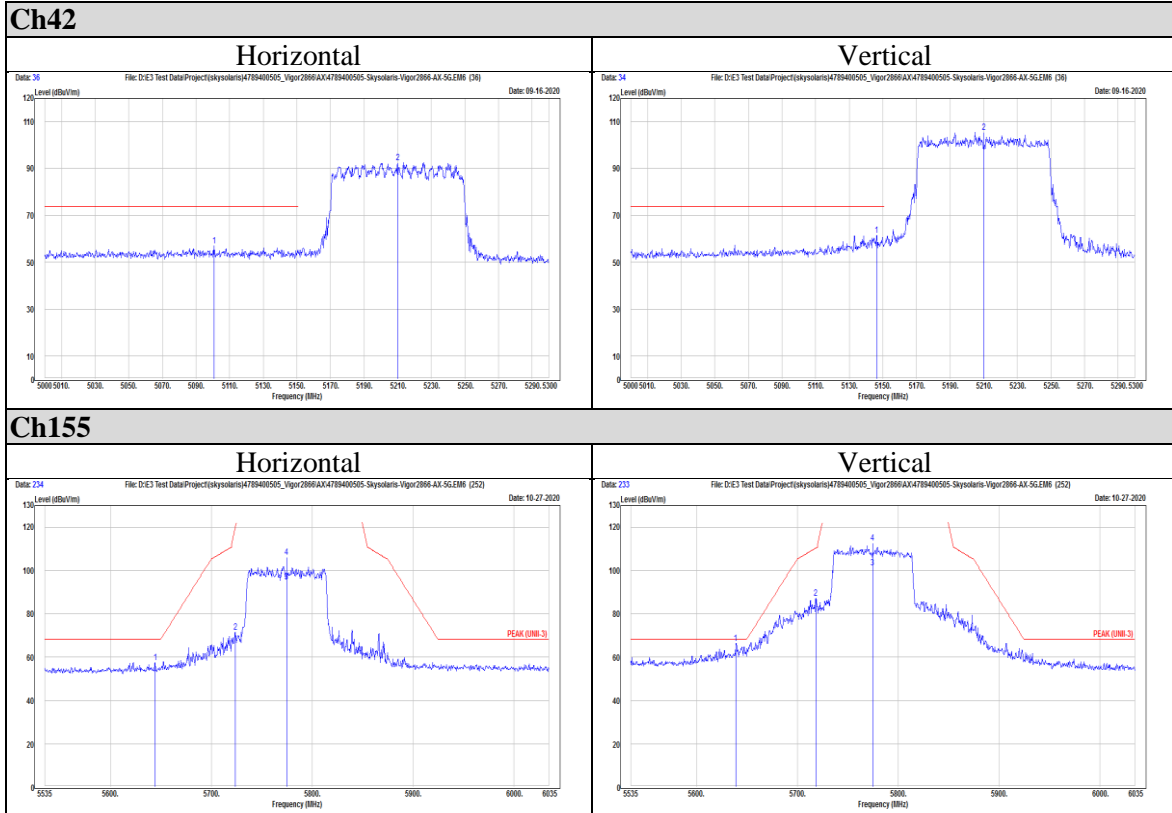






### 802.11ax (HE80)

#### Peak



#### Average

