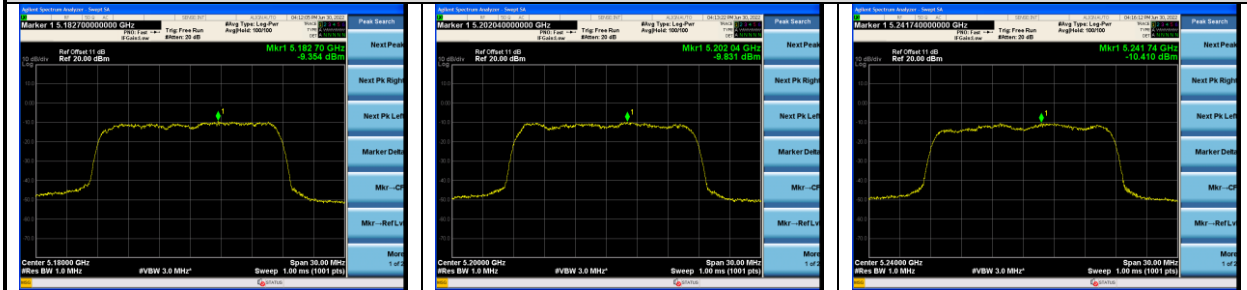
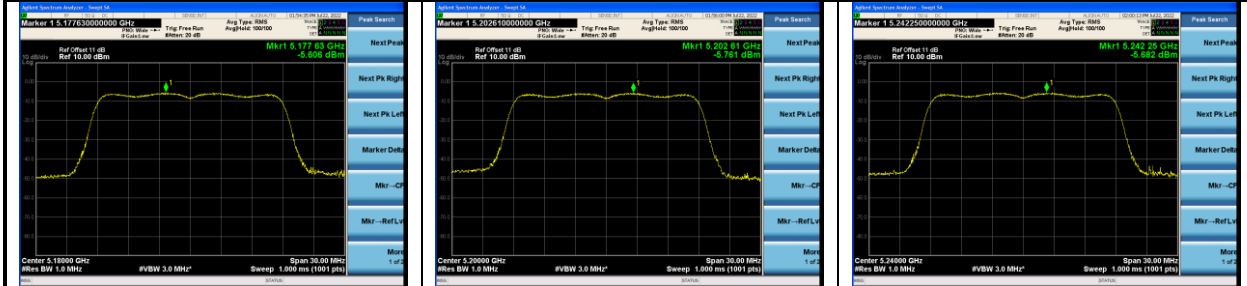


U-NII-1 Band: ANT1

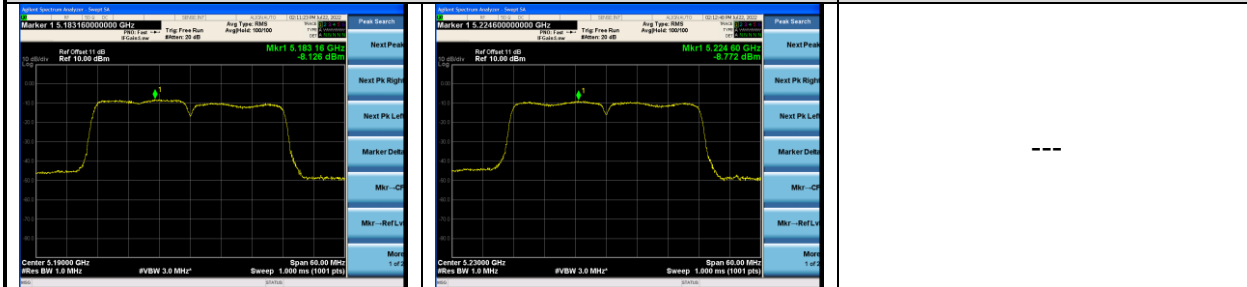
IEEE 802.11a



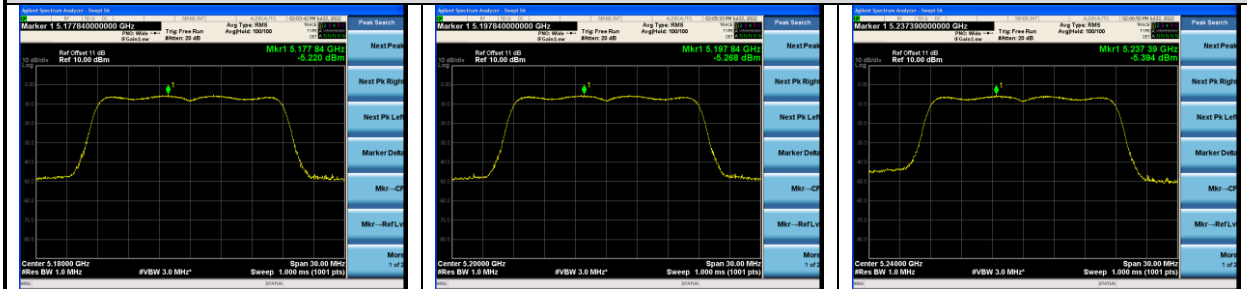
IEEE 802.11n HT20



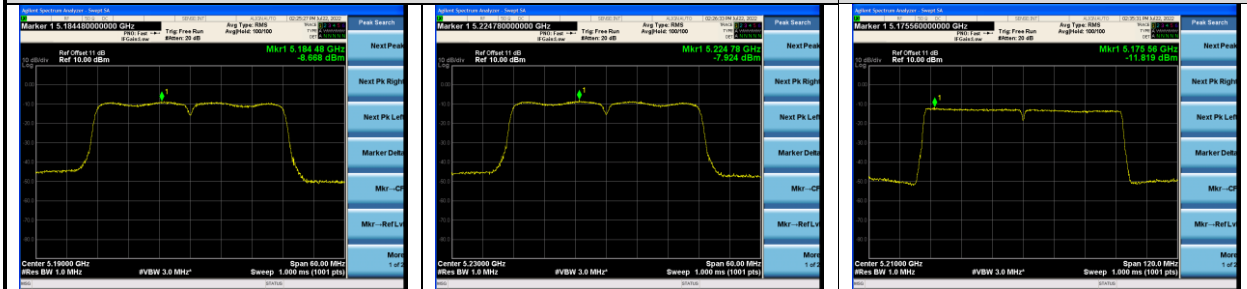
IEEE 802.11n HT40



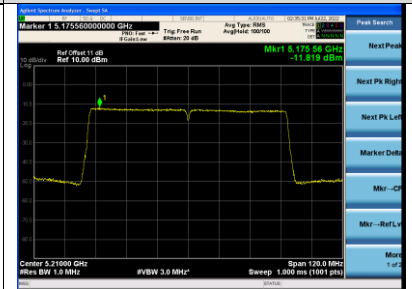
IEEE 802.11ac VHT20



IEEE 802.11ac VHT40

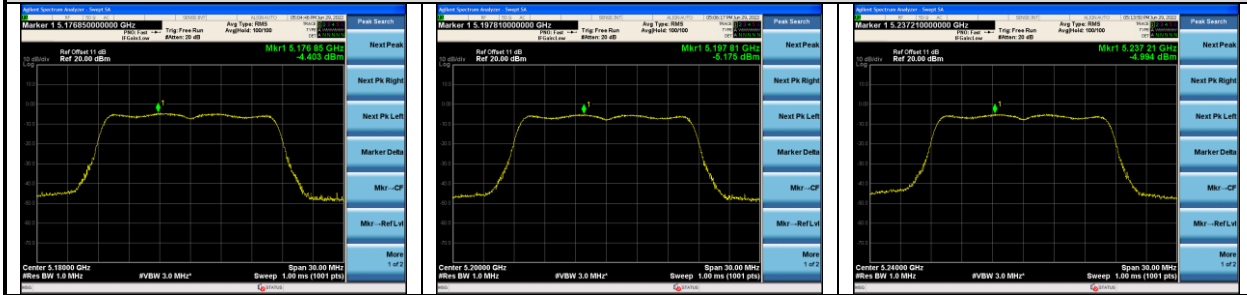


IEEE 802.11ac VHT80

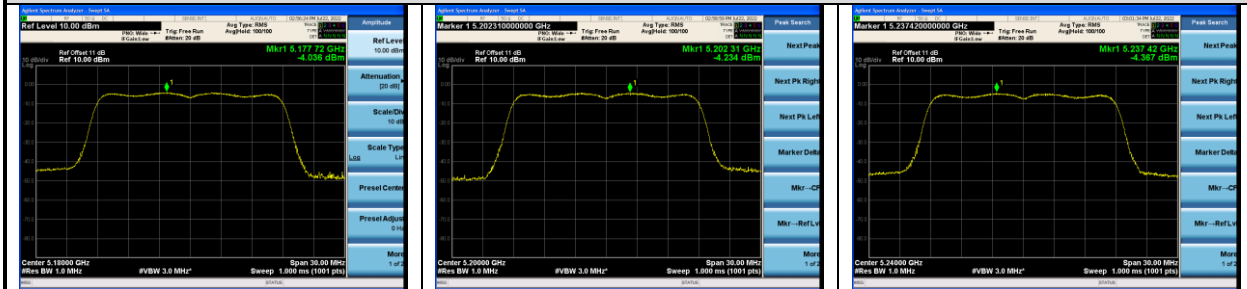


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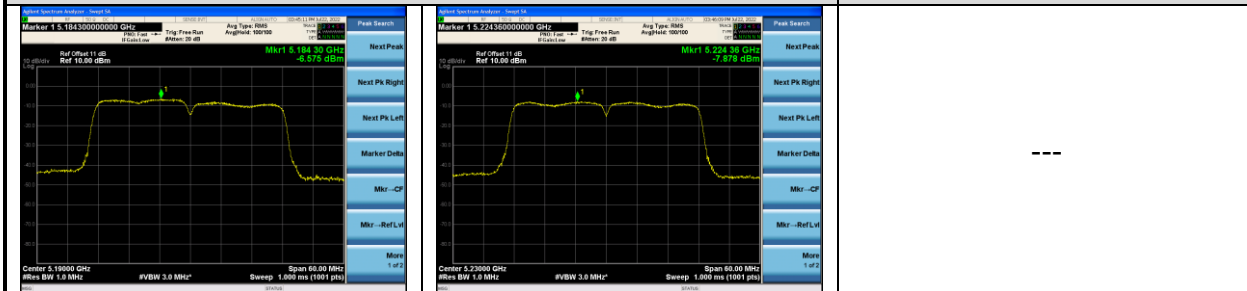
IEEE 802.11a



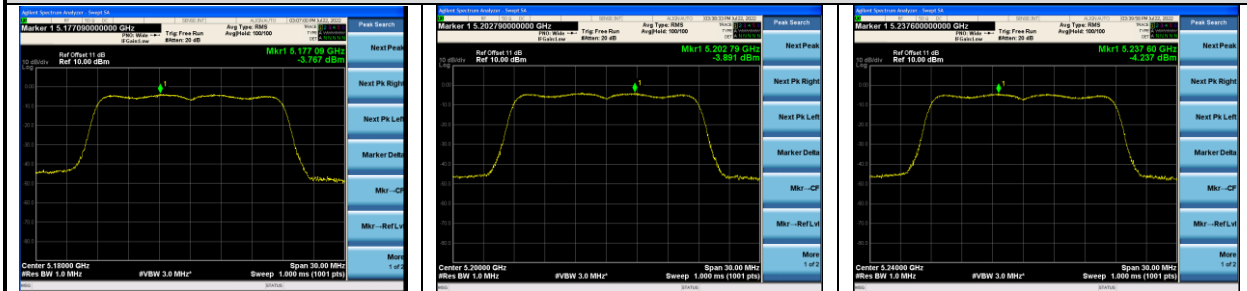
IEEE 802.11n HT20



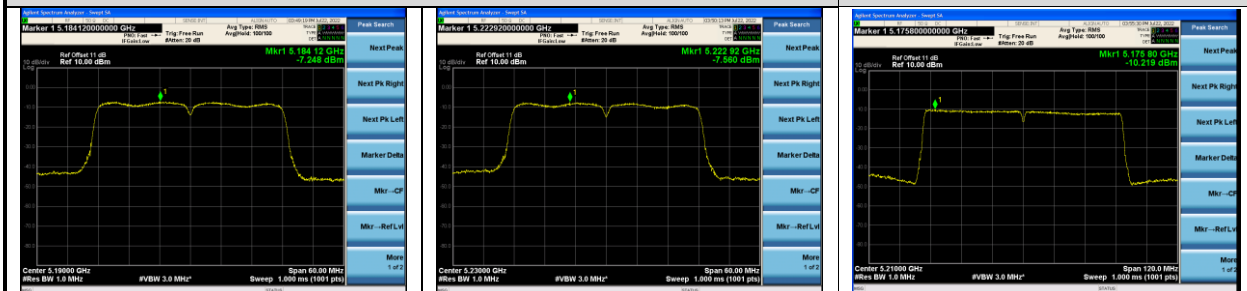
IEEE 802.11n HT40



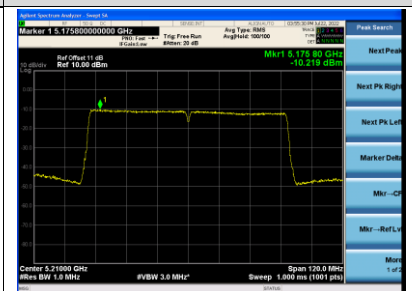
IEEE 802.11ac VHT20



IEEE 802.11ac VHT40

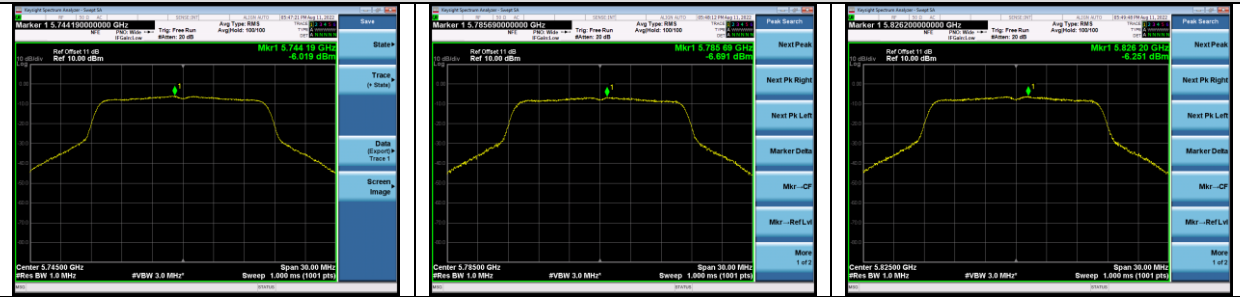


IEEE 802.11ac VHT80

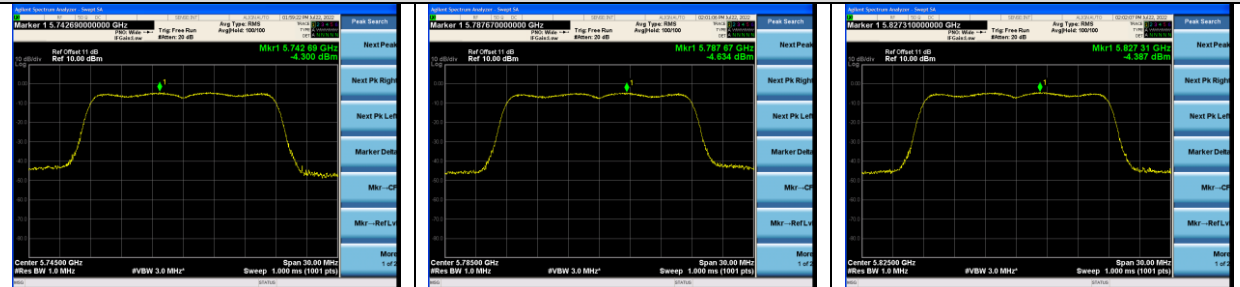


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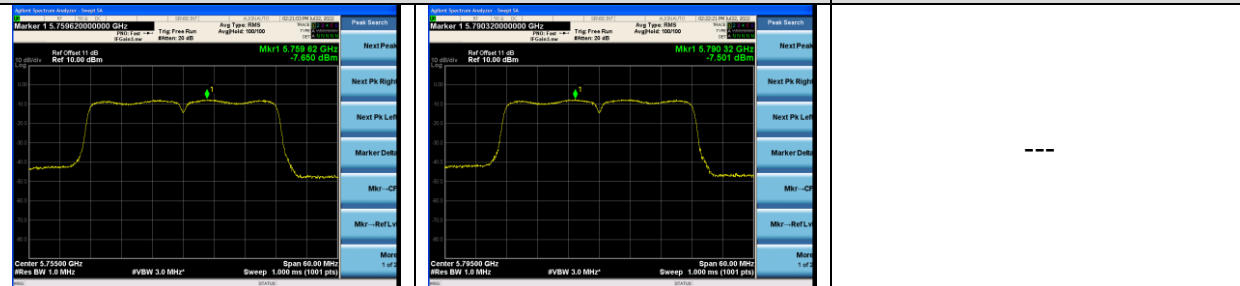
IEEE 802.11a



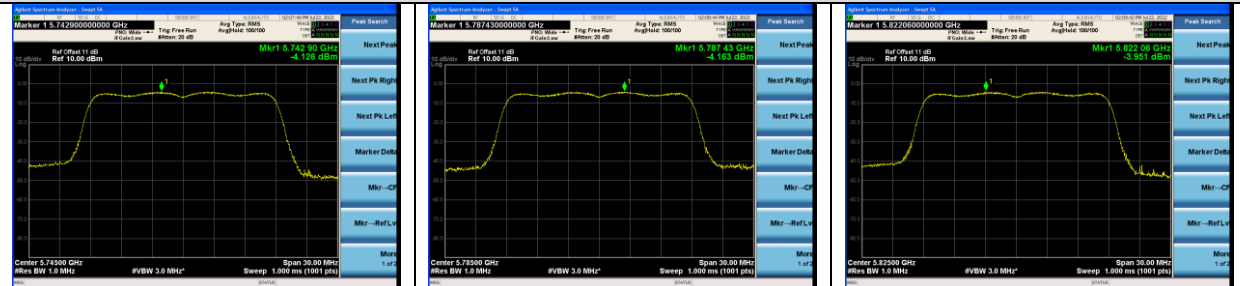
IEEE 802.11n HT20



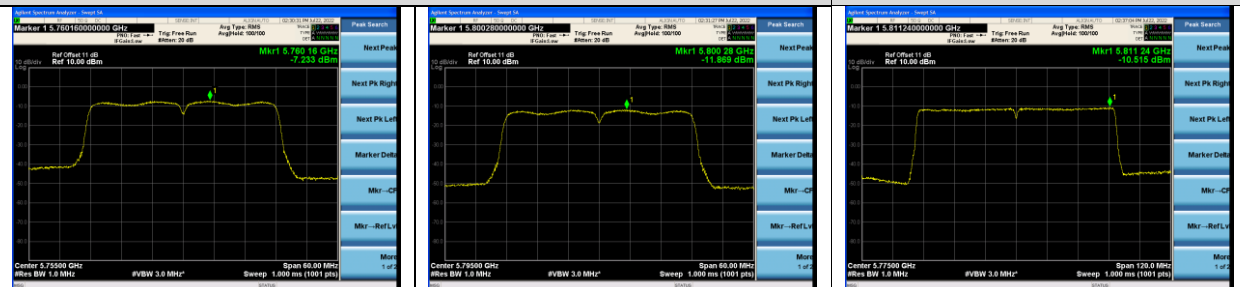
IEEE 802.11n HT40



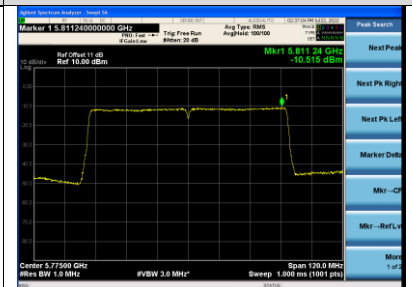
IEEE 802.11ac VHT20



IEEE 802.11ac VHT40

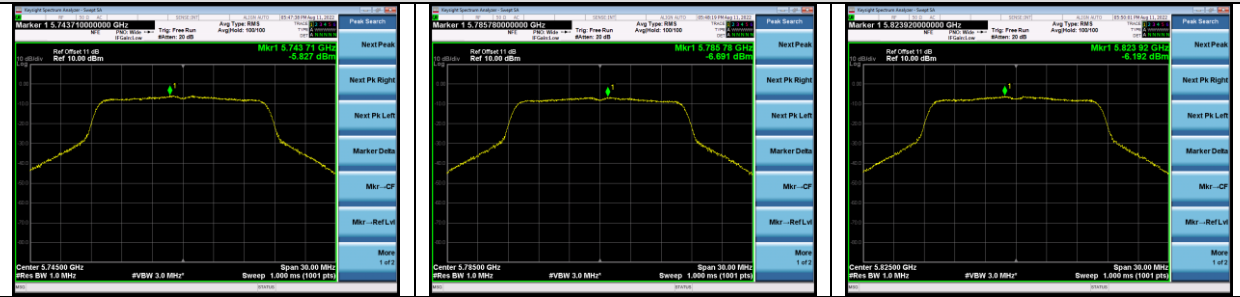


IEEE 802.11ac VHT80

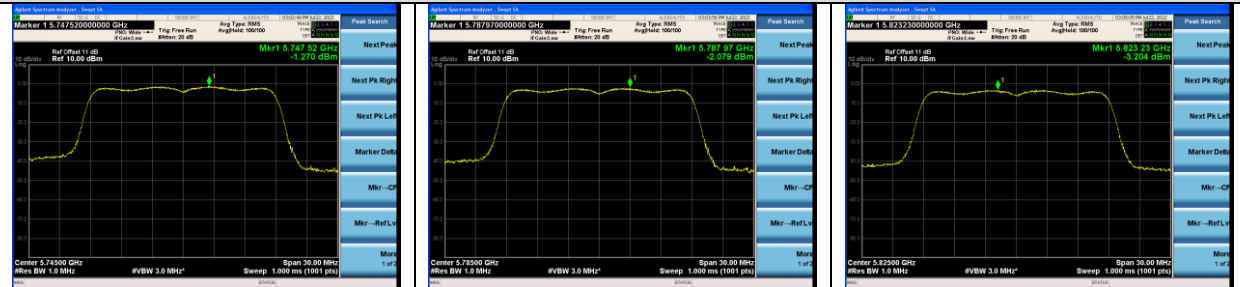


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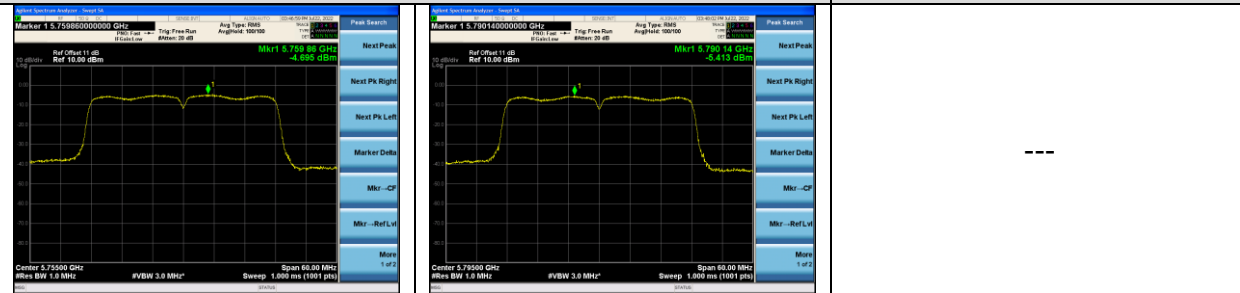
IEEE 802.11a



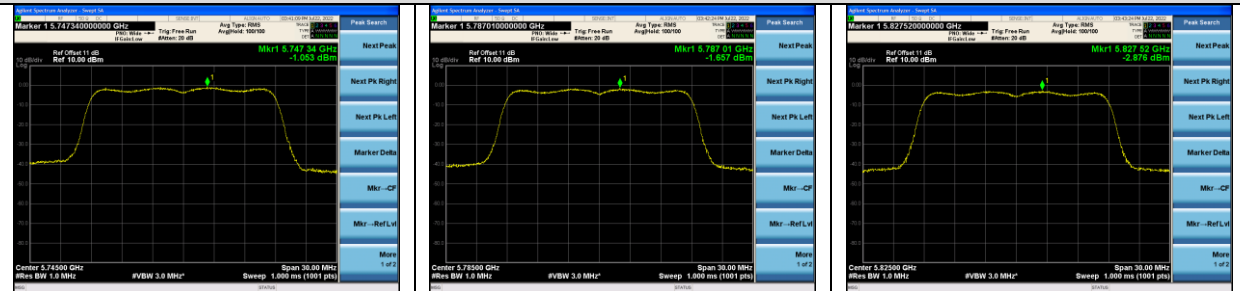
IEEE 802.11n HT20



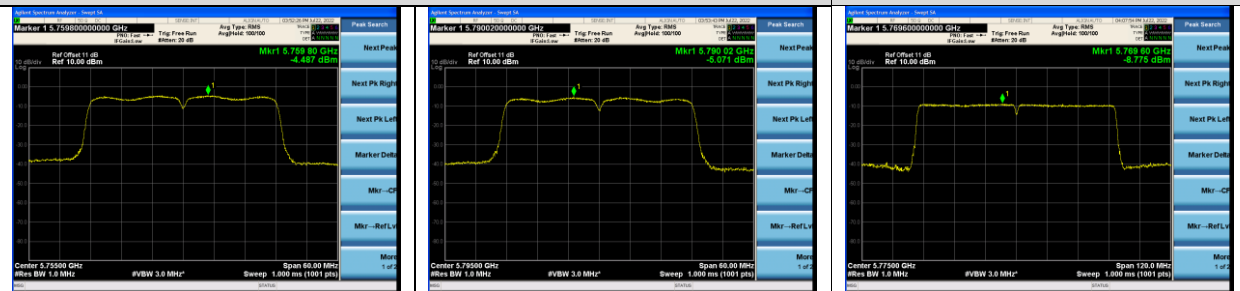
IEEE 802.11n HT40



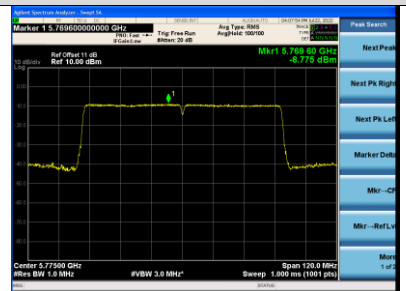
IEEE 802.11ac VHT20



IEEE 802.11ac VHT40



IEEE 802.11ac VHT80



9. FREQUENCY STABILITY MEASUREMENT

9.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	PXA Signal Analyzer	Agilent	N9030A	MY51380221	Apr.06,22	1 Year
2.	RF Cable	eastsheep	141-SMA-JJ-1000	NO.1	Jul.01,22	1 Year
3.	Attenuator	Agilent	8491B	MY39269201	Oct.09,21	1 Year

9.2. Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

9.3. Test Procedure

Use the test method described in ANSI C63.10 clause 6.8:

1. The transmitter output (antenna port) was connected to the spectrum analyzer.
EUT have transmitted absence of modulation signal and fixed channelise. Set the spectrum analyzer span to view the entire absence of modulation emissions bandwidth. Set RBW = 10 kHz, VBW = 10 kHz with peak detector and maxhold settings. f_c is declaring of channel frequency. Then the frequency error formula is $(f_c - f)/f \times 10^{-6}$ ppm. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.
2. Extreme temperature is -40 °C~85 °C.

9.4.Test Result

EUT: Truck Infotainment Unit		
M/N: Service Entertainment Module 2.5		
Test date: 2022-07-25	Pressure: 102.1 ±1.0 kpa	Humidity: 53.2 ±3.0%
Tested by: Xinyao	Test site: RF site	Temperature: 22.3 ±0.6℃

Frequency Stability vs.Voltage:

Test Voltage	Temperature	CH	Reading (MHz)	Target Frequency (MHz)	Result (ppm)
DC 10.8V	25℃	CH36	5179.9820	5180	-3.4749
		CH38	5189.9845	5190	-2.9865
		CH40	5199.9825	5200	-3.3654
		CH42	5209.9810	5210	-3.6468
		CH44	5229.9810	5230	-3.6329
		CH48	5239.9820	5240	-3.4351
		CH149	5744.9810	5745	-3.3072
		CH153	5754.9815	5755	-3.2146
		CH155	5774.9810	5775	-3.2900
		CH157	5784.9815	5785	-3.1979
		CH161	5794.9830	5795	-2.9336
		CH165	5824.9805	5825	-3.3476
DC 12V	25℃	CH36	5179.9835	5180	-3.1853
		CH38	5189.9860	5190	-2.6975
		CH40	5199.9840	5200	-3.0769
		CH42	5209.9825	5210	-3.3589
		CH44	5229.9825	5230	-3.3461
		CH48	5239.9835	5240	-3.1489
		CH149	5744.9825	5745	-3.0461
		CH153	5754.9830	5755	-2.9540
		CH155	5774.9825	5775	-3.0303
		CH157	5784.9830	5785	-2.9386
		CH161	5794.9845	5795	-2.6747
		CH165	5824.9820	5825	-3.0901

DC 13.2V	25℃	CH36	5179.9850	5180	-2.8958
		CH38	5189.9875	5190	-2.4085
		CH40	5199.9855	5200	-2.7885
		CH42	5209.9840	5210	-3.0710
		CH44	5229.9840	5230	-3.0593
		CH48	5239.9850	5240	-2.8626
		CH149	5744.9840	5745	-2.7850
		CH153	5754.9845	5755	-2.6933
		CH155	5774.9840	5775	-2.7706
		CH157	5784.9845	5785	-2.6793
		CH161	5794.9860	5795	-2.4159
		CH165	5824.9835	5825	-2.8326

Frequency Stability vs. Temperature:

Test Voltage	Temperature	CH	Reading (MHz)	Target Frequency (MHz)	Result (ppm)
DC 12V	-40℃	CH36	5179.9815	5180	-3.5714
		CH38	5189.9840	5190	-3.0829
		CH40	5199.9820	5200	-3.4615
		CH42	5209.9805	5210	-3.7428
		CH44	5229.9805	5230	-3.7285
		CH48	5239.9815	5240	-3.5305
		CH149	5744.9805	5745	-3.3943
		CH153	5754.9810	5755	-3.3015
		CH155	5774.9805	5775	-3.3766
		CH157	5784.9810	5785	-3.2844
		CH161	5794.9825	5795	-3.0198
		CH165	5824.9800	5825	-3.4335
DC 12V	-30℃	CH36	5179.9825	5180	-3.3784
		CH38	5189.9850	5190	-2.8902
		CH40	5199.9830	5200	-3.2692
		CH42	5209.9815	5210	-3.5509
		CH44	5229.9815	5230	-3.5373
		CH48	5239.9825	5240	-3.3397
		CH149	5744.9815	5745	-3.2202
		CH153	5754.9820	5755	-3.1277
		CH155	5774.9815	5775	-3.2035
		CH157	5784.9820	5785	-3.1115
		CH161	5794.9835	5795	-2.8473
		CH165	5824.9810	5825	-3.2618

DC 12V	-20℃	CH36	5179.9830	5180	-3.2819
		CH38	5189.9855	5190	-2.7938
		CH40	5199.9835	5200	-3.1731
		CH42	5209.9820	5210	-3.4549
		CH44	5229.9820	5230	-3.4417
		CH48	5239.9830	5240	-3.2443
		CH149	5744.9820	5745	-3.1332
		CH153	5754.9825	5755	-3.0408
		CH155	5774.9820	5775	-3.1169
		CH157	5784.9825	5785	-3.0251
		CH161	5794.9840	5795	-2.7610
		CH165	5824.9815	5825	-3.1760
DC 12V	-10℃	CH36	5179.9835	5180	-3.1853
		CH38	5189.9860	5190	-2.6975
		CH40	5199.9840	5200	-3.0769
		CH42	5209.9825	5210	-3.3589
		CH44	5229.9825	5230	-3.3461
		CH48	5239.9835	5240	-3.1489
		CH149	5744.9825	5745	-3.0461
		CH153	5754.9830	5755	-2.9540
		CH155	5774.9825	5775	-3.0303
		CH157	5784.9830	5785	-2.9386
		CH161	5794.9845	5795	-2.6747
		CH165	5824.9820	5825	-3.0901
DC 12V	0℃	CH36	5179.9840	5180	-3.0888
		CH38	5189.9865	5190	-2.6012
		CH40	5199.9845	5200	-2.9808
		CH42	5209.9830	5210	-3.2630
		CH44	5229.9830	5230	-3.2505
		CH48	5239.9840	5240	-3.0534
		CH149	5744.9830	5745	-2.9591
		CH153	5754.9835	5755	-2.8671
		CH155	5774.9830	5775	-2.9437
		CH157	5784.9835	5785	-2.8522
		CH161	5794.9850	5795	-2.5884
		CH165	5824.9825	5825	-3.0043

DC 12V	10℃	CH36	5179.9855	5180	-2.7992
		CH38	5189.9880	5190	-2.3121
		CH40	5199.9860	5200	-2.6923
		CH42	5209.9845	5210	-2.9750
		CH44	5229.9845	5230	-2.9637
		CH48	5239.9855	5240	-2.7672
		CH149	5744.9845	5745	-2.6980
		CH153	5754.9850	5755	-2.6064
		CH155	5774.9845	5775	-2.6840
		CH157	5784.9850	5785	-2.5929
		CH161	5794.9865	5795	-2.3296
		CH165	5824.9840	5825	-2.7468
DC 12V	20℃	CH36	5179.9750	5180	-4.8263
		CH38	5189.9745	5190	-4.9133
		CH40	5199.9875	5200	-2.4038
		CH42	5209.9840	5210	-3.0710
		CH44	5229.9780	5230	-4.2065
		CH48	5239.9995	5240	-0.0954
		CH149	5744.9785	5745	-3.7424
		CH153	5754.9830	5755	-2.9540
		CH155	5774.9705	5775	-5.1082
		CH157	5784.9740	5785	-4.4944
		CH161	5794.9765	5795	-4.0552
		CH165	5824.9905	5825	-1.6309
DC 12V	30℃	CH36	5179.9665	5180	-6.4672
		CH38	5189.9665	5190	-6.4547
		CH40	5199.9960	5200	-0.7692
		CH42	5209.9835	5210	-3.1670
		CH44	5229.9730	5230	-5.1625
		CH48	5240.0105	5240	2.0038
		CH149	5744.9665	5745	-5.8312
		CH153	5754.9770	5755	-3.9965
		CH155	5774.9680	5775	-5.5411
		CH157	5784.9615	5785	-6.6551
		CH161	5794.9655	5795	-5.9534
		CH165	5824.9915	5825	-1.4592

DC 12V	40℃	CH36	5179.9505	5180	-9.5560
		CH38	5189.9795	5190	-3.9499
		CH40	5199.9820	5200	-3.4615
		CH42	5209.9970	5210	-0.5758
		CH44	5229.9605	5230	-7.5526
		CH48	5240.0205	5240	3.9122
		CH149	5744.9810	5745	-3.3072
		CH153	5754.9635	5755	-6.3423
		CH155	5774.9675	5775	-5.6277
		CH157	5784.9485	5785	-8.9023
		CH161	5794.9600	5795	-6.9025
		CH165	5824.9795	5825	-3.5193
DC 12V	50℃	CH36	5179.9905	5180	-1.8340
		CH38	5189.9925	5190	-1.4451
		CH40	5199.976	5200	-4.6154
		CH42	5210.0085	5210	1.6315
		CH44	5229.986	5230	-2.6769
		CH48	5240.009	5240	1.7176
		CH149	5744.9915	5745	-1.4795
		CH153	5754.9635	5755	-6.3423
		CH155	5774.9585	5775	-7.1861
		CH157	5785.0005	5785	0.0864
		CH161	5794.9625	5795	-6.4711
		CH165	5824.988	5825	-2.0601
DC 12V	60℃	CH36	5179.9865	5180	-2.6062
		CH38	5189.999	5190	-0.1927
		CH40	5199.98	5200	-3.8462
		CH42	5209.998	5210	-0.3839
		CH44	5229.9805	5230	-3.7285
		CH48	5240.0005	5240	0.0954
		CH149	5744.9915	5745	-1.4795
		CH153	5754.9715	5755	-4.9522
		CH155	5774.9682	5775	-5.5065
		CH157	5784.9905	5785	-1.6422
		CH161	5794.976	5795	-4.1415
		CH165	5824.9815	5825	-3.1760

DC 12V	70℃	CH36	5179.9980	5180	-0.3861
		CH38	5189.9900	5190	-1.9268
		CH40	5199.9775	5200	-4.3269
		CH42	5210.0070	5210	1.3436
		CH44	5229.9735	5230	-5.0669
		CH48	5239.9915	5240	-1.6221
		CH149	5744.9840	5745	-2.7850
		CH153	5754.9685	5755	-5.4735
		CH155	5774.9590	5775	-7.0996
		CH157	5785.0050	5785	0.8643
		CH161	5794.9645	5795	-6.1260
		CH165	5824.9655	5825	-5.9227
DC 12V	80℃	CH36	5179.9930	5180	-1.3514
		CH38	5189.9810	5190	-3.6609
		CH40	5199.9815	5200	-3.5577
		CH42	5210.0005	5210	0.0960
		CH44	5229.9530	5230	-8.9866
		CH48	5239.9855	5240	-2.7672
		CH149	5744.9835	5745	-2.8721
		CH153	5754.9815	5755	-3.2146
		CH155	5774.9730	5775	-4.6753
		CH157	5785.0095	5785	1.6422
		CH161	5794.9710	5795	-5.0043
		CH165	5824.9595	5825	-6.9528
DC 12V	85℃	CH36	5179.9800	5180	-3.8610
		CH38	5189.9755	5190	-4.7206
		CH40	5199.9775	5200	-4.3269
		CH42	5210.0155	5210	2.9750
		CH44	5229.9860	5230	-2.6769
		CH48	5239.9805	5240	-3.7214
		CH149	5744.9885	5745	-2.0017
		CH153	5754.9870	5755	-2.2589
		CH155	5774.9885	5775	-1.9913
		CH157	5785.0205	5785	3.5436
		CH161	5794.9765	5795	-4.0552
		CH165	5824.9510	5825	-8.4120

10. ANTENNA REQUIREMENT

10.1. Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.407 (a), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

10.2. Antenna Connected Construction

The antennas used for this product are Internal Chip Antenna that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is U-NII Band: 2.79dBi.

11. DEVIATION TO TEST SPECIFICATIONS

[NONE]

..... THE END