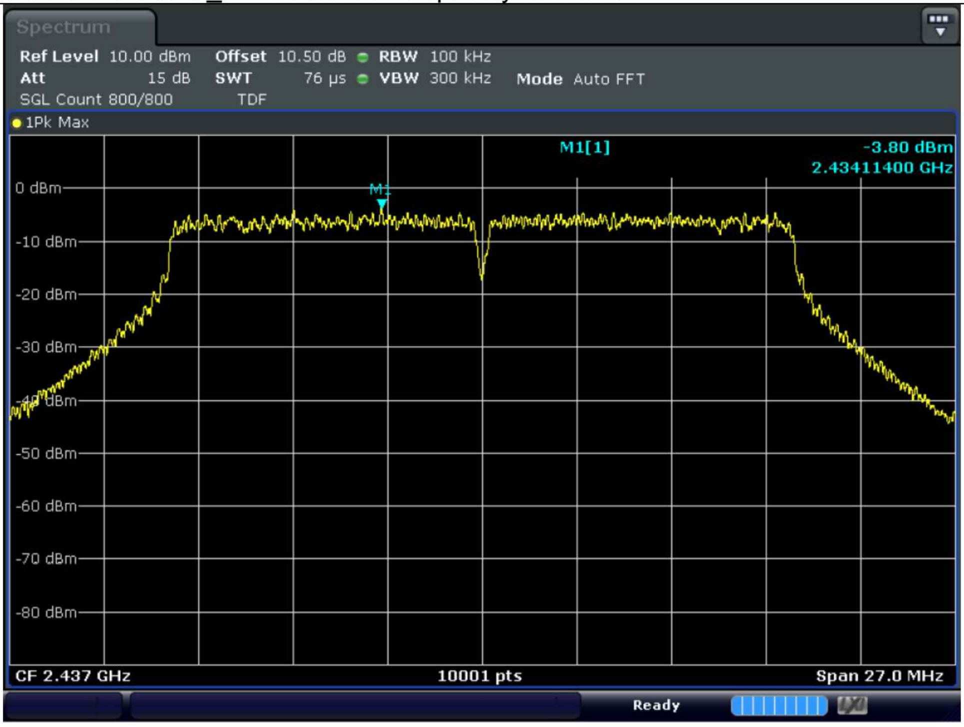
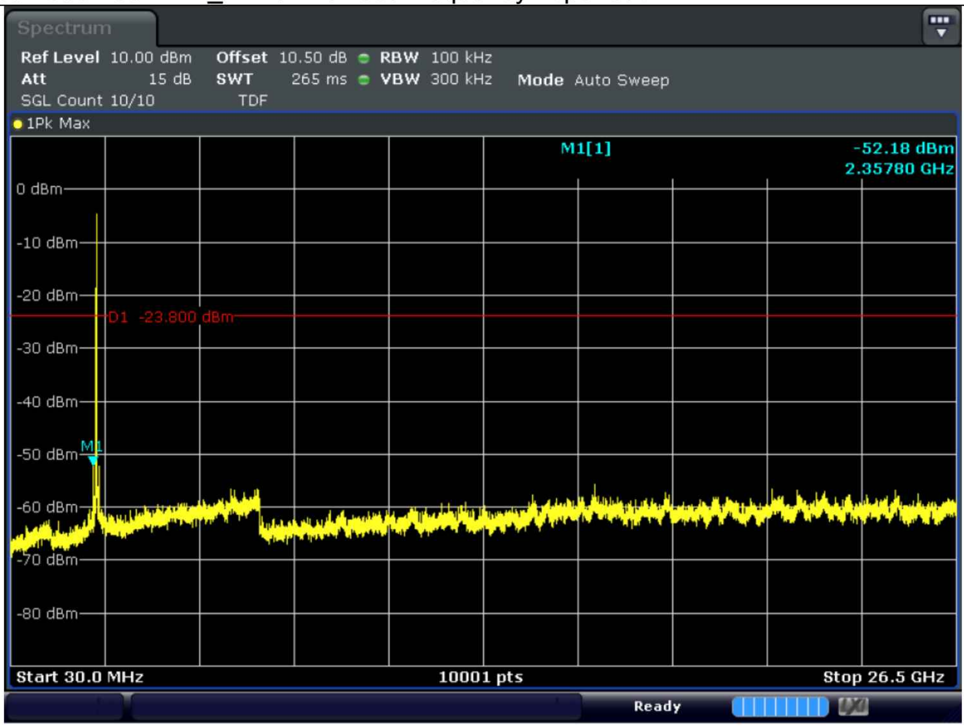
Test mode : 802.11n_HT20 /Middle Frequency / reference

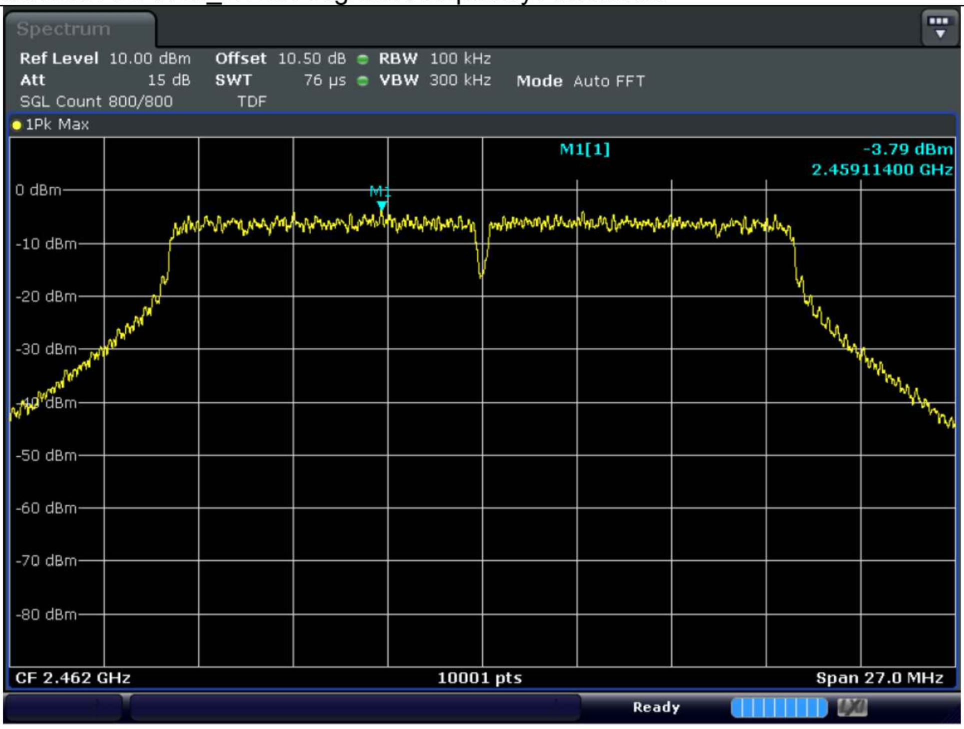


NOTE: Limit : -3.80 dBm - 20 dB = -23.80 dBm

Test mode : 802.11n_HT20 / Lowest Frequency / spurious

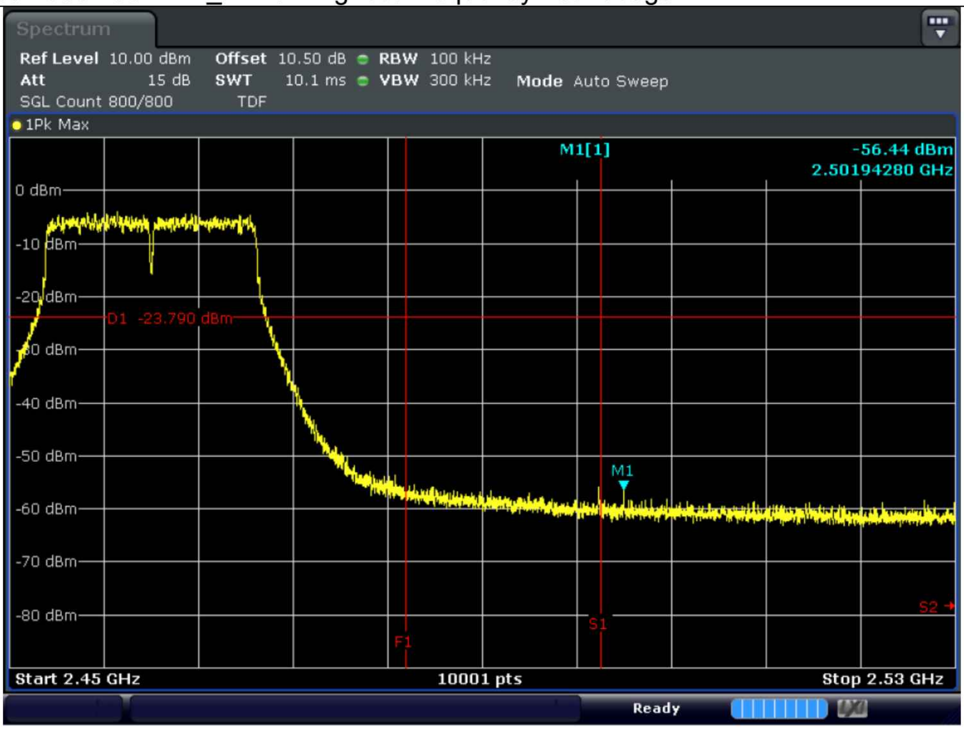


Test mode : 802.11n_HT20 / Highest Frequency / reference

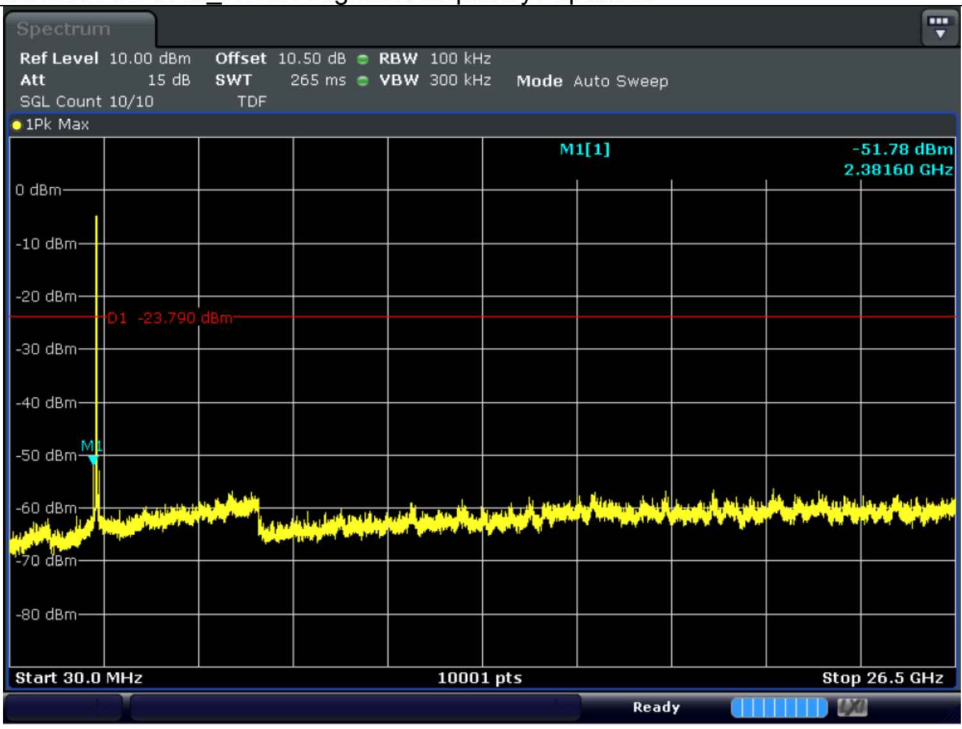


NOTE: Limit : -3.79 dBm - 20 dB = -23.79 dBm

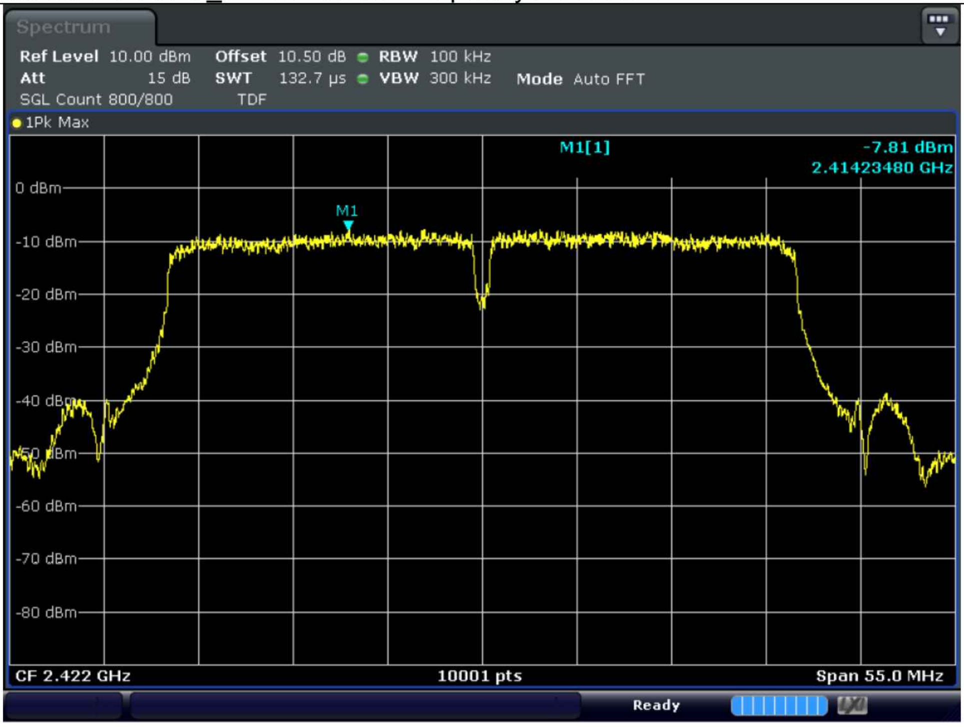
Test mode : 802.11n_HT20 / Highest Frequency / bandedge



Test mode : 802.11n_HT20 / Highest Frequency / spurious

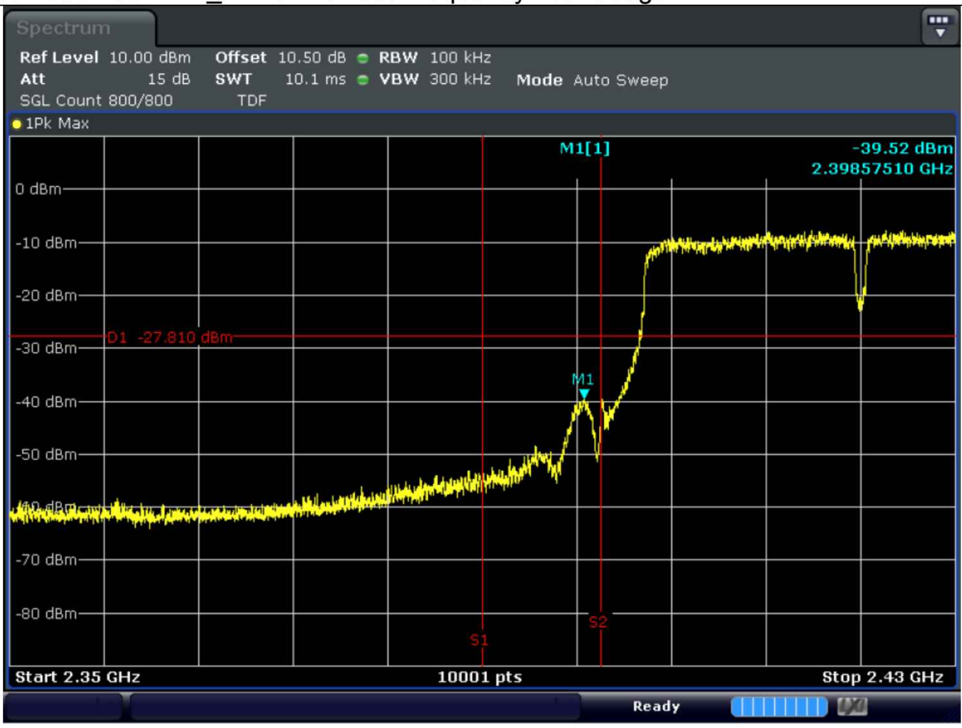


Test mode : 802.11n_HT40 / Lowest Frequency / reference

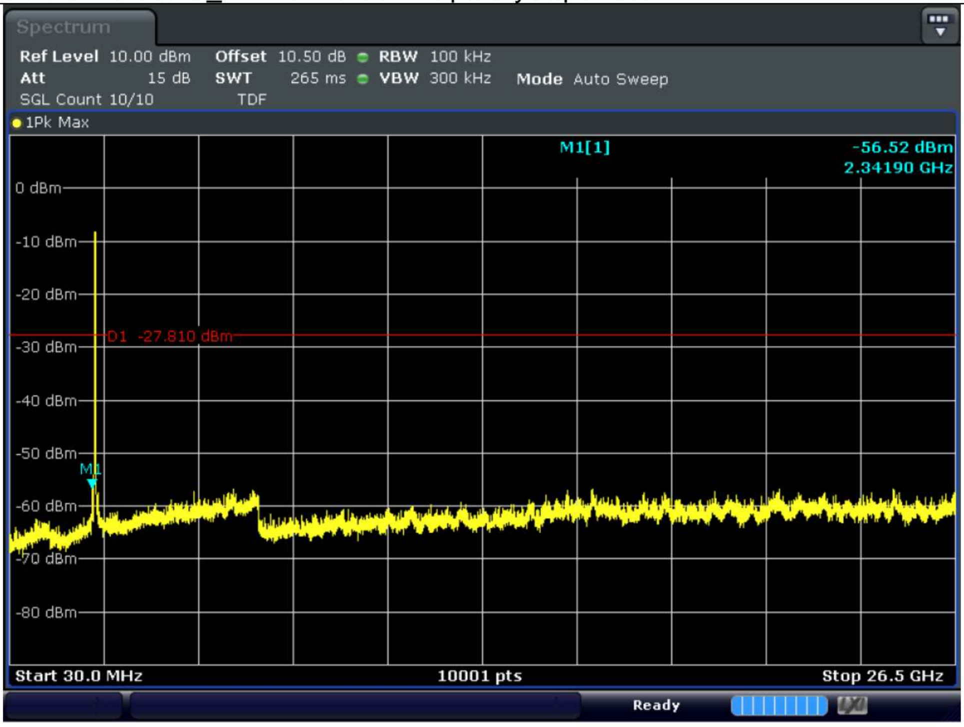


NOTE: Limit : -7.81 dBm - 20 dB = -27.81 dBm

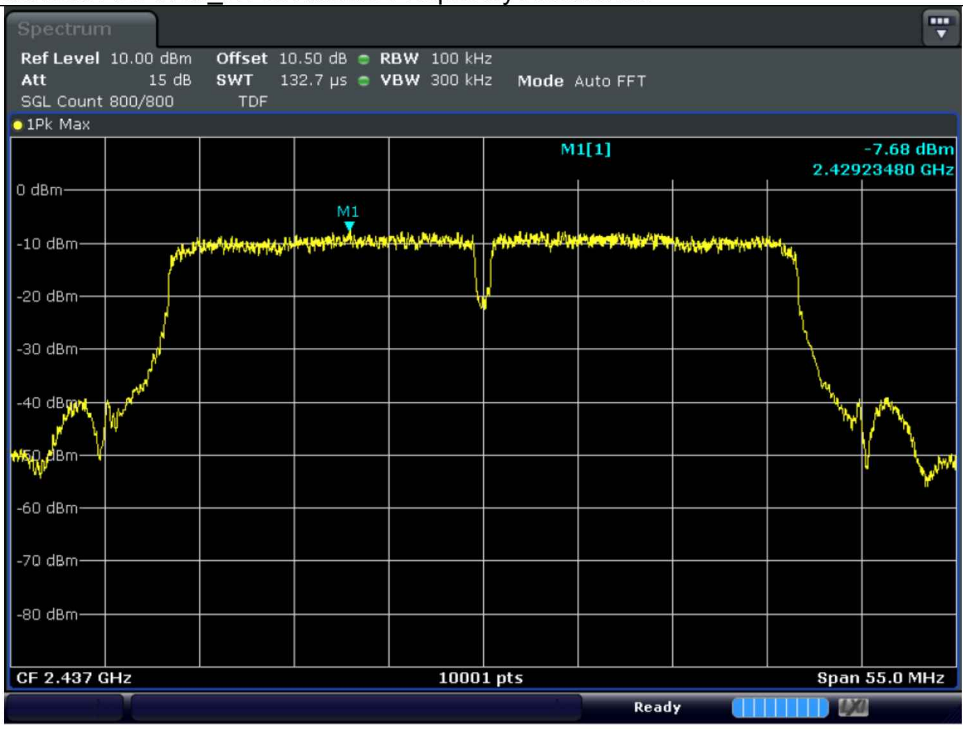
Test mode : 802.11n_HT40 / Lowest Frequency / bandedge



Test mode : 802.11n_HT40 / Lowest Frequency / spurious

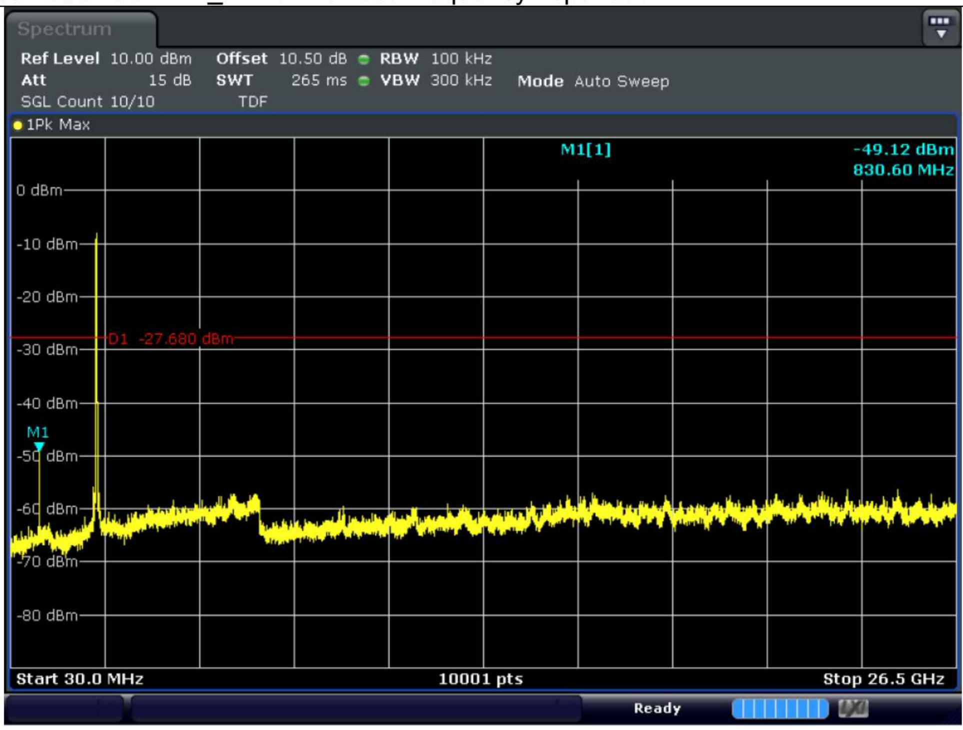


Test mode : 802.11n_HT40 /Middle Frequency / reference

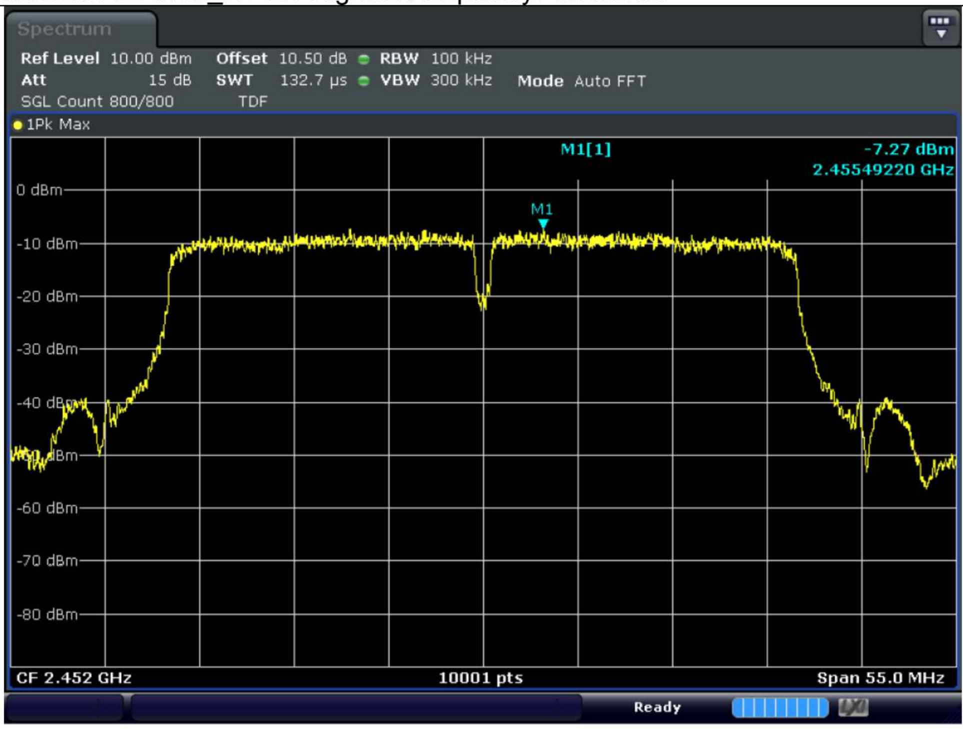


NOTE: Limit : -7.69 dBm - 20 dB = -27.69 dBm

Test mode : 802.11n_HT40 / Lowest Frequency / spurious

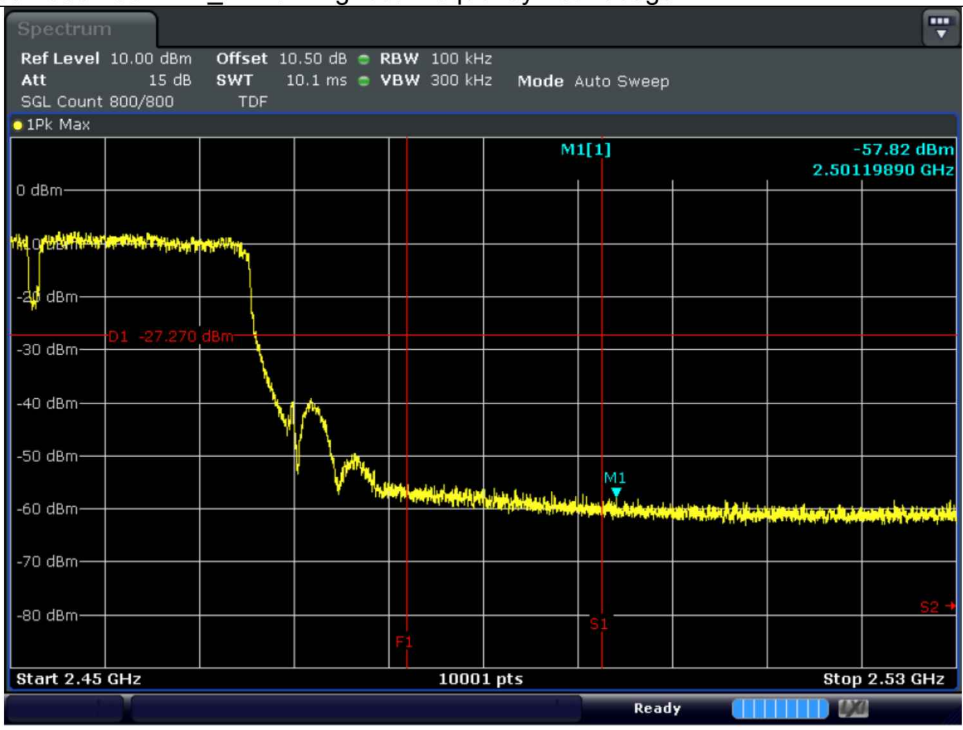


Test mode : 802.11n_HT40 / Highest Frequency / reference

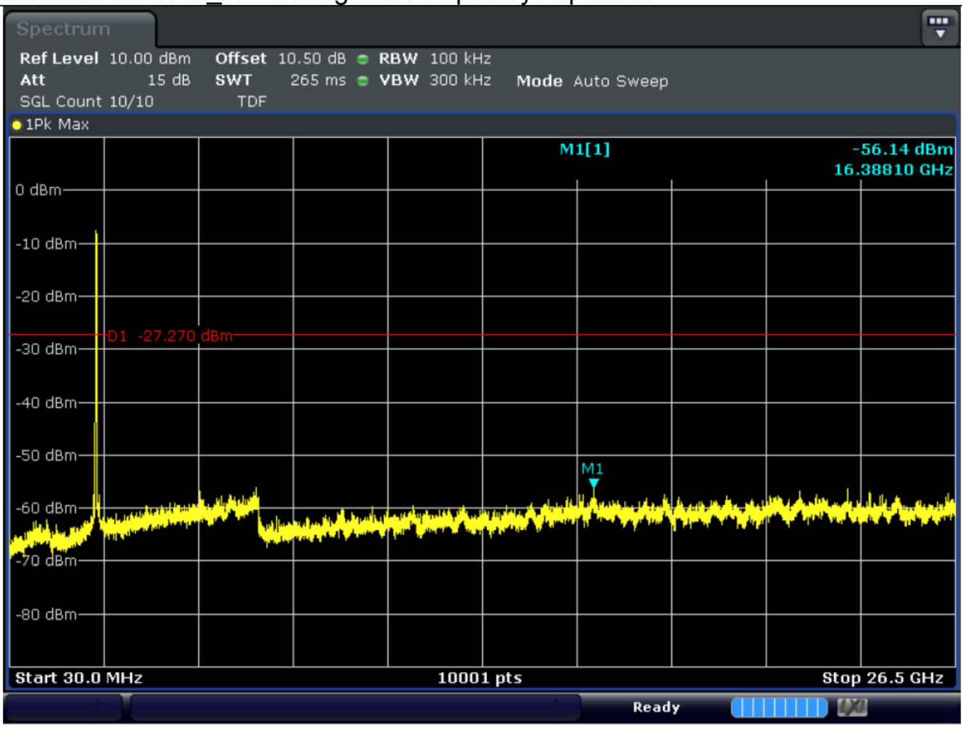


NOTE: Limit : -7.27 dBm - 20 dB = -27.27 dBm

Test mode : 802.11n_HT40 / Highest Frequency / bandedge



Test mode : 802.11n_HT40 / Highest Frequency / spurious

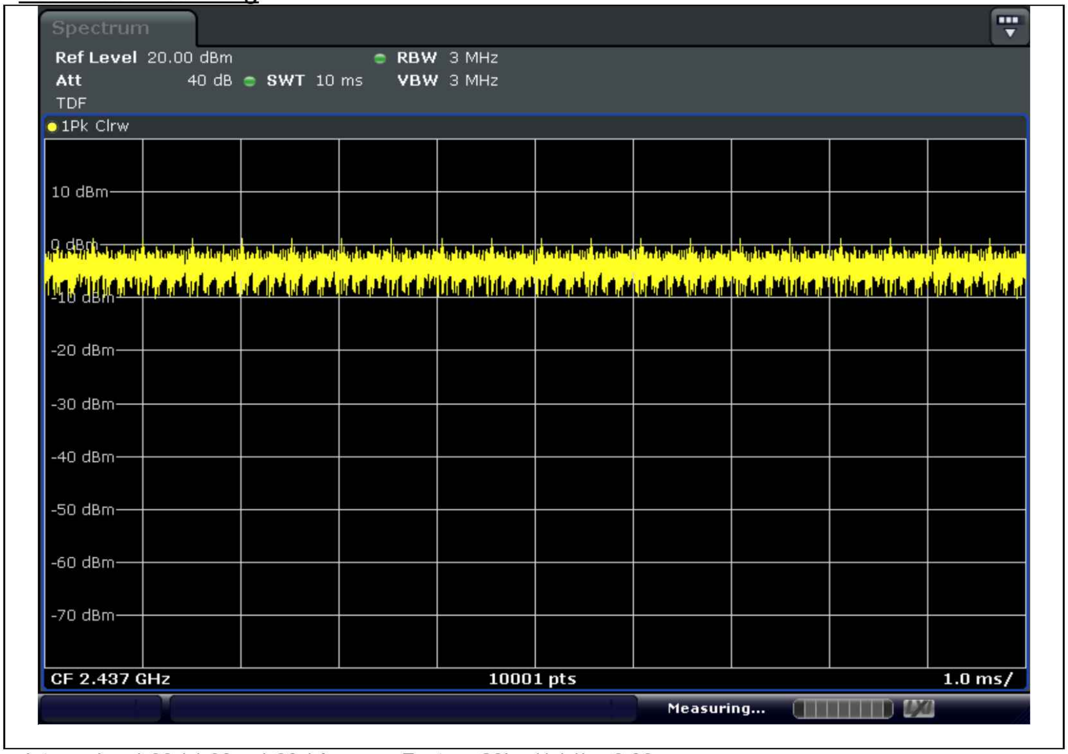


4.4.5.7 Measurement Plot_Dutycycle

Test mode : 802.11b

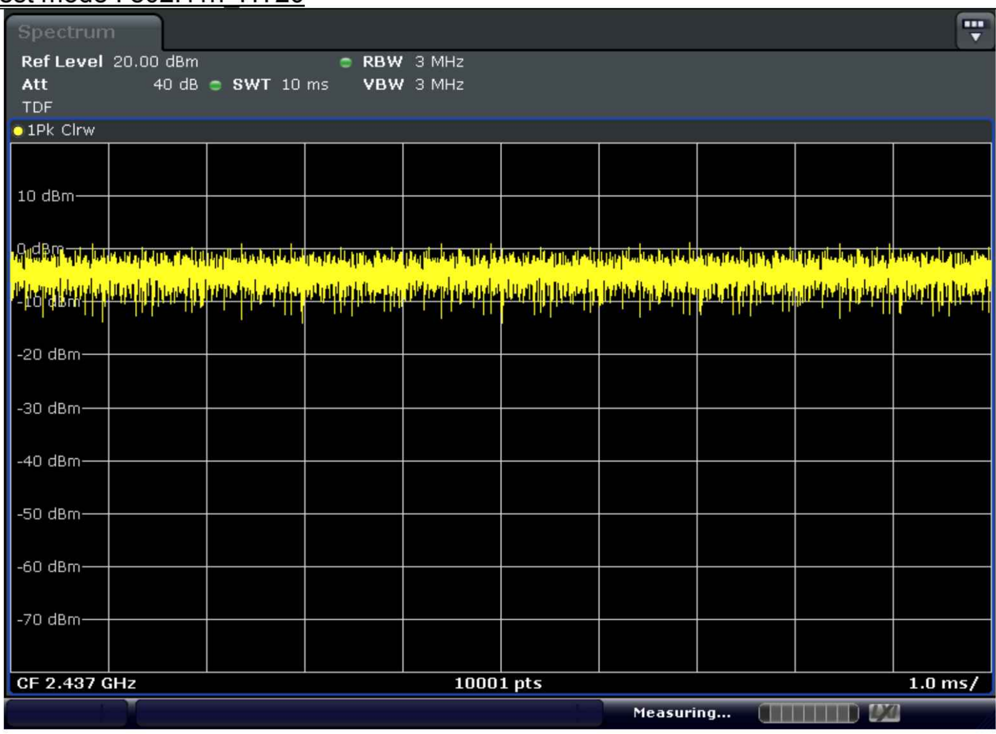
duty cycle : 1.00 / 1.00 = 1.00 / Average Factor : 20log(1 / 1) = 0.00

Test mode : 802.11g



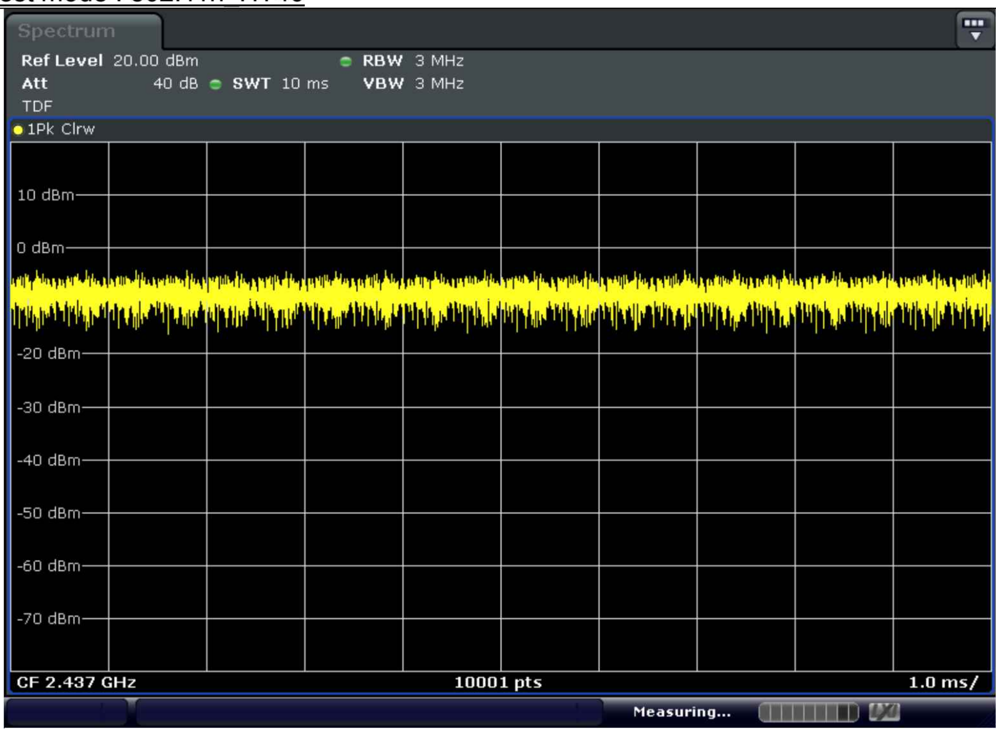
duty cycle : 1.00 / 1.00 = 1.00 / Average Factor : 20log(1 / 1) = 0.00

Test mode : 802.11n_HT20



duty cycle : 1.00 / 1.00 = 1.00 / Average Factor : 20log(1 / 1) = 0.00

Test mode : 802.11n_HT40



duty cycle : 1.00 / 1.00 = 1.00 / Average Factor : 20log(1 / 1) = 0.00

4.4.6 Conducted Emission

4.4.6.1 Regulation

According to §15.207(a), for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 μH/50 Ω line impedance stabilization network (LISN).
Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

Frequency of emission (MHz)	Conducted limit (dBμV)	
	Qausi-peak	Average
0.15 – 0.5	66 to 56 *	56 to 46 *
0.5 – 5	56	46
5 - 30	60	50

* Decreases with the logarithm of the frequency.

According to §15.107(a), for unintentional device, except for Class A digital devices, line conducted emission limits are the same as the above table.

4.4.6.2 Measurement Procedure

1) The EUT was placed on a wooden table of size, 1 m by 1.5 m, raised 80 cm in which is located 40 cm away from the vertical wall and 1.5 m away from the side wall of the shielded room.

2) Each current-carrying conductor of the EUT power cord was individually connected through a 50 Ω/50 μH LISN, which is an input transducer to a Spectrum Analyzer or an EMI/Field Intensity Meter, to the input power source.

3) Exploratory measurements were made to identify the frequency of the emission that had the highest amplitude relative to the limit by operating the EUT in a range of typical modes of operation, cable position, and with a typical system equipment configuration and arrangement. Based on the exploratory tests of the EUT, the one EUT cable configuration and arrangement and mode of operation that had produced the emission with the highest amplitude relative to the limit was selected for the final measurement.

4) The final test on all current-carrying conductors of all of the power cords to the equipment that comprises the EUT (but not the cords associated with other non-EUT equipment is the system) was then performed over the frequency range of 0.15 MHz to 30 MHz.

5) The measurements were made with the detector set to PEAK amplitude within a bandwidth of 10 kHz or to QUASIPEAK and AVERAGE within a bandwidth of 9 kHz. The EUT was in transmitting mode during the measurements.

4.4.6.3 Result

Not Applicable (This device gets power supply from vehicle battery.(DC 12 V)
Therefore this test item was not performed)

APPENDIX I

TEST EQUIPMENT USED FOR TESTS

To facilitate inclusion on each page of the test equipment used for related tests, each item of test equipment.

Equipment	Manufacturer	Model	Serial No.	Cal. Date (yy.mm.dd)	Next Cal.Date (yy.mm.dd)
FSV Signal Analyzer	ROHDE&SCHWARZ	FSV40	101010	2018-04-24	2019-04-24
Power Sensor	KEYSIGHT	U2022XA	MY55320008	2018-08-17	2019-08-17
DC Power Supply	AGILENT	E3632A	MY51160055	2018-04-23	2019-04-23
Digital MultiMeter	HP	34401A	US36025428	2018-01-11	2019-01-11
ATTENUATOR	WEINSCHEL	54A-10	69672	2018-10-15	2019-10-15
Signal Generator	ROHDE&SCHWARZ	SMB100A	178384	2018-10-15	2019-10-15
EMI Test Receiver	ROHDE&SCHWARZ	ESU40	100445	2017-12-15	2018-12-15
BiLog Antenna	Schwarzbeck	VULB9160	9160-3381	2017-06-15	2019-06-15
Attenuator	JFW	50FPE-006N	-	2018-04-23	2019-04-23
Preamplifier	TSJ	MLA-10k01-b01-27	1870369	2018-04-23	2019-04-23
Antenna Mast(10 m)	TOKIN	5977	-	-	-
Antenna Mast(10 m)	Innco	MA4640-XPET-0800	578	-	-
Controller(10 m)	TOKIN	5909L	141909L-1	-	-
Controller(10 m)	Innco	CO3000	40040217	-	-
Turn Table(10 m)	TOKIN	5983-1.5	-	-	-
10 m Semi-Anechoic Chamber	SY CORPORATION	-	-	-	-
Active Loop H-Field	ETS	6502	00150598	2017-06-01	2019-06-01
Double Ridege Horn Antenna	ETS	3117	00168719	2017-09-01	2019-09-01
Double Ridege Horn Antenna	A.H Systems, Inc	SAS-574	465	2017-04-25	2019-04-25
PREAMPLIFIER	Agilent	8449B	3008A02110	2018-01-15	2019-01-15
PREAMPLIFIER	A.H Systems, Inc	PAM-1840VH	166	2018-01-15	2019-01-15