

- ☒ For Undesirable radiated Spurious Emission in U-NII -2A
 All the modes 802.11a/n/ac has been tested and the worst result 802.11a recorded as below:
 : ☒ Undesirable radiated Spurious Emission Above 1GHz (1GHz to 40GHz)

Test mode:		802.11a		Frequency(MHz):		5260	
Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)		
4067.65	V	45.44	-49.76	-27	-22.76		
10712.95	V	57.27	-37.93	-27	-10.93		
17612.40	V	61.72	-33.48	-27	-6.48		
3958.00	H	45.24	-49.96	-27	-22.96		
10481.75	H	56.67	-38.53	-27	-11.53		
17053.10	H	61.52	-33.68	-27	-6.68		

Test mode:		802.11a		Frequency(MHz):		5280	
Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)		
4023.45	V	46.28	-48.92	-27	-21.92		
11041.05	V	57.39	-37.81	-27	-10.81		
17826.60	V	61.58	-33.62	-27	-6.62		
4023.45	H	46.28	-48.92	-27	-21.92		
11041.05	H	57.39	-37.81	-27	-10.81		
17826.60	H	61.58	-33.62	-27	-6.62		

Test mode:		802.11a		Frequency(MHz):		5320	
Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)		
4008.15	V	46.13	-49.07	-27	-22.07		
10149.40	V	56.57	-38.63	-27	-11.63		
17690.60	V	61.38	-33.82	-27	-6.82		
4054.90	H	45.38	-49.82	-27	-22.82		
10693.40	H	57.07	-38.13	-27	-11.13		
17915.85	H	62.2	-33	-27	-6		

- Note:** (1) All Readings are Peak Value (VBW=3MHz) and AV Value (VBW=10Hz).
 (2) Emission Level= Reading Level+Probe Factor +Cable Loss.
 (3) $EIRP[dBm] = E[dBuV/m] + 20 \log(d[meters]) - 104.77$
 d is the measurement distance in 3 meters
 (4) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Frequency: 802.11a				Frequency(MHz): 5260			
Freq. (MHz)	Ant.Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Margin (dB)	
		PK	AV	PK	AV	PK	AV
4067.65	V	45.44	32.57	74	54	-28.56	-21.43
10712.95	V	57.27	38.72	74	54	-16.73	-15.28
17612.40	V	61.72	42.08	74	54	-12.28	-11.92
3958.00	H	45.24	32.17	74	54	-28.76	-21.83
10481.75	H	56.67	40.02	74	54	-17.33	-13.98
17053.10	H	61.52	42.43	74	54	-12.48	-11.57

Frequency: 802.11a				Frequency(MHz): 5280			
Freq. (MHz)	Ant.Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Margin (dB)	
		PK	AV	PK	AV	PK	AV
4023.45	V	46.28	33.47	74	54	-27.72	-20.53
11041.05	V	57.39	40.19	74	54	-16.61	-13.81
17826.60	V	61.58	42.63	74	54	-12.42	-11.37
4023.45	H	46.28	33.47	74	54	-27.72	-20.53
11041.05	H	57.39	40.47	74	54	-16.61	-13.53
17826.60	H	61.58	42.38	74	54	-12.42	-11.62

Frequency: 802.11a				Frequency(MHz): 5320			
Freq. (MHz)	Ant.Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Margin (dB)	
		PK	AV	PK	AV	PK	AV
4008.15	V	46.13	32.67	74	54	-27.87	-21.33
10149.40	V	56.57	40.17	74	54	-17.43	-13.83
17690.60	V	61.38	42.85	74	54	-12.62	-11.15
4054.90	H	45.38	32.63	74	54	-28.62	-21.37
10693.40	H	57.07	40.17	74	54	-16.93	-13.83
17915.85	H	62.20	42.36	74	54	-11.80	-11.64

- Note:** (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor +Cable Loss.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4)The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

● ☒ Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

Test mode: 802.11a Frequency(MHz): 5260

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5142.105	H	50.61	-44.59	-27	Pass
5135.767	V	50.58	-44.62	-27	Pass

Test mode: 802.11a Frequency(MHz): 5320

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5363.820	H	51.73	-43.47	-27	Pass
5361.525	V	50.91	-44.29	-27	Pass

Note: (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).
 (2) Emission Level= Reading Level+Correct Factor +Cable Loss.
 (3) Correct Factor= Ant_F + Cab_L - Preamp
 (4) EIRP[dBm] = E[dBuV/m] + 20 log(d[meters]) - 104.77
 d is the measurement distance in 3 meters

Test mode: 802.11a Frequency(MHz): 5260

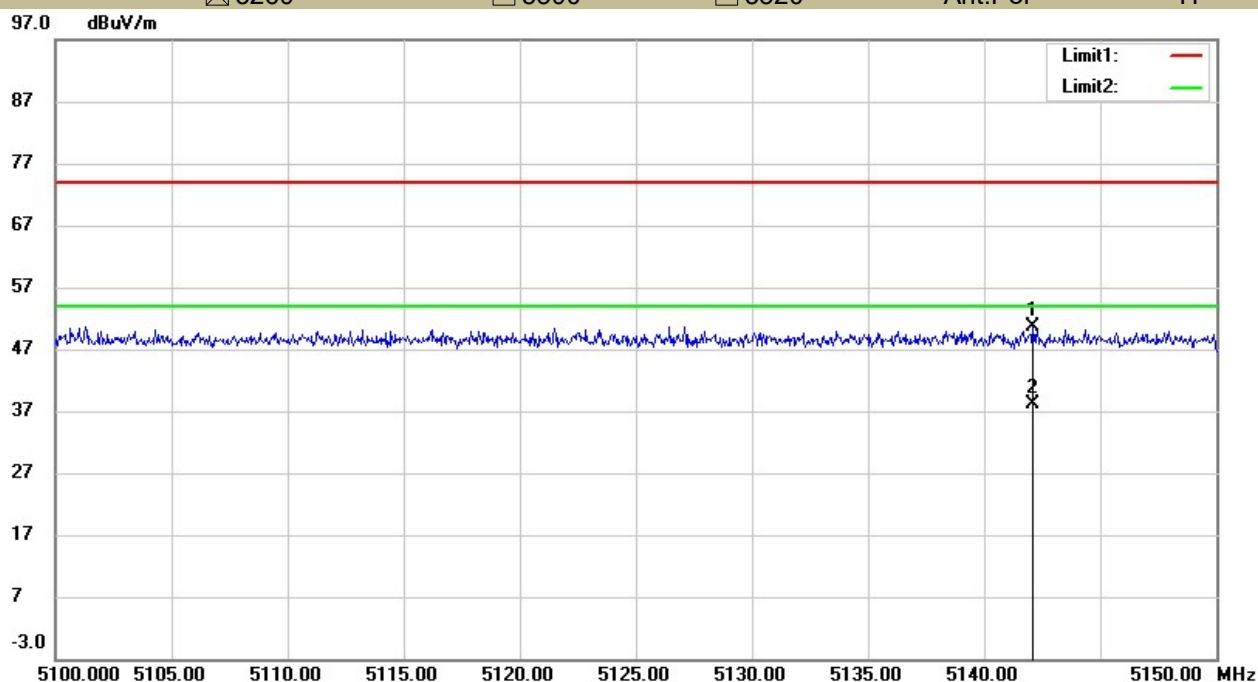
Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)	Over(dB)	AV(dBuV/m) (VBW=10Hz)	Limit 3m (dBuV/m)	Over(dB)
5142.105	H	50.61	74.00	-23.39	38.12	54.00	-15.88
5135.767	V	50.58	74.00	-23.42	38.61	54.00	-15.39

Test mode: 802.11a Frequency(MHz): 5320

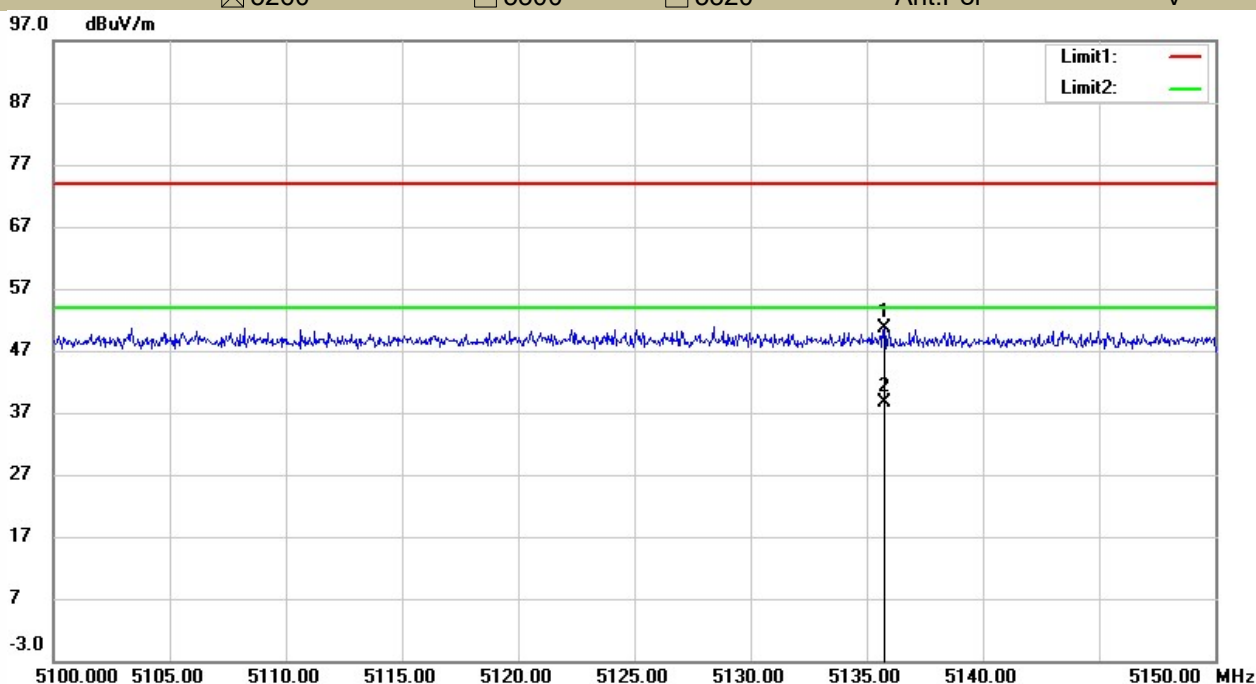
Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)	Over(dB)	AV(dBuV/m) (VBW=10Hz)	Limit 3m (dBuV/m)	Over(dB)
5363.820	H	51.73	74.00	-22.27	39.27	54.00	-14.73
5361.525	V	50.91	74.00	-23.09	38.64	54.00	-15.36

Note: (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).
 (2) Emission Level= Reading Level+Correct Factor +Cable Loss.
 (3) Correct Factor= Ant_F + Cab_L - Preamp

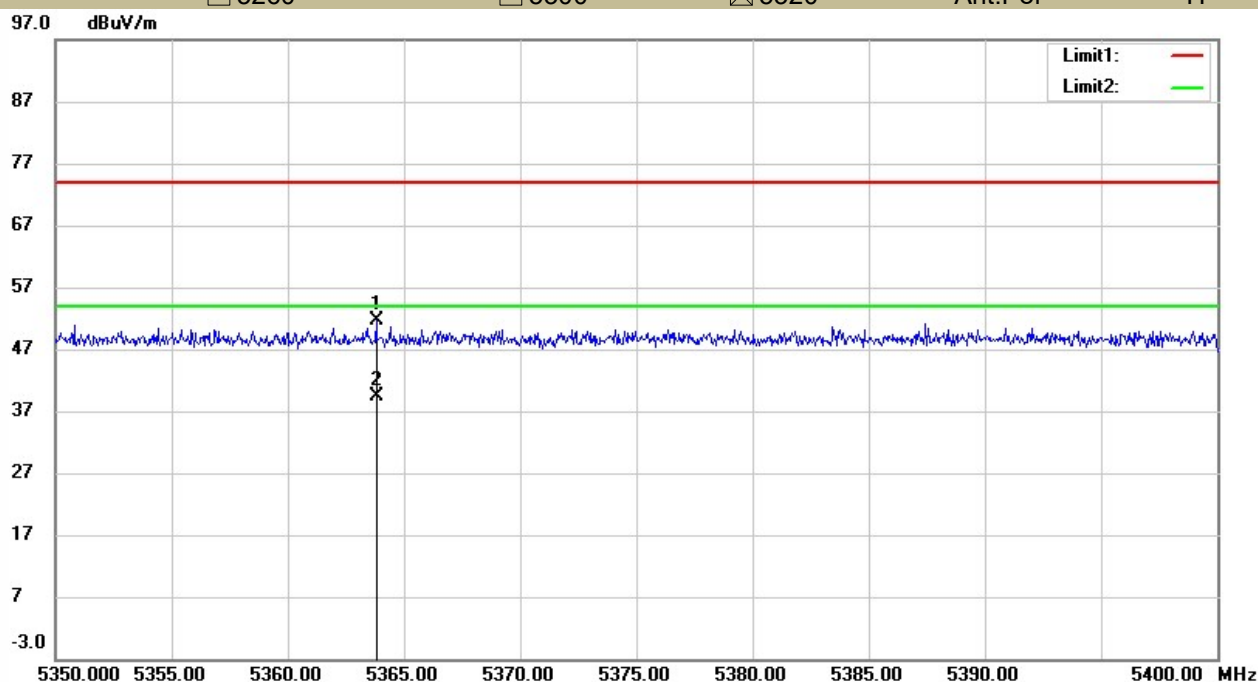
U-NII -2A					
Test Model	Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)				
	☒ 802.11a	☐ 802.11n(HT20)	☐ 802.11 ac (VHT20)		
	☒ 5260	☐ 5300	☐ 5320	Ant.Pol	H



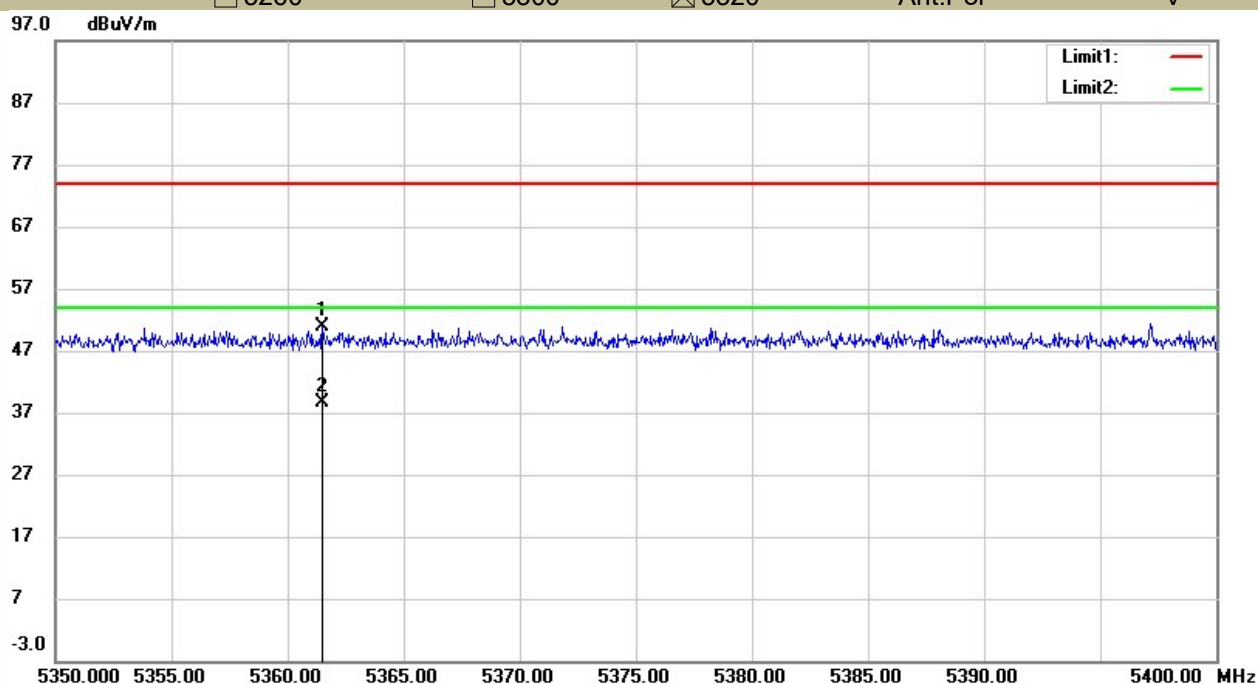
U-NII -2A					
Test Model	Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)				
	☒ 802.11a	☐ 802.11n(HT20)	☐ 802.11 ac (VHT20)		
	☒ 5260	☐ 5300	☐ 5320	Ant.Pol	V



U-NII -2A					
Test Model	Undesirable radiated Spurious Emission in Restricted Band (5350-5400MHz)				
	☒ 802.11a	☐ 802.11n(HT20)	☐ 802.11 ac (VHT20)		
	☐ 5260	☐ 5300	☒ 5320	Ant.Pol	H



U-NII -2A					
Test Model	Undesirable radiated Spurious Emission in Restricted Band (5350-5400MHz)				
	☒ 802.11a	☐ 802.11n(HT20)	☐ 802.11 ac (VHT20)		
	☐ 5260	☐ 5300	☒ 5320	Ant.Pol	V



- ☒ For Undesirable radiated Spurious Emission in U-NII -2C
All the modes 802.11a/n/ac has been tested and the worst result 802.11a recorded as below:
- : ☒ Undesirable radiated Spurious Emission Above 1GHz (1GHz to 40GHz)

Test mode:		802.11a		Frequency(MHz):		5500	
Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)		
3994.55	V	45.59	-49.61	-27	-22.61		
10979.00	V	57.06	-38.14	-27	-11.14		
17701.65	V	61.66	-33.54	-27	-6.54		
3952.05	H	45.59	-49.61	-27	-22.61		
11086.95	H	56.56	-38.64	-27	-11.64		
17815.55	H	61.58	-33.62	-27	-6.62		

Test mode:		802.11a		Frequency(MHz):		5600	
Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)		
3946.10	V	45.25	-49.95	-27	-22.95		
12118.85	V	57.94	-37.26	-27	-10.26		
17231.60	V	61.4	-33.8	-27	-6.8		
3898.50	H	46.32	-48.88	-27	-21.88		
11007.90	H	56.66	-38.54	-27	-11.54		
17993.20	H	61.17	-34.03	-27	-7.03		

Test mode:		802.11a		Frequency(MHz):		5700	
Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)		
3992.85	V	46.41	-48.79	-27	-21.79		
11119.25	V	57.1	-38.1	-27	-11.1		
17621.75	V	61.7	-33.5	-27	-6.5		
3967.35	H	45.69	-49.51	-27	-22.51		
12063.60	H	58.6	-36.6	-27	-9.6		
17528.25	H	61.66	-33.54	-27	-6.54		

Note: (1) All Readings are Peak Value (VBW=3MHz) and AV Value (VBW=10Hz).

(2) Emission Level= Reading Level+Probe Factor +Cable Loss.

(3) EIRP[dBm] = E[dBuV/m] + 20 log(d[meters]) - 104.77

d is the measurement distance in 3 meters

(4) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Frequency: 802.11a				Frequency(MHz): 5500			
Freq. (MHz)	Ant.Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Margin (dB)	
		PK	AV	PK	AV	PK	AV
3994.55	V	45.59	32.54	74	54	-28.41	-21.46
10979.00	V	57.06	39.61	74	54	-16.94	-14.39
17701.65	V	61.66	42.07	74	54	-12.34	-11.93
3952.05	H	45.59	32.60	74	54	-28.41	-21.40
11086.95	H	56.56	40.36	74	54	-17.44	-13.64
17815.55	H	61.58	42.17	74	54	-12.42	-11.83

Frequency: 802.11a				Frequency(MHz): 5600			
Freq. (MHz)	Ant.Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Margin (dB)	
		PK	AV	PK	AV	PK	AV
3946.10	V	45.25	32.47	74	54	-28.75	-21.53
12118.85	V	57.94	40.10	74	54	-16.06	-13.90
17231.60	V	61.40	42.67	74	54	-12.60	-11.33
3898.50	H	46.32	33.47	74	54	-27.68	-20.53
11007.90	H	56.66	40.01	74	54	-17.34	-13.99
17993.20	H	61.17	42.67	74	54	-12.83	-11.33

Frequency: 802.11a				Frequency(MHz): 5700			
Freq. (MHz)	Ant.Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Margin (dB)	
		PK	AV	PK	AV	PK	AV
3992.85	V	46.41	33.41	74	54	-27.59	-20.59
11119.25	V	57.10	40.35	74	54	-16.90	-13.65
17621.75	V	61.70	42.74	74	54	-12.30	-11.26
3967.35	H	45.69	32.07	74	54	-28.31	-21.93
12063.60	H	58.60	40.62	74	54	-15.40	-13.38
17528.25	H	61.66	42.17	74	54	-12.34	-11.83

- Note:** (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor +Cable Loss.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4)The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

● ☒ Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

Test mode: 802.11a Frequency(MHz): 5500

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5452.217	H	50.25	-44.95	-27	Pass
5453.432	V	50.72	-44.48	-27	Pass

Test mode: 802.11a Frequency(MHz): 5700

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5732.305	H	50.22	-44.98	-27	Pass
5731.052	V	50.18	-45.02	-27	Pass

Note: (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).
 (2) Emission Level= Reading Level+Correct Factor +Cable Loss.
 (3) Correct Factor= Ant_F + Cab_L - Preamp
 (4) EIRP[dBm] = E[dBuV/m] + 20 log(d[meters]) - 104.77
 d is the measurement distance in 3 meters

Test mode: 802.11a Frequency(MHz): 5500

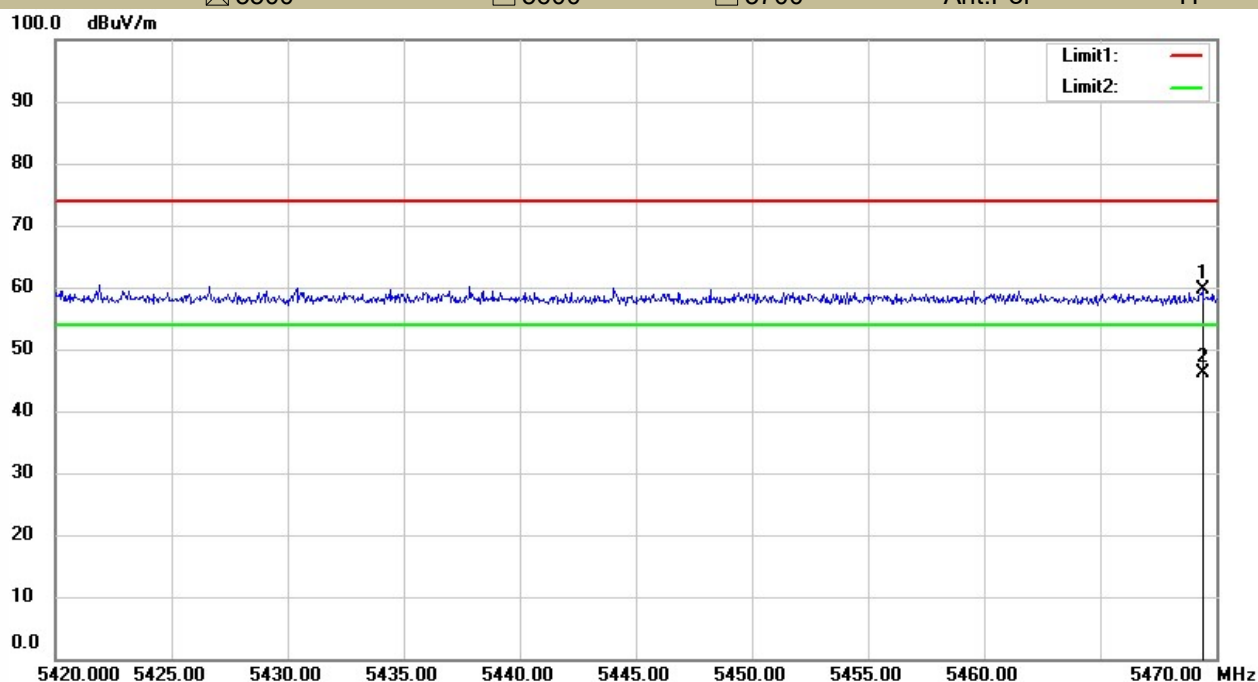
Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)	Over(dB)	AV(dBuV/m) (VBW=10Hz)	Limit 3m (dBuV/m)	Over(dB)
5452.217	H	50.25	74.00	-23.75	38.29	54.00	-15.71
5453.432	V	50.72	74.00	-23.28	38.10	54.00	-15.90

Test mode: 802.11a Frequency(MHz): 5700

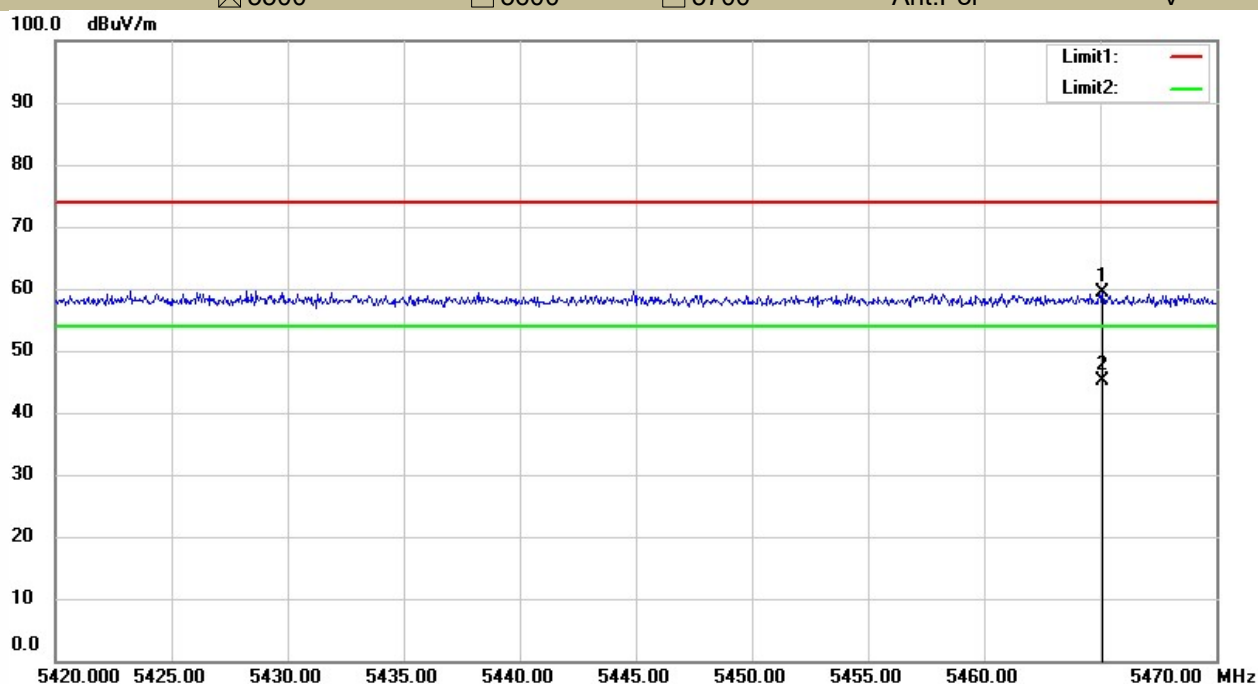
Frequency (MHz)	Polarity	PK(dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)	Over(dB)	AV(dBuV/m) (VBW=10Hz)	Limit 3m (dBuV/m)	Over(dB)
5732.305	H	50.22	74.00	-23.78	39.08	54.00	-14.92
5731.052	V	50.18	74.00	-23.82	38.09	54.00	-15.91

Note: (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).
 (2) Emission Level= Reading Level+Correct Factor +Cable Loss.
 (3) Correct Factor= Ant_F + Cab_L - Preamp

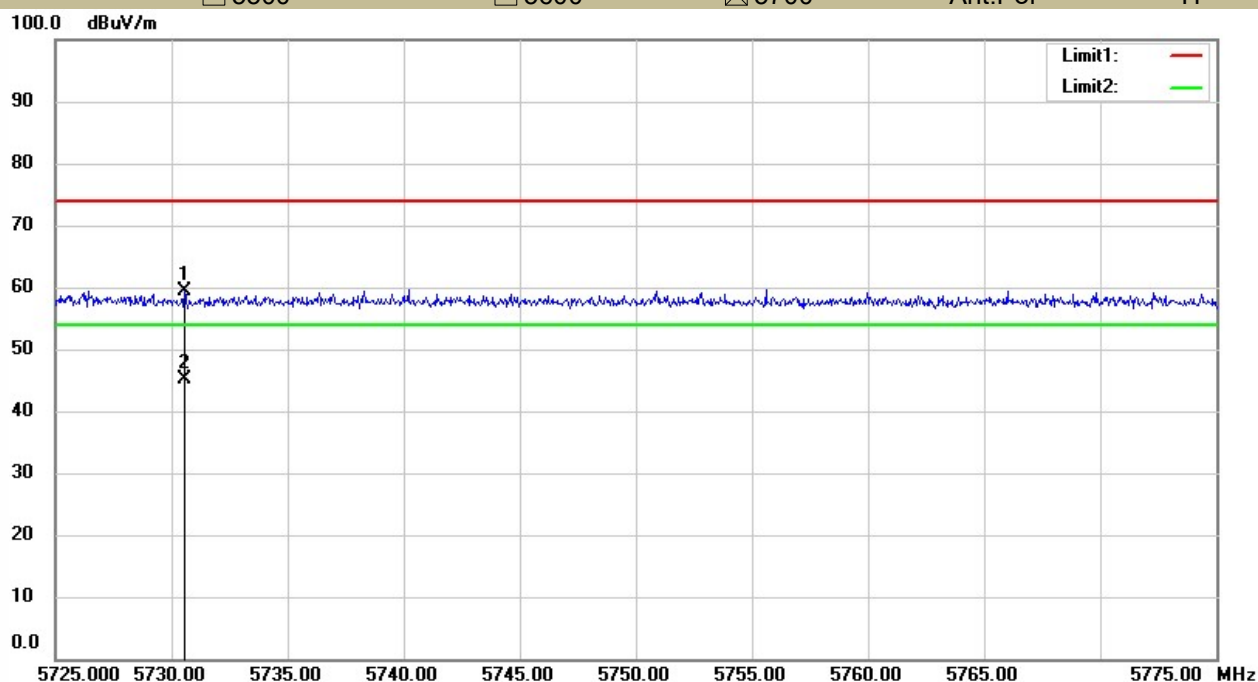
U-NII -2C					
Test Model	Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)				
	☒ 802.11a	☐ 802.11n(HT20)	☐ 802.11 ac (VHT20)		
	☒ 5500	☐ 5600	☐ 5700	Ant.Pol	H



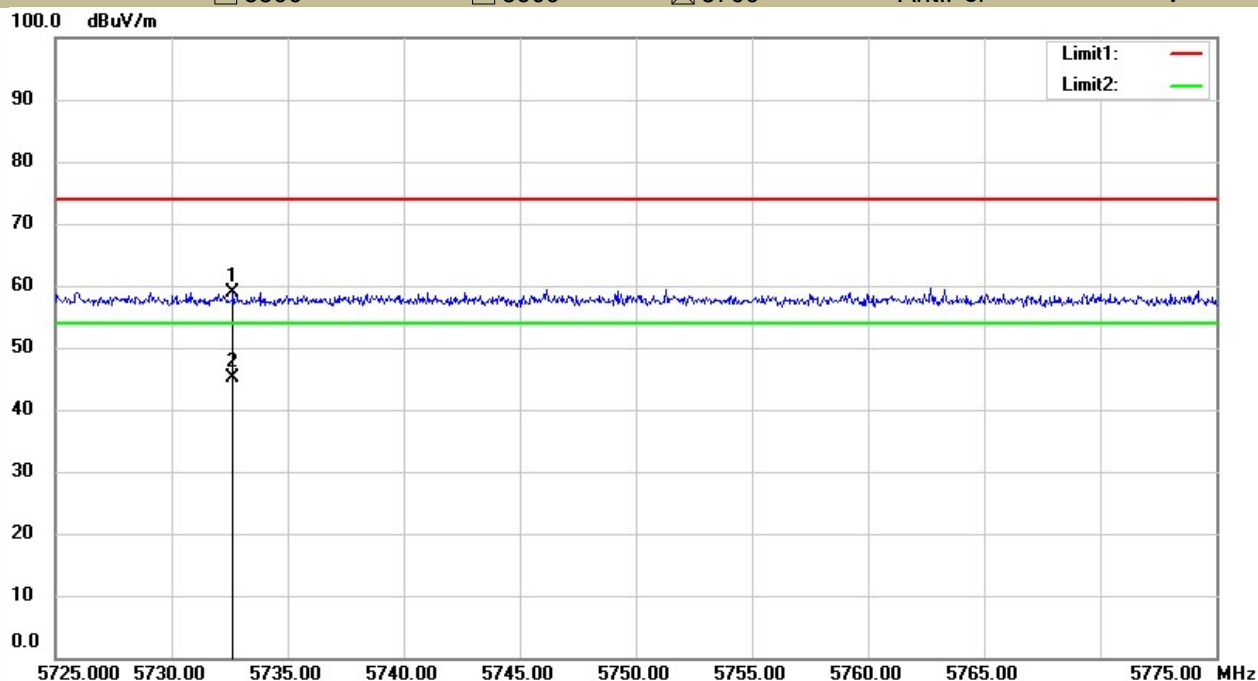
U-NII -2C					
Test Model	Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)				
	☒ 802.11a	☐ 802.11n(HT20)	☐ 802.11 ac (VHT20)		
	☒ 5500	☐ 5600	☐ 5700	Ant.Pol	V



U-NII -2C				
Test Model	Undesirable radiated Spurious Emission in Restricted Band (5350-5400MHz)			
	☒ 802.11a	☐ 802.11n(HT20)	☐ 802.11 ac (VHT20)	
	☐ 5500	☐ 5600	☒ 5700	Ant.Pol H



U-NII -2C				
Test Model	Undesirable radiated Spurious Emission in Restricted Band (5350-5400MHz)			
	☒ 802.11a	☐ 802.11n(HT20)	☐ 802.11 ac (VHT20)	
	☐ 5500	☐ 5600	☒ 5700	Ant.Pol V



■ ☒ For Undesirable radiated Spurious Emission in U-NII -3

All the modes 802.11a/n/ac has been tested and the worst result 802.11a recorded as below:

● ☒ Undesirable radiated Spurious Emission Above 1GHz (1GHz to 40GHz)

Test mode: 802.11a Frequency(MHz): 5745

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
3959.70	V	46.83	-48.37	-27	-21.37
12333.05	V	58.75	-36.45	-27	-9.45
17593.70	V	61.81	-33.39	-27	-6.39
3934.20	H	45.75	-49.45	-27	-22.45
12008.35	H	58.23	-36.97	-27	-9.97
17580.95	H	61.33	-33.87	-27	-6.87

Test mode: 802.11a Frequency(MHz): 5785

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
3943.55	V	45.54	-49.66	-27	-22.66
12148.60	V	57.91	-37.29	-27	-10.29
17863.15	V	61.12	-34.08	-27	-7.08
4029.40	H	45.59	-49.61	-27	-22.61
11107.35	H	56.9	-38.3	-27	-11.3
17826.60	H	61.72	-33.48	-27	-6.48

Test mode: 802.11a Frequency(MHz): 5825

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
3949.50	V	45.65	-49.55	-27	-22.55
11868.10	V	58.84	-36.36	-27	-9.36
17396.50	V	61.18	-34.02	-27	-7.02
4019.20	H	46.21	-48.99	-27	-21.99
11947.15	H	59.22	-35.98	-27	-8.98
17928.60	H	62.45	-32.75	-27	-5.75

Note: (1) All Readings are Peak Value (VBW=3MHz) and AV Value (VBW=10Hz).

(2) Emission Level= Reading Level+Probe Factor +Cable Loss.

(3) EIRP[dBm] = E[dBμV/m] + 20 log(d[meters]) - 104.77

d is the measurement distance in 3 meters

(4) The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

Frequency: 802.11a				Frequency(MHz): 5745			
Freq. (MHz)	Ant.Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Margin (dB)	
		PK	AV	PK	AV	PK	AV
3959.70	V	46.83	33.74	74	54	-27.17	-20.26
12333.05	V	58.75	39.63	74	54	-15.25	-14.37
17593.70	V	61.81	42.07	74	54	-12.19	-11.93
3934.20	H	45.75	32.61	74	54	-28.25	-21.39
12008.35	H	58.23	39.58	74	54	-15.77	-14.42
17580.95	H	61.33	42.17	74	54	-12.67	-11.83

Frequency: 802.11a				Frequency(MHz): 5785			
Freq. (MHz)	Ant.Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Margin (dB)	
		PK	AV	PK	AV	PK	AV
3943.55	V	45.54	32.07	74	54	-28.46	-21.93
12148.60	V	57.91	38.64	74	54	-16.09	-15.36
17863.15	V	61.12	42.27	74	54	-12.88	-11.73
4029.40	H	45.59	33.01	74	54	-28.41	-20.99
11107.35	H	56.90	38.41	74	54	-17.10	-15.59
17826.60	H	61.72	42.00	74	54	-12.28	-12.00

Frequency: 802.11a				Frequency(MHz): 5825			
Freq. (MHz)	Ant.Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Margin (dB)	
		PK	AV	PK	AV	PK	AV
3949.50	V	45.65	32.74	74	54	-28.35	-21.26
11868.10	V	58.84	39.61	74	54	-15.16	-14.39
17396.50	V	61.18	42.22	74	54	-12.82	-11.78
4019.20	H	46.21	33.43	74	54	-27.79	-20.57
11947.15	H	59.22	40.36	74	54	-14.78	-13.64
17928.60	H	62.45	42.17	74	54	-11.55	-11.83

- Note:** (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).
(2) Emission Level= Reading Level+Correct Factor +Cable Loss.
(3) Correct Factor= Ant_F + Cab_L - Preamp
(4)The reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

● ☒ Undesirable radiated Spurious Emission in band edge

Test mode: 802.11a Frequency: 5745

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5623.725	H	50.52	-44.68	26.31	PASS
5605.094	V	50.5	-44.7	29.87	PASS

Test mode: 802.11a Frequency: 5825

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5939.281	H	50.27	-44.93	27.57	PASS
5955.331	V	59.71	-35.49	28.47	PASS

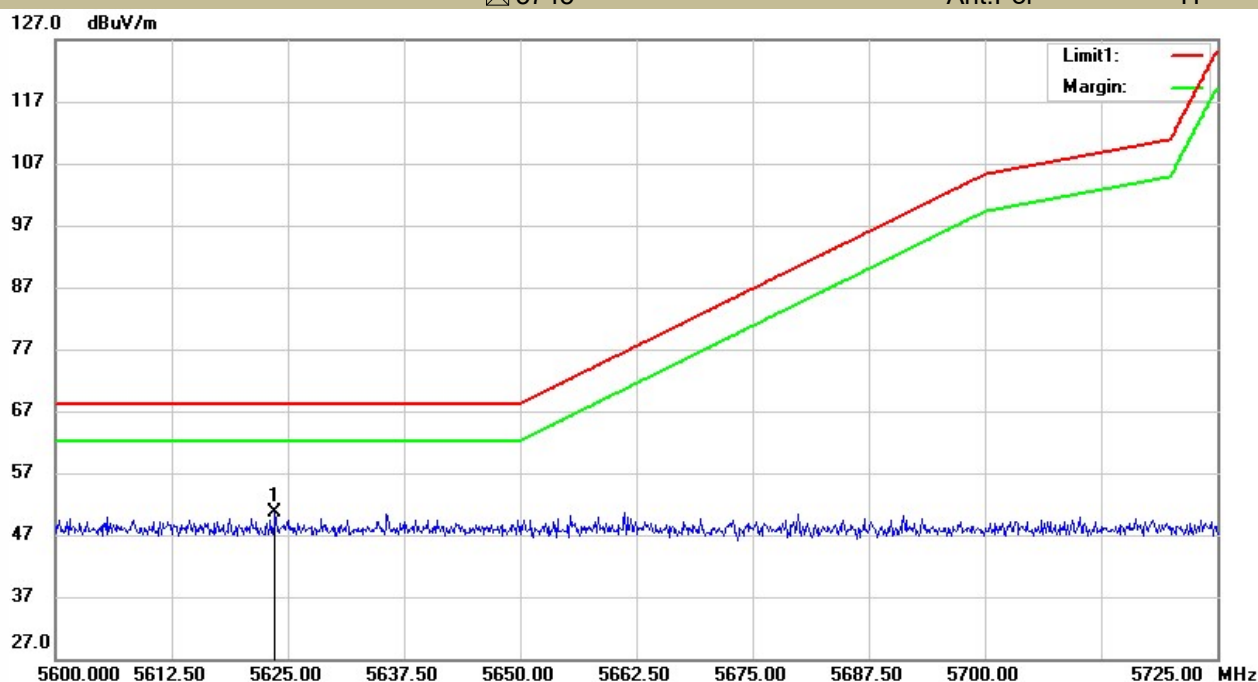
Note: (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).

(2) Emission Level= Reading Level+Correct Factor +Cable Loss.

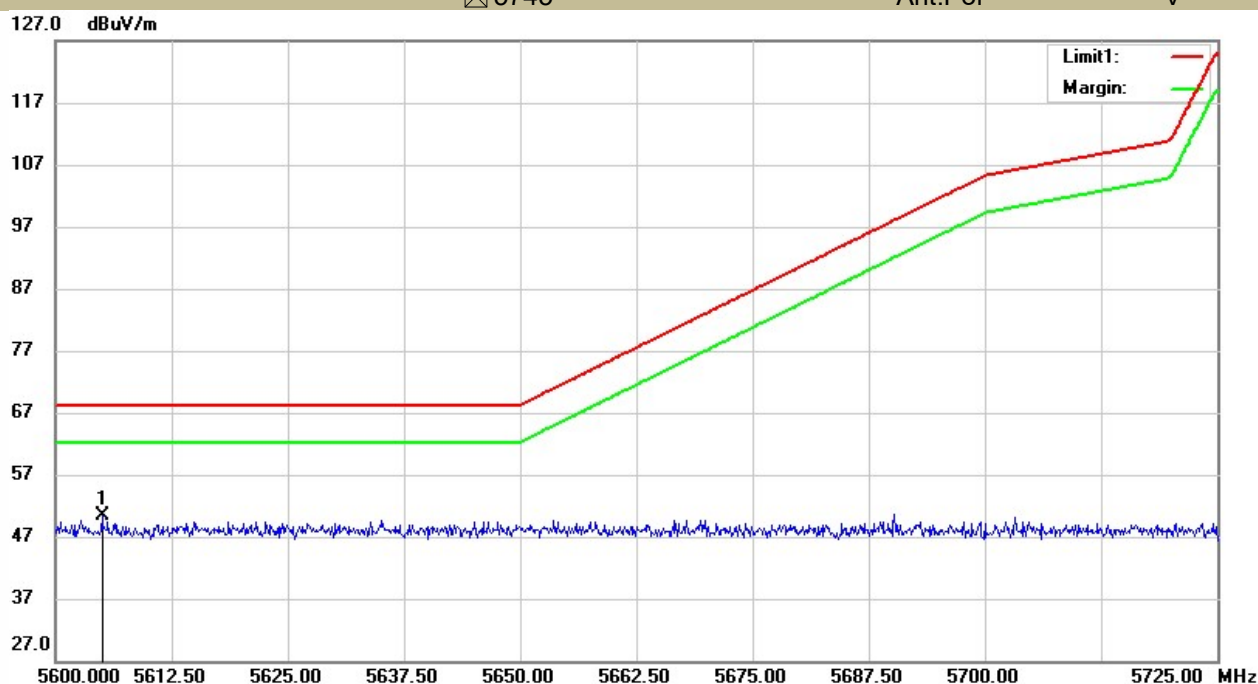
(3) Correct Factor= Ant_F + Cab_L - Preamp

(4) EIRP[dBm] = E[dBuV/m] + 20 log(d[meters]) - 104.77
d is the measurement distance in 3 meters

U-NII -3				
Test Model	Undesirable radiated	Undesirable radiated	Spurious Emission in Band Edge	
	☒ 802.11a	☐ 802.11n(HT20)	☐ 802.11n(HT40)	
	☒ 5745		Ant.Pol	H



U-NII -3				
Test Model	Undesirable radiated	Undesirable radiated	Spurious Emission in Band Edge	
	☒ 802.11a	☐ 802.11n(HT20)	☐ 802.11n(HT40)	
	☒ 5745		Ant.Pol	V



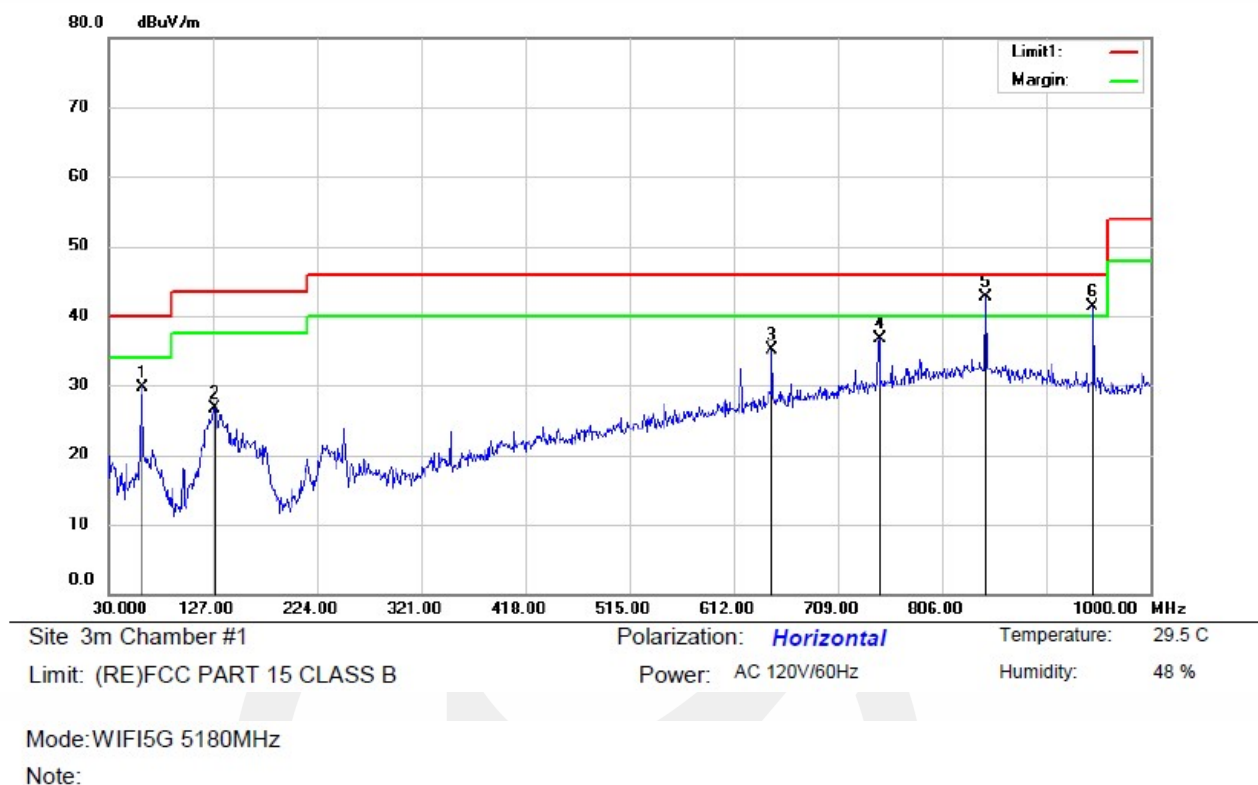
U-NII -3				
Test Model	Undesirable radiated	Undesirable radiated	Spurious Emission in Band Edge	
	☒ 802.11a	☐ 802.11n(HT20)	☐ 802.11n(HT40)	
	☒ 5825		Ant.Pol	H



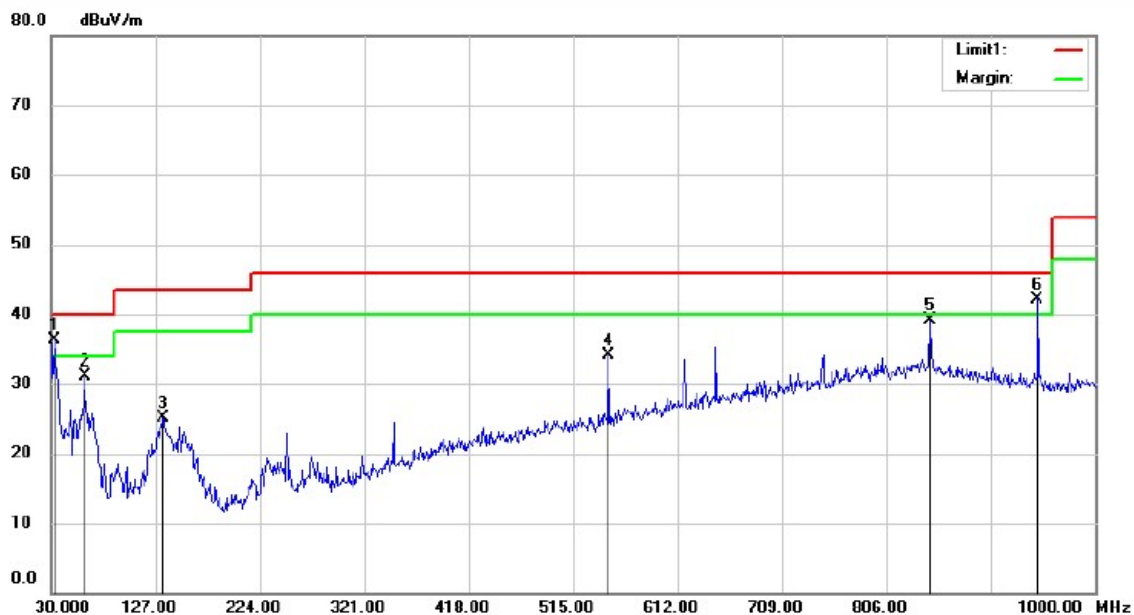
U-NII -3				
Test Model	Undesirable radiated	Undesirable radiated	Spurious Emission in Band Edge	
	☒ 802.11a	☐ 802.11n(HT20)	☐ 802.11n(HT40)	
	☒ 5825		Ant.Pol	V



- Undesirable radiated Spurious Emission below 1GHz (30MHz to 1GHz)
All the modes 802.11a/n/ac has been tested and the worst result 802.11a recorded as below:



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree degree	Comment
1		61.8887	41.60	-11.80	29.80	40.00	-10.20	QP		
2		129.5462	40.86	-14.09	26.77	43.50	-16.73	QP		
3		648.0112	34.96	0.20	35.16	46.00	-10.84	QP		
4		747.8000	34.42	2.22	36.64	46.00	-9.36	QP		
5	*	847.4674	37.82	4.93	42.75	46.00	-3.25	QP		
6	!	947.2562	39.31	2.08	41.39	46.00	-4.61	QP		



Site 3m Chamber #1

Polarization: **Vertical**

Temperature: 29.5 C

Limit: (RE)FCC PART 15 CLASS B

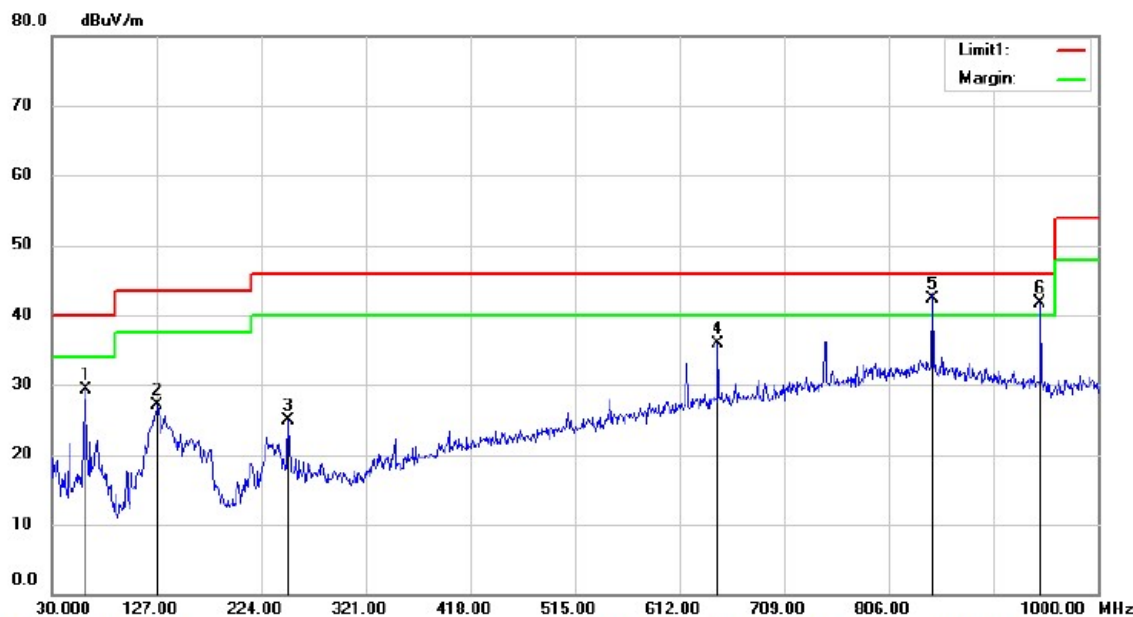
Power: AC 120V/60Hz

Humidity: 48 %

Mode:WIFI5G 5180MHz

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	33.1525	50.16	-13.88	36.28	40.00	-3.72	QP		
2		61.8887	42.95	-11.80	31.15	40.00	-8.85	QP		
3		134.2750	39.07	-14.04	25.03	43.50	-18.47	QP		
4		548.3437	36.59	-2.55	34.04	46.00	-11.96	QP		
5		847.4674	34.08	4.93	39.01	46.00	-6.99	QP		
6	!	947.2562	40.12	2.08	42.20	46.00	-3.80	QP		



Site 3m Chamber #1

Polarization: **Horizontal**

Temperature: 29.5 C

Limit: (RE)FCC PART 15 CLASS B

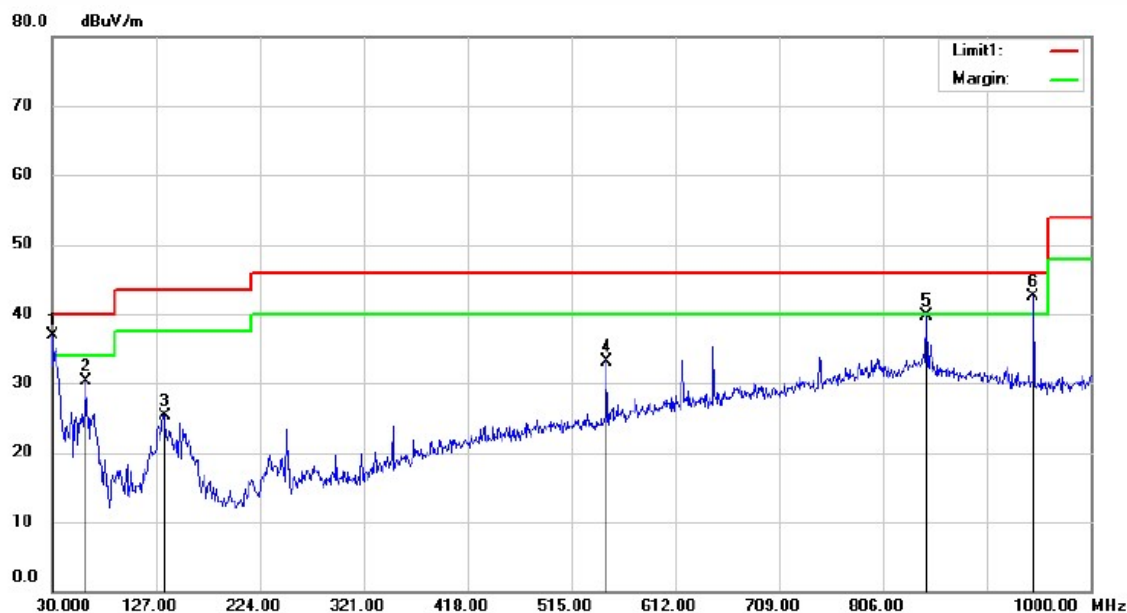
Power: AC 120V/60Hz

Humidity: 48 %

Mode: WIFI5G 5200MHz

Note:

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		61.8887	41.09	-11.80	29.29	40.00	-10.71	QP		
2		128.4550	41.25	-14.12	27.13	43.50	-16.37	QP		
3		249.2200	36.95	-12.12	24.83	46.00	-21.17	QP		
4		648.0112	35.69	0.20	35.89	46.00	-10.11	QP		
5	*	847.4674	37.47	4.93	42.40	46.00	-3.60	QP		
6	!	947.2562	39.70	2.08	41.78	46.00	-4.22	QP		



Site 3m Chamber #1

Polarization: **Vertical**

Temperature: 29.5 C

Limit: (RE)FCC PART 15 CLASS B

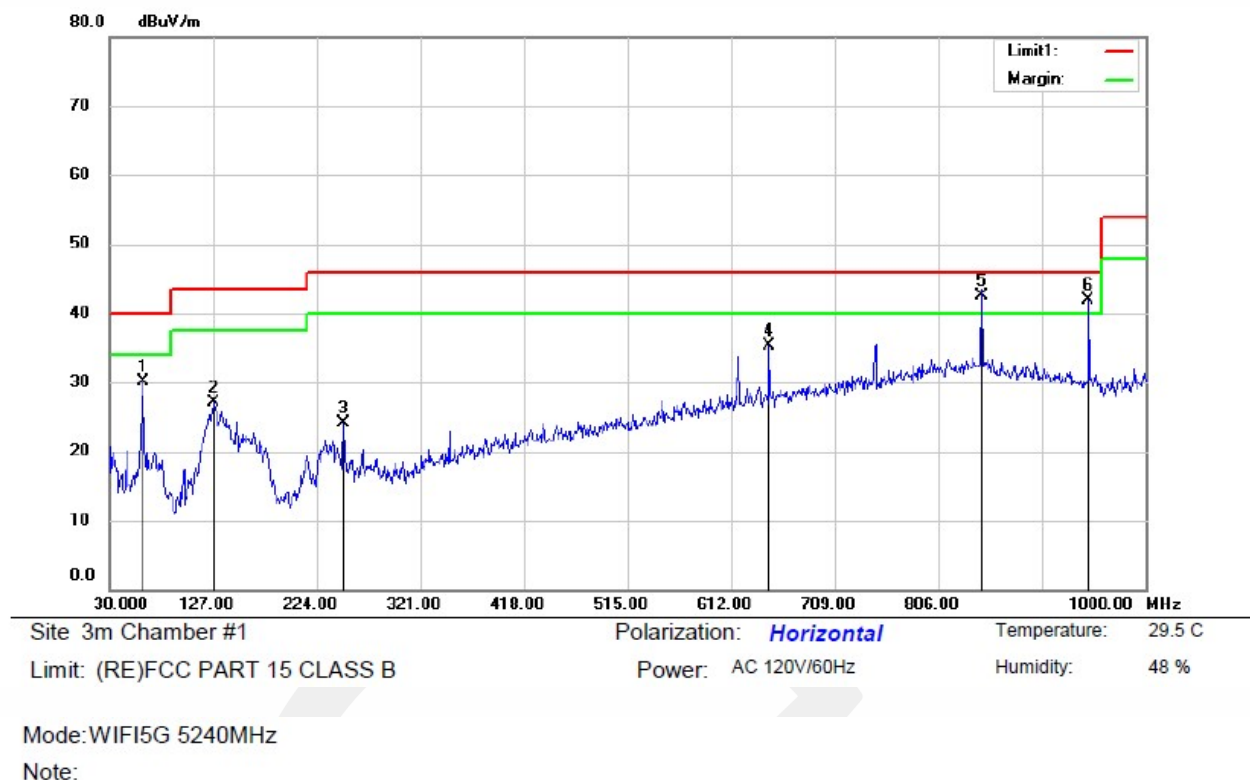
Power: AC 120V/60Hz

Humidity: 48 %

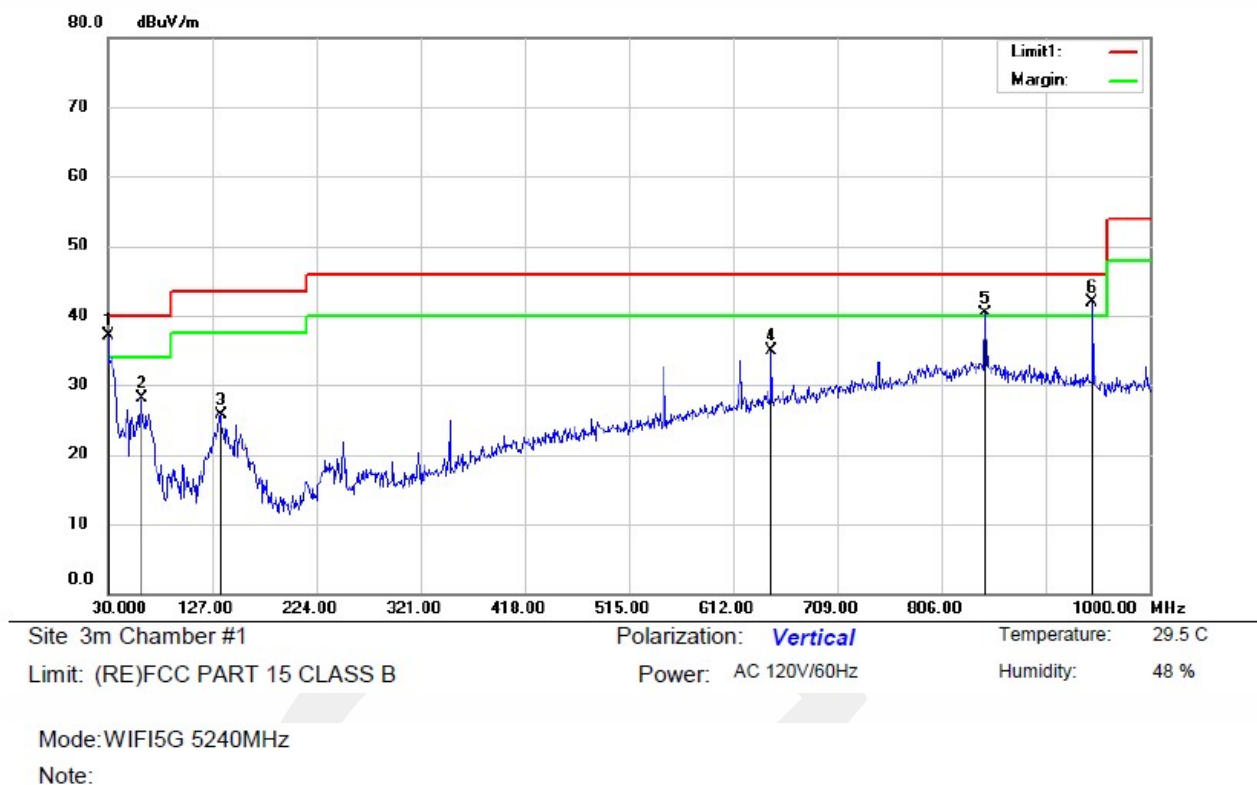
Mode: WIFI5G 5200MHz

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	30.2424	51.03	-14.14	36.89	40.00	-3.11	QP		
2		62.3737	42.08	-11.80	30.28	40.00	-9.72	QP		
3		135.4875	39.44	-14.06	25.38	43.50	-18.12	QP		
4		548.3437	35.75	-2.55	33.20	46.00	-12.80	QP		
5		847.4674	34.76	4.93	39.69	46.00	-6.31	QP		
6	!	947.1350	40.35	2.09	42.44	46.00	-3.56	QP		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree degree	Comment
1		61.8887	41.81	-11.80	30.01	40.00	-9.99	QP		
2		127.9700	41.23	-14.13	27.10	43.50	-16.40	QP		
3		249.2200	36.17	-12.12	24.05	46.00	-21.95	QP		
4		648.0112	35.04	0.20	35.24	46.00	-10.76	QP		
5	*	847.4674	37.67	4.93	42.60	46.00	-3.40	QP		
6	!	947.2562	39.78	2.08	41.86	46.00	-4.14	QP		



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	30.2424	51.28	-14.14	37.14	40.00	-2.86	QP		
2		61.5250	39.79	-11.78	28.01	40.00	-11.99	QP		
3		135.1237	39.83	-14.04	25.79	43.50	-17.71	QP		
4		648.0112	34.75	0.20	34.95	46.00	-11.05	QP		
5	!	847.4674	35.30	4.93	40.23	46.00	-5.77	QP		
6	!	947.2562	39.76	2.08	41.84	46.00	-4.16	QP		

8.6 POWER LINE CONDUCTED EMISSIONS

8.6.1 Applicable Standard

According to FCC Part 15.207(a)

8.6.2 Conformance Limit

Frequency(MHz)	Conducted Emission Limit	
	Quasi-peak	Average
0.15-0.5	66-56	56-46
0.5-5.0	56	46
5.0-30.0	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.

8.6.3 Test Configuration

Test according to clause 6.3 conducted emission test setup

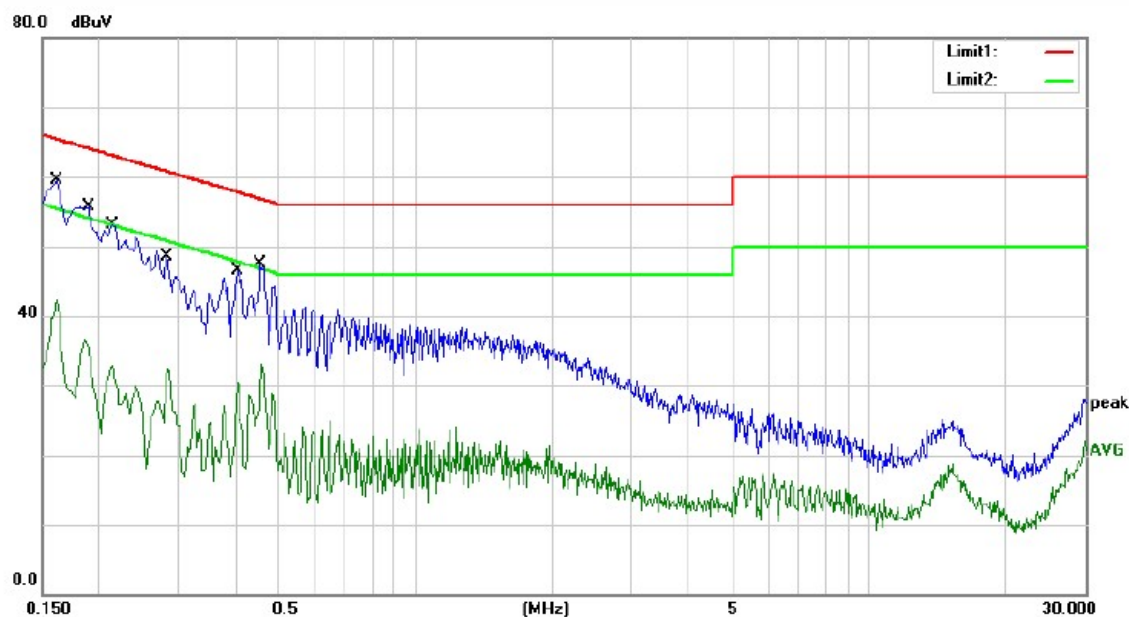
8.6.4 Test Procedure

The EUT was placed on a table which is 0.8m above ground plane.
Maximum procedure was performed on the highest emissions to ensure EUT compliance.
Repeat above procedures until all frequency measured were complete.

8.6.5 Test Results

Pass

The 120V &240V voltage have been tested, and the worst result recorded was report as below:



Site Conduction #2

Phase: **N**

Temperature: 25.0

Limit: (CE)FCC PART 15 class B_QP

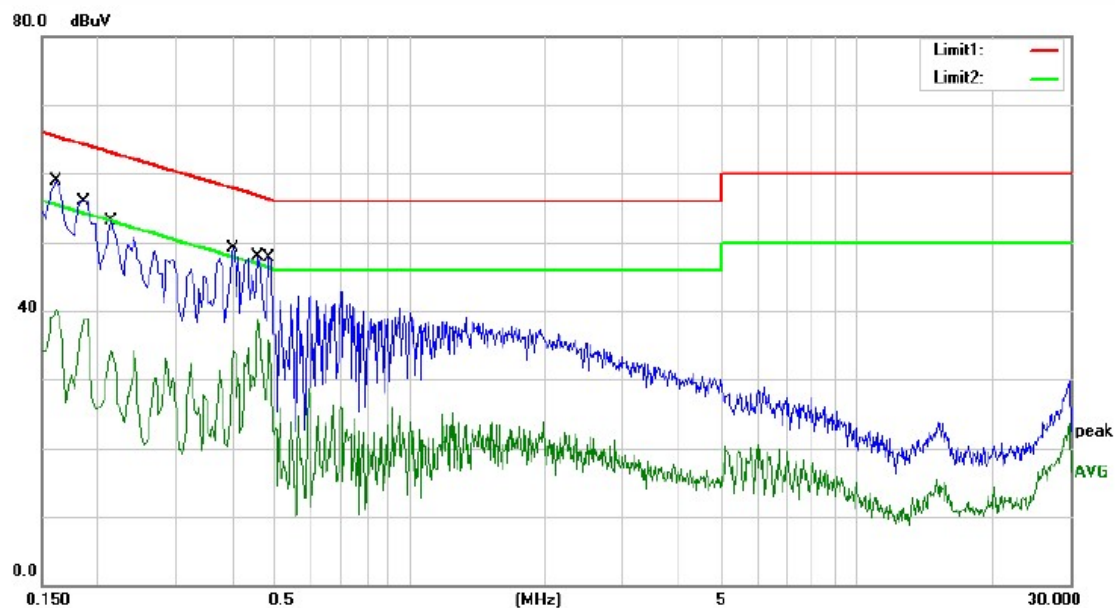
Power: AC 120V/60Hz

Humidity: 49 %

Mode: WIFI(5G)

Note:

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV	dBuV	dB		
1	*	0.1620	48.10	9.90	58.00	65.36	-7.36	QP	
2		0.1620	32.48	9.90	42.38	55.36	-12.98	AVG	
3		0.1900	45.71	9.90	55.61	64.04	-8.43	QP	
4		0.1900	26.80	9.90	36.70	54.04	-17.34	AVG	
5		0.2140	43.19	9.90	53.09	63.05	-9.96	QP	
6		0.2140	23.08	9.90	32.98	53.05	-20.07	AVG	
7		0.2820	38.50	9.91	48.41	60.76	-12.35	QP	
8		0.2820	22.65	9.91	32.56	50.76	-18.20	AVG	
9		0.4060	36.54	9.92	46.46	57.73	-11.27	QP	
10		0.4060	20.53	9.92	30.45	47.73	-17.28	AVG	
11		0.4540	37.58	9.92	47.50	56.80	-9.30	QP	
12		0.4540	23.08	9.92	33.00	46.80	-13.80	AVG	



Site Conduction #2

Phase: L1

Temperature: 25.0

Limit: (CE)FCC PART 15 class B_QP

Power: AC 120V/60Hz

Humidity: 49 %

Mode: WIFI(5G)

Note:

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
1	*	0.1620	49.00	9.90	58.90	65.36	-6.46	QP	
2		0.1620	30.23	9.90	40.13	55.36	-15.23	AVG	
3		0.1860	46.07	9.90	55.97	64.21	-8.24	QP	
4		0.1860	28.98	9.90	38.88	54.21	-15.33	AVG	
5		0.2140	43.29	9.90	53.19	63.05	-9.86	QP	
6		0.2140	24.25	9.90	34.15	53.05	-18.90	AVG	
7		0.4020	39.17	9.92	49.09	57.81	-8.72	QP	
8		0.4020	24.87	9.92	34.79	47.81	-13.02	AVG	
9		0.4580	37.90	9.92	47.82	56.73	-8.91	QP	
10		0.4580	28.76	9.92	38.68	46.73	-8.05	AVG	
11		0.4860	37.82	9.92	47.74	56.24	-8.50	QP	
12		0.4860	25.72	9.92	35.64	46.24	-10.60	AVG	

8.7 ANTENNA APPLICATION

8.7.1 Antenna Requirement

Standard	Requirement
FCC CRF Part 15.203	An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.407 (a), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

8.7.2 Result

PASS.

- The EUT has 1 antenna: a External Bar antenna for WIFI 5G, the gain is 3 dBi
- Note:
- ☒ Antennas use a permanently attached antenna which is not replaceable.
 - ☐ Not using a standard antenna jack or electrical connector for antenna replacement
 - ☐ The antenna has to be professionally installed (please provide method of installation)

Which in accordance to section 15.203, please refer to the internal photos.

Detail of factor for radiated emission

Frequency(MHz)	Ant_F(dB)	Cab_L(dB)	Preamp(dB)	Correct Factor(dB)
0.009	20.6	0.03	\	20.63
0.15	20.7	0.1	\	20.8
1	20.9	0.15	\	21.05
10	20.1	0.28	\	20.38
30	18.8	0.45	\	19.25
30	11.7	0.62	27.9	-15.58
100	12.5	1.02	27.8	-14.28
300	12.9	1.91	27.5	-12.69
600	19.2	2.92	27	-4.88
800	21.1	3.54	26.6	-1.96
1000	22.3	4.17	26.2	0.27
1000	25.6	1.76	41.4	-14.04
3000	28.9	3.27	43.2	-11.03
5000	31.1	4.2	44.6	-9.3
8000	36.2	5.95	44.7	-2.55
10000	38.4	6.3	43.9	0.8
12000	38.5	7.14	42.3	3.34
15000	40.2	8.15	41.4	6.95
18000	45.4	9.02	41.3	13.12
18000	37.9	1.81	47.9	-8.19
21000	37.9	1.95	48.7	-8.85
25000	39.3	2.01	42.8	-1.49
28000	39.6	2.16	46.0	-4.24
31000	41.2	2.24	44.5	-1.06
34000	41.5	2.29	46.6	-2.81
37000	43.8	2.30	46.4	-0.3
40000	43.2	2.50	42.2	3.5