



11G-Ant1-2437



11G-Ant1-2462



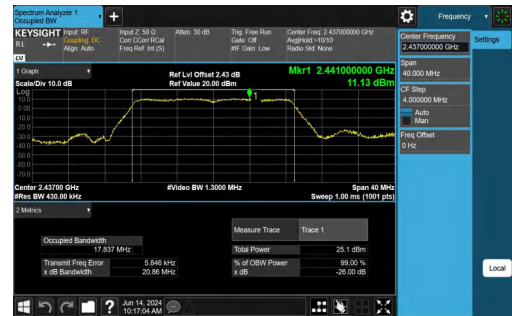
11N20SISO-Ant1-2412



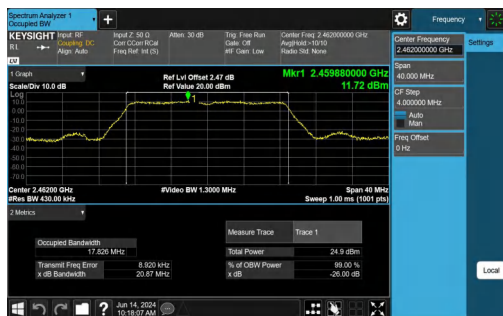
11N20SISO-Ant1-2437



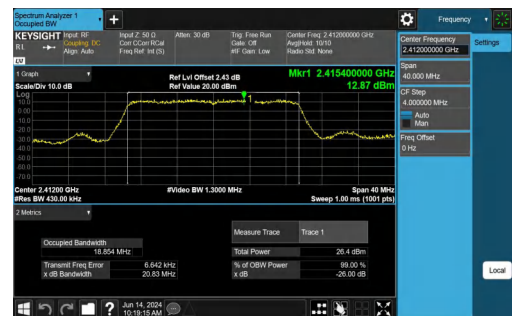
11N20SISO-Ant1-2462



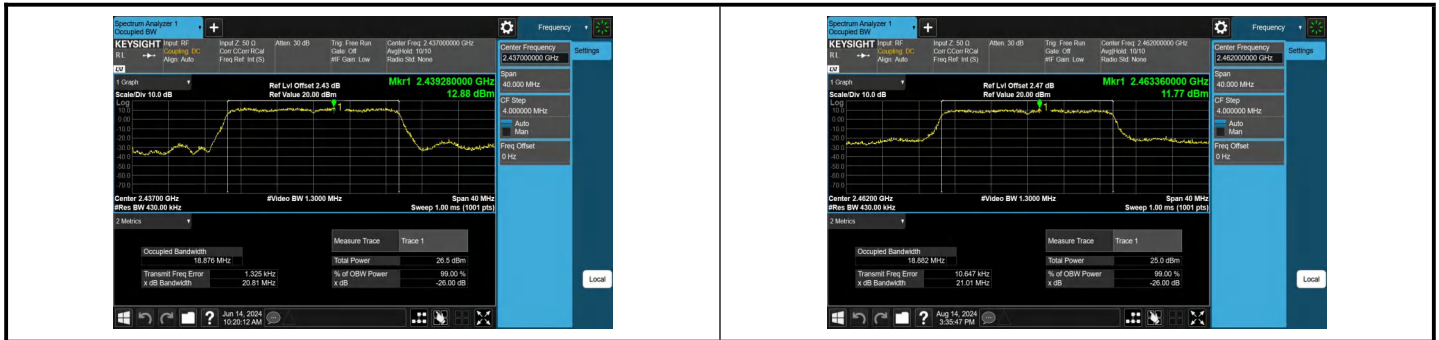
11AX20SISO-Ant1-2412



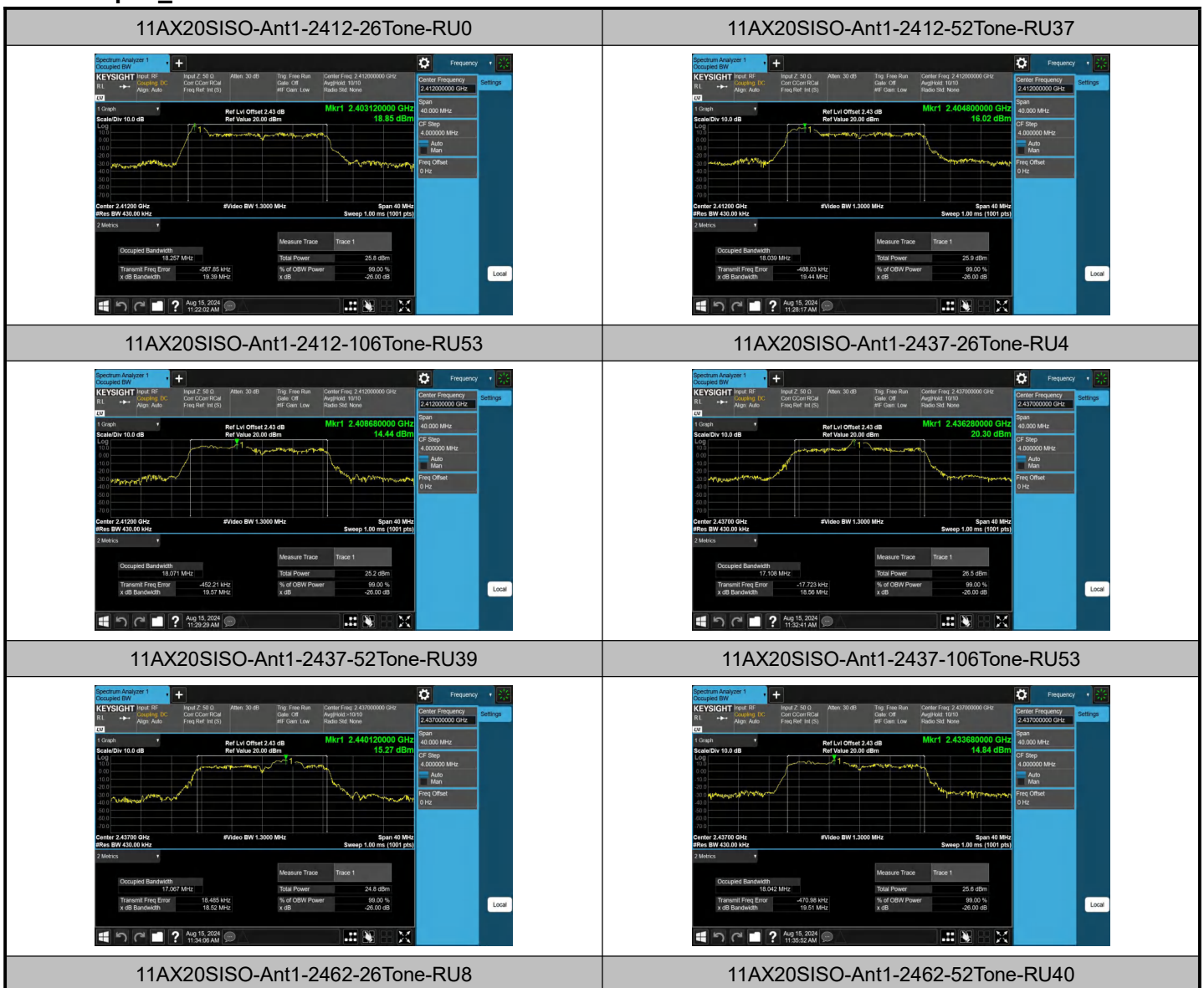
11AX20SISO-Ant1-2437

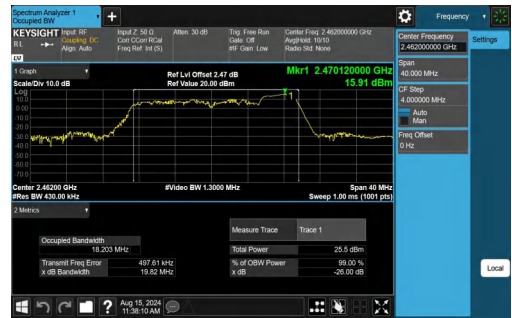
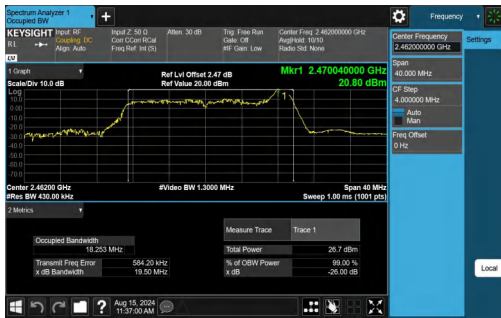


11AX20SISO-Ant1-2462



Test Graphs_99% Bandwidth for AX Part RU





11AX20SISO-Ant1-2462-106Tone-RU54

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A.3 Power Spectral Density

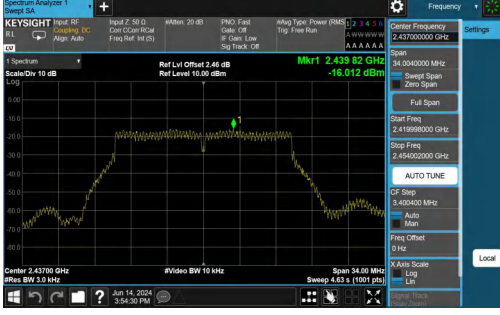
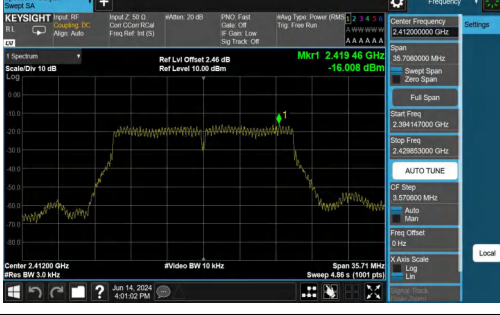
Test Result

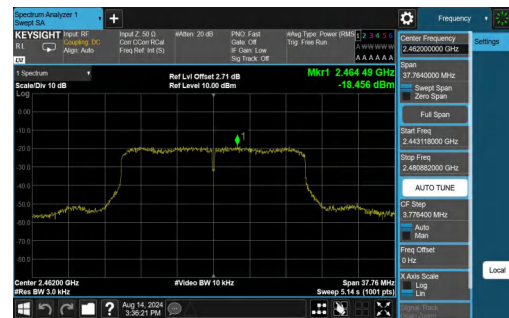
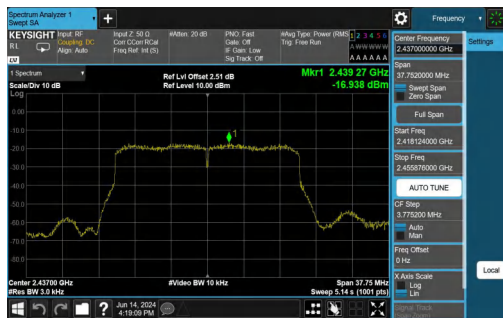
Test Mode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-12.23	≤8.00	PASS
11B	Ant1	2437	-13.30	≤8.00	PASS
11B	Ant1	2462	-14.36	≤8.00	PASS
11G	Ant1	2412	-16.09	≤8.00	PASS
11G	Ant1	2437	-16.01	≤8.00	PASS
11G	Ant1	2462	-17.71	≤8.00	PASS
11N20SISO	Ant1	2412	-16.01	≤8.00	PASS
11N20SISO	Ant1	2437	-15.94	≤8.00	PASS
11N20SISO	Ant1	2462	-16.23	≤8.00	PASS
11AX20SISO	Ant1	2412	-17.01	≤8.00	PASS
11AX20SISO	Ant1	2437	-16.94	≤8.00	PASS
11AX20SISO	Ant1	2462	-18.46	≤8.00	PASS

Test Result for AX Part RU

Test Mode	Antenna	Frequency [MHz]	Ru Size	Ru Index	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
11AX20SISO	Ant1	2412	26Tone	RU0	-6.63	≤8.00	PASS
11AX20SISO	Ant1	2412	52Tone	RU37	-7.34	≤8.00	PASS
11AX20SISO	Ant1	2412	106Tone	RU53	-10.84	≤8.00	PASS
11AX20SISO	Ant1	2437	26Tone	RU4	-5.86	≤8.00	PASS
11AX20SISO	Ant1	2437	52Tone	RU39	-9.26	≤8.00	PASS
11AX20SISO	Ant1	2437	106Tone	RU53	-9.92	≤8.00	PASS
11AX20SISO	Ant1	2462	26Tone	RU8	-6.01	≤8.00	PASS
11AX20SISO	Ant1	2462	52Tone	RU40	-7.71	≤8.00	PASS
11AX20SISO	Ant1	2462	106Tone	RU54	-10.84	≤8.00	PASS

Test Graphs

11B-Ant1-2412-PASS 	11B-Ant1-2437-PASS 
11B-Ant1-2462-PASS 	11G-Ant1-2412-PASS 
11G-Ant1-2437-PASS 	11G-Ant1-2462-PASS 
11N20SISO-Ant1-2412-PASS 	11N20SISO-Ant1-2437-PASS 
11N20SISO-Ant1-2462-PASS	11X20SISO-Ant1-2412-PASS



Test Graphs for AX Part RU

11AX20SISO-Ant1-2412-26Tone-RU0-PASS



11AX20SISO-Ant1-2412-52Tone-RU37-PASS



11AX20SISO-Ant1-2412-106Tone-RU53-PASS



11AX20SISO-Ant1-2437-26Tone-RU4-PASS



11AX20SISO-Ant1-2437-52Tone-RU39-PASS

11AX20SISO-Ant1-2437-106Tone-RU53-PASS



11AX20SISO-Ant1-2462-26Tone-RU8-PASS



11AX20SISO-Ant1-2462-52Tone-RU40-PASS



11AX20SISO-Ant1-2462-106Tone-RU54-PASS



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A.4 Conducted Band Edges and Spurious Emission

Test Result

Band Edges

Test Mode	Antenna	Ch Name	Frequency [MHz]	Ref Level[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	10.07	-38.66	≤-19.93	PASS
11B	Ant1	High	2462	9.07	-46.08	≤-20.93	PASS
11G	Ant1	Low	2412	7.89	-30.83	≤-22.11	PASS
11G	Ant1	High	2462	6.31	-44.76	≤-23.69	PASS
11N20SISO	Ant1	Low	2412	8.09	-29.56	≤-21.91	PASS
11N20SISO	Ant1	High	2462	7.95	-36.66	≤-22.05	PASS
11AX20SISO	Ant1	Low	2412	8.07	-30.09	≤-21.93	PASS
11AX20SISO	Ant1	High	2462	6.49	-31.62	≤-23.51	PASS

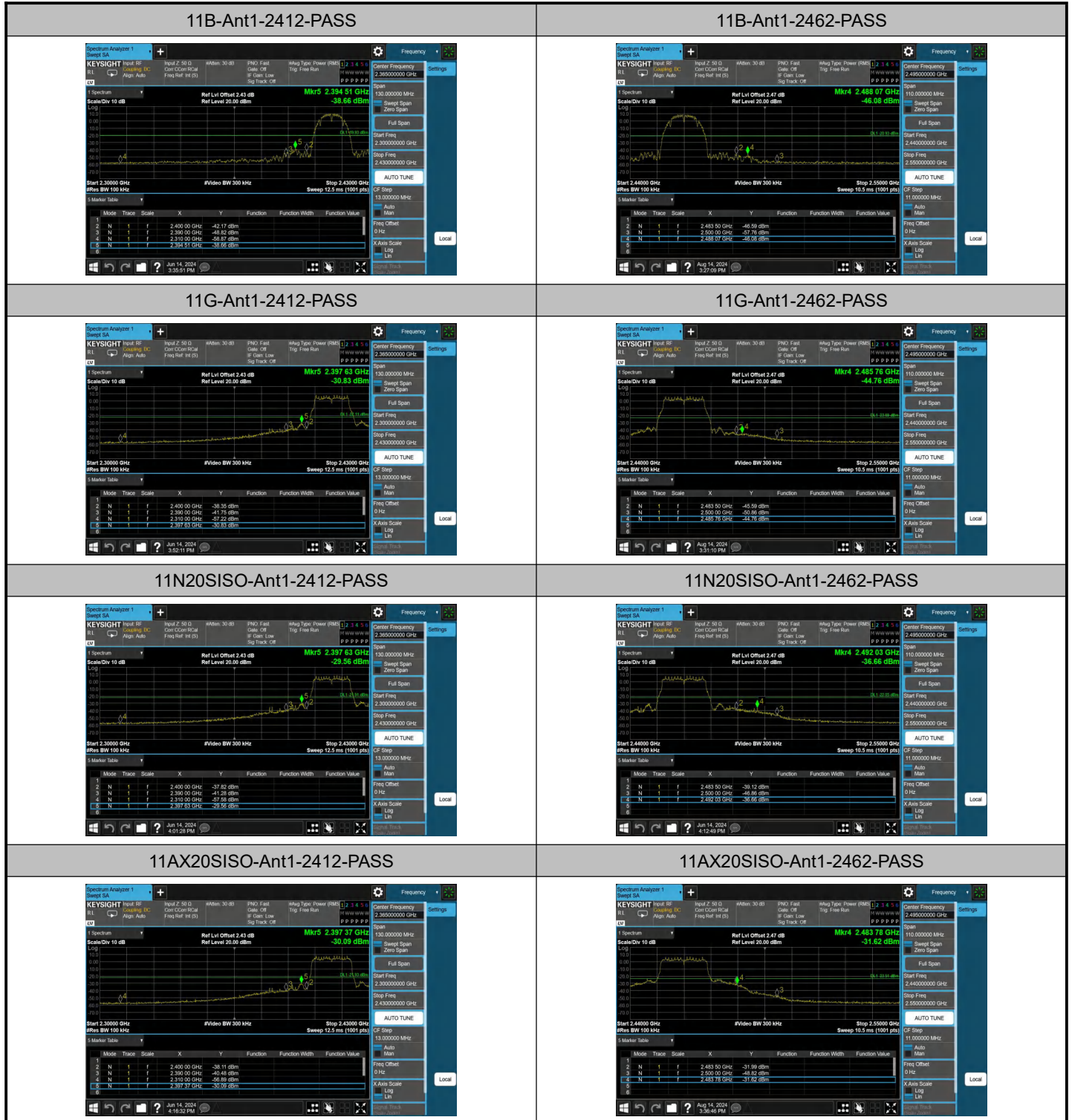
Spurious Emission

Test Mode	Antenna	Frequency[MHz]	Freq Range[MHz]	Ref Level[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	2412	30~1000	10.07	-68.47	≤-19.93	PASS
11B	Ant1	2412	1000~26500	10.07	-41.02	≤-19.93	PASS
11B	Ant1	2437	30~1000	10.29	-61.9	≤-19.71	PASS
11B	Ant1	2437	1000~26500	10.29	-41.58	≤-19.71	PASS
11B	Ant1	2462	30~1000	9.07	-69.31	≤-20.93	PASS
11B	Ant1	2462	1000~26500	9.07	-49.47	≤-20.93	PASS
11G	Ant1	2412	30~1000	7.89	-65.37	≤-22.11	PASS
11G	Ant1	2412	1000~26500	7.89	-44.12	≤-22.11	PASS
11G	Ant1	2437	30~1000	8.12	-68.51	≤-21.88	PASS
11G	Ant1	2437	1000~26500	8.12	-44.2	≤-21.88	PASS
11G	Ant1	2462	30~1000	6.31	-68.71	≤-23.69	PASS
11G	Ant1	2462	1000~26500	6.31	-55.02	≤-23.69	PASS
11N20SISO	Ant1	2412	30~1000	8.09	-68.27	≤-21.91	PASS
11N20SISO	Ant1	2412	1000~26500	8.09	-44.2	≤-21.91	PASS
11N20SISO	Ant1	2437	30~1000	8.38	-68.31	≤-21.62	PASS
11N20SISO	Ant1	2437	1000~26500	8.38	-45.41	≤-21.62	PASS
11N20SISO	Ant1	2462	30~1000	7.95	-69.08	≤-22.05	PASS
11N20SISO	Ant1	2462	1000~26500	7.95	-47.75	≤-22.05	PASS
11AX20SISO	Ant1	2412	30~1000	8.07	-68.35	≤-21.93	PASS
11AX20SISO	Ant1	2412	1000~26500	8.07	-46.18	≤-21.93	PASS
11AX20SISO	Ant1	2437	30~1000	8.23	-68.19	≤-21.77	PASS
11AX20SISO	Ant1	2437	1000~26500	8.23	-44.05	≤-21.77	PASS
11AX20SISO	Ant1	2462	30~1000	6.49	-67.38	≤-23.51	PASS

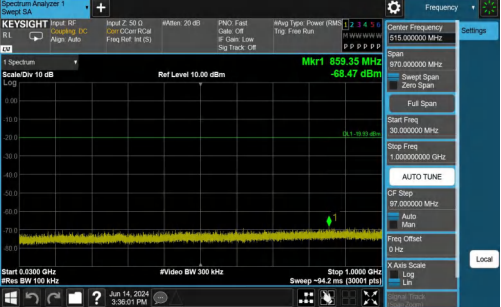
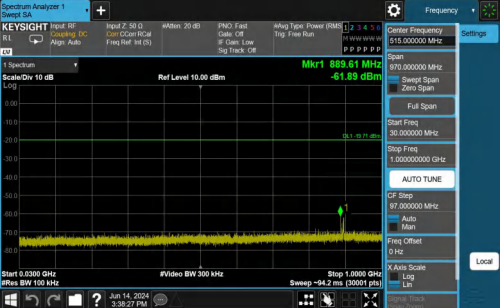
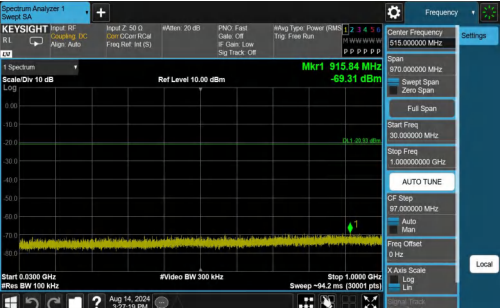
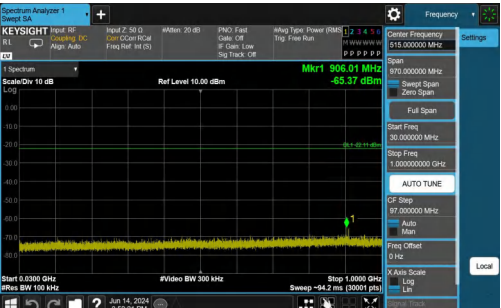
11AX20SISO	Ant1	2462	1000~26500	6.49	-53.66	≤-23.51	PASS
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Test Graphs

Band Edges



Spurious Emission

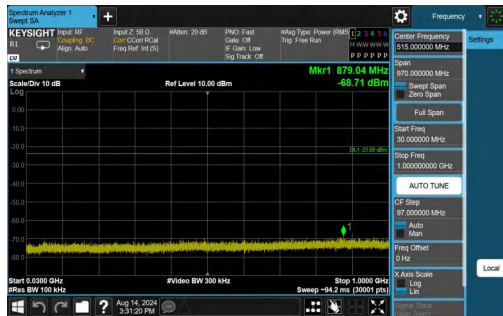
11B-Ant1-2412-30~1000-PASS 	11B-Ant1-2412-1000~26500-PASS 
11B-Ant1-2437-30~1000-PASS 	11B-Ant1-2437-1000~26500-PASS 
11B-Ant1-2462-30~1000-PASS 	11B-Ant1-2462-1000~26500-PASS 
11G-Ant1-2412-30~1000-PASS 	11G-Ant1-2412-1000~26500-PASS 
11G-Ant1-2437-30~1000-PASS	11G-Ant1-2437-1000~26500-PASS



11G-Ant1-2462-30~1000-PASS



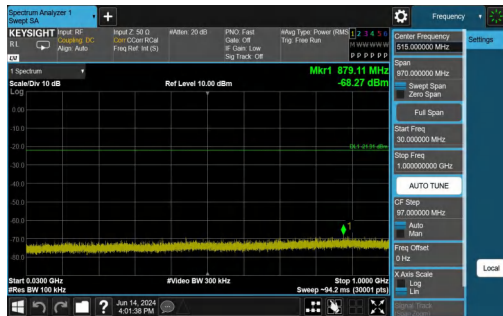
11G-Ant1-2462-1000~26500-PASS



11N20SISO-Ant1-2412-30~1000-PASS



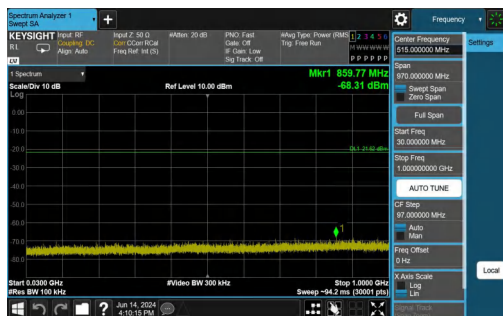
11N20SISO-Ant1-2412-1000~26500-PASS



11N20SISO-Ant1-2437-30~1000-PASS



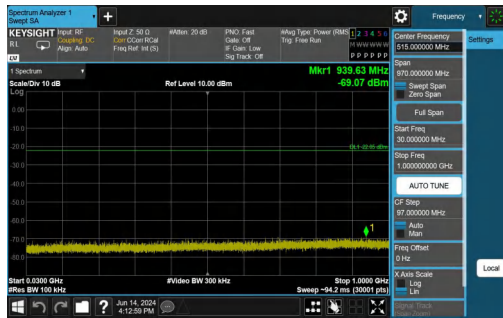
11N20SISO-Ant1-2437-1000~26500-PASS



11N20SISO-Ant1-2462-30~1000-PASS



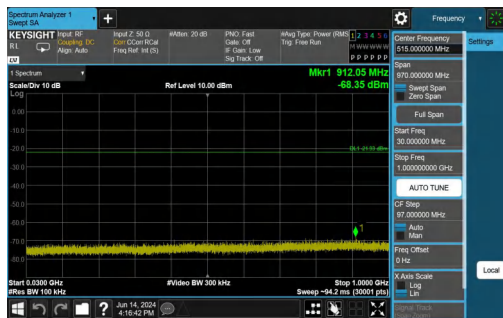
11N20SISO-Ant1-2462-1000~26500-PASS



11AX20SISO-Ant1-2412-30~1000-PASS



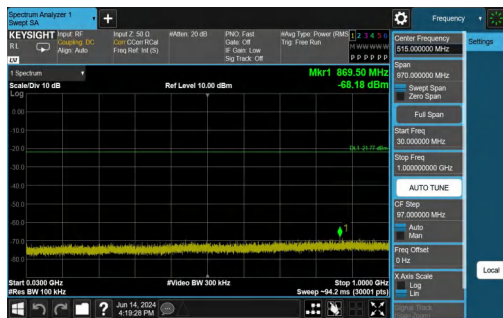
11AX20SISO-Ant1-2412-1000~26500-PASS



11AX20SISO-Ant1-2437-30~1000-PASS



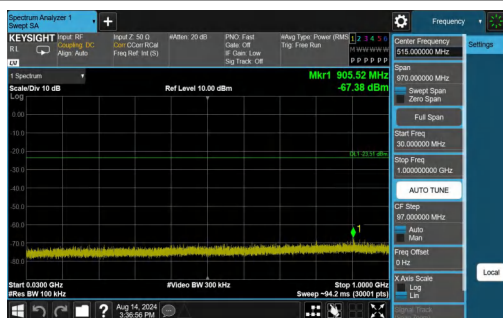
11AX20SISO-Ant1-2437-1000~26500-PASS



11AX20SISO-Ant1-2462-30~1000-PASS



11AX20SISO-Ant1-2462-1000~26500-PASS



A.5 Duty Cycle

Test Result

Test Mode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Factor
11B	Ant1	2412	20.00	20.00	100.00	0.00
11B	Ant1	2437	20.00	20.00	100.00	0.00
11B	Ant1	2462	20.00	20.00	100.00	0.00
11G	Ant1	2412	1.43	1.45	98.62	0.06
11G	Ant1	2437	1.43	1.44	99.31	0.03
11G	Ant1	2462	1.43	1.44	99.31	0.03
11N20SISO	Ant1	2412	1.34	1.35	99.26	0.03
11N20SISO	Ant1	2437	1.34	1.36	98.53	0.06
11N20SISO	Ant1	2462	1.34	1.35	99.26	0.03
11AX20SISO	Ant1	2412	1.04	1.06	98.11	0.08
11AX20SISO	Ant1	2437	1.04	1.06	98.11	0.08
11AX20SISO	Ant1	2462	1.05	1.11	94.59	0.24

Test Result for AX Part RU

Test Mode	Antenna	Frequency [MHz]	Ru Size	Ru Index	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11AX20SISO	Ant1	2412	26Tone	RU0	0.67	0.76	88.16
11AX20SISO	Ant1	2412	52Tone	RU37	0.67	0.76	88.16
11AX20SISO	Ant1	2412	106Tone	RU53	0.67	0.75	89.33
11AX20SISO	Ant1	2437	26Tone	RU4	0.69	0.76	90.79
11AX20SISO	Ant1	2437	52Tone	RU39	0.67	0.75	89.33
11AX20SISO	Ant1	2437	106Tone	RU53	0.67	0.75	89.33
11AX20SISO	Ant1	2462	26Tone	RU8	0.67	0.75	89.33
11AX20SISO	Ant1	2462	52Tone	RU40	0.67	0.75	89.33
11AX20SISO	Ant1	2462	106Tone	RU54	0.67	0.75	89.33

Test Graphs

NTNV-11B-Ant1-2412



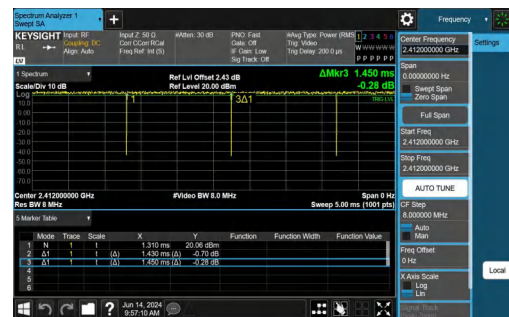
NTNV-11B-Ant1-2437



NTNV-11B-Ant1-2462



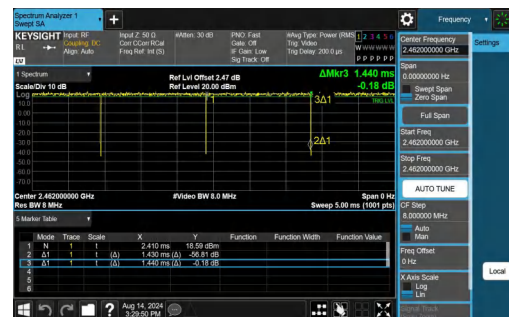
NTNV-11G-Ant1-2412



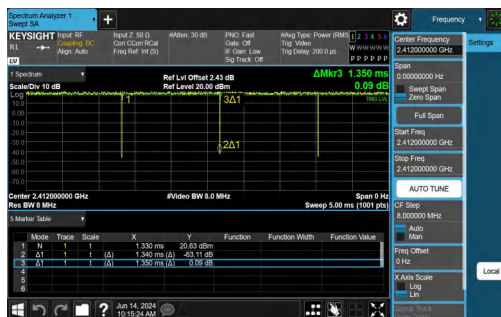
NTNV-11G-Ant1-2437



NTNV-11G-Ant1-2462



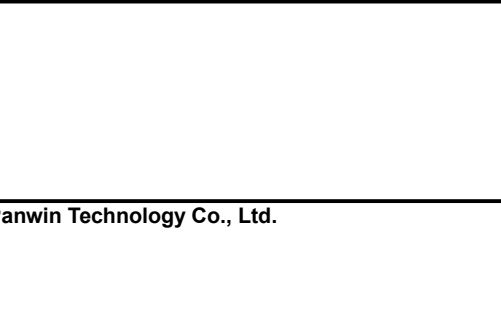
NTNV-11N20SISO-Ant1-2412



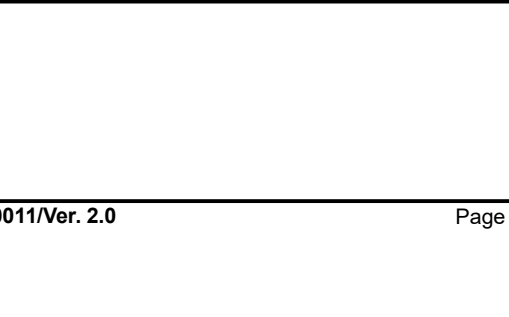
NTNV-11N20SISO-Ant1-2437



NTNV-11N20SISO-Ant1-2462



NTNV-11AX20SISO-Ant1-2412

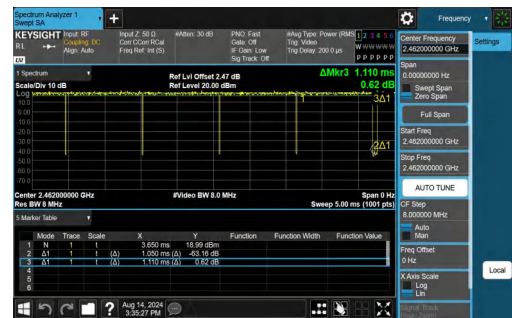
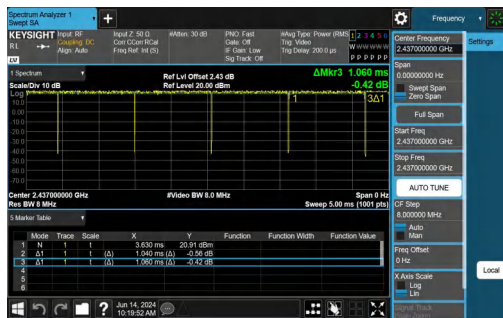




NTNV-11AX20SISO-Ant1-2437

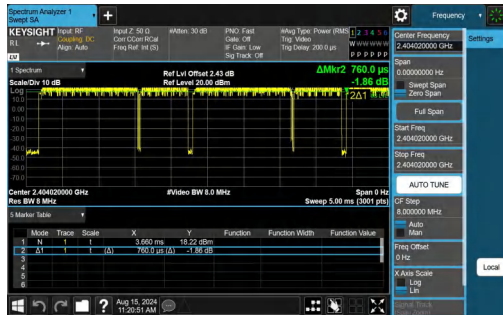


NTNV-11AX20SISO-Ant1-2462

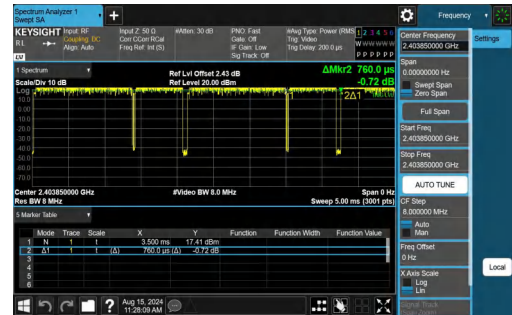


Test Graphs for AX Part RU

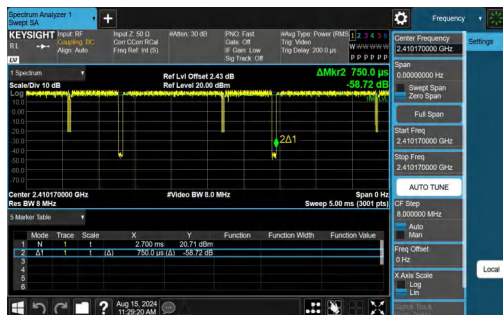
NTNV-11AX20SISO-Ant1-2412-26Tone-RU0



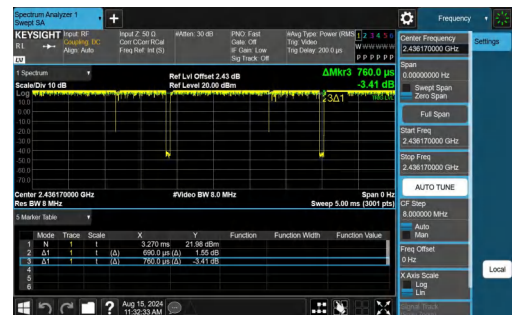
NTNV-11AX20SISO-Ant1-2412-52Tone-RU37



NTNV-11AX20SISO-Ant1-2412-106Tone-RU53

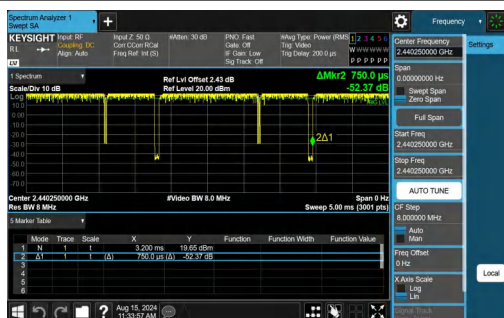


NTNV-11AX20SISO-Ant1-2437-26Tone-RU4

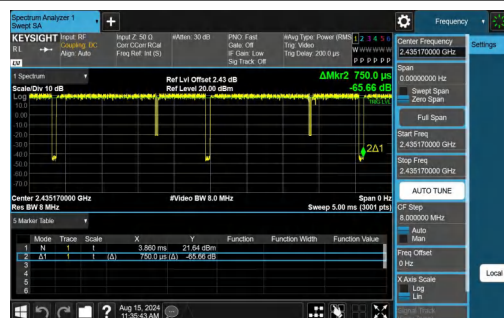


NTNV-11AX20SISO-Ant1-2437-52Tone-RU39

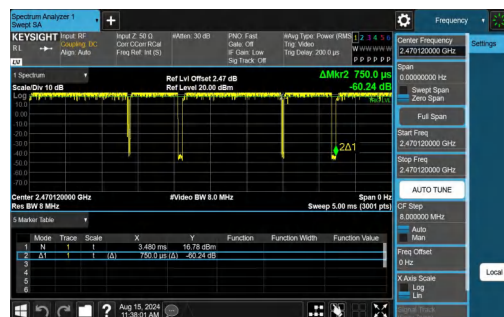
NTNV-11AX20SISO-Ant1-2437-106Tone-RU53



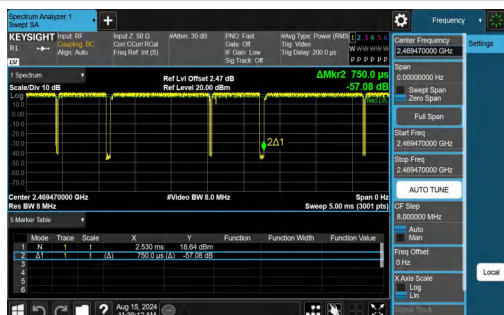
NTNV-11AX20SISO-Ant1-2462-26Tone-RU8



NTNV-11AX20SISO-Ant1-2462-52Tone-RU40



NTNV-11AX20SISO-Ant1-2462-106Tone-RU54



A

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Appendix B – Test Results of Radiated Test

B.1 Radiated Band Edges and Spurious Emission

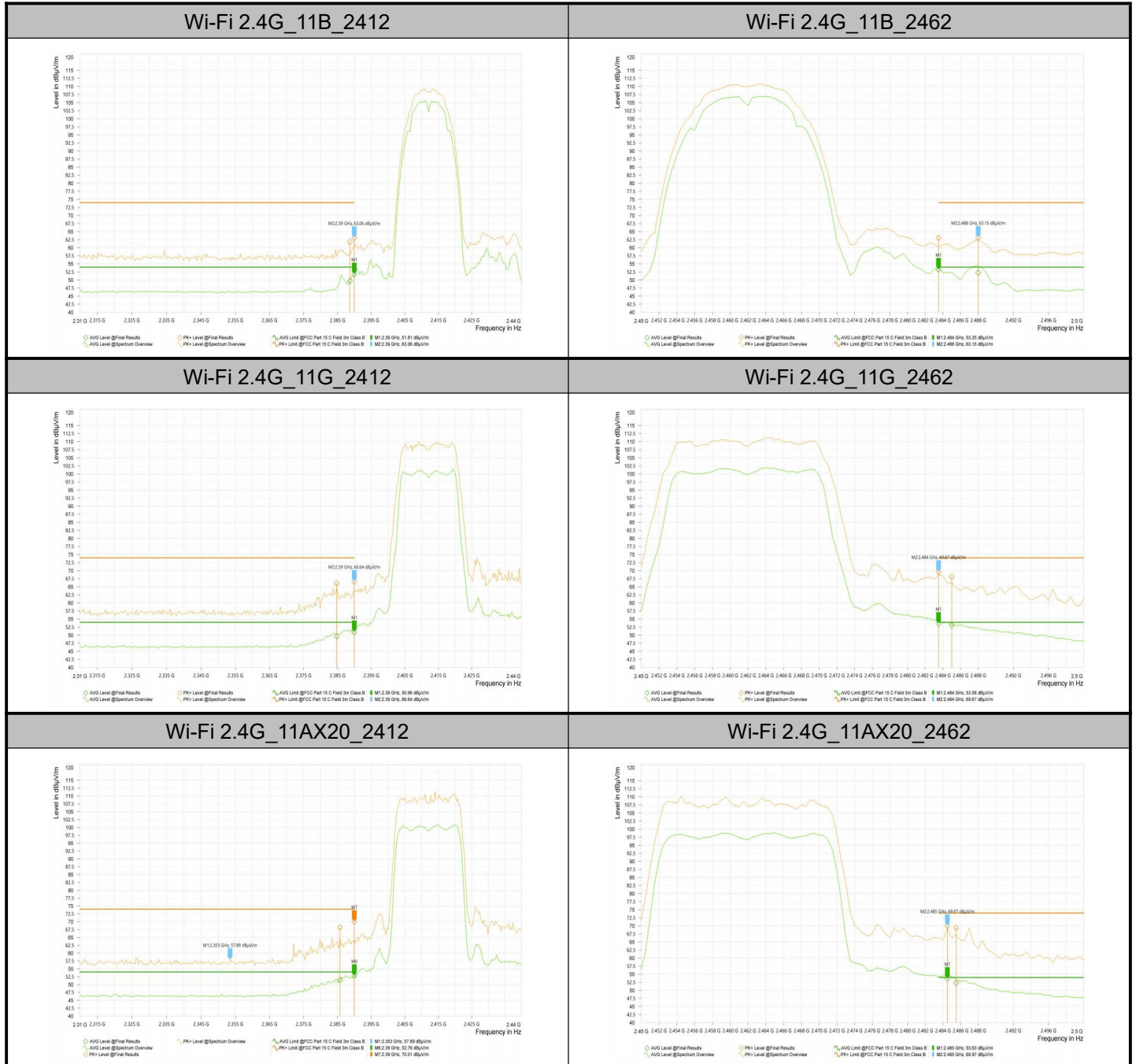
Test Result_Band Edges

Test Mode & Test Freq.[MHz]	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Polarization	Azimuth [deg]
Wi-Fi 2.4G_11B_2412	2,388.650	61.79	74.00	12.21	49.72	54.00	4.28	H	287
	2,389.950	63.06	74.00	10.94	51.81	54.00	2.19	H	296.9
Wi-Fi 2.4G_11B_2462	2,483.500	63.06	74.00	10.94	53.25	54.00	0.75	H	46.9
	2,488.000	63.15	74.00	10.85	52.27	54.00	1.73	H	55.9
Wi-Fi 2.4G_11G_2412	2,384.750	66.07	74.00	7.93	49.61	54.00	4.39	H	305
	2,389.950	66.64	74.00	7.36	50.96	54.00	3.04	H	305
Wi-Fi 2.4G_11G_2462	2,483.500	69.67	74.00	4.33	53.58	54.00	0.42	H	45.1
	2,485.000	68.18	74.00	5.82	53.14	54.00	0.86	H	26.4
Wi-Fi 2.4G_11AX20_2412	2,385.725	68.20	74.00	5.80	51.39	54.00	2.61	H	287.8
	2,389.950	70.01	74.00	3.99	52.76	54.00	1.24	H	296.8
Wi-Fi 2.4G_11AX20_2462	2,484.500	69.97	74.00	4.03	53.63	54.00	0.37	H	36.1
	2,485.500	69.42	74.00	4.58	52.24	54.00	1.76	H	54.1

Test Result_Band Edges for AX Part RU

Test Mode & Test Freq.[MHz]	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Polarization	Azimuth [deg]
Wi-Fi 2.4_11AX20_2412_ 106Tone_RU53	2,388.000	72.23	74.00	1.77	49.04	54.00	4.96	H	35.3
	2,389.300	72.84	74.00	1.16	49.46	54.00	4.54	H	26.2
Wi-Fi 2.4_11AX20_2412_ 26Tone_RU0	2,370.775	66.80	74.00	7.20	48.84	54.00	5.16	H	27.1
	2,388.975	72.70	74.00	1.30	48.66	54.00	5.34	H	36.1
Wi-Fi 2.4_11AX20_2412_ 52Tone_RU37	2,386.700	69.96	74.00	4.04	47.64	54.00	6.36	H	45.2
	2,388.325	72.81	74.00	1.19	48.87	54.00	5.13	H	33.2
Wi-Fi 2.4_11AX20_2462_ 106Tone_RU52	2,483.500	71.30	74.00	2.70	51.39	54.00	2.61	H	45.1
	2,485.500	68.22	74.00	5.78	49.74	54.00	4.26	H	45.1
Wi-Fi 2.4_11AX20_2462_ 26Tone_RU8	2,485.500	73.72	74.00	0.28	51.59	54.00	2.41	H	19.7
	2,487.000	70.73	74.00	3.27	50.68	54.00	3.32	H	8.6
Wi-Fi 2.4_11AX20_2462_ 52Tone_RU40	2,484.000	68.23	74.00	5.77	48.85	54.00	5.15	H	4.9
	2,485.500	69.51	74.00	4.49	50.70	54.00	3.30	H	35.2

Test Graphs_Band Edges



Test Graphs_Band Edges for AX Part RU

Wi-Fi 2.4_11AX20_2412_106Tone_RU53



Wi-Fi 2.4_11AX20_2412_26Tone_RU0



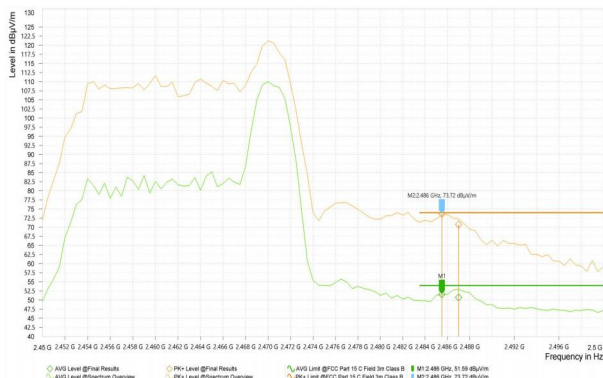
Wi-Fi 2.4_11AX20_2412_52Tone_RU37



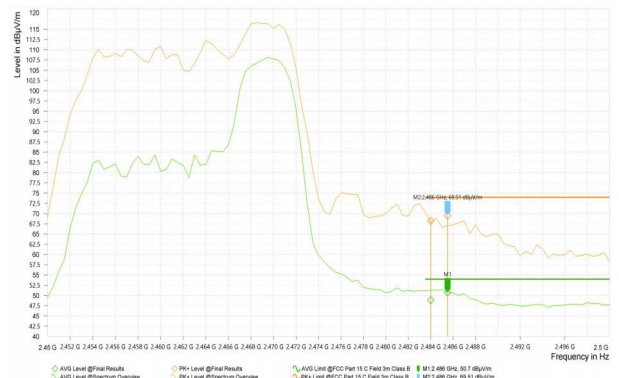
Wi-Fi 2.4_11AX20_2462_106Tone_RU52



Wi-Fi 2.4_11AX20_2462_26Tone_RU8



Wi-Fi 2.4_11AX20_2462_52Tone_RU40



Test Result_Spurious Emission

Note1: Test result Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier the Emissions in the frequency band 9kHz-30MHz and above 18GHz are more than 20dB below the limit are not reported.

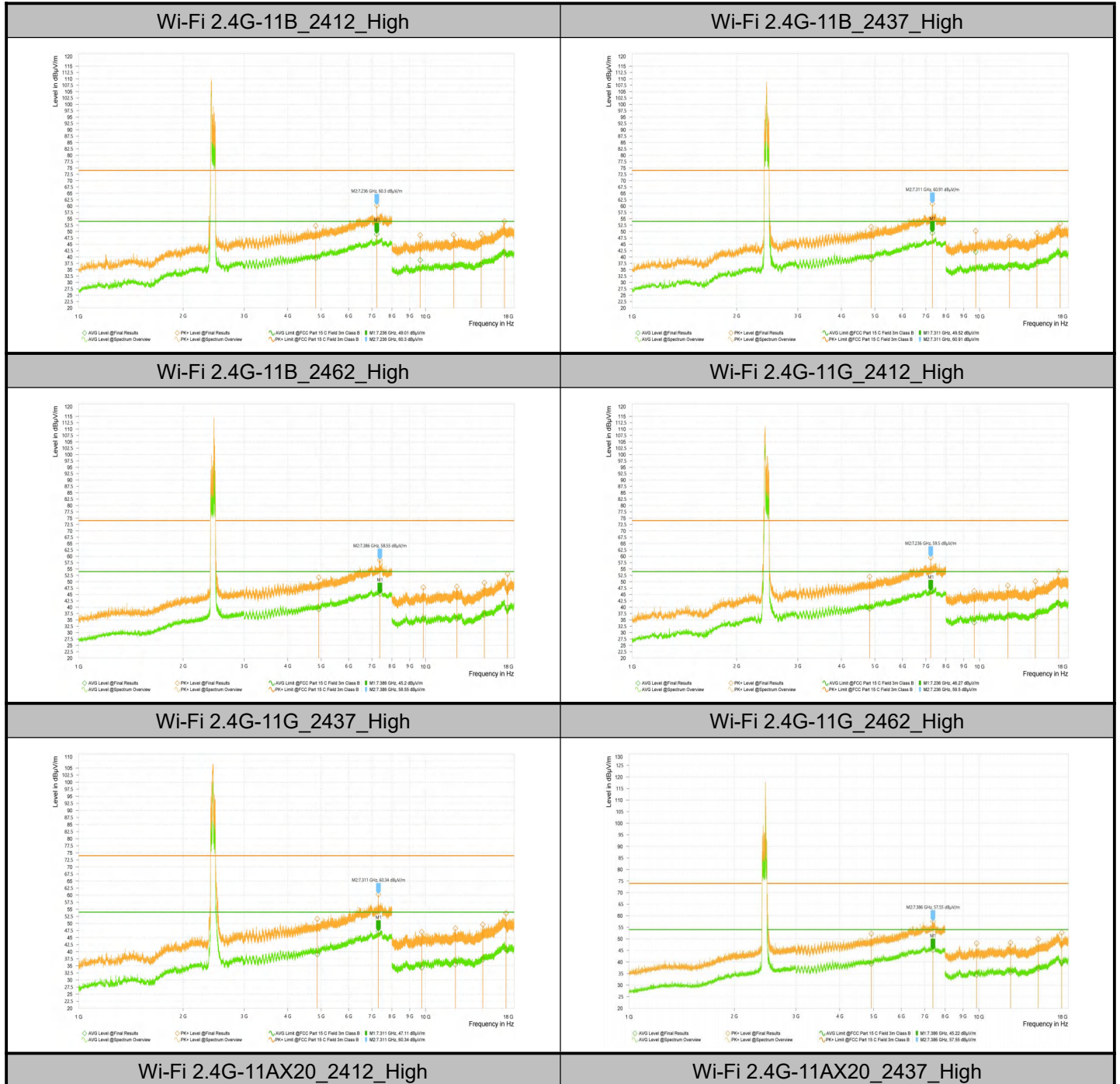
Note2: 'Low' indicates a frequency range below 1GHz, and 'High' indicates a frequency range above 1GHz.

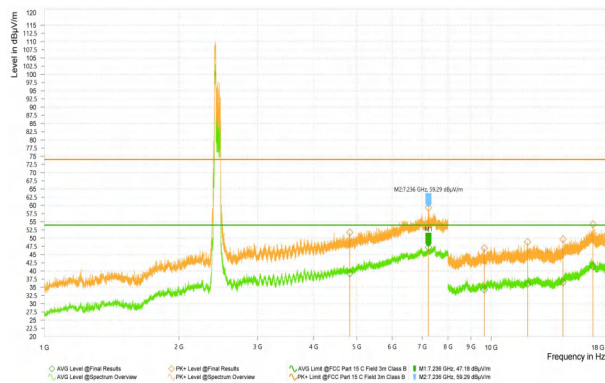
Test Mode & Test Freq.[MHz]	Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Polarization	Azimuth [deg]
Wi-Fi 2.4G-11B_2412_High	4,824.000	52.23	74.00	21.77	39.52	54.00	14.48	H	360
	7,236.000	60.30	74.00	13.70	49.01	54.00	4.99	H	0.5
	9,648.000	48.50	74.00	25.50	38.78	54.00	15.22	V	73.8
	12,060.000	48.66	74.00	25.34	35.88	54.00	18.12	H	347.7
	14,472.000	49.18	74.00	24.82	37.05	54.00	16.95	H	200.6
	16,884.000	53.99	74.00	20.01	41.30	54.00	12.70	V	201.8
Wi-Fi 2.4G-11B_2437_High	4,874.000	51.80	74.00	22.20	39.07	54.00	14.93	H	195.8
	7,311.000	60.91	74.00	13.09	49.52	54.00	4.48	H	0
	9,748.000	50.18	74.00	23.82	41.98	54.00	12.02	V	239.4
	12,185.000	47.91	74.00	26.09	35.47	54.00	18.53	H	360
	14,622.000	49.37	74.00	24.63	37.28	54.00	16.72	H	322.2
	17,059.000	53.10	74.00	20.90	40.86	54.00	13.14	V	1.8
Wi-Fi 2.4G-11B_2462_High	4,924.000	51.63	74.00	22.37	39.14	54.00	14.86	H	306.8
	7,385.500	58.55	74.00	15.45	45.20	54.00	8.80	H	91.7
	9,848.000	47.77	74.00	26.23	35.62	54.00	18.38	V	9
	12,309.500	48.06	74.00	25.94	35.39	54.00	18.61	H	350.4
	14,772.500	49.52	74.00	24.48	36.87	54.00	17.13	H	0
	17,234.000	53.10	74.00	20.90	39.81	54.00	14.19	H	350.4
Wi-Fi 2.4G-11G_2412_High	4,824.000	51.98	74.00	22.02	39.42	54.00	14.58	H	360
	7,236.000	59.50	74.00	14.50	46.27	54.00	7.73	H	16.6
	9,648.000	46.33	74.00	27.67	34.00	54.00	20.00	V	360
	12,060.000	48.47	74.00	25.53	36.16	54.00	17.84	V	292.2
	14,472.000	50.08	74.00	23.92	36.41	54.00	17.59	V	202.9
	16,884.000	54.05	74.00	19.95	41.34	54.00	12.66	V	0
Wi-Fi 2.4G-11G_2437_High	4,874.000	51.59	74.00	22.41	39.09	54.00	14.91	V	261.2
	7,311.000	60.34	74.00	13.66	47.11	54.00	6.89	H	0
	9,748.000	46.99	74.00	27.01	34.36	54.00	19.64	H	352.2
	12,185.000	48.27	74.00	25.73	35.51	54.00	18.49	H	139.5
	14,622.000	49.59	74.00	24.41	37.20	54.00	16.80	V	0
	17,059.000	53.58	74.00	20.42	40.81	54.00	13.19	H	158.3
Wi-Fi 2.4G-11G_2462_High	4,923.500	52.22	74.00	21.78	39.23	54.00	14.77	V	170.6
	7,385.500	57.55	74.00	16.45	45.22	54.00	8.78	V	255.6

	9,847.500	48.06	74.00	25.94	34.44	54.00	19.56	H	0
	12,310.000	48.29	74.00	25.71	35.48	54.00	18.52	H	7.2
	14,772.500	49.82	74.00	24.18	37.04	54.00	16.96	H	158.2
	17,235.000	52.73	74.00	21.27	39.84	54.00	14.16	H	138.3
Wi-Fi 2.4G-11AX20_2412_High	4,824.000	51.75	74.00	22.25	39.28	54.00	14.72	H	306.8
	7,236.000	59.29	74.00	14.71	47.18	54.00	6.82	H	0
	9,648.000	46.96	74.00	27.04	34.30	54.00	19.70	V	71.4
	12,060.000	48.83	74.00	25.17	36.07	54.00	17.93	H	202.9
	14,472.000	49.66	74.00	24.34	36.49	54.00	17.51	H	139.4
	16,884.000	54.20	74.00	19.80	41.33	54.00	12.67	H	70.2
Wi-Fi 2.4G-11AX20_2437_High	4,874.000	51.73	74.00	22.27	39.18	54.00	14.82	H	305.6
	7,311.000	59.51	74.00	14.49	47.12	54.00	6.88	H	0
	9,748.000	47.05	74.00	26.95	34.44	54.00	19.56	H	360
	12,185.000	48.63	74.00	25.37	35.50	54.00	18.50	H	351.7
	14,622.000	49.80	74.00	24.20	37.09	54.00	16.91	V	360
	17,059.000	53.05	74.00	20.95	40.75	54.00	13.25	H	289.8
Wi-Fi 2.4G-11AX20_2462_High	4,924.000	51.44	74.00	22.56	39.23	54.00	14.77	H	104.9
	7,386.000	58.19	74.00	15.81	45.22	54.00	8.78	V	359.7
	9,847.500	47.85	74.00	26.15	35.20	54.00	18.80	V	360
	12,310.000	48.38	74.00	25.62	35.55	54.00	18.45	H	0
	14,772.000	49.45	74.00	24.55	36.90	54.00	17.10	H	360
	17,233.500	52.13	74.00	21.87	39.86	54.00	14.14	H	0

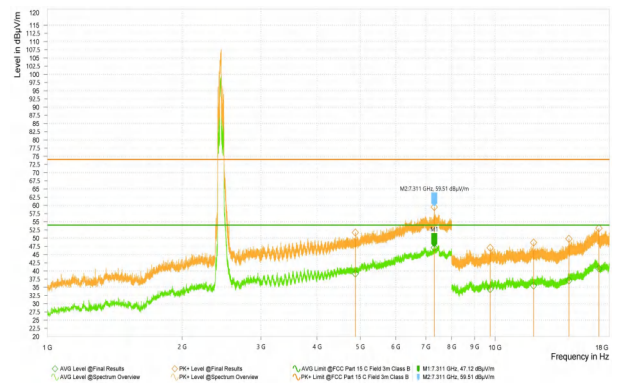
Test Mode & Test Freq.[MHz]	Frequency [MHz]	QPK Level [dBμV/m]	QPK Limit [dBμV/m]	QPK Margin [dB]	Polarization	Azimuth [deg]
Wi-Fi 2.4G-11B_2412_Low	32.641	25.90	40.00	14.10	V	320.2
	119.994	29.80	43.50	13.70	V	176.9
	240.059	22.44	46.00	23.56	V	176.9
	960.068	24.95	54.00	29.05	H	70.8

Test Graphs_Spurious Emission

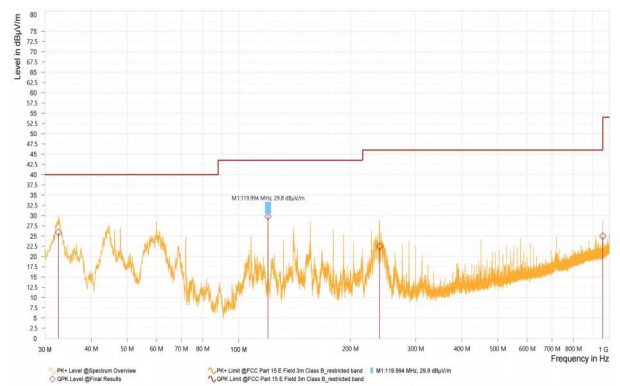
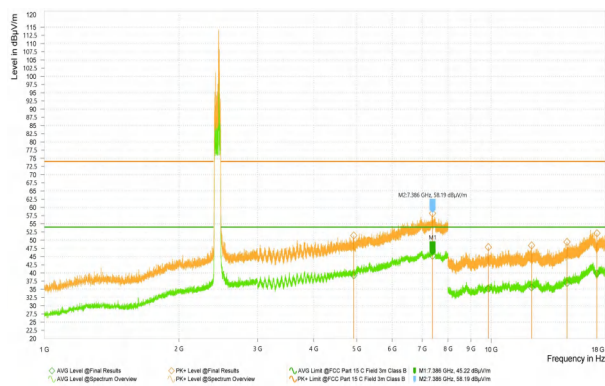




Wi-Fi 2.4G-11AX20_2462_High



Wi-Fi 2.4G-11B_2412_Low



Appendix C – The EUT Appearance

Refer to “Attachment A.1: Photographs of EUT” file.

Appendix D – Test Setup Photograph

Refer to “Attachment A.3: RF Test Setup Photograph” file.

*****End of the Report*****