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Appendix for 5GHz WIFI

Applicant: Frontier IoT Inc.

Address: 19800 MacArthur Blvd Suite 300, Irvine, CA 92612, USA

Product Name: LTE Smart IP Phone

Model: DT-200D, DT-200A

FCC ID: 2BDTQ-FRONT

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Appendix A1: Emission Bandwidth

Test Result

Test Mode	Channel	26db EBW [MHz]	FL [MHz]	FH [MHz]	Verdict
802.11a	5180	21.120	5169.400	5190.520	PASS
	5200	20.840	5189.480	5210.320	PASS
	5240	20.920	5229.560	5250.480	PASS
	5745	22.120	5734.320	5756.440	PASS
	5785	23.600	5773.760	5797.360	PASS
	5825	23.680	5813.640	5837.320	PASS
802.11n(HT20)	5180	21.680	5169.240	5190.920	PASS
	5200	21.600	5189.240	5210.840	PASS
	5240	21.520	5229.280	5250.800	PASS
	5745	27.840	5732.880	5760.720	PASS
	5785	27.240	5772.880	5800.120	PASS
	5825	27.960	5812.040	5840.000	PASS
802.11n(HT40)	5190	39.280	5170.480	5209.760	PASS
	5230	39.360	5210.320	5249.680	PASS
	5755	48.400	5735.560	5783.960	PASS
	5795	49.040	5775.320	5824.360	PASS
802.11ac(VHT20)	5180	23.800	5169.320	5193.120	PASS
	5200	21.480	5189.280	5210.760	PASS
	5240	21.360	5229.400	5250.760	PASS
	5745	26.840	5733.560	5760.400	PASS
	5785	27.040	5773.120	5800.160	PASS
	5825	26.560	5813.560	5840.120	PASS
802.11ac(VHT40)	5190	44.000	5170.000	5214.000	PASS
	5230	46.000	5210.240	5256.240	PASS
	5755	52.480	5735.240	5787.720	PASS
	5795	47.920	5775.000	5822.920	PASS
802.11ac(VHT80)	5210	81.120	5169.680	5250.800	PASS
	5775	99.200	5734.840	5834.040	PASS

Test Graphs

802.11a_5180

802.11a_5200

802.11a_5240

802.11a_5745

802.11a_5785

802.11a_5825

802.11n(HT20)_5180

802.11n(HT20)_5200

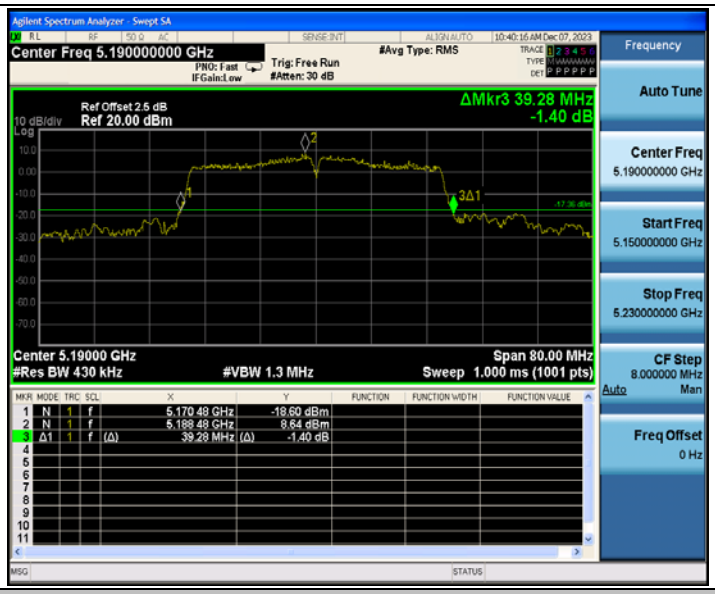
802.11n(HT20)_5240

802.11n(HT20)_5745

802.11n(HT20)_5785

802.11n(HT20)_5825

802.11n(HT40)_5190



802.11n(HT40)_5230

802.11n(HT40)_5755

802.11n(HT40)_5795

802.11ac(VHT20)_5180

802.11ac(VHT20)_5200

802.11ac(VHT20)_5240

802.11ac(VHT20)_5745

802.11ac(VHT20)_5785

802.11ac(VHT20)_5825

802.11ac(VHT40)_5190

802.11ac(VHT40)_5230

802.11ac(VHT40)_5755

802.11ac(VHT40)_5795

802.11ac(VHT80)_5210

802.11ac(VHT80)_5775

Agilent Spectrum Analyzer - Swept SA
Center Freq 5.775000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
01:46:24 PM Dec 07, 2023
Frequency
Auto Tune
Ref Offset 2.5 dB
10 dB/div Ref 20.00 dBm
Log
ΔMkr3 99.20 MHz
-2.65 dB
Center Freq
5.775000000 GHz
Start Freq
5.695000000 GHz
Stop Freq
5.855000000 GHz
Center 5.77500 GHz
#Res BW 820 kHz
#VBW 2.7 MHz
Span 160.0 MHz
Sweep 1.000 ms (1001 pts)
CF Step
16.000000 MHz
Auto Man
Freq Offset
0 Hz
1 N 1 f 5.734 84 GHz -21.13 dBm
2 N 1 f 5.777 08 GHz 5.18 dBm
3 Δ1 1 f (Δ) 99.20 MHz (Δ) -2.65 dB
MSG
STATUS

Appendix A2: Occupied channel bandwidth

Test Result

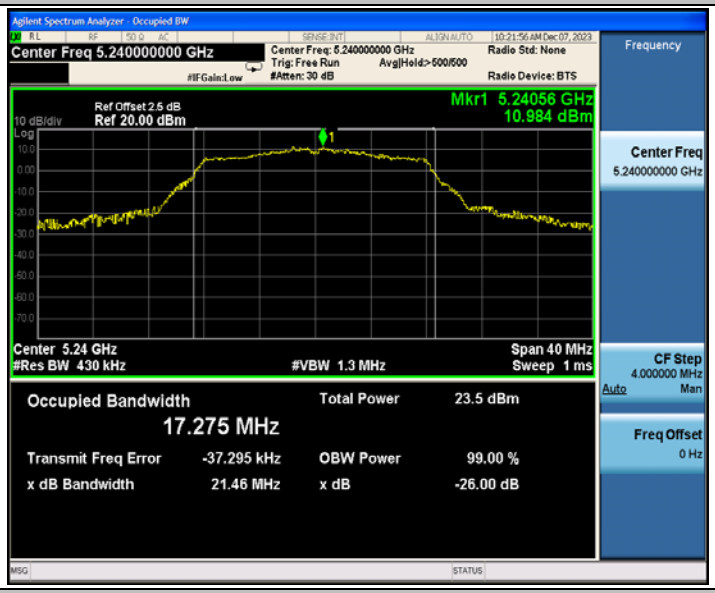
Test Mode	Channel	OCB [MHz]	Verdict
802.11a	5180	17.296	PASS
	5200	17.293	PASS
	5240	17.275	PASS
	5745	17.632	PASS
	5785	17.691	PASS
	5825	17.934	PASS
802.11n(HT20)	5180	18.331	PASS
	5200	18.307	PASS
	5240	18.269	PASS
	5745	18.786	PASS
	5785	18.721	PASS
	5825	18.658	PASS
802.11n(HT40)	5190	36.416	PASS
	5230	36.374	PASS
	5755	36.998	PASS
	5795	36.905	PASS
802.11ac(VHT20)	5180	18.352	PASS
	5200	18.325	PASS
	5240	18.314	PASS
	5745	18.767	PASS
	5785	18.643	PASS
	5825	18.648	PASS
802.11ac(VHT40)	5190	36.532	PASS
	5230	36.577	PASS
	5755	36.827	PASS
	5795	36.704	PASS
802.11ac(VHT80)	5210	75.384	PASS
	5775	75.652	PASS

Test Graphs

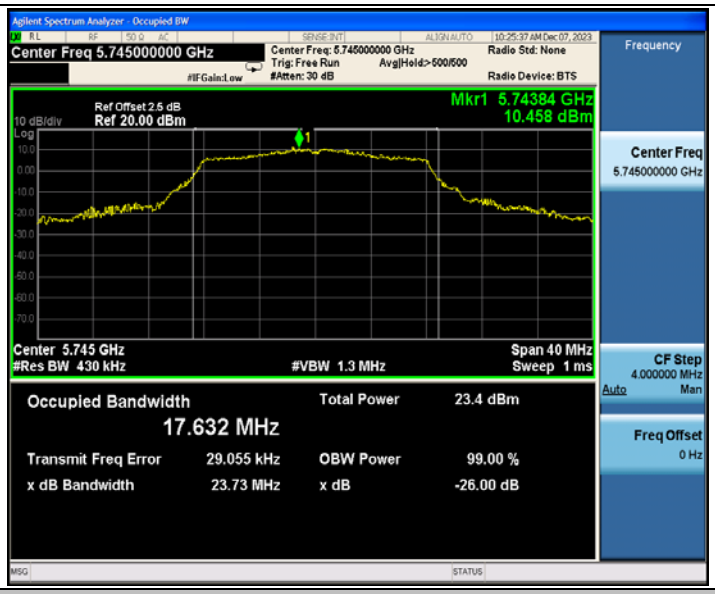
802.11a_5180

802.11a_5200

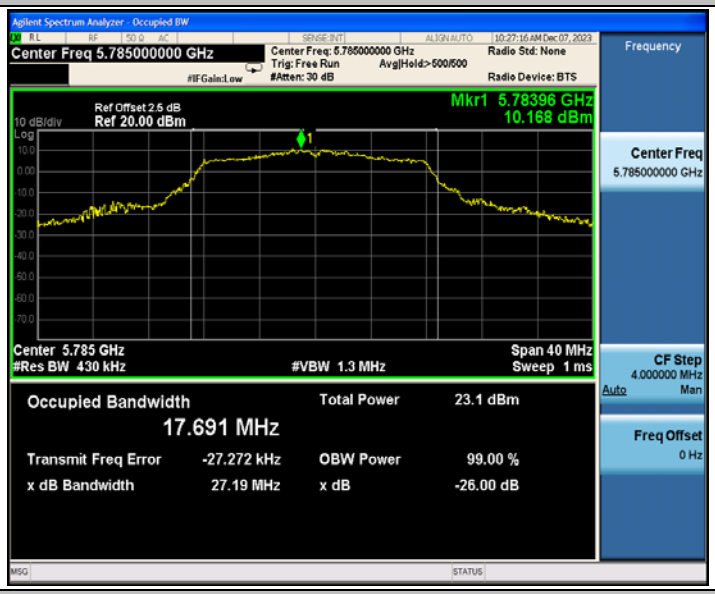
802.11a_5240



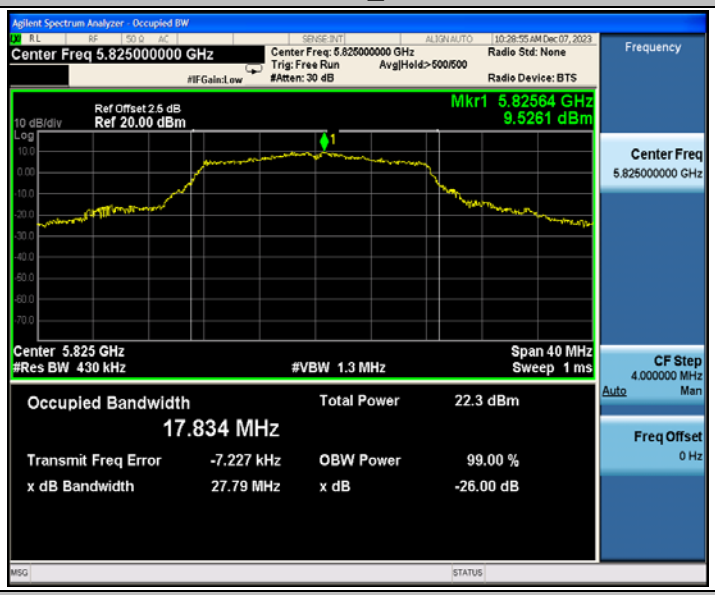
802.11a_5745



802.11a_5785



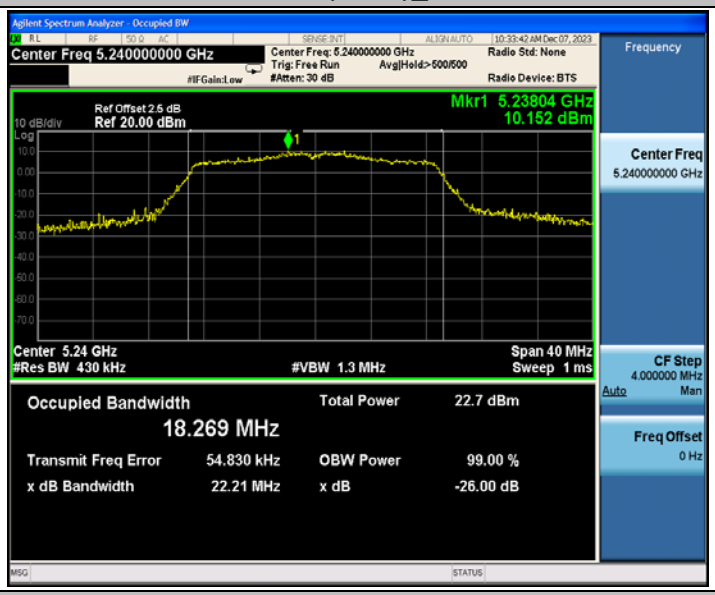
802.11a_5825



802.11n(HT20)_5180

802.11n(HT20)_5200

802.11n(HT20)_5240

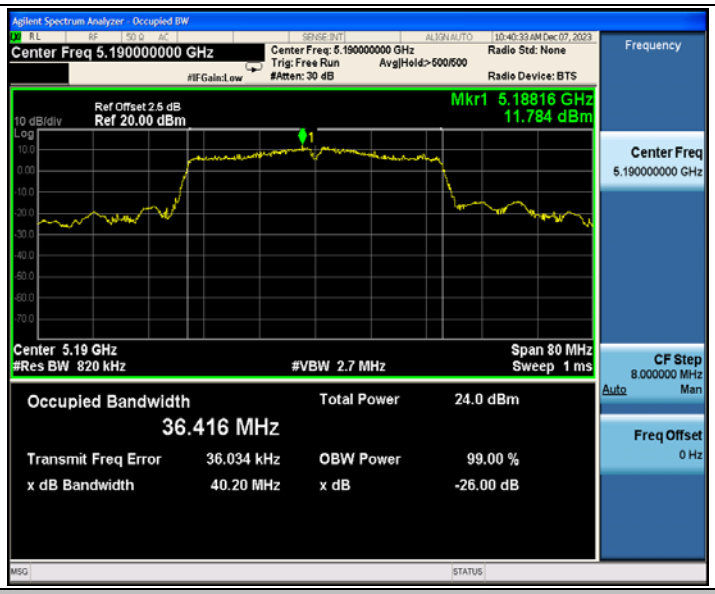


802.11n(HT20)_5745

802.11n(HT20)_5785

802.11n(HT20)_5825

802.11n(HT40)_5190



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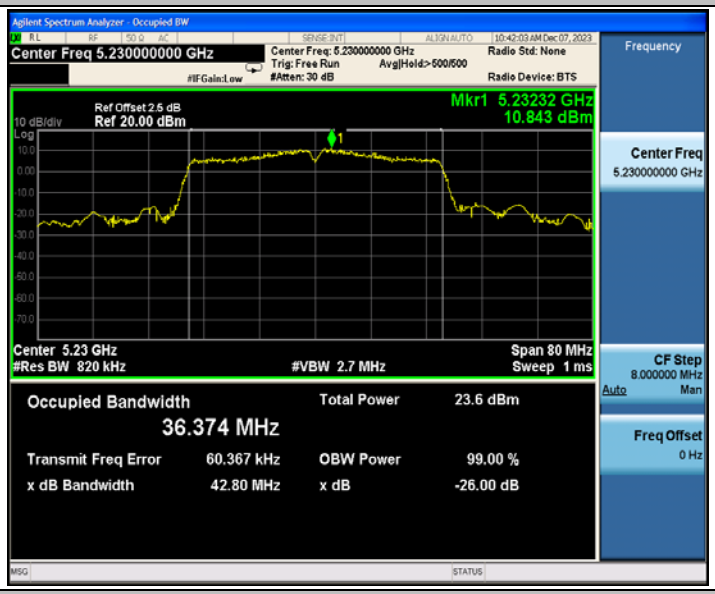
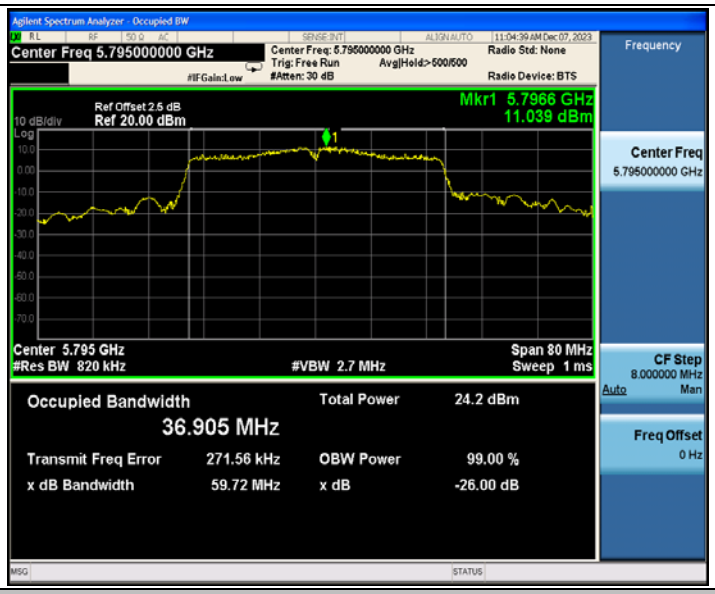


802.11n(HT40)_5755

802.11n(HT40)_5795



802.11ac(VHT20)_5180

802.11ac(VHT20)_5200

802.11ac(VHT20)_5240

802.11ac(VHT20)_5745

802.11ac(VHT20)_5785

802.11ac(VHT20)_5825

802.11ac(VHT40)_5190

802.11ac(VHT40)_5230

802.11ac(VHT40)_5755

802.11ac(VHT40)_5795

802.11ac(VHT80)_5210

802.11ac(VHT80)_5775