

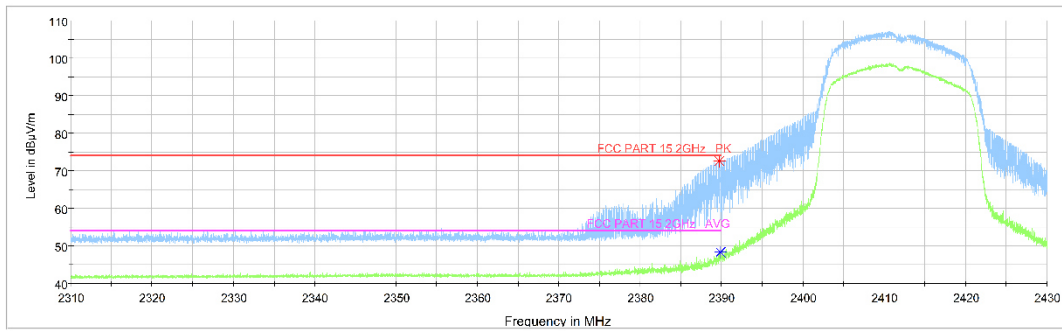


Fig. 7.5 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch1, 2.31 GHz - 2.43GHz

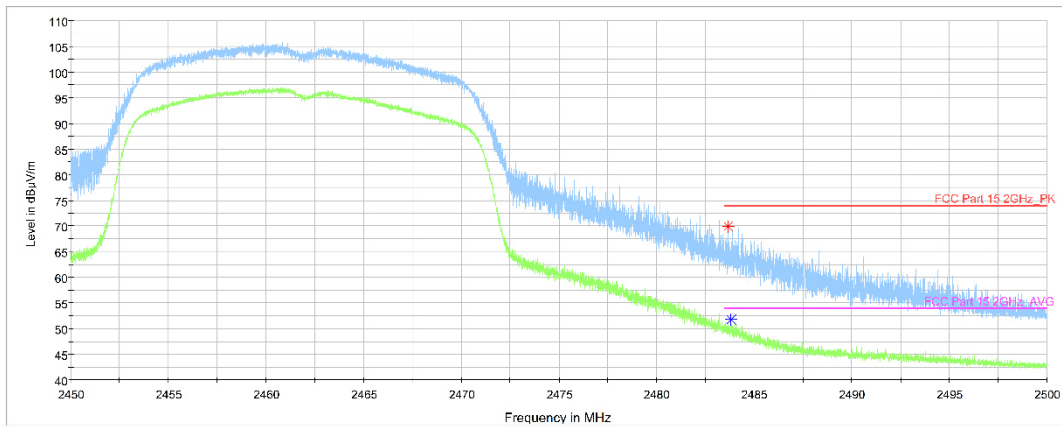


Fig. 7.6 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT20, ch11, 2.45 GHz - 2.50GHz

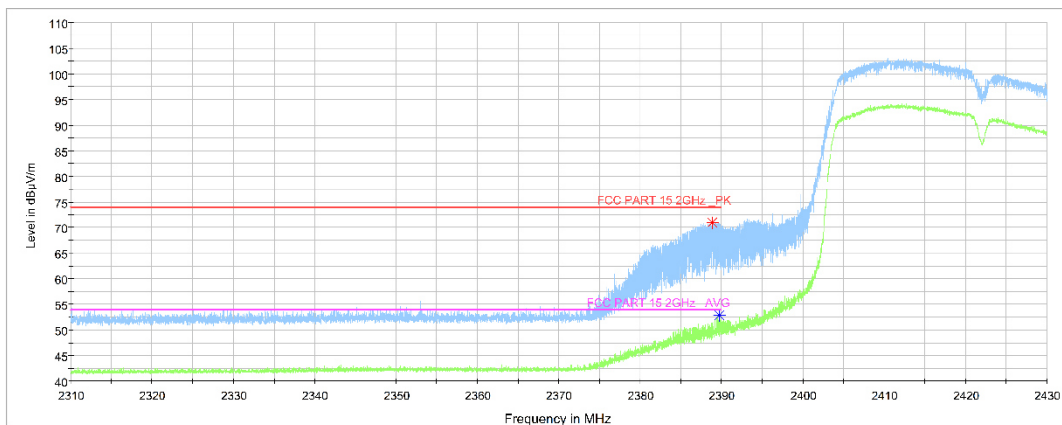
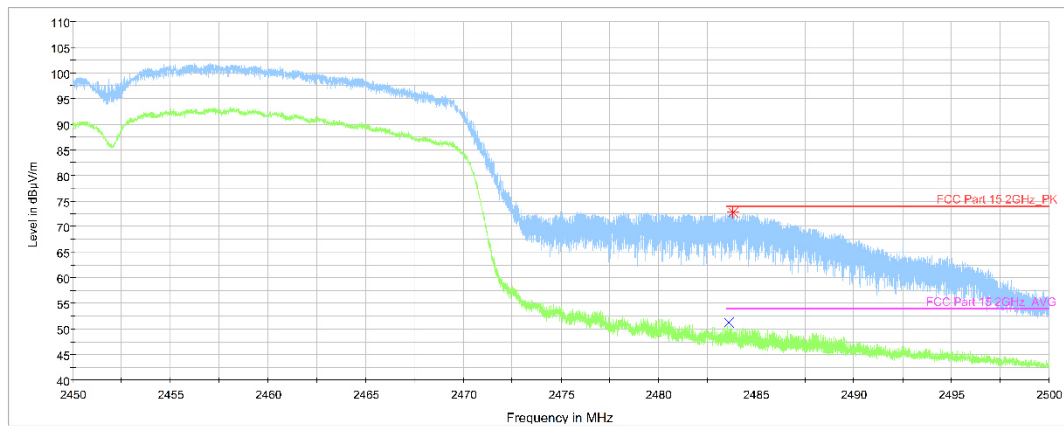


Fig. 7.7 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch3, 2.31 GHz - 2.43GHz



**Fig. 7.8 Transmitter Spurious Emission - Radiated (Power): 802.11n-HT40, ch9,
2.45 GHz - 2.50GHz**

A.8. AC Power-line Conducted Emission

Summary

All AC line conducted spurious emissions are measured with a receiver connected to a grounded LISN while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates and modes were investigated for conducted spurious emissions. Only the conducted emissions of the configuration that produced the worst case emissions are reported in this section

Method of Measurement:

See Clause 6.2 of ANSI C63.10 specifically.

See Clause 4 and Clause 5 of ANSI C63.10 generally.

The conducted emissions from the AC port of the EUT are measured in a shielding room. The EUT is connected to a Line Impedance Stabilization Network (LISN). An overview sweep with peak detection was performed. The measurements were performed with a quasi-peak detector and if required, an average detector.

The conducted emission measurements were made with the following detector of the test receiver:

Quasi-Peak / Average Detector.

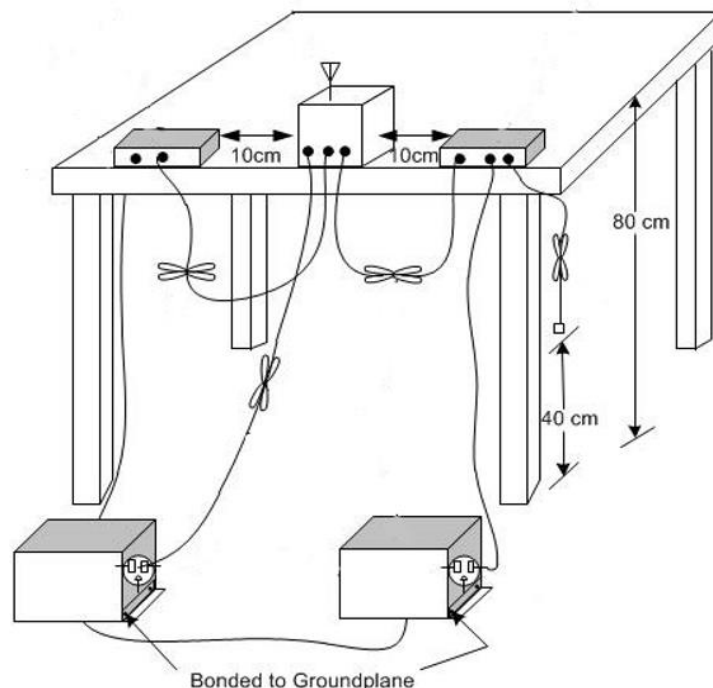
The measurement bandwidth is:

Frequency of Emission (MHz)	RBW/IF bandwidth
0.15-30	9kHz

Test Condition:

Voltage (V)	Frequency (Hz)
120	60

Test setup



Measurement Result and limit:
WLAN (Quasi-peak Limit)

Frequency range (MHz)	Quasi-peak Limit (dBμV)	Result (dBμV)		Conclusion
		With charger		
		802.11b	Idle	
0.15 to 0.5	66 to 56	Fig.A.8.1	Fig.A.8.2	P
0.5 to 5	56			
5 to 30	60			

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

WLAN (Average Limit)

Frequency range (MHz)	Average Limit (dBμV)	Result (dBμV)		Conclusion
		With charger		
		802.11b	Idle	
0.15 to 0.5	56 to 46	Fig.A.8.1	Fig.A.8.2	P
0.5 to 5	46			
5 to 30	50			

NOTE: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

Conclusion: Pass

Test graphs as below:

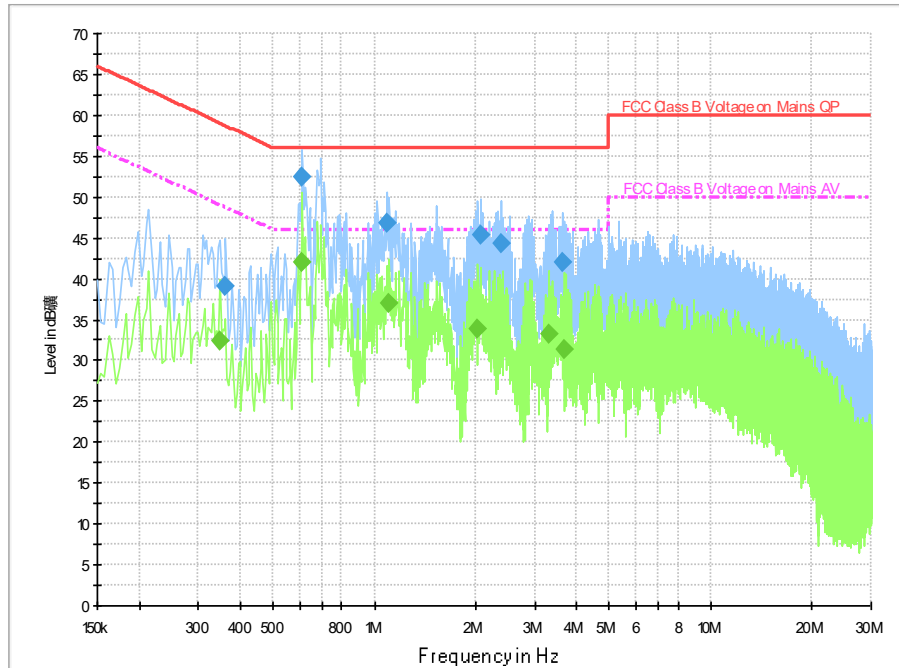


Fig.A.8.1 AC Powerline Conducted Emission-802.11b

Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.362000	39.2	2000.0	9.000	On	L1	19.8	19.5	58.7	
0.610000	52.5	2000.0	9.000	On	L1	19.8	3.5	56.0	
1.090000	46.7	2000.0	9.000	On	L1	19.6	9.3	56.0	
2.066000	45.4	2000.0	9.000	On	L1	19.6	10.6	56.0	
2.382000	44.2	2000.0	9.000	On	L1	19.6	11.8	56.0	
3.642000	42.1	2000.0	9.000	On	L1	19.6	13.9	56.0	

Final Result 2

Frequency (MHz)	CAverage (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.346000	32.3	2000.0	9.000	On	L1	19.8	16.8	49.1	
0.610000	42.0	2000.0	9.000	On	L1	19.8	4.0	46.0	
1.106000	37.1	2000.0	9.000	On	L1	19.6	9.0	46.0	
2.034000	33.8	2000.0	9.000	On	L1	19.6	12.2	46.0	
3.318000	33.3	2000.0	9.000	On	L1	19.6	12.7	46.0	
3.674000	31.4	2000.0	9.000	On	L1	19.6	14.6	46.0	

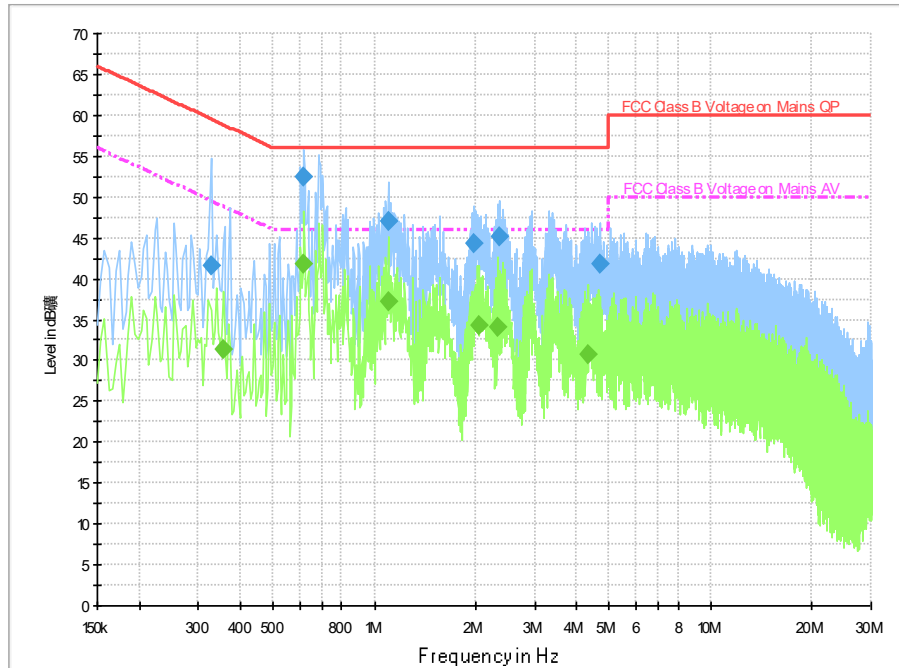


Fig.A.8.2 AC Powerline Conducted Emission-Idle

Note: The graphic result above is the maximum of the measurements for both phase line and neutral line.

Final Result 1

Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.326000	41.6	2000.0	9.000	On	L1	19.8	17.9	59.6	
0.618000	52.5	2000.0	9.000	On	L1	19.7	3.5	56.0	
1.098000	47.1	2000.0	9.000	On	L1	19.6	8.9	56.0	
1.986000	44.3	2000.0	9.000	On	L1	19.6	11.7	56.0	
2.350000	45.2	2000.0	9.000	On	L1	19.6	10.8	56.0	
4.678000	41.8	2000.0	9.000	On	L1	19.6	14.2	56.0	

Final Result 2

Frequency (MHz)	CAverage (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.354000	31.3	2000.0	9.000	On	L1	19.8	17.6	48.9	
0.618000	41.8	2000.0	9.000	On	L1	19.7	4.2	46.0	
1.098000	37.3	2000.0	9.000	On	L1	19.6	8.7	46.0	
2.046000	34.4	2000.0	9.000	On	L1	19.6	11.6	46.0	
2.338000	34.0	2000.0	9.000	On	L1	19.6	12.0	46.0	
4.314000	30.8	2000.0	9.000	On	L1	19.6	15.2	46.0	

ANNEX B: EUT parameters

Disclaimer: The antenna gain and worse case provided by the client may affect the validity of the measurement results in this report, and the client shall bear the impact and consequences arising therefrom.

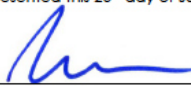
ANNEX C: Accreditation Certificate


Accredited Laboratory
A2LA has accredited
TELECOMMUNICATION TECHNOLOGY LABS, CAICT
Beijing, People's Republic of China
for technical competence in the field of
Electrical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 26th day of June 2023.



Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 7049.01
Valid to July 31, 2024

For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.

*****END OF REPORT*****