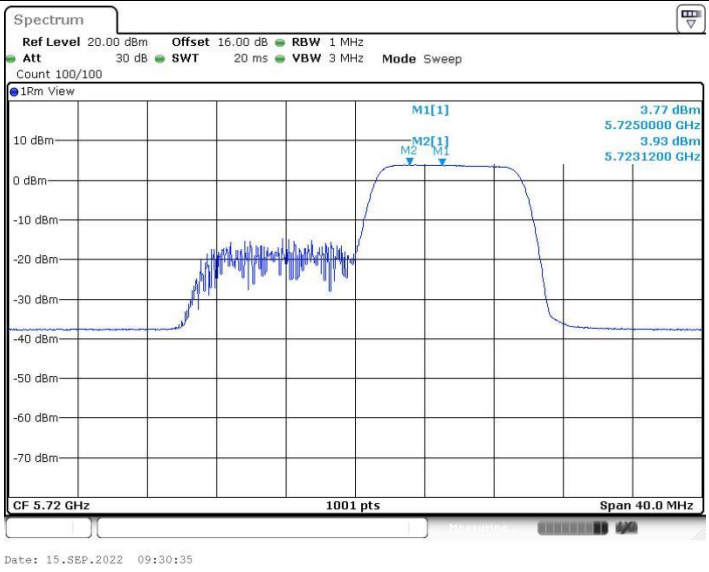
11AX20MIMO_Ant1_5720_UNII-2C_106Tone_RU54


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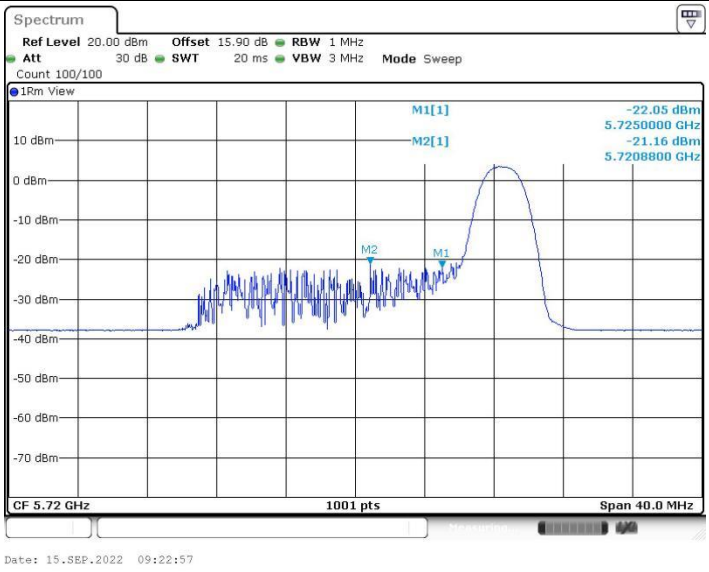
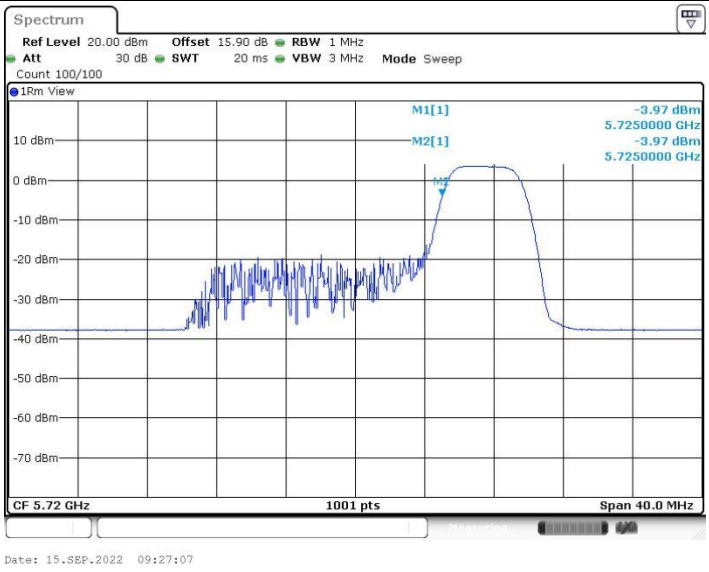


11AX20MIMO_Ant2_5720_UNII-2C_52Tone_RU40


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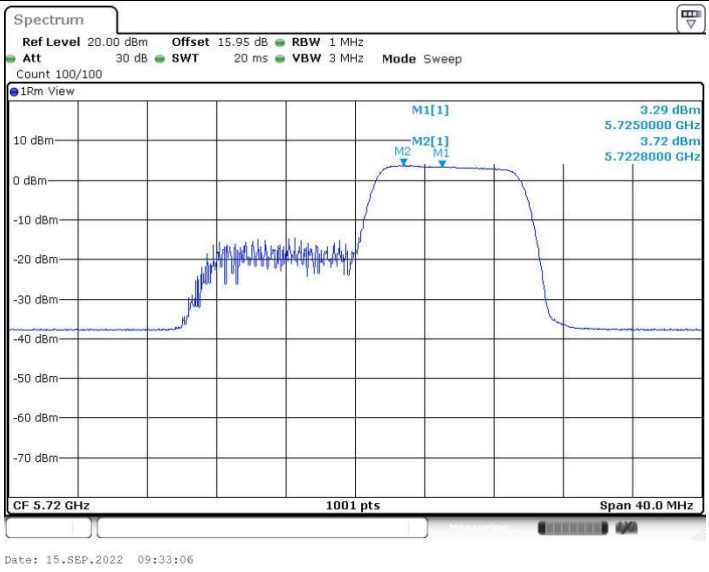

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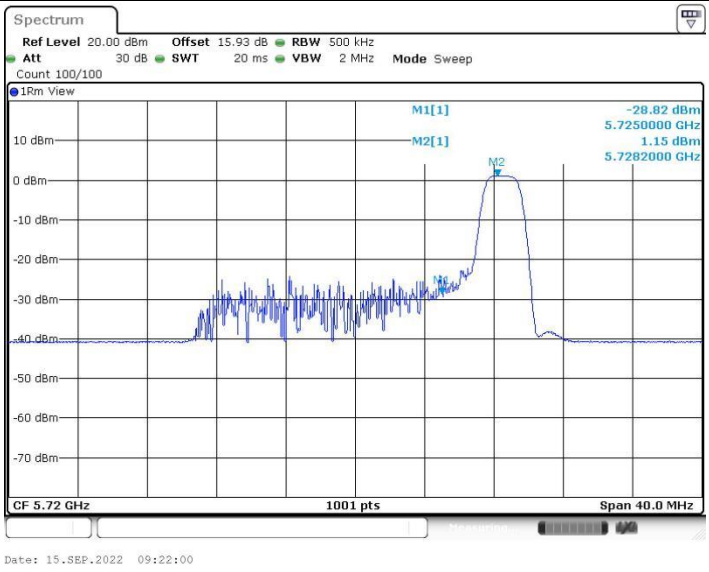

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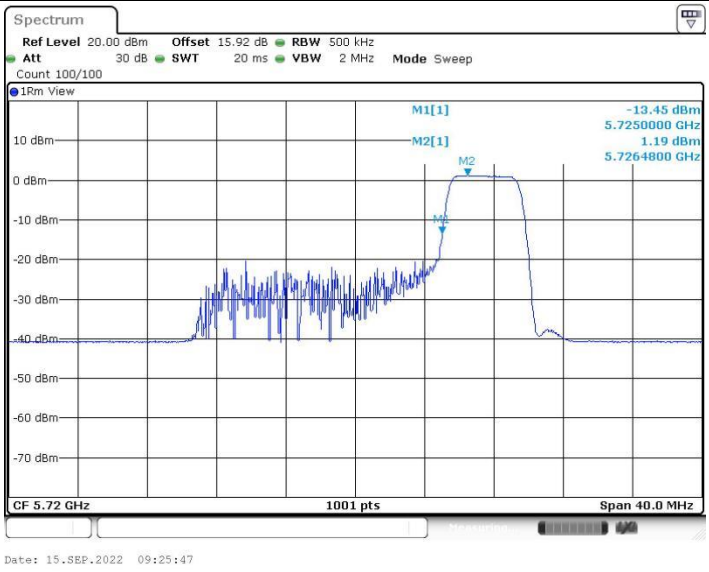

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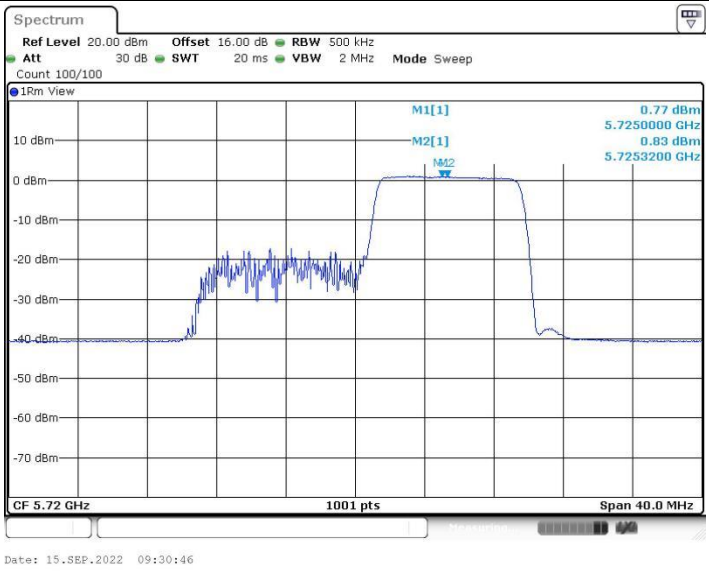

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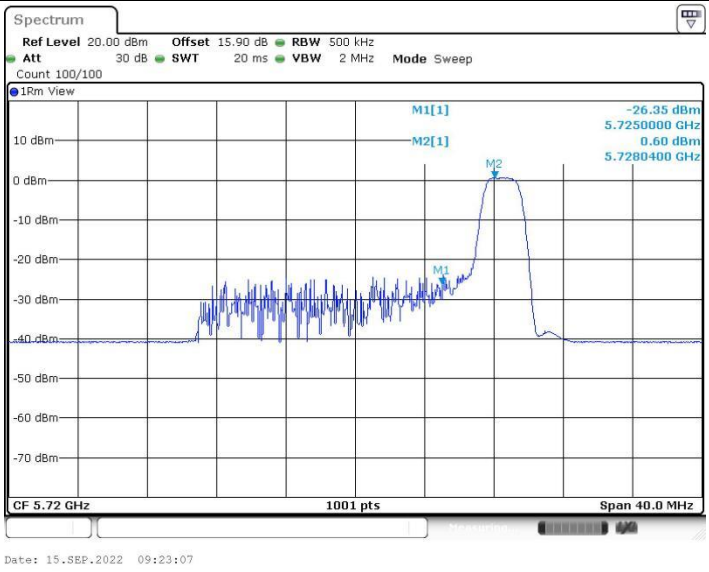

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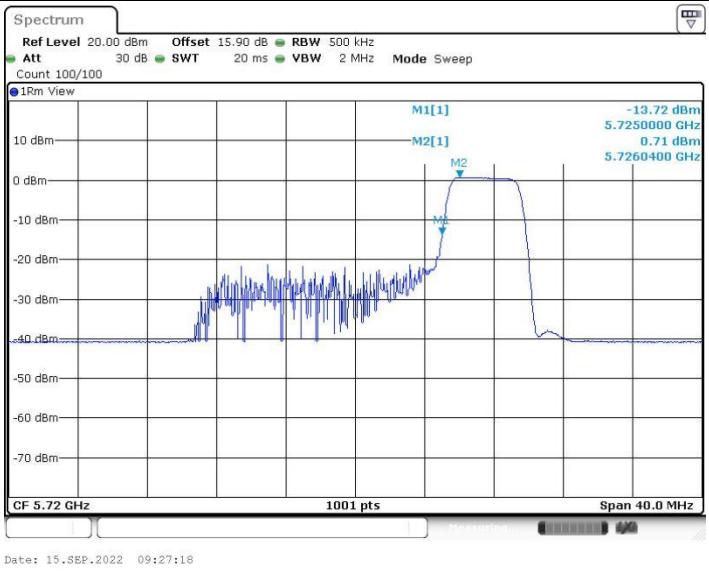

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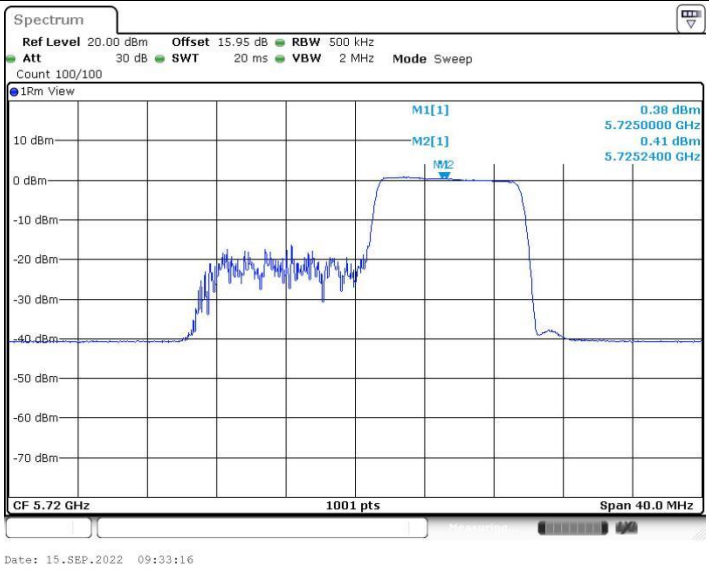

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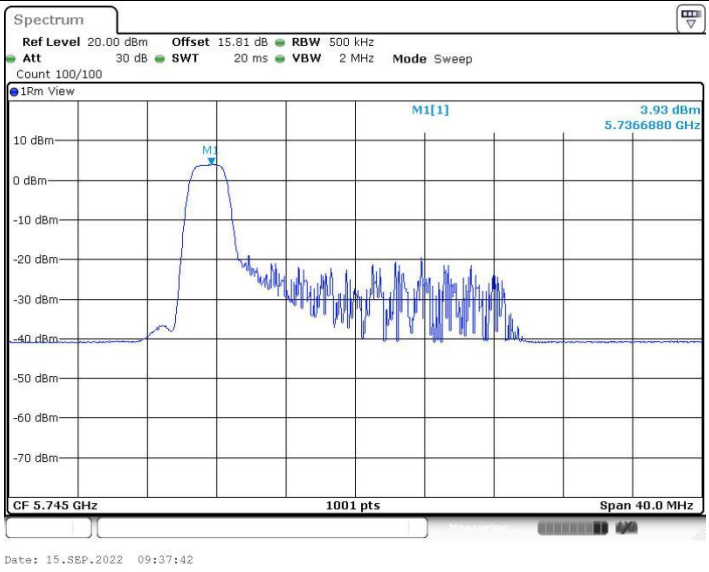

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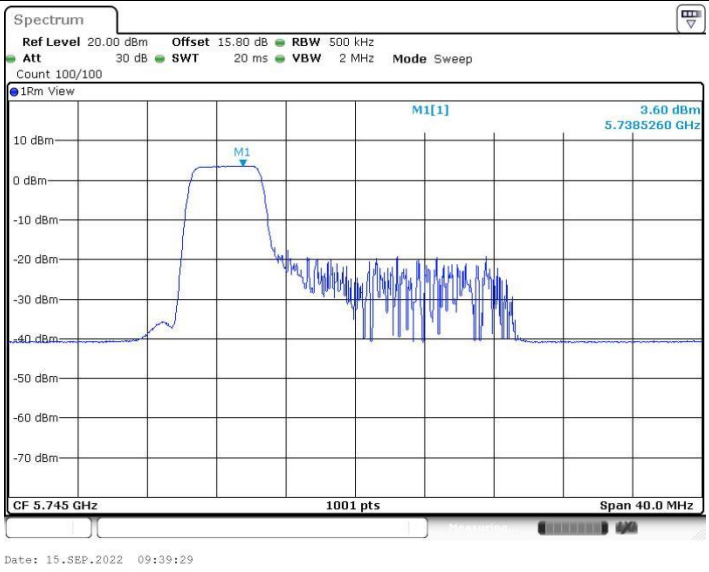

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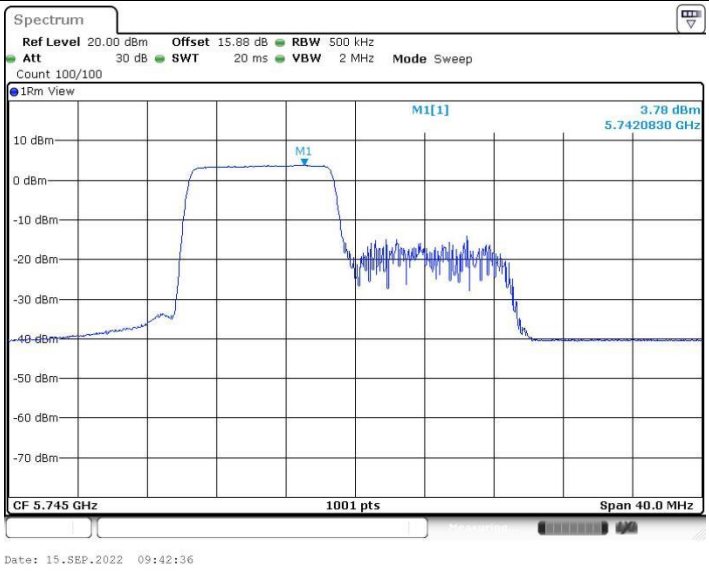

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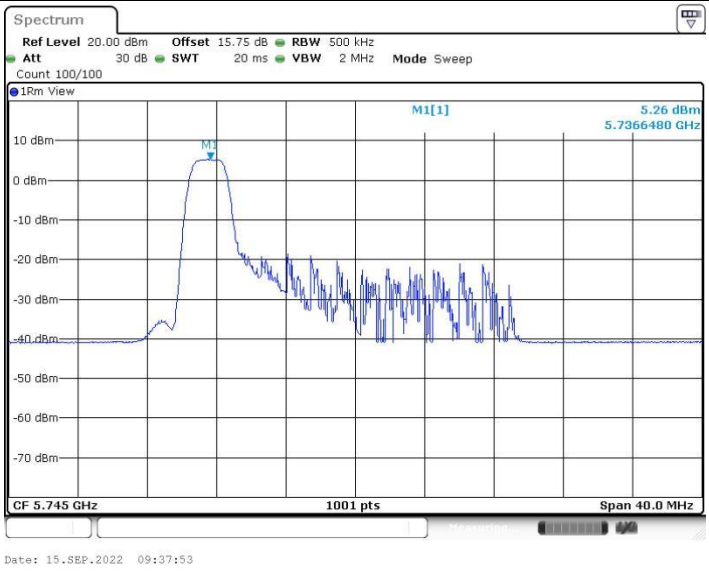

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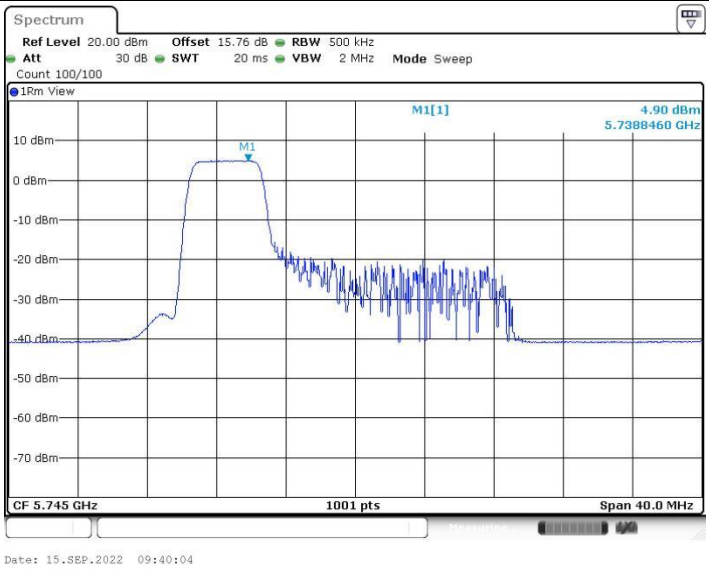

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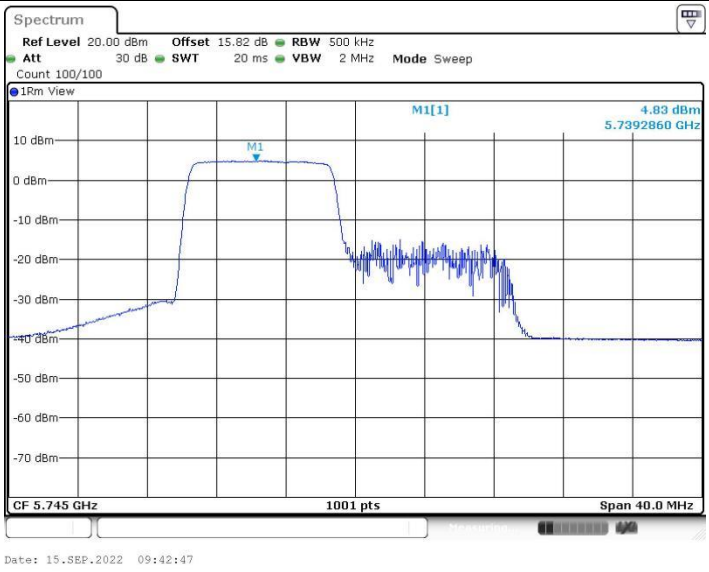
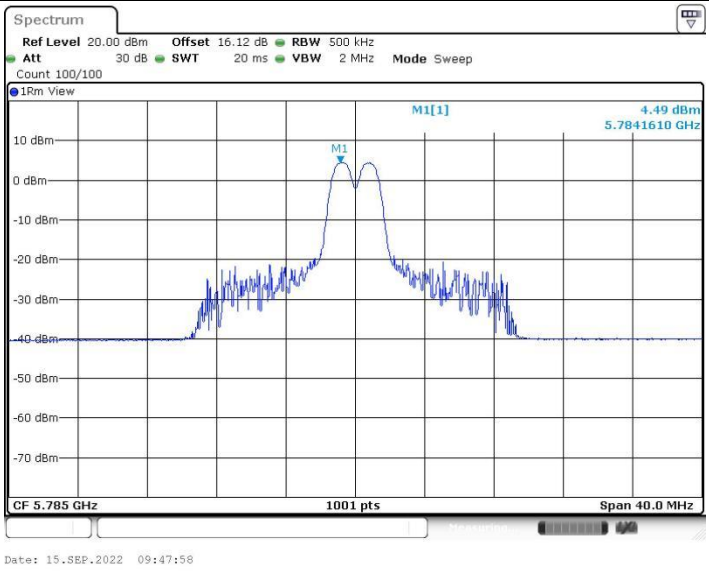
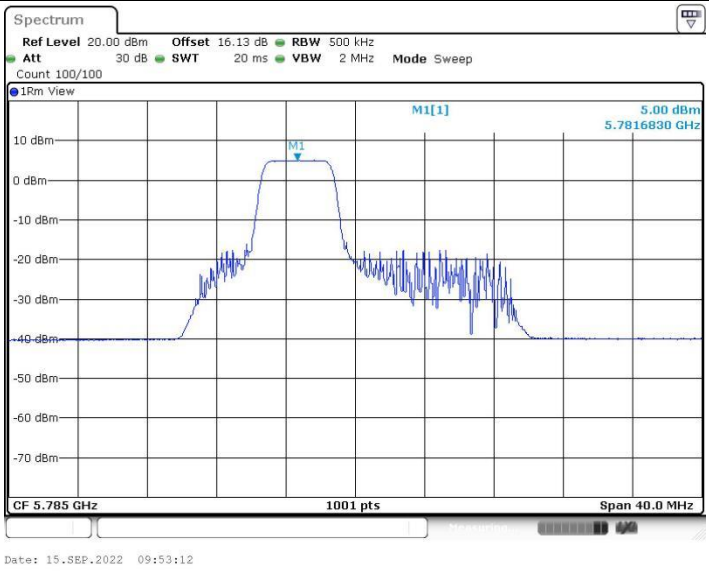


11AX20MIMO_Ant1_5785_26Tone_RU4


11AX20MIMO_Ant1_5785_52Tone_RU38


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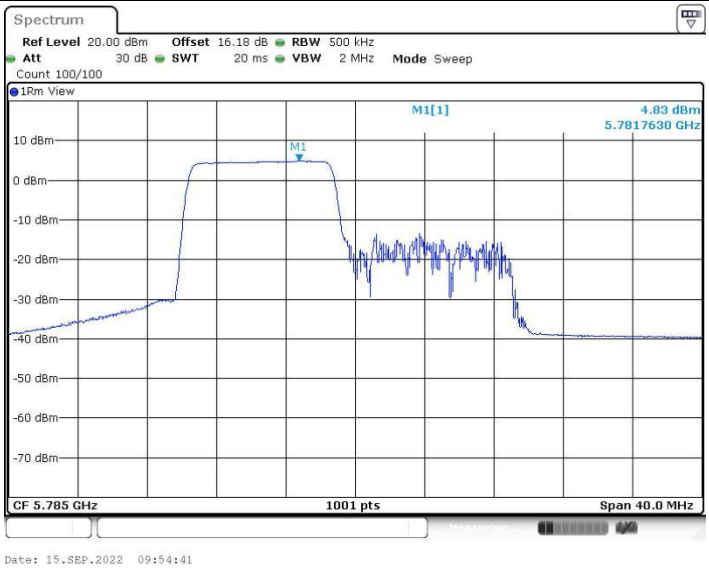

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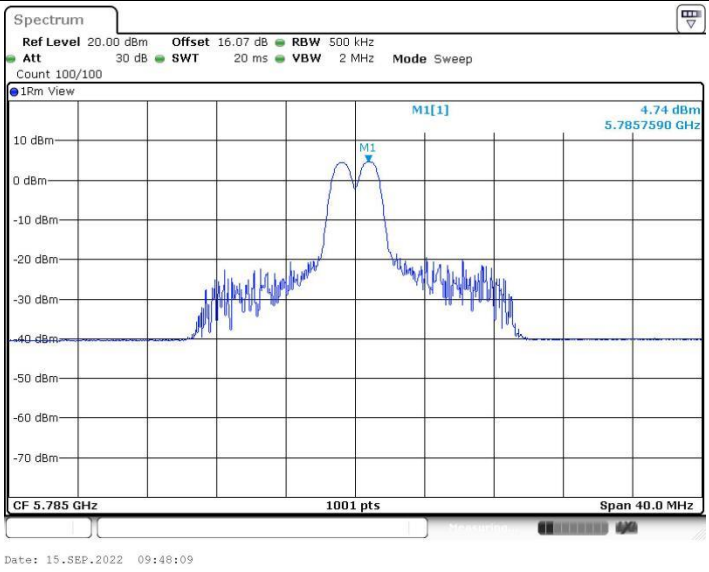

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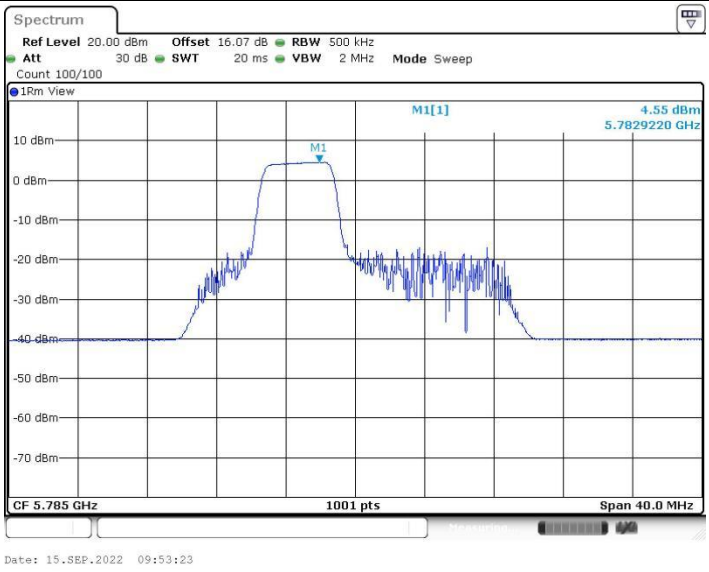

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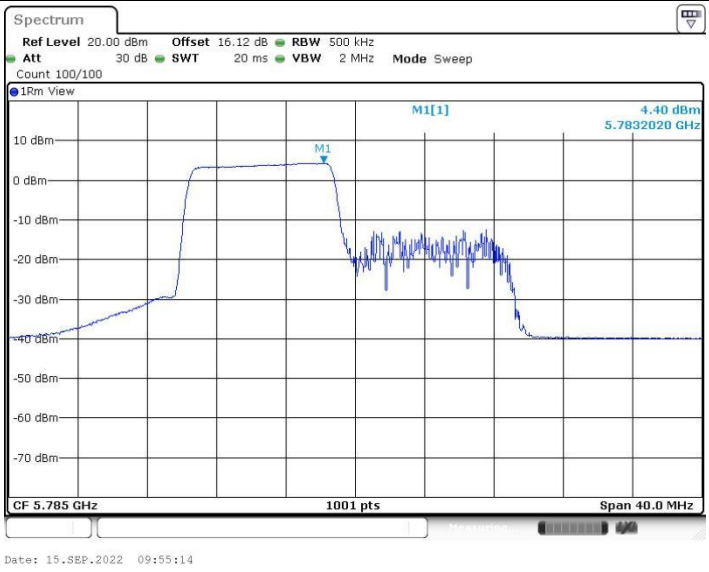

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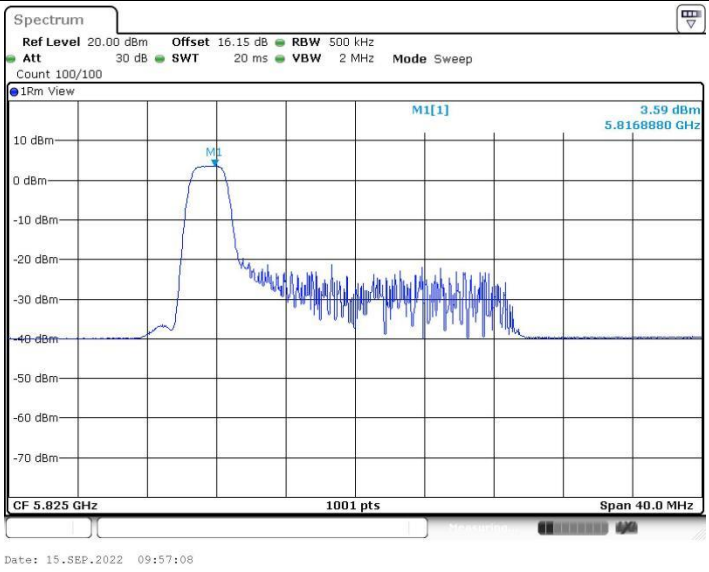

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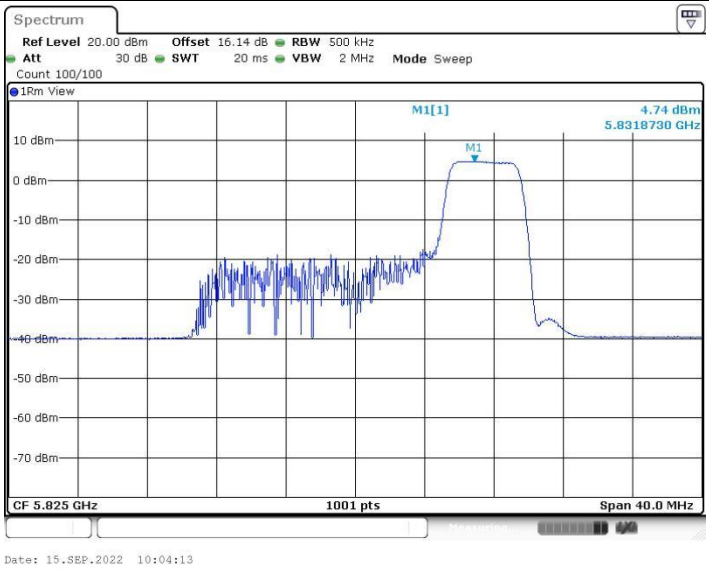
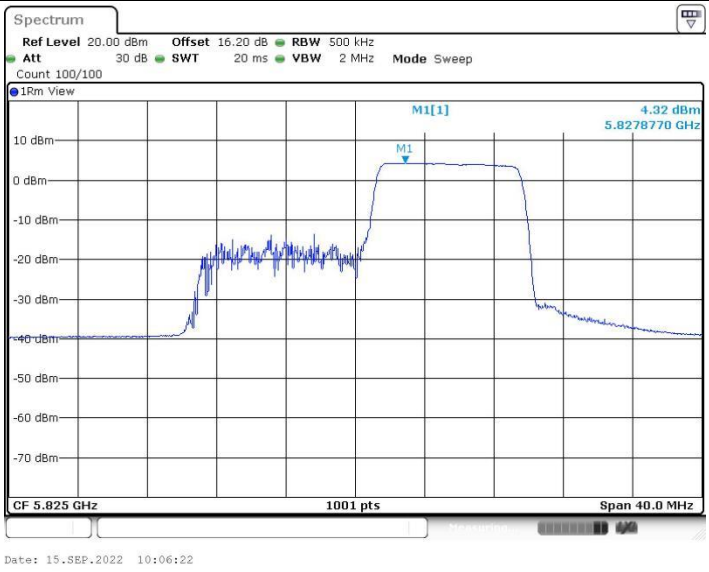


11AX20MIMO_Ant1_5825_106Tone_RU54


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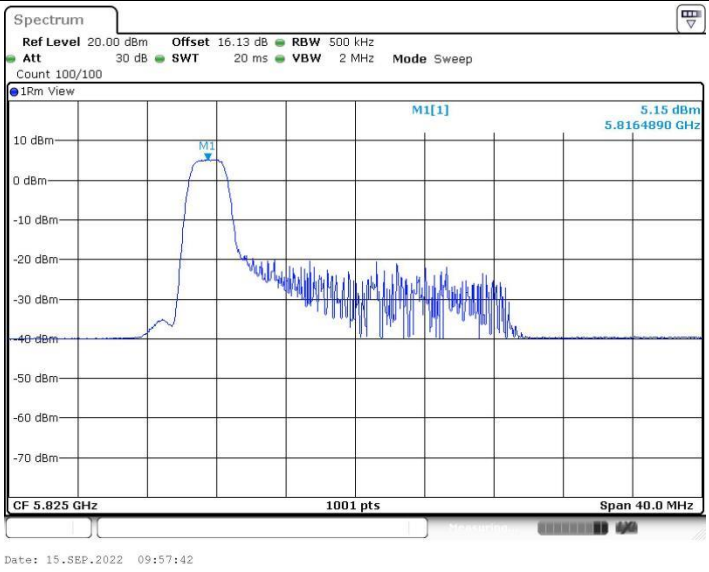

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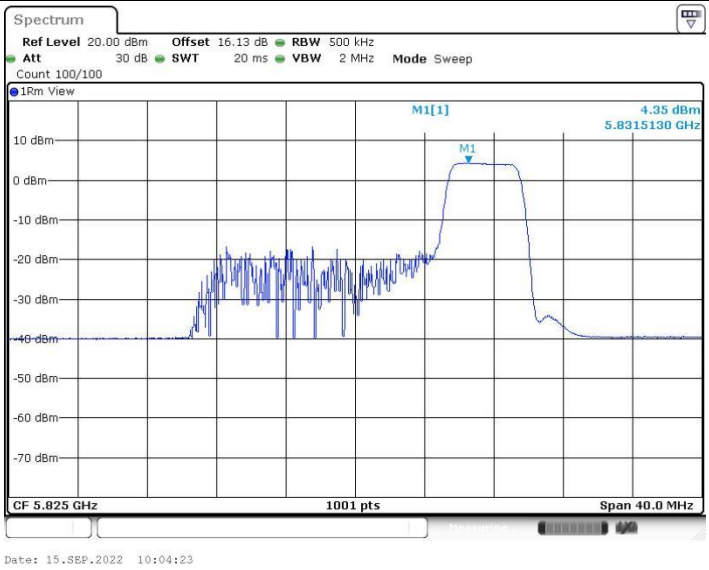
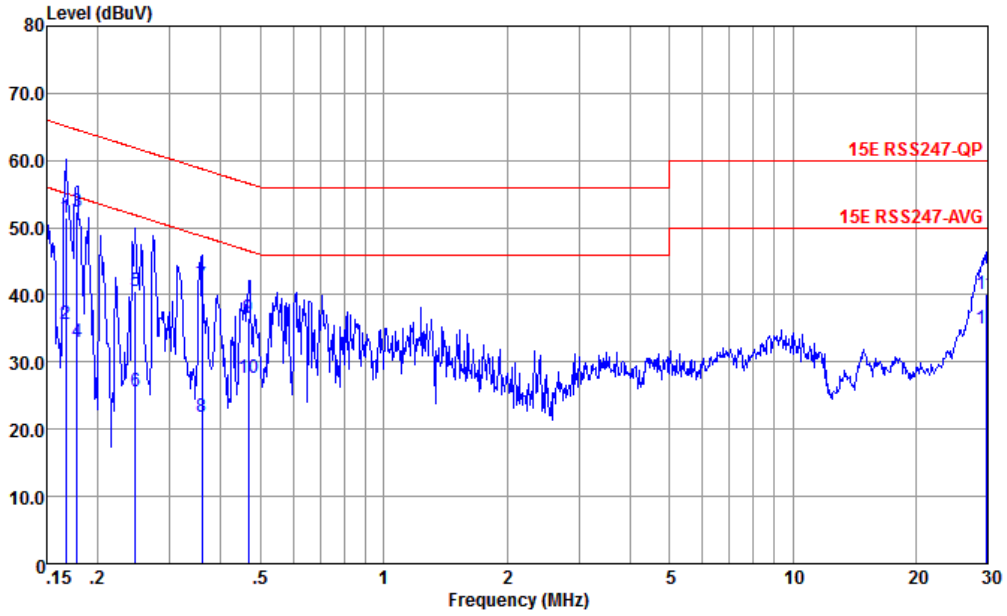

11AX20MIMO_Ant2_5825_106Tone_RU54


Appendix B. AC Conducted Emission Test Results

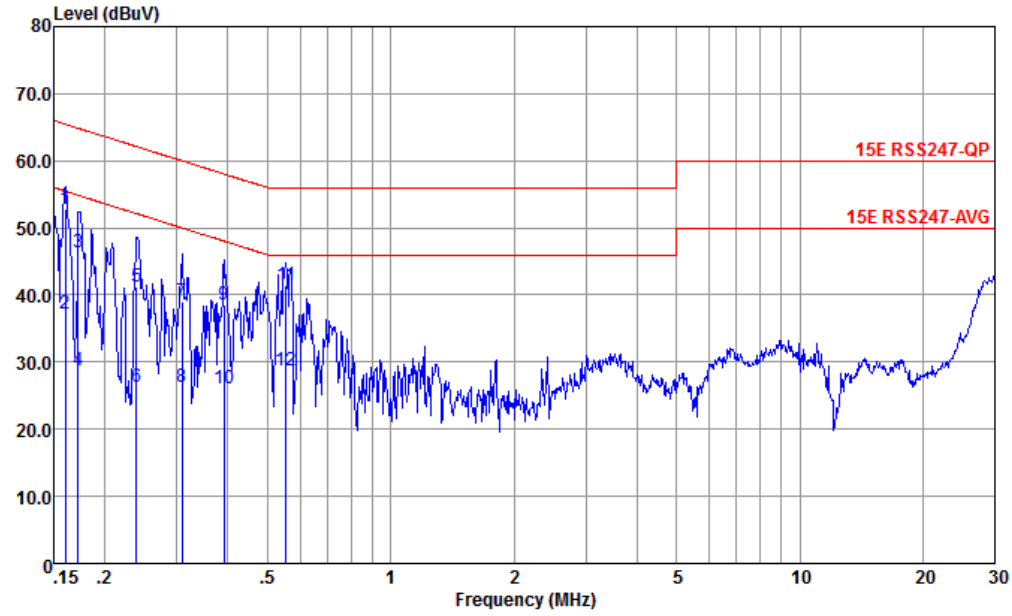
Test Engineer :	Amos Zhang	**Temperature :**	25.3~26.2℃
		Relative Humidity :	38~40%
Test Voltage :	120Vac / 60Hz	**Phase :**	Line
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : CO01-KS
Condition : 15E RSS247-QP LISN-060105-L LINE

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1		0.167	51.56	-13.56	65.12	41.09	0.03	10.44	QP
2		0.167	35.56	-29.56	65.12	25.09	0.03	10.44	Average
3	*	0.178	52.34	-12.25	64.59	41.90	0.03	10.41	QP
4		0.178	32.94	-31.65	64.59	22.50	0.03	10.41	Average
5		0.247	40.59	-21.27	61.86	30.19	0.06	10.34	QP
6		0.247	25.59	-36.27	61.86	15.19	0.06	10.34	Average
7		0.360	41.46	-17.28	58.74	31.10	0.08	10.28	QP
8		0.360	21.86	-36.88	58.74	11.50	0.08	10.28	Average
9		0.466	36.54	-20.04	56.58	26.20	0.10	10.24	QP
10		0.466	27.54	-29.04	56.58	17.20	0.10	10.24	Average
11		29.684	40.02	-19.98	60.00	28.60	0.79	10.63	QP
12		29.684	34.92	-25.08	60.00	23.50	0.79	10.63	Average

Test Engineer :	Amos Zhang	**Temperature :**	25.3~26.2℃
		Relative Humidity :	38~40%
Test Voltage :	120Vac / 60Hz	**Phase :**	Neutral
Remark :	All emissions not reported here are more than 10 dB below the prescribed limit.		



Site : CO01-KS
Condition : 15E RSS247-QP LISN-060105-N NEUTRAL

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1	*	0.160	52.86	-12.61	65.47	42.30	0.11	10.45	QP
2		0.160	37.19	-28.28	65.47	26.63	0.11	10.45	Average
3		0.172	46.33	-18.53	64.86	35.80	0.11	10.42	QP
4		0.172	28.73	-36.13	64.86	18.20	0.11	10.42	Average
5		0.239	41.24	-20.89	62.13	30.80	0.10	10.34	QP
6		0.239	26.24	-35.89	62.13	15.80	0.10	10.34	Average
7		0.308	38.90	-21.12	60.02	28.50	0.10	10.30	QP
8		0.308	26.20	-33.82	60.02	15.80	0.10	10.30	Average
9		0.391	38.57	-19.46	58.03	28.19	0.11	10.27	QP
10		0.391	26.17	-31.86	58.03	15.79	0.11	10.27	Average
11		0.555	41.45	-14.55	56.00	31.10	0.11	10.24	QP
12		0.555	28.65	-27.35	56.00	18.30	0.11	10.24	Average

Note:

1. Level(dBμV) = Read Level(dBμV) + LISN Factor(dB) + Cable Loss(dB)
2. Over Limit(dB) = Level(dBμV) – Limit Line(dBμV)

Appendix C. Radiated Spurious Emission

Note: All modes had been tested and only the worst channel test data of each bandwidth shown in the report

UNII-1 - 5150~5250MHz

WIFI 802.11ax HE20 Partial 52 (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
7+8		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
		5113.76	58.35	-15.65	74	42.52	34.48	10.61	29.26	100	120	P	H
802.11ax		5101.28	47.08	-6.92	54	31.24	34.5	10.6	29.26	100	120	A	H
HE20		5176	107.52	-	-	91.81	34.42	10.63	29.34	100	120	P	H
Partial		5176	100.44	-	-	84.73	34.42	10.63	29.34	100	120	A	H
52/37		5128.8	57.58	-16.42	74	41.78	34.47	10.61	29.28	339	71	P	V
CH 36		5103.52	47.02	-6.98	54	31.18	34.5	10.6	29.26	339	71	A	V
5180MHz		5176	107.41	-	-	91.7	34.42	10.63	29.34	339	71	P	V
		5176	99.51	-	-	83.8	34.42	10.63	29.34	339	71	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-1 5150~5250MHz

WIFI 802.11ax HE40 Full (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
7+8		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
		5145.12	59.98	-14.02	74	43.64	35.03	10.62	29.31	298	71	P	H
		5145.44	50.94	-3.06	54	34.6	35.03	10.62	29.31	298	71	A	H
	*	5188	105.1	-	-	88.75	35.06	10.63	29.34	298	71	P	H
802.11ax		5188	97.05	-	-	80.7	35.06	10.63	29.34	298	71	A	H
HE40 Full		5381.82	55.73	-18.27	74	39.17	35.24	10.87	29.55	298	71	P	H
CH 38		5356.62	46.46	-7.54	54	29.93	35.22	10.83	29.52	298	71	A	H
5190MHz		5145.44	59.4	-14.6	74	43.06	35.03	10.62	29.31	117	312	P	V
		5147.68	50.39	-3.61	54	34.05	35.03	10.62	29.31	117	312	A	V
	*	5188	104.36	-	-	88.01	35.06	10.63	29.34	117	312	P	V
		5188	97.2	-	-	80.85	35.06	10.63	29.34	117	312	A	V

		5391.54	54.51	-19.49	74	37.93	35.26	10.87	29.55	117	312	P	V
		5350.2	46.46	-7.54	54	29.93	35.22	10.83	29.52	117	312	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-1 5150~5250MHz

WIFI 802.11ax HE40 Full (Harmonic @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax		10388	53.55	-14.75	68.3	65.45	38.33	16.21	66.44	248	175	P	H
HE40 Full CH 38 5190MHz		10366	50.28	-18.02	68.3	62.22	38.32	16.2	66.46	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-1 5150~5250MHz

WIFI 802.11ax HE80 Full (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5148.8	58.99	-15.01	74	42.65	35.03	10.62	29.31	314	72	P	H
		5150	50.73	-3.27	54	34.39	35.03	10.62	29.31	314	72	P	H
	*	5224	100.38	-	-	84.02	35.09	10.66	29.39	314	72	P	H
		5224	93.18	-	-	76.82	35.09	10.66	29.39	314	72	A	H
802.11ax		5397.3	54.92	-19.08	74	38.32	35.26	10.89	29.55	314	72	P	H
HE80 Full		5350.86	46.9	-7.1	54	30.37	35.22	10.83	29.52	314	72	A	H
CH 42		5142.88	58.96	-15.04	74	42.61	35.01	10.62	29.28	140	304	P	V
5210MHz		5149.92	50.31	-3.69	54	33.97	35.03	10.62	29.31	140	304	A	V
	*	5230	99.93	-	-	83.53	35.11	10.68	29.39	140	304	P	V
		5230	91.5	-	-	75.1	35.11	10.68	29.39	140	304	A	V
		5350.14	55.04	-18.96	74	38.51	35.22	10.83	29.52	140	304	P	V
		5351.94	46.68	-7.32	54	30.15	35.22	10.83	29.52	140	304	A	V

Remark	

UNII-1 5150~5250MHz

WIFI 802.11ax HE80 Full (Harmonic @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 42 5210MHz		10421	45.83	-22.47	68.3	57.65	38.34	16.24	66.4	100	360	P	H
		10421	46.03	-22.27	68.3	57.85	38.34	16.24	66.4	300	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2A- 5250~5350MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 64 5320MHz		5352.9	58.15	-15.85	74	41.62	35.22	10.83	29.52	316	61	P	H
		5352.8	50.93	-3.07	54	34.4	35.22	10.83	29.52	316	61	A	H
	*	5320	110.09	-	-	93.58	35.19	10.79	29.47	316	61	P	H
		5320	103.75	-	-	87.24	35.19	10.79	29.47	316	61	A	H
		5352.5	59.77	-14.23	74	43.24	35.22	10.83	29.52	100	307	P	V
		5352.3	49.27	-4.73	54	32.74	35.22	10.83	29.52	100	307	A	V
	*	5320	107.93	-	-	91.42	35.19	10.79	29.47	100	307	P	V
		5320	101.21	-	-	84.7	35.19	10.79	29.47	100	307	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2A5250~5350MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a		10641	50.86	-23.14	74	62.22	38.41	16.38	66.15	300	0	P	H
CH 64		10641	57.7	-16.3	74	69.06	38.41	16.38	66.15	342	2	P	V
5320MHz		10641	49.59	-4.41	54	60.95	38.41	16.38	66.15	342	2	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2A5250~5350MHz

WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5354.8	60.04	-13.96	74	43.51	35.22	10.83	29.52	314	63	P	H
		5350.1	50.97	-3.03	54	34.44	35.22	10.83	29.52	314	63	A	H
802.11ax	*	5320	110.19	-	-	93.68	35.19	10.79	29.47	314	63	P	H
HE20 Full		5320	103.32	-	-	86.81	35.19	10.79	29.47	314	63	A	H
CH 64		5357.7	62.24	-11.76	74	45.71	35.22	10.83	29.52	100	360	P	V
5320MHz		5350	50.39	-3.61	54	33.86	35.22	10.83	29.52	100	360	A	V
	*	5320	109.49	-	-	92.98	35.19	10.79	29.47	100	360	P	V
		5320	101.84	-	-	85.33	35.19	10.79	29.47	100	360	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2A5250~5350MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 64 5320MHz		10641	54.46	-19.54	74	65.82	38.41	16.38	66.15	300	12	P	H
		10630	56.65	-17.35	74	68.06	38.4	16.36	66.17	336	0	P	V
		10630	48.1	-5.9	54	59.51	38.4	16.36	66.17	336	0	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

WIFI 802.11ax HE20 Full (LF @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full LF		53.28	35.08	-4.92	40	51.64	13.78	1.01	31.35	-	-	P	H
		91.11	32.77	-10.73	43.5	48.35	14.96	1.35	31.89	-	-	P	H
		162.89	38.31	-5.19	43.5	51.46	16.32	1.86	31.33	-	-	P	H
		271.53	35.58	-10.42	46	45.53	19.24	2.29	31.48	-	-	P	H
		570.29	32.91	-13.09	46	35.48	25.54	3.38	31.49	-	-	P	H
		751.68	30.97	-15.03	46	30.53	27.48	4.07	31.11	-	-	P	H
		30	27.35	-12.65	40	32.08	25.74	0.76	31.23	-	-	P	V
		55.22	24.17	-15.83	40	41.08	13.32	1.03	31.26	-	-	P	V
		96.93	38.82	-4.68	43.5	53.64	15.68	1.41	31.91	-	-	P	V
		158.04	36.48	-7.02	43.5	49.34	16.62	1.84	31.32	-	-	P	V
		196.84	37.39	-6.11	43.5	51.65	15.01	2.07	31.34	-	-	P	V
		318.09	34.18	-11.82	46	43.39	19.8	2.63	31.64	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

UNII-3 - 5725~5850MHz

WIFI 802.11a (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 149 5745MHz		5604	57.07	-11.23	68.3	40.19	35.47	11.19	29.78	392	59	P	H
		5694	60.52	-40.36	100.88	43.46	35.58	11.28	29.8	392	59	P	H
		5719.6	69.31	-41.48	110.79	52.18	35.6	11.32	29.79	392	59	P	H
		5723.6	76.62	-42.49	119.11	59.47	35.62	11.32	29.79	392	59	P	H
		5746	112.63	-	-	95.42	35.65	11.34	29.78	392	59	P	H
		5746	107.04	-	-	89.83	35.65	11.34	29.78	392	59	A	H
		5637.2	58.31	-9.99	68.3	41.41	35.48	11.23	29.81	225	302	P	V
		5696.8	61.79	-41.15	102.94	44.73	35.58	11.28	29.8	225	302	P	V
		5719.6	68.82	-41.97	110.79	51.69	35.6	11.32	29.79	225	302	P	V
		5724.8	75.41	-46.43	121.84	58.26	35.62	11.32	29.79	225	302	P	V
		5746	112.51	-	-	95.3	35.65	11.34	29.78	225	302	P	V
		5746	106.84	-	-	89.63	35.65	11.34	29.78	225	302	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-3 5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a CH 149 5745MHz		11488	60.53	-13.47	74	70.2	38.69	17.09	65.45	304	25	P	H
		11488	50.91	-3.09	54	60.58	38.69	17.09	65.45	304	25	A	H
		11488	57.23	-16.77	74	66.9	38.69	17.09	65.45	141	9	P	V
		11488	50.67	-3.33	54	60.34	38.69	17.09	65.45	141	9	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-3 5725~5850MHz

WIFI 802.11ax HE20_Full (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 149 5745MHz		5630.8	56.48	-11.82	68.3	39.6	35.48	11.21	29.81	342	67	P	H
		5696.4	62.3	-40.35	102.65	45.24	35.58	11.28	29.8	342	67	P	H
		5719.6	72.43	-38.36	110.79	55.3	35.6	11.32	29.79	342	67	P	H
		5724.4	79.25	-41.68	120.93	62.1	35.62	11.32	29.79	342	67	P	H
		5746	110.58	-	-	93.37	35.65	11.34	29.78	342	67	P	H
		5746	104.27	-	-	87.06	35.65	11.34	29.78	342	67	A	H
		5629.6	56.31	-11.99	68.3	39.43	35.48	11.21	29.81	100	301	P	V
		5699.2	61.86	-42.85	104.71	44.8	35.58	11.28	29.8	100	301	P	V
		5719.6	72.33	-38.46	110.79	55.2	35.6	11.32	29.79	100	301	P	V
		5724.8	80.16	-41.68	121.84	63.01	35.62	11.32	29.79	100	301	P	V
		5740	111.07	-	-	93.86	35.65	11.34	29.78	100	301	P	V
		5740	104.45	-	-	87.24	35.65	11.34	29.78	100	301	A	V
Remark	3. No other spurious found. 4. All results are PASS against Peak and Average limit line.												

UNII-3 5725~5850MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 149 5745MHz		11488	59.31	-14.69	74	68.98	38.69	17.09	65.45	318	32	P	H
		11488	49.82	-4.18	54	59.49	38.69	17.09	65.45	318	32	A	H
		11488	59.63	-14.37	74	69.3	38.69	17.09	65.45	143	9	P	V
		11488	50.5	-3.5	54	60.17	38.69	17.09	65.45	143	9	A	V
Remark	3. No other spurious found. 4. All results are PASS against Peak and Average limit line.												

UNII-3 5725~5850MHz

WIFI 802.11ax HE20_Partial 52 (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Partial 52/40 CH 165 5825MHz		5850.4	56.6	-64.79	121.39	39.98	34.95	11.42	29.75	100	114	P	H
		5866.4	56.82	-50.89	107.71	40.16	35	11.43	29.77	100	114	P	H
		5881.2	57.55	-43.14	100.69	40.83	35.05	11.44	29.77	100	114	P	H
		5928.8	57.55	-10.75	68.3	40.72	35.17	11.48	29.82	100	114	P	H
		5830	112.97	-	-	96.42	34.9	11.41	29.76	100	114	P	H
		5830	104.7	-	-	88.15	34.9	11.41	29.76	100	114	A	H
		5854	56.37	-56.81	113.18	39.69	35	11.43	29.75	362	41	P	V
		5862.8	56.72	-51.99	108.71	40.06	35	11.43	29.77	362	41	P	V
		5902	57.13	-28.15	85.28	40.38	35.1	11.45	29.8	362	41	P	V
		5950	56.22	-12.08	68.3	39.37	35.2	11.49	29.84	362	41	P	V
		5830	111.07	-	-	94.52	34.9	11.41	29.76	362	41	P	V
		5830	102.72	-	-	86.17	34.9	11.41	29.76	362	41	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-3 5725~5850MHz

WIFI 802.11ax HE40_Full (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE40 Full CH 151 5755MHz		5624	56	-12.3	68.3	39.09	35.48	11.21	29.78	300	111	P	H
		5700	64.67	-40.63	105.3	47.61	35.58	11.28	29.8	300	111	P	H
		5716.4	74.83	-35.06	109.89	57.72	35.6	11.3	29.79	300	111	P	H
		5723.2	73.56	-44.64	118.2	56.41	35.62	11.32	29.79	300	111	P	H
		5758	105.76	-	-	88.51	35.67	11.35	29.77	300	111	P	H
		5758	99.5	-	-	82.25	35.67	11.35	29.77	300	111	A	H
		5853.2	55.78	-59.22	115	38.31	35.8	11.42	29.75	300	111	P	H
		5864	57.13	-51.25	108.38	39.68	35.79	11.43	29.77	300	111	P	H
		5912	56.09	-21.8	77.89	38.66	35.78	11.47	29.82	300	111	P	H
		5951.6	56.8	-11.5	68.3	39.39	35.76	11.49	29.84	300	111	P	H

		5644.8	58.18	-10.12	68.3	41.26	35.5	11.23	29.81	244	301	P	V
		5697.2	68.36	-34.88	103.24	51.3	35.58	11.28	29.8	244	301	P	V
		5716.4	80.32	-29.57	109.89	63.21	35.6	11.3	29.79	244	301	P	V
		5723.2	78.34	-39.86	118.2	61.19	35.62	11.32	29.79	244	301	P	V
		5746	108.53	-	-	91.32	35.65	11.34	29.78	244	301	P	V
		5746	101.57	-	-	84.36	35.65	11.34	29.78	244	301	A	V
		5850.4	57.09	-64.3	121.39	39.62	35.8	11.42	29.75	244	301	P	V
		5856	56.87	-53.75	110.62	39.39	35.8	11.43	29.75	244	301	P	V
		5890	58.3	-35.87	94.17	40.86	35.79	11.45	29.8	244	301	P	V
		5955.2	56.27	-12.03	68.3	38.86	35.76	11.49	29.84	244	301	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-3 5725~5850MHz

WIFI 802.11ax HE40_Full (Harmonic @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax		11521	56.29	-17.71	74	65.91	38.7	17.12	65.44	326	31	P	H
HE40 Full		11521	48.09	-5.91	54	57.71	38.7	17.12	65.44	326	31	A	H
CH 151		11521	57.09	-16.91	74	66.71	38.7	17.12	65.44	153	10	P	V
5755MHz		11521	48.22	-5.78	54	57.84	38.7	17.12	65.44	153	10	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-3 5725~5850MHz

WIFI 802.11ax HE80_Full (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBµV/m)	Over Limit (dB)	Limit Line (dBµV/m)	Read Level (dBµV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE80 Full CH 155 5775MHz		5627.6	64.22	-4.08	68.3	47.31	35.48	11.21	29.78	371	67	P	H
		5682.8	78.2	-14.41	92.61	61.19	35.55	11.26	29.8	371	67	P	H
		5710	76.39	-31.71	108.1	59.28	35.6	11.3	29.79	371	67	P	H
		5721.6	77.65	-36.9	114.55	60.52	35.6	11.32	29.79	371	67	P	H
		5758	105.99	-	-	88.74	35.67	11.35	29.77	371	67	P	H
		5758	96.93	-	-	79.68	35.67	11.35	29.77	371	67	A	H
		5850.4	72.28	-49.11	121.39	54.81	35.8	11.42	29.75	371	67	P	H
		5857.6	72.65	-37.52	110.17	55.17	35.8	11.43	29.75	371	67	P	H
		5880	67.25	-34.34	101.59	49.79	35.79	11.44	29.77	371	67	P	H
		5927.6	59.96	-8.34	68.3	42.53	35.77	11.48	29.82	371	67	P	H
		5638.4	63.58	-4.72	68.3	46.66	35.5	11.23	29.81	258	301	P	V
		5695.6	80.15	-21.91	102.06	63.09	35.58	11.28	29.8	258	301	P	V
		5708	79.86	-27.68	107.54	62.75	35.6	11.3	29.79	258	301	P	V
		5720.8	78.38	-34.34	112.72	61.25	35.6	11.32	29.79	258	301	P	V
		5764	105.95	-	-	88.7	35.67	11.35	29.77	258	301	P	V
		5764	98.46	-	-	81.21	35.67	11.35	29.77	258	301	A	V
		5850.8	77.42	-43.06	120.48	59.95	35.8	11.42	29.75	258	301	P	V
		5856	77.78	-32.84	110.62	60.3	35.8	11.43	29.75	258	301	P	V
		5880.8	71.99	-29	100.99	54.53	35.79	11.44	29.77	258	301	P	V
		5928	57.93	-10.37	68.3	40.5	35.77	11.48	29.82	258	301	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-3 5725~5850MHz

WIFI 802.11ax HE80_Full (Harmonic @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax		11565	55.4	-18.6	74	64.95	38.71	17.16	65.42	300	27	P	H
HE80 Full		11565	44.59	-9.41	54	54.14	38.71	17.16	65.42	300	27	A	H
CH 155		11576	54.68	-19.32	74	64.2	38.71	17.18	65.41	182	4	P	V
5775MHz		11576	45.52	-8.48	54	55.04	38.71	17.18	65.41	182	4	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

WIFI 802.11a (LF @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11a LF		40.67	30.39	-9.61	40	41.87	19.29	0.88	31.65	-	-	P	H
		89.17	23.37	-20.13	43.5	39.16	14.71	1.34	31.84	-	-	P	H
		167.74	33.22	-10.28	43.5	46.69	15.98	1.88	31.33	-	-	P	H
		257.95	28.67	-17.33	46	38.46	19.45	2.16	31.4	-	-	P	H
		312.27	31.04	-14.96	46	40.43	19.65	2.6	31.64	-	-	P	H
		455.83	31.15	-14.85	46	36.2	23.08	3.14	31.27	-	-	P	H
		40.67	23.28	-16.72	40	34.76	19.29	0.88	31.65	-	-	P	V
		85.29	25.59	-14.41	40	41.74	14.2	1.33	31.68	-	-	P	V
		156.1	30.38	-13.12	43.5	43.15	16.72	1.83	31.32	-	-	P	V
		239.52	30.6	-15.4	46	42.54	17.33	2.09	31.36	-	-	P	V
		360.77	33.43	-12.57	46	41.3	20.88	2.81	31.56	-	-	P	V
		560.59	36.64	-9.36	46	39.59	25.33	3.29	31.57	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

<Simultaneous transmission>

WIFI 802.11ax HE20 Full _CH64_ant8& WIFI 802.11ax HE20 Full_ant7&LTE41C_BW=20M+20M

2.4GHz 2400~2483.5MHz

WIFI 802.11 ax HE20 Full (Band Edge @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
7		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE20 Full CH 01 2412MHz		2389.95	63.22	-10.78	74	55.07	31.9	7.13	30.88	281	139	P	H
		2389.69	48.01	-5.99	54	39.88	31.9	7.13	30.9	281	139	A	H
		2410	104.97	-	-	96.72	31.97	7.16	30.88	281	139	P	H
		2414	94.83	-	-	86.58	31.97	7.16	30.88	281	139	A	H
		2389.3	61.44	-12.56	74	53.31	31.9	7.13	30.9	322	84	P	V
		2389.95	49.6	-4.4	54	41.45	31.9	7.13	30.88	322	84	A	V
		2414	104.3	-	-	96.05	31.97	7.16	30.88	322	84	P	V
		2412	94.26	-	-	86.01	31.97	7.16	30.88	322	84	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

WIFI 802.11 ax HE20 Full (Harmonic @ 3m)

WIFI Ant.	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
7		(MHz)	(dBµV/m)	(dB)	(dBµV/m)	(dBµV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE20 Full CH 01 2412MHz		4824	40.82	-33.18	74	61.14	34.26	10.85	65.43	300	360	P	H
		4830	41.01	-32.99	74	61.33	34.26	10.85	65.43	100	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2A- 5250~5350MHz

WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI Ant. 8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 64 5320MHz		5350.7	59.19	-14.81	74	43.48	34.4	10.83	29.52	242	123	P	H
		5350	49.35	-4.65	54	33.64	34.4	10.83	29.52	242	123	A	H
	*	5320	105.35	-	-	89.63	34.4	10.79	29.47	242	123	P	H
		5320	98.17	-	-	82.45	34.4	10.79	29.47	242	123	A	H
		5351.3	59.81	-14.19	74	44.1	34.4	10.83	29.52	134	84	P	V
		5350.1	47.83	-6.17	54	32.12	34.4	10.83	29.52	134	84	A	V
	*	5320	105.96	-	-	90.24	34.4	10.79	29.47	134	84	P	V
		5320	98.84	-	-	83.12	34.4	10.79	29.47	134	84	A	V
Remark	3. No other spurious found. 4. All results are PASS against Peak and Average limit line.												

UNII-2A-5250~5350MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI Ant. 8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax HE20 Full CH 64 5320MHz		10641	42.99	-31.01	74	55.1	37.66	16.38	66.15	100	0	P	H
		10641	43.39	-30.61	74	55.5	37.66	16.38	66.15	300	0	P	V
Remark	3. No other spurious found. 4. All results are PASS against Peak and Average limit line.												

WIFI 802.11ax HE20 Full _CH64_ant7+8& BLE_CH39_ant7&LTE41C_BW=20M+20M

2.4GHz 2400~2483.5MHz

BLE (Band Edge @ 3m)

BLE	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
BLE CH 39 2480MHz		2498.74	61.34	-12.66	74	52.32	32.3	7.32	30.6	244	0	P	H
		2483.5	45.66	-8.34	54	36.82	32.23	7.28	30.67	244	0	A	H
		2480	96.51	-	-	87.67	32.23	7.28	30.67	244	0	P	H
		2480	94.09	-	-	85.25	32.23	7.28	30.67	244	0	A	H
		2484.82	55.84	-18.16	74	47	32.23	7.28	30.67	101	113	P	V
		2483.5	45.54	-8.46	54	36.7	32.23	7.28	30.67	101	113	A	V
		2480	97.98	-	-	89.14	32.23	7.28	30.67	101	113	P	V
		2480	95.55	-	-	86.71	32.23	7.28	30.67	101	113	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

2.4GHz 2400~2483.5MHz

BLE (Harmonic @ 3m)

BLE	Note	Frequency	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Path Loss	Preamp Factor	Ant Pos	Table Pos	Peak Avg.	Pol.
		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
BLE CH 39 2480MHz		4965	40.76	-33.24	74	61.09	34.23	10.89	65.45	200	0	P	H
		7440	42.35	-31.65	74	58.48	35.65	13.55	65.33	200	0	P	H
		4960	40.64	-33.36	74	60.97	34.23	10.89	65.45	300	360	P	V
		7440	43.3	-30.7	74	59.43	35.65	13.55	65.33	300	360	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2A- 5250~5350MHz

WIFI 802.11ax HE20 Full (Band Edge @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
		5350.6	62.17	-11.83	74	46.46	34.4	10.83	29.52	363	51	P	H
		5350.3	50.15	-3.85	54	34.44	34.4	10.83	29.52	363	51	A	H
802.11ax	*	5320	110.09	-	-	94.37	34.4	10.79	29.47	363	51	P	H
HE20 Full		5320	102.88	-	-	87.16	34.4	10.79	29.47	363	51	A	H
CH 64		5350.6	60.16	-13.84	74	44.45	34.4	10.83	29.52	100	304	P	V
5320MHz		5350.4	50.05	-3.95	54	34.34	34.4	10.83	29.52	100	304	A	V
	*	5320	109.35	-	-	93.63	34.4	10.79	29.47	100	304	P	V
		5320	101.98	-	-	86.26	34.4	10.79	29.47	100	304	A	V
Remark	5. No other spurious found. 6. All results are PASS against Peak and Average limit line.												

UNII-2A5250~5350MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI Ant. 7+8	Note	Frequency (MHz)	Level (dBμV/m)	Over Limit (dB)	Limit Line (dBμV/m)	Read Level (dBμV)	Antenna Factor (dB/m)	Path Loss (dB)	Preamp Factor (dB)	Ant Pos (cm)	Table Pos (deg)	Peak Avg. (P/A)	Pol. (H/V)
802.11ax		10641	59.29	-14.71	74	71.4	37.66	16.38	66.15	297	4	P	H
HE20 Full		10641	48.38	-5.62	54	60.49	37.66	16.38	66.15	297	4	A	H
CH 64		10641	55.74	-18.26	74	67.85	37.66	16.38	66.15	100	197	P	V
5320MHz		10641	46.21	-7.79	54	58.32	37.66	16.38	66.15	100	197	A	V
Remark	5. No other spurious found. 6. All results are PASS against Peak and Average limit line.												

Note symbol

*	**Fundamental Frequency** which can be ignored. However, the level of any unwanted emissions shall not exceed the level of the fundamental frequency.
!	Test result is **over limit** line.
P/A	**P**eak or **A**verage
H/V	**H**orizontal or **V**ertical

A calculation example for radiated spurious emission is shown as below:

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
7+8		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
		2390	43.54	-10.46	54	42.6	32.22	4.58	35.86	103	308	A	H

1. Path Loss(dB) = Cable loss(dB) + Filter loss(dB) + Attenuator loss(dB)
2. Level(dBμV/m) = Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)
3. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

For Peak Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 54.51(dBμV) – 35.86 (dB)

= 55.45 (dBμV/m)

2. Over Limit(dB)

= Level(dBμV/m) – Limit Line(dBμV/m)

= 55.45(dBμV/m) – 74(dBμV/m)

= -18.55(dB)

For Average Limit @ 2390MHz:

1. Level(dBμV/m)

= Antenna Factor(dB/m) + Path Loss(dB) + Read Level(dBμV) - Preamp Factor(dB)

= 32.22(dB/m) + 4.58(dB) + 42.6(dBμV) – 35.86 (dB)

= 43.54 (dBμV/m)

2. Over Limit(dB) = Level(dBμV/m) – Limit Line(dBμV/m)

= 43.54(dBμV/m) – 54(dBμV/m)

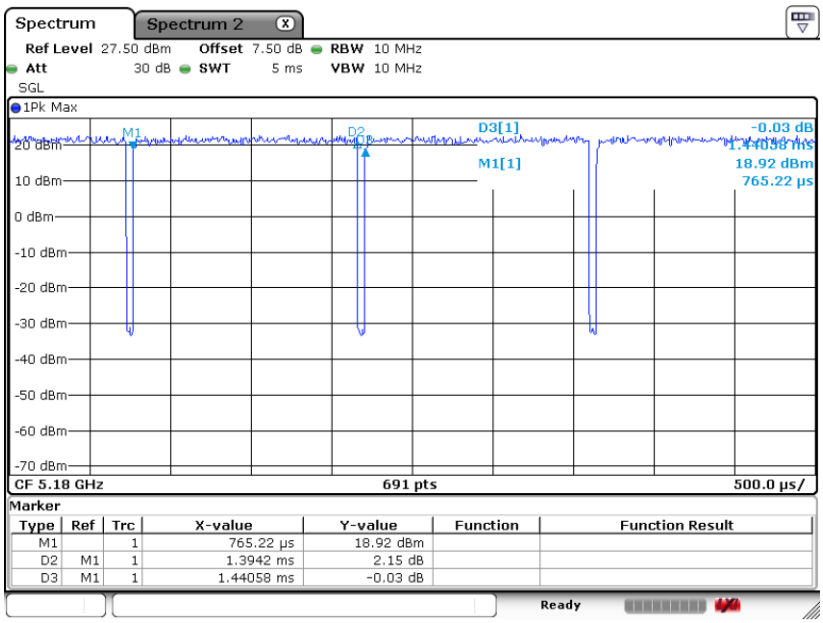
= -10.46(dB)

Both peak and average measured complies with the limit line, so test result is “PASS”.

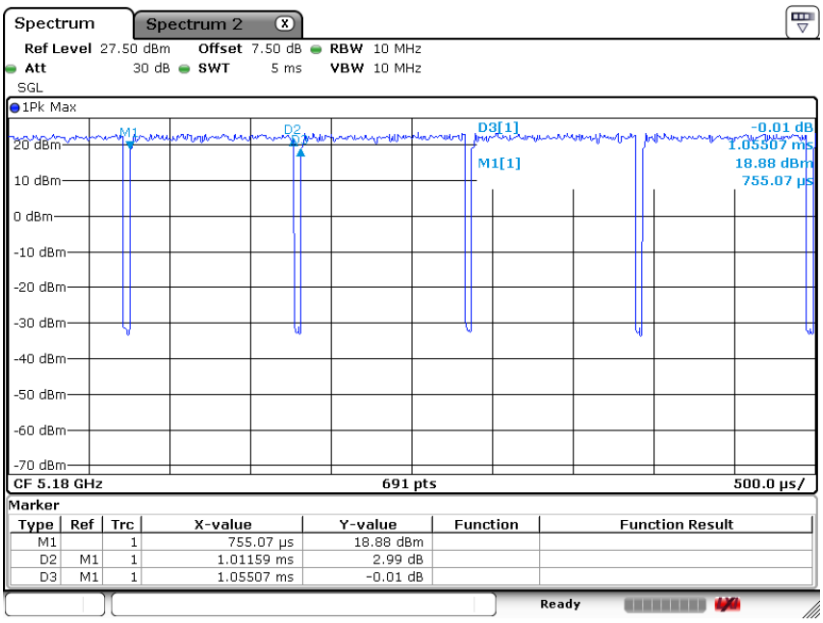
Appendix D. Duty Cycle Plots

Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
802.11a	96.78	1.394	0.717	0.75KHz
802.11ax HE20	95.88	1.012	0.989	1KHz
802.11ax HE40	92.46	0.533	1.875	3.3KHz
802.11ax HE80	86.84	0.287	3.485	3.6KHz
802.11ax HE20_RU26	98.84	-	-	10Hz
802.11ax HE20_RU52	99.22	-	-	10Hz
802.11ax HE20_RU106	98.37	-	-	10Hz

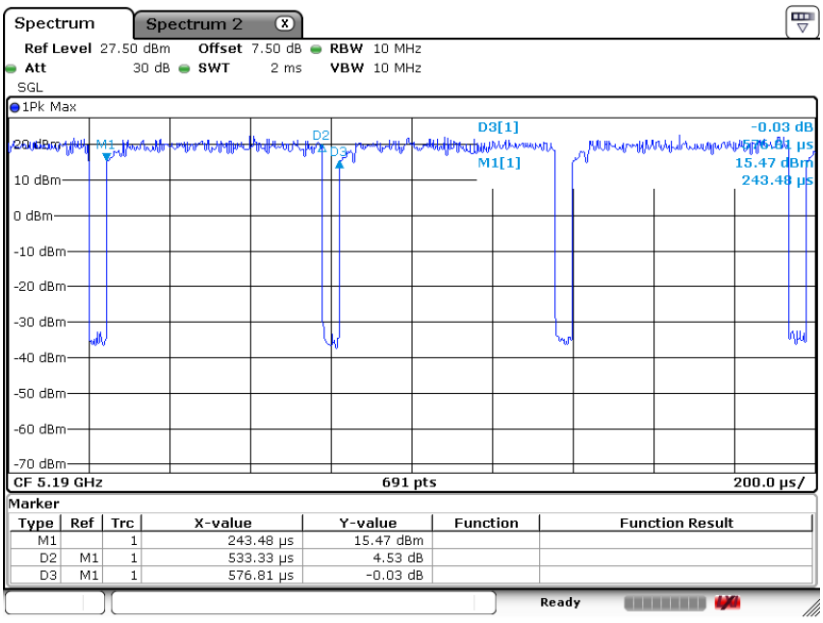
802.11a



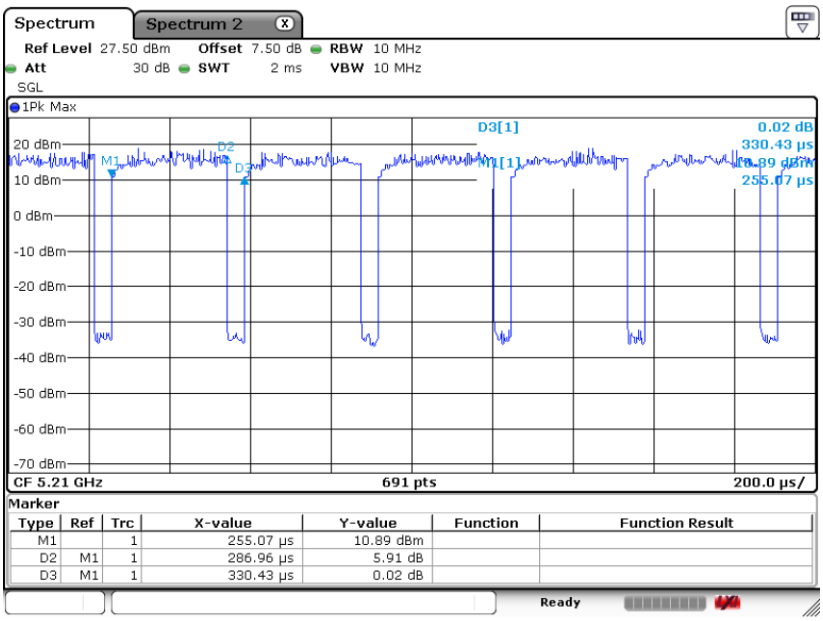
802.11ax HE20



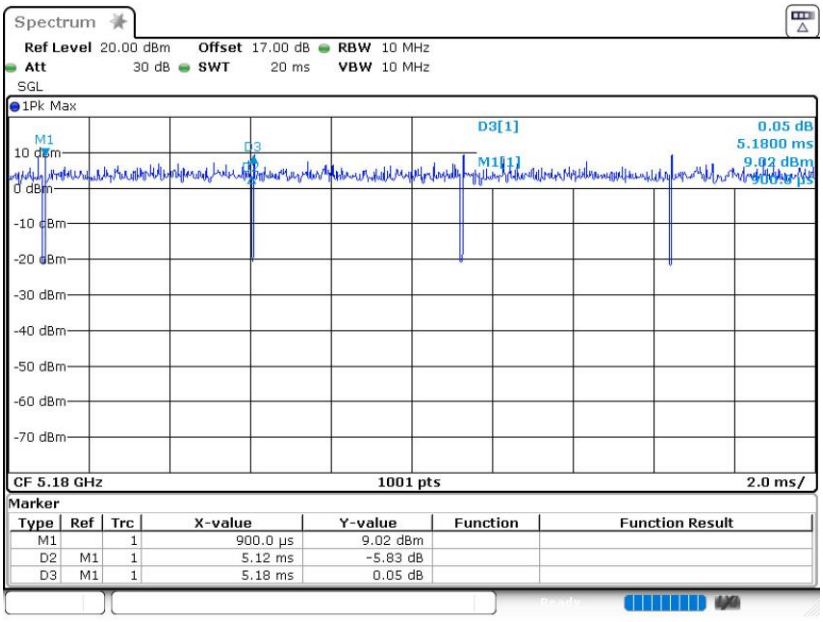
802.11 ax HE40



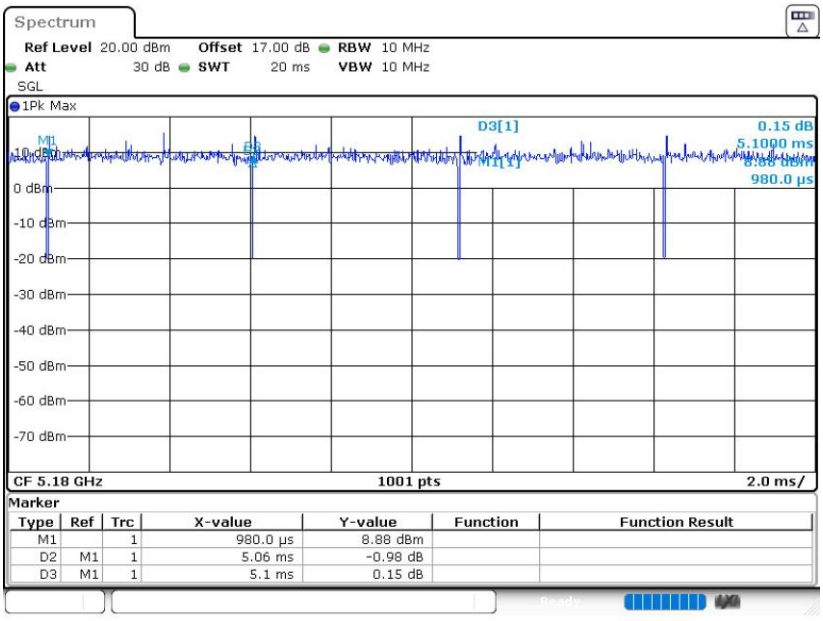
802.11 ax HE80



802.11ax HE20-26RU



802.11ax HE20-52RU



802.11ax HE20-106RU