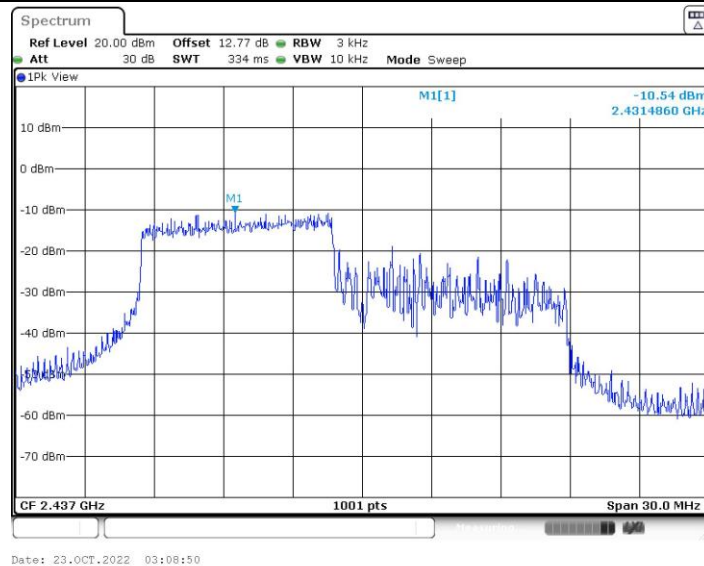
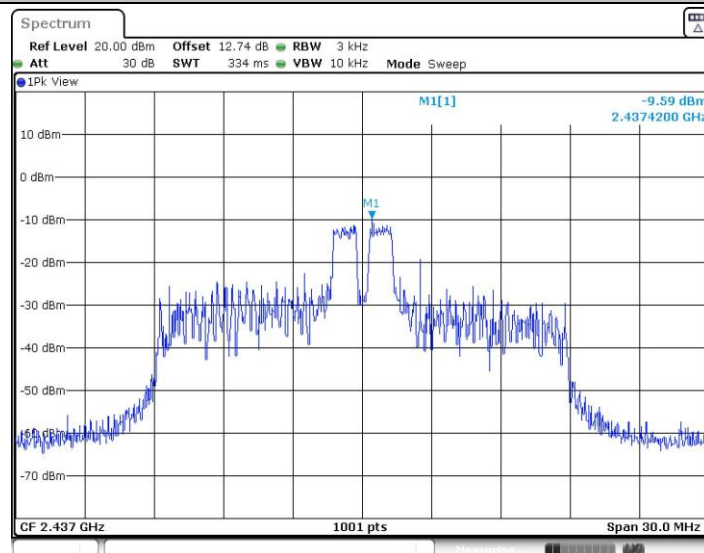


11AX20MIMO_Ant4_2437_106Tone_RU53

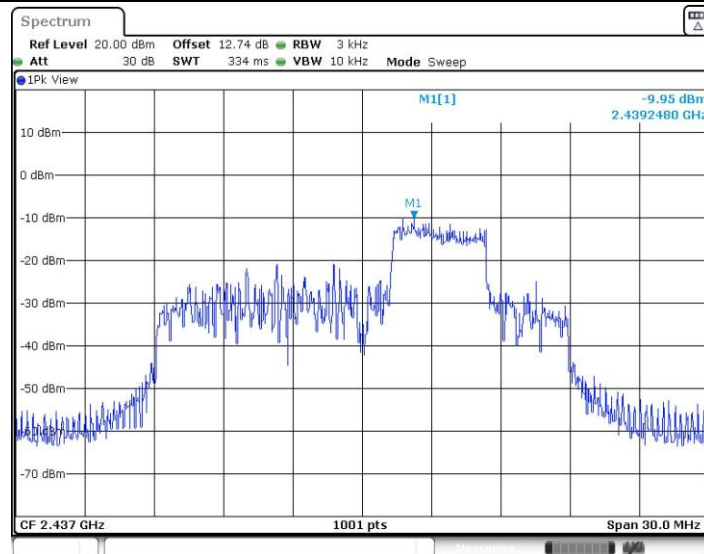


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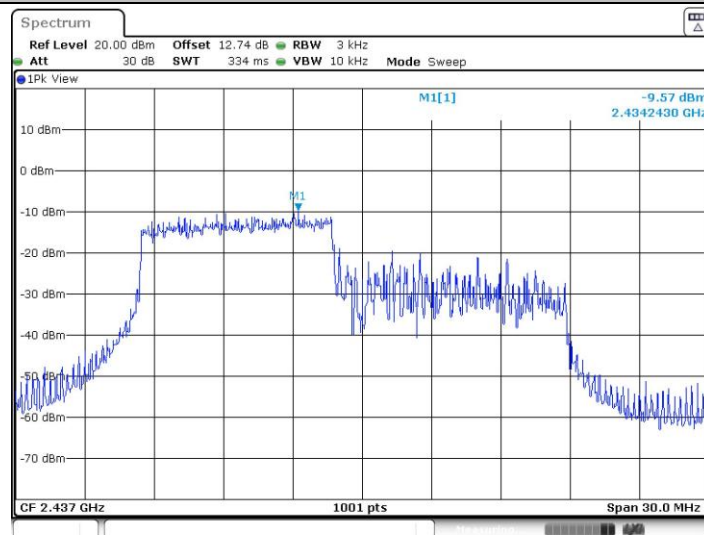




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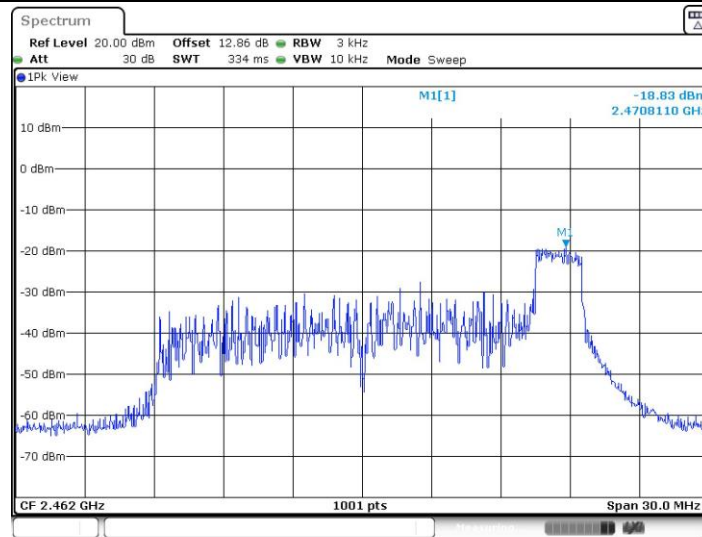


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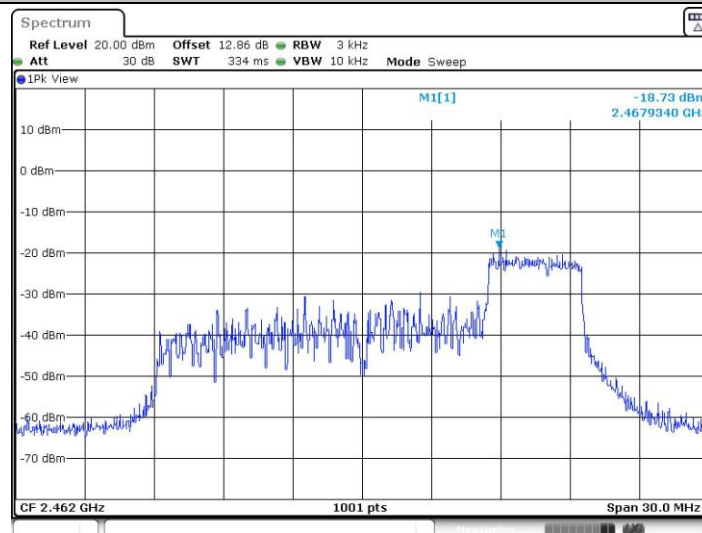
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11AX20MIMO_Ant4_2462_26Tone_RU8



Date: 21.NOV.2022 04:22:30

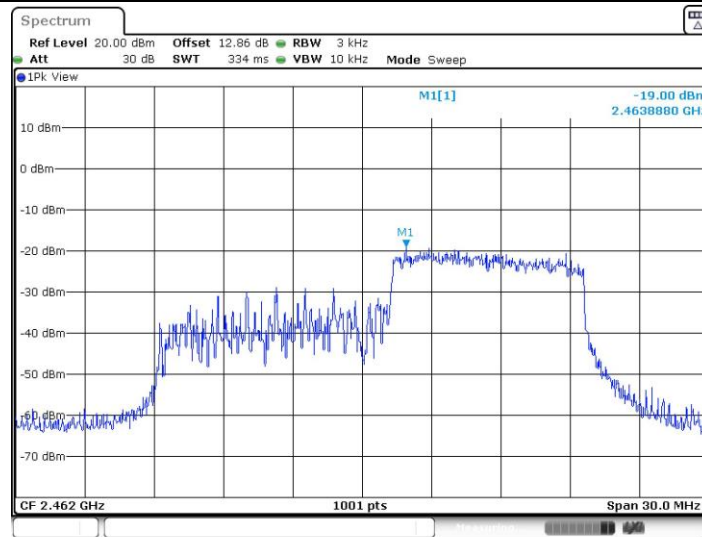
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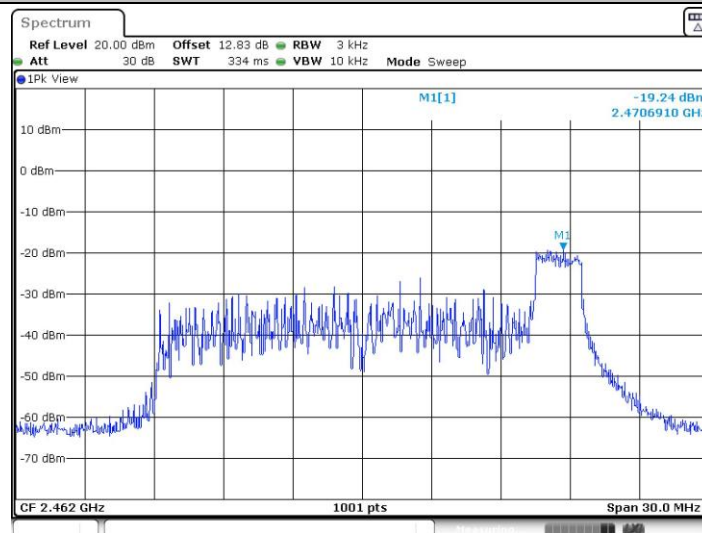


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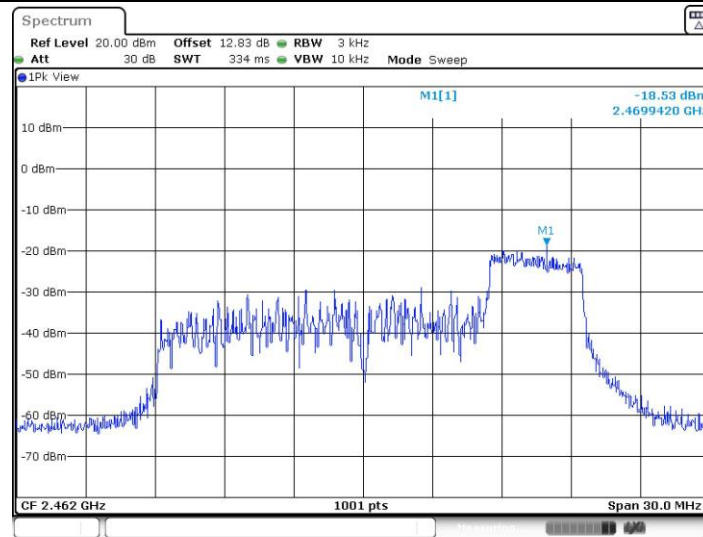
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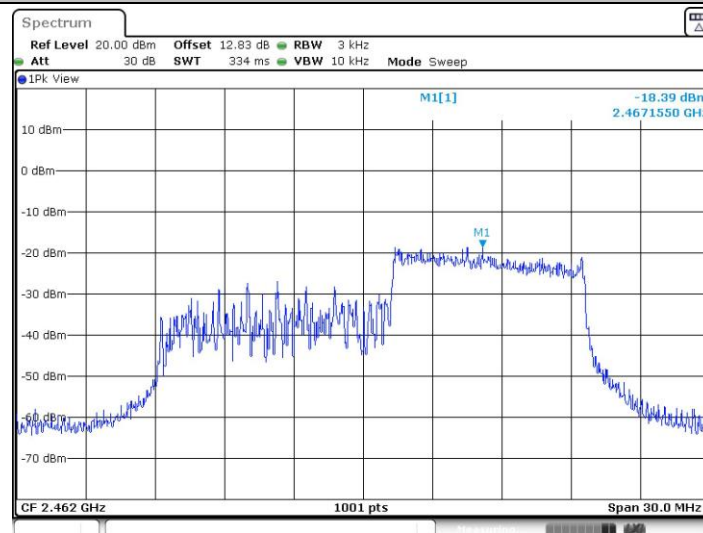
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11AX20MIMO_Ant5_2462_52Tone_RU40



Date: 21.NOV.2022 04:27:19

11AX20MIMO_Ant5_2462_106Tone_RU54



Date: 21.NOV.2022 04:28:32



Maximum (Peak) Output Power

Test Result

2.4GHz Band (CDD mode)																	
Mod.	Data Rate	RU Config	NTX	CH.	Freq. (MHz)	Peak Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
						Ant 4	Ant 5	SUM	Ant 4	Ant 5	Ant 4	Ant 5	Ant 4	Ant 5	Ant 4	Ant 5	
11b	1Mbps	-	2	1	2412	14.82	15.06	17.95	30.00		5.05		23.00		36.00		Pass
11b	1Mbps		2	6	2437	14.90	16.01	18.50	30.00		5.05		23.55		36.00		Pass
11b	1Mbps		2	11	2462	13.62	14.39	17.03	30.00		5.05		22.08		36.00		Pass
11g	6Mbps		2	1	2412	24.78	24.56	27.68	30.00		5.05		32.73		36.00		Pass
11g	6Mbps		2	6	2437	24.92	24.92	27.93	30.00		5.05		32.98		36.00		Pass
11g	6Mbps		2	9	2452	23.74	24.43	27.11	30.00		5.05		32.16		36.00		Pass
11g	6Mbps		2	10	2457	24.13	24.62	27.39	30.00		5.05		32.44		36.00		Pass
11g	6Mbps		2	11	2462	19.43	19.68	22.57	30.00		5.05		27.62		36.00		Pass
HT20	MCS0		2	1	2412	23.72	23.56	26.65	30.00		5.05		31.70		36.00		Pass
HT20	MCS0		2	6	2437	24.25	24.03	27.15	30.00		5.05		32.20		36.00		Pass
HT20	MCS0		2	8	2447	23.84	23.95	26.91	30.00		5.05		31.96		36.00		Pass
HT20	MCS0		2	9	2452	23.88	24.24	27.07	30.00		5.05		32.12		36.00		Pass
HT20	MCS0		2	10	2457	23.44	23.92	26.70	30.00		5.05		31.75		36.00		Pass
HT20	MCS0		2	11	2462	17.21	18.13	20.70	30.00		5.05		25.75		36.00		Pass
HT40	MCS0		2	3	2422	21.96	22.12	25.05	30.00		5.05		30.10		36.00		Pass
HT40	MCS0		2	4	2427	23.12	22.78	25.96	30.00		5.05		31.01		36.00		Pass
HT40	MCS0		2	5	2432	23.21	23.12	26.18	30.00		5.05		31.23		36.00		Pass
HT40	MCS0		2	6	2437	24.40	24.55	27.49	30.00		5.05		32.54		36.00		Pass
HT40	MCS0		2	7	2442	22.98	23.54	26.28	30.00		5.05		31.33		36.00		Pass
HT40	MCS0		2	8	2447	21.82	22.48	25.17	30.00		5.05		30.22		36.00		Pass
HT40	MCS0		2	9	2452	21.79	22.21	25.02	30.00		5.05		30.07		36.00		Pass
HE20	MCS0	full	2	1	2412	23.96	23.72	26.85	30.00		5.05		31.90		36.00		Pass
HE20	MCS0	26RU	2	1	2412	17.66	18.05	20.87	30.00		5.05		25.92		36.00		Pass
HE20	MCS0	52RU	2	1	2412	18.45	17.24	20.90	30.00		5.05		25.95		36.00		Pass
HE20	MCS0	106RU	2	1	2412	20.97	20.75	23.87	30.00		5.05		28.92		36.00		Pass
HE20	MCS0	full	2	6	2437	24.31	24.06	27.20	30.00		5.05		32.25		36.00		Pass
HE20	MCS0	26RU	2	6	2437	17.62	18.66	21.18	30.00		5.05		26.23		36.00		Pass
HE20	MCS0	52RU	2	6	2437	20.78	20.87	23.84	30.00		5.05		28.89		36.00		Pass
HE20	MCS0	106RU	2	6	2437	23.49	23.11	26.31	30.00		5.05		31.36		36.00		Pass
HE20	MCS0	full	2	8	2447	23.94	24.01	26.99	30.00		5.05		32.04		36.00		Pass
HE20	MCS0	full	2	9	2452	23.92	24.29	27.12	30.00		5.05		32.17		36.00		Pass
HE20	MCS0	full	2	10	2457	23.55	23.98	26.78	30.00		5.05		31.83		36.00		Pass
HE20	MCS0	full	2	11	2462	17.35	18.26	20.84	30.00		5.05		25.89		36.00		Pass
HE20	MCS0	26RU	2	11	2462	10.09	11.49	13.86	30.00		5.05		18.91		36.00		Pass
HE20	MCS0	52RU	2	11	2462	11.25	10.81	14.05	30.00		5.05		19.10		36.00		Pass
HE20	MCS0	106RU	2	11	2462	13.12	13.68	16.42	30.00		5.05		21.47		36.00		Pass
HE40	MCS0	full	2	3	2422	22.22	22.25	25.25	30.00		5.05		30.30		36.00		Pass
HE40	MCS0	full	2	4	2427	23.23	22.88	26.07	30.00		5.05		31.12		36.00		Pass
HE40	MCS0	full	2	5	2432	23.27	23.19	26.24	30.00		5.05		31.29		36.00		Pass
HE40	MCS0	full	2	6	2437	24.44	24.59	27.53	30.00		5.05		32.58		36.00		Pass
HE40	MCS0	full	2	7	2442	23.07	23.65	26.38	30.00		5.05		31.43		36.00		Pass
HE40	MCS0	full	2	8	2447	21.89	22.55	25.24	30.00		5.05		30.29		36.00		Pass
HE40	MCS0	full	2	9	2452	21.85	22.33	25.11	30.00		5.05		30.16		36.00		Pass



2.4GHz Band (TXBF mode)																	
Mod.	Data Rate	RU Config	NTX	CH.	Freq. (MHz)	Peak Conducted Power (dBm)			Conducted Power Limit (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)		Pass /Fail
						Ant 4	Ant 5	SUM	Ant 4	Ant 5	Ant 4	Ant 5	Ant 4	Ant 5	Ant 4	Ant 5	
HE20	MCS0	full	2	1	2412	20.93	20.67	23.81	28.02		7.98		31.79		36.00		Pass
HE20	MCS0	full	2	6	2437	21.29	21.00	24.16	28.02		7.98		32.13		36.00		Pass
HE20	MCS0	full	2	11	2462	20.11	20.30	23.22	28.02		7.98		31.19		36.00		Pass
HE40	MCS0	full	2	3	2422	19.20	19.20	22.21	28.02		7.98		30.19		36.00		Pass
HE40	MCS0	full	2	6	2437	21.41	21.52	24.48	28.02		7.98		32.45		36.00		Pass
HE40	MCS0	full	2	9	2452	18.81	19.27	22.06	28.02		7.98		30.03		36.00		Pass

Average Output Power

Test Result

2.4GHz Band (CDD mode)											
Mod.	Data Rate	RU Config	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			Power Setting
						Ant 4	Ant 5	Ant 4	Ant 5	SUM	Ant 4/Ant 5
11b	1Mbps	-	2	1	2412	0.03	0.03	12.15	13.18	15.71	9
11b	1Mbps		2	6	2437	0.03	0.03	12.62	14.26	16.53	9.5
11b	1Mbps		2	11	2462	0.03	0.03	11.31	11.97	14.66	14
11g	6Mbps		2	1	2412	0.18	0.18	15.04	15.14	18.10	14
11g	6Mbps		2	6	2437	0.18	0.18	14.94	15.54	18.26	14
11g	6Mbps		2	9	2452	0.18	0.18	14.56	15.62	18.13	14
11g	6Mbps		2	10	2457	0.18	0.18	14.59	15.76	18.22	13.5
11g	6Mbps		2	11	2462	0.18	0.18	8.84	9.23	12.05	14
HT20	MCS0		2	1	2412	0.21	0.19	13.34	13.86	16.62	12.5
HT20	MCS0		2	6	2437	0.21	0.19	14.99	15.59	18.31	14
HT20	MCS0		2	8	2447	0.21	0.19	14.35	15.30	17.86	14
HT20	MCS0		2	9	2452	0.21	0.19	14.23	15.41	17.87	13.5
HT20	MCS0		2	10	2457	0.21	0.19	13.15	14.23	16.73	12
HT20	MCS0		2	11	2462	0.21	0.19	7.53	8.00	10.78	12.5
HT40	MCS0		2	3	2422	0.38	0.38	10.67	11.09	13.89	9.5
HT40	MCS0		2	4	2427	0.38	0.38	12.13	12.40	15.28	11
HT40	MCS0		2	5	2432	0.38	0.38	12.97	13.06	16.02	12
HT40	MCS0		2	6	2437	0.38	0.38	14.93	15.58	18.28	14
HT40	MCS0		2	7	2442	0.38	0.38	13.21	13.95	16.60	12.5
HT40	MCS0		2	8	2447	0.38	0.38	11.73	12.49	15.13	11
HT40	MCS0		2	9	2452	0.38	0.38	10.93	11.71	14.35	9.5
HE20	MCS0	full	2	1	2412	0.24	0.24	13.77	13.89	16.84	12.5
HE20	MCS0	26RU	2	1	2412	0.27	0.27	4.44	3.83	7.15	14
HE20	MCS0	52RU	2	1	2412	0.17	0.17	7.28	6.81	10.06	13.5
HE20	MCS0	106RU	2	1	2412	0.38	0.38	10.81	10.49	13.66	13.5
HE20	MCS0	full	2	6	2437	0.24	0.24	15.05	15.70	18.40	14
HE20	MCS0	26RU	2	6	2437	0.27	0.27	6.62	7.73	10.22	13.5
HE20	MCS0	52RU	2	6	2437	0.17	0.17	8.71	10.29	12.58	13.5



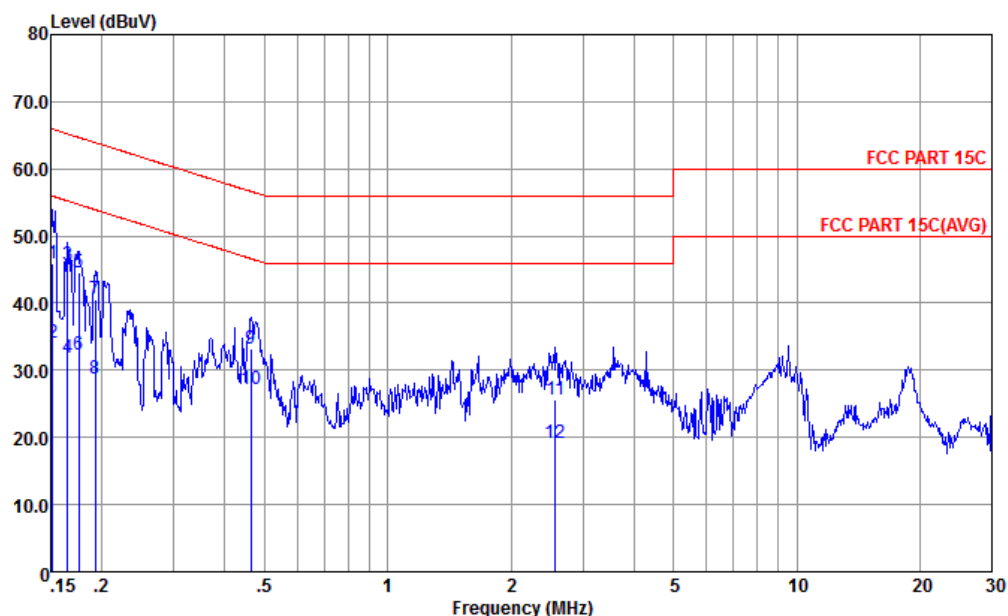
HE20	MCS0	106RU	2	6	2437	0.38	0.38	12.13	13.12	15.66	15
HE20	MCS0	full	2	8	2447	0.24	0.24	14.46	15.45	17.99	14
HE20	MCS0	full	2	9	2452	0.24	0.24	14.36	15.51	17.98	13.5
HE20	MCS0	full	2	10	2457	0.24	0.24	13.25	14.32	16.83	12
HE20	MCS0	full	2	11	2462	0.24	0.24	7.63	8.16	10.91	12.5
HE20	MCS0	26RU	2	11	2462	0.27	0.27	-0.41	-0.91	2.35	13
HE20	MCS0	52RU	2	11	2462	0.17	0.17	1.88	1.28	4.60	12
HE20	MCS0	106RU	2	11	2462	0.38	0.38	3.56	3.51	6.55	10.5
HE40	MCS0	full	2	3	2422	0.44	0.44	10.85	11.17	14.02	9.5
HE40	MCS0	full	2	4	2427	0.44	0.44	12.38	12.53	15.46	11
HE40	MCS0	full	2	5	2432	0.44	0.44	13.27	13.21	16.25	12
HE40	MCS0	full	2	6	2437	0.44	0.44	15.03	15.72	18.40	14
HE40	MCS0	full	2	7	2442	0.44	0.44	13.39	14.15	16.79	12.5
HE40	MCS0	full	2	8	2447	0.44	0.44	11.88	12.61	15.27	11
HE40	MCS0	full	2	9	2452	0.44	0.44	10.69	12.03	14.42	9.5

2.4GHz Band (TXBF mode)											
Mod.	Data Rate	RU Config	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Average Conducted Power (dBm)			Power Setting
						Ant 4	Ant 5	Ant 4	Ant 5	SUM	Ant 4/Ant 5
HE20	MCS0	full	2	1	2412	0.24	0.24	10.71	10.85	13.79	9.5
HE20	MCS0	full	2	6	2437	0.24	0.24	12.00	12.65	15.35	11
HE20	MCS0	full	2	11	2462	0.24	0.24	8.13	8.49	11.32	9.5
HE40	MCS0	full	2	3	2422	0.44	0.44	7.82	8.09	10.96	6.5
HE40	MCS0	full	2	6	2437	0.44	0.44	11.98	12.66	15.34	11
HE40	MCS0	full	2	9	2452	0.44	0.44	7.62	8.98	11.36	6.5



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.		

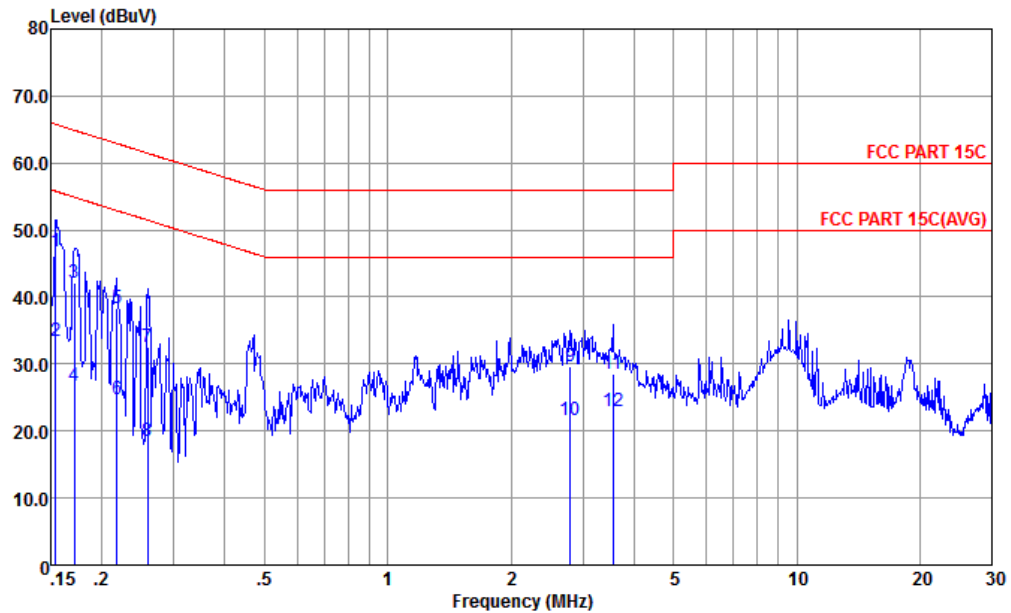


Site : CO01-KS
Condition : FCC PART 15C LISN-060105-L LINE

	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
			dB	dBuV	dBuV	dB	dB	
1	0.152	46.00	-19.91	65.91	35.50	0.02	10.48	QP
2	0.152	34.10	-21.81	55.91	23.60	0.02	10.48	Average
3	0.165	45.67	-19.54	65.21	35.20	0.03	10.44	QP
4	0.165	31.97	-23.24	55.21	21.50	0.03	10.44	Average
5	0.176	44.65	-20.03	64.68	34.20	0.03	10.42	QP
6	0.176	32.35	-22.33	54.68	21.90	0.03	10.42	Average
7	0.192	40.62	-23.31	63.93	30.20	0.04	10.38	QP
8	0.192	28.72	-25.21	53.93	18.30	0.04	10.38	Average
9	0.464	33.14	-23.49	56.63	22.79	0.10	10.25	QP
10 *	0.464	27.24	-19.39	46.63	16.89	0.10	10.25	Average
11	2.567	25.58	-30.42	56.00	15.19	0.15	10.24	QP
12	2.567	19.18	-26.82	46.00	8.79	0.15	10.24	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 : FCC PART 15C LISN-060105-N NEUTRAL

	Freq	Level	Over	Limit	Read	LISN	Cable	
	MHz	dBuV	Limit	Line	Level	Factor	Loss	Remark
			dB	dBuV	dBuV	dB	dB	
1 *	0.154	46.88	-18.90	65.78	36.30	0.11	10.47	QP
2	0.154	33.48	-22.30	55.78	22.90	0.11	10.47	Average
3	0.171	42.03	-22.87	64.90	31.49	0.11	10.43	QP
4	0.171	26.83	-28.07	54.90	16.29	0.11	10.43	Average
5	0.217	38.35	-24.57	62.92	27.90	0.10	10.35	QP
6	0.217	24.75	-28.17	52.92	14.30	0.10	10.35	Average
7	0.259	32.63	-28.84	61.47	22.20	0.10	10.33	QP
8	0.259	18.53	-32.94	51.47	8.10	0.10	10.33	Average
9	2.794	29.59	-26.41	56.00	19.20	0.15	10.24	QP
10	2.794	21.59	-24.41	46.00	11.20	0.15	10.24	Average
11	3.547	28.61	-27.39	56.00	18.20	0.16	10.25	QP
12	3.547	23.01	-22.99	46.00	12.60	0.16	10.25	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

Test Engineer :	Henry Li	Temperature :	22~23°C
		Relative Humidity :	41~42%

2.4GHz 2400~2483.5MHz

WIFI 802.11b (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.
CDD 4+5		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2345.62	54.67	-19.33	74	47.38	32.38	7.8	32.89	105	72	P	H
		2381.11	44.16	-9.84	54	36.73	32.43	7.86	32.86	105	72	A	H
	*	2412	100.96	-	-	93.4	32.48	7.91	32.83	105	72	P	H
	*	2412	98.89	-	-	91.33	32.48	7.91	32.83	105	72	A	H
		2328.33	51.34	-22.66	74	47.72	32.36	7.77	36.51	256	145	P	V
		2389.95	40.57	-13.43	54	36.69	32.46	7.89	36.47	256	145	A	V
	*	2412	107.01	-	-	103.1	32.48	7.91	36.48	256	145	P	V
	*	2410	104.87	-	-	100.96	32.48	7.91	36.48	256	145	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 802.11b (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.
CDD 4+5		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		4830	50.92	-23.08	74	68	34.64	12.01	63.73	100	0	P	H
		4830	54.21	-19.79	74	71.29	34.64	12.01	63.73	264	355	P	V
		4830	53.64	-0.36	54	70.72	34.64	12.01	63.73	264	355	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 802.11g (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.		(MHz)	(dBμV/m)	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
CDD 4+5				(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11g CH 10 2457MHz		2487.7	56.76	-17.24	74	50.15	32.5	6.75	32.64	158	271	P	H
		2483.68	46.76	-7.24	54	40.24	32.43	6.73	32.64	158	271	A	H
	*	2462	100.57	-	-	94.21	32.37	6.7	32.71	158	271	P	H
	*	2462	93.16	-	-	86.8	32.37	6.7	32.71	158	271	A	H
		2484.58	64.49	-9.51	74	57.97	32.43	6.73	32.64	247	200	P	V
		2483.74	53.48	-0.52	54	46.96	32.43	6.73	32.64	247	200	A	V
	*	2458	112.59	-	-	106.23	32.37	6.7	32.71	247	200	P	V
	*	2458	105.98	-	-	99.62	32.37	6.7	32.71	247	200	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 802.11g (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.		(MHz)	(dBμV/m)	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
CDD 4+5				(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11g CH 10 2457MHz		4920	43.29	-30.71	74	60.75	34.1	9.58	61.14	300	0	P	H
		7365	54.5	-19.5	74	67.92	35.7	11.71	60.83	305	42	P	H
		7365	42.97	-11.03	54	56.39	35.7	11.71	60.83	305	42	A	H
		4920	46.99	-27.01	74	64.45	34.1	9.58	61.14	100	0	P	V
		7365	47.69	-26.31	74	61.11	35.7	11.71	60.83	100	0	P	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 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
CDD 4+5 8802.11ax HE20 Full CH 09 2452MHz		2499.34	56.21	-17.79	74	49.53	32.5	6.75	32.57	267	249	P	H
		2483.74	46.67	-7.33	54	40.15	32.43	6.73	32.64	267	249	A	H
	*	2454	104.6	-	-	98.24	32.37	6.7	32.71	267	249	P	H
	*	2454	94.41	-	-	88.05	32.37	6.7	32.71	267	249	A	H
		2483.98	63.56	-10.44	74	57.04	32.43	6.73	32.64	217	168	P	V
		2484.04	53.61	-0.39	54	47.09	32.43	6.73	32.64	217	168	A	V
	*	2452	114.96	-	-	108.69	32.3	6.68	32.71	217	168	P	V
	*	2452	106.01	-	-	99.74	32.3	6.68	32.71	217	168	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	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.		(MHz)	(dBμV/m)	Limit (dB)	Line (dBμV/m)	Level (dBμV)	Factor (dB/m)	Loss (dB)	Factor (dB)	Pos (cm)	Pos (deg)	Avg. (P/A)	(H/V)
CDD 4+5 802.11ax HE20 Full CH 09 2457MHz		4905	44.05	-29.95	74	61.53	34.1	9.56	61.14	300	0	P	H
		7350	55.36	-18.64	74	68.75	35.7	11.71	60.8	304	46	P	H
		7350	43.13	-10.87	54	56.52	35.7	11.71	60.8	304	46	A	H
		4905	48.68	-25.32	74	66.16	34.1	9.56	61.14	100	0	P	V
		7350	47.44	-26.56	74	60.83	35.7	11.71	60.8	100	0	P	V
Remark		1. No other spurious found. 2. All results are PASS against Peak and Average limit line.											



2.4GHz 2400~2483.5MHz

WIFI 802.11ax HE20 Partial 26 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.		(MHz)	(dBμV/m)	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
CDD 4+5				(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE20 Partial 26/8 CH 11 2462MHz		2483.62	52.23	-21.77	74	48.17	32.58	7.99	36.51	305	253	P	H
		2491.48	41.63	-12.37	54	37.53	32.6	8.01	36.51	305	253	A	H
		2470	92.99	-	-	88.97	32.55	7.97	36.5	305	253	P	H
		2470	84.43	-	-	80.41	32.55	7.97	36.5	305	253	A	H
		2498.08	52.31	-21.69	74	48.21	32.6	8.01	36.51	270	200	P	V
		2484.34	41.82	-12.18	54	37.76	32.58	7.99	36.51	270	200	A	V
		2470	103.59	-	-	99.57	32.55	7.97	36.5	270	200	P	V
		2470	95.4	-	-	91.38	32.55	7.97	36.5	270	200	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 802.11ax HE20 Partial 52 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.		(MHz)	(dBμV/m)	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
CDD 4+5				(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE20 Partial 52/37 CH 01 2412MHz		2368.37	51.93	-22.07	74	48.18	32.41	7.83	36.49	364	100	P	H
		2380.98	41.55	-12.45	54	37.74	32.43	7.86	36.48	364	100	A	H
		2404	104.87	-	-	100.96	32.48	7.91	36.48	364	100	P	H
		2404	96.05	-	-	92.14	32.48	7.91	36.48	364	100	A	H
		2389.43	54.15	-19.85	74	50.27	32.46	7.89	36.47	281	194	P	V
		2389.95	43.29	-10.71	54	39.41	32.46	7.89	36.47	281	194	A	V
		2406	114	-	-	110.09	32.48	7.91	36.48	281	194	P	V
		2406	105.32	-	-	101.41	32.48	7.91	36.48	281	194	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 802.11ax HE20 Partial 106 (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.		(MHz)	(dBμV/m)	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
CDD 4+5				(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE20 Partial 106/53 CH 01 2412MHz		2378.38	51.87	-22.13	74	48.06	32.43	7.86	36.48	105	75	P	H
		2389.82	42.01	-11.99	54	38.13	32.46	7.89	36.47	105	75	A	H
		2410	105.09	-	-	101.18	32.48	7.91	36.48	105	75	P	H
		2410	96.29	-	-	92.38	32.48	7.91	36.48	105	75	A	H
		2389.82	58.16	-15.84	74	54.28	32.46	7.89	36.47	256	170	P	V
		2389.95	48.5	-5.5	54	44.62	32.46	7.89	36.47	256	170	A	V
		2408	115.78	-	-	111.87	32.48	7.91	36.48	256	170	P	V
		2410	106.72	-	-	102.81	32.48	7.91	36.48	256	170	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 HE40 Full (Band Edge @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.		(MHz)	(dBμV/m)	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
CDD 4+5				(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax HE40 Full CH 05 2432MHz		2389.69	55.93	-18.07	74	49.9	32.3	6.61	32.88	149	263	P	H
		2389.69	46.68	-7.32	54	40.65	32.3	6.61	32.88	149	263	A	H
	*	2426	100.7	-	-	94.51	32.3	6.66	32.77	149	263	P	H
	*	2428	90.16	-	-	83.97	32.3	6.66	32.77	149	263	A	H
		2487.52	56.51	-17.49	74	49.9	32.5	6.75	32.64	149	263	P	H
		2483.68	47.03	-6.97	54	40.51	32.43	6.73	32.64	149	263	A	H
		2389.17	61.46	-12.54	74	55.43	32.3	6.61	32.88	300	194	P	V
		2389.95	51.52	-2.48	54	45.45	32.3	6.61	32.84	300	194	A	V
	*	2428	108.38	-	-	102.19	32.3	6.66	32.77	300	194	P	V
	*	2428	99.9	-	-	93.71	32.3	6.66	32.77	300	194	A	V
		2483.86	63.79	-10.21	74	57.27	32.43	6.73	32.64	300	194	P	V
		2483.5	53.57	-0.43	54	47.05	32.43	6.73	32.64	300	194	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 HE40 Full (Harmonic @ 3m)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.		(MHz)	(dBμV/m)	Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
CDD 4+5				(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11ax		4864	41.06	-32.94	74	58.56	34.18	9.5	61.18	300	0	P	H
HE40 Full		7296	41.99	-32.01	74	55.31	35.7	11.68	60.7	300	0	P	H
CH 05		4860	43.77	-30.23	74	61.27	34.18	9.5	61.18	100	0	P	V
2432MHz		7296	41.41	-32.59	74	54.73	35.7	11.68	60.7	100	0	P	V
Remark	1. No other spurious found. 2. All results are PASS against Peak and Average limit line.												

Emission below 1GHz

2.4GHz WIFI 802.11b (LF)

WIFI	Note	Frequency	Level	Over	Limit	Read	Antenna	Path	Preamp	Ant	Table	Peak	Pol.
Ant.				Limit	Line	Level	Factor	Loss	Factor	Pos	Pos	Avg.	
CDD 4+5		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
2.4GHz 802.11b LF		43.58	33.95	-6.05	40	48.01	17.82	1	32.88	-	-	P	H
		129.91	31.71	-11.79	43.5	45.08	17.74	1.73	32.84	-	-	P	H
		174.53	29.63	-13.87	43.5	43.66	16.91	2.01	32.95	-	-	P	H
		261.83	22.12	-23.88	46	33.11	19.59	2.47	33.05	-	-	P	H
		578.05	26.61	-19.39	46	29.8	25.68	3.67	32.54	-	-	P	H
		799.21	30.51	-15.49	46	31.8	26.89	4.32	32.5	-	-	P	H
		45.52	35.36	-4.64	40	50.33	16.92	1.03	32.92	150	125	P	V
		129.91	31.87	-11.63	43.5	45.24	17.74	1.73	32.84	-	-	P	V
		261.83	21.19	-24.81	46	32.18	19.59	2.47	33.05	-	-	P	V
		499.48	28.12	-17.88	46	33.02	24.48	3.42	32.8	-	-	P	V
		624.61	29.94	-16.06	46	33.03	25.7	3.81	32.6	-	-	P	V
		773.02	29.53	-16.47	46	31.21	26.68	4.25	32.61	-	-	P	V
Remark	1. No other spurious found. 2. All results are PASS against limit line.												

Co-location

2.4GHz 2400~2483.5MHz

WIFI 802.11b&Band 48 (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.	
CDD 4+5		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b CH 01 2412MHz		2330.54	55.45	-18.55	74	43.44	31.84	7.07	32.9	100	8	P	H
		2389.04	45.22	-8.78	54	32.94	31.97	7.16	32.85	100	8	A	H
	*	2412	98.45	-	-	86.08	32.01	7.2	32.84	100	8	P	H
	*	2412	95.07	-	-	82.7	32.01	7.2	32.84	100	8	A	H
		2350.56	55.76	-18.24	74	43.66	31.89	7.1	32.89	100	338	P	V
		2388.91	45.18	-8.82	54	32.9	31.97	7.16	32.85	100	338	A	V
	*	2412	105.23	-	-	92.84	32.02	7.21	32.84	100	338	P	V
	*	2412	102.24	-	-	89.85	32.02	7.21	32.84	100	338	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 802.11b&Band 48 (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.	
CDD 4+5		(MHz)	(dBμV/m)	(dB)	(dBμV/m)	(dBμV)	(dB/m)	(dB)	(dB)	(cm)	(deg)	(P/A)	(H/V)
802.11b		4830	50.52	-23.48	74	71.39	34.09	10.3	65.26	300	298	P	H
CH 01		4824	54.7	-19.3	74	75.58	34.09	10.29	65.26	227	0	P	V
2412MHz		4824	49.53	-4.47	54	70.41	34.09	10.29	65.26	227	0	A	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.	
CDD 4+5		(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)

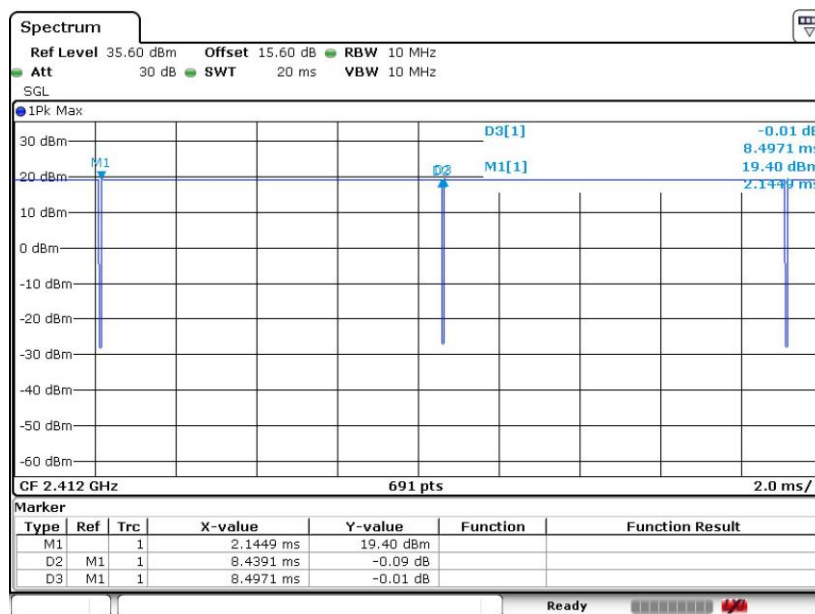
= -10.46(dB)

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
802.11b	99.32	-	-	10Hz
802.11g	96.02	1.399	0.715	0.75KHz
802.11ax HE20	94.63	1.022	0.979	1KHz
802.11ax HE40	90.43	0.548	1.825	2KHz
802.11ax HE20 RU26	96.15	1.449	0.690	0.75KHz
802.11ax HE20 RU52	94.03	0.913	1.095	1.1KHz
802.11ax HE20 RU106	91.60	0.632	1.583	1.6KHz

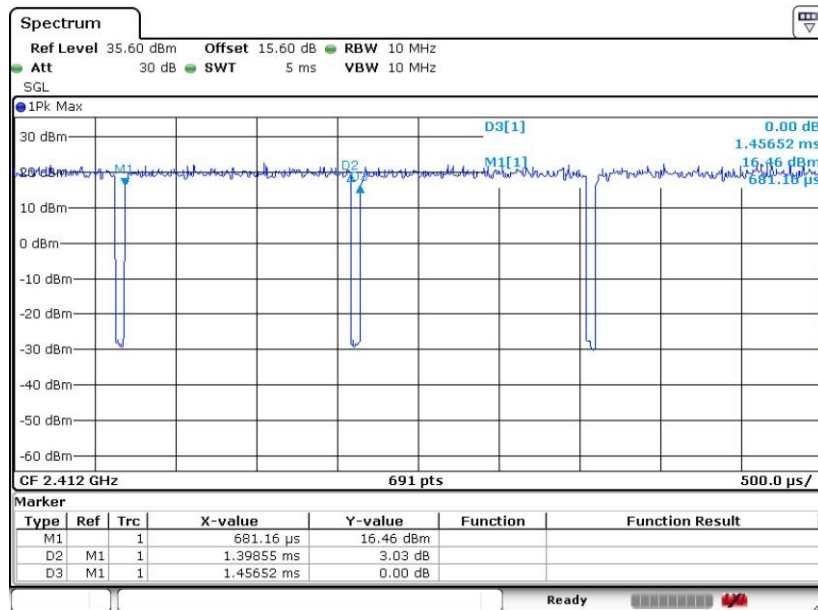
802.11b



Date: 2.AUG.2022 14:01:18

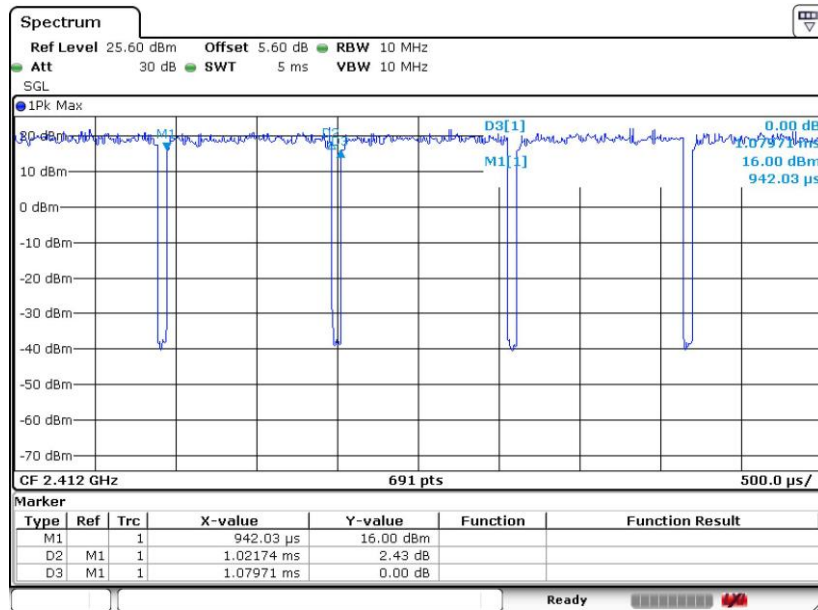


802.11g



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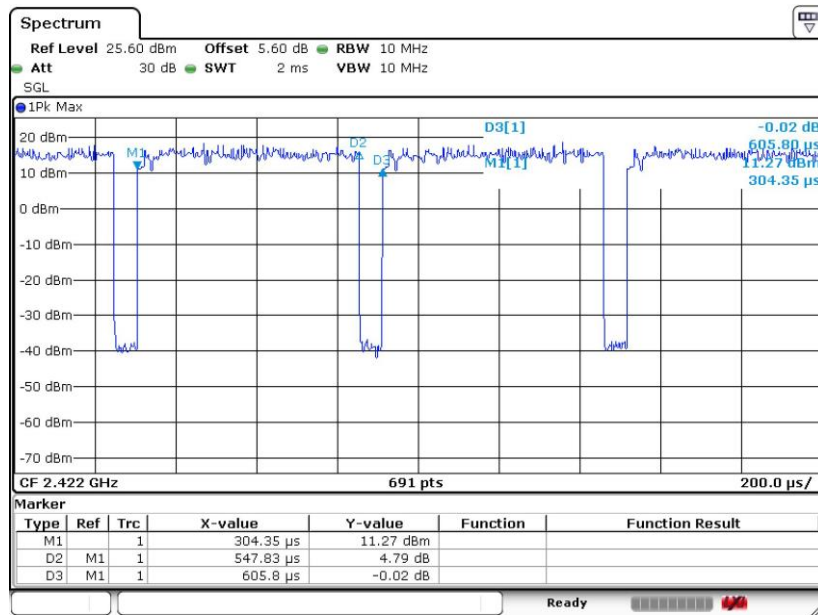
802.11ax HE20



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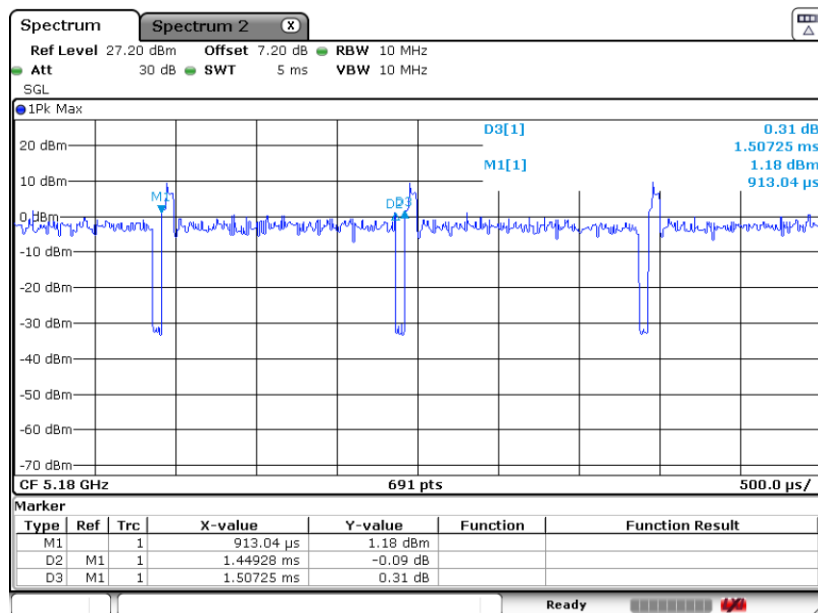


802.11ax HE40



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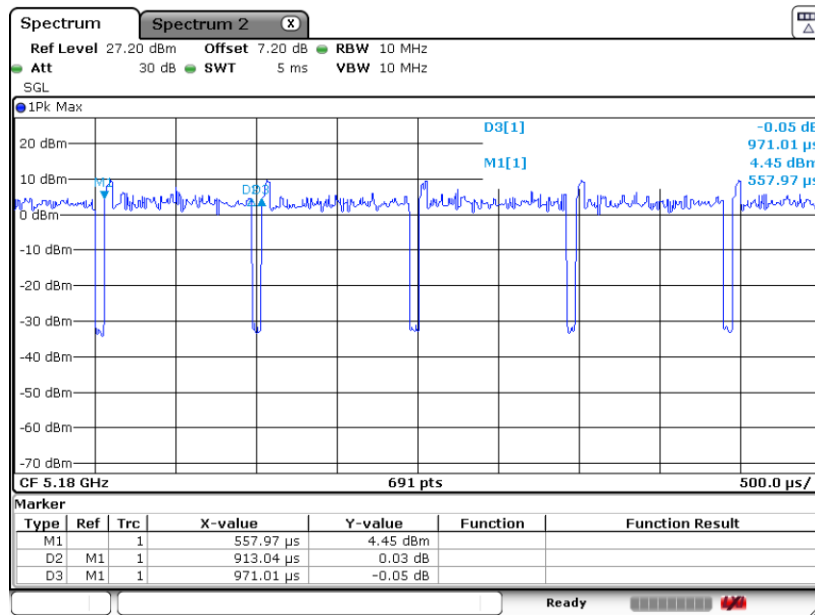
802.11ax HE20 RU26



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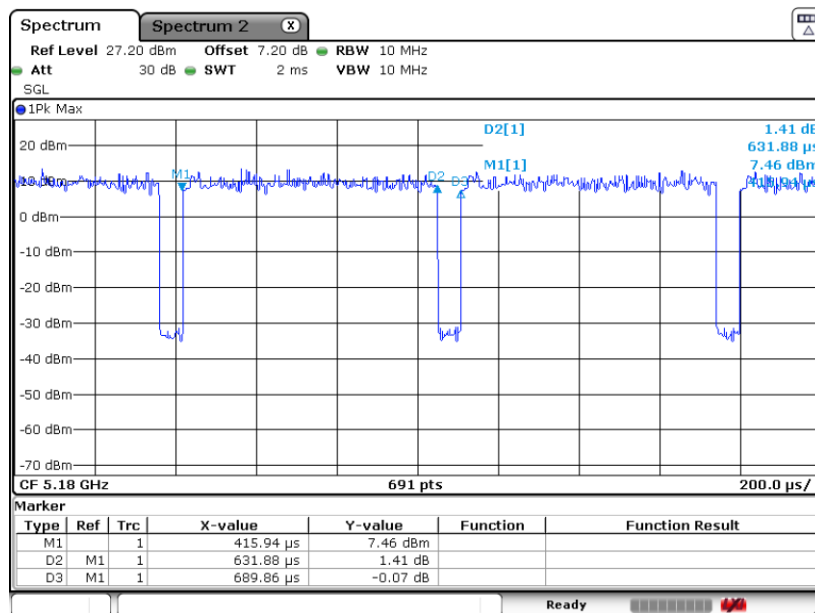


802.11ax HE20 RU52



Date: 9.AUG.2022 18:42:14

802.11ax HE20 RU 106



Date: 9.AUG.2022 18:45:12