

6. 6dB EMISSION BANDWIDTH

6.1. TEST CONDITIONS

Test performed by : Armand MAHOUNGOU
Date of test : January 22, 2018
Ambient temperature : 26 °C
Relative humidity : 44 %

6.2. TEST SETUP

- The Equipment Under Test is installed:

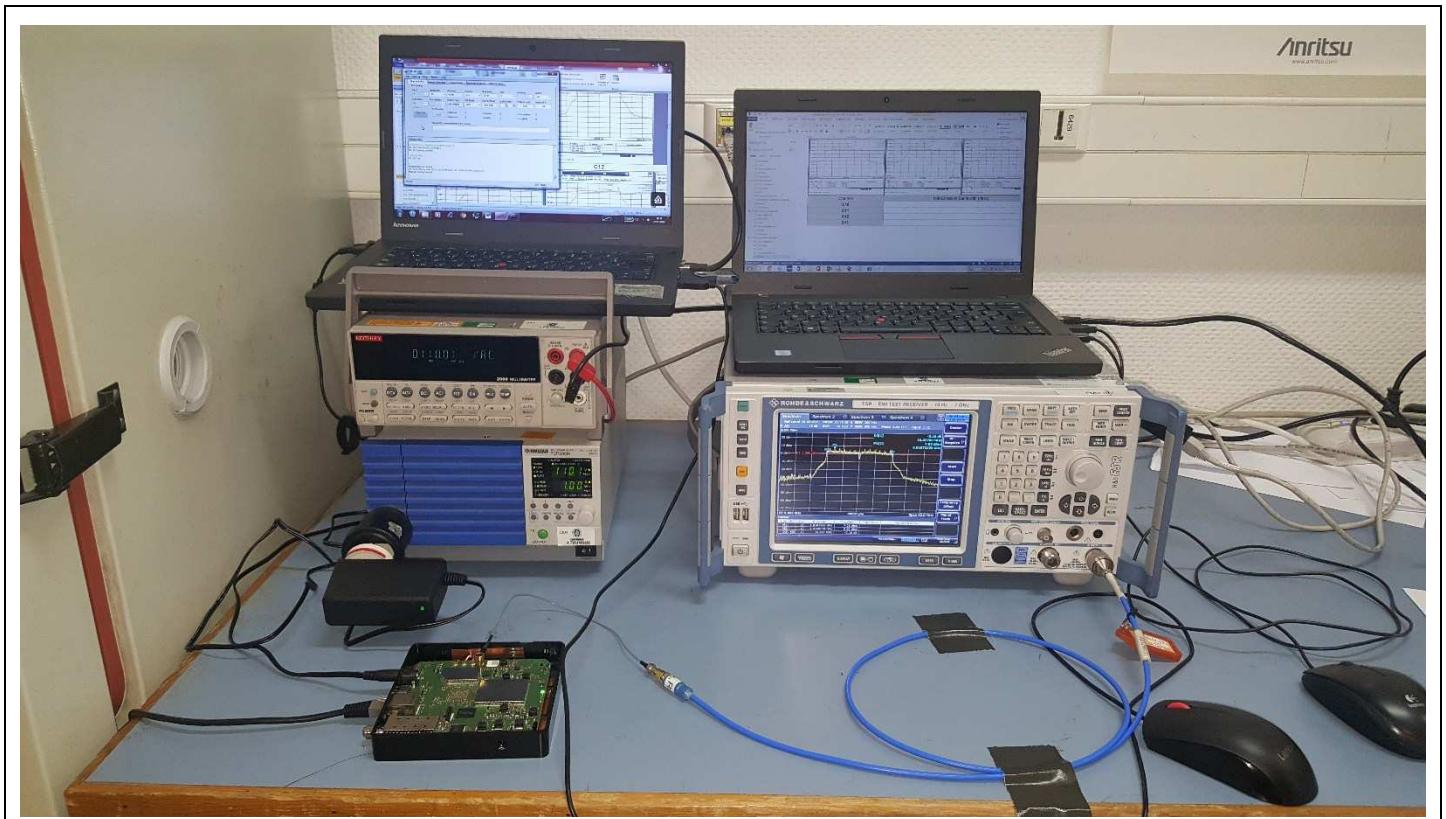
- On a table
- In an anechoic chamber

- Measurement is performed with a spectrum analyzer in:

- Conducted Method
- Radiated Method

- Test Procedure:

- KDB 789033 D02 General UNII Test Procedures New Rules v01r02 § C2



Photograph for 6dB emission bandwidth



6.3. LIMIT

The 6dB bandwidth shall be at least 500kHz

6.4. TEST EQUIPMENT LIST

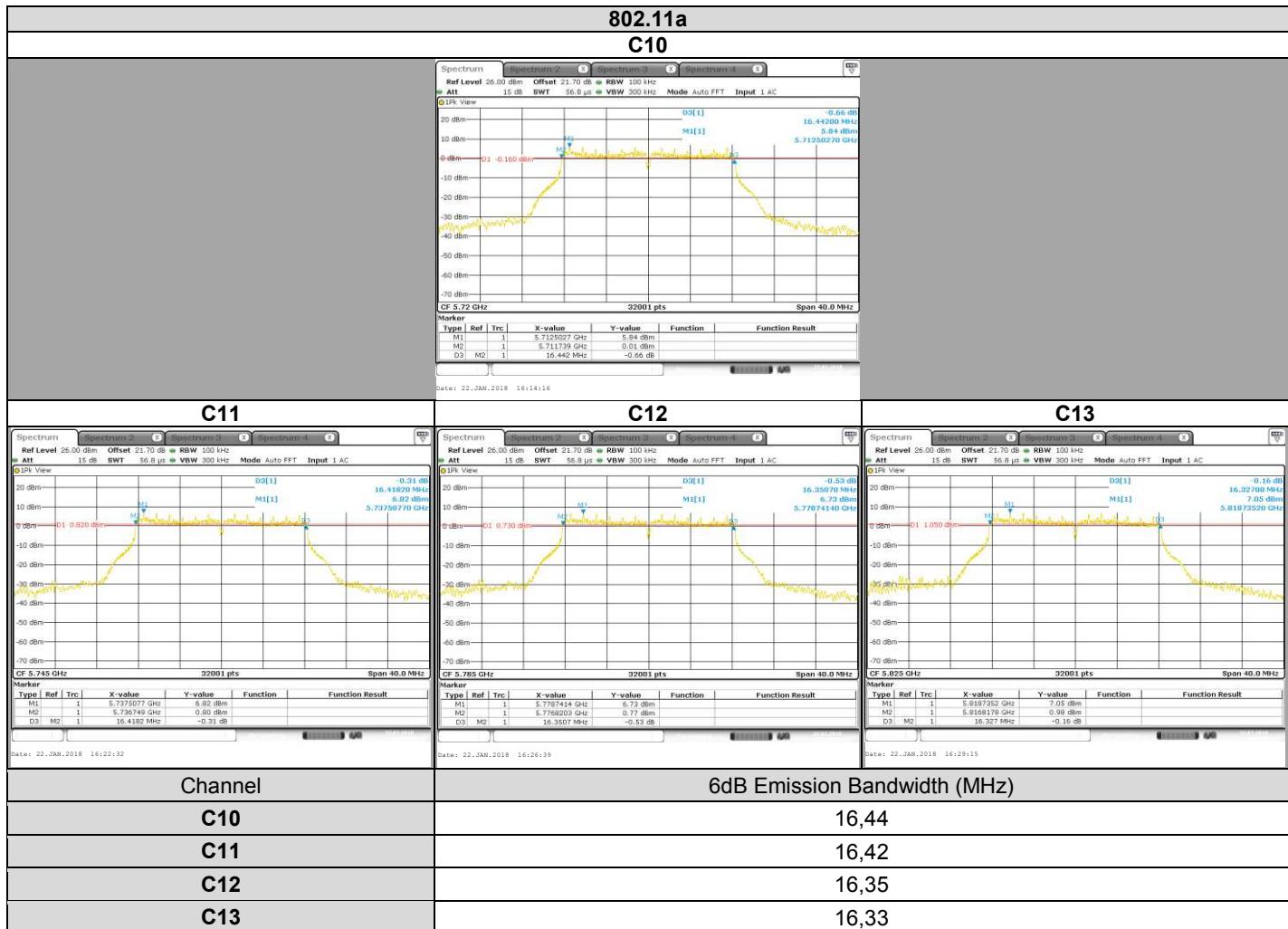
DESCRIPTION	MANUFACTURER	MODEL	N° LCIE	Cal_Date	Cal_Due
EMI receiver	ROHDE & SCHWARZ	ESR 7	A2642023	2017/09	2018/09
Multi-meter	KEITHLEY	2000	A1242090	2016/06	2018/06
Programmable AC/DC power supply	KIKUSUI	PCR500M	A7040079	2016/06	2018/06
RF cable & 20 dB attenuator	Télédynne	920-0202-048	A5329661	2017/09	2018/09

Note: In our quality system, the test equipment calibration due is more & less 2 months



L C I E

6.5. RESULTS

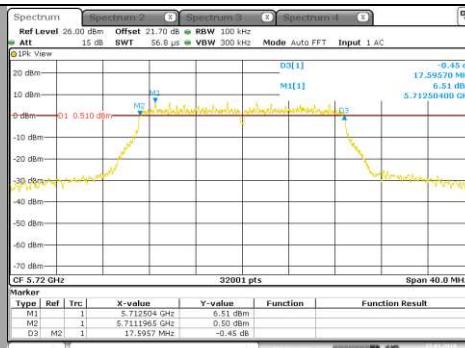




L C I E

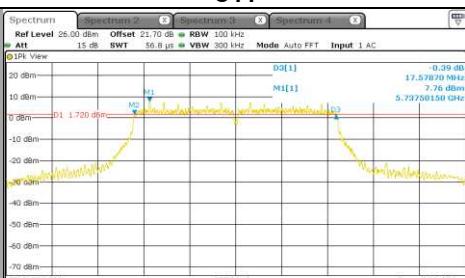
802.11n HT20/ac VHT20

C10



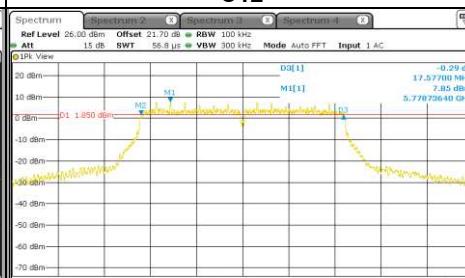
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C11



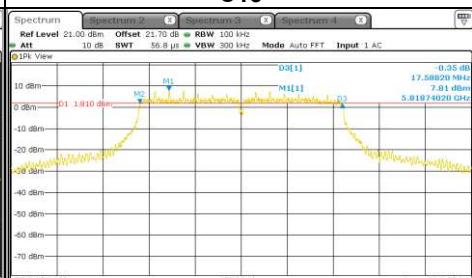
Date: 22.JAN.2018 16:36:36

C12



Date: 22.JAN.2018 16:38:51

C13



Date: 22.JAN.2018 16:42:4

Channel	6dB Emission Bandwidth (MHz)
C10	17,59
C11	17,58
C12	17,58
C13	17,59

Channel

6dB Emission Bandwidth (MHz)

17 59

C10

1759

C13

17,58

C12

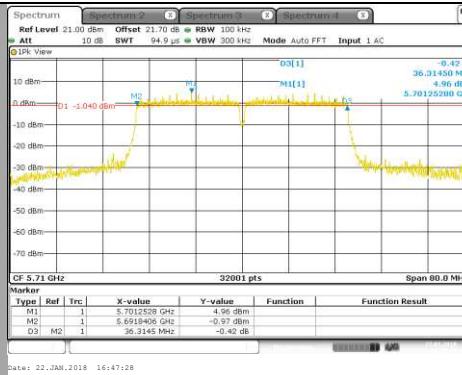
17,58



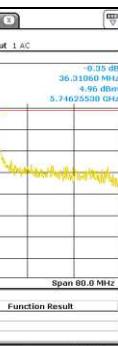
L C I E

802.11n HT40/ac VHT40

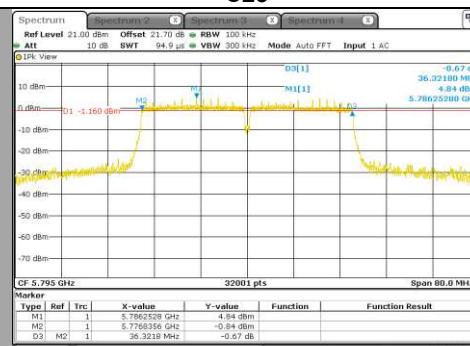
C21



C22



C23



Channel

6dB Emission Bandwidth (MHz)

C21

36,31

C22

36,31

C23

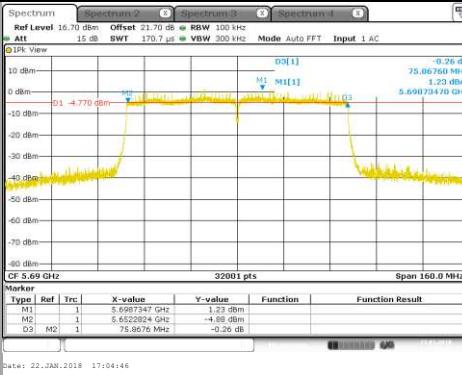
36,32



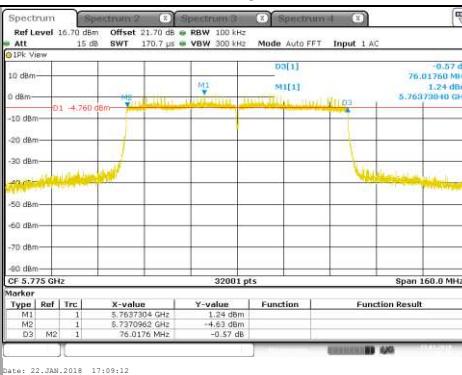
L C I E

802.11ac VHT80

C28



C29



Channel	6dB Emission Bandwidth (MHz)
C28	75,87
C29	76,02

6.6. CONCLUSION

6dB Emission Bandwidth measurement performed on the sample of the product **SAGEMCOM DCIW387 ATN**, SN: **617510000063**, in configuration and description presented in this test report, show levels **compliant** to the **47 CFR PART 15.407** limits.

7. DUTY CYCLE

7.1. TEST CONDITIONS

Test performed by : Armand MAHOUNGOU
Date of test : January 22, 2018
Ambient temperature : 26 °C
Relative humidity : 44 %

7.2. TEST SETUP

- The Equipment Under Test is installed:

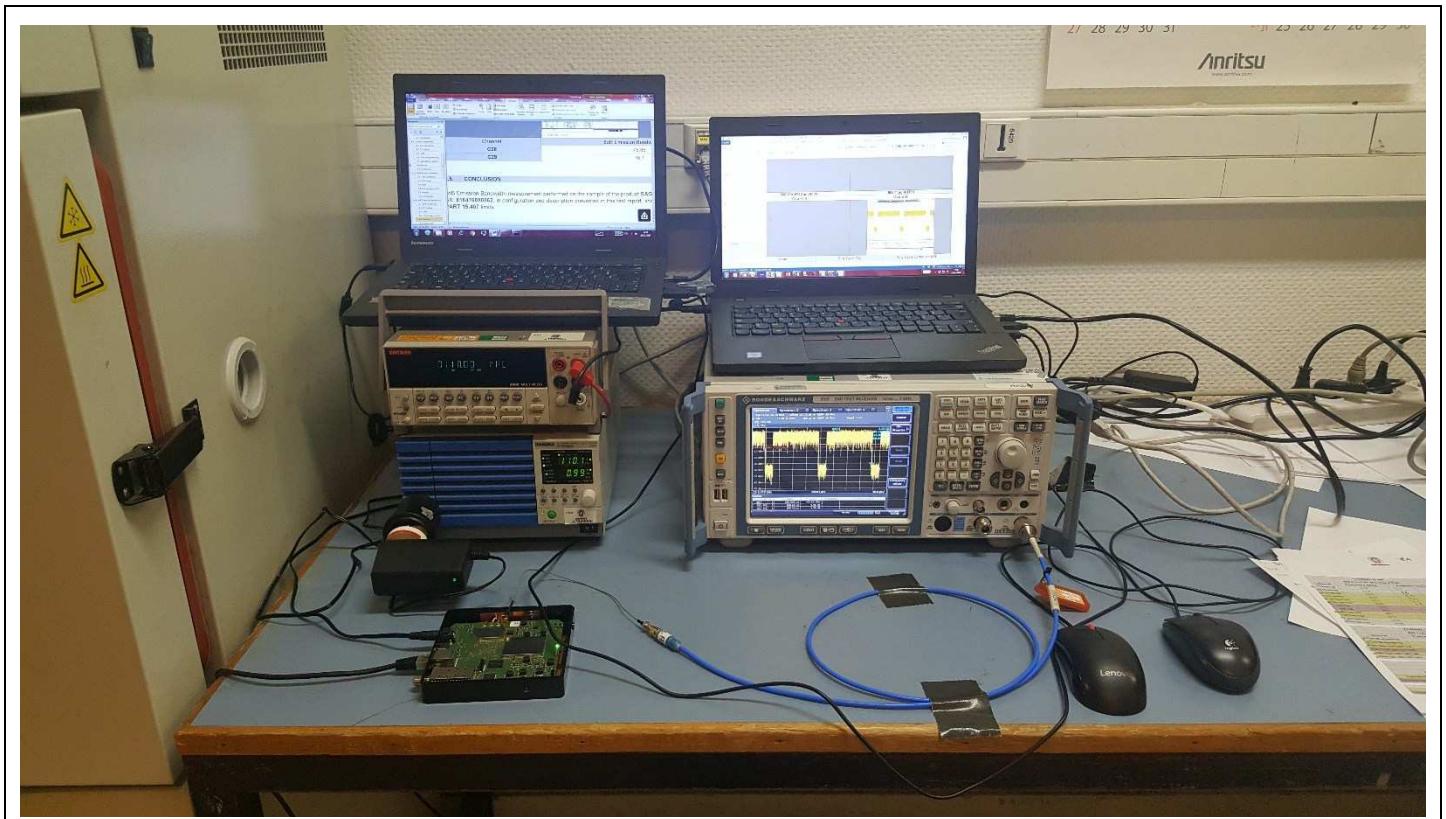
- On a table
- In an anechoic chamber

- Measurement is performed with a spectrum analyzer in:

- Conducted Method
- Radiated Method

- Test Procedure:

- KDB 789033 D02 General UNII Test Procedures New Rules v01r02 § B2 b)



Photograph for Duty Cycle



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7.3. LIMIT

None

7.4. TEST EQUIPMENT LIST

DESCRIPTION	MANUFACTURER	MODEL	N° LCIE	Cal_Date	Cal_Due
EMI receiver	ROHDE & SCHWARZ	ESR 7	A2642023	2017/09	2018/09
Multi-meter	KEITHLEY	2000	A1242090	2016/06	2018/06
Programmable AC/DC power supply	KIKUSUI	PCR500M	A7040079	2016/06	2018/06
RF cable & 20 dB attenuator	Télédynne	920-0202-048	A5329661	2017/09	2018/09

Note: In our quality system, the test equipment calibration due is more & less 2 months



L C I E

7.5. RESULTS



7.6. CONCLUSION

Duty Cycle measurement performed on the sample of the product **SAGEMCOM DCIW387 ATN**, SN: **617510000063**, in configuration and description presented in this test report, show levels **compliant** to the **47 CFR PART 15.407** limits.

8. MAXIMUM CONDUCTED OUTPUT POWER, MAXIMUM POWER SPECTRAL DENSITY, MAXIMUM EIRP, MAXIMUM EIRP SPECTRAL DENSITY

8.1. TEST CONDITIONS

Test performed by : Armand MAHOUNGOU
Date of test : January 23, 2018
Ambient temperature : 27 °C
Relative humidity : 41 %

8.2. TEST SETUP

- The Equipment Under Test is installed:

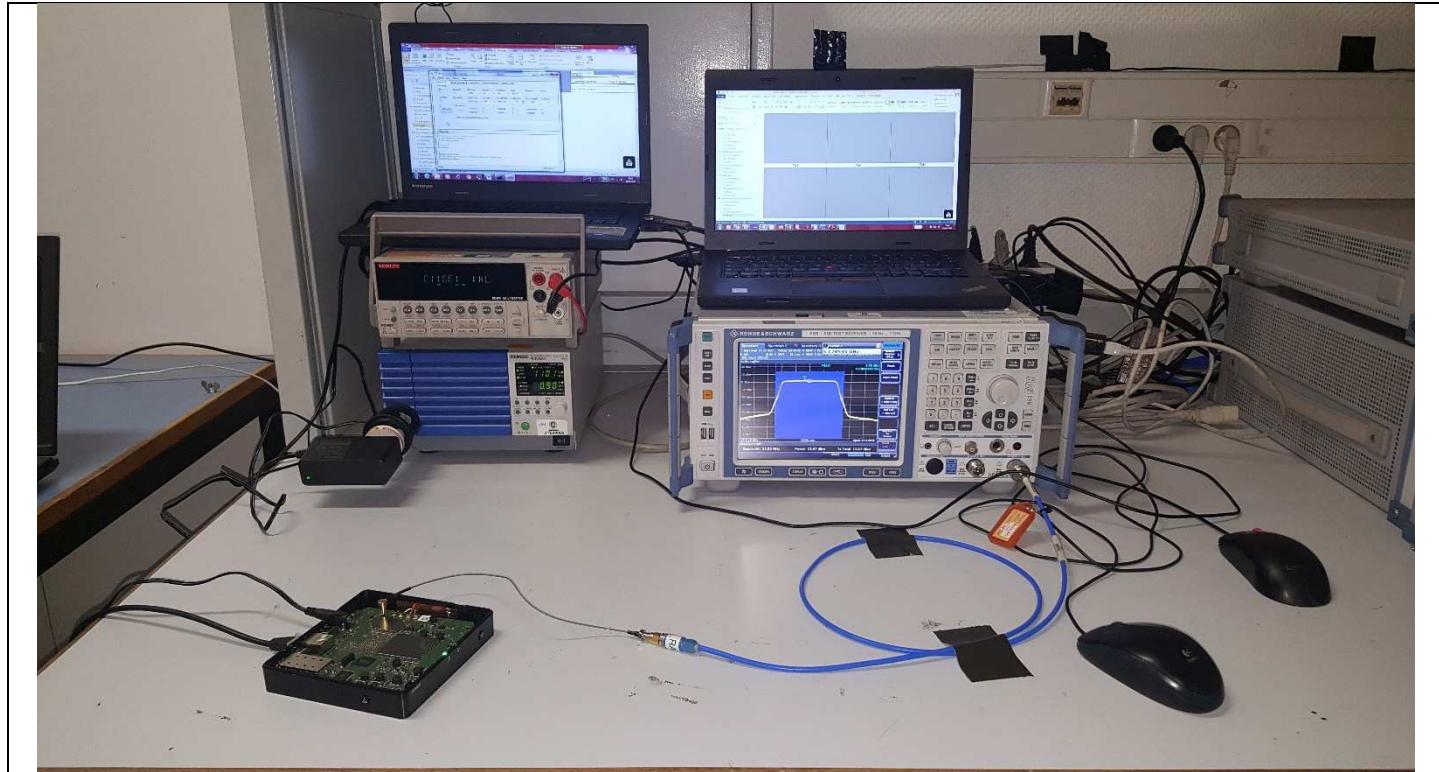
- On a table
- In an anechoic chamber

- Measurement is performed with a spectrum analyzer in:

- Conducted Method
- Radiated Method

- Test Procedure:

- KDB 789033 D02 General UNII Test Procedures New Rules v01r02 § E2 b) (Method SA-1) & F
- KDB 789033 D02 General UNII Test Procedures New Rules v01r02 § E2 c) (Method SA-2) & F
- KDB 662911 D01 Multiple Transmitter Output v02r01
- KDB 644545 D03 Guidance for IEEE 802.11ac v01



Photograph for Maximum Conducted Output Power



8.3. LIMIT

FCC Part 15.407

Maximum Conducted Output power:

5150MHz-5250MHz: Shall not exceed 30dBm for Indoor Access Point devices & 24dBm for Client devices

5250MHz-5350MHz: Shall not exceed 24dBm or $11\text{dBm} + 10 \log_{10}(\text{Bandwidth} \text{ MHz})$

5470MHz-5725MHz: Shall not exceed 24dBm or $11\text{dBm} + 10 \log_{10}(\text{Bandwidth} \text{ MHz})$

5725MHz-5850MHz: Shall not exceed 30dBm

Limits are reduced by G-6dBi if Overall Antenna Gain above 6dBi

Maximum Power Spectral Density:

5150MHz-5250MHz: Shall not exceed 17dBm/MHz for Indoor Access Point & 11dBm/MHz for Client devices

5250MHz-5350MHz: Shall not exceed 11dBm/MHz

5470MHz-5725MHz: Shall not exceed 11dBm/MHz

5725MHz-5850MHz: Shall not exceed 30dBm/500kHz

Limits are reduced by G-6dBi if Overall Antenna Gain above 6dBi



8.4. TEST EQUIPMENT LIST

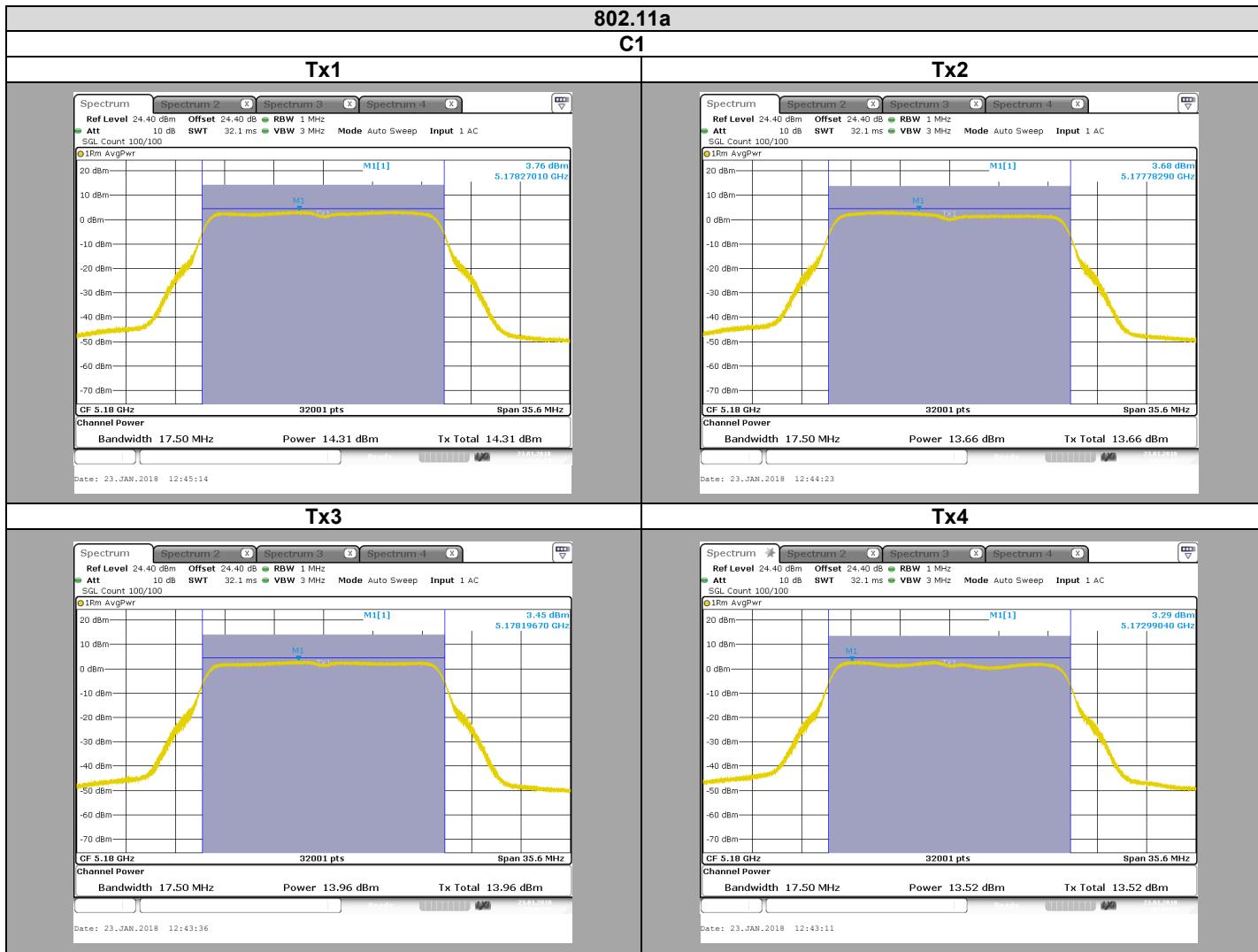
DESCRIPTION	MANUFACTURER	MODEL	N° LCIE	Cal_Date	Cal_Due
EMI receiver	ROHDE & SCHWARZ	ESR 7	A2642023	2017/09	2018/09
Multi-meter	KEITHLEY	2000	A1242090	2016/06	2018/06
Programmable AC/DC power supply	KIKUSUI	PCR500M	A7040079	2016/06	2018/06
RF cable & 20 dB attenuator	Télédynne	920-0202-048	A5329661	2017/09	2018/09

Note: In our quality system, the test equipment calibration due is more & less 2 months



L C I E

8.5. RESULTS





L C I E

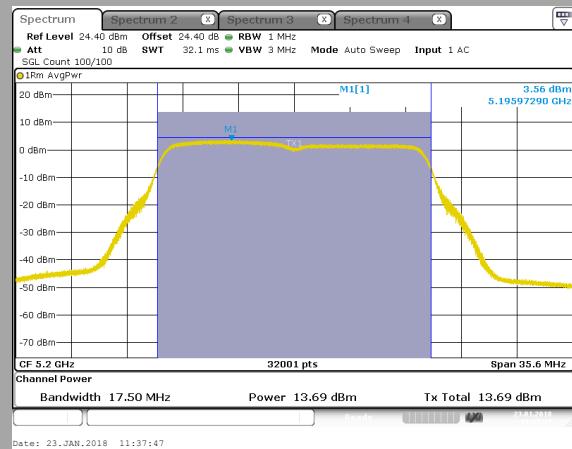
802.11a

C2

Tx1



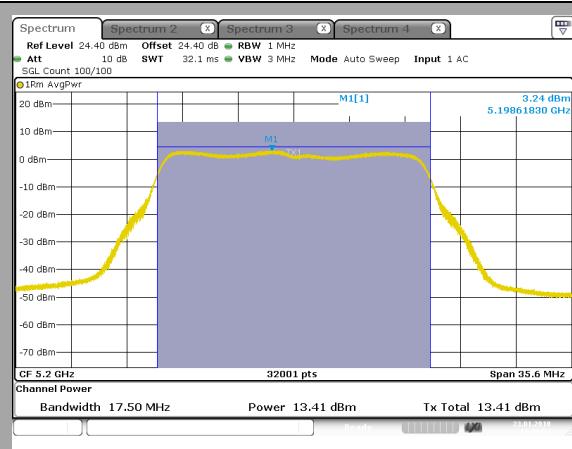
Tx2



Tx3



Tx4



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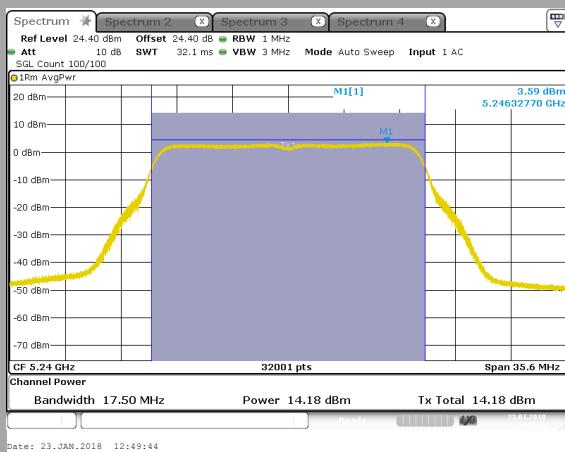


L C I E

802.11a

C3

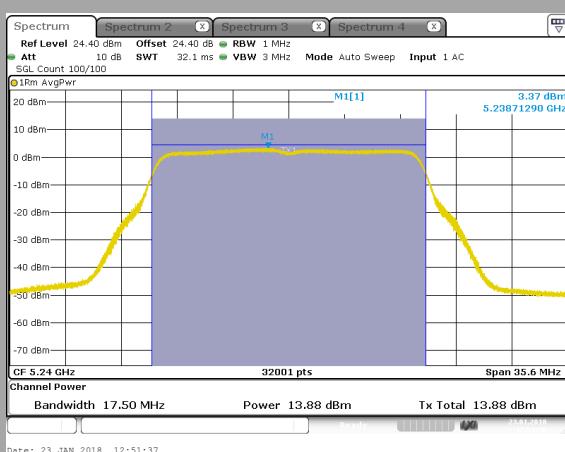
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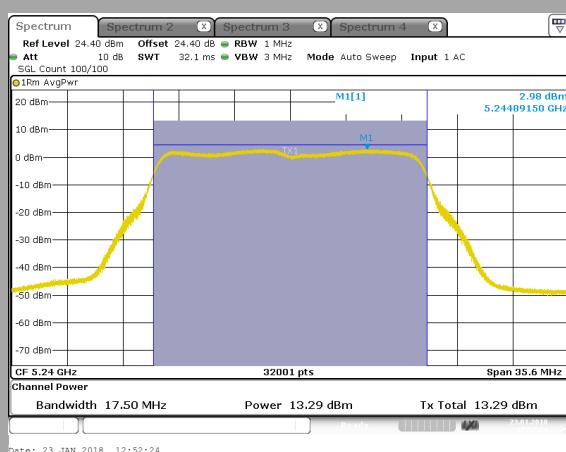
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Tx3



Tx4



TEST REPORT

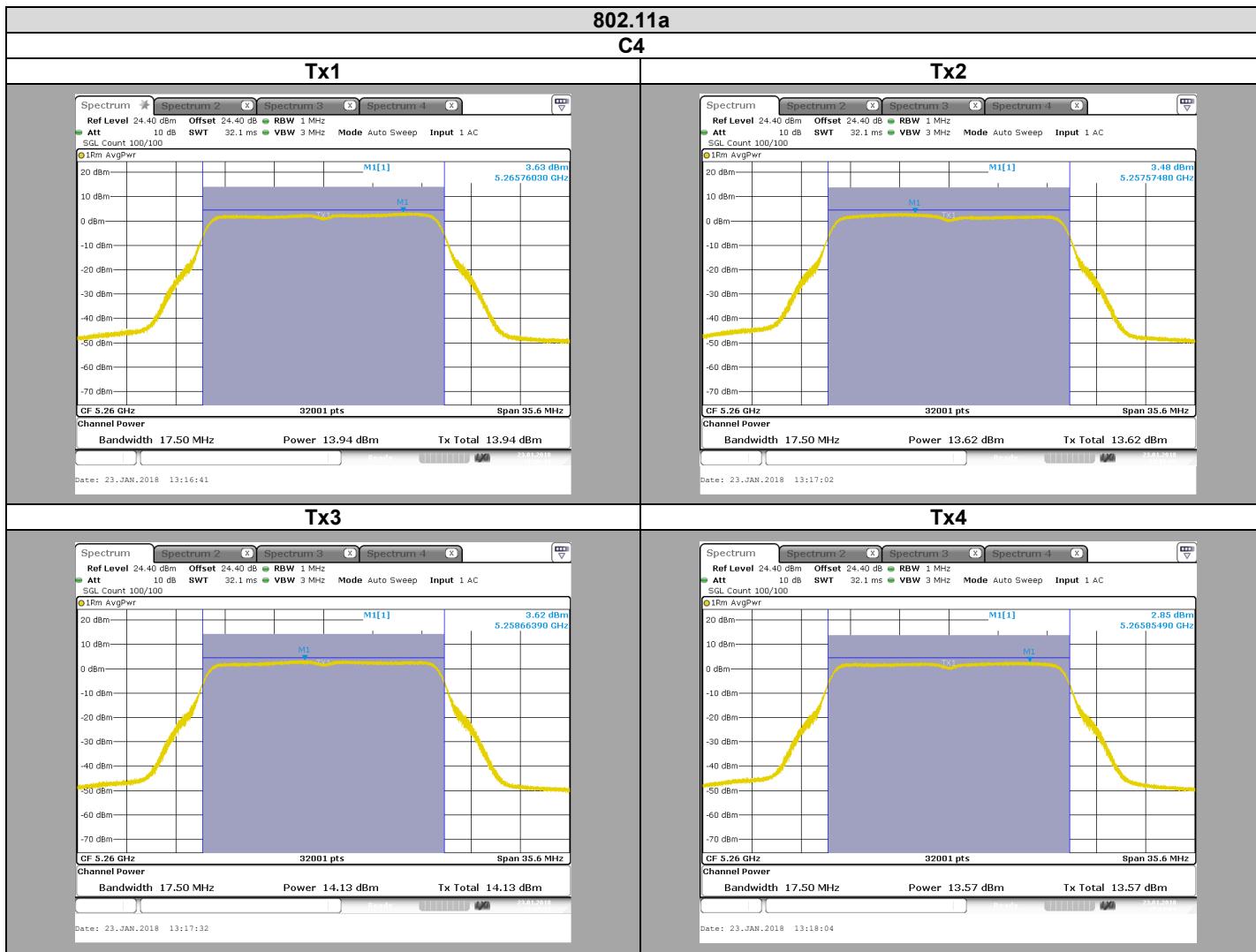
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L C I E





L C I E

802.11a

C5

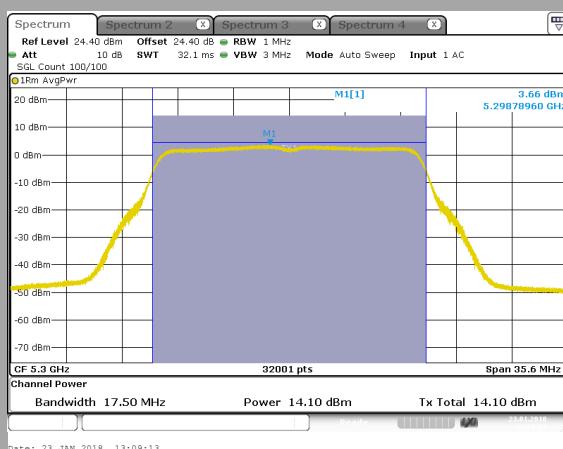
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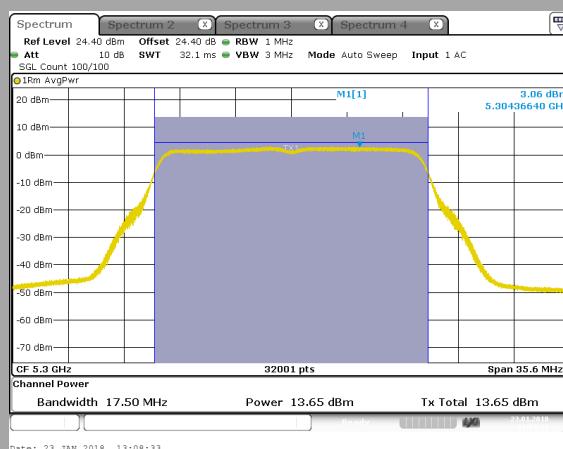
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Tx3



Tx4



TEST REPORT

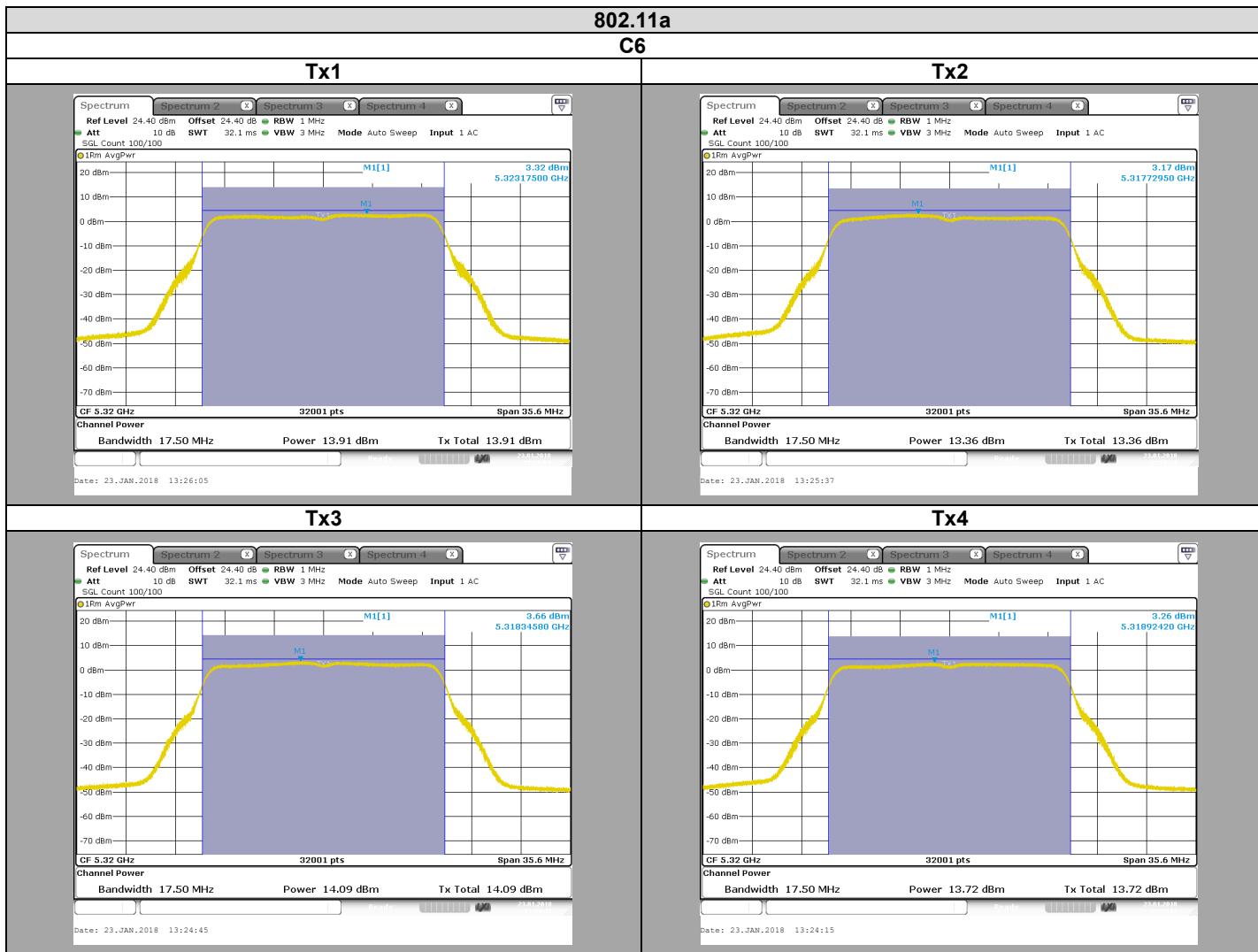
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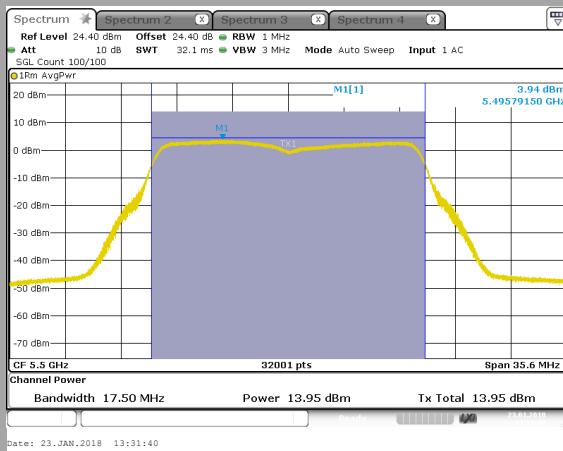


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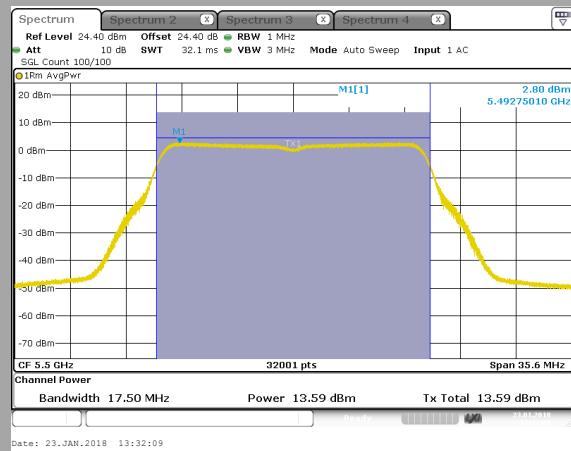
802.11a

C7

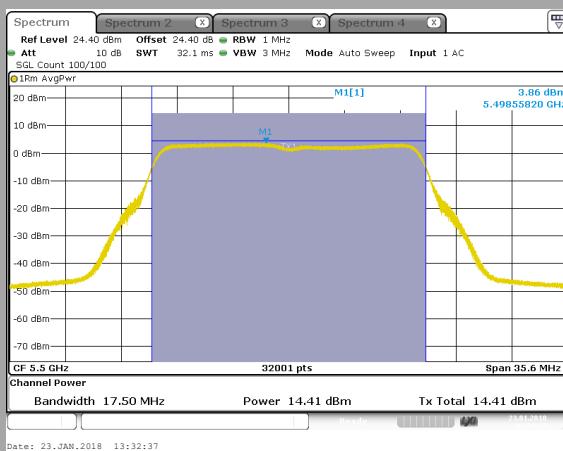
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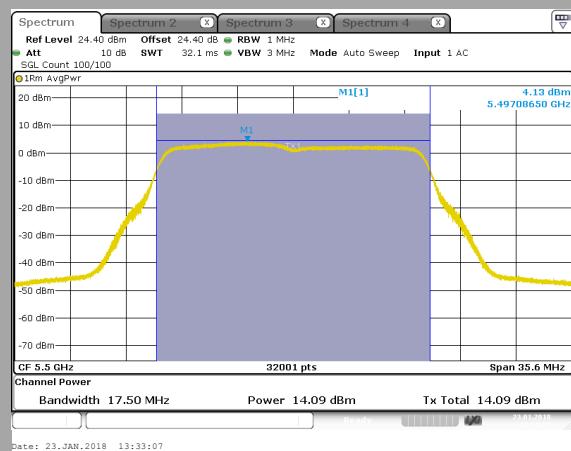
Tx2



Tx3



Tx4



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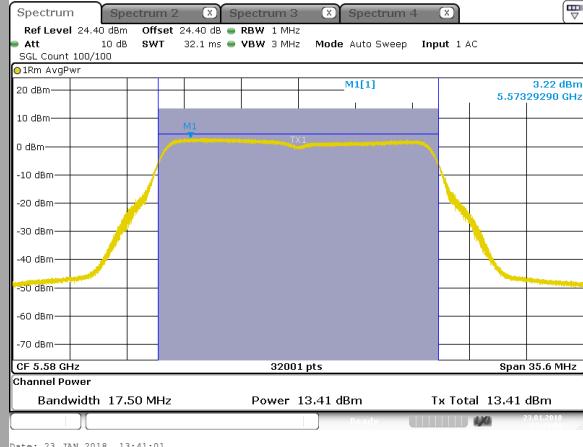
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C8

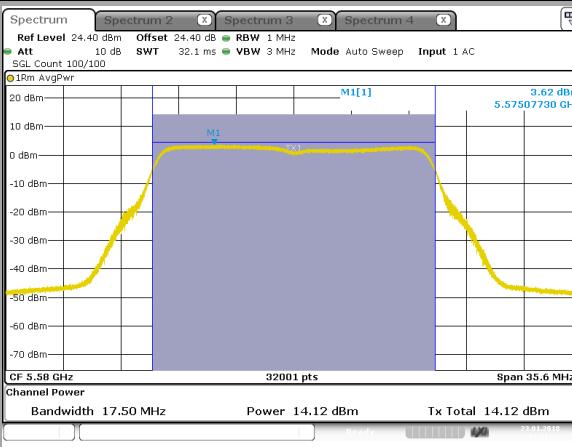
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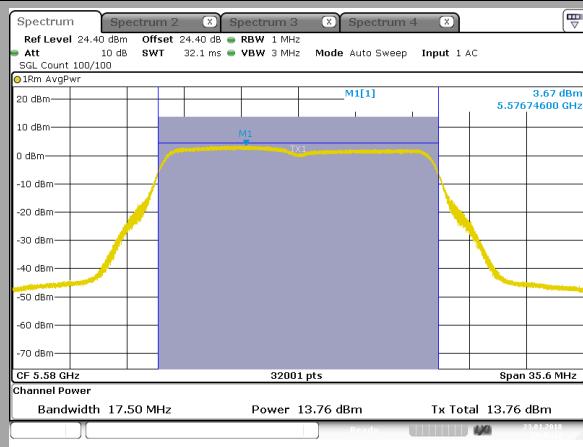
Tx2



Tx3



Tx4



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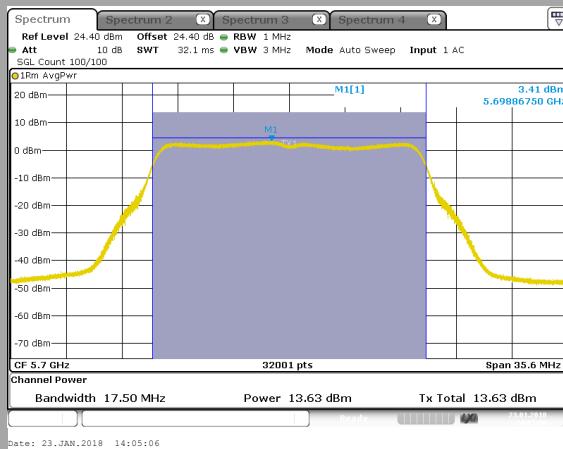


L C I E

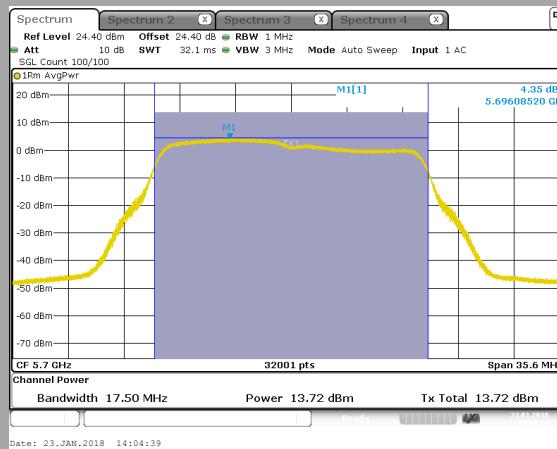
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C9

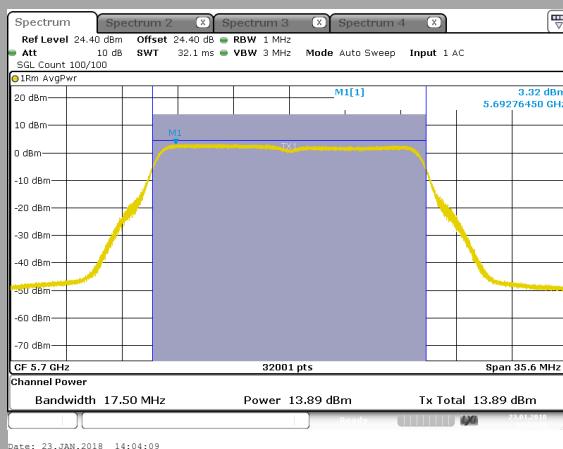
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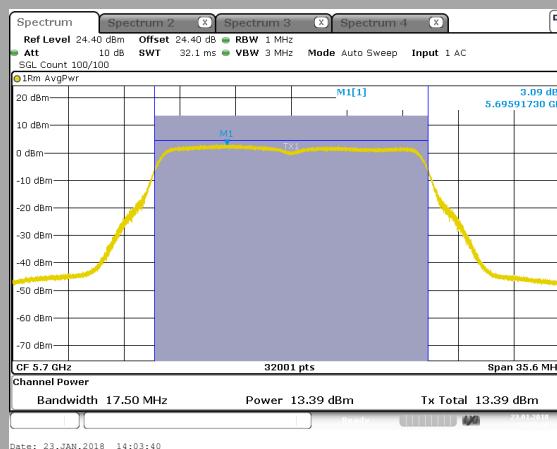
Tx2



Tx3



Tx4



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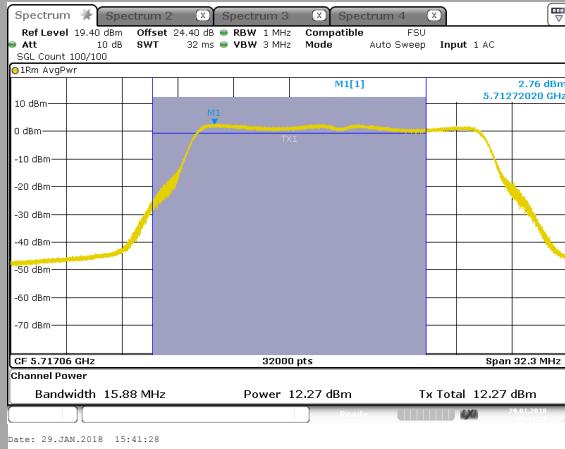


L C I E

802.11a

C10

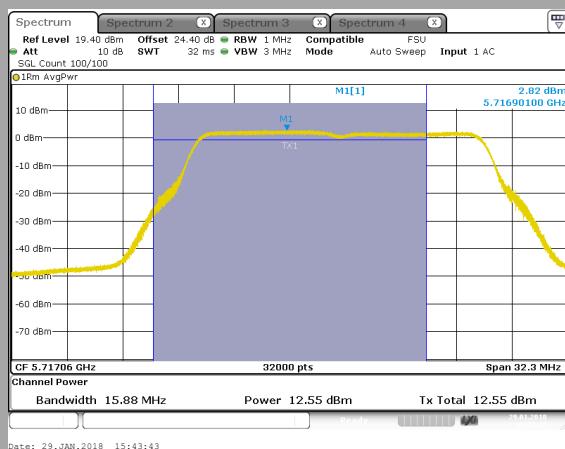
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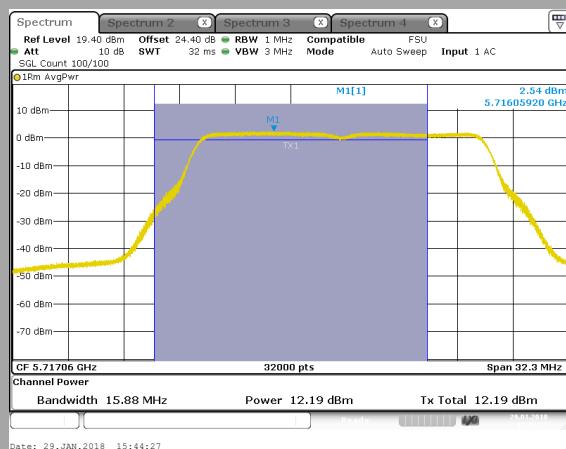
Tx2



Tx3



Tx4



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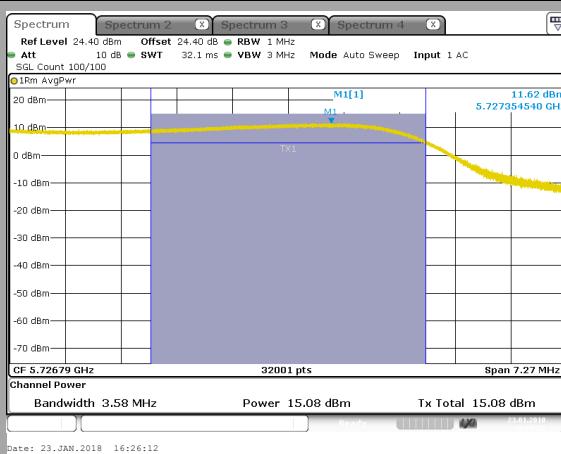


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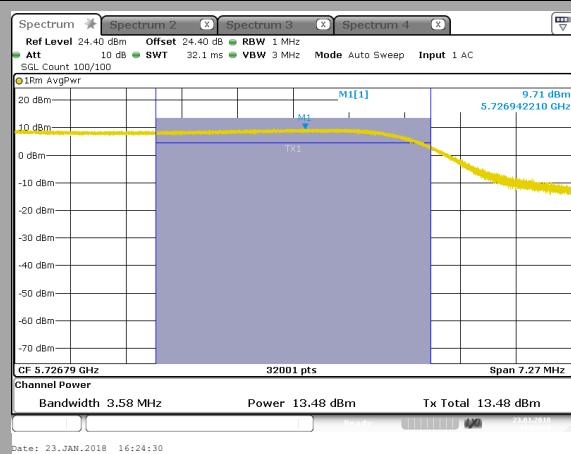
802.11a

C10 Straddle 5725MHz-5850MHz

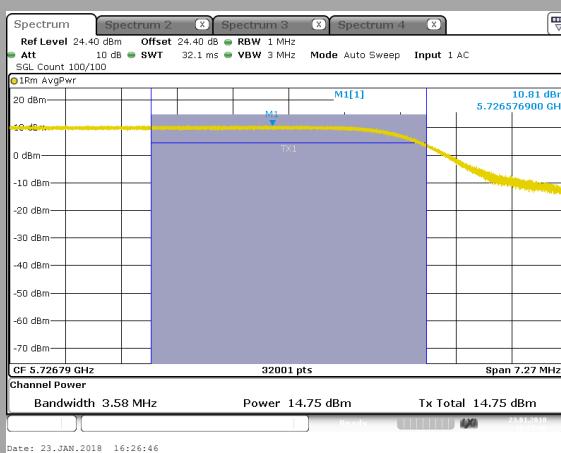
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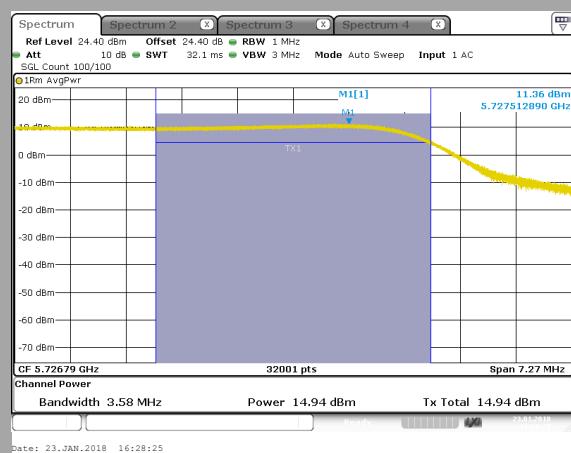
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Tx3



Tx4



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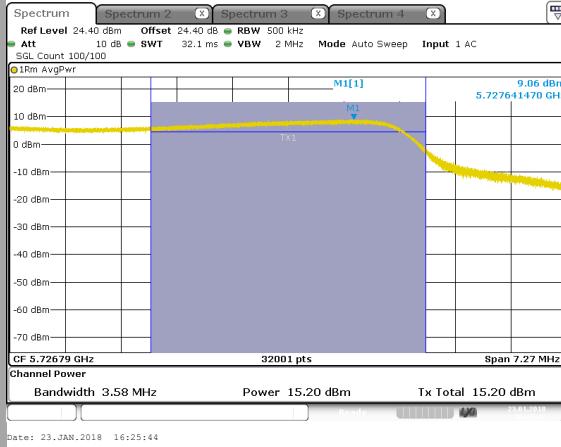


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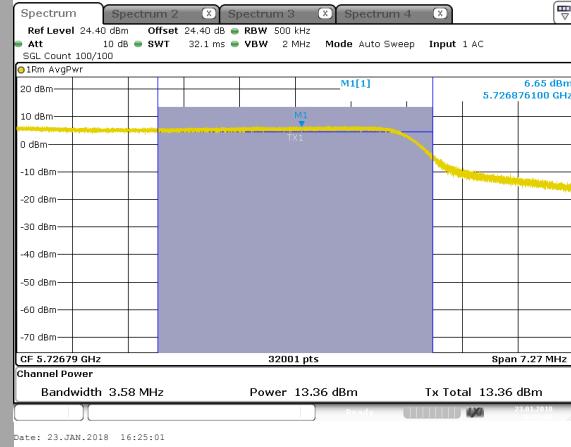
802.11a

C10 Straddle 5725MHz-5850MHz

Tx1



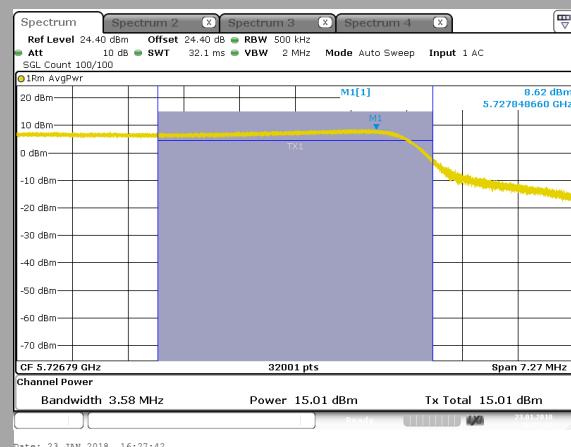
Tx2



Tx3



Tx4



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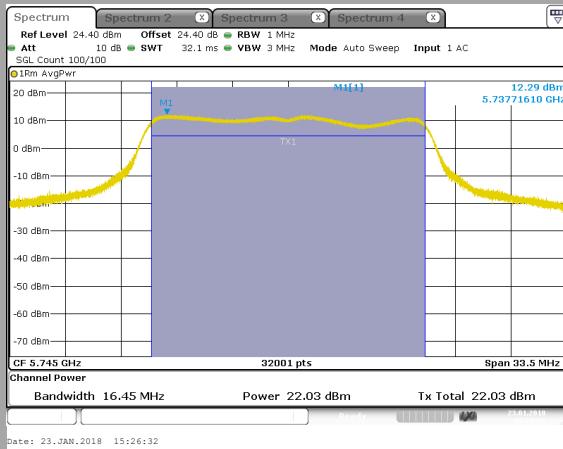


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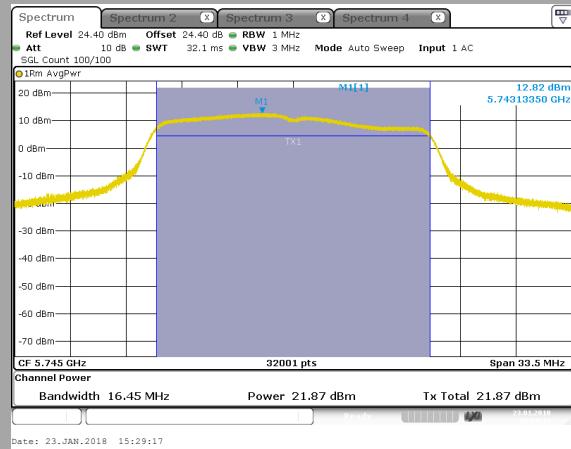
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C11

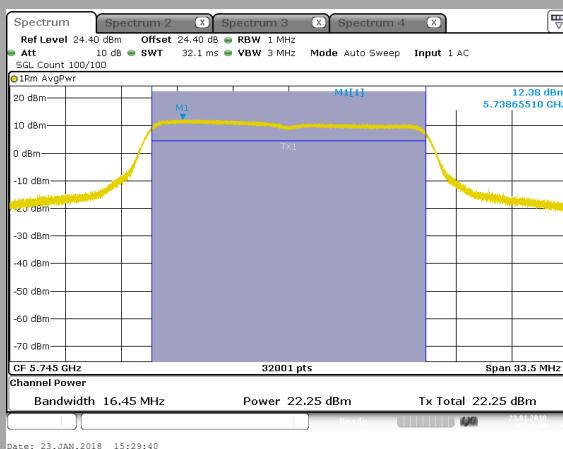
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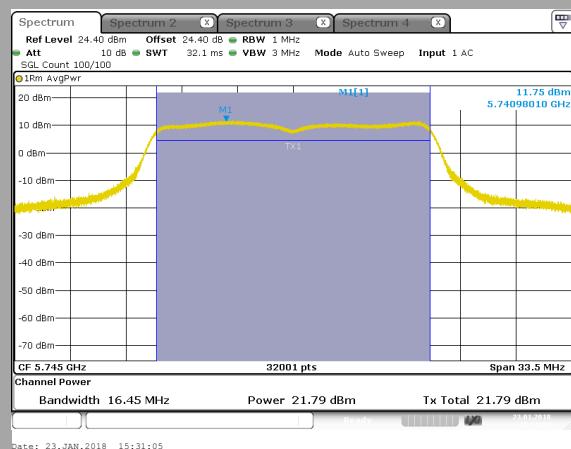
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Tx3



Tx4



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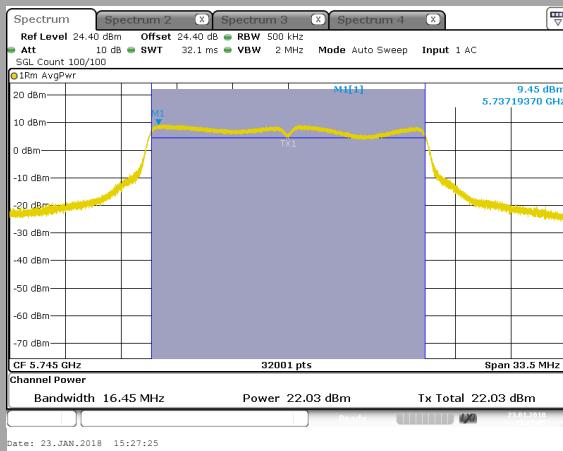


L C I E

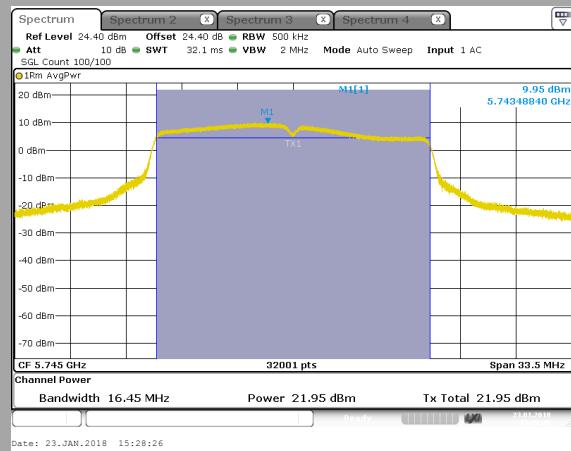
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C11

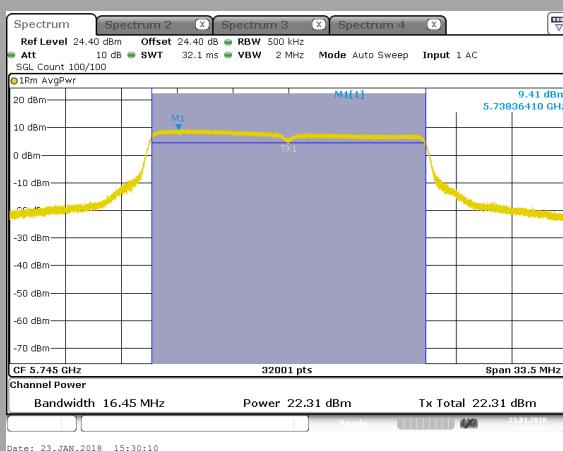
Tx1



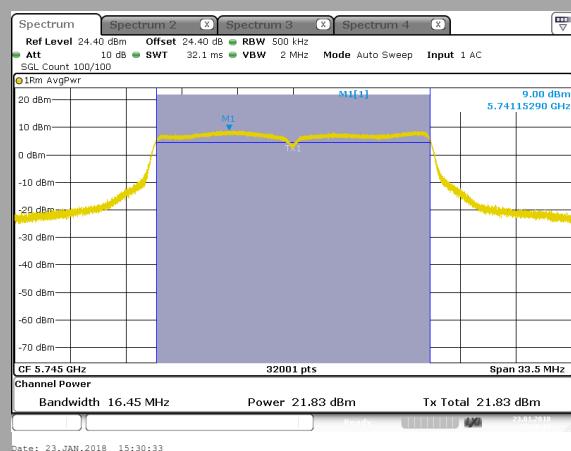
Tx2



Tx3



Tx4



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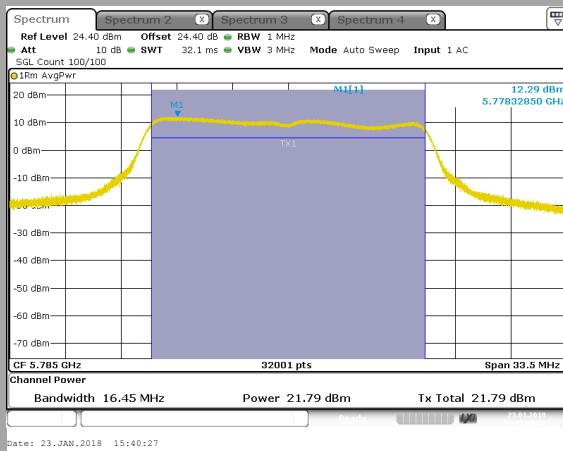


L C I E

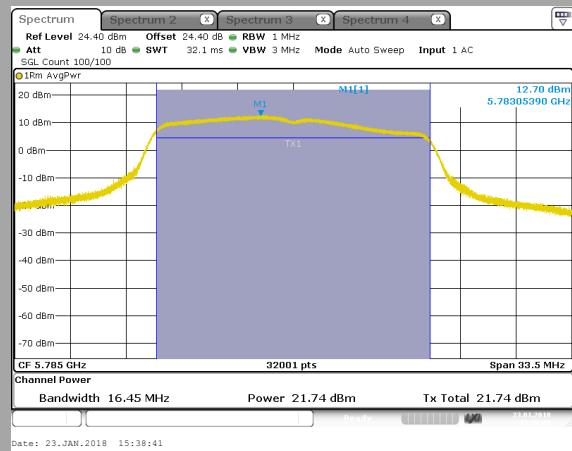
802.11a

C12

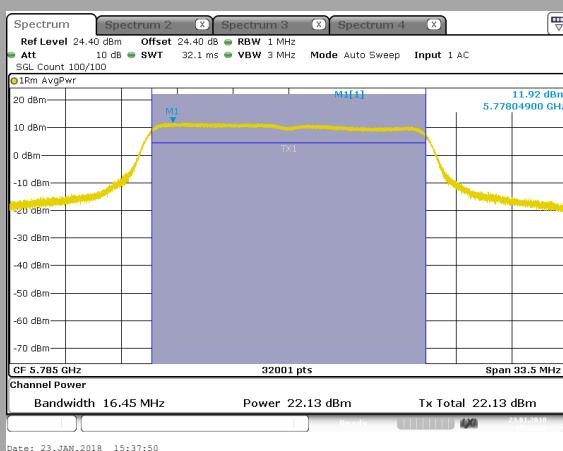
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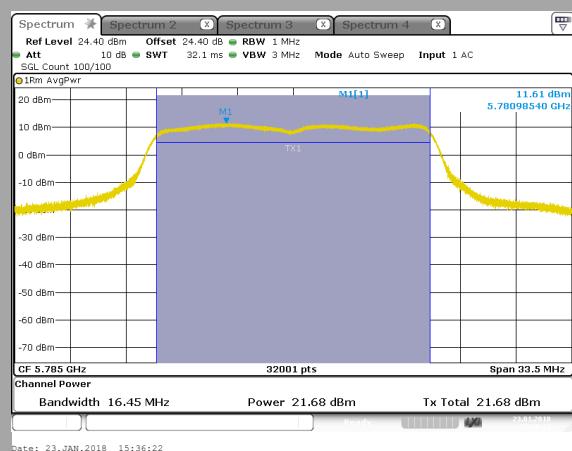
Tx2



Tx3



Tx4



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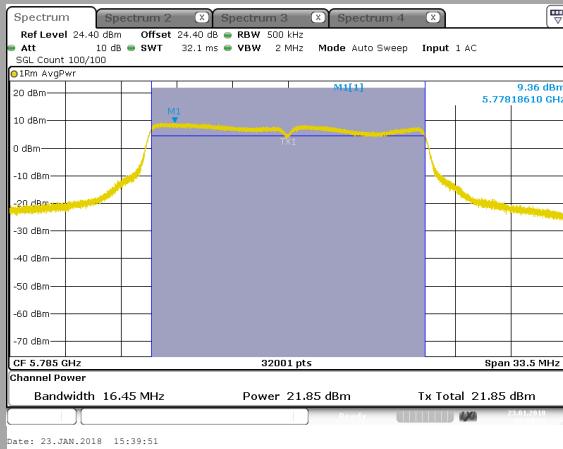


L C I E

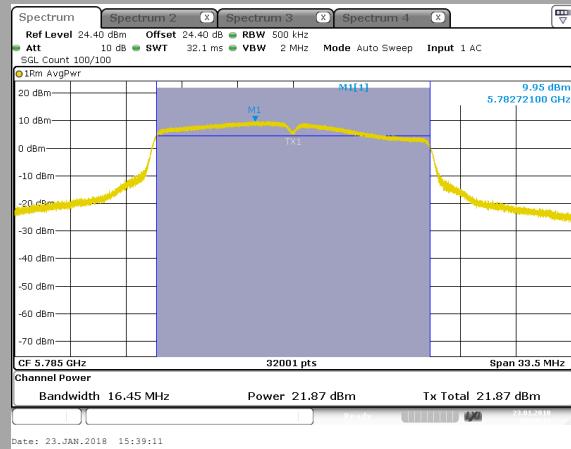
802.11a

C12

Tx1



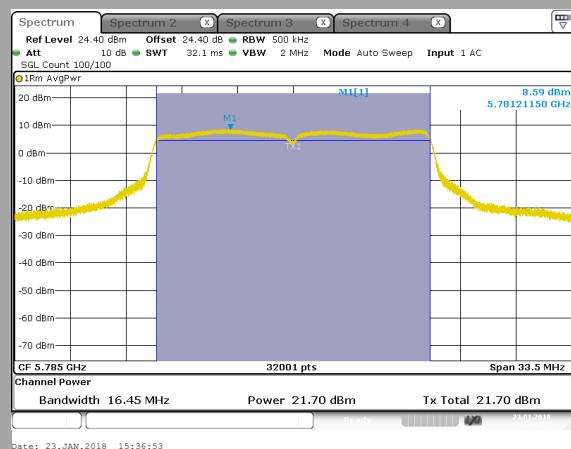
Tx2



Tx3



Tx4



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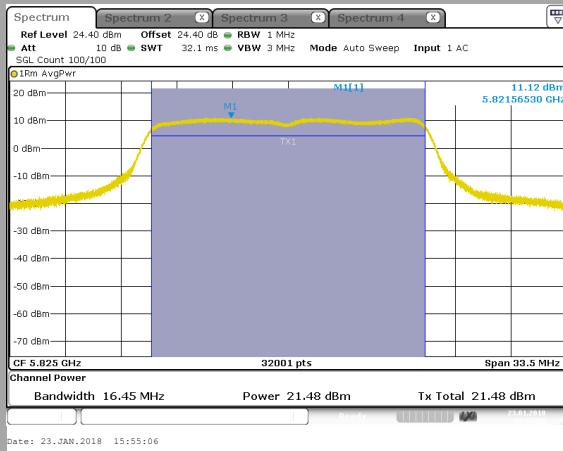


L C I E

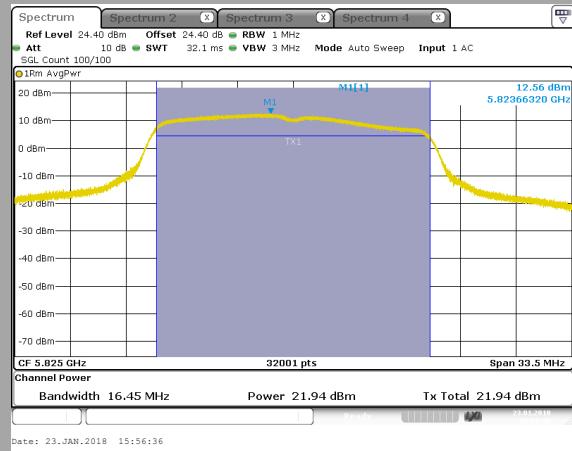
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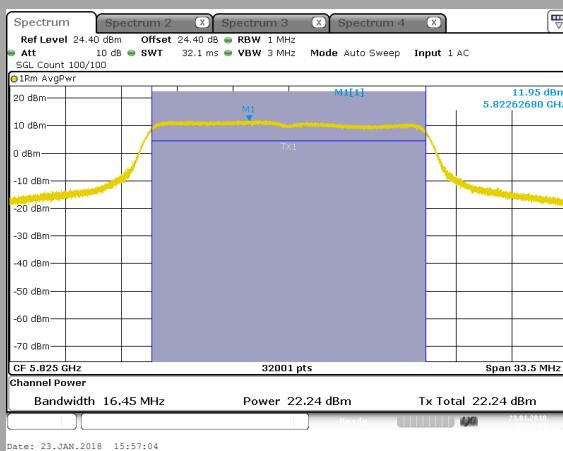
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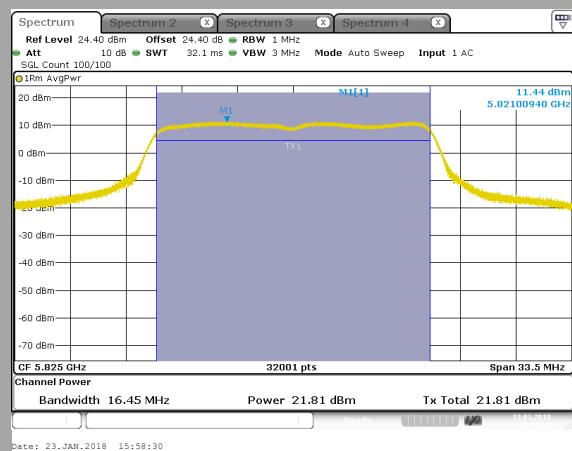
Tx2



Tx3



Tx4



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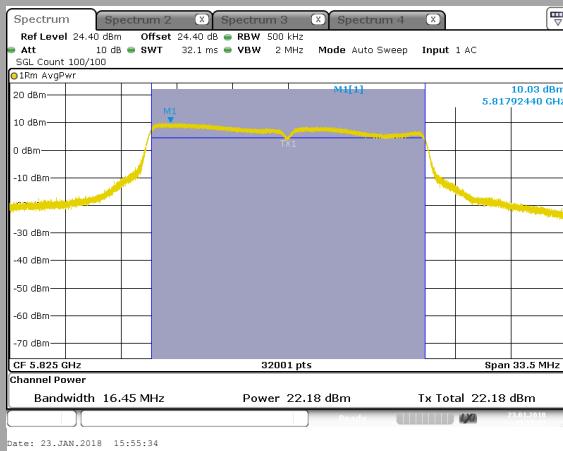


L C I E

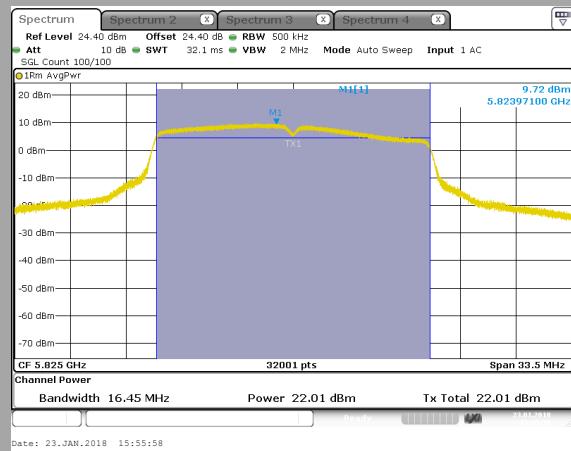
802.11a

C13

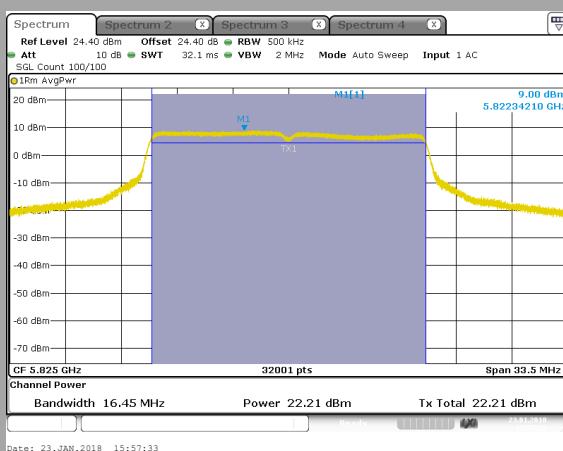
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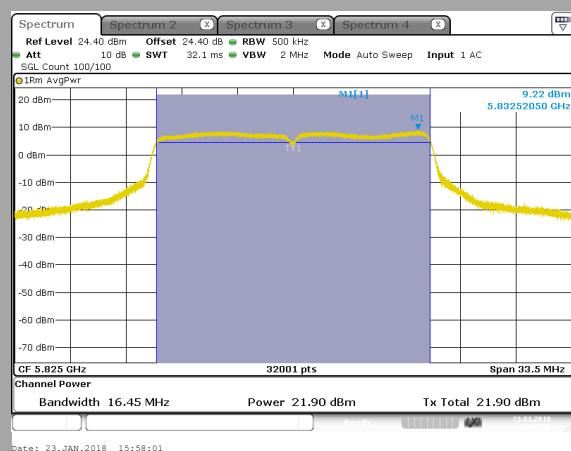
Tx2



Tx3



Tx4



TEST REPORT

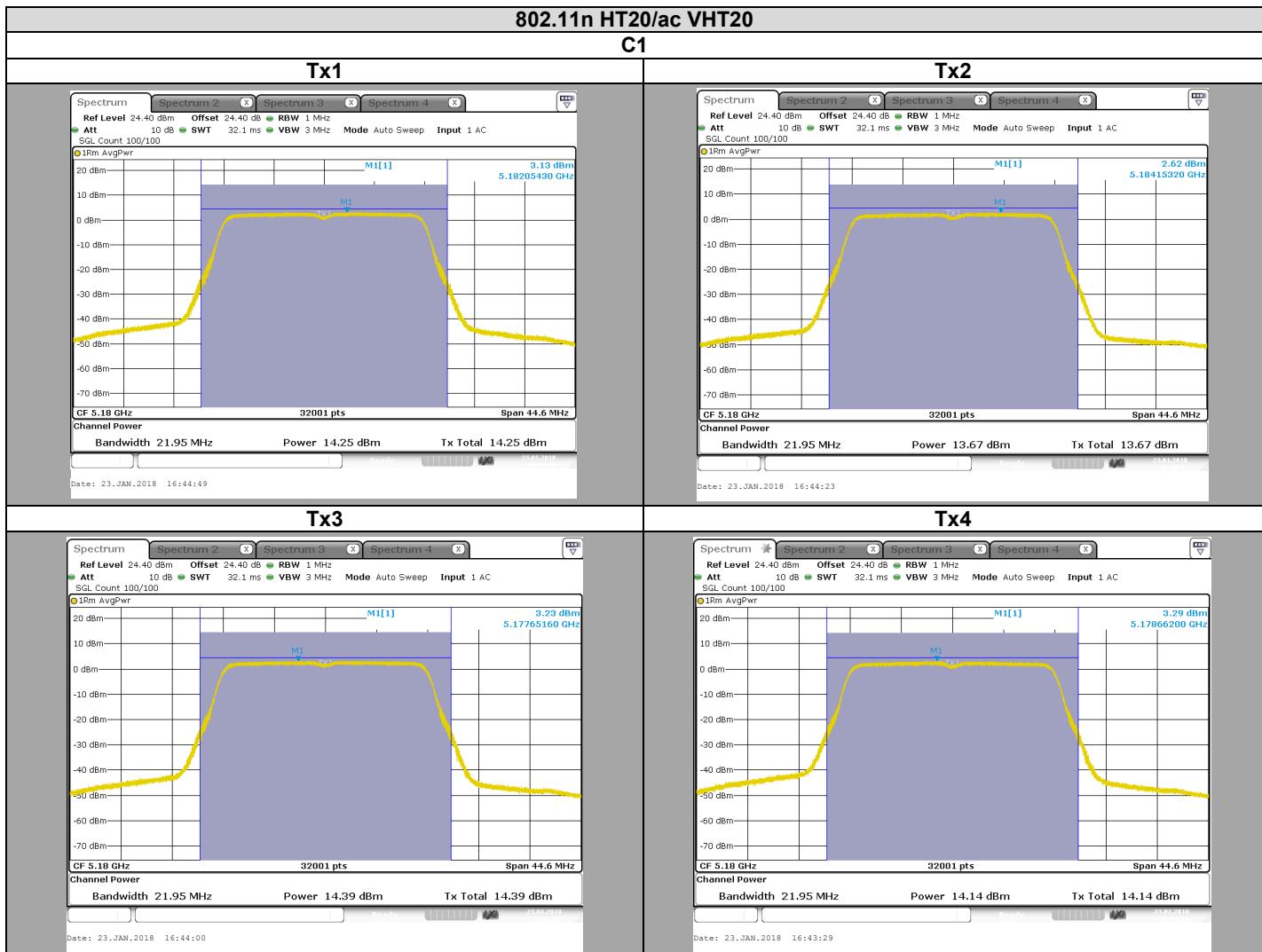
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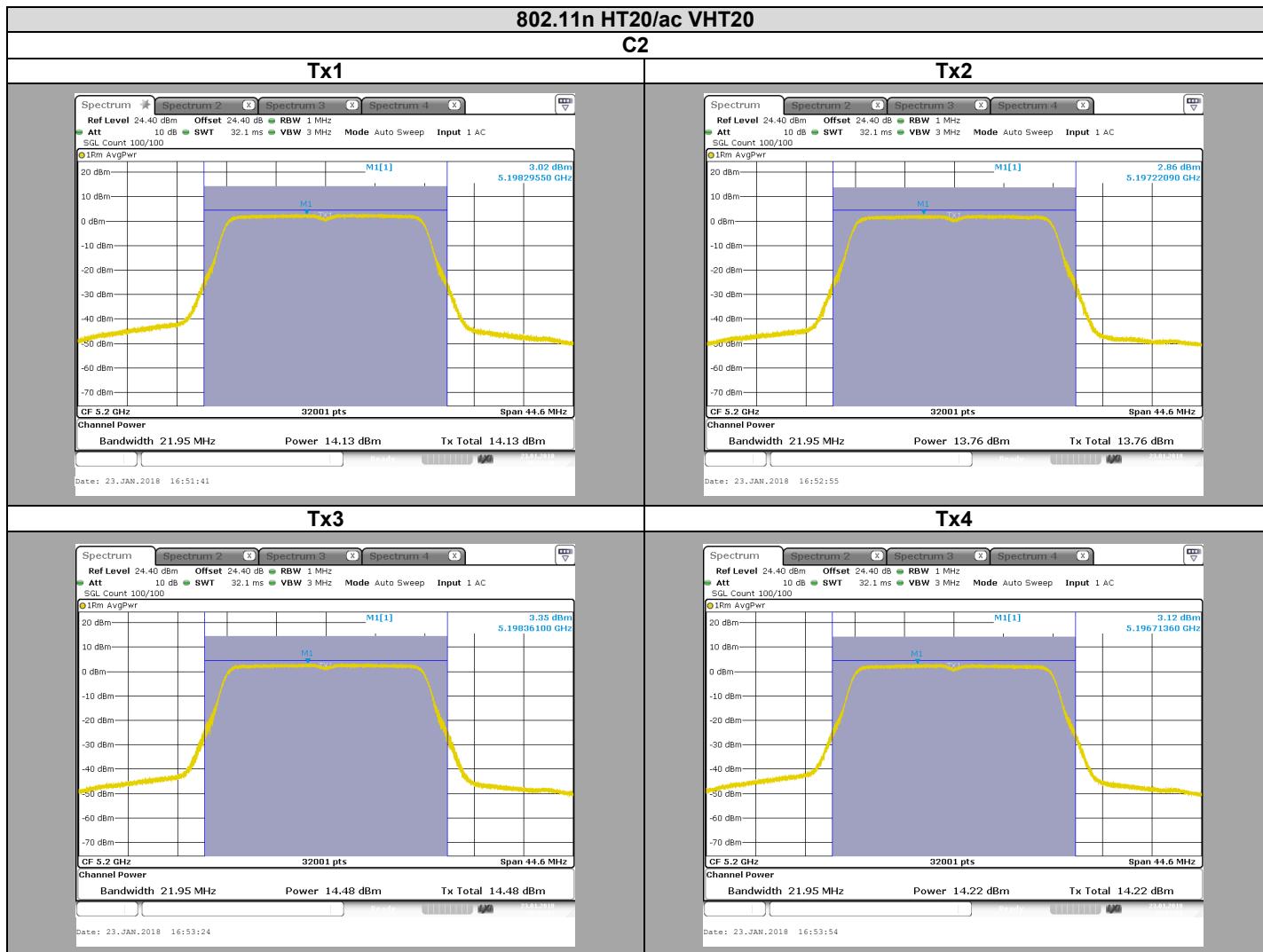
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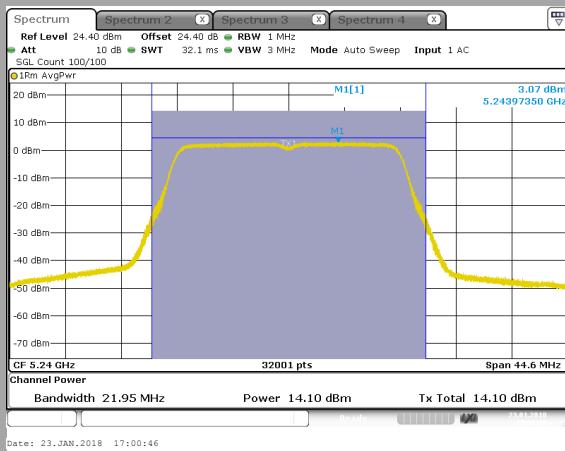


L C I E

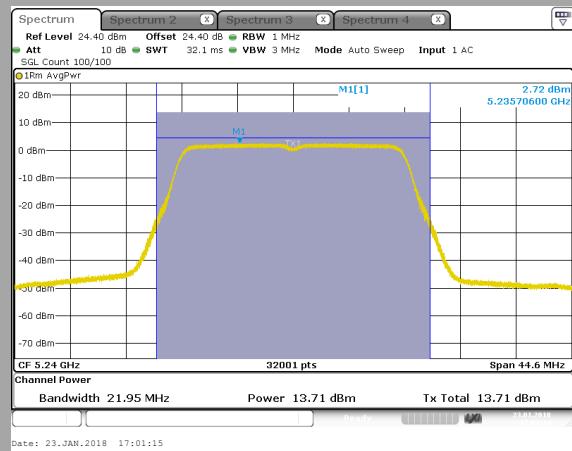
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C3

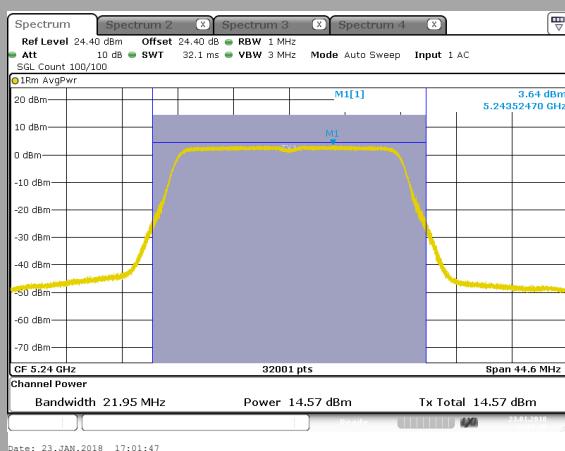
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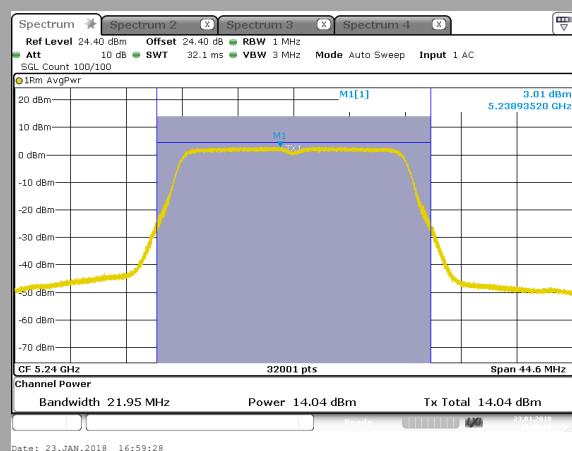
Tx2



Tx3



Tx4



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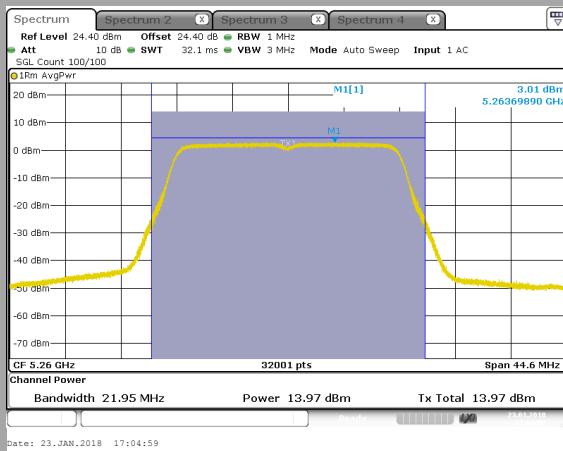


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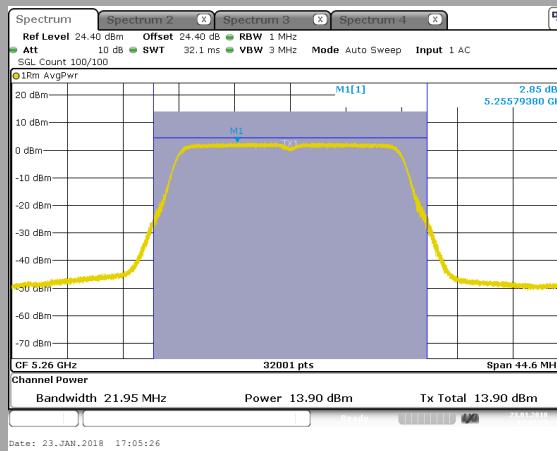
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C4

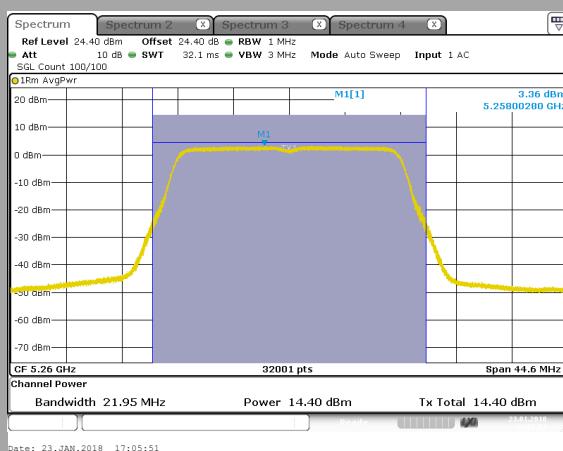
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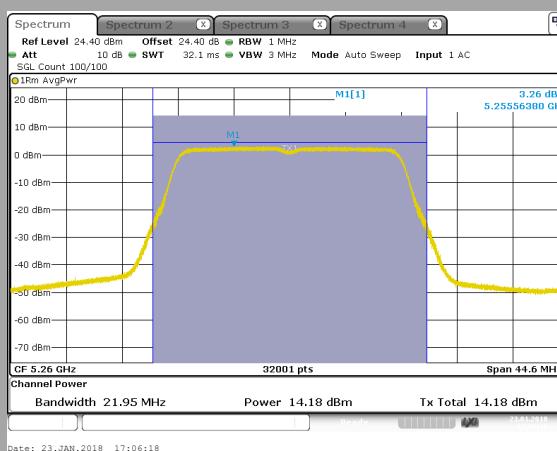
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Tx3



Tx4



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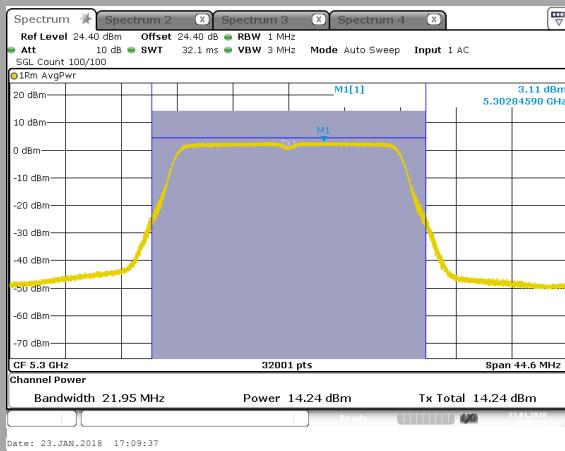


L C I E

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C5

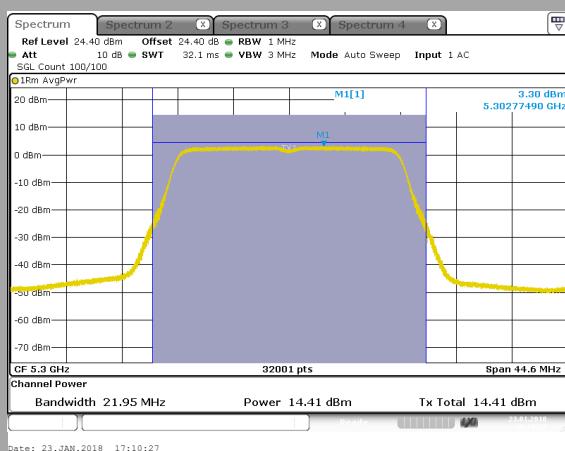
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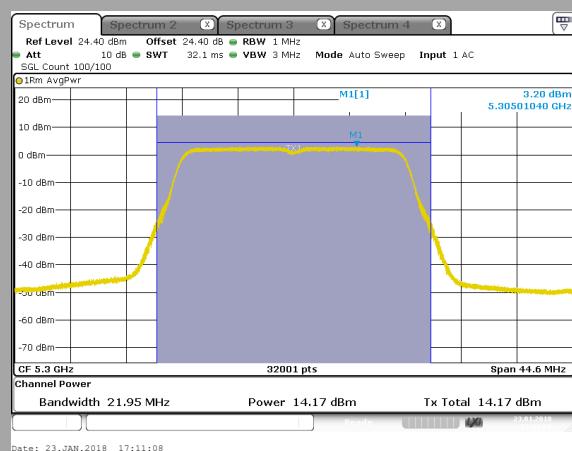
Tx2



Tx3



Tx4



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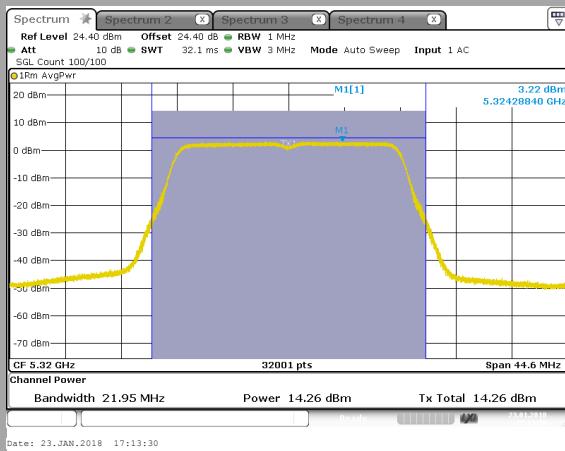


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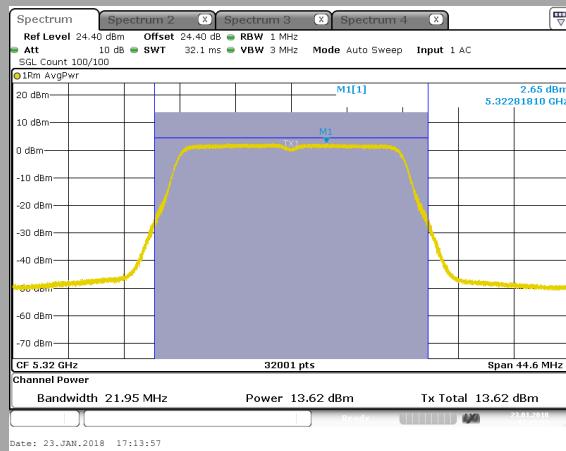
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C6

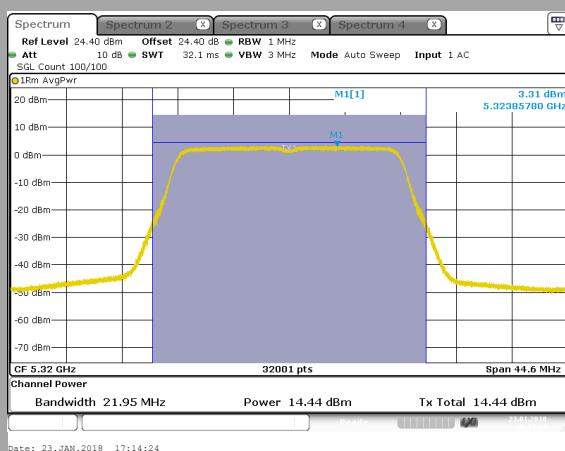
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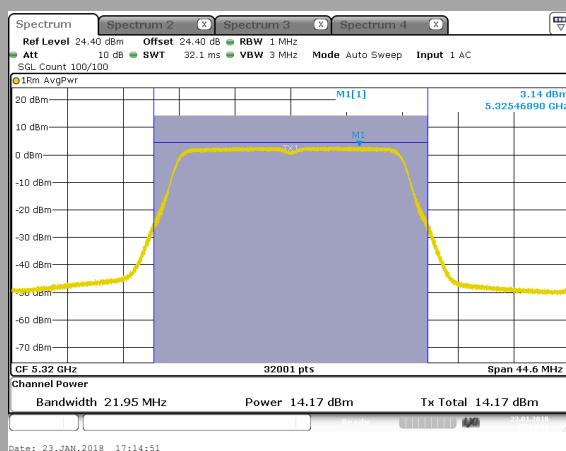
Tx2



Tx3



Tx4



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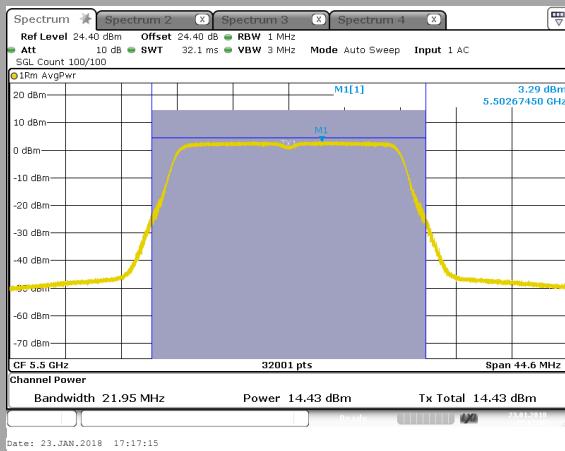


L C I E

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C7

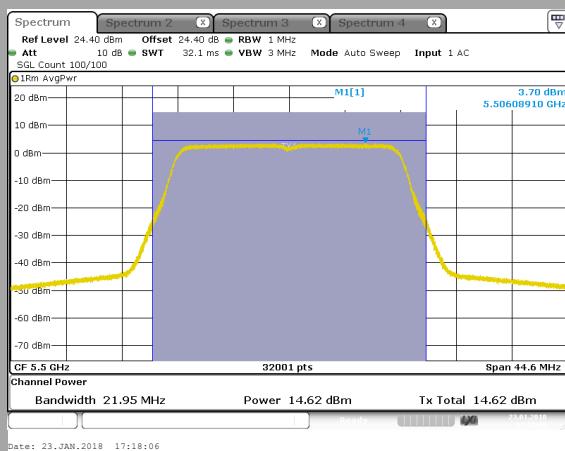
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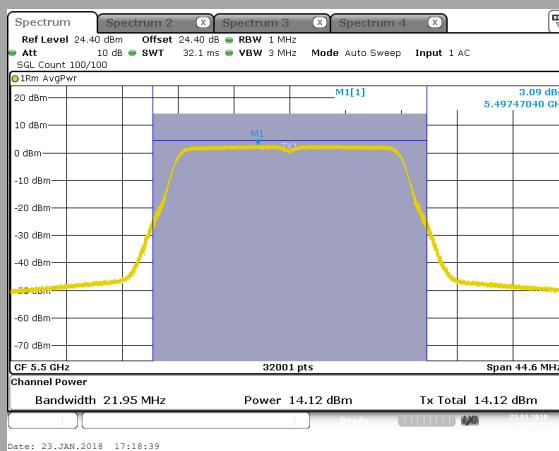
Tx2



Tx3



Tx4



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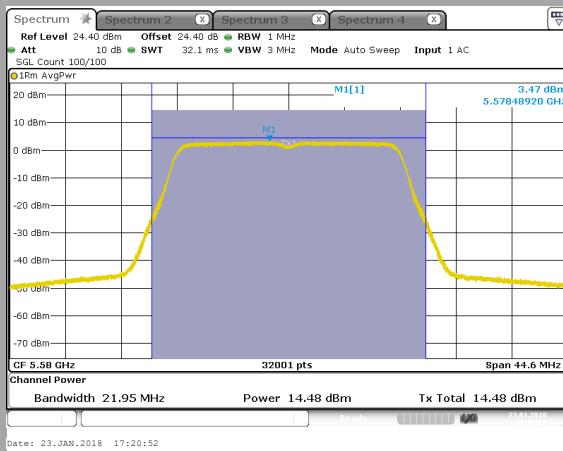


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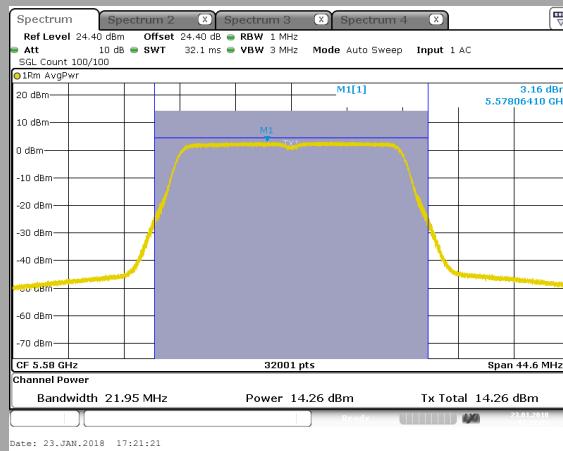
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C8

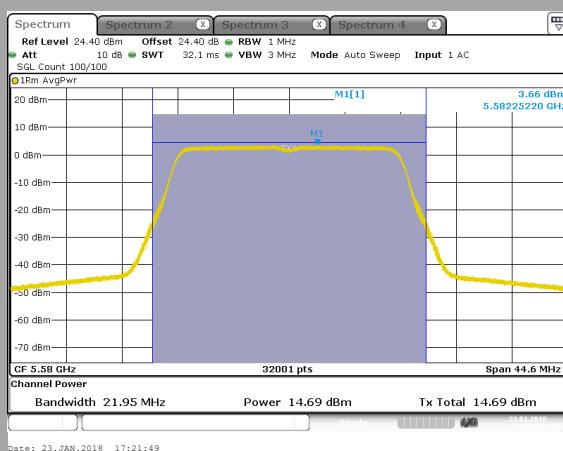
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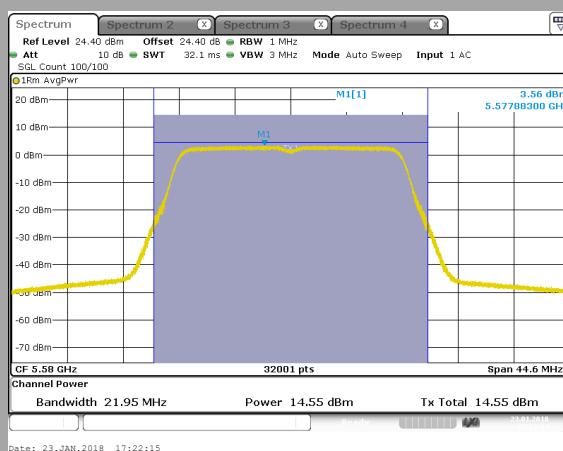
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Tx3



Tx4



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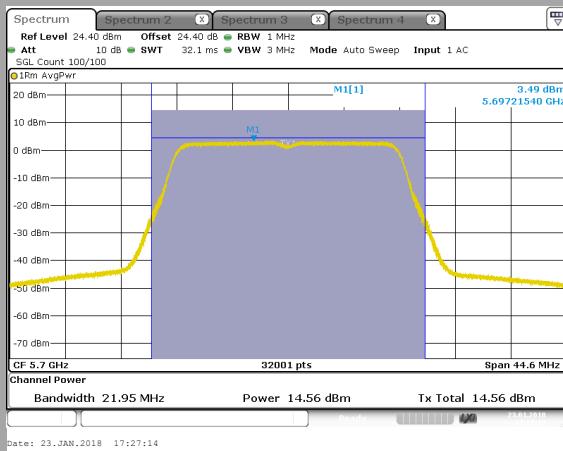


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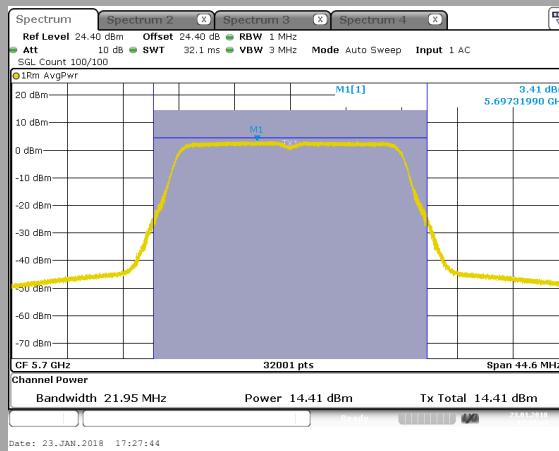
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C9

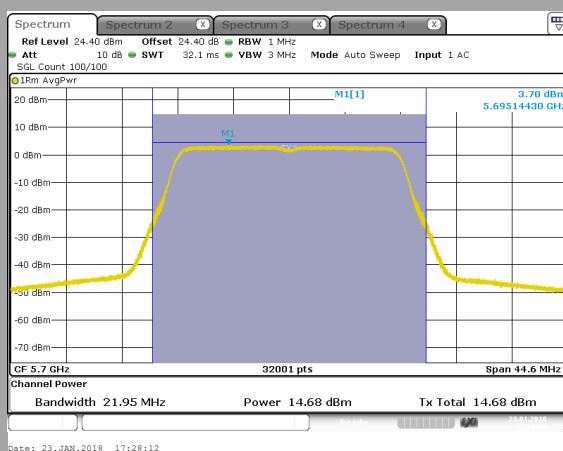
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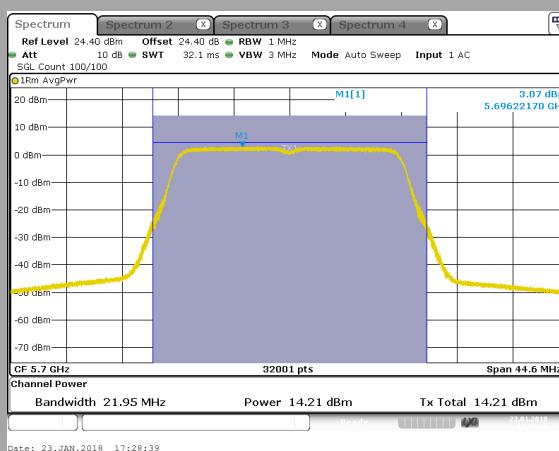
Tx2



Tx3



Tx4



TEST REPORT

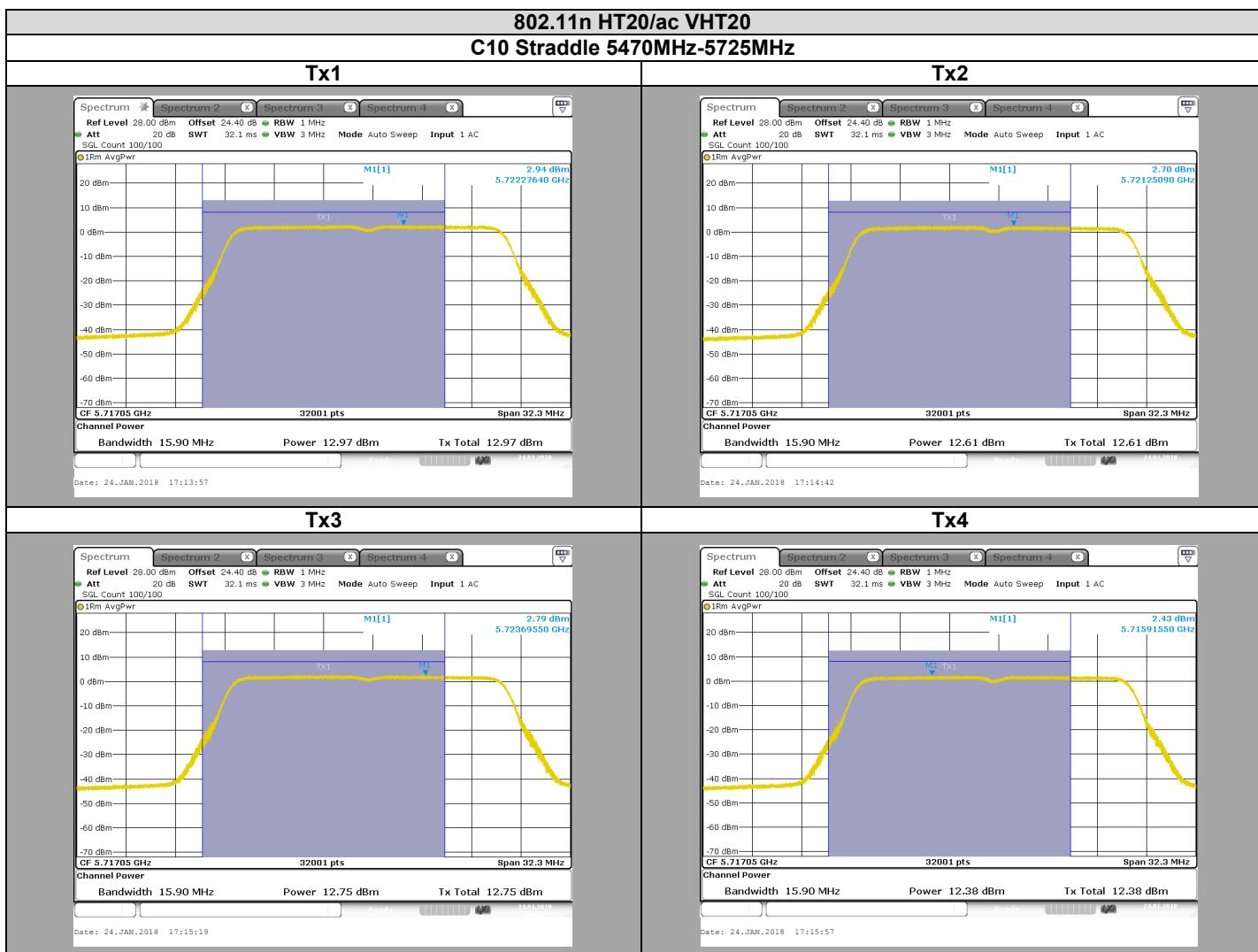
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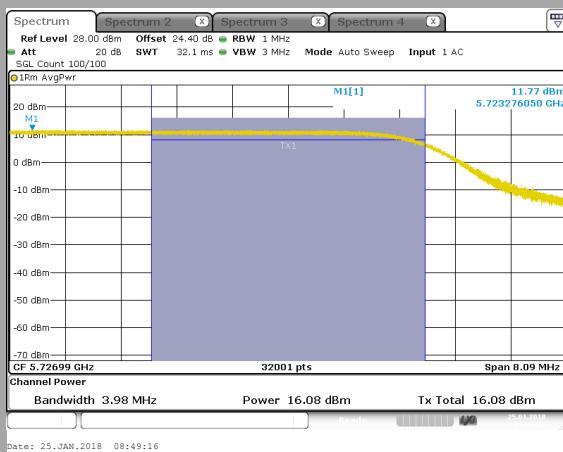


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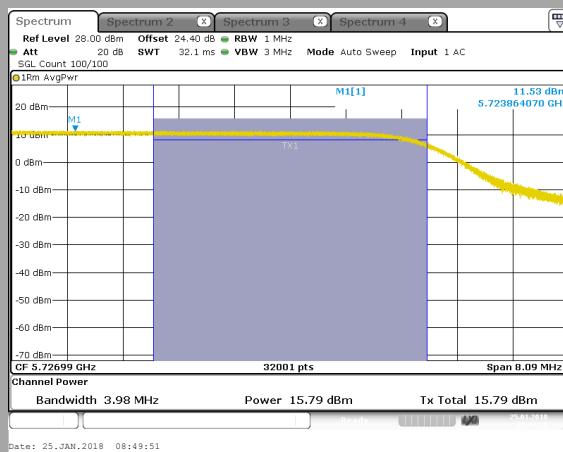
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C10 Straddle 5725MHz-5850MHz

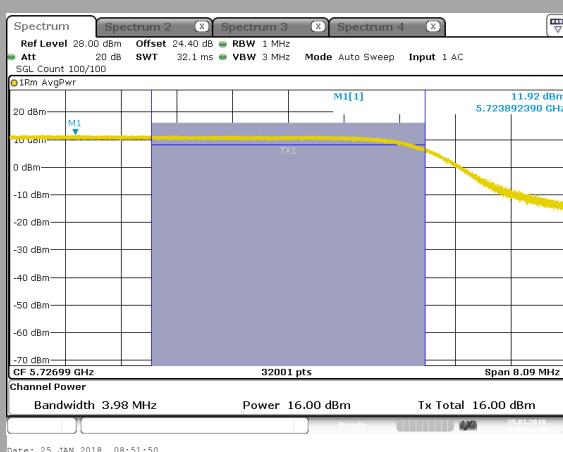
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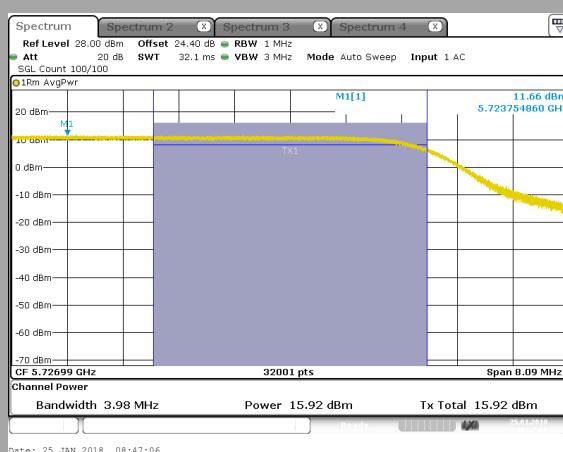
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Tx3



Tx4



TEST REPORT

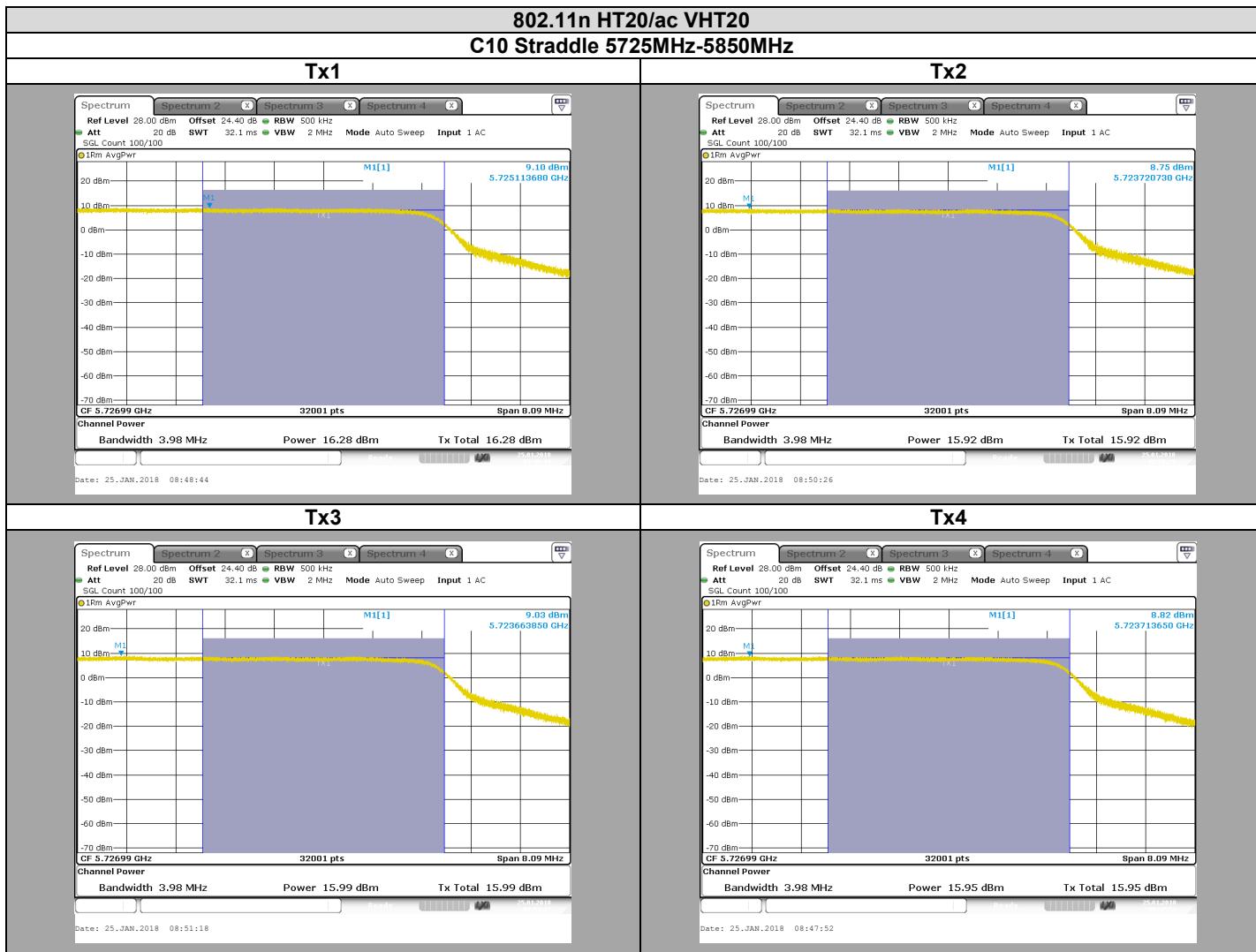
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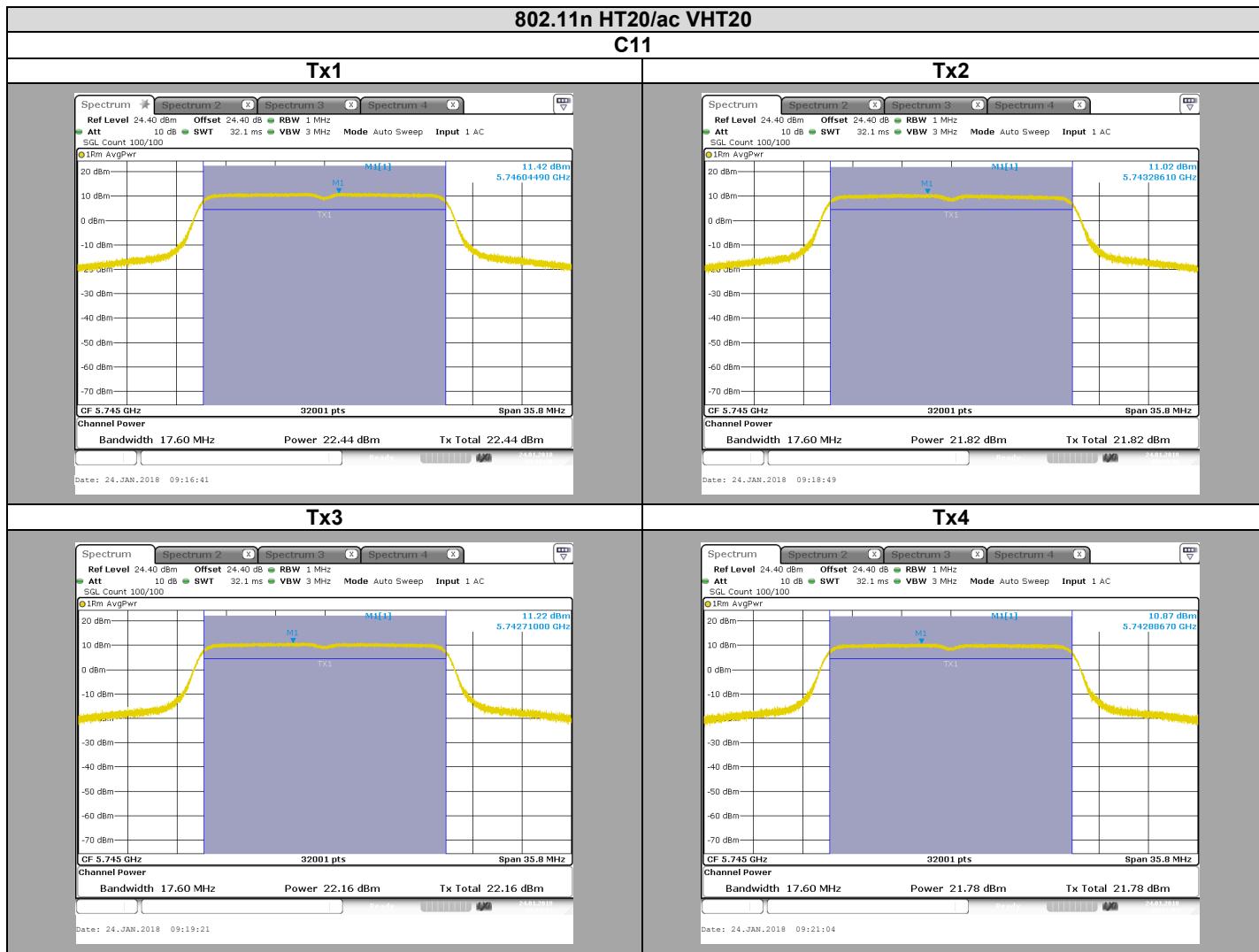


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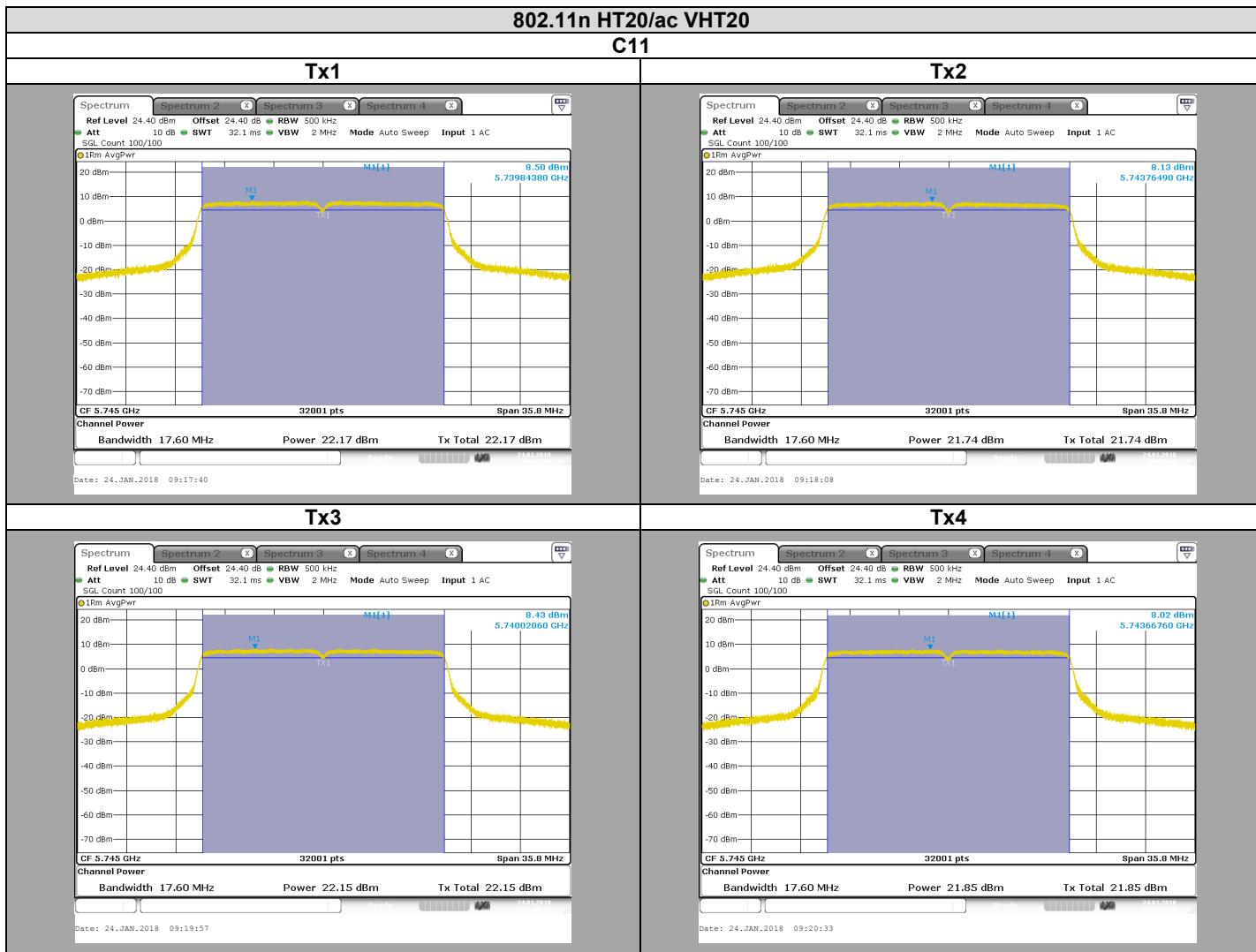


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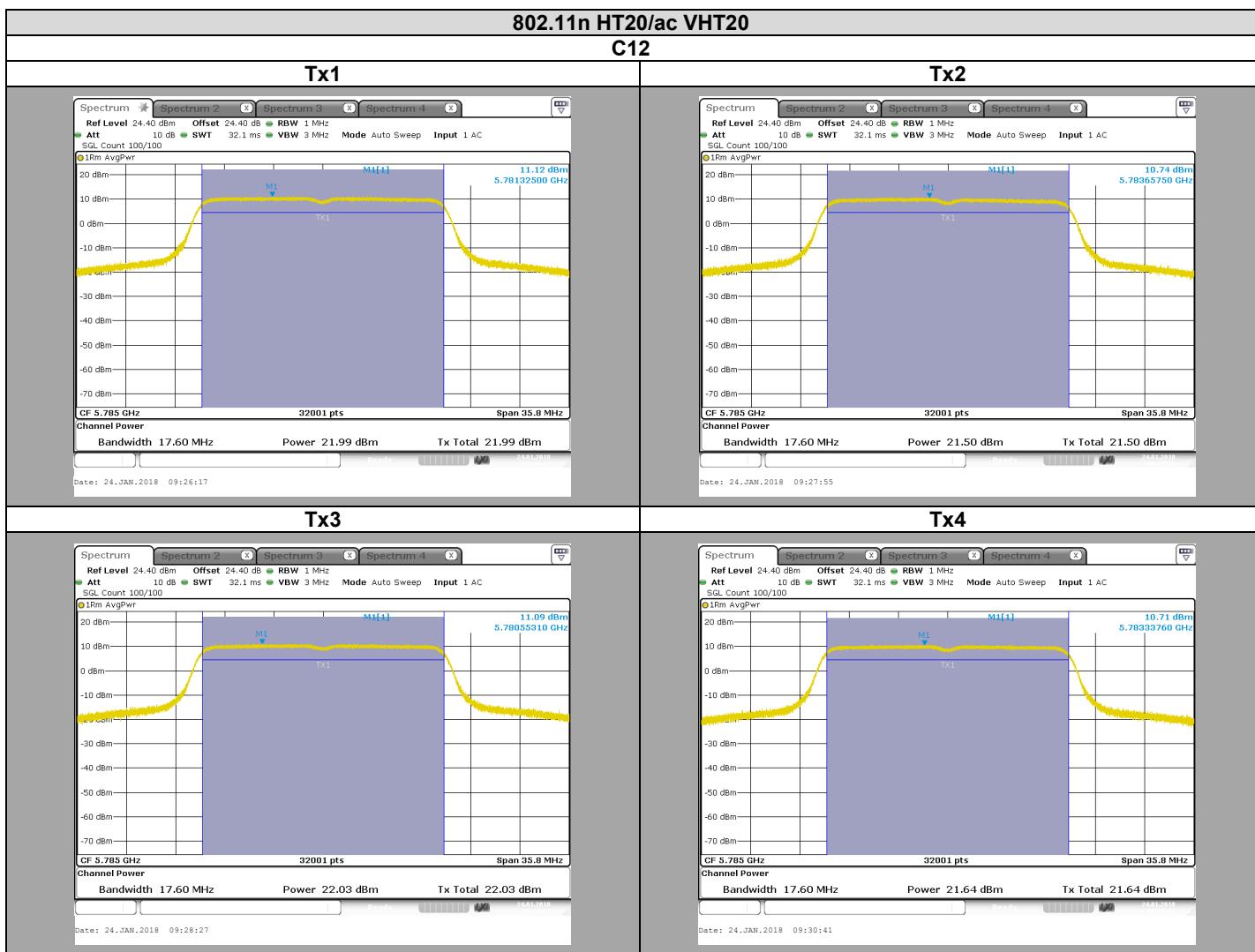


L C I E





L C I E



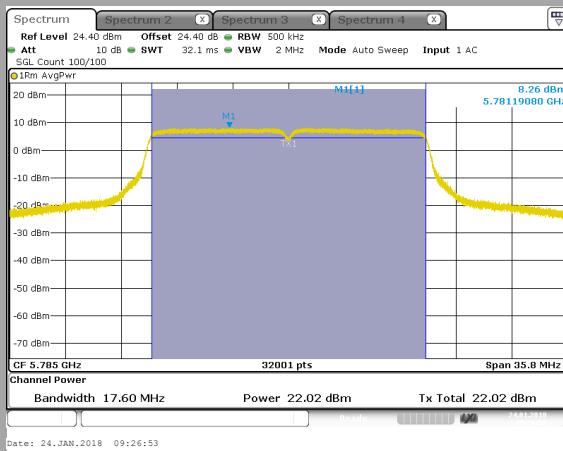


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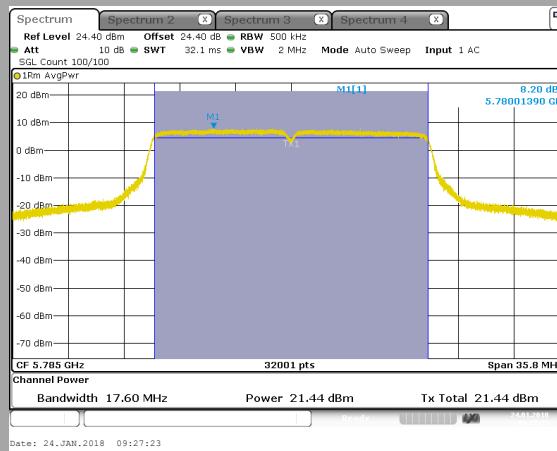
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C12

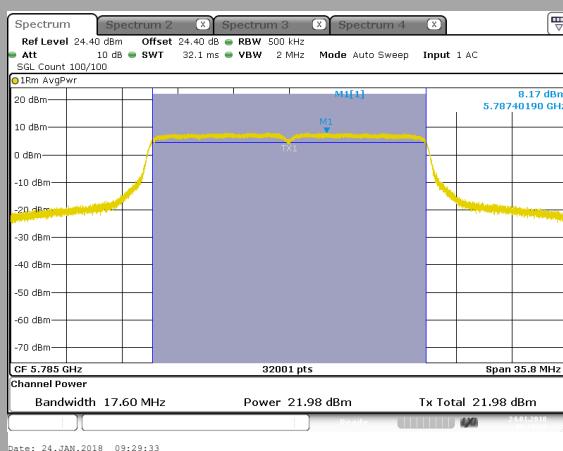
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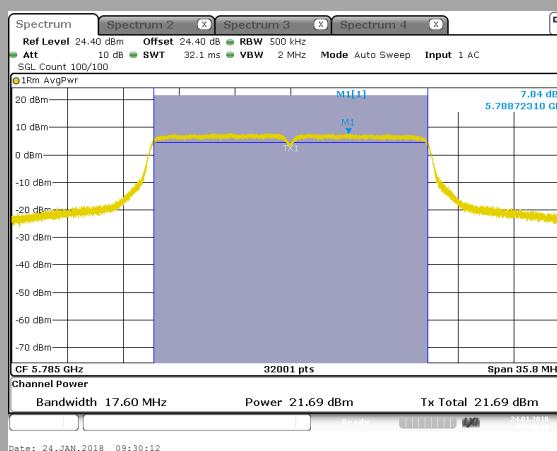
Tx2



Tx3



Tx4



TEST REPORT

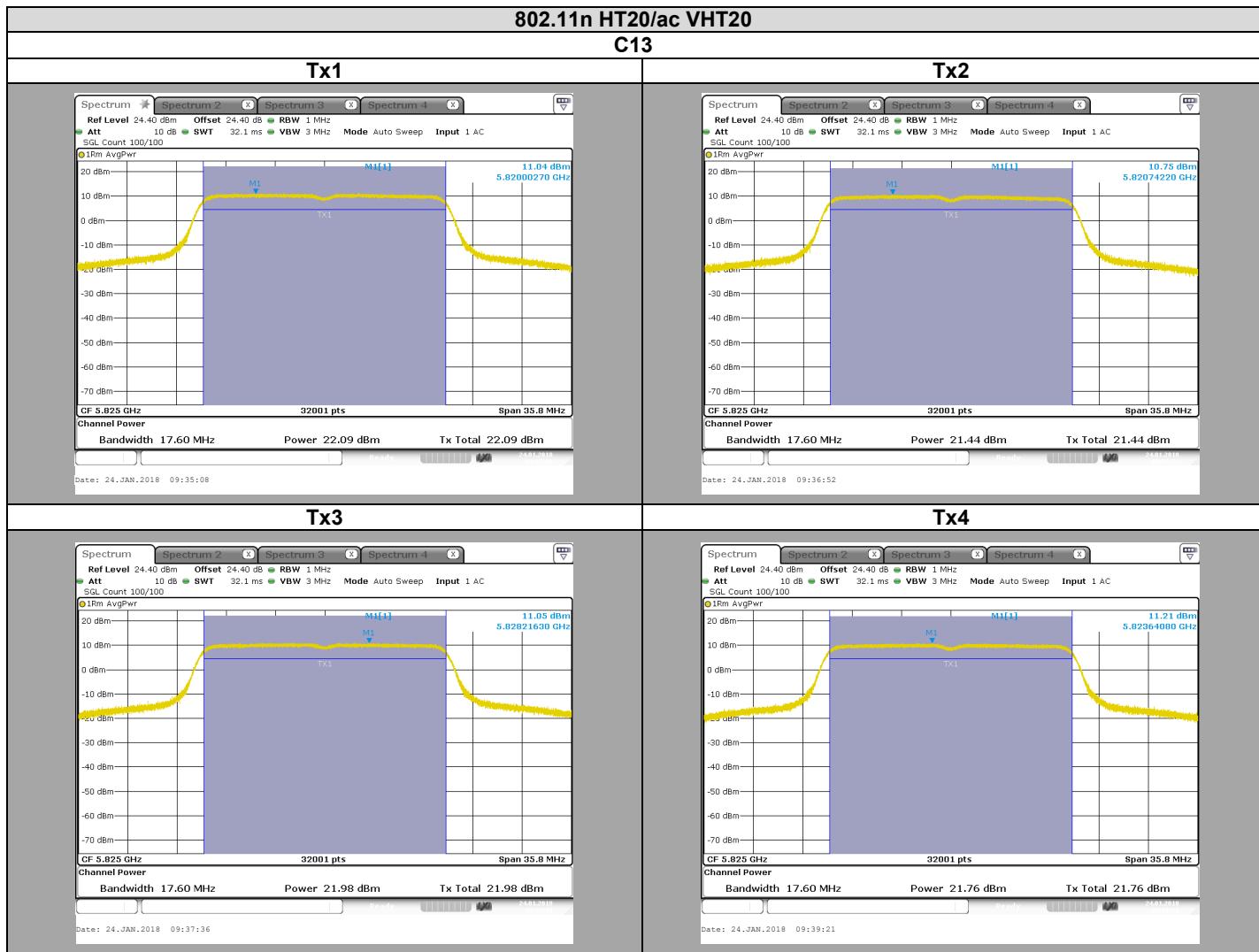
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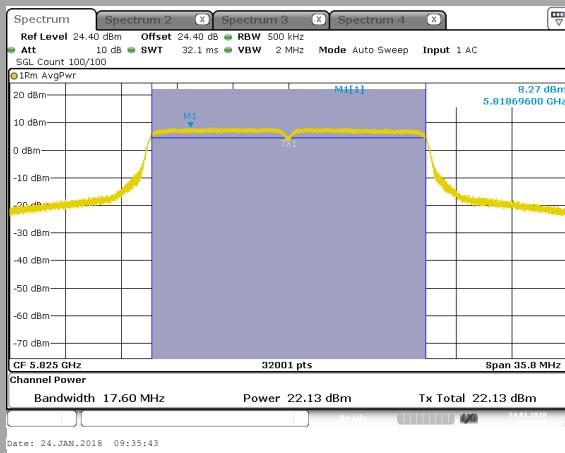


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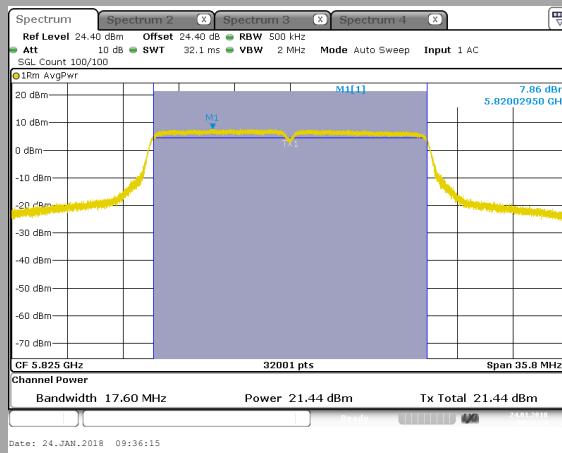
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C13

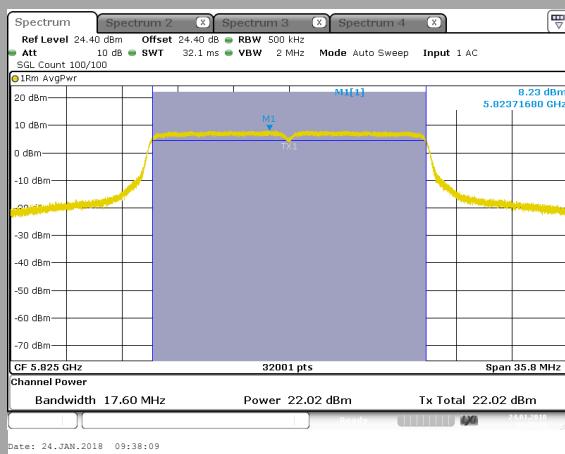
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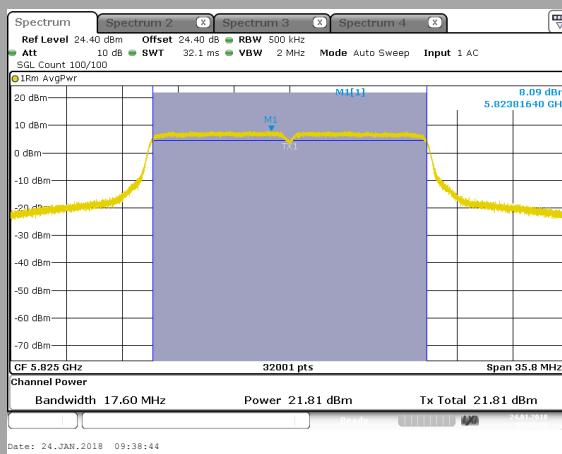
Tx2



Tx3



Tx4



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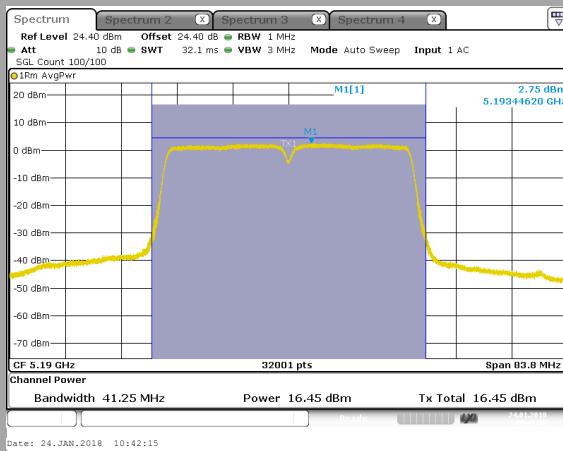


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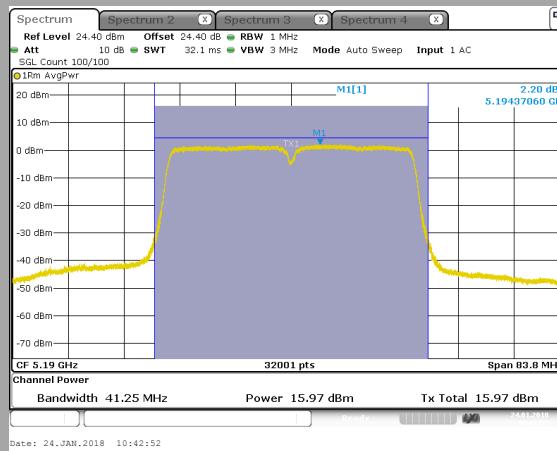
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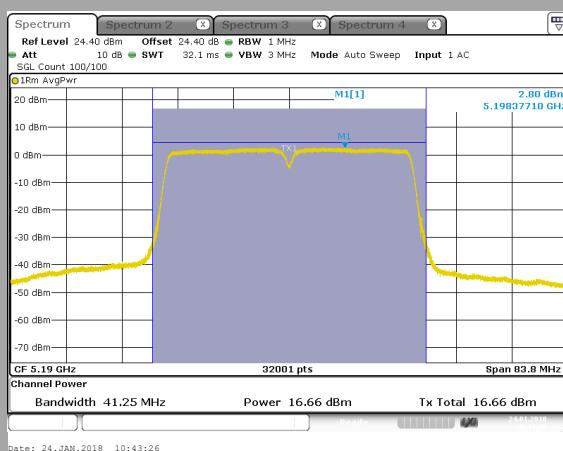
Tx1



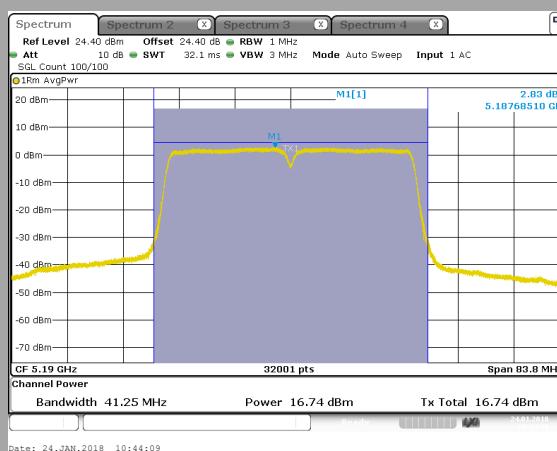
Tx2



Tx3



Tx4



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