

SPURIOUS CONDUCTED EMISSIONS

TEST DESCRIPTION

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer.

The spurious RF conducted emissions were measured with the EUT set to low, medium and high transmit frequencies. The EUT was transmitting at the data rate(s) listed in the datasheet. For each transmit frequency, the fundamental was measured with a 100 kHz resolution bandwidth and the highest value was recorded. The rest of the spectrum was then measured with a 100 kHz resolution bandwidth and the highest value was found. The difference between the value found on the fundamental and the rest of the spectrum was compared against the limit to determine compliance.

The reference level offset for the fundamental screen capture was based on a measured value of the loss between the spectrum analyzer and the EUT which was verified at the time of test. The remaining screen capture(s) use an internal transducer factor on the analyzer to correct the displayed trace based on the cable loss over frequency. The reference level offset for the additional screen capture(s) is then based on the expected attenuator value and any other losses.

Fundamental Offset = Ref Lvl Offset showing measured composite factor of all losses

Remaining Screen capture(s) Offset = "Internal" cable loss factor not shown on screen capture + Ref Lvl Offset showing expected attenuator value and any other losses

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Attenuator	Fairview Microwave	SA18H-20	UAZ	2026-03-25	2027-03-25
Block - DC	Aeroflex	INMET 8535	AMO	2025-12-04	2026-12-04
Cable	Micro-Coax	UFD150A-1-0720-200200	OCA	2025-10-21	2026-10-21
Generator - Signal	Agilent	E8257D	TGU	2023-11-08	2026-11-08
Analyzer - Spectrum Analyzer	Agilent	N9010A	AFJ	2026-03-24	2027-03-24

SPURIOUS CONDUCTED EMISSIONS



EUT:	Lantern Refresh Surgical Assistant (LSA)	Work Order:	ORTH0042
Serial Number:	2528001	Date:	2026-04-30
Customer:	OrthAlign	Temperature:	24.2°C
Attendees:	Larry Varnado, Kian Gholizadeh	Relative Humidity:	50.6%
Customer Project:	None	Bar. Pressure (PMSL):	1011 mbar
Tested By:	Kyle Fujimoto	Job Site:	OC13
Power:	4.5 Vdc via Battery	Configuration:	ORTH0042-2

COMMENTS

Reference Level Offset includes Cable Loss, Pigtail Loss, 20 dB Attenuator, and DC Block

DEVIATIONS FROM TEST STANDARD

None

CONCLUSION

Pass

Kyle Fujimoto

Tested By

TEST RESULTS

	Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit : (dBc)	Result
20 MHz BW					
802.11(b) 1 Mbps					
Low Channel 1, 2412 MHz	Fundamental	2413.01	N/A	N/A	N/A
	30 MHz - 12.5 GHz	4824.05	-51.76	-30	N/A
	12.5 GHz - 25 GHz	22364.49	-49.76	-30	N/A
Mid Channel 6, 2437 MHz	Fundamental	2438.01	N/A	N/A	N/A
	30 MHz - 12.5 GHz	3249.88	-53.46	-30	N/A
	12.5 GHz - 25 GHz	24006.53	-51.93	-30	N/A
High Channel 11, 2462 MHz	Fundamental	2461.01	N/A	N/A	N/A
	30 MHz - 12.5 GHz	5767.94	-52.23	-30	N/A
	12.5 GHz - 25 GHz	22321.76	-51.75	-30	N/A
802.11(b) 11 Mbps					
Low Channel 1, 2412 MHz	Fundamental	2411.77	N/A	N/A	N/A
	30 MHz - 12.5 GHz	3216.39	-50.86	-30	N/A
	12.5 GHz - 25 GHz	22419.42	-50.53	-30	N/A
Mid Channel 6, 2437 MHz	Fundamental	2436.77	N/A	N/A	N/A
	30 MHz - 12.5 GHz	4787.51	-53.44	-30	N/A
	12.5 GHz - 25 GHz	23953.12	-51.22	-30	N/A
High Channel 11, 2462 MHz	Fundamental	2461.77	N/A	N/A	N/A
	30 MHz - 12.5 GHz	5096.56	-53.39	-30	N/A
	12.5 GHz - 25 GHz	22663.59	-50.62	-30	N/A
802.11(g) 6 Mbps					
Low Channel 1, 2412 MHz	Fundamental	2414.5	N/A	N/A	N/A
	30 MHz - 12.5 GHz	3216.39	-48.41	-30	N/A
	12.5 GHz - 25 GHz	23977.54	-47.06	-30	N/A
Mid Channel 6, 2437 MHz	Fundamental	2438.26	N/A	N/A	N/A

SPURIOUS CONDUCTED EMISSIONS

	Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ; (dBc)	Result
High Channel 11, 2462 MHz	30 MHz - 12.5 GHz	1727.48	-43.55	-30	N/A
	12.5 GHz - 25 GHz	23861.56	-47.34	-30	N/A
	Fundamental	2463.3	N/A	N/A	N/A
	30 MHz - 12.5 GHz	4924.52	-49.67	-30	N/A
	12.5 GHz - 25 GHz	23641.8	-46.51	-30	N/A
802.11(g) 36 Mbps					
Low Channel 1, 2412 MHz	Fundamental	2417	N/A	N/A	N/A
	30 MHz - 12.5 GHz	3216.39	-47	-30	N/A
	12.5 GHz - 25 GHz	22359.91	-45.4	-30	N/A
Mid Channel 6, 2437 MHz	Fundamental	2430.75	N/A	N/A	N/A
	30 MHz - 12.5 GHz	4961.06	-49.08	-30	N/A
	12.5 GHz - 25 GHz	19434.44	-46.72	-30	N/A
High Channel 11, 2462 MHz	Fundamental	2455.76	N/A	N/A	N/A
	30 MHz - 12.5 GHz	3826.87	-48.17	-30	N/A
	12.5 GHz - 25 GHz	23797.46	-45.69	-30	N/A
802.11(g) 54 Mbps					
Low Channel 1, 2412 MHz	Fundamental	2405.75	N/A	N/A	N/A
	30 MHz - 12.5 GHz	3216.39	-46.97	-30	N/A
	12.5 GHz - 25 GHz	22346.17	-45.56	-30	N/A
Mid Channel 6, 2437 MHz	Fundamental	2430.75	N/A	N/A	N/A
	30 MHz - 12.5 GHz	4863.63	-48.68	-30	N/A
	12.5 GHz - 25 GHz	22318.7	-45.32	-30	N/A
High Channel 11, 2462 MHz	Fundamental	2455.75	N/A	N/A	N/A
	30 MHz - 12.5 GHz	4999.12	-48.46	-30	N/A
	12.5 GHz - 25 GHz	22205.77	-44.89	-30	N/A
802.11(n) MCS0					
Low Channel 1, 2412 MHz	Fundamental	2413.29	N/A	N/A	N/A
	30 MHz - 12.5 GHz	5787.73	-46.5	-30	N/A
	12.5 GHz - 25 GHz	24111.83	-46.18	-30	N/A
Mid Channel 6, 2437 MHz	Fundamental	2438.3	N/A	N/A	N/A
	30 MHz - 12.5 GHz	5798.38	-45.07	-30	N/A
	12.5 GHz - 25 GHz	24319.37	-45.11	-30	N/A
High Channel 11, 2462 MHz	Fundamental	2463.25	N/A	N/A	N/A
	30 MHz - 12.5 GHz	4961.06	-48.73	-30	N/A
	12.5 GHz - 25 GHz	22672.75	-45.59	-30	N/A
802.11(n) MCS7					
Low Channel 1, 2412 MHz	Fundamental	2405.76	N/A	N/A	N/A
	30 MHz - 12.5 GHz	3216.39	-47.28	-30	N/A
	12.5 GHz - 25 GHz	22330.91	-44.35	-30	N/A
Mid Channel 6, 2437 MHz	Fundamental	2430.75	N/A	N/A	N/A
	30 MHz - 12.5 GHz	4971.72	-47.48	-30	N/A
	12.5 GHz - 25 GHz	22353.8	-44.6	-30	N/A
High Channel 11, 2462 MHz	Fundamental	2455.74	N/A	N/A	N/A
	30 MHz - 12.5 GHz	4924.52	-48.37	-30	N/A
	12.5 GHz - 25 GHz	23704.37	-46.05	-30	N/A
40 MHz BW					
802.11(n) MCS0					
Low Channel 1/5, 2422 MHz	Fundamental	2417	N/A	N/A	N/A
	30 MHz - 12.5 GHz	2376.02	-46.83	-30	N/A

SPURIOUS CONDUCTED EMISSIONS

	Frequency Range	Measured Freq (MHz)	Max Value (dBc)	Limit ; (dBc)	Result
Mid Channel 4/8, 2437 MHz	12.5 GHz - 25 GHz	22094.37	-43.32	-30	N/A
	Fundamental	2442	N/A	N/A	N/A
	30 MHz - 12.5 GHz	8340.8	-46.66	-30	N/A
High Channel 7/11, 2452 MHz	12.5 GHz - 25 GHz	22523.2	-43.38	-30	N/A
	Fundamental	2457.01	N/A	N/A	N/A
	30 MHz - 12.5 GHz	4948.88	-46.84	-30	N/A
	12.5 GHz - 25 GHz	20028.08	-44.28	-30	N/A
802.11(n) MCS7					
Low Channel 1/5, 2422 MHz	Fundamental	2433.28	N/A	N/A	N/A
	30 MHz - 12.5 GHz	3228.57	-45.06	-30	N/A
	12.5 GHz - 25 GHz	22279.03	-43.2	-30	N/A
Mid Channel 4/8, 2437 MHz	Fundamental	2448.27	N/A	N/A	N/A
	30 MHz - 12.5 GHz	3994.34	-46.37	-30	N/A
	12.5 GHz - 25 GHz	23712	-43.24	-30	N/A
High Channel 7/11, 2452 MHz	Fundamental	2463.27	N/A	N/A	N/A
	30 MHz - 12.5 GHz	5032.62	-44.87	-30	N/A
	12.5 GHz - 25 GHz	23971.43	-43.78	-30	N/A

SPURIOUS CONDUCTED EMISSIONS



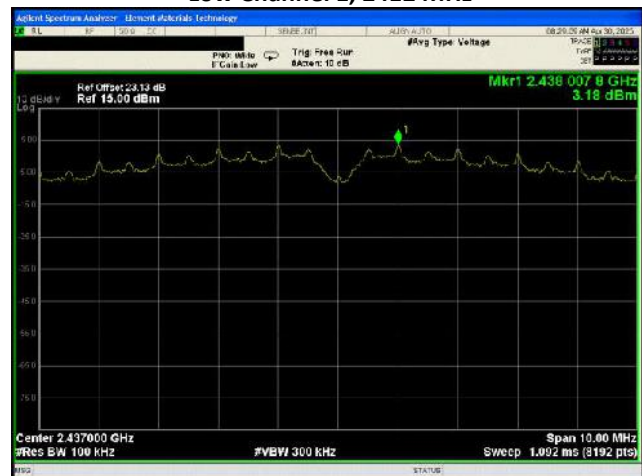
20 MHz BW
802.11(b) 1 Mbps
Low Channel 1, 2412 MHz



20 MHz BW
802.11(b) 1 Mbps
Low Channel 1, 2412 MHz

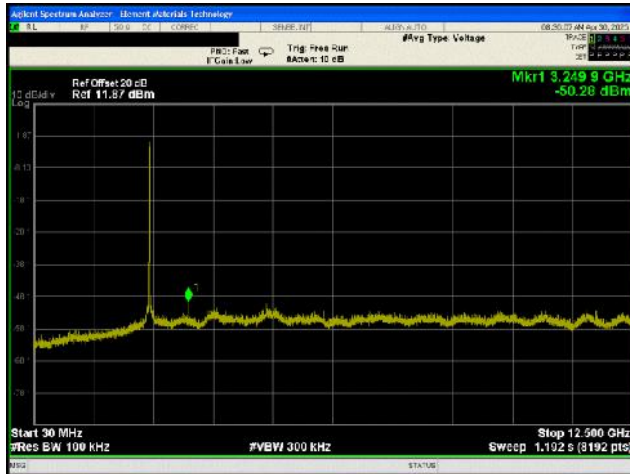


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802.11(b) 1 Mbps
Low Channel 1, 2412 MHz

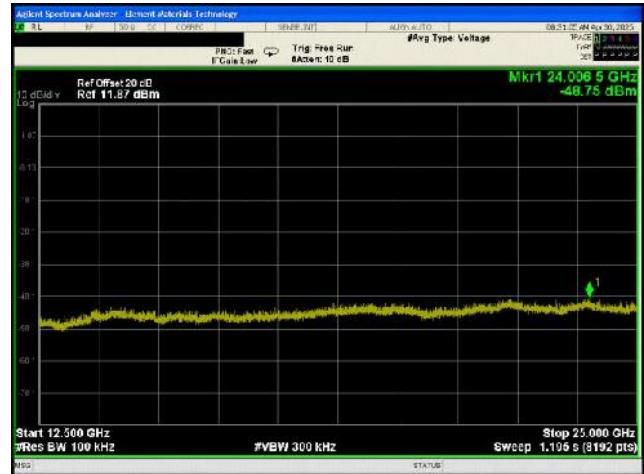


20 MHz BW
802.11(b) 1 Mbps
Mid Channel 6, 2437 MHz

SPURIOUS CONDUCTED EMISSIONS



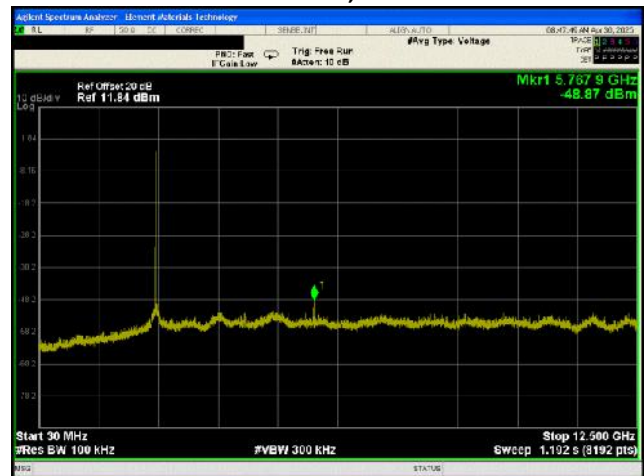
20 MHz BW
802.11(b) 1 Mbps
Mid Channel 6, 2437 MHz



20 MHz BW
802.11(b) 1 Mbps
Mid Channel 6, 2437 MHz



20 MHz BW
802.11(b) 1 Mbps
High Channel 11, 2462 MHz



20 MHz BW
802.11(b) 1 Mbps
High Channel 11, 2462 MHz

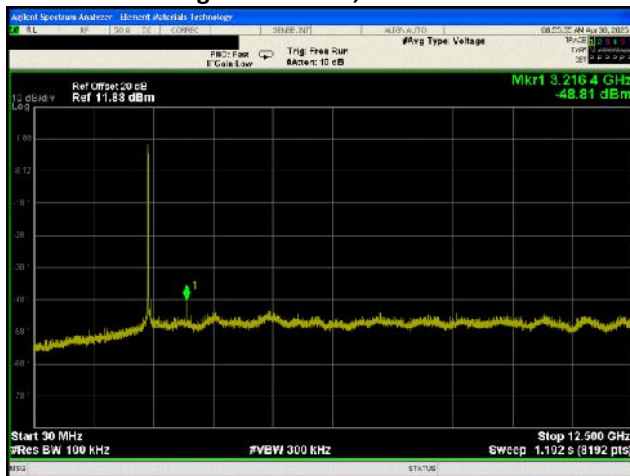
SPURIOUS CONDUCTED EMISSIONS



20 MHz BW
802.11(b) 1 Mbps
High Channel 11, 2462 MHz



20 MHz BW
802.11(b) 11 Mbps
Low Channel 1, 2412 MHz



20 MHz BW
802.11(b) 11 Mbps
Low Channel 1, 2412 MHz

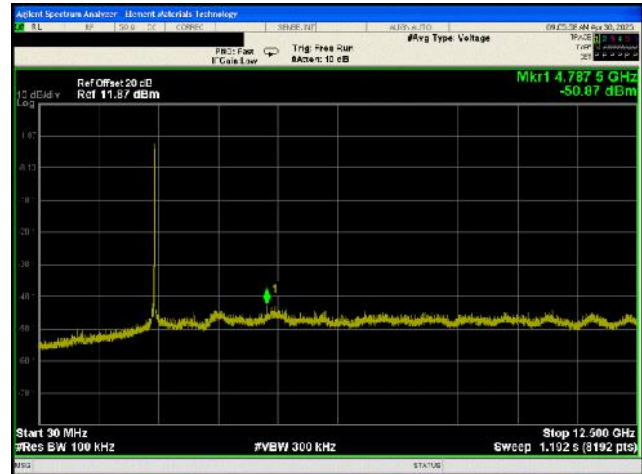


20 MHz BW
802.11(b) 11 Mbps
Low Channel 1, 2412 MHz

SPURIOUS CONDUCTED EMISSIONS



20 MHz BW
802.11(b) 11 Mbps
Mid Channel 6, 2437 MHz



20 MHz BW
802.11(b) 11 Mbps
Mid Channel 6, 2437 MHz



20 MHz BW
802.11(b) 11 Mbps
Mid Channel 6, 2437 MHz



20 MHz BW
802.11(b) 11 Mbps
High Channel 11, 2462 MHz

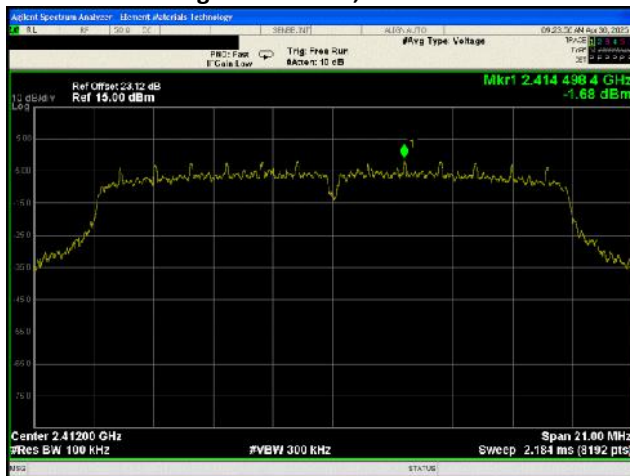
SPURIOUS CONDUCTED EMISSIONS



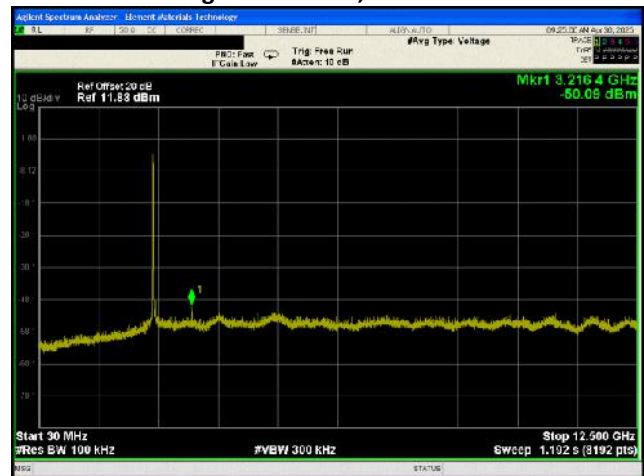
20 MHz BW
802.11(b) 11 Mbps
High Channel 11, 2462 MHz



20 MHz BW
802.11(b) 11 Mbps
High Channel 11, 2462 MHz



20 MHz BW
802.11(g) 6 Mbps
Low Channel 1, 2412 MHz



20 MHz BW
802.11(g) 6 Mbps
Low Channel 1, 2412 MHz

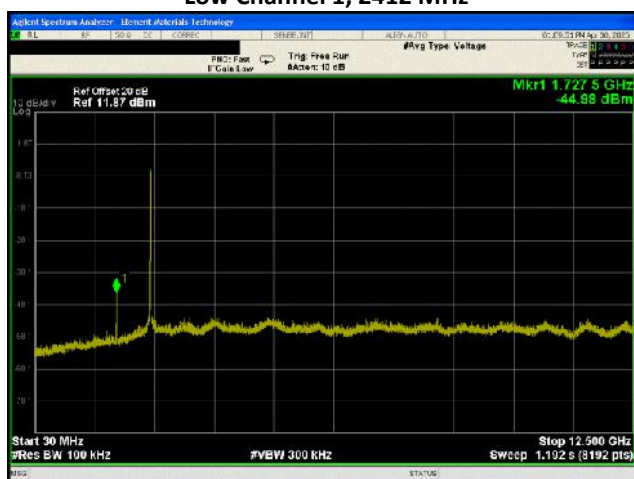
SPURIOUS CONDUCTED EMISSIONS



20 MHz BW
802.11(g) 6 Mbps
Low Channel 1, 2412 MHz



20 MHz BW
802.11(g) 6 Mbps
Mid Channel 6, 2437 MHz



20 MHz BW
802.11(g) 6 Mbps
Mid Channel 6, 2437 MHz

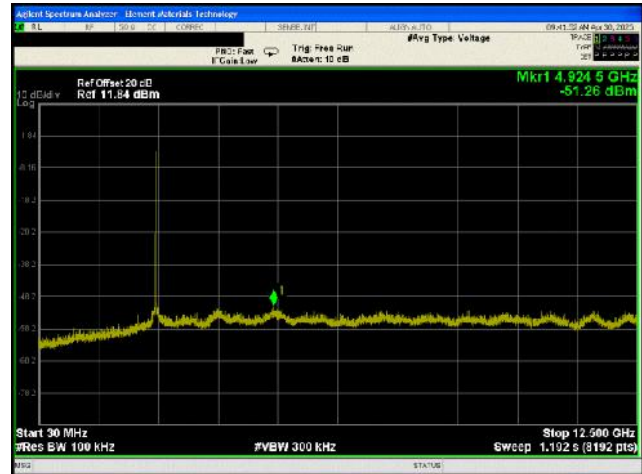


20 MHz BW
802.11(g) 6 Mbps
Mid Channel 6, 2437 MHz

SPURIOUS CONDUCTED EMISSIONS



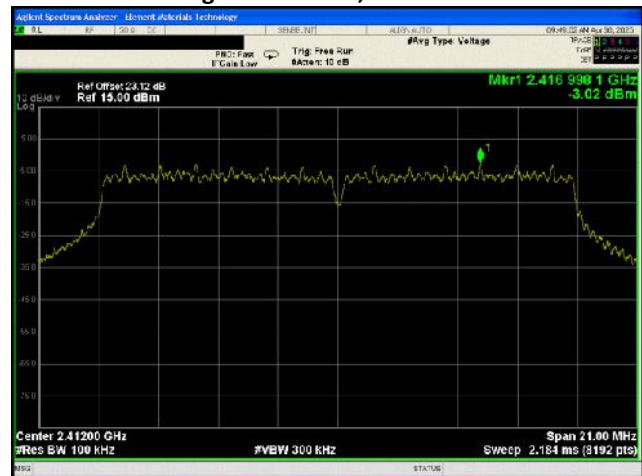
20 MHz BW
802.11(g) 6 Mbps
High Channel 11, 2462 MHz



20 MHz BW
802.11(g) 6 Mbps
High Channel 11, 2462 MHz

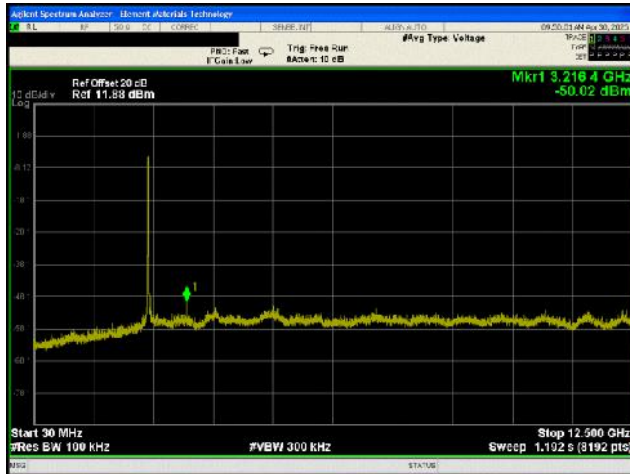


20 MHz BW
802.11(g) 6 Mbps
High Channel 11, 2462 MHz

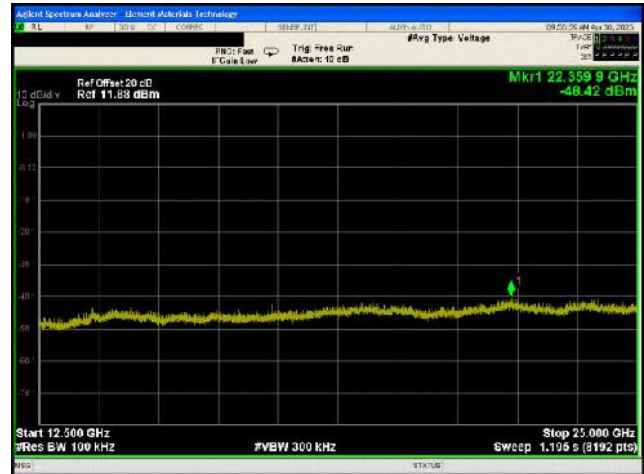


20 MHz BW
802.11(g) 36 Mbps
Low Channel 1, 2412 MHz

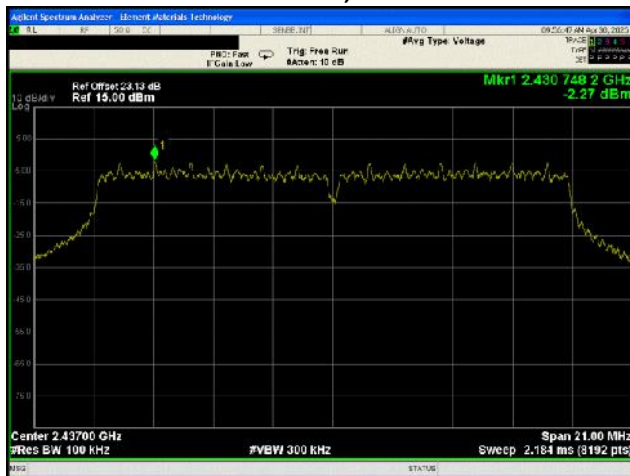
SPURIOUS CONDUCTED EMISSIONS



20 MHz BW
802.11(g) 36 Mbps
Low Channel 1, 2412 MHz



20 MHz BW
802.11(g) 36 Mbps
Low Channel 1, 2412 MHz



20 MHz BW
802.11(g) 36 Mbps
Mid Channel 6, 2437 MHz

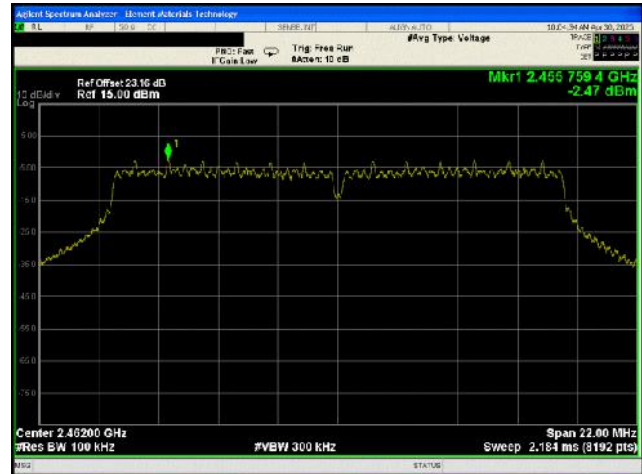


20 MHz BW
802.11(g) 36 Mbps
Mid Channel 6, 2437 MHz

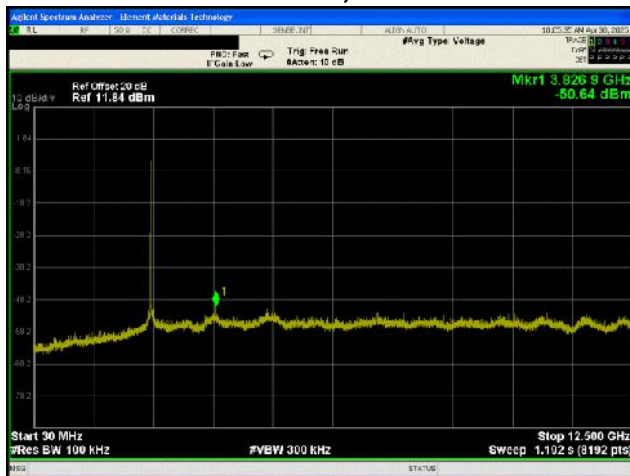
SPURIOUS CONDUCTED EMISSIONS



20 MHz BW
802.11(g) 36 Mbps
Mid Channel 6, 2437 MHz



20 MHz BW
802.11(g) 36 Mbps
High Channel 11, 2462 MHz



20 MHz BW
802.11(g) 36 Mbps
High Channel 11, 2462 MHz

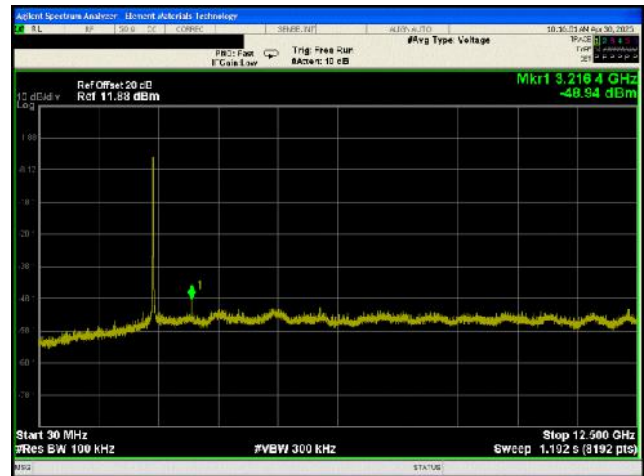


20 MHz BW
802.11(g) 36 Mbps
High Channel 11, 2462 MHz

SPURIOUS CONDUCTED EMISSIONS



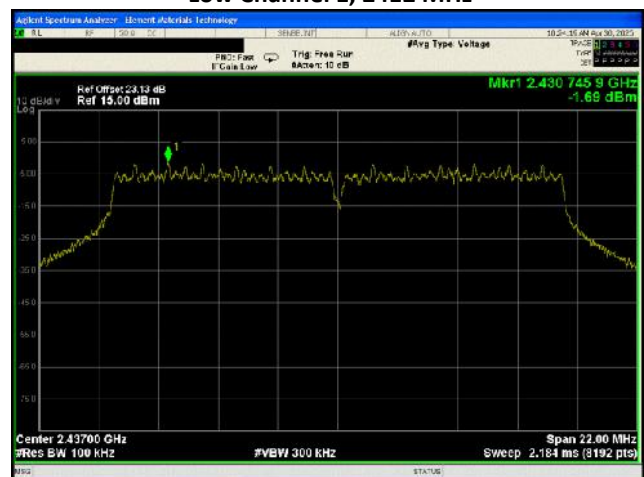
20 MHz BW
802.11(g) 54 Mbps
Low Channel 1, 2412 MHz



20 MHz BW
802.11(g) 54 Mbps
Low Channel 1, 2412 MHz

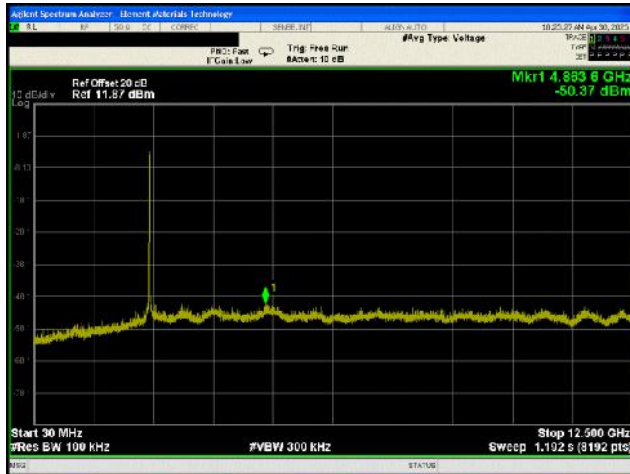


20 MHz BW
802.11(g) 54 Mbps
Low Channel 1, 2412 MHz



20 MHz BW
802.11(g) 54 Mbps
Mid Channel 6, 2437 MHz

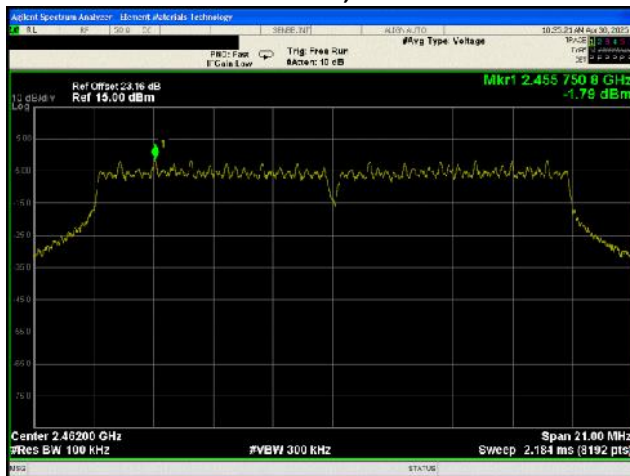
SPURIOUS CONDUCTED EMISSIONS



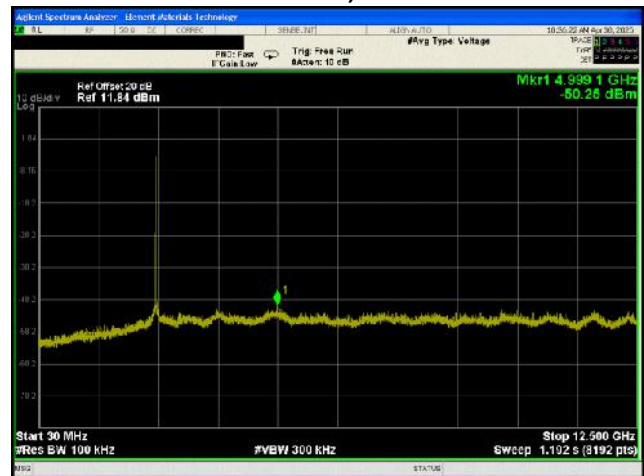
20 MHz BW
802.11(g) 54 Mbps
Mid Channel 6, 2437 MHz



20 MHz BW
802.11(g) 54 Mbps
Mid Channel 6, 2437 MHz



20 MHz BW
802.11(g) 54 Mbps
High Channel 11, 2462 MHz



20 MHz BW
802.11(g) 54 Mbps
High Channel 11, 2462 MHz

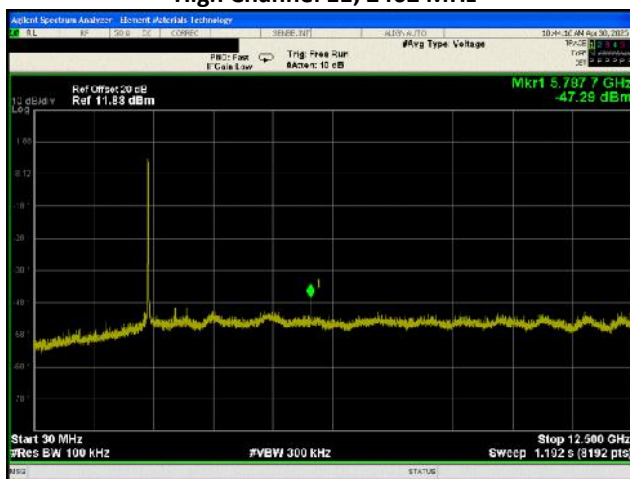
SPURIOUS CONDUCTED EMISSIONS



20 MHz BW
802.11(g) 54 Mbps
High Channel 11, 2462 MHz



20 MHz BW
802.11(n) MCS0
Low Channel 1, 2412 MHz



20 MHz BW
802.11(n) MCS0
Low Channel 1, 2412 MHz

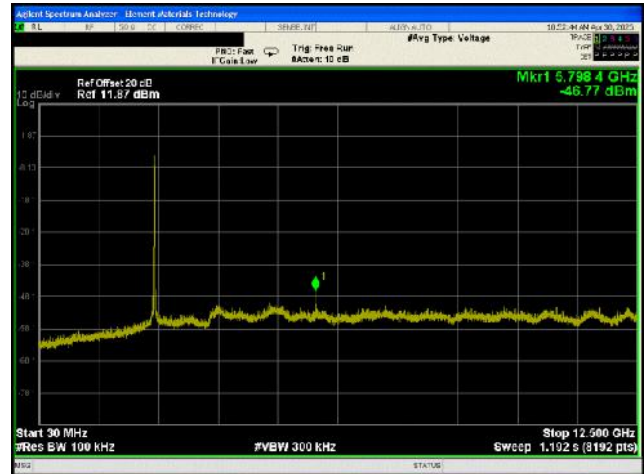


20 MHz BW
802.11(n) MCS0
Low Channel 1, 2412 MHz

SPURIOUS CONDUCTED EMISSIONS



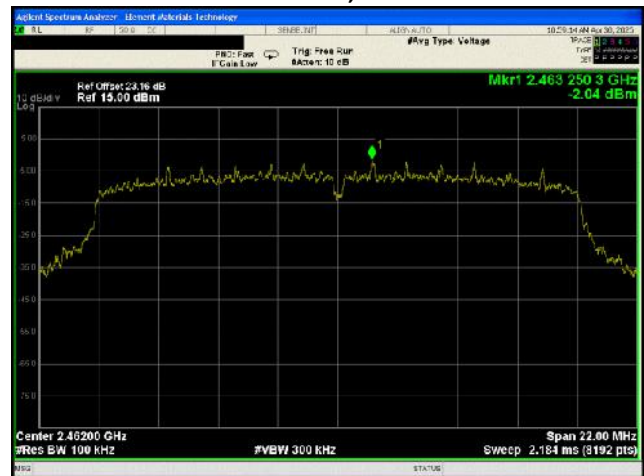
20 MHz BW
802.11(n) MCS0
Mid Channel 6, 2437 MHz



20 MHz BW
802.11(n) MCS0
Mid Channel 6, 2437 MHz



20 MHz BW
802.11(n) MCS0
Mid Channel 6, 2437 MHz



20 MHz BW
802.11(n) MCS0
High Channel 11, 2462 MHz

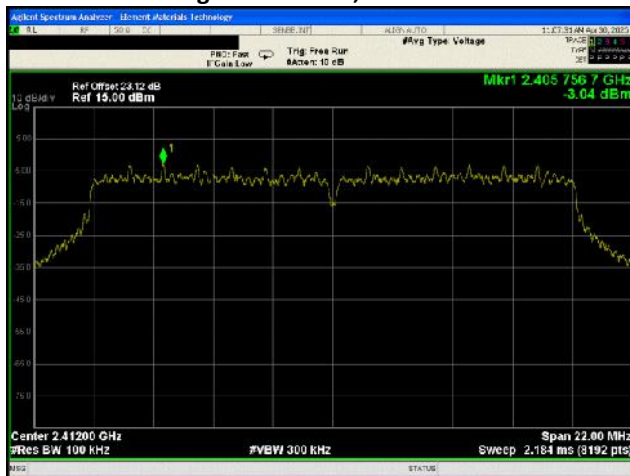
SPURIOUS CONDUCTED EMISSIONS



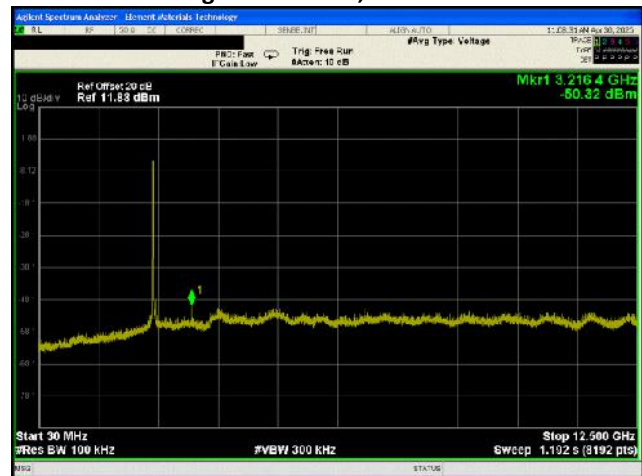
20 MHz BW
802.11(n) MCS0
High Channel 11, 2462 MHz



20 MHz BW
802.11(n) MCS0
High Channel 11, 2462 MHz



20 MHz BW
802.11(n) MCS7
Low Channel 1, 2412 MHz

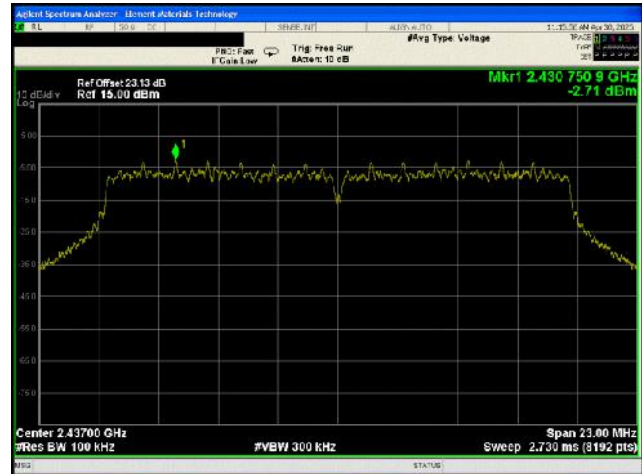


20 MHz BW
802.11(n) MCS7
Low Channel 1, 2412 MHz

SPURIOUS CONDUCTED EMISSIONS



20 MHz BW
802.11(n) MCS7
Low Channel 1, 2412 MHz



20 MHz BW
802.11(n) MCS7
Mid Channel 6, 2437 MHz



20 MHz BW
802.11(n) MCS7
Mid Channel 6, 2437 MHz

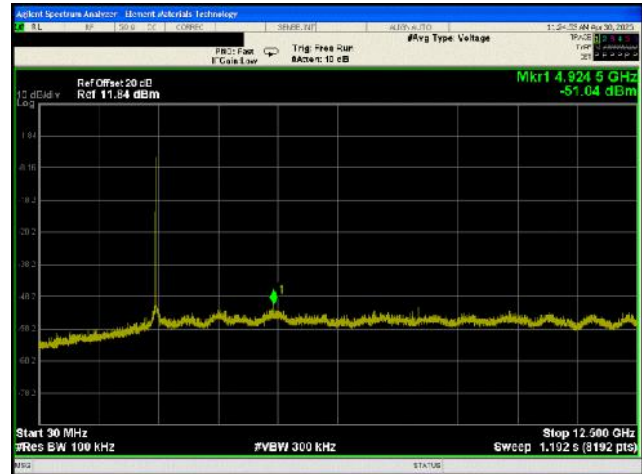


20 MHz BW
802.11(n) MCS7
Mid Channel 6, 2437 MHz

SPURIOUS CONDUCTED EMISSIONS



20 MHz BW
802.11(n) MCS7
High Channel 11, 2462 MHz



20 MHz BW
802.11(n) MCS7
High Channel 11, 2462 MHz

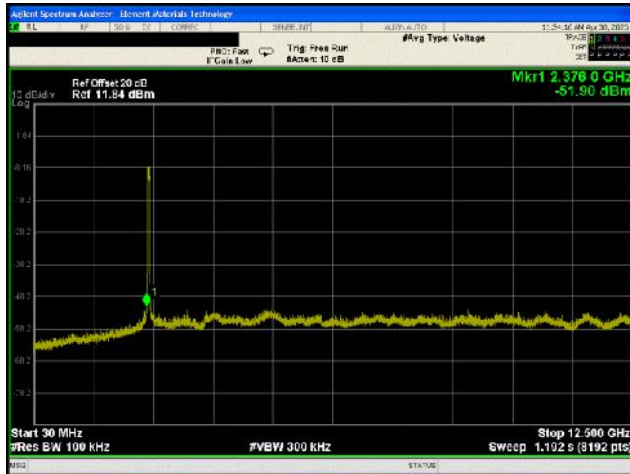


20 MHz BW
802.11(n) MCS7
High Channel 11, 2462 MHz



40 MHz BW
802.11(n) MCS0
Low Channel 1/5, 2422 MHz

SPURIOUS CONDUCTED EMISSIONS



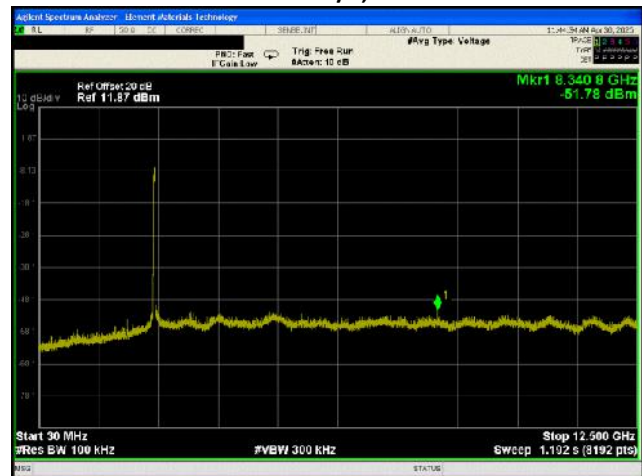
40 MHz BW
802.11(n) MCS0
Low Channel 1/5, 2422 MHz



40 MHz BW
802.11(n) MCS0
Low Channel 1/5, 2422 MHz



40 MHz BW
802.11(n) MCS0
Mid Channel 4/8, 2437 MHz

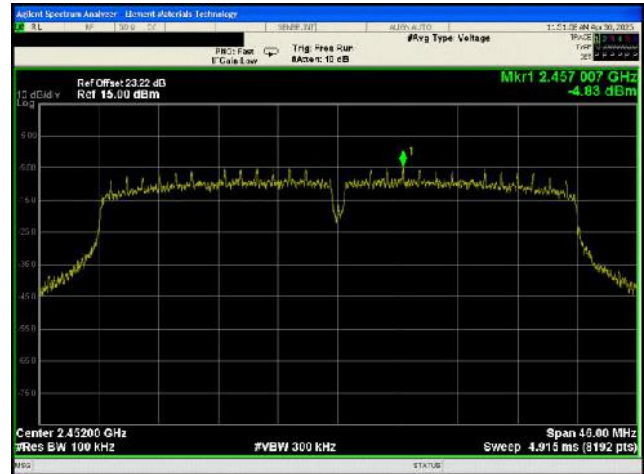


40 MHz BW
802.11(n) MCS0
Mid Channel 4/8, 2437 MHz

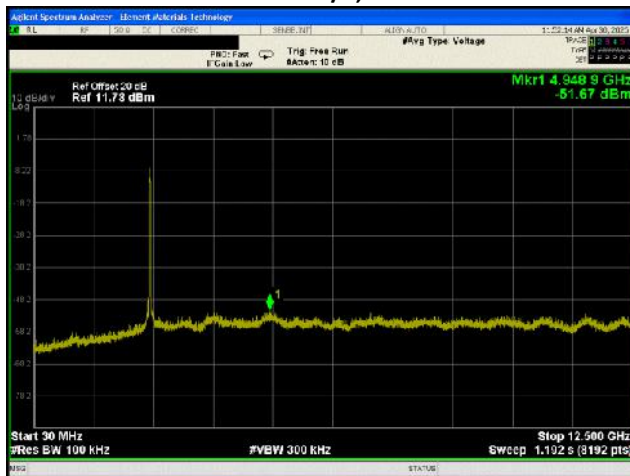
SPURIOUS CONDUCTED EMISSIONS



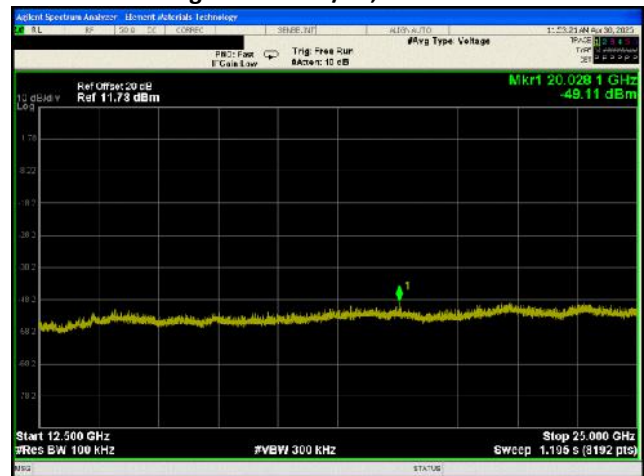
40 MHz BW
802.11(n) MCS0
Mid Channel 4/8, 2437 MHz



40 MHz BW
802.11(n) MCS0
High Channel 7/11, 2452 MHz



40 MHz BW
802.11(n) MCS0
High Channel 7/11, 2452 MHz

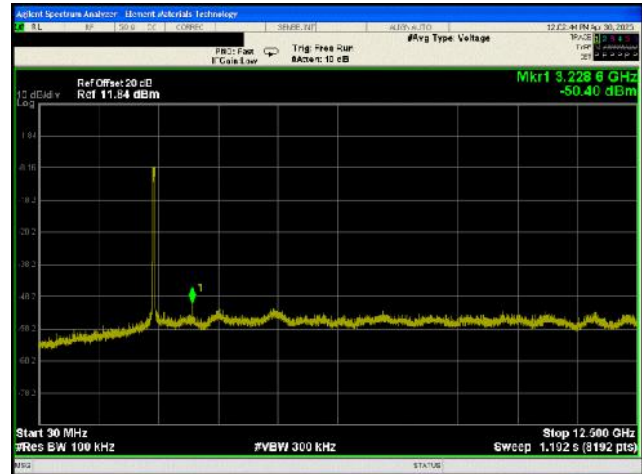


40 MHz BW
802.11(n) MCS0
High Channel 7/11, 2452 MHz

SPURIOUS CONDUCTED EMISSIONS



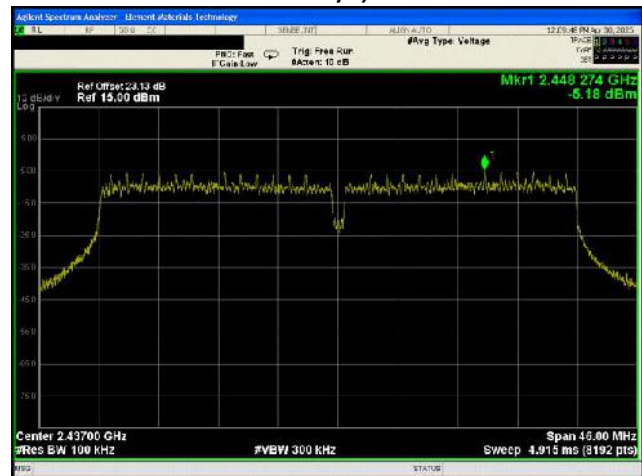
40 MHz BW
802.11(n) MCS7
Low Channel 1/5, 2422 MHz



40 MHz BW
802.11(n) MCS7
Low Channel 1/5, 2422 MHz

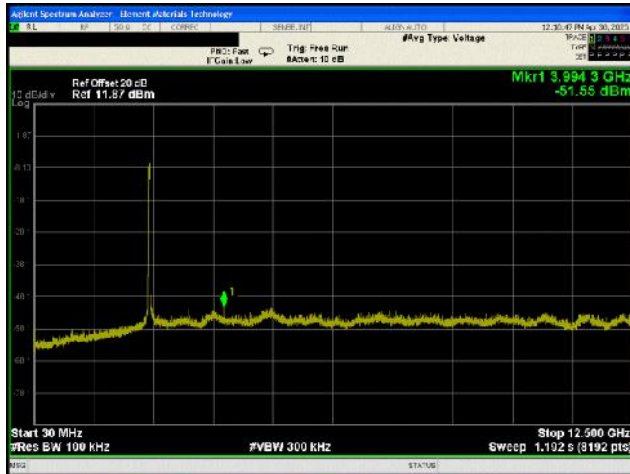


40 MHz BW
802.11(n) MCS7
Low Channel 1/5, 2422 MHz

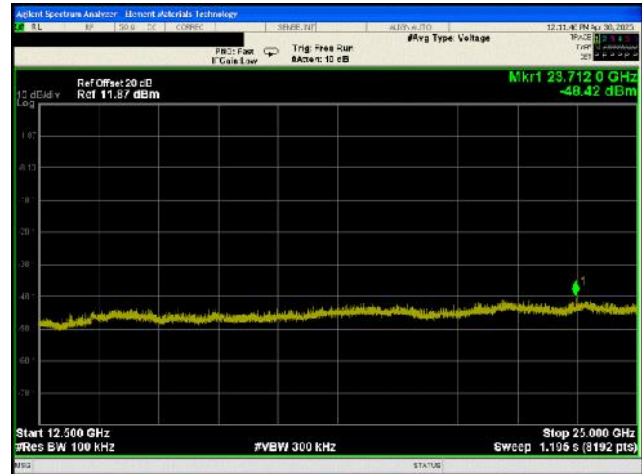


40 MHz BW
802.11(n) MCS7
Mid Channel 4/8, 2437 MHz

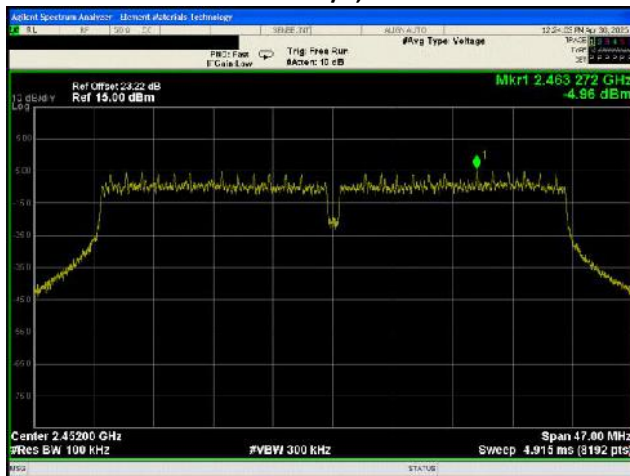
SPURIOUS CONDUCTED EMISSIONS



40 MHz BW
802.11(n) MCS7
Mid Channel 4/8, 2437 MHz



40 MHz BW
802.11(n) MCS7
Mid Channel 4/8, 2437 MHz



40 MHz BW
802.11(n) MCS7
High Channel 7/11, 2452 MHz



40 MHz BW
802.11(n) MCS7
High Channel 7/11, 2452 MHz

SPURIOUS CONDUCTED EMISSIONS



40 MHz BW
802.11(n) MCS7
High Channel 7/11, 2452 MHz