

6. 6dB & 99%&26dB Bandwidth Test

6.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	N9030A	MY51380221	Oct.15,16	1 Year
2.	Attenuator (20dB)	Agilent	8491B	MY39262165	Apr.27,17	1 Year
3.	RF Cable	Marvelous Microwave Inc	SFL402105FLEX	No.1	Oct.15,16	1 Year

6.2.Limit

6dB Bandwidth should be not less than 500kHz

6.3.Test Procedure

6dB Bandwidth:

The transmitter output was connected to a spectrum analyzer, The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100kHz RBW and 300 KHz VBW for signal width below 20MHz and 300KHz RBW ,1MHz VBW for Above 20MHz signal Bandwidth.

26dB Bandwidth:

The transmitter output was connected to a spectrum analyzer, The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100kHz RBW and 300 KHz VBW The 26dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 26dB.

6.4.Test Results

5180-5240MHz Band:
6dB bandwidth

EUT: Wireless Speaker		
M/N: LF-S50G		
Test date: 2017-06-21	Pressure: 102.1±1.0 kpa	Humidity: 51.1±3.0%
Tested by: Alice-Yang	Test site: RF site	Temperature: 22.8±0.6 °C

Test Mode	CH	6dB bandwidth (MHz)	Limit (KHz)
11a	CH36	15.13	≥ 500
	CH40	15.14	≥ 500
	CH48	15.13	≥ 500
11n HT20	CH36	15.13	≥ 500
	CH40	15.12	≥ 500
	CH48	15.13	≥ 500
11n HT40	CH38	35.16	≥ 500
	CH46	35.14	≥ 500

Conclusion: PASS

Test Mode	CH	99% bandwidth (MHz)	Limit (KHz)
11a	CH36	16.318	N/A
	CH40	16.312	N/A
	CH48	16.319	N/A
11n HT20	CH36	17.494	N/A
	CH40	17.495	N/A
	CH48	17.481	N/A
11n HT40	CH38	35.739	N/A
	CH46	35.759	N/A

Conclusion : PASS

26dB bandwidth

EUT: Wireless Speaker		
M/N: LF-S50G		
Test date: 2017-06-21	Pressure: 102.1±1.0 kpa	Humidity: 51.1±3.0%
Tested by: Alice-Yang	Test site: RF site	Temperature: 22.8±0.6 °C

Test Mode	CH	-26dB bandwidth (MHz)	Limit (KHz)
11a	CH36	19.14	N/A
	CH40	19.16	N/A
	CH48	19.15	N/A
11n HT20	CH36	19.54	N/A
	CH40	19.58	N/A
	CH48	19.46	N/A
11n HT40	CH38	38.11	N/A
	CH46	38.15	N/A
Conclusion: PASS			

5260-5320MHz Band:
6dB bandwidth

EUT: Wireless Speaker		
M/N: LF-S50G		
Test date: 2017-06-21	Pressure: 102.1±1.0 kpa	Humidity: 51.1±3.0%
Tested by: Alice-Yang	Test site: RF site	Temperature: 22.8±0.6 °C

Test Mode	CH	6dB bandwidth (MHz)	Limit (KHz)
11a	CH52	15.13	≥ 500
	CH60	15.14	≥ 500
	CH64	15.11	≥ 500
11n HT20	CH52	15.14	≥ 500
	CH60	15.14	≥ 500
	CH64	15.14	≥ 500
11n HT40	CH54	35.15	≥ 500
	CH62	35.14	≥ 500

Conclusion: PASS

Test Mode	CH	99% bandwidth (MHz)	Limit (KHz)
11a	CH52	16.308	N/A
	CH60	16.310	N/A
	CH64	16.313	N/A
11n HT20	CH52	17.486	N/A
	CH60	17.480	N/A
	CH64	17.476	N/A
11n HT40	CH54	35.738	N/A
	CH62	35.711	N/A

Conclusion : PASS

26dB bandwidth

EUT: Wireless Speaker		
M/N: LF-S50G		
Test date: 2017-06-21	Pressure: 102.1±1.0 kpa	Humidity: 51.1±3.0%
Tested by: Alice-Yang	Test site: RF site	Temperature: 22.8±0.6 °C

Test Mode	CH	-26dB bandwidth (MHz)	Limit (KHz)
11a	CH52	19.17	N/A
	CH60	19.27	N/A
	CH64	18.95	N/A
11n HT20	CH52	19.54	N/A
	CH60	19.55	N/A
	CH64	19.46	N/A
11n HT40	CH54	38.01	N/A
	CH62	37.85	N/A
Conclusion: PASS			

5500-5700MHz Band:
6dB bandwidth

EUT: Wireless Speaker		
M/N: LF-S50G		
Test date: 2017-06-21	Pressure: 102.1±1.0 kpa	Humidity: 51.1±3.0%
Tested by: Alice-Yang	Test site: RF site	Temperature: 22.8±0.6 °C

Test Mode	CH	6dB bandwidth (MHz)	Limit (KHz)
11a	CH100	15.13	≥ 500
	CH120	15.13	≥ 500
	CH140	13.02	≥ 500
11n HT20	CH100	15.14	≥ 500
	CH120	15.14	≥ 500
	CH140	15.12	≥ 500
11n HT40	CH102	35.13	≥ 500
	CH118	35.14	≥ 500
	CH134	35.13	≥ 500
Conclusion: PASS			

Test Mode	CH	99% bandwidth (MHz)	Limit (KHz)
11a	CH100	16.320	N/A
	CH120	16.319	N/A
	CH140	16.314	N/A
11n HT20	CH100	17.493	N/A
	CH120	17.488	N/A
	CH140	17.490	N/A
11n HT40	CH102	35.771	N/A
	CH118	35.747	N/A
	CH134	35.728	N/A
Conclusion : PASS			

26dB bandwidth

EUT: Wireless Speaker		
M/N: LF-S50G		
Test date: 2017-06-21	Pressure: 102.1±1.0 kpa	Humidity: 51.1±3.0%
Tested by: Alice-Yang	Test site: RF site	Temperature: 22.8±0.6 °C

Test Mode	CH	-26dB bandwidth (MHz)	Limit (KHz)
11a	CH100	19.19	N/A
	CH120	19.14	N/A
	CH140	19.11	N/A
11n HT20	CH100	19.59	N/A
	CH120	19.50	N/A
	CH140	19.44	N/A
11n HT40	CH102	38.01	N/A
	CH118	38.29	N/A
	CH134	37.98	N/A

Conclusion: PASS

5745-5825MHz Band:
6dB bandwidth

EUT: Wireless Speaker		
M/N: LF-S50G		
Test date: 2017-06-21	Pressure: 102.1±1.0 kpa	Humidity: 51.1±3.0%
Tested by: Alice-Yang	Test site: RF site	Temperature: 22.8±0.6 °C

Test Mode	CH	6dB bandwidth (MHz)	Limit (KHz)
11a	CH149	15.12	≥ 500
	CH157	15.14	≥ 500
	CH165	15.14	≥ 500
11n HT20	CH149	15.13	≥ 500
	CH157	15.14	≥ 500
	CH165	15.14	≥ 500
11n HT40	CH151	35.14	≥ 500
	CH159	35.14	≥ 500
Conclusion: PASS			

Test Mode	CH	99% bandwidth (MHz)	Limit (KHz)
11a	CH149	16.304	N/A
	CH157	16.310	N/A
	CH165	16.318	N/A
11n HT20	CH149	17.480	N/A
	CH157	17.488	N/A
	CH165	17.477	N/A
11n HT40	CH151	35.719	N/A
	CH159	35.732	N/A
Conclusion : PASS			

26dB bandwidth

EUT: Wireless Speaker		
M/N: LF-S50G		
Test date: 2017-06-21	Pressure: 102.1±1.0 kpa	Humidity: 51.1±3.0%
Tested by: Alice-Yang	Test site: RF site	Temperature: 22.8±0.6 °C

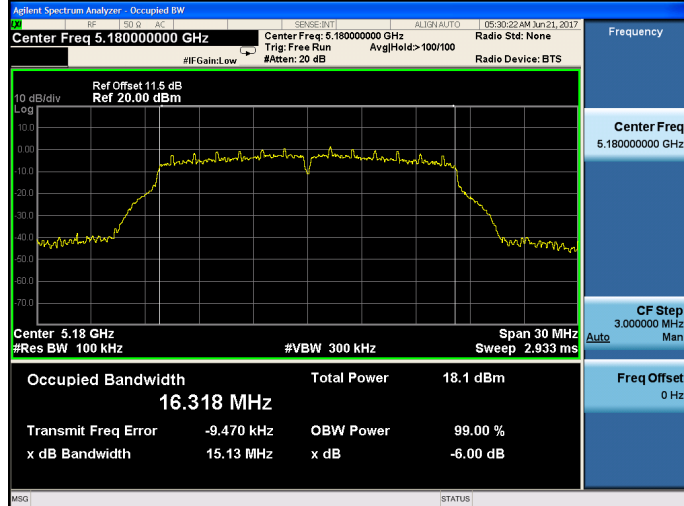
Test Mode	CH	-26dB bandwidth (MHz)	Limit (KHz)
11a	CH149	18.84	N/A
	CH157	19.14	N/A
	CH165	19.13	N/A
11n HT20	CH149	19.43	N/A
	CH157	19.54	N/A
	CH165	19.40	N/A
11n HT40	CH151	37.94	N/A
	CH159	37.88	N/A
Conclusion: PASS			

5180-5240MHz Band:

6dB & 99% bandwidth

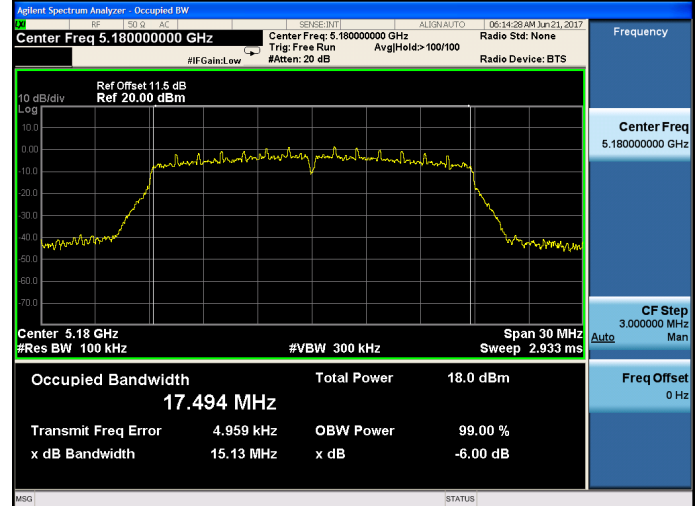
11a

5180MHz

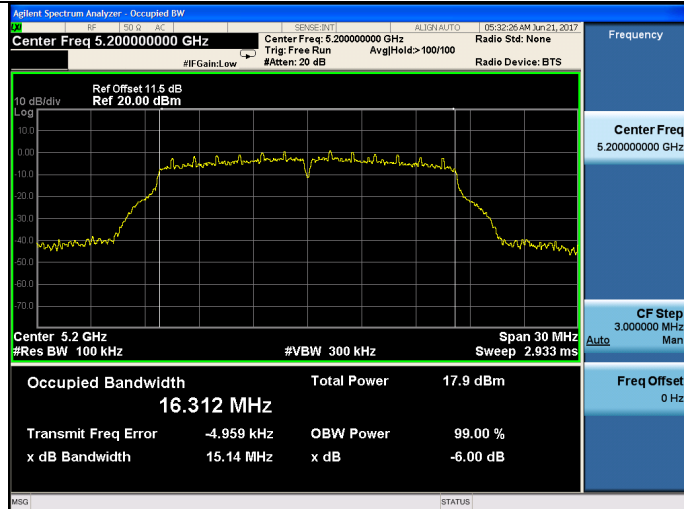


11n HT20

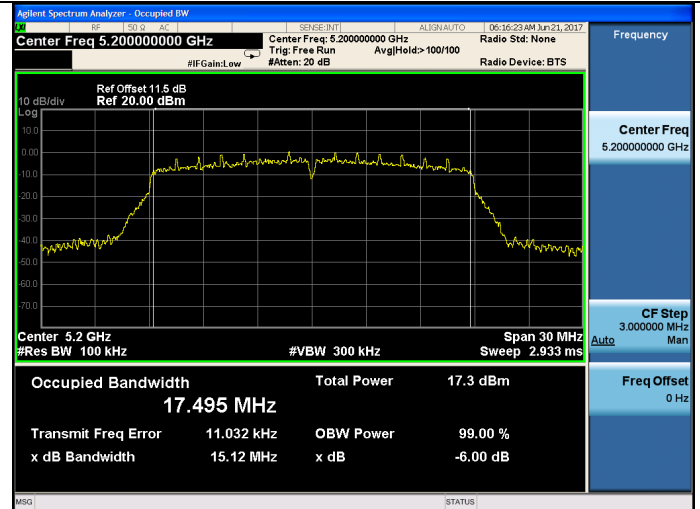
5180MHz



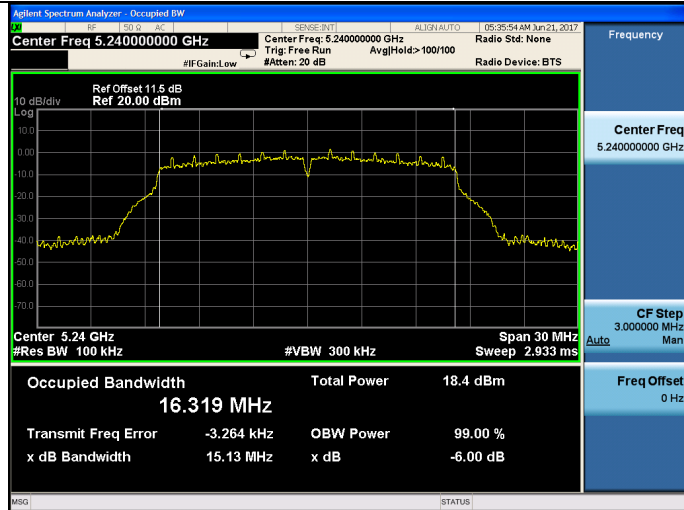
5200MHz



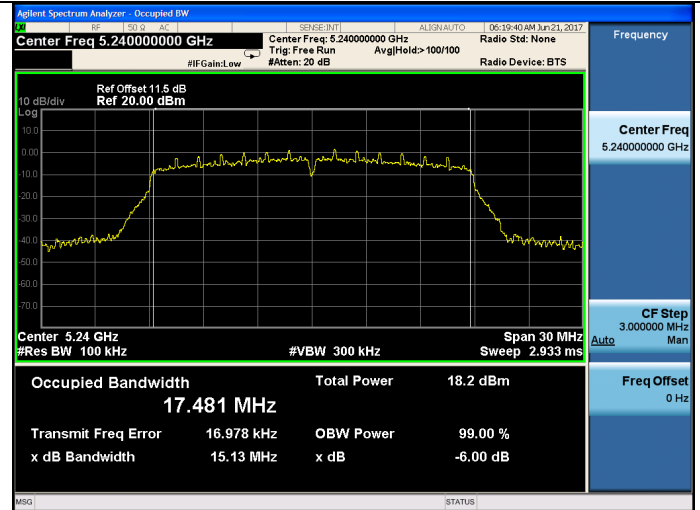
5200MHz



5240MHz

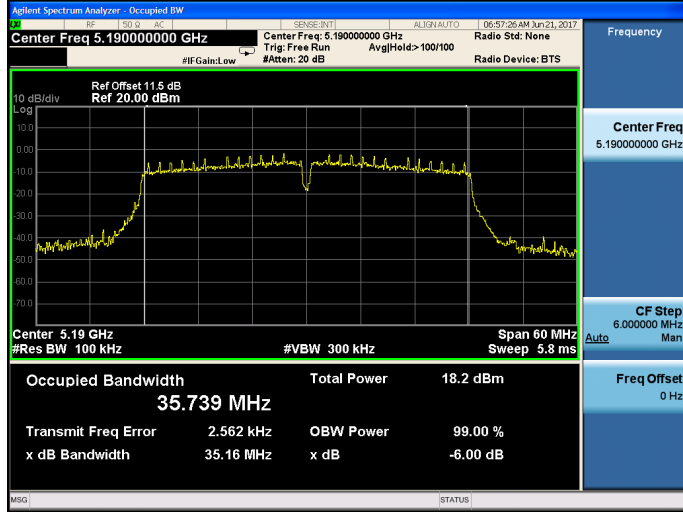


5240MHz

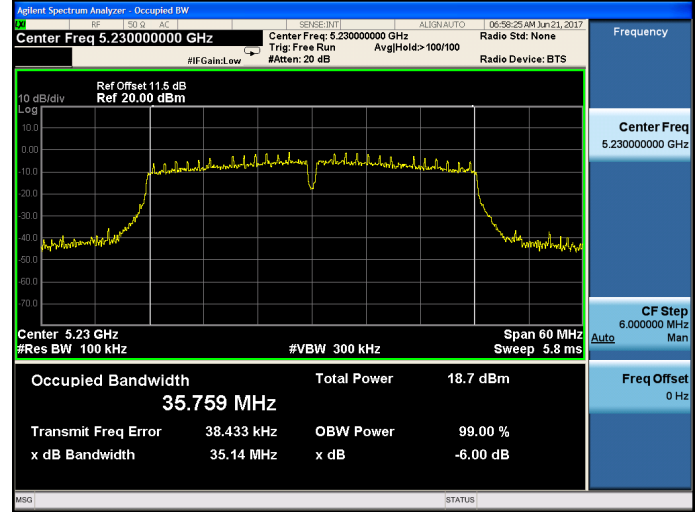


11n HT40

5190MHz



5230MHz

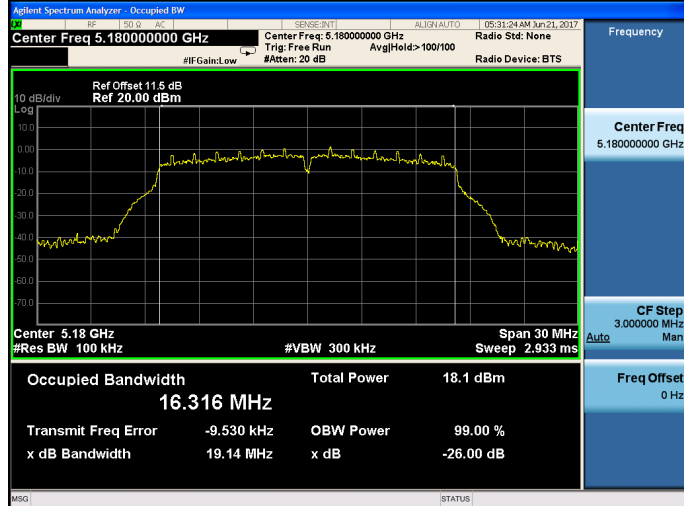


5180-5240MHz Band:

26dB bandwidth

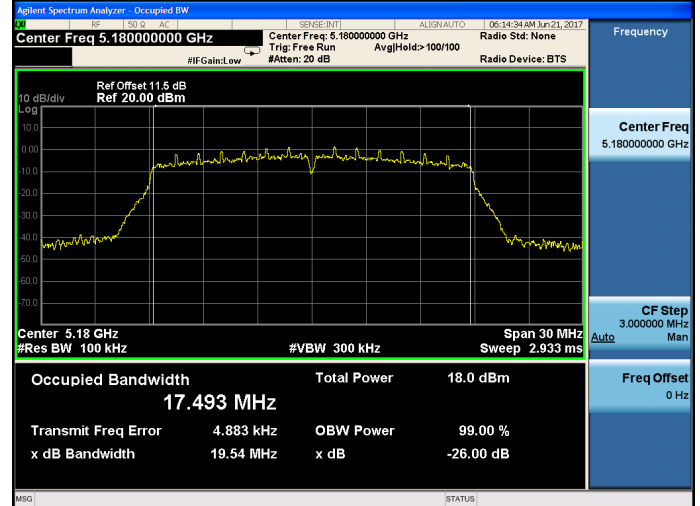
11a

5180MHz

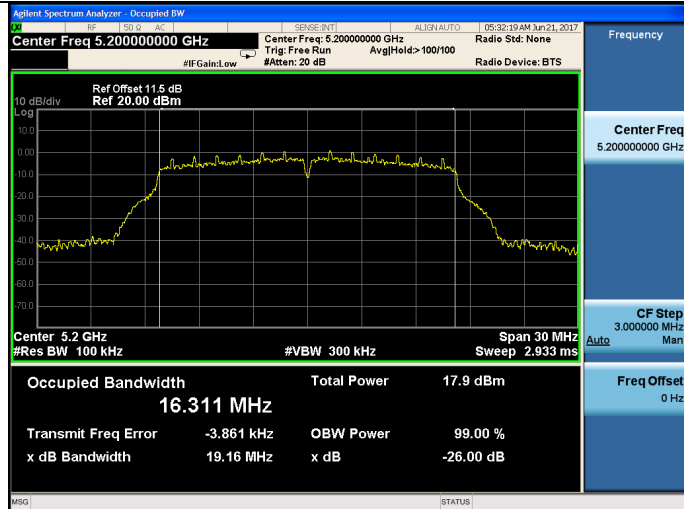


11n HT20

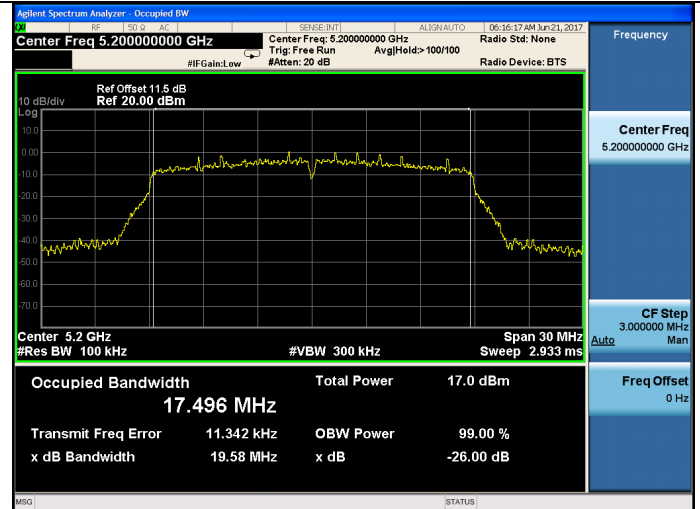
5180MHz



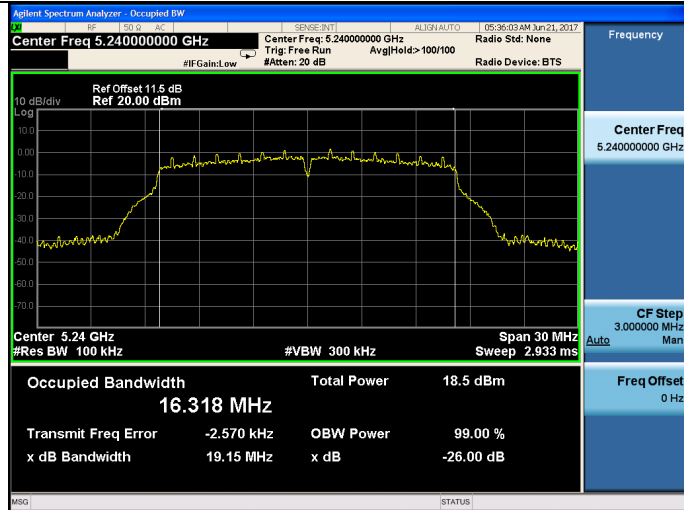
5200MHz



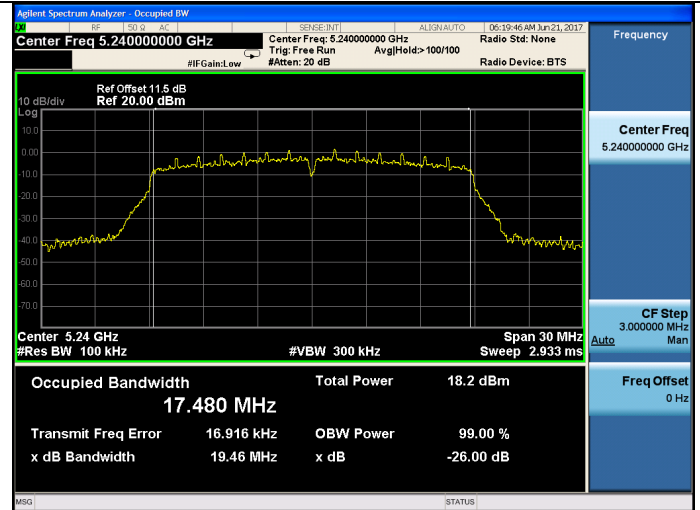
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5240MHz

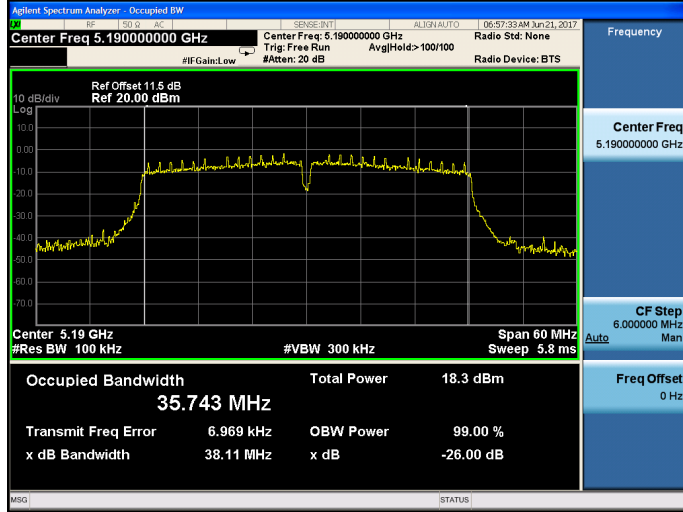


5240MHz

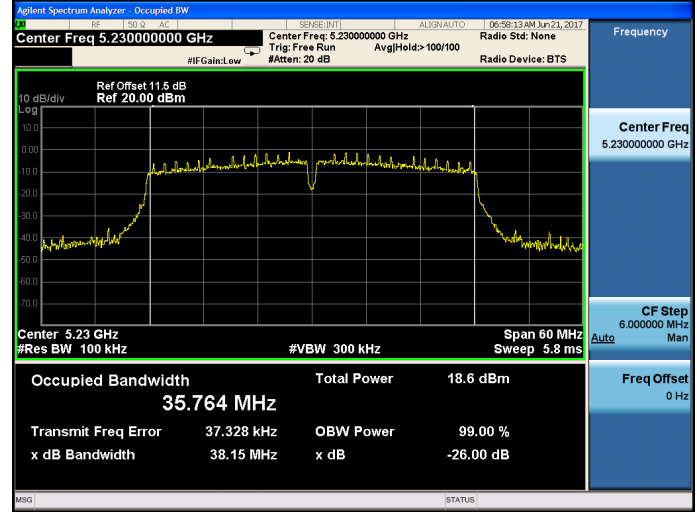


11n HT40

5190MHz



5230MHz

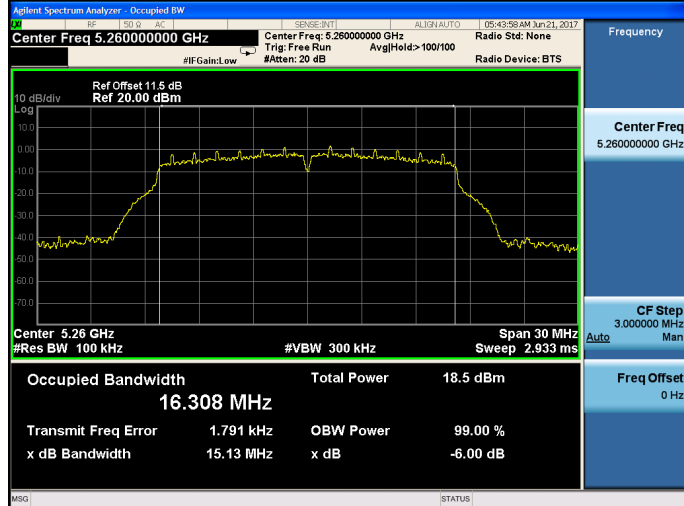


5260-5320MHz Band:

6dB & 99% bandwidth

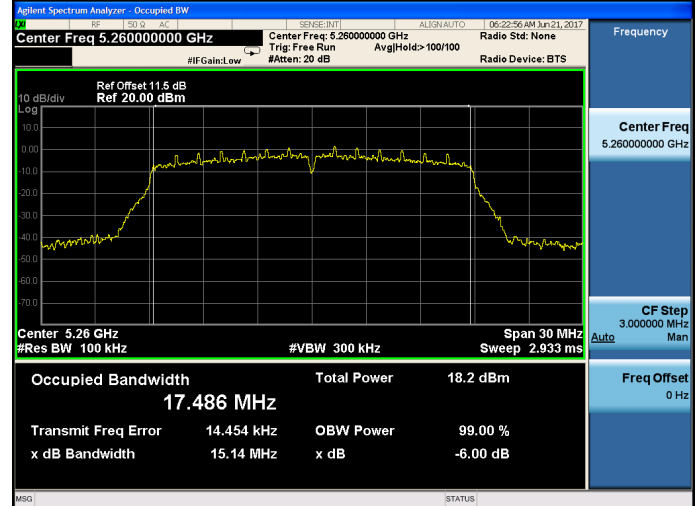
11a

5260MHz

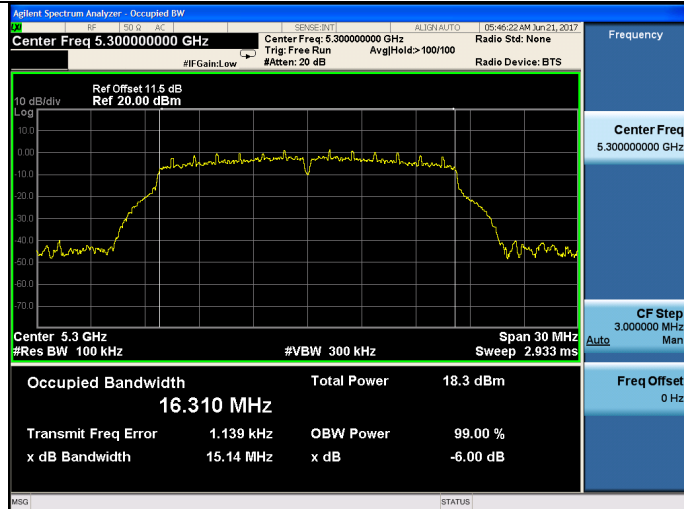


11n HT20

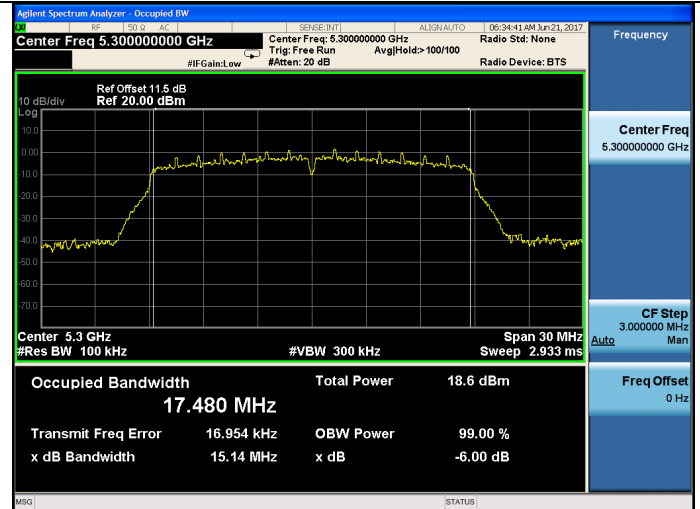
5260MHz



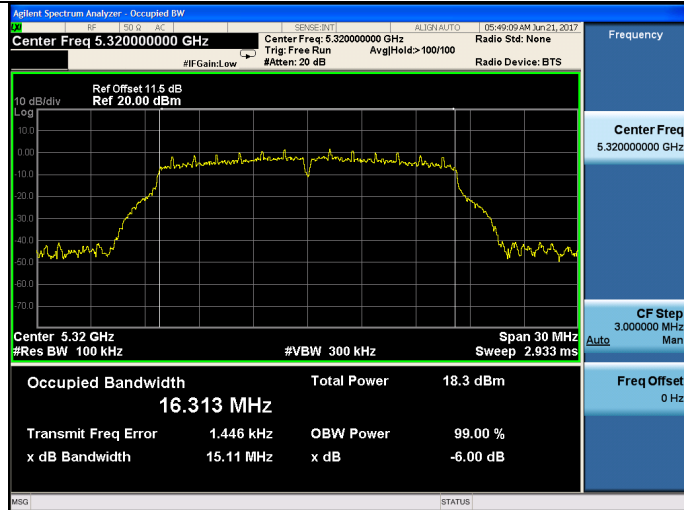
5300MHz



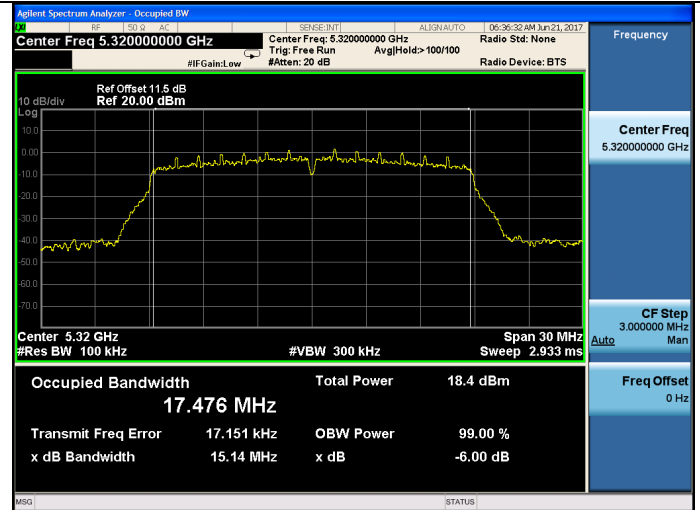
5300MHz



5320MHz

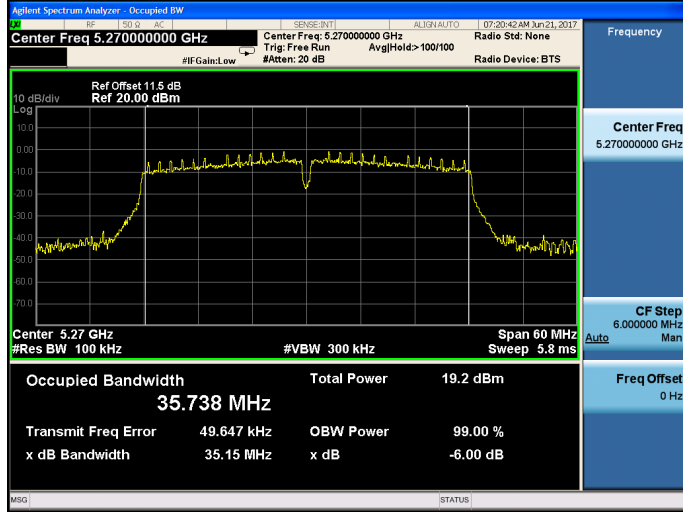


5320MHz

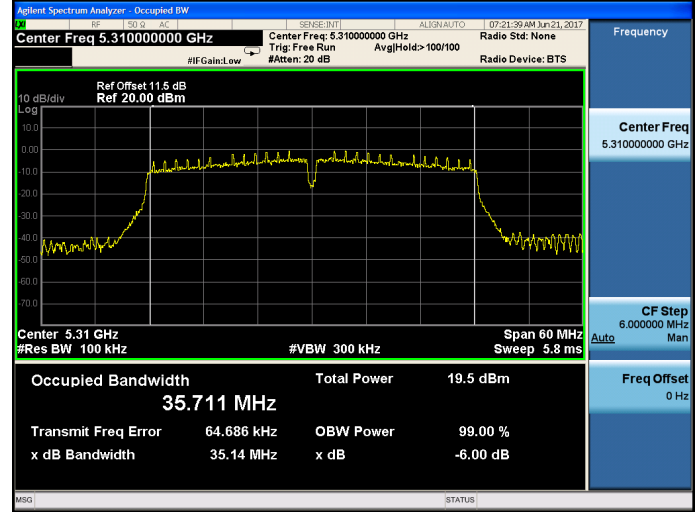


11n HT40

5270MHz



5310MHz

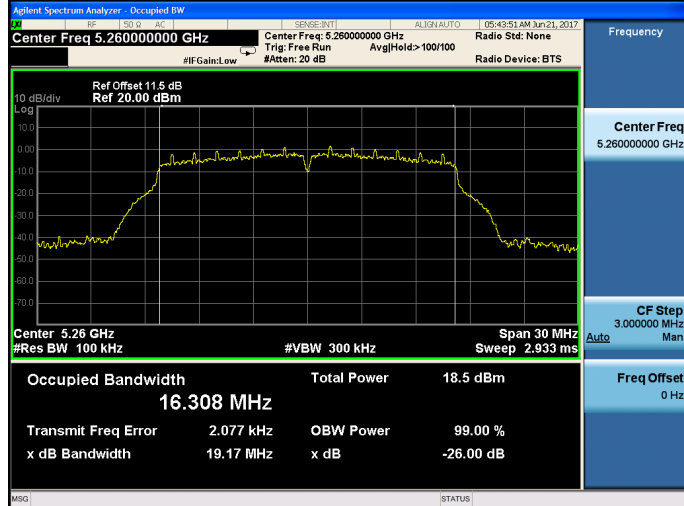


5260-5320MHz Band:

26dB bandwidth

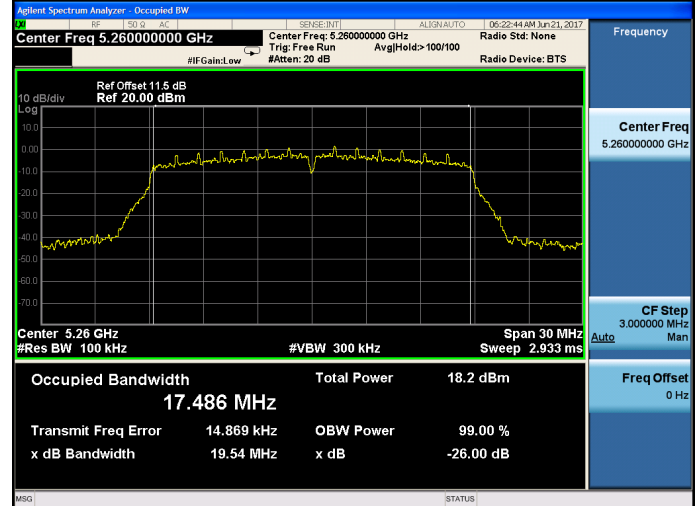
11a

5260MHz

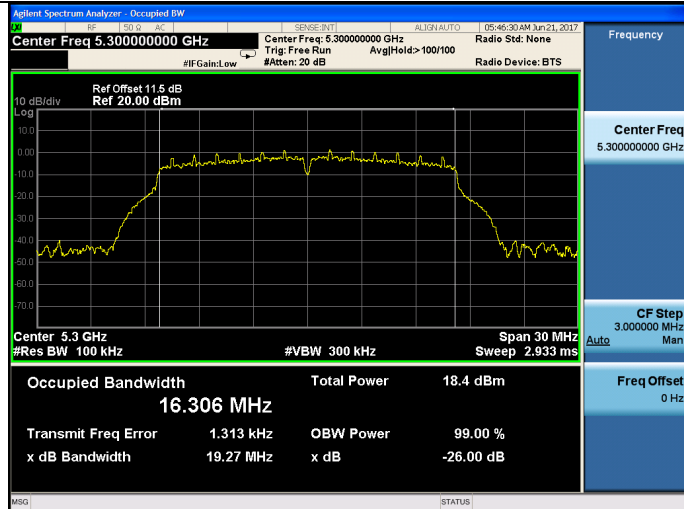


11n HT20

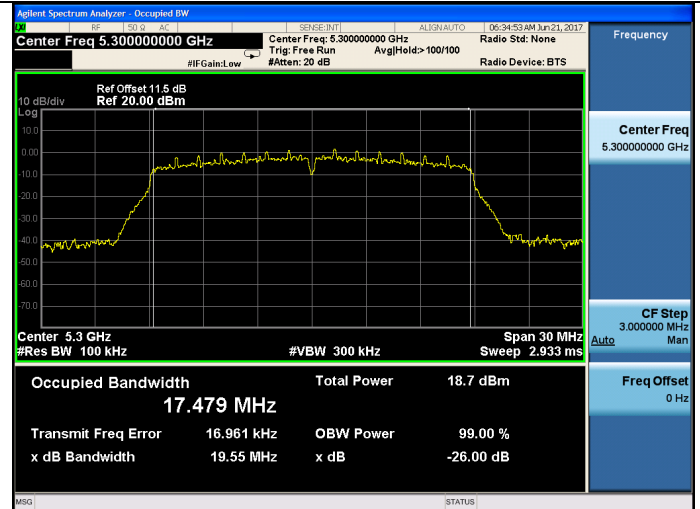
5260MHz



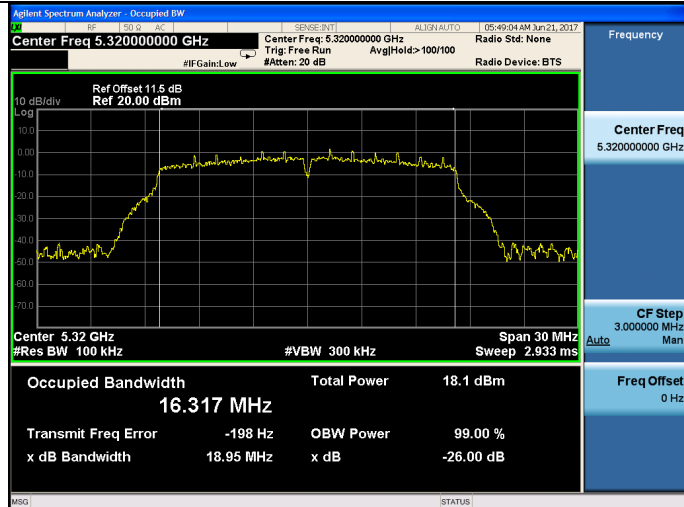
5300MHz



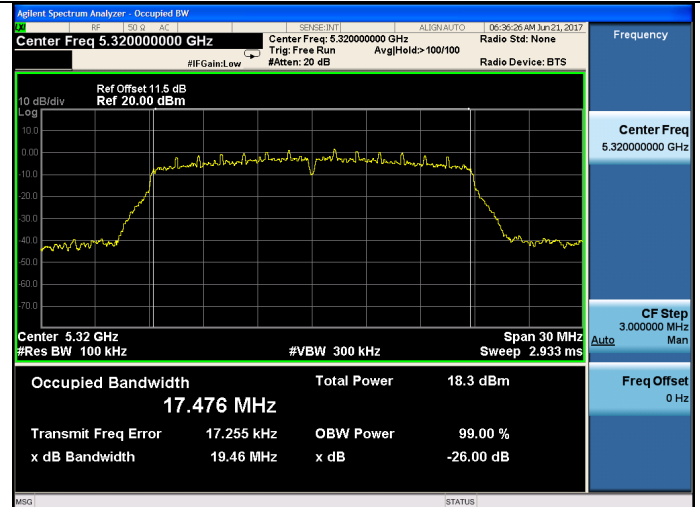
5300MHz



5320MHz

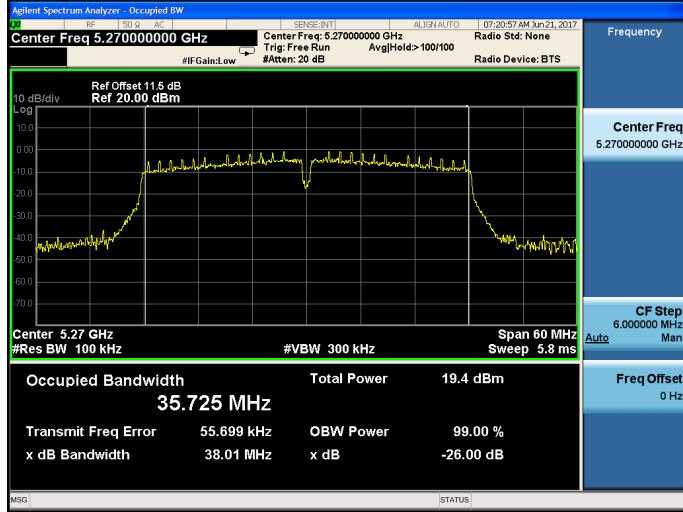


5320MHz

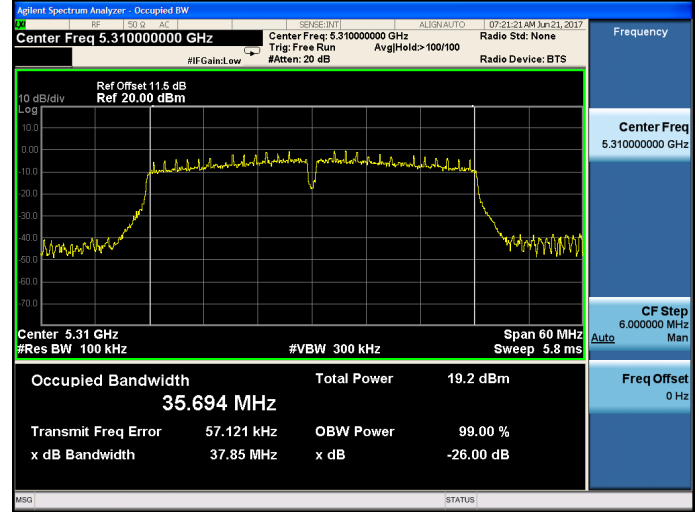


11n HT40

5270MHz



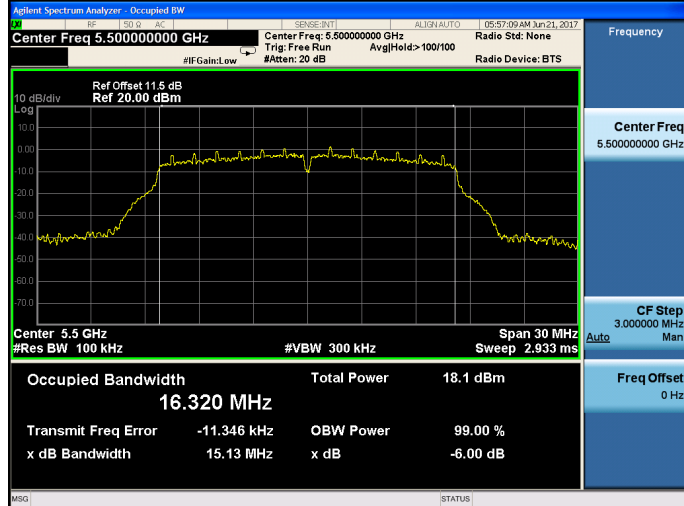
5310MHz



**5500-5700MHz Band:
6dB & 99% bandwidth**

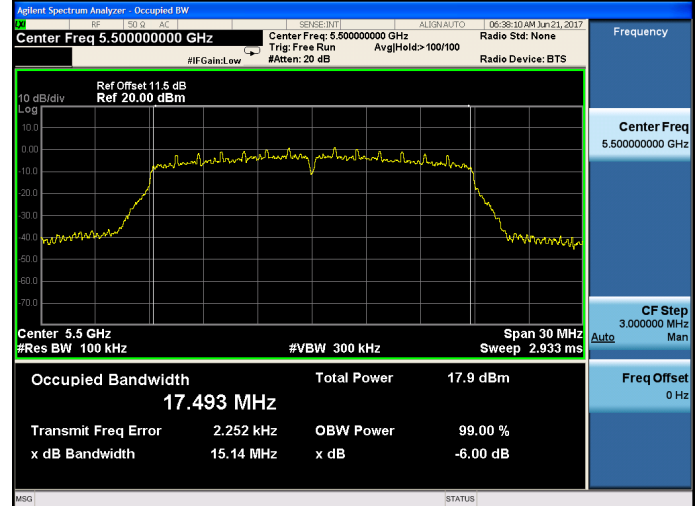
11a

5500MHz

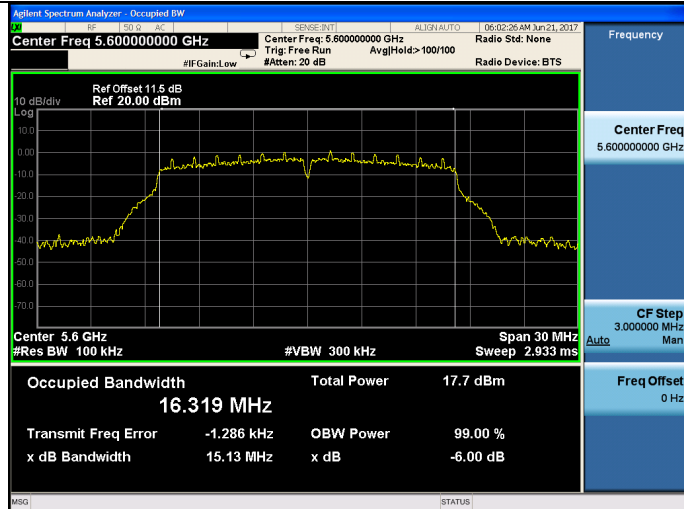


11n HT20

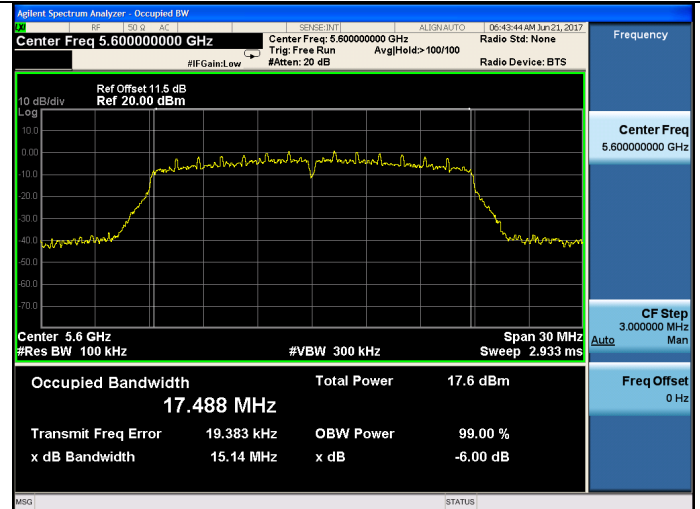
5500MHz



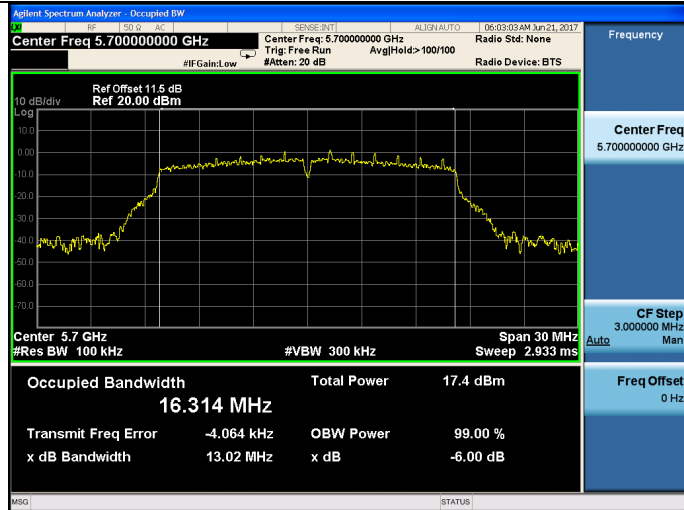
5600MHz



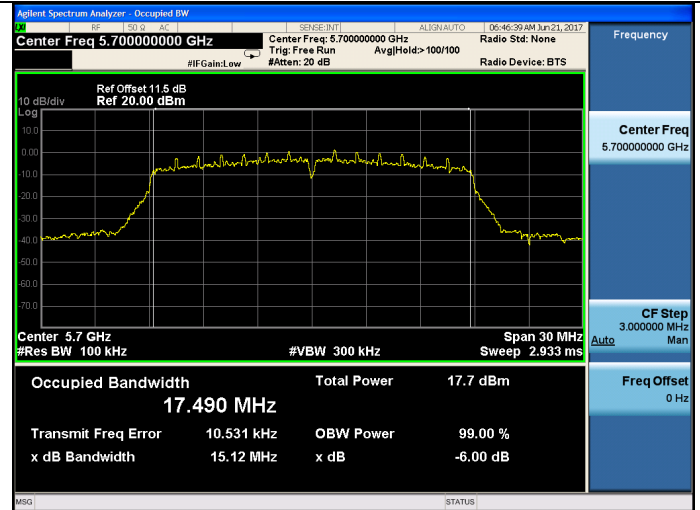
5600MHz



5700MHz

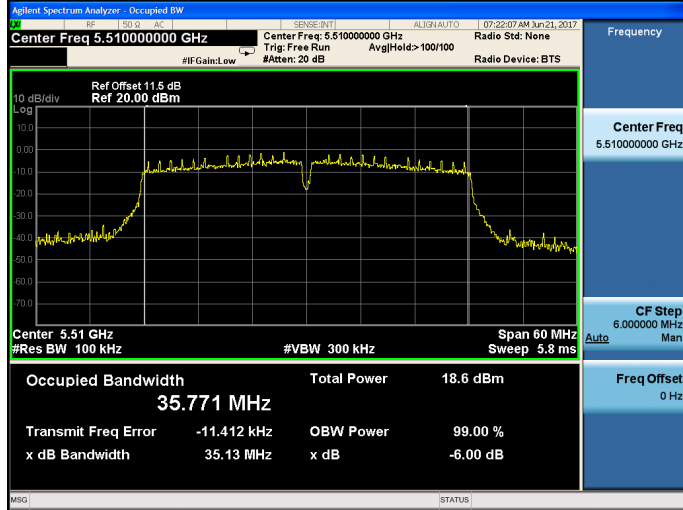


5700MHz

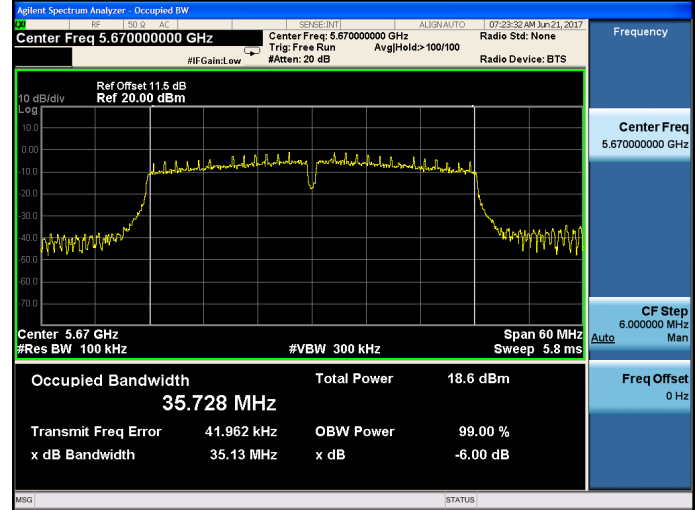


11n HT40

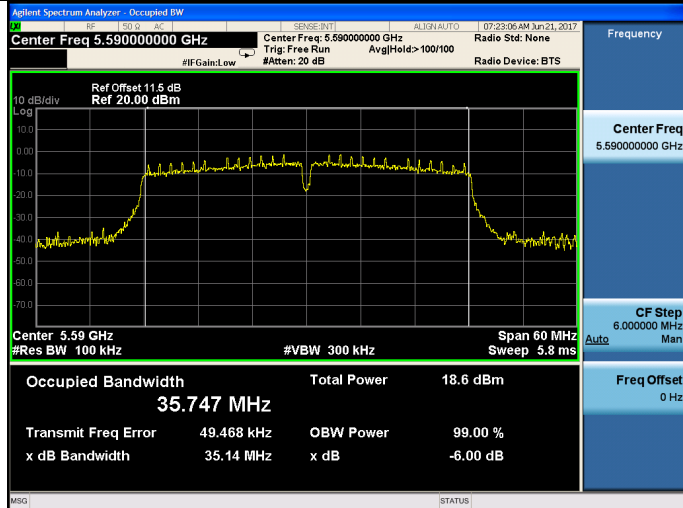
5510MHz



5670MHz



5590MHz

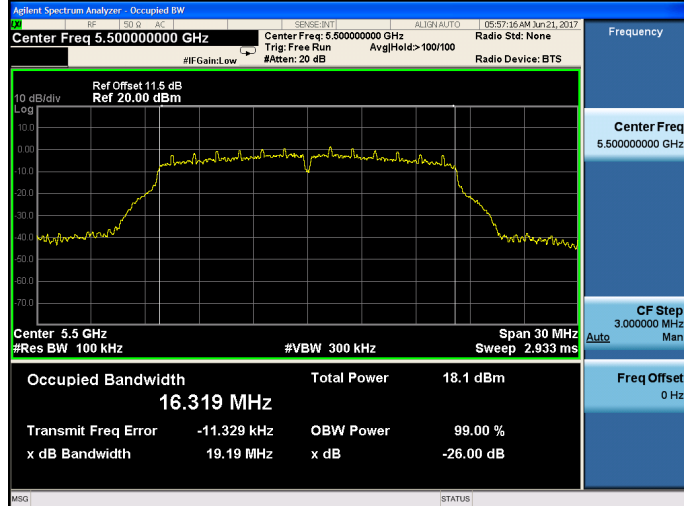


5500-5700MHz Band:

26dB bandwidth

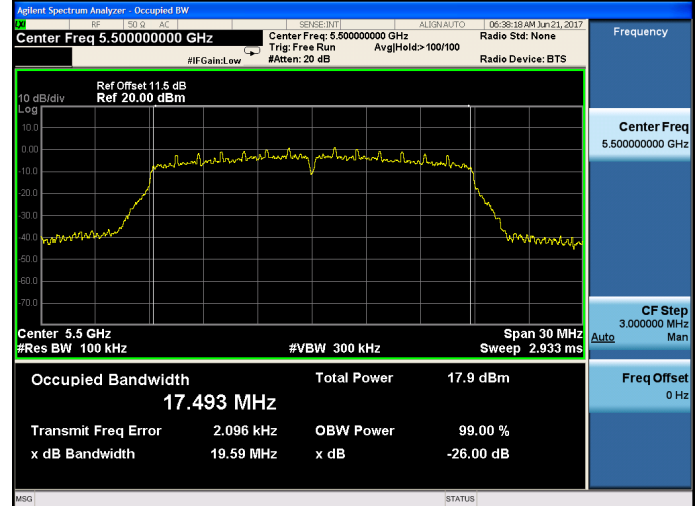
11a

5500MHz

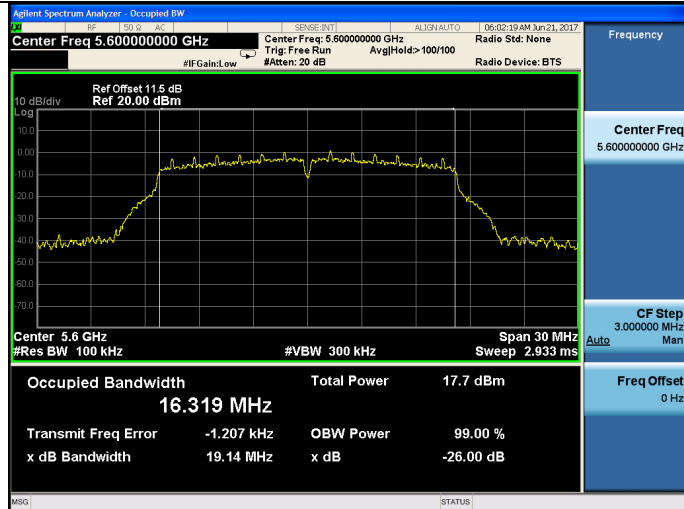


11n HT20

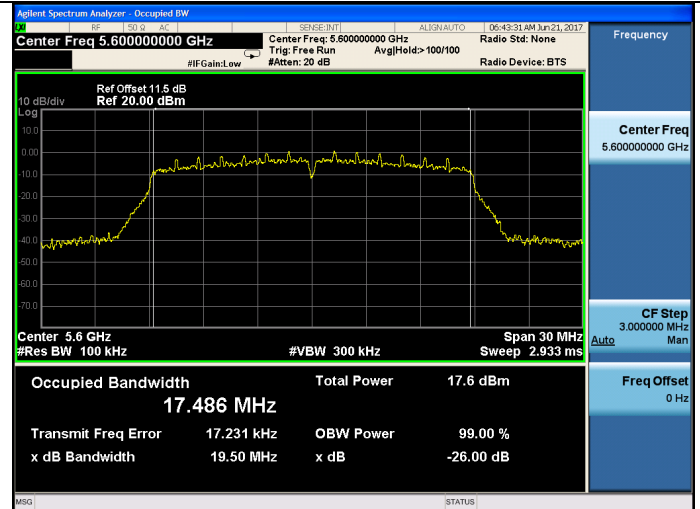
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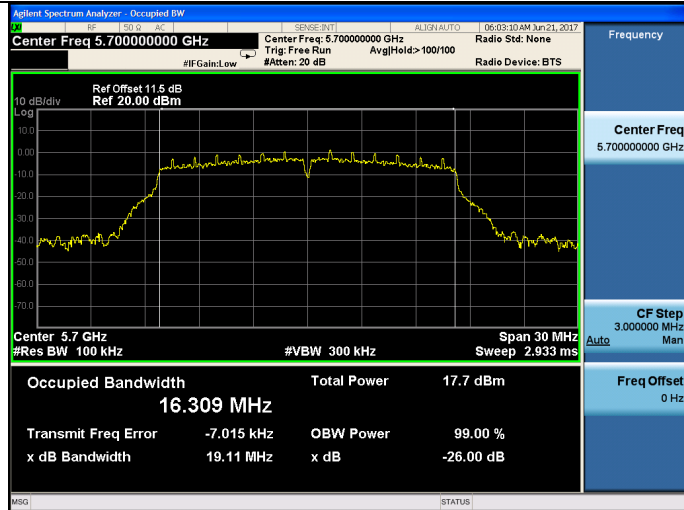
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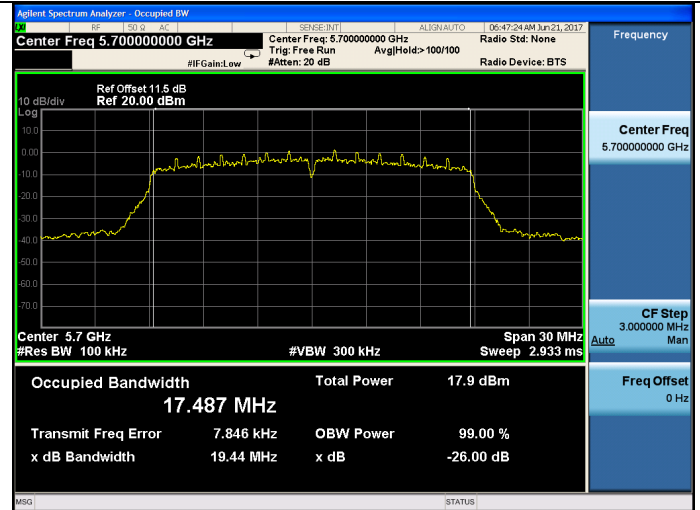
5600MHz



5700MHz

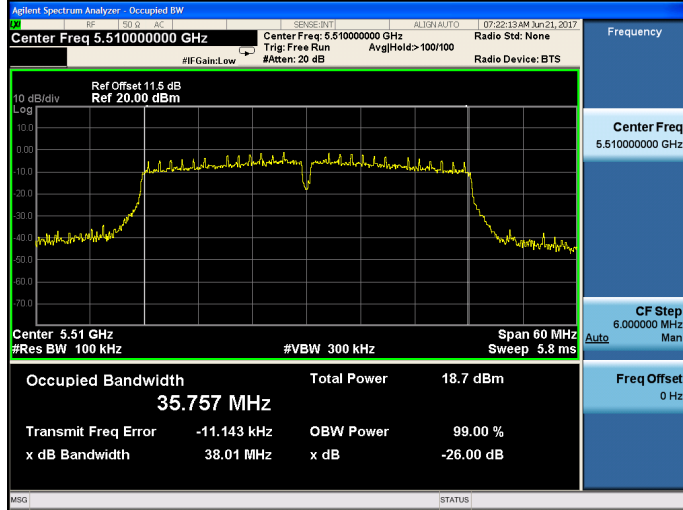


5700MHz

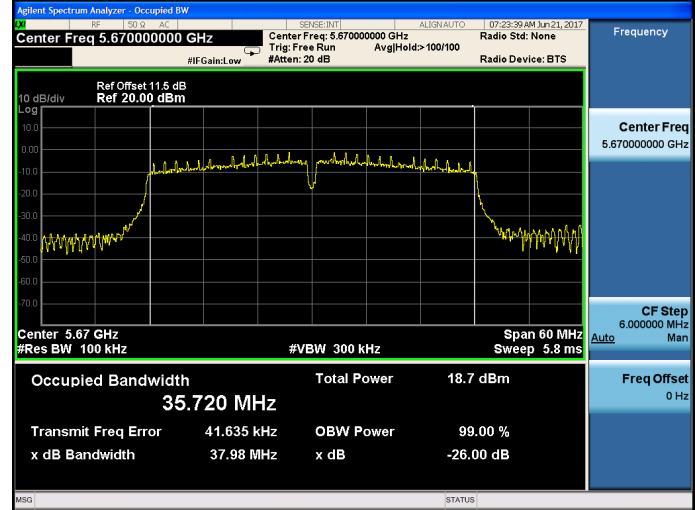


11n HT40

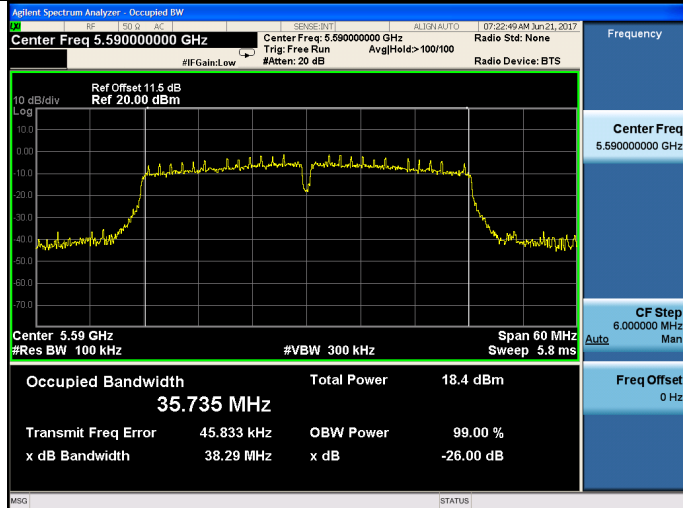
5510MHz



5670MHz



5590MHz

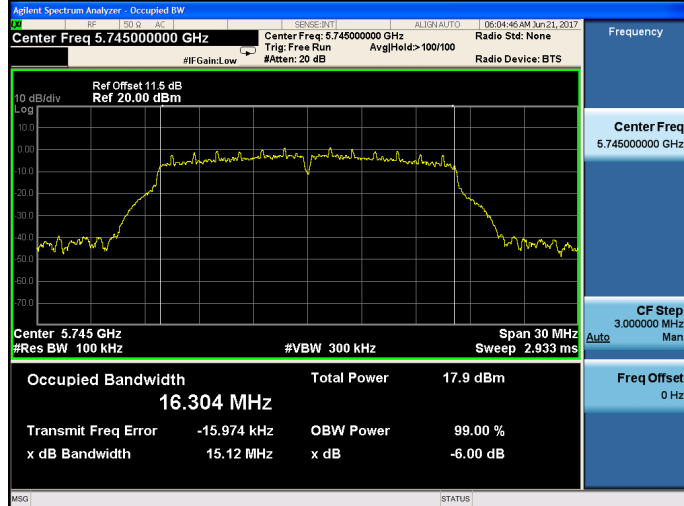


5745-5825MHz Band:

6dB & 99% bandwidth

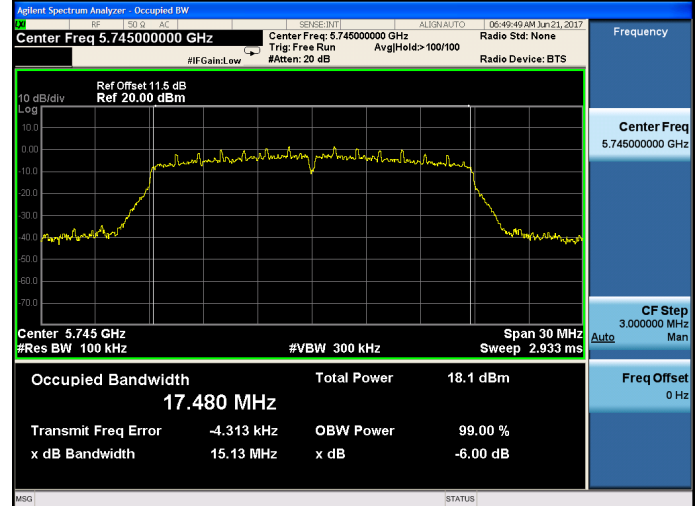
11a

5745MHz

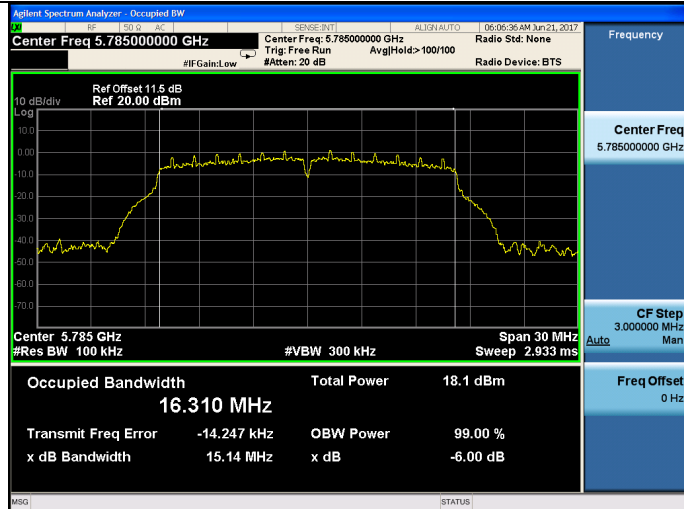


11n HT20

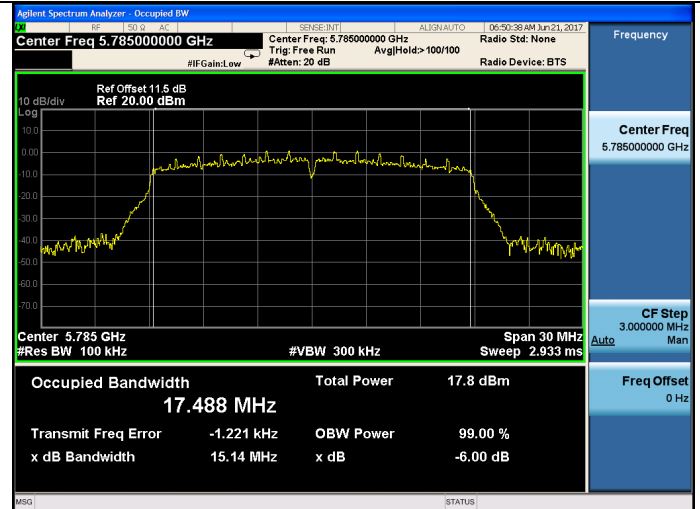
5745MHz



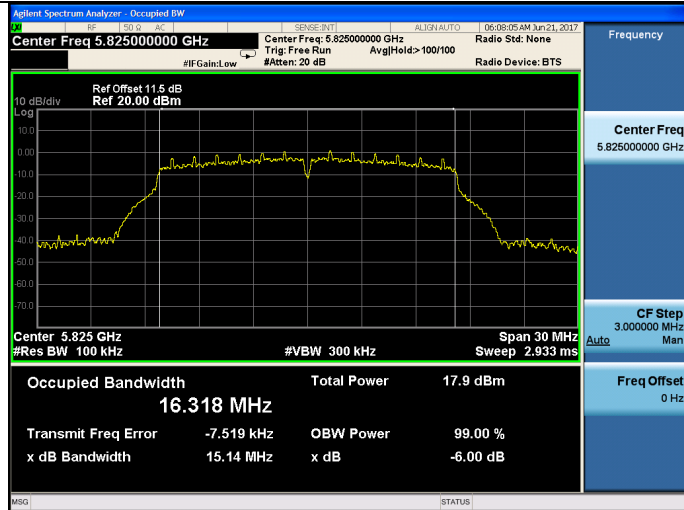
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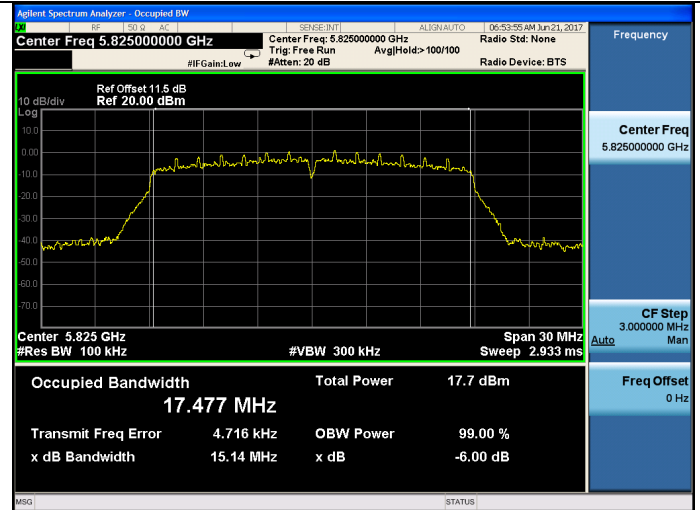
5785MHz



5825MHz

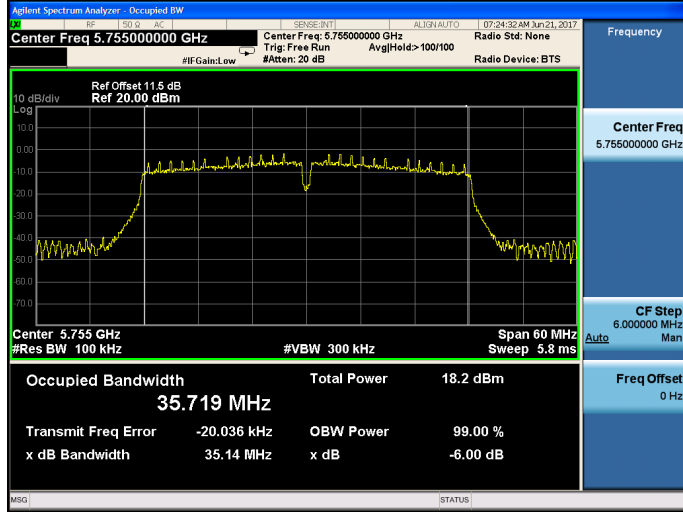


5825MHz

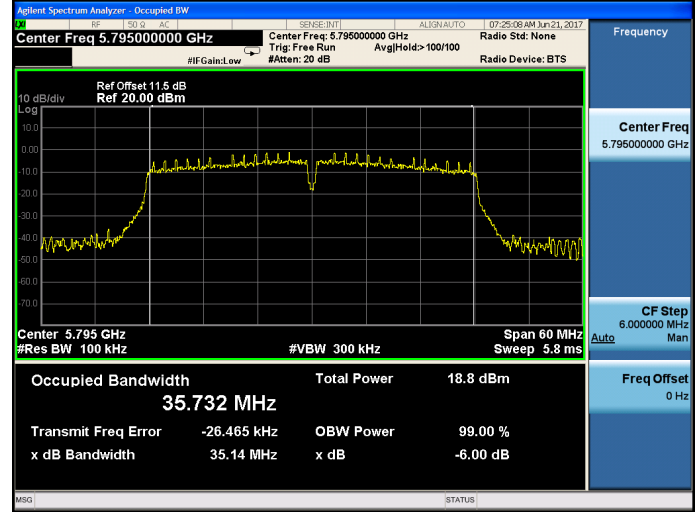


11n HT40

5755MHz



5795MHz

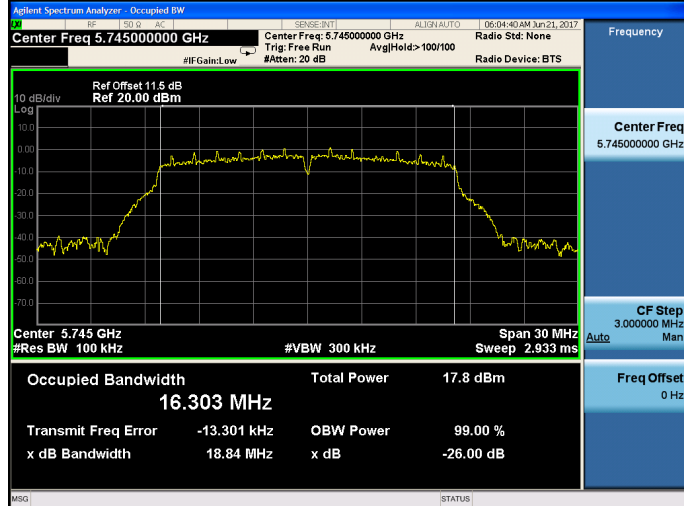


5745-5825MHz Band:

26dB bandwidth

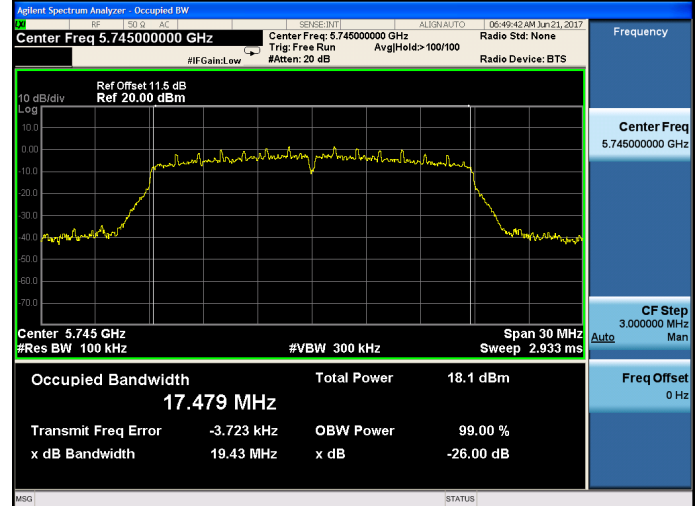
11a

5745MHz

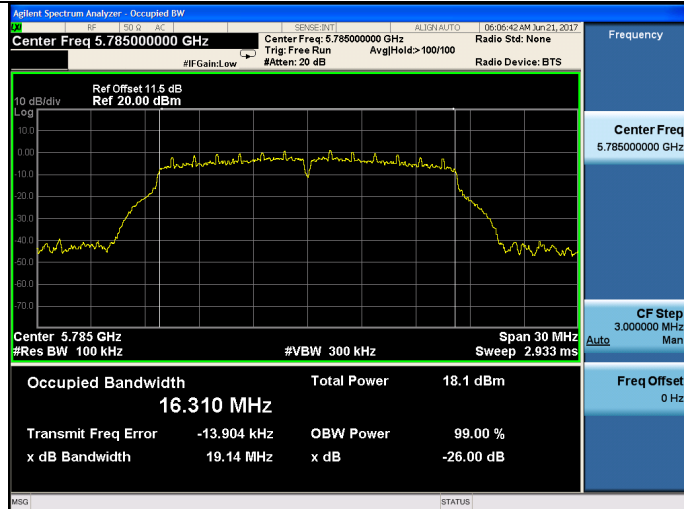


11n HT20

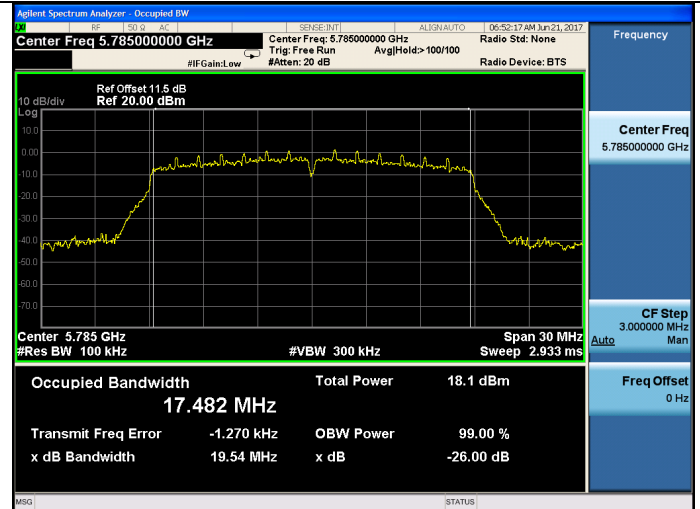
5745MHz



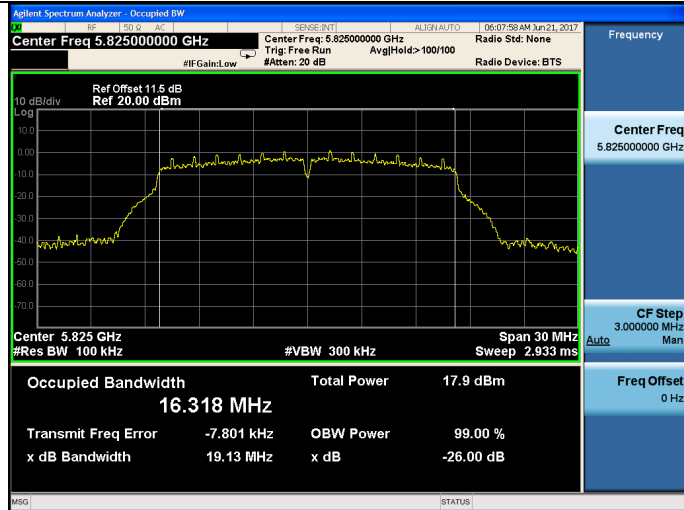
5785MHz



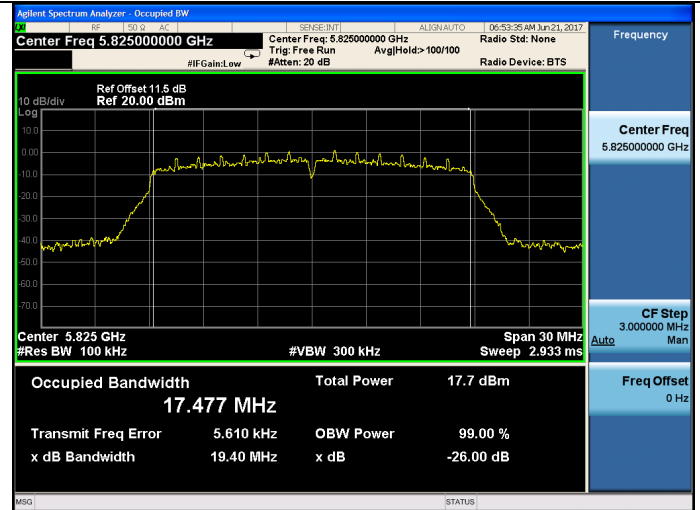
5785MHz



5825MHz

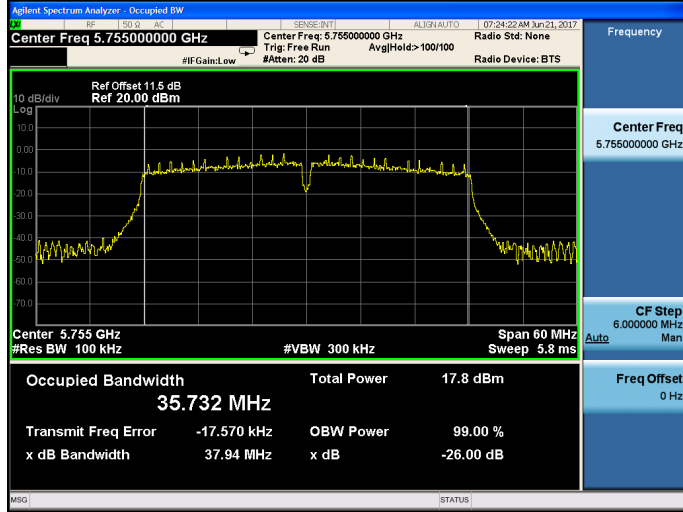


5825MHz



11n HT40

5755MHz



5795MHz

