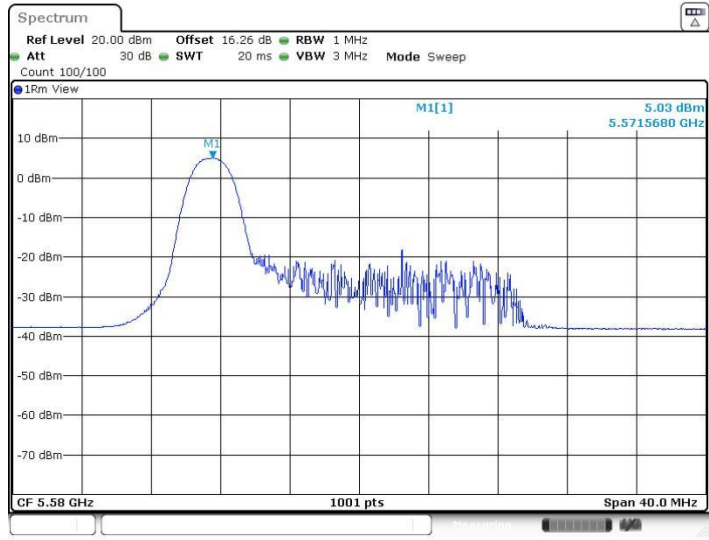


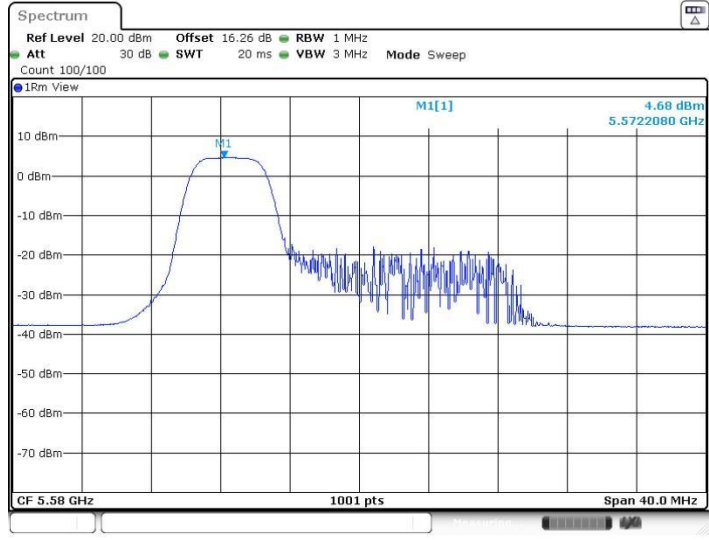


11AX20MIMO_Ant1_5580_26Tone_RU0

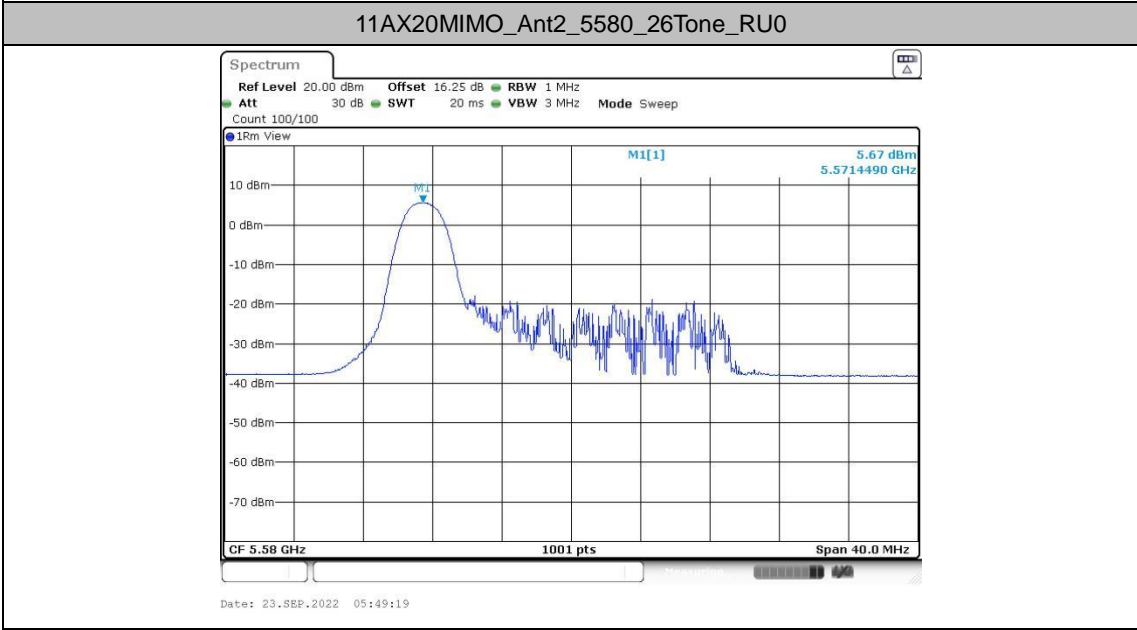
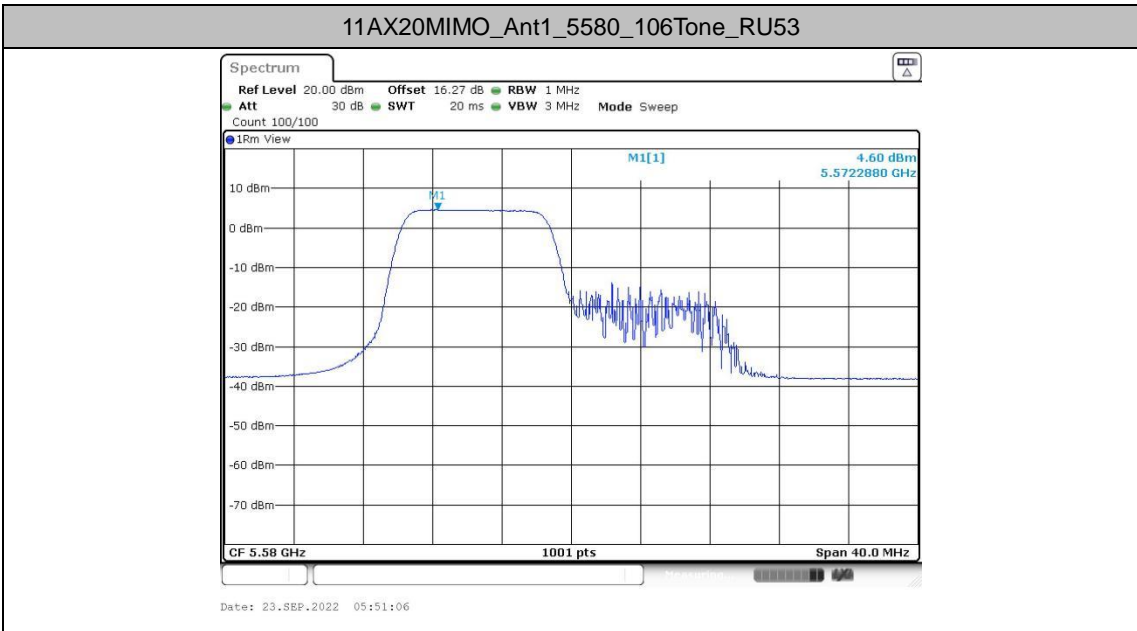


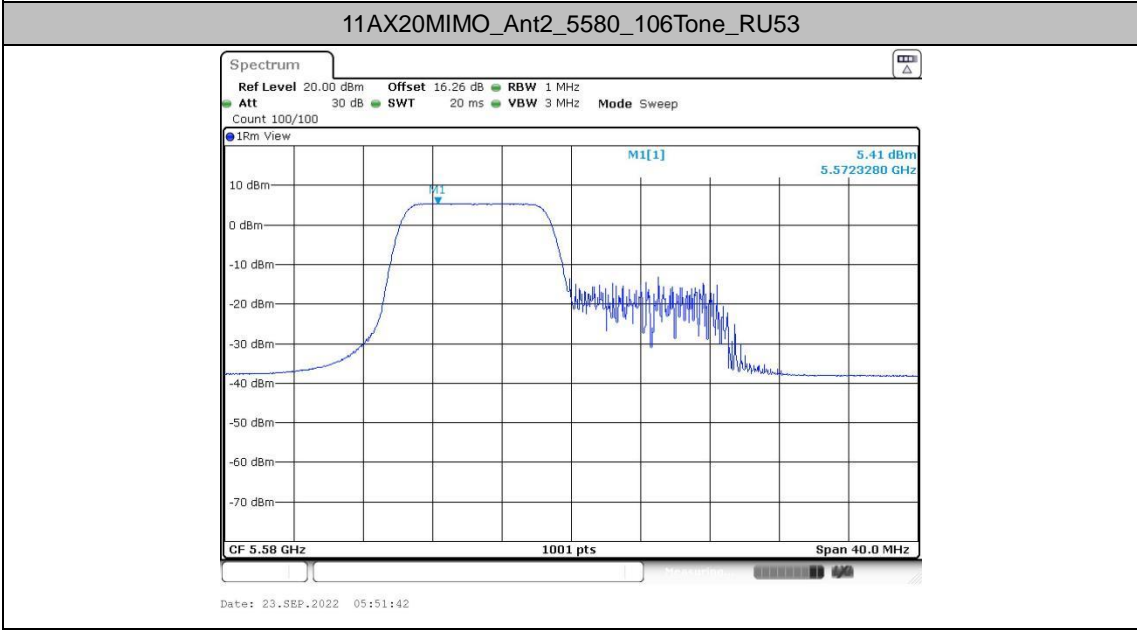
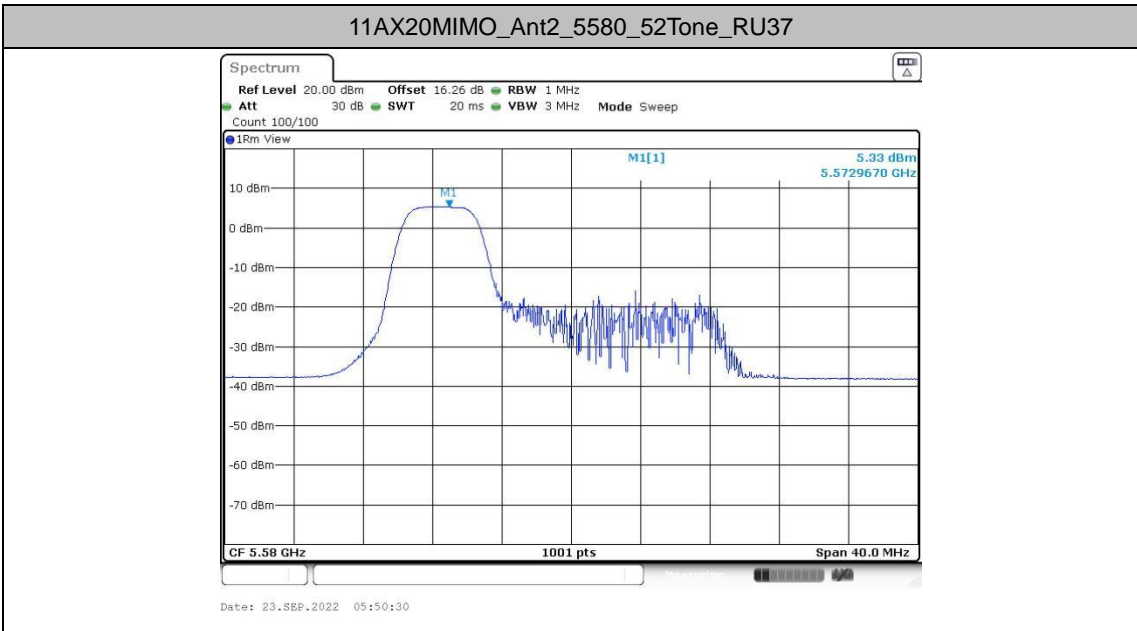
Date: 23.SEP.2022 05:48:43

11AX20MIMO_Ant1_5580_52Tone_RU37



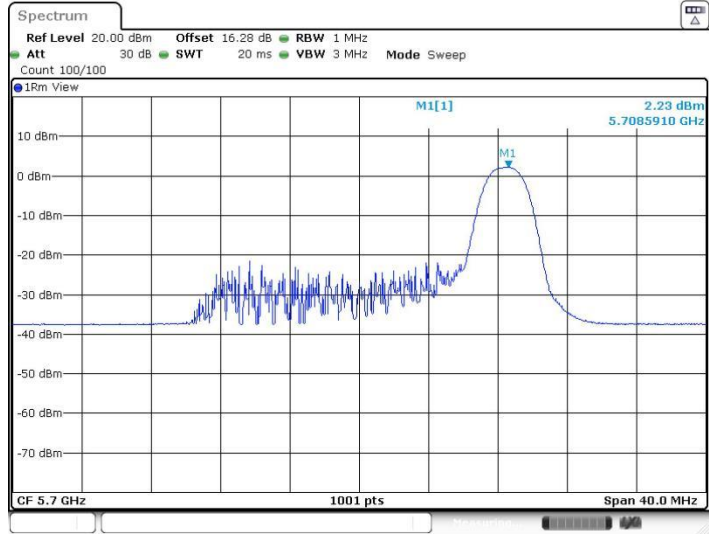
Date: 23.SEP.2022 05:49:56





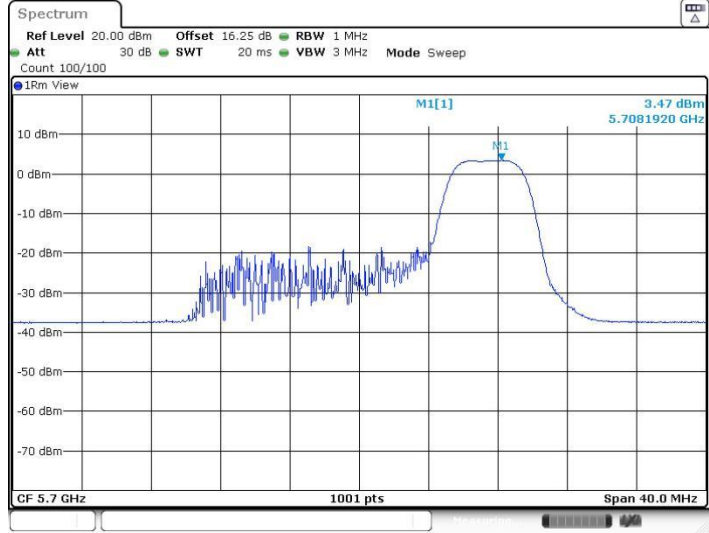


11AX20MIMO_Ant1_5700_26Tone_RU8

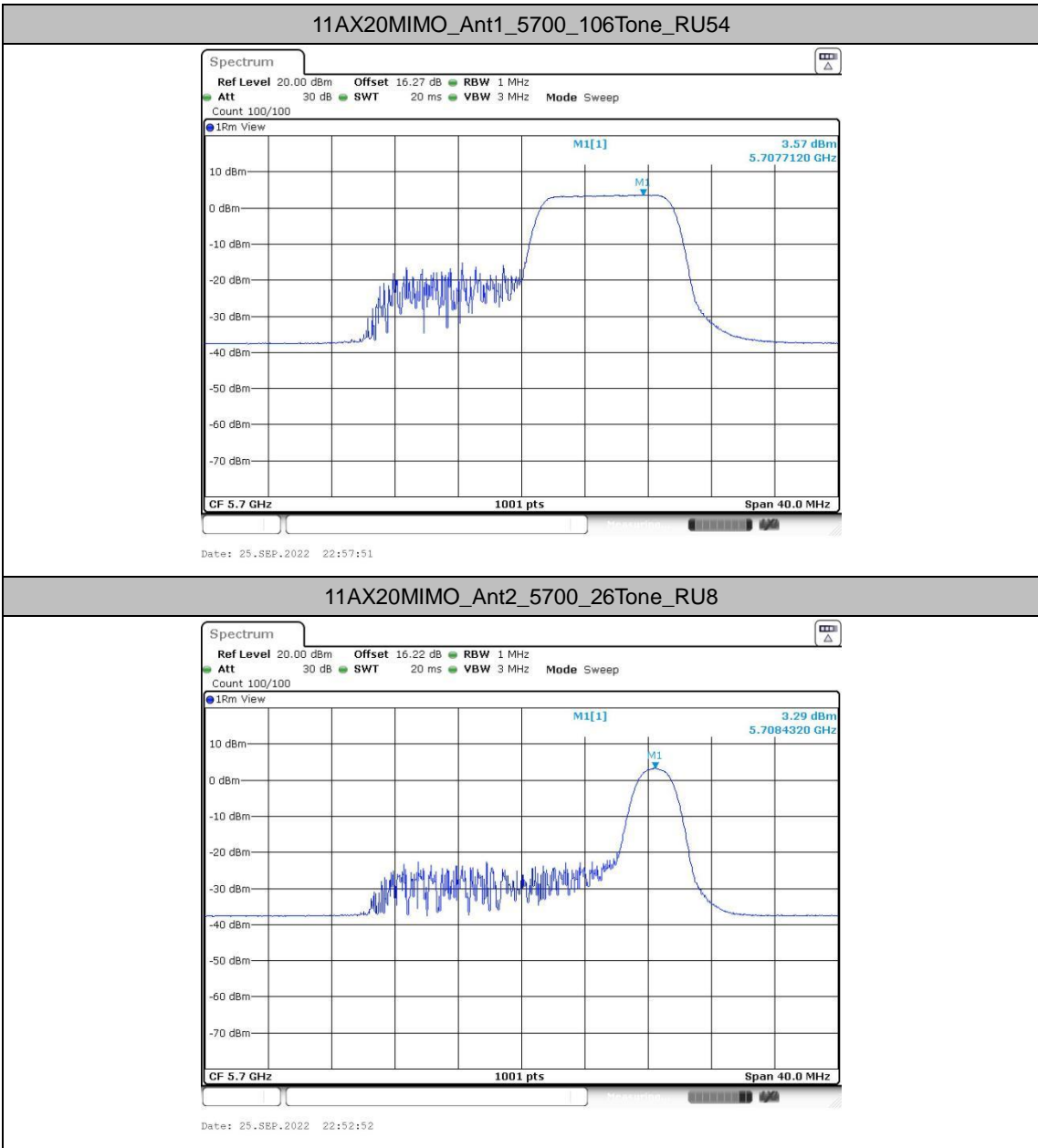


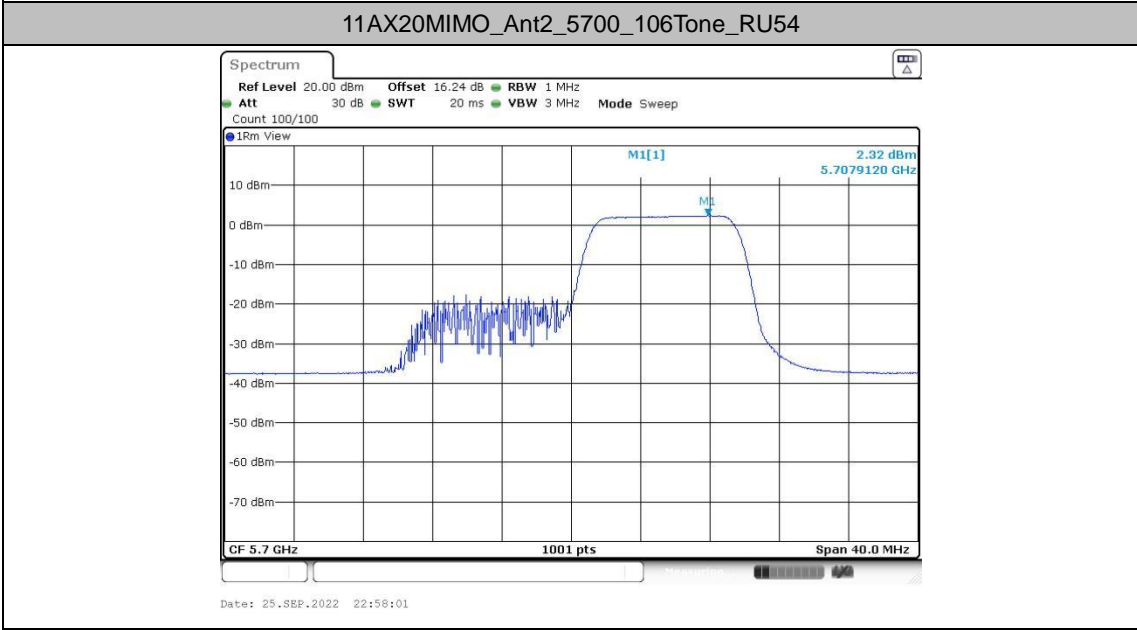
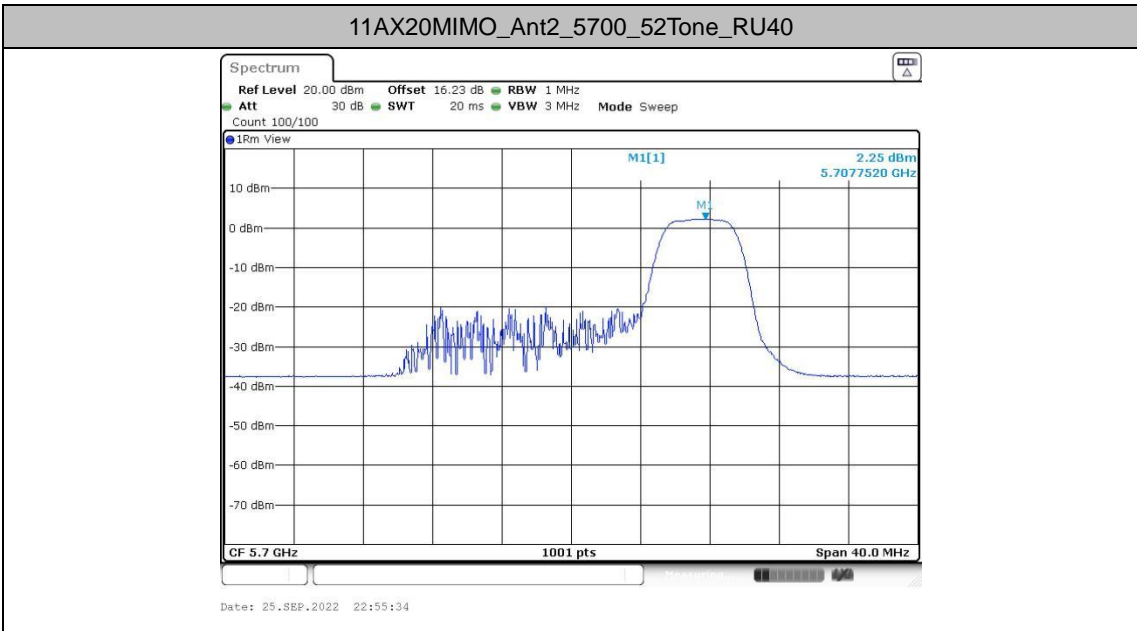
Date: 25_SEP.2022 22:52:41

11AX20MIMO_Ant1_5700_52Tone_RU40



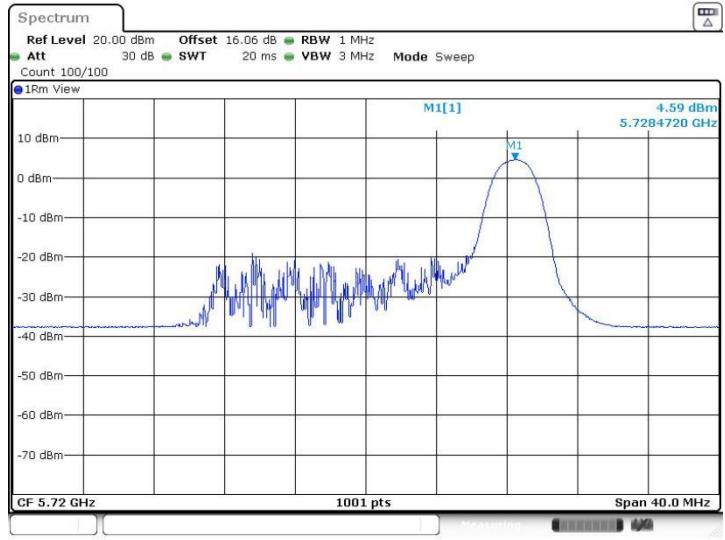
Date: 25_SEP.2022 22:55:23



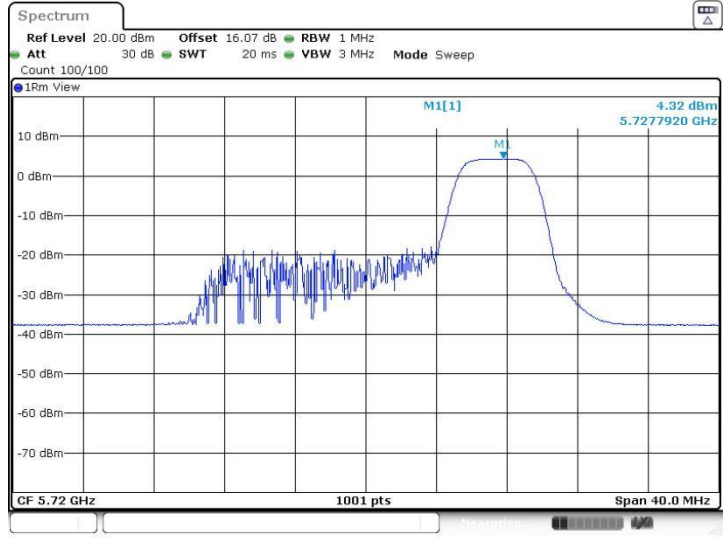




11AX20MIMO_Ant1_5720_26Tone_RU8

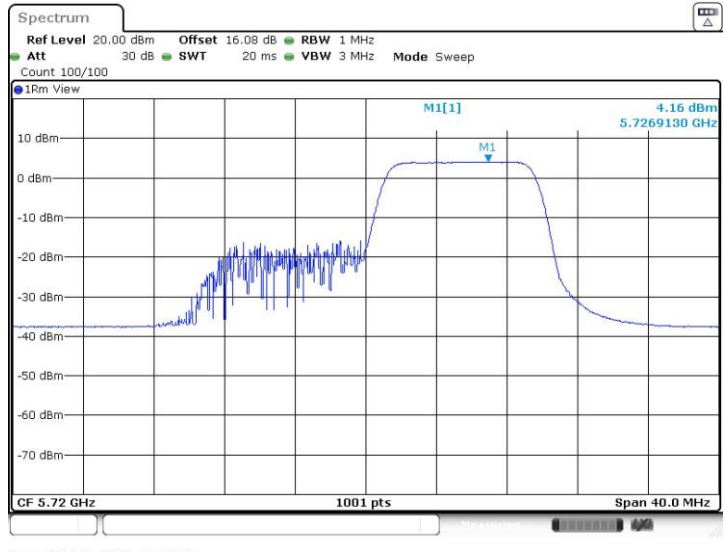


11AX20MIMO_Ant1_5720_52Tone_RU40

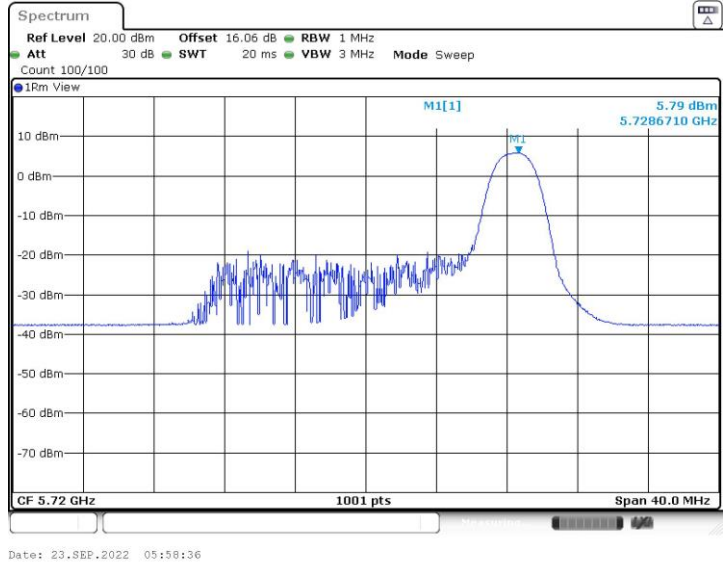




11AX20MIMO_Ant1_5720_106Tone_RU54

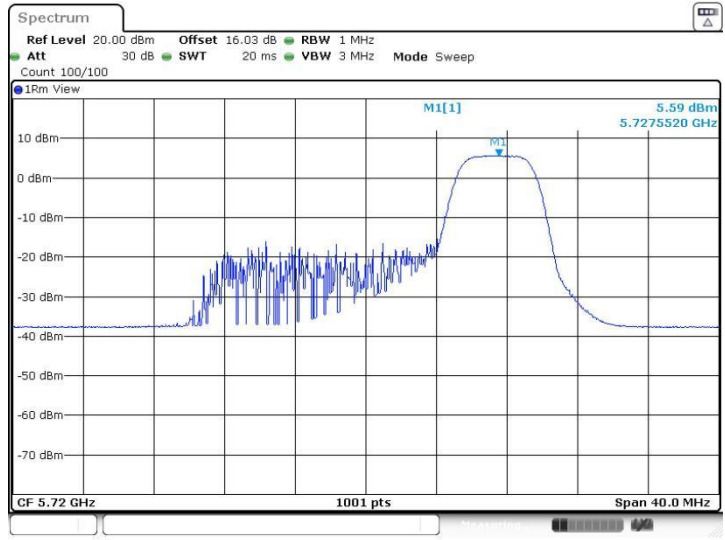


11AX20MIMO_Ant2_5720_26Tone_RU8

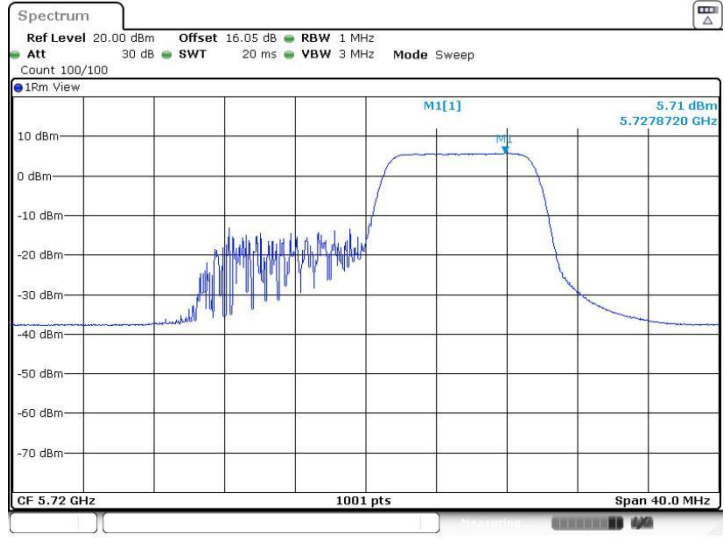


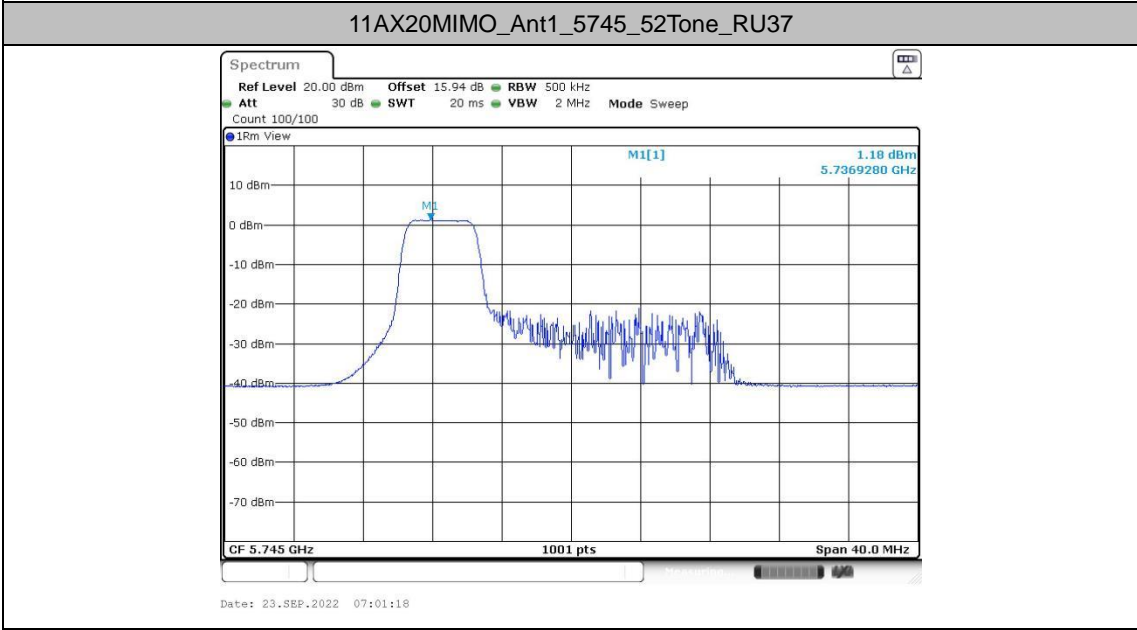
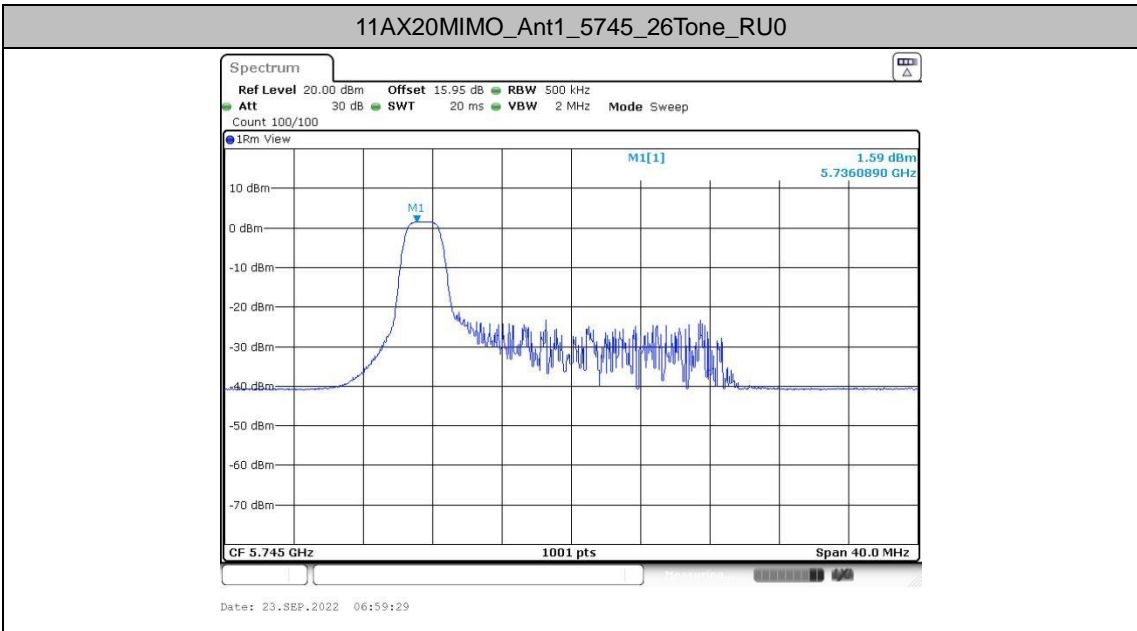


11AX20MIMO_Ant2_5720_52Tone_RU40



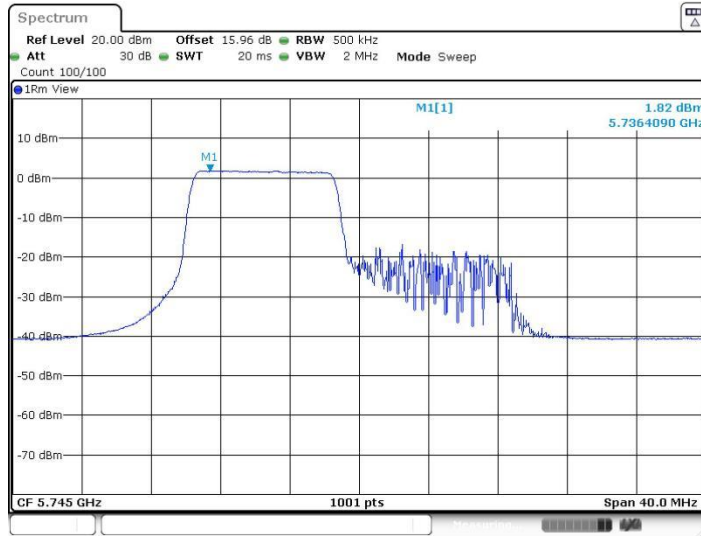
11AX20MIMO_Ant2_5720_106Tone_RU54



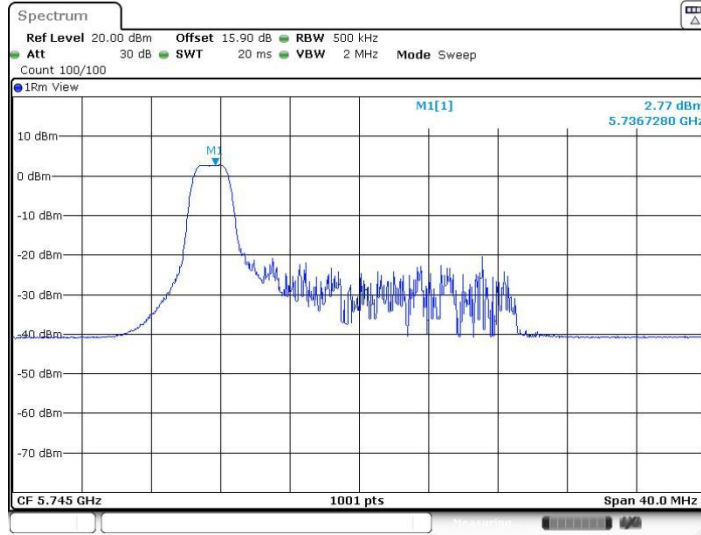




11AX20MIMO_Ant1_5745_106Tone_RU53

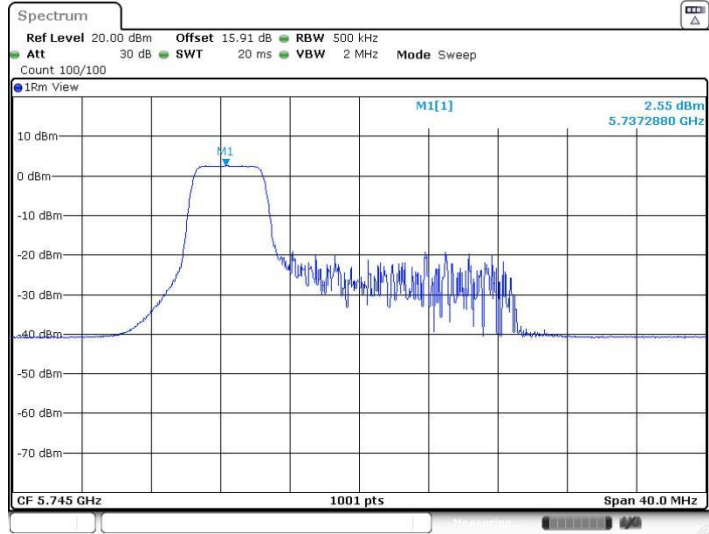


11AX20MIMO_Ant2_5745_26Tone_RU0



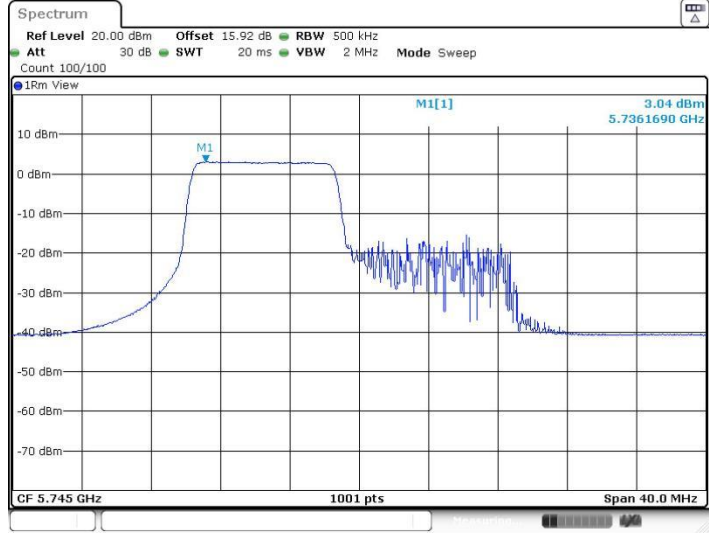


11AX20MIMO_Ant2_5745_52Tone_RU37

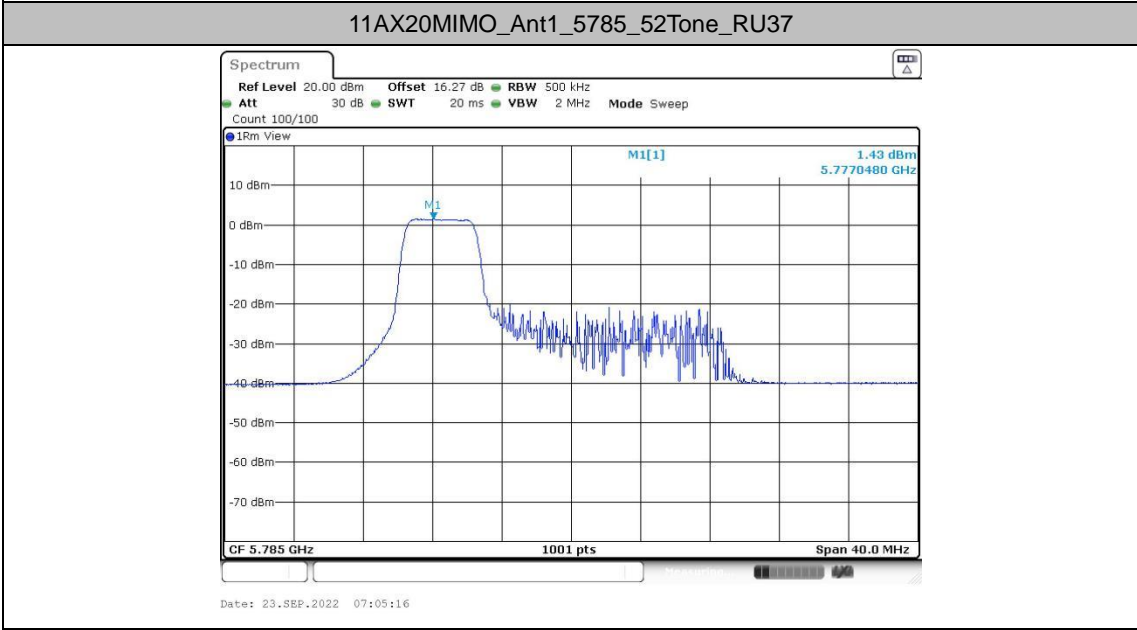
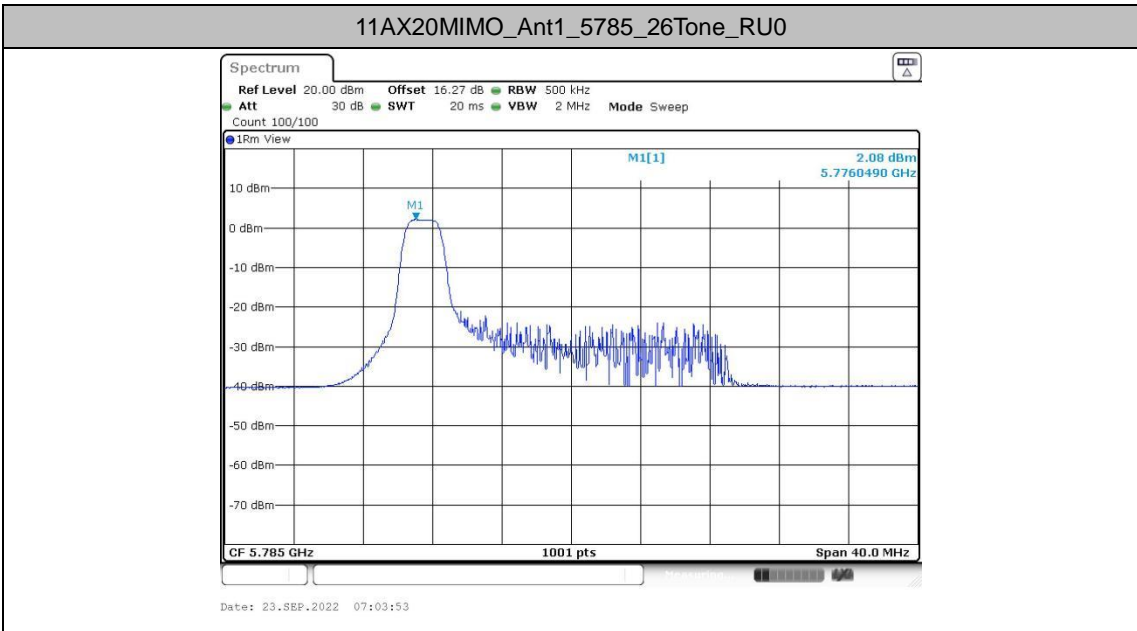


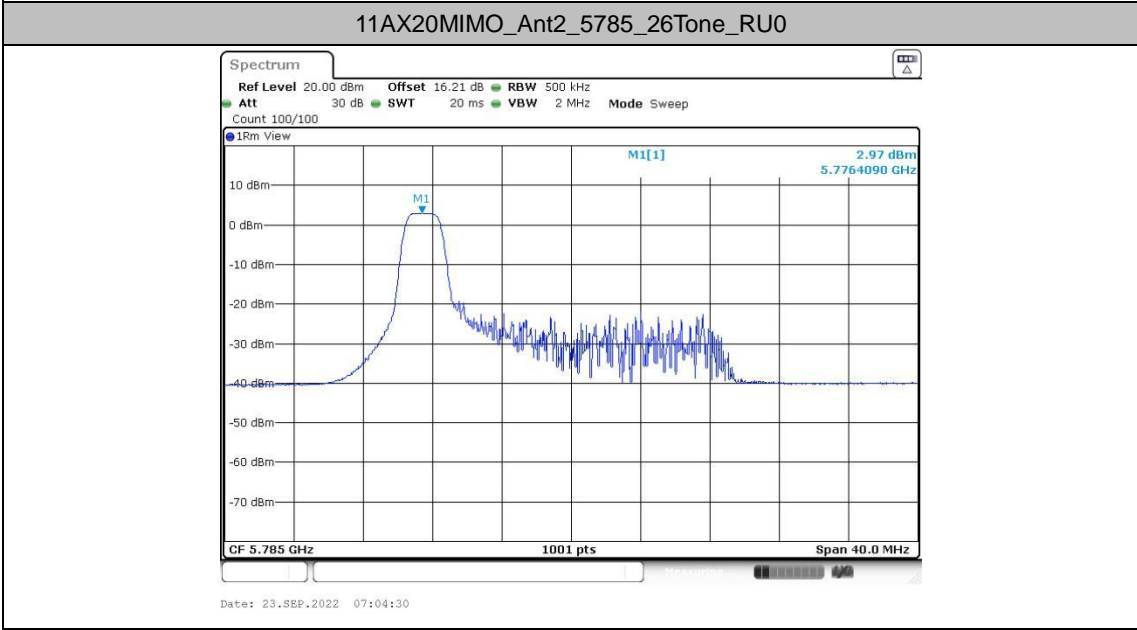
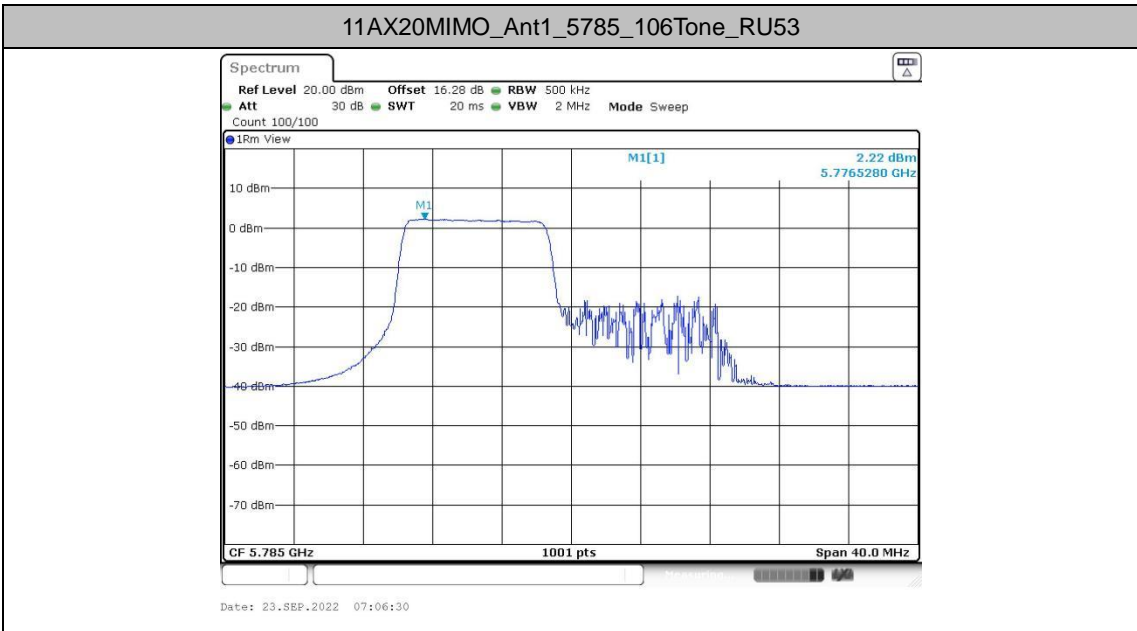
Date: 23.SEP.2022 07:01:50

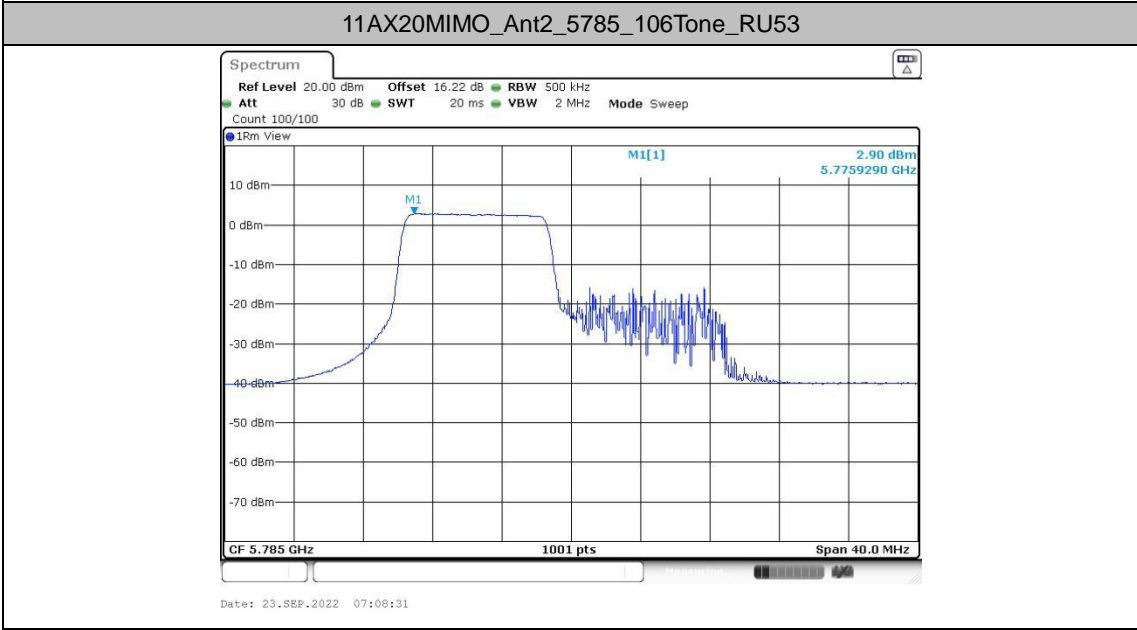
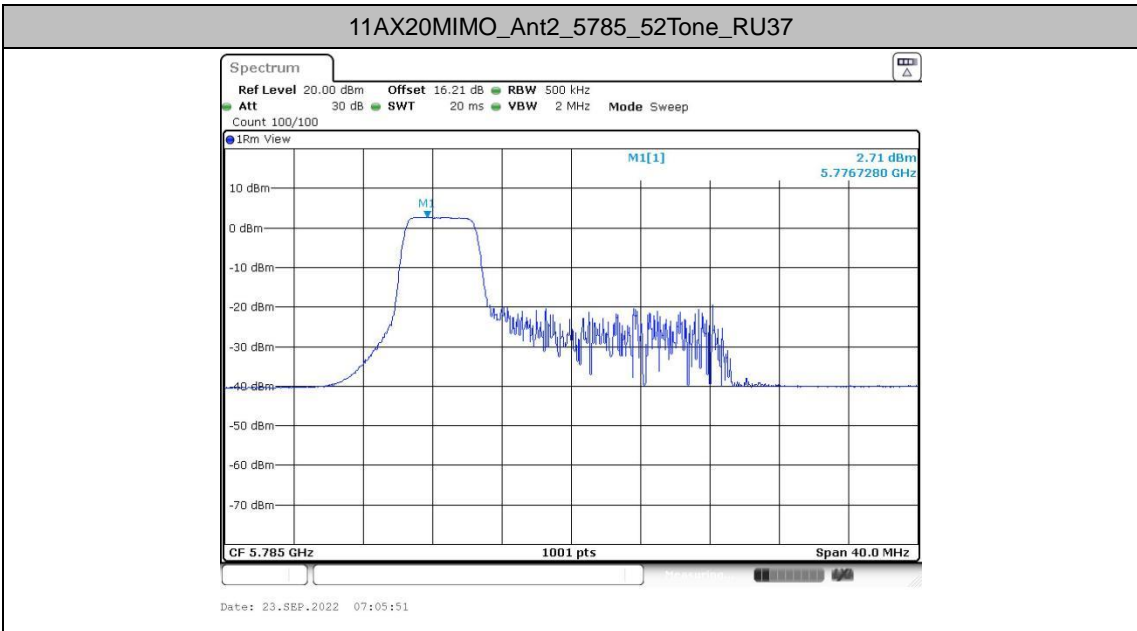
11AX20MIMO_Ant2_5745_106Tone_RU53



Date: 23.SEP.2022 07:03:03

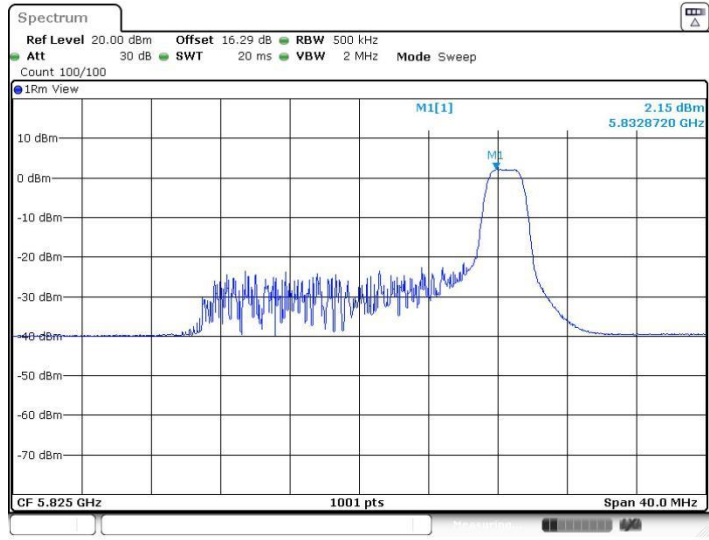






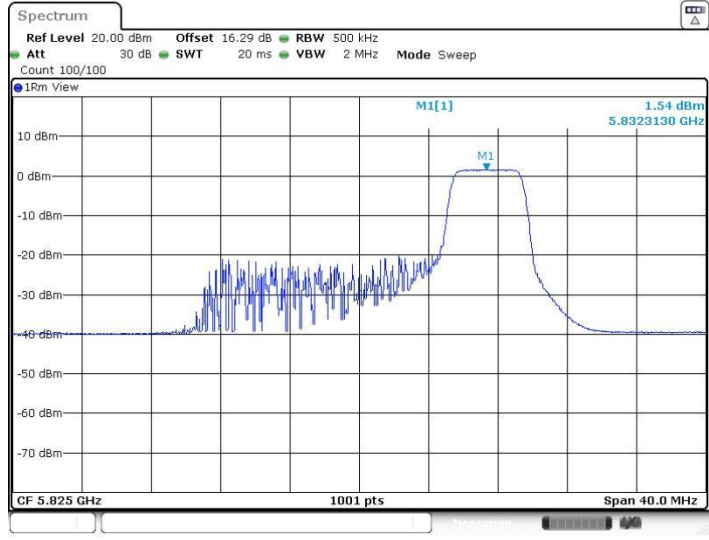


11AX20MIMO_Ant1_5825_26Tone_RU8

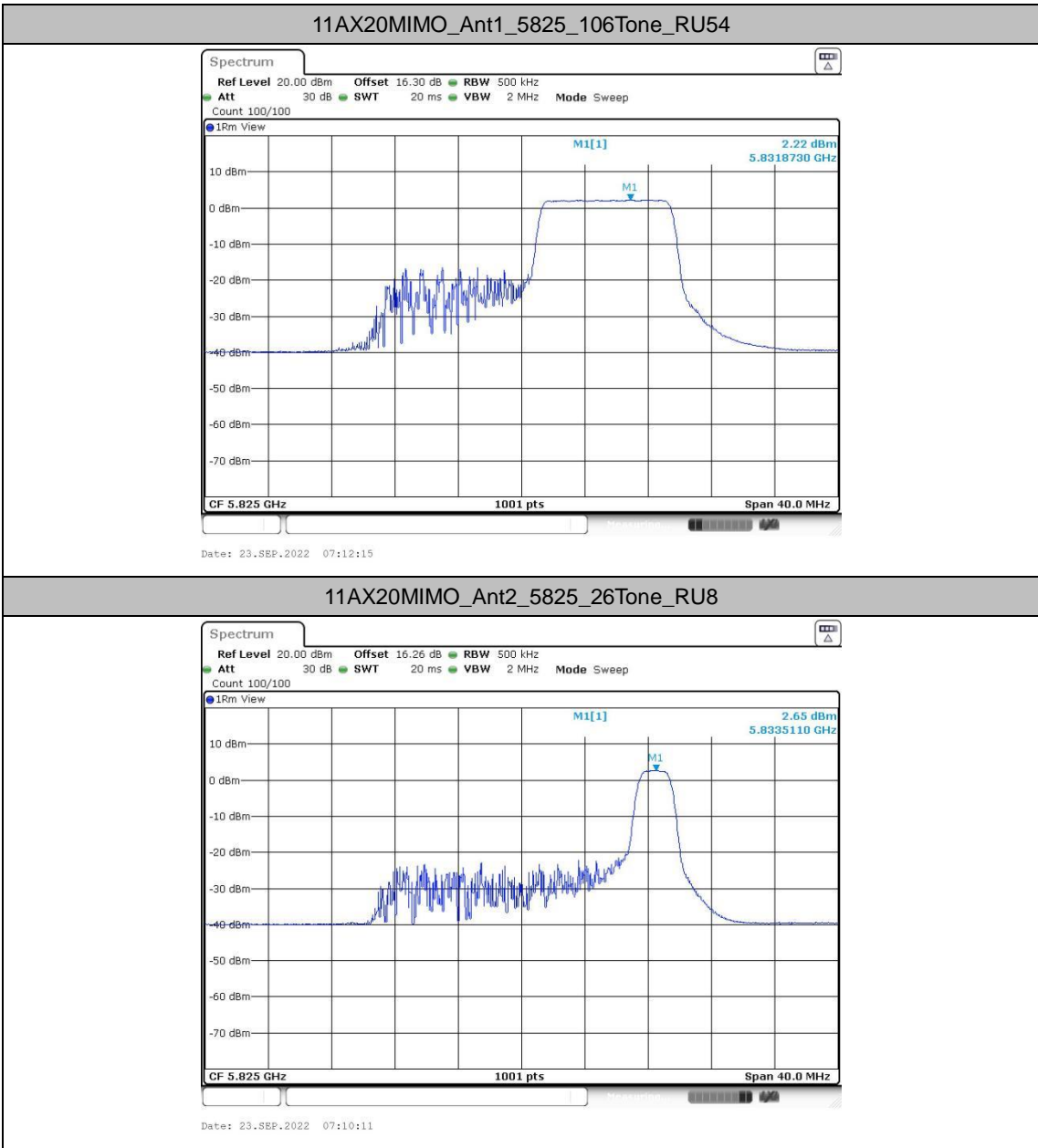


Date: 23.SEP.2022 07:09:39

11AX20MIMO_Ant1_5825_52Tone_RU40

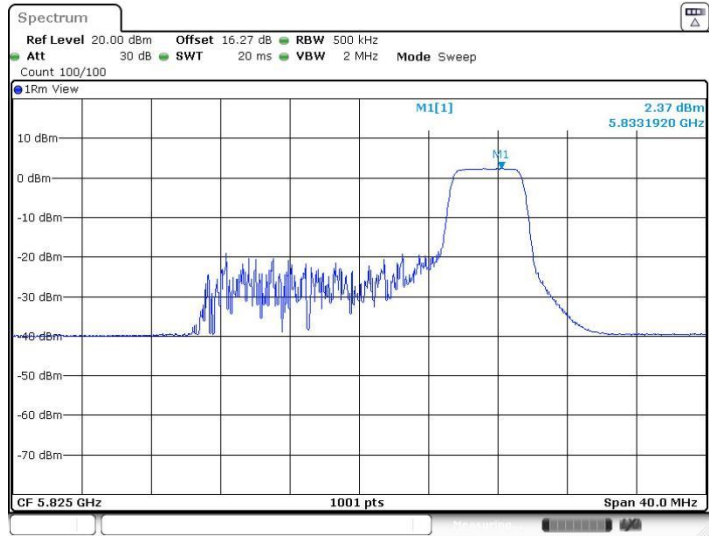


Date: 23.SEP.2022 07:10:57



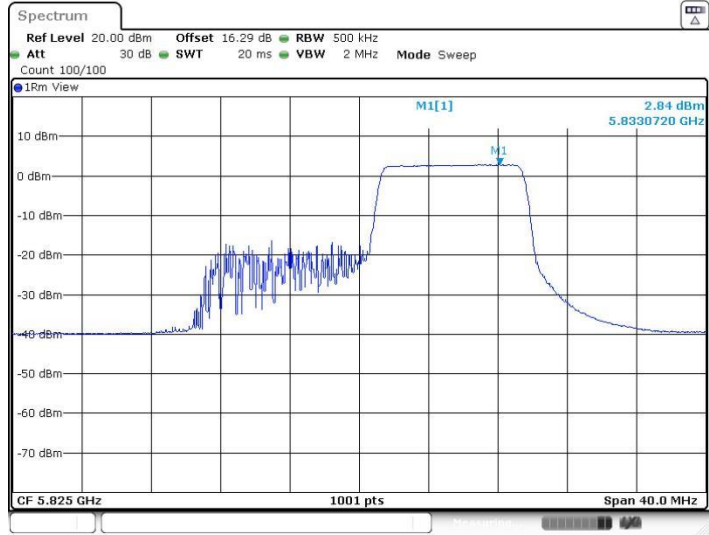


11AX20MIMO_Ant2_5825_52Tone_RU40



Date: 23.SEP.2022 07:11:32

11AX20MIMO_Ant2_5825_106Tone_RU54

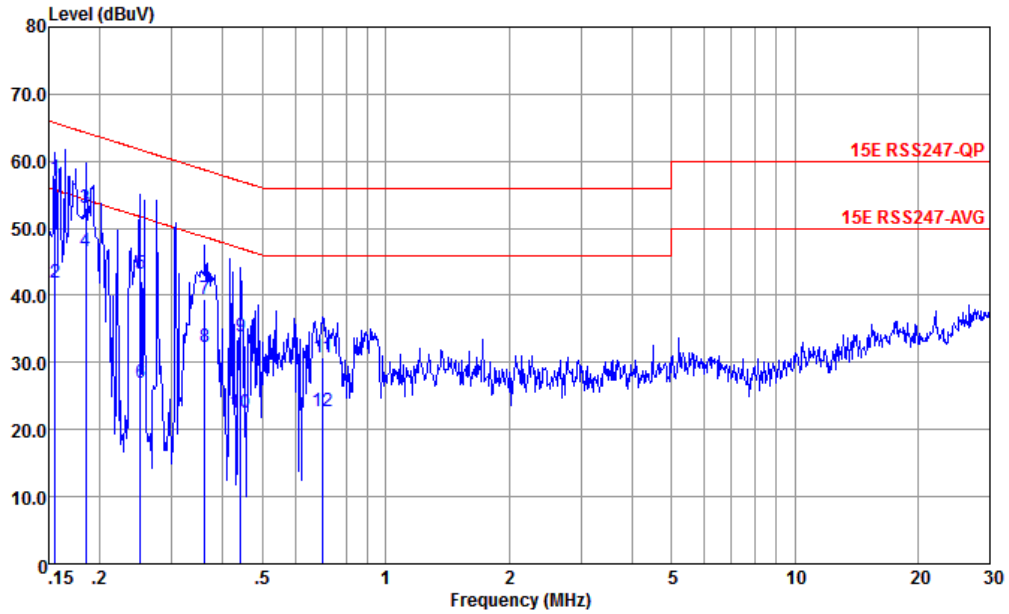


Date: 23.SEP.2022 07:12:49



Appendix B. AC Conducted Emission Test Results

Test Engineer :	Amos Zhang	Temperature :	25.3~26.2°C
		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.		

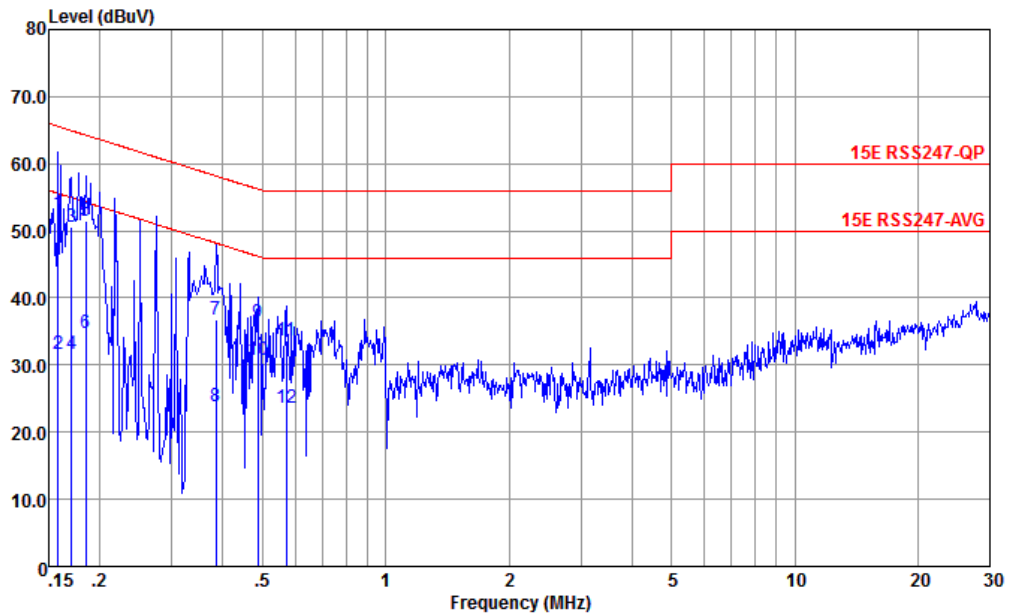


Site : CO01-KS
 Condition : 15E RSS247-QP LISN-060105-LINE LINE

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	dB	
1 *	0.156	57.39	-8.30	65.69	46.90	0.06	10.43	QP
2	0.156	41.79	-23.90	65.69	31.30	0.06	10.43	Average
3	0.184	53.06	-11.22	64.28	42.61	0.03	10.42	QP
4	0.184	46.66	-17.62	64.28	36.21	0.03	10.42	Average
5	0.251	43.22	-18.51	61.73	32.80	0.04	10.38	QP
6	0.251	27.02	-34.71	61.73	16.60	0.04	10.38	Average
7	0.361	39.54	-19.15	58.69	29.19	0.03	10.32	QP
8	0.361	32.30	-26.39	58.69	21.95	0.03	10.32	Average
9	0.442	33.85	-23.17	57.02	23.60	-0.01	10.26	QP
10	0.442	22.45	-34.57	57.02	12.20	-0.01	10.26	Average
11	0.701	30.67	-25.33	56.00	20.60	-0.09	10.16	QP
12	0.701	22.67	-33.33	56.00	12.60	-0.09	10.16	Average



Test Engineer :	Amos Zhang	Temperature :	25.3~26.2°C
		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-NEUTRAL NEUTRAL

	Freq	Level	Over	Limit	Read	LISN	Cable	Remark
	MHz	dBuV	Limit	Line	Level	Factor	Loss	
			dB	dBuV	dBuV	dB	dB	
1	0.158	52.66	-12.90	65.56	42.20	0.03	10.43	QP
2	0.158	31.66	-33.90	65.56	21.20	0.03	10.43	Average
3	0.170	50.66	-14.28	64.94	40.19	0.04	10.43	QP
4	0.170	31.66	-33.28	64.94	21.19	0.04	10.43	Average
5 *	0.184	51.57	-12.71	64.28	41.11	0.04	10.42	QP
6	0.184	34.77	-29.51	64.28	24.31	0.04	10.42	Average
7	0.385	36.84	-21.33	58.17	26.59	-0.06	10.31	QP
8	0.385	23.74	-34.43	58.17	13.49	-0.06	10.31	Average
9	0.486	36.34	-19.89	56.23	26.20	-0.08	10.22	QP
10	0.486	30.64	-26.59	56.23	20.50	-0.08	10.22	Average
11	0.570	33.71	-22.29	56.00	23.60	-0.08	10.19	QP
12	0.570	23.71	-32.29	56.00	13.60	-0.08	10.19	Average

Note:

- Level(dBμV) = Read Level(dBμV) + LISN Factor(dB) + Cable Loss(dB)
- 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 802.11a (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.
5+7		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 48 5240MHz		7330	48.61	-25.39	74	63.28	35.7	11.69	62.06	300	0	P	H
		10480	45.09	-23.21	68.3	54.84	37.69	14.21	61.65	300	0	P	H
		15723	58.62	-15.38	74	62.82	40.45	17.61	62.26	299	103	P	H
		15723	48.58	-5.42	54	52.78	40.45	17.61	62.26	299	103	A	H
		7341	48.43	-25.57	74	63.09	35.7	11.7	62.06	100	0	P	V
		10476	44.9	-23.4	68.3	54.69	37.69	14.2	61.68	100	0	P	V
		15723	60.79	-13.21	74	64.99	40.45	17.61	62.26	100	305	P	V
		15723	50.62	-3.38	54	54.82	40.45	17.61	62.26	100	305	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 HE20 Partial 26 (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.
5+7		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE20 Partial 26/0 CH 36 5180MHz		5109.44	53.23	-20.77	74	41.15	34.1	9.76	31.78	112	53	P	H
		5129.6	43.23	-10.77	54	31.15	34.1	9.77	31.79	112	53	A	H
		5170	107.19	-	-	95.11	34.1	9.8	31.82	112	53	P	H
		5170	99.51	-	-	87.43	34.1	9.8	31.82	112	53	A	H
		5149.76	53.13	-20.87	74	41.06	34.1	9.78	31.81	400	24	P	V
		5122.08	42.95	-11.05	54	30.88	34.1	9.76	31.79	400	24	A	V
		5170	104.76	-	-	92.68	34.1	9.8	31.82	400	24	P	V
		5170	98.55	-	-	86.47	34.1	9.8	31.82	400	24	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 HE80 Full (Band Edge @ 3m)

WIFI Ant. 5+7	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		5132.96	60.79	-13.21	74	48.71	34.1	9.77	31.79	100	224	P	H
		5150	50.72	-3.28	54	38.65	34.1	9.78	31.81	100	224	A	H
	*	5194	102.3	-	-	90.19	34.1	9.83	31.82	100	224	P	H
		5194	94.27	-	-	82.16	34.1	9.83	31.82	100	224	A	H
		5393.16	54.18	-19.82	74	41.45	34.75	9.93	31.95	100	224	P	H
		5351.4	43.6	-10.4	54	30.97	34.65	9.91	31.93	100	224	A	H
		5135.2	58.46	-15.54	74	46.38	34.1	9.77	31.79	104	77	P	V
		5150	48.03	-5.97	54	35.96	34.1	9.78	31.81	104	77	A	V
	*	5176	97.15	-	-	85.06	34.1	9.81	31.82	104	77	P	V
		5176	89.91	-	-	77.82	34.1	9.81	31.82	104	77	A	V
		5373.18	52.97	-21.03	74	40.28	34.7	9.92	31.93	104	77	P	V
	5393.16	42.75	-11.25	54	30.02	34.75	9.93	31.95	104	77	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 HE80 Full (Harmonic @ 3m)

WIFI Ant. 5+7	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		10420	45.9	-22.4	68.3	55.83	37.67	14.17	61.77	300	0	P	H
		10421	46.52	-21.78	68.3	56.44	37.67	14.17	61.76	100	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 802.11ax HE20 Full (Band Edge @ 3m)

WIFI Ant. 5+7	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		5361.6	55.5	-18.5	74	42.81	34.7	9.92	31.93	104	222	P	H
		5350	46.96	-7.04	54	34.33	34.65	9.91	31.93	104	222	A	H
	*	5326	110.59	-	-	98.06	34.55	9.89	31.91	104	222	P	H
		5326	102.94	-	-	90.41	34.55	9.89	31.91	104	222	A	H
		5361.4	53.62	-20.38	74	40.93	34.7	9.92	31.93	136	75	P	V
		5359.7	43.24	-10.76	54	30.61	34.65	9.91	31.93	136	75	A	V
	*	5326	105.41	-	-	92.88	34.55	9.89	31.91	136	75	P	V
		5326	97.65	-	-	85.12	34.55	9.89	31.91	136	75	A	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 (Harmonic @ 3m)

WIFI Ant. 5+7	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		7451	49.27	-24.73	74	63.49	35.7	11.78	61.7	300	0	P	H
		10640	44.98	-29.02	74	54.62	37.78	14.32	61.74	300	0	P	H
		15965	59.33	-14.67	74	62.17	40.93	17.73	61.5	100	336	P	H
		15965	48.37	-5.63	54	51.21	40.93	17.73	61.5	100	336	A	H
		7440	49.33	-24.67	74	63.55	35.7	11.78	61.7	100	0	P	V
		10641	46.18	-27.82	74	55.82	37.78	14.32	61.74	100	0	P	V
		15965	61.13	-12.87	74	63.97	40.93	17.73	61.5	100	302	P	V
			15965	50.78	-3.22	54	53.62	40.93	17.73	61.5	100	302	A
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



UNII-2A- 5250~5350MHz
WIFI 802.11ax HE40 Full (Band Edge @ 3m)

WIFI Ant. 5+7	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 62 5310MHz		5135.04	53.28	-20.72	74	41.2	34.1	9.77	31.79	127	211	P	H
		5117.28	42.81	-11.19	54	30.73	34.1	9.76	31.78	127	211	A	H
	*	5314	107.33	-	-	94.79	34.55	9.89	31.9	127	211	P	H
		5314	97.31	-	-	84.77	34.55	9.89	31.9	127	211	A	H
		5355.4	60.62	-13.38	74	47.99	34.65	9.91	31.93	127	211	P	H
		5355.2	50.61	-3.39	54	37.98	34.65	9.91	31.93	127	211	A	H
		5104.96	55.22	-18.78	74	43.16	34.1	9.74	31.78	100	71	P	V
		5116.96	42.82	-11.18	54	30.74	34.1	9.76	31.78	100	71	A	V
	*	5296	100.07	-	-	87.56	34.5	9.89	31.88	100	71	P	V
		5296	92.33	-	-	79.82	34.5	9.89	31.88	100	71	A	V
		5353.3	56.24	-17.76	74	43.61	34.65	9.91	31.93	100	71	P	V
		5352.7	47.02	-6.98	54	34.39	34.65	9.91	31.93	100	71	A	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 HE40 Full (Harmonic @ 3m)

WIFI Ant. 5+7	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 62 5310MHz		10619	45.84	-28.16	74	55.5	37.77	14.31	61.74	300	0	P	H
		10619	46.77	-27.23	74	56.43	37.77	14.31	61.74	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



UNII-2C- - 5470~5725MHz

WIFI 802.11ax HE160 Full (Band Edge @ 3m)

WIFI Ant. 5+7	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 HE160 Full CH 114 5570MHz		5456.88	59.21	-14.79	74	46.38	34.8	10.02	31.99	101	35	P	H
		5460.56	57.81	-10.49	68.3	44.98	34.8	10.02	31.99	101	35	P	H
		5455.28	50.16	-3.84	54	37.33	34.8	10.02	31.99	101	35	A	H
		5518	101.5	-	-	88.63	34.77	10.12	32.02	101	35	P	H
		5518	91.89	-	-	79.02	34.77	10.12	32.02	101	35	A	H
		5729.72	61.85	-6.45	68.3	49.01	34.53	10.35	32.04	101	35	P	H
		5450.16	56.72	-17.28	74	43.89	34.8	10.02	31.99	100	253	P	V
		5465.52	58.97	-9.33	68.3	46.12	34.8	10.04	31.99	100	253	P	V
		5455.28	47.64	-6.36	54	34.81	34.8	10.02	31.99	100	253	A	V
		5512	99.55	-	-	86.68	34.8	10.09	32.02	100	253	P	V
		5512	89.36	-	-	76.49	34.8	10.09	32.02	100	253	A	V
		5727.56	64.38	-3.92	68.3	51.54	34.53	10.35	32.04	100	253	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-2C- 5470~5725MHz

WIFI 802.11ax HE160 Full (Harmonic @ 3m)

WIFI Ant. 5+7	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 HE160 Full CH 114 5570MHz		11136	45.45	-28.55	74	54.3	38.08	14.66	61.59	300	0	P	H
		11136	45.47	-28.53	74	54.32	38.08	14.66	61.59	100	0	P	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
5+7		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE20 Full LF		30.97	21.82	-18.18	40	29.91	24.44	0.46	32.99	-	-	P	H
		121.18	15.78	-27.72	43.5	29.52	17.64	1.47	32.85	-	-	P	H
		188.11	18.87	-24.63	43.5	34.91	14.95	1.85	32.84	-	-	P	H
		350.1	21.32	-24.68	46	31.25	20.48	2.52	32.93	-	-	P	H
		651.77	27.72	-18.28	46	30.74	26.47	3.46	32.95	-	-	P	H
		873.9	28.94	-17.06	46	27.81	29.26	3.98	32.11	-	-	P	H
		67.83	29.66	-10.34	40	49.21	12.36	0.93	32.84	-	-	P	V
		187.14	16.15	-27.35	43.5	32.19	14.95	1.85	32.84	-	-	P	V
		250.19	19.39	-26.61	46	31.38	18.65	2.13	32.77	-	-	P	V
		327.79	20.76	-25.24	46	31.4	19.79	2.44	32.87	-	-	P	V
		568.35	25.46	-20.54	46	28.99	26.35	3.22	33.1	-	-	P	V
	840.92	29.25	-16.75	46	28.44	29.34	3.91	32.44	-	-	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
5+7		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 165 5825MHz		5824	110.98	-	-	97.77	34.73	10.43	31.95	102	286	P	H
		5824	103.41	-	-	90.2	34.73	10.43	31.95	102	286	A	H
		5852.8	59.3	-56.62	115.92	45.99	34.8	10.44	31.93	102	286	P	H
		5857.6	57.45	-52.72	110.17	44.05	34.87	10.46	31.93	102	286	P	H
		5904	55.5	-28.3	83.8	41.98	35	10.49	31.97	102	286	P	H
		5926.8	54.98	-13.32	68.3	41.32	35.13	10.52	31.99	102	286	P	H
		5830	110.51	-	-	97.3	34.73	10.43	31.95	276	270	P	V
		5830	102.52	-	-	89.31	34.73	10.43	31.95	276	270	A	V
		5852.4	58.55	-58.28	116.83	45.24	34.8	10.44	31.93	276	270	P	V
		5856.8	56.06	-54.34	110.4	42.66	34.87	10.46	31.93	276	270	P	V
		5907.6	54.64	-26.5	81.14	41.03	35.07	10.51	31.97	276	270	P	V
		5986.4	54.34	-13.96	68.3	40.5	35.33	10.56	32.05	276	270	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

UNII-3-5725~5850MHz

WIFI 802.11a (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
5+7		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11a CH 165 5825MHz		11653	46.97	-27.03	74	54.78	38.46	15.03	61.3	300	0	P	H
		11653	48.56	-25.44	74	56.37	38.46	15.03	61.3	100	0	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 HE20_Full (Band Edge @ 3m)

Table with 14 columns: WIFI Ant. 5+7, 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). Rows include test results for frequencies 5818, 5850, 5892, 5982.4, 5836, 5850, 5855.6, 5920.4, and 5950.8 MHz.



UNII-3-5725~5850MHz

WIFI 802.11ax HE20 Full (Harmonic @ 3m)

WIFI Ant. 5+7	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		11653	47.38	-26.62	74	55.19	38.46	15.03	61.3	300	0	P	H
CH 165 5825MHz		11653	47.03	-26.97	74	54.84	38.46	15.03	61.3	100	0	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 HE20_Partial 52 (Band Edge @ 3m)

WIFI Ant. 5+7	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		5836	107.12	-	-	93.89	34.73	10.43	31.93	100	118	P	H
		5836	100.47	-	-	87.24	34.73	10.43	31.93	100	118	A	H
		5852	52.05	-65.69	117.74	38.74	34.8	10.44	31.93	100	118	P	H
		5869.6	52.89	-53.92	106.81	39.51	34.87	10.46	31.95	100	118	P	H
		5888.4	54.33	-41.02	95.35	40.81	35	10.49	31.97	100	118	P	H
		5992.8	53.55	-14.75	68.3	39.62	35.4	10.58	32.05	100	118	P	H
		5836	108.4	-	-	95.17	34.73	10.43	31.93	304	88	P	V
		5836	99.97	-	-	86.74	34.73	10.43	31.93	304	88	A	V
		5854.4	52.56	-59.71	112.27	39.16	34.87	10.46	31.93	304	88	P	V
		5860	54.05	-55.45	109.5	40.67	34.87	10.46	31.95	304	88	P	V
	5900	52.83	-33.93	86.76	39.31	35	10.49	31.97	304	88	P	V	
	5972.4	54.61	-13.69	68.3	40.82	35.27	10.55	32.03	304	88	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 (Band Edge @ 3m)

WIFI Ant. 5+7	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 159 5795MHz		5632.4	52.56	-15.74	68.3	39.82	34.58	10.26	32.1	100	136	P	H
		5656.8	54.57	-18.78	73.35	41.82	34.54	10.29	32.08	100	136	P	H
		5719.2	54.35	-56.33	110.68	41.51	34.53	10.35	32.04	100	136	P	H
		5724	54.65	-65.37	120.02	41.81	34.53	10.35	32.04	100	136	P	H
		5806	108.76	-	-	95.65	34.67	10.41	31.97	100	136	P	H
		5806	98.54	-	-	85.43	34.67	10.41	31.97	100	136	A	H
		5850.4	55.22	-66.17	121.39	41.91	34.8	10.44	31.93	100	136	P	H
		5856	56.92	-53.7	110.62	43.52	34.87	10.46	31.93	100	136	P	H
		5875.6	55.73	-49.12	104.85	42.28	34.93	10.47	31.95	100	136	P	H
		5972	54.76	-13.54	68.3	40.97	35.27	10.55	32.03	100	136	P	H
		5604.4	52.68	-15.62	68.3	39.91	34.6	10.25	32.08	280	270	P	V
		5696.4	53.9	-48.75	102.65	41.14	34.5	10.32	32.06	280	270	P	V
		5706.4	53.29	-53.8	107.09	40.48	34.52	10.33	32.04	280	270	P	V
		5723.6	54.04	-65.07	119.11	41.2	34.53	10.35	32.04	280	270	P	V
		5806	106.79	-	-	93.68	34.67	10.41	31.97	280	270	P	V
		5806	98.31	-	-	85.2	34.67	10.41	31.97	280	270	A	V
		5850	56.38	-65.92	122.3	43.07	34.8	10.44	31.93	280	270	P	V
		5860.8	54.36	-54.91	109.27	40.98	34.87	10.46	31.95	280	270	P	V
	5922.4	55.24	-14.98	70.22	41.58	35.13	10.52	31.99	280	270	P	V	
	5950	53.83	-14.47	68.3	40.11	35.2	10.53	32.01	280	270	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. 5+7	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 159 5795MHz		11587	46.27	-27.73	74	54.2	38.39	14.98	61.3	300	0	P	H
		11587	45.2	-28.8	74	53.13	38.39	14.98	61.3	100	0	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 (Band Edge @ 3m)

Table with 14 columns: WIFI Ant. 5+7, 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). Rows include test data for 802.11ax HE80 Full CH 155 5775MHz and a Remark section.



UNII-3-5725~5850MHz

WIFI 802.11ax HE80_Full (Harmonic @ 3m)

WIFI Ant. 5+7	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		11554	45.47	-28.53	74	53.46	38.35	14.96	61.3	300	0	P	H
CH 155 5775MHz		11554	45.75	-28.25	74	53.74	38.35	14.96	61.3	100	0	P	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. 5+7	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		74.62	17.35	-22.65	40	36.08	13.06	1.02	32.81	-	-	P	H
		188.11	20.19	-23.31	43.5	36.23	14.95	1.85	32.84	-	-	P	H
		350.1	20.93	-25.07	46	30.86	20.48	2.52	32.93	-	-	P	H
		466.5	22.81	-23.19	46	29.48	23.43	2.91	33.01	-	-	P	H
		679.9	27.12	-18.88	46	29.92	26.69	3.53	33.02	-	-	P	H
		783.69	28.65	-17.35	46	29.39	28.24	3.78	32.76	-	-	P	H
		72.68	28.85	-11.15	40	47.83	12.84	0.99	32.81	-	-	P	V
		97.9	24.59	-18.91	43.5	40.33	15.81	1.32	32.87	-	-	P	V
		250.19	20.34	-25.66	46	32.33	18.65	2.13	32.77	-	-	P	V
		324.88	20.86	-25.14	46	31.58	19.71	2.43	32.86	-	-	P	V
		632.37	26.33	-19.67	46	29.26	26.66	3.4	32.99	-	-	P	V
	838.01	29.48	-16.52	46	28.78	29.26	3.9	32.46	-	-	P	V	
Remark	1. No other spurious found. 2. All results are PASS against limit line.												



CO-LOCATION

WIFI 5G 802.11ax HE20 Full& BLE_Tx_Ch39&Part 96---LTE_B48_BW_20M

2.4GHz 2400~2483.5MHz

BLE_Tx (Band Edge @ 3m)

BLE	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)
BLE CH 39 2480MHz		2483.5	62.65	-11.35	74	56.13	32.43	6.73	32.64	128	119	P	H
		2483.62	48.69	-5.31	54	42.17	32.43	6.73	32.64	128	119	A	H
	*	2480	103.47	-	-	96.95	32.43	6.73	32.64	128	119	P	H
	*	2480	101.68	-	-	95.16	32.43	6.73	32.64	128	119	A	H
		2483.62	59.99	-14.01	74	53.47	32.43	6.73	32.64	400	202	P	V
		2483.5	47.52	-6.48	54	41	32.43	6.73	32.64	400	202	A	V
	*	2480	100.36	-	-	93.84	32.43	6.73	32.64	400	202	P	V
	*	2480	98.53	-	-	92.01	32.43	6.73	32.64	400	202	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_Tx_Ch39 (Harmonic @ 3m)

BLE	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)
BLE CH 39 2480MHz		4965	42.05	-31.95	74	60.05	34.1	9.61	61.71	300	0	P	H
		7440	43.52	-30.48	74	58.11	35.7	11.78	62.07	300	0	P	H
		4965	41.37	-32.63	74	59.37	34.1	9.61	61.71	100	0	P	V
		7440	43.03	-30.97	74	57.62	35.7	11.78	62.07	100	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 802.11ax HE20 Full (Band Edge @ 3m)

WIFI Ant. 5+7	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		5350.9	56.41	-17.59	74	43.78	34.65	9.91	31.93	100	23	P	H
		5350	47.64	-6.36	54	35.01	34.65	9.91	31.93	100	23	A	H
	*	5326	109.51	-	-	96.98	34.55	9.89	31.91	100	23	P	H
	*	5326	102.17	-	-	89.64	34.55	9.89	31.91	100	23	A	H
		5372.7	52.87	-21.13	74	40.18	34.7	9.92	31.93	102	260	P	V
		5350	43.9	-10.1	54	31.27	34.65	9.91	31.93	102	260	A	V
	*	5326	105.58	-	-	93.05	34.55	9.89	31.91	102	260	P	V
	*	5326	97.59	-	-	85.06	34.55	9.89	31.91	102	260	A	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 (Harmonic @ 3m)

WIFI Ant. 5+7	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	45.82	-28.18	74	55.37	37.78	14.32	61.65	300	0	P	H
		15965	60.4	-13.6	74	63.92	40.93	17.73	62.18	100	336	P	H
		15965	50.17	-3.83	54	53.69	40.93	17.73	62.18	100	336	A	H
		10641	45.87	-28.13	74	55.42	37.78	14.32	61.65	100	0	P	V
		15954	60.34	-13.66	74	63.86	40.93	17.73	62.18	100	298	P	V
		15954	50.36	-3.64	54	53.88	40.93	17.73	62.18	100	298	A	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												



WIFI 5G 802.11ax HE20_CH64 Full& 11B_CH06&Part 96---LTE_B48_BW_20M

2.4GHz 2400~2483.5MHz

WIFI 11B_CH06 (Band Edge @ 3m)

WIFI Ant. 4+6	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)
802.11b CH 06 2437MHz		2389.95	53.63	-20.37	74	47.56	32.3	6.61	32.84	100	227	P	H
		2389.3	43.55	-10.45	54	37.52	32.3	6.61	32.88	100	227	A	H
		2486.02	54.15	-19.85	74	47.63	32.43	6.73	32.64	100	227	P	H
		2496.76	44.15	-9.85	54	37.47	32.5	6.75	32.57	100	227	A	H
	*	2436	103.75	-	-	97.56	32.3	6.66	32.77	100	227	P	H
	*	2436	98.44	-	-	92.25	32.3	6.66	32.77	100	227	A	H
		2380.72	53.24	-20.76	74	47.31	32.23	6.58	32.88	383	74	P	V
		2387.48	43.47	-10.53	54	37.44	32.3	6.61	32.88	383	74	A	V
		2496.04	53.84	-20.16	74	47.16	32.5	6.75	32.57	383	74	P	V
		2484.7	44.12	-9.88	54	37.6	32.43	6.73	32.64	383	74	A	V
	*	2436	103.69	-	-	97.5	32.3	6.66	32.77	383	74	P	V
	*	2438	100.92	-	-	94.71	32.3	6.68	32.77	383	74	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 11B_CH06 (Harmonic @ 3m)

WIFI Ant. 4+6	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)
802.11b CH 06 2437MHz		4875	40.74	-33.26	74	58.85	34.14	9.52	61.77	300	0	P	H
		7305	49.31	-24.69	74	63.98	35.7	11.69	62.06	300	0	P	H
		4875	40.2	-33.8	74	58.31	34.14	9.52	61.77	100	0	P	V
		7305	49.71	-24.29	74	64.38	35.7	11.69	62.06	100	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 802.11ax HE20_CH64 Full (Band Edge @ 3m)

WIFI Ant. 5+7	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	56.18	-17.82	74	43.55	34.65	9.91	31.93	100	227	P	H
		5350	47.82	-6.18	54	35.19	34.65	9.91	31.93	100	227	A	H
	*	5320	109.24	-	-	96.7	34.55	9.89	31.9	100	227	P	H
	*	5320	100.13	-	-	87.59	34.55	9.89	31.9	100	227	A	H
		5351.2	56.22	-17.78	74	43.59	34.65	9.91	31.93	110	82	P	V
		5350	45.69	-8.31	54	33.06	34.65	9.91	31.93	110	82	A	V
	*	5326	104.54	-	-	92.01	34.55	9.89	31.91	110	82	P	V
*	5326	96.19	-	-	83.66	34.55	9.89	31.91	110	82	A	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_CH64 Full (Harmonic @ 3m)

WIFI Ant. 5+7	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	43.83	-30.17	74	53.38	37.78	14.32	61.65	300	0	P	H
		10641	44.77	-29.23	74	54.32	37.78	14.32	61.65	100	0	P	V
Remark	1. No other spurious found. 2. 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	Peak or Average
H/V	Horizontal or Vertical



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.	
4+6		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b		2390	55.45	-18.55	74	54.51	32.22	4.58	35.86	103	308	P	H
CH 01													
2412MHz		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)

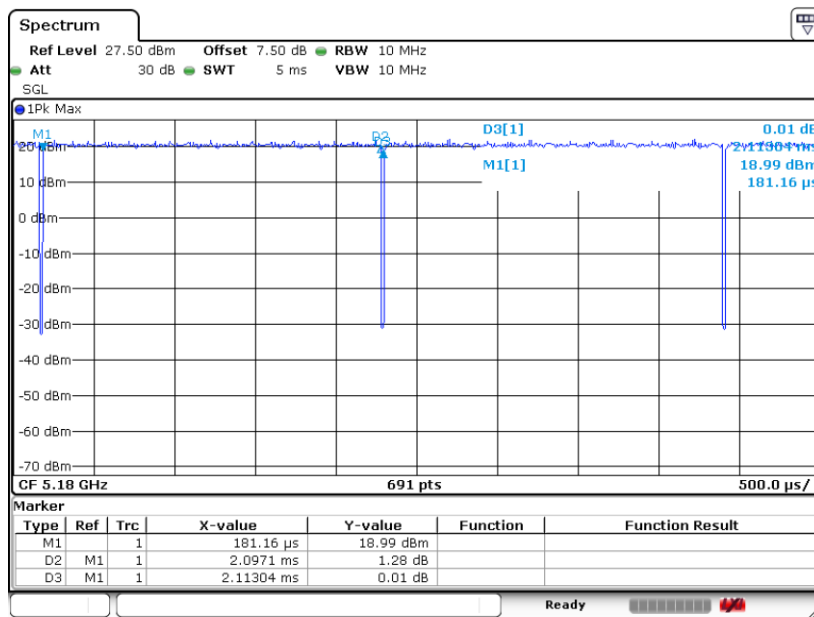
Both peak and average measured complies with the limit line, so test result is “PASS”.



Appendix D. Duty Cycle Plots

Band	Duty Cycle(%)	T(ms)	1/T(kHz)	VBW Setting
802.11a	99.25	-	-	10Hz
802.11ax HE20	100	-	-	10Hz
802.11ax HE40	100	-	-	10Hz
802.11ax HE80	100	-	-	10Hz
802.11ax HE20 RU26	95.65	5.101	0.196	0.2KHz
802.11ax HE20 RU52	95.63	5.073	0.197	0.2KHz
802.11ax HE20 RU106	95.35	4.754	0.210	0.22KHz

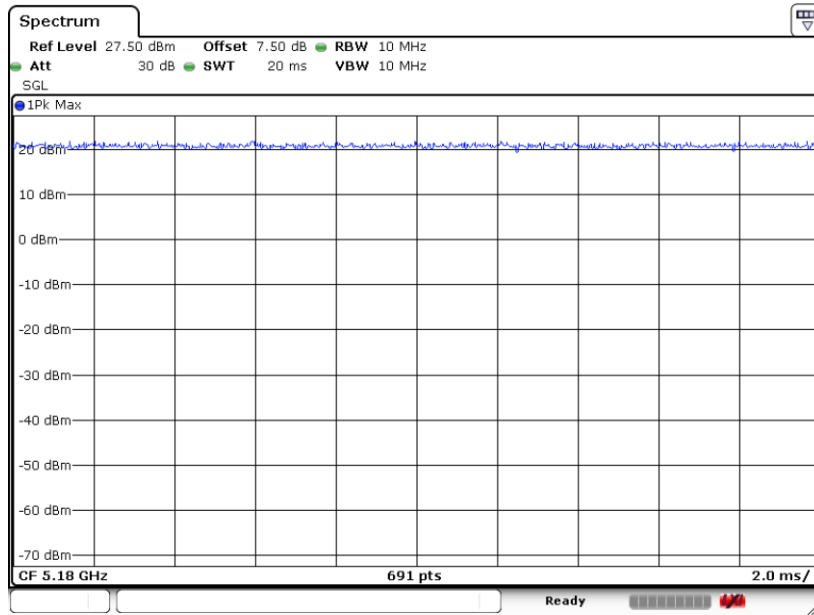
802.11a



Date: 6.SEP.2022 13:49:52

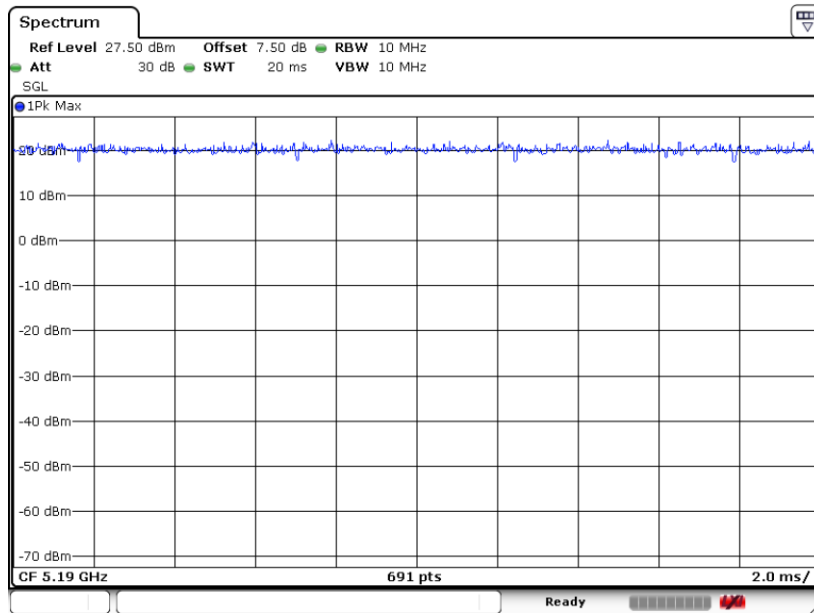


802.11ax HE20



Date: 6.SEP.2022 13:56:38

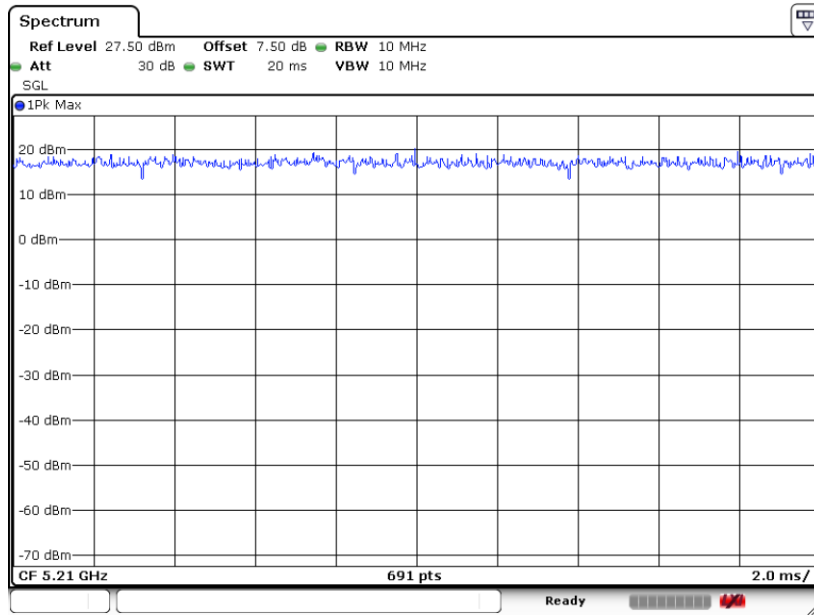
802.11ax HE40



Date: 6.SEP.2022 13:57:20

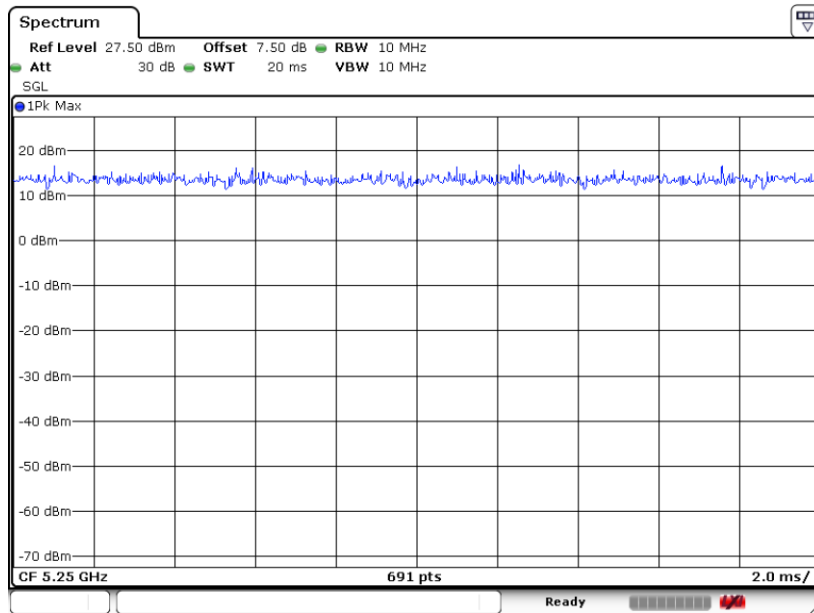


802.11ax HE80



Date: 6.SEP.2022 13:58:04

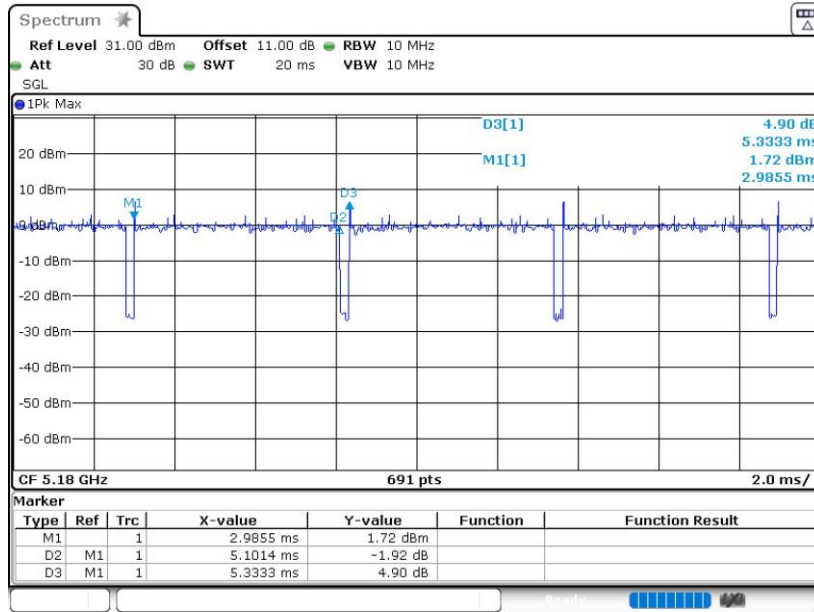
802.11ax HE160



Date: 6.SEP.2022 13:55:49

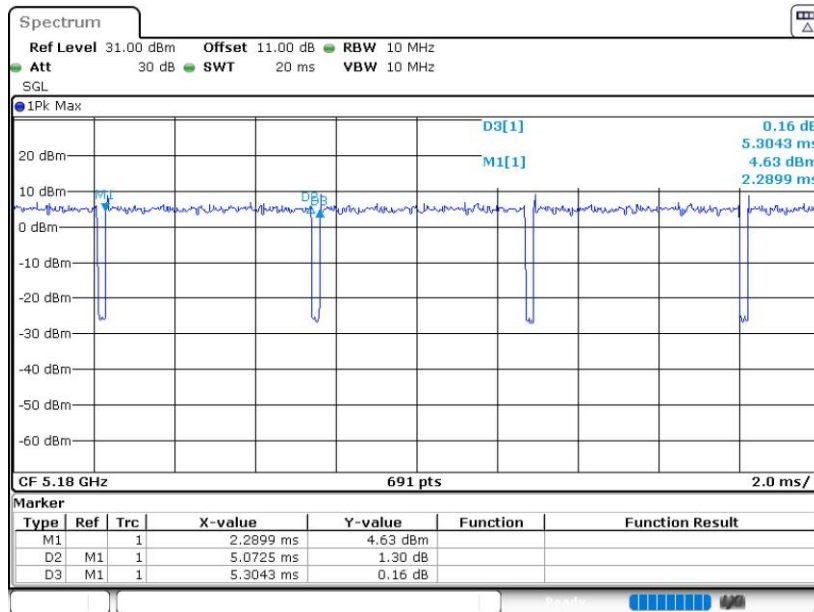


802.11ax HE20 RU 26



Date: 22.SEP.2022 23:28:15

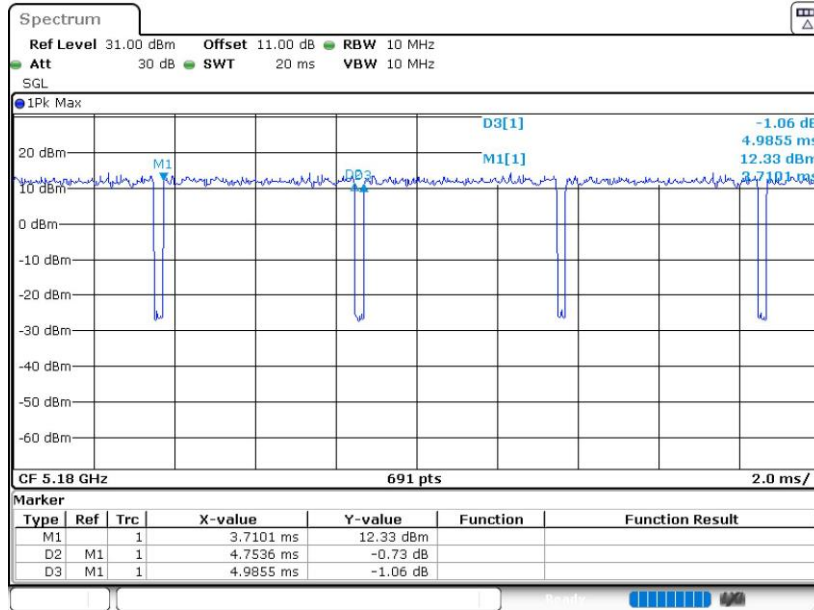
802.11ax HE20 RU 52



Date: 22.SEP.2022 23:30:18



802.11ax HE20 RU 106



Date: 22.SEP.2022 23:31:54