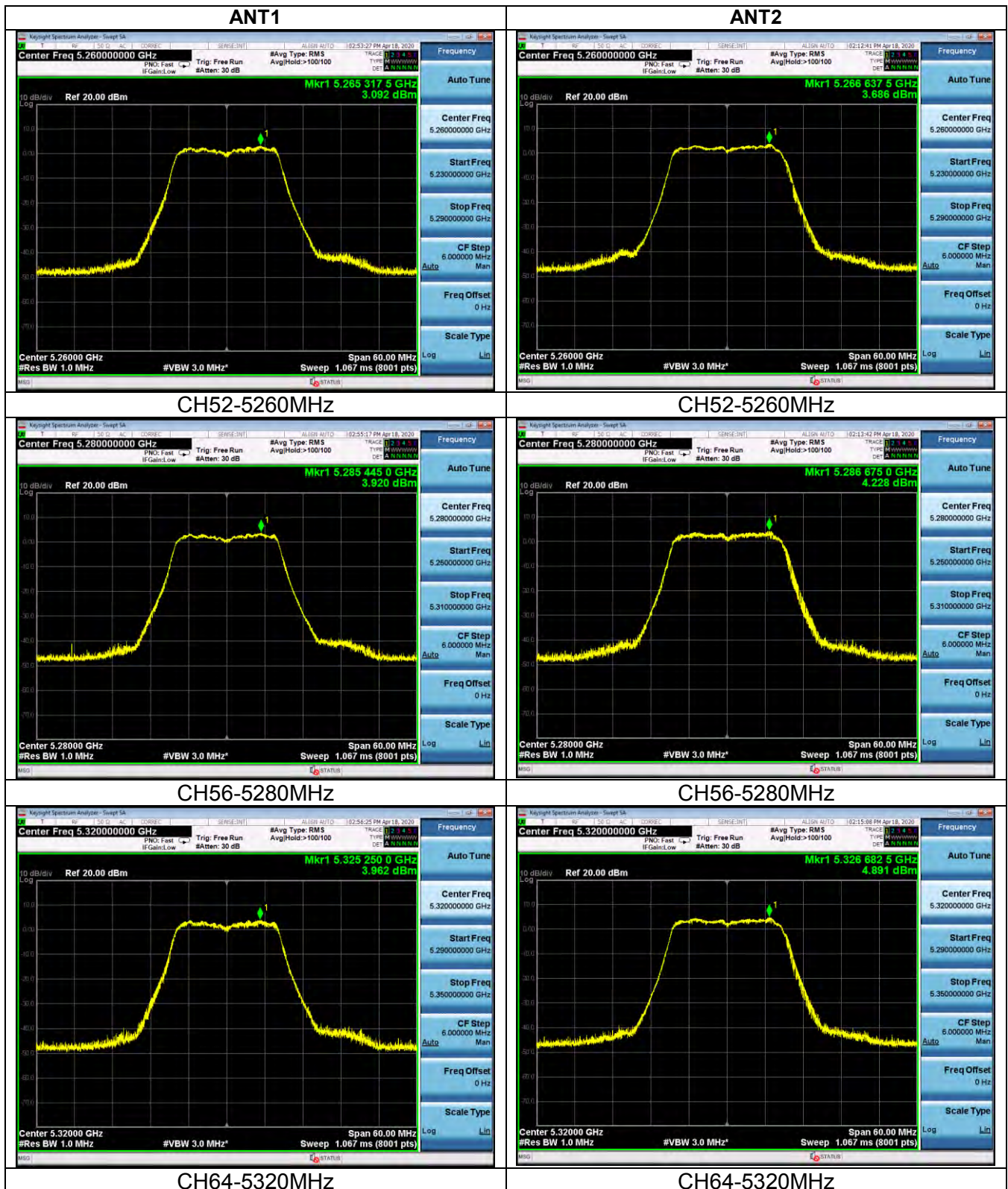


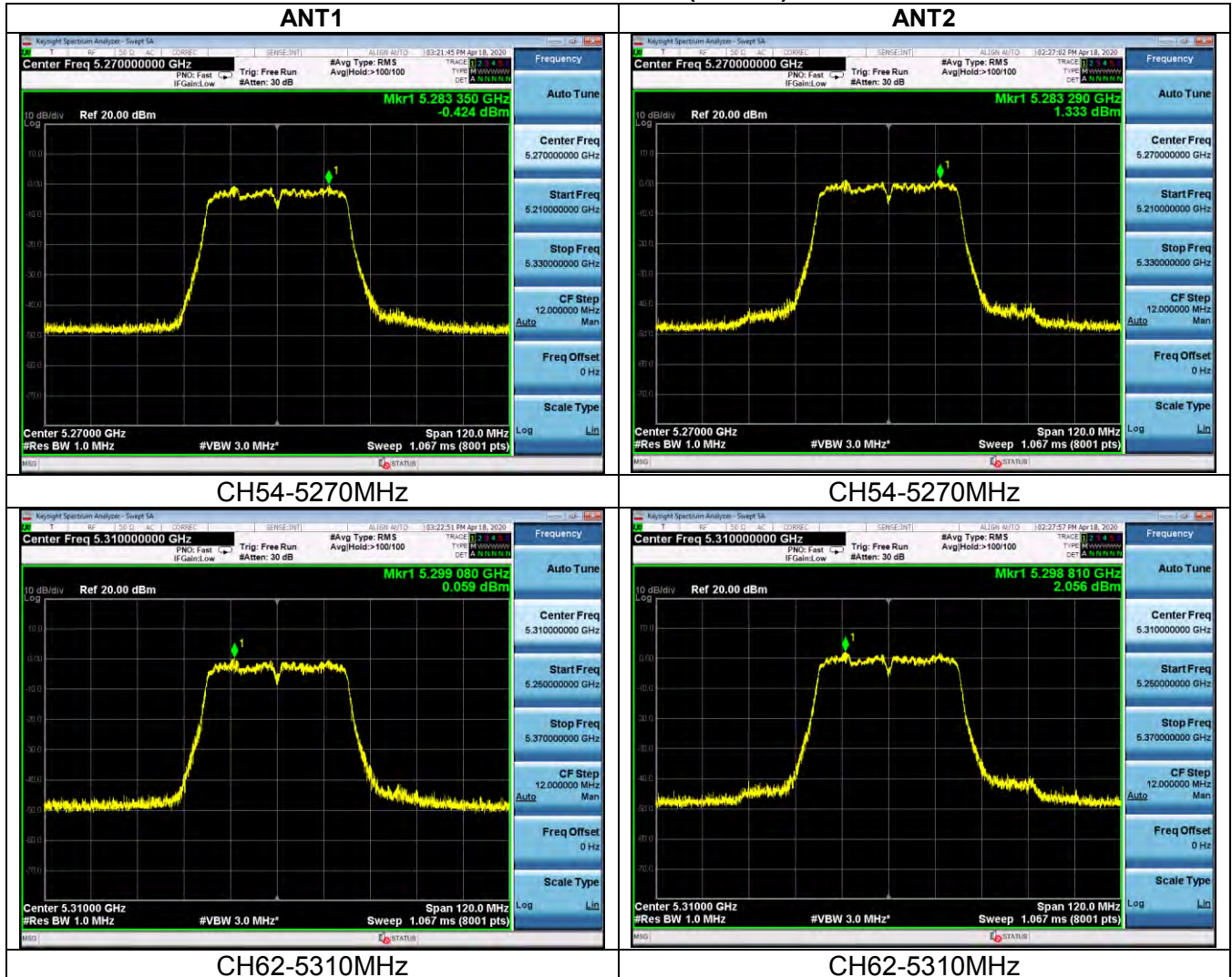


band 2A -- ac (20MHz)

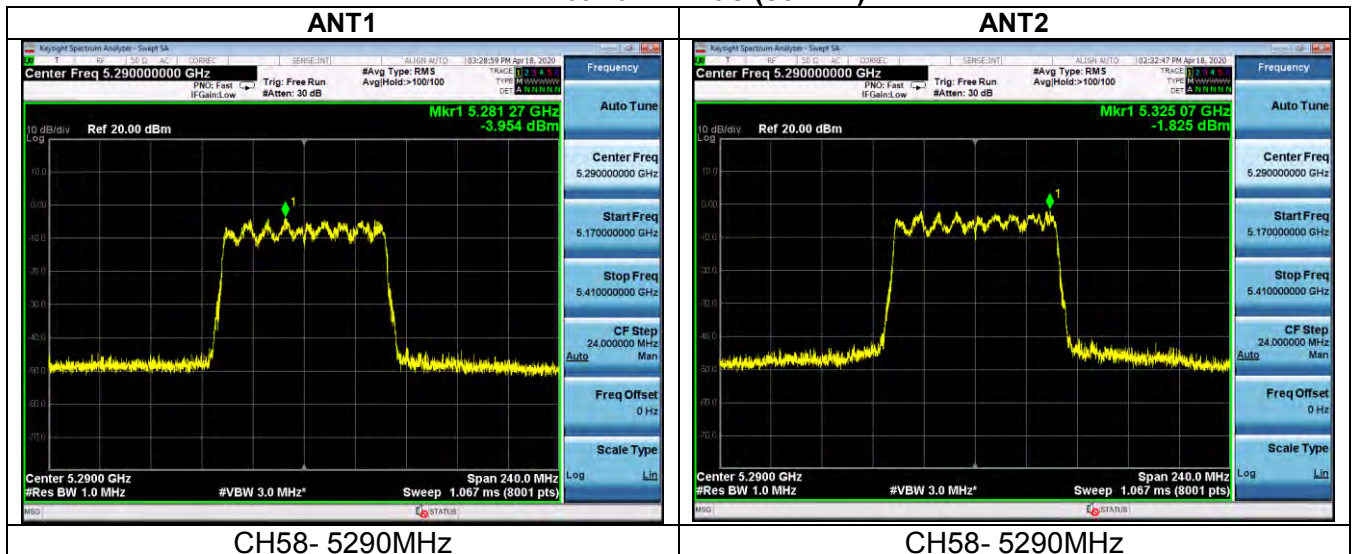




band 2A -- ac (40MHz)

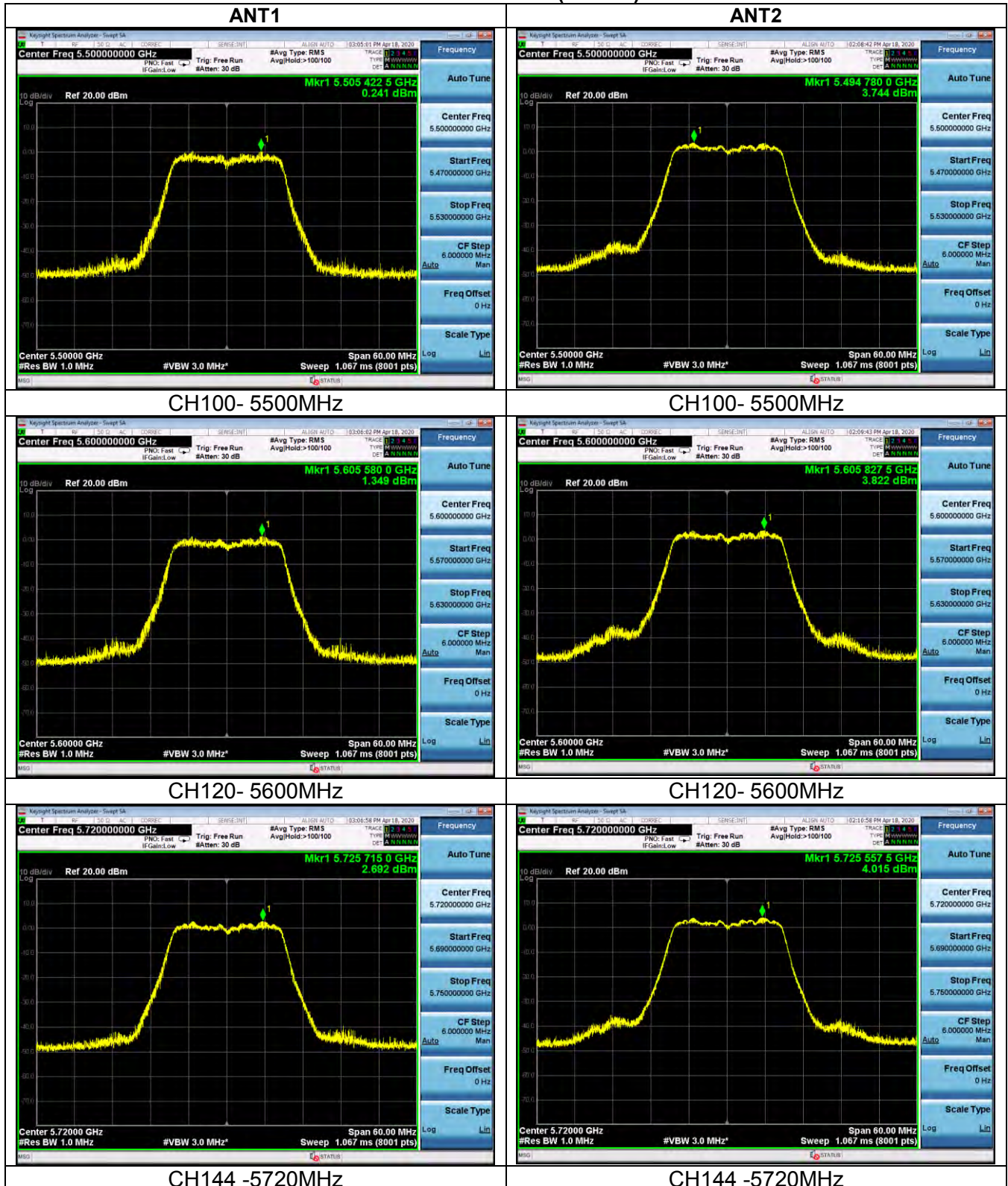


band 2A -- ac (80MHz)



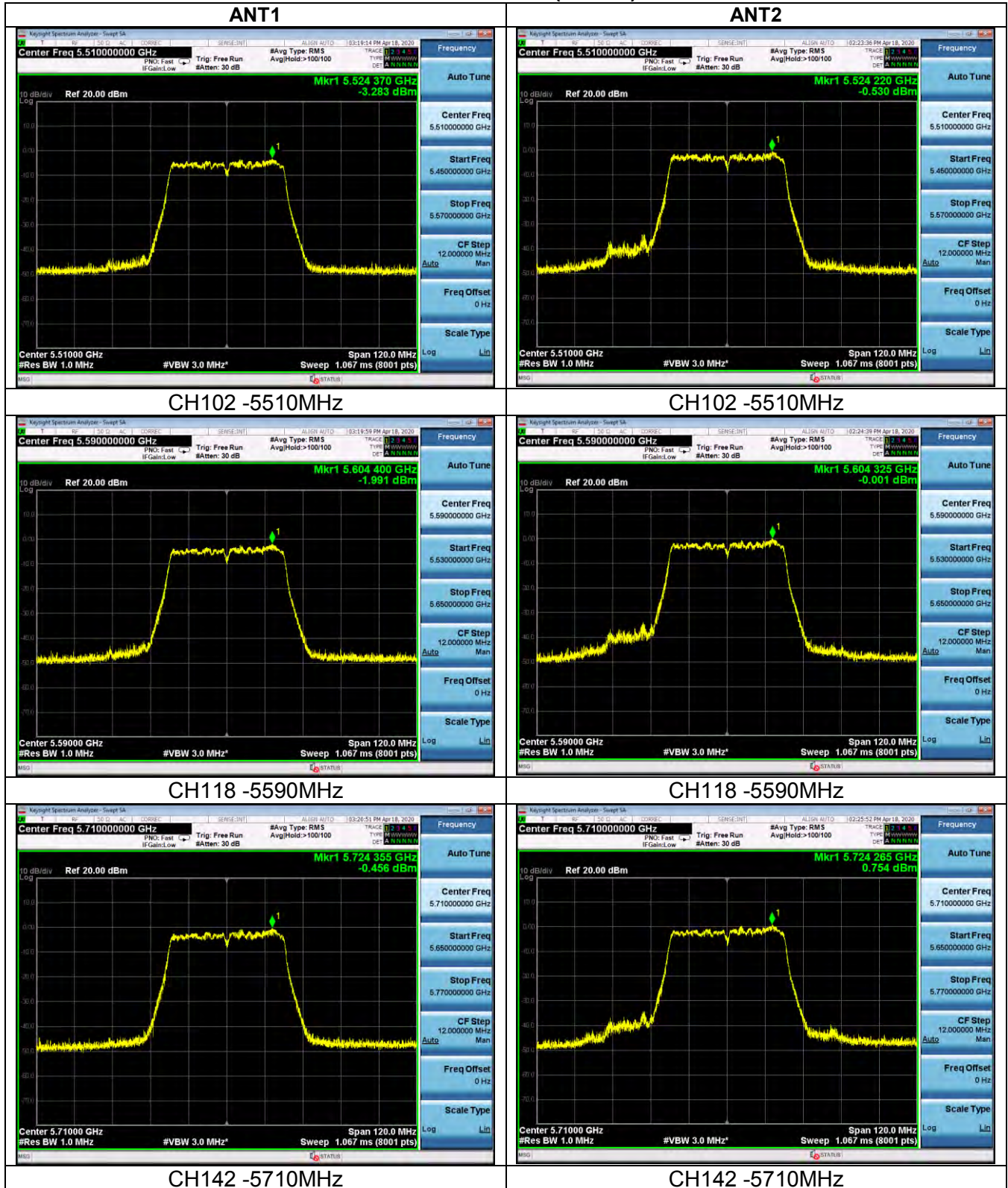


band 2C -- n (20MHz)



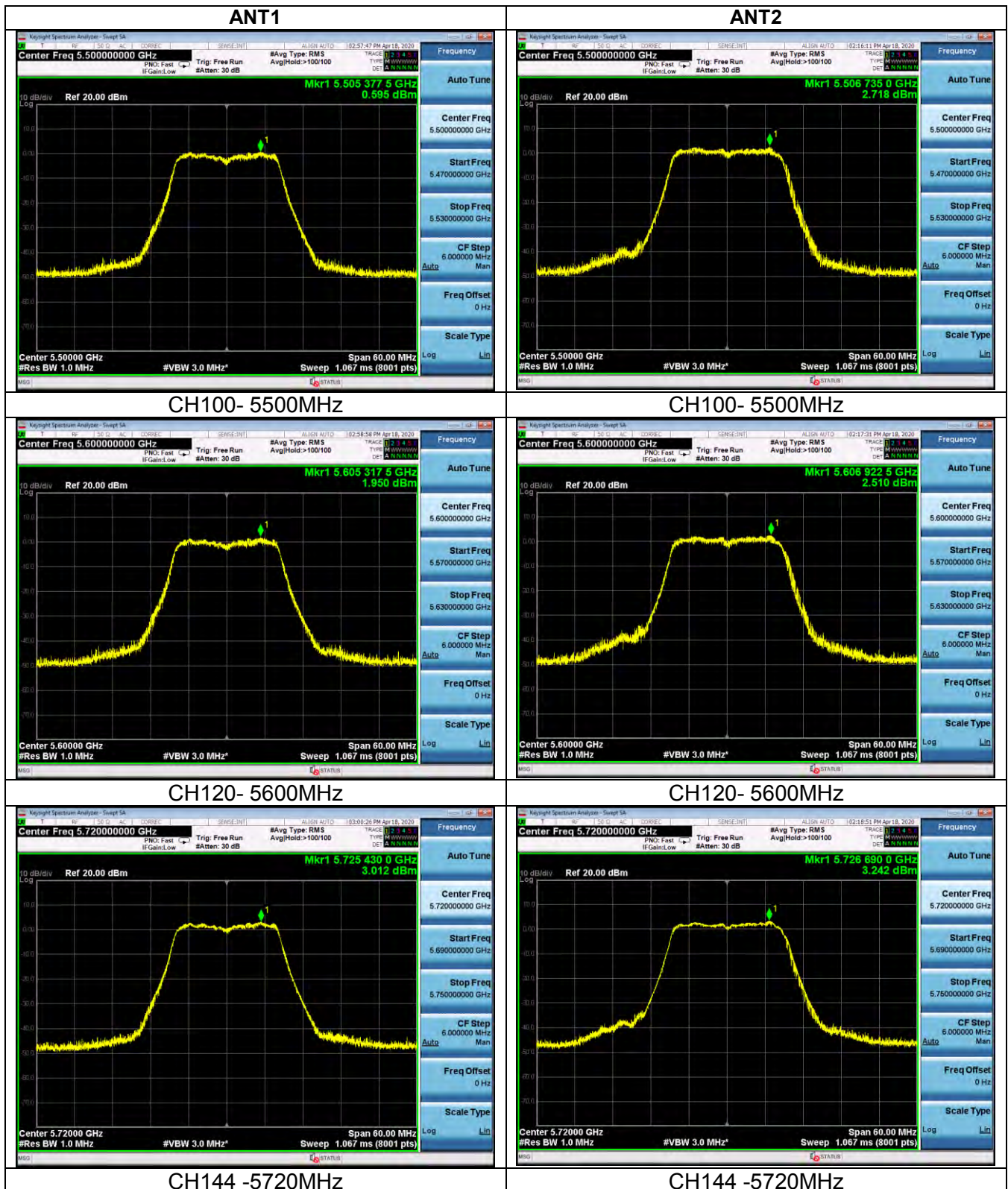


band 2C -- n (40MHz)



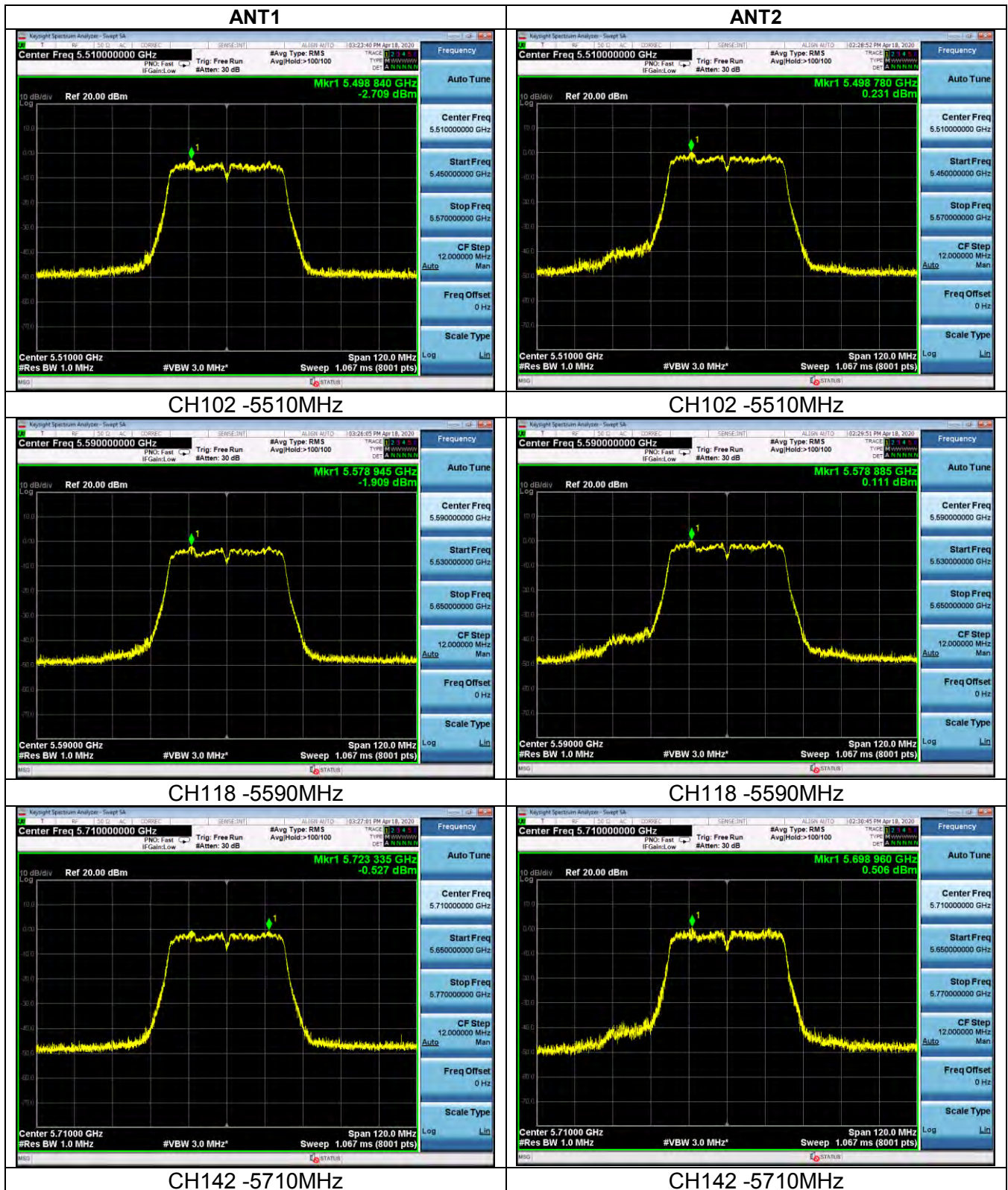


band 2C -- ac (20MHz)



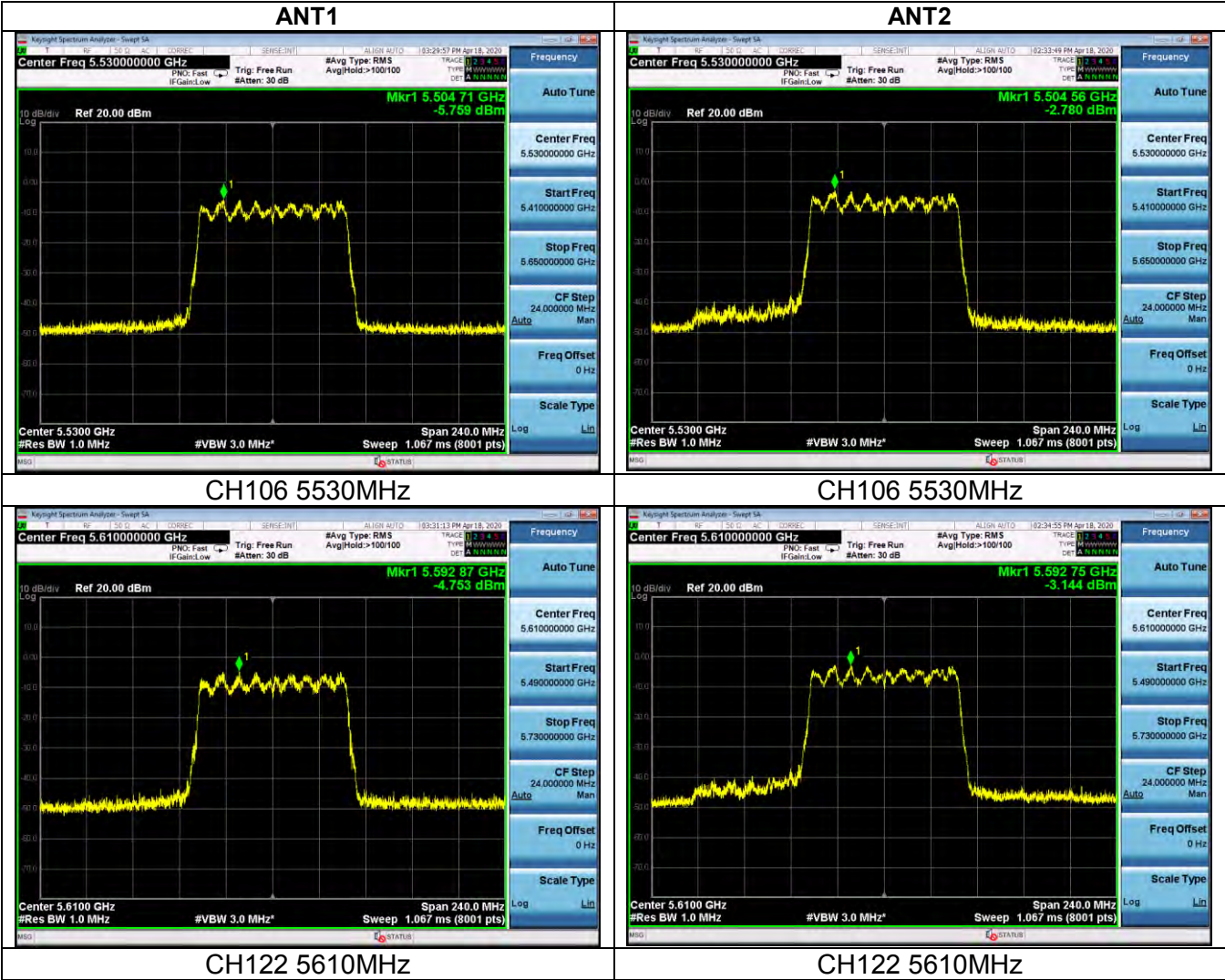


band 2C -- ac (40MHz)





band 2C -- ac (80MHz)

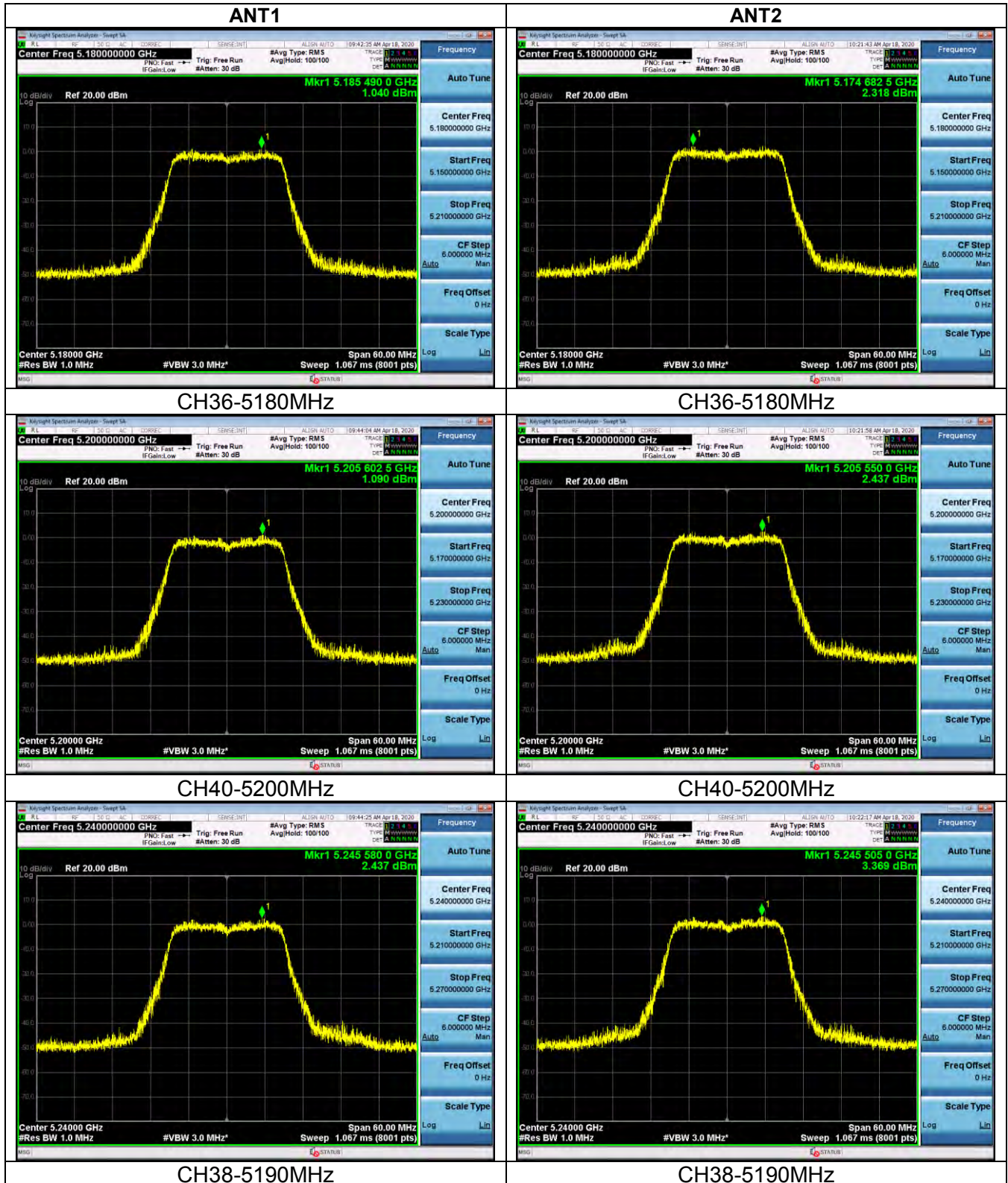


**Summed MIMO/CDD Power Spectral Density Measurements**

BAND	802.11 Mode	Channel No.	Frequency [MHz]	Measured Power Spectral Density [dBm/MHz]		MIMO/CDD Power Density [dBm/MHz]	Limit [dBm/MHz]
				ANT1	ANT2		
BAND 1	n (20MHz)	36	5180	1.040	2.318	4.736	16.99
		40	5200	1.090	2.437	4.826	16.99
		48	5240	2.437	3.369	5.938	16.99
	n (40MHz)	38	5190	-2.146	-0.494	1.768	16.99
		46	5230	-0.997	0.421	2.780	16.99
	ac (20MHz)	36	5180	-0.135	1.689	3.882	16.99
		40	5200	0.376	1.746	4.125	16.99
		48	5240	1.662	2.639	5.188	16.99
	ac(40MHz)	38	5190	-2.264	-0.404	1.775	16.99
		46	5230	-1.167	0.274	2.623	16.99
	ac(80MHz)	42	5210	-5.541	-3.558	-1.427	10.99
BAND 2A	n (20MHz)	52	5260	2.479	4.672	6.723	10.99
		56	5280	2.937	5.349	7.319	10.99
		64	5320	3.588	6.149	8.065	10.99
	n (40MHz)	54	5270	-0.702	1.677	3.659	10.99
		62	5310	-0.095	2.057	4.123	10.99
	ac (20MHz)	52	5260	1.672	3.757	5.849	10.99
		56	5280	2.237	4.259	6.375	10.99
		64	5320	2.255	4.522	6.545	10.99
	ac(40MHz)	54	5270	-0.549	1.582	3.656	10.99
		62	5310	0.235	2.064	4.255	10.99
	ac(80MHz)	58	5290	-3.974	-1.847	0.229	10.99
BAND 2C	n (20MHz)	100	5500	0.427	3.728	5.394	10.99
		120	5600	1.386	3.604	5.645	10.99
		144	5720	2.650	4.059	6.422	10.99
	n (40MHz)	102	5510	-3.356	-0.561	1.273	10.99
		118	5590	-1.941	-0.116	2.077	10.99
		142	5710	-0.512	0.764	3.183	10.99
	ac (20MHz)	100	5500	-0.634	2.281	4.074	10.99
		120	5600	0.655	2.635	4.767	10.99
		144	5720	1.976	3.255	5.673	10.99
	ac(40MHz)	102	5510	-2.770	0.232	1.996	10.99
		118	5590	-1.982	-0.066	2.091	10.99
		142	5710	-0.582	0.405	2.950	10.99
	ac(80MHz)	106	5530	-5.777	-3.233	-1.311	10.99
		122	5610	-4.631	-3.002	-0.730	10.99

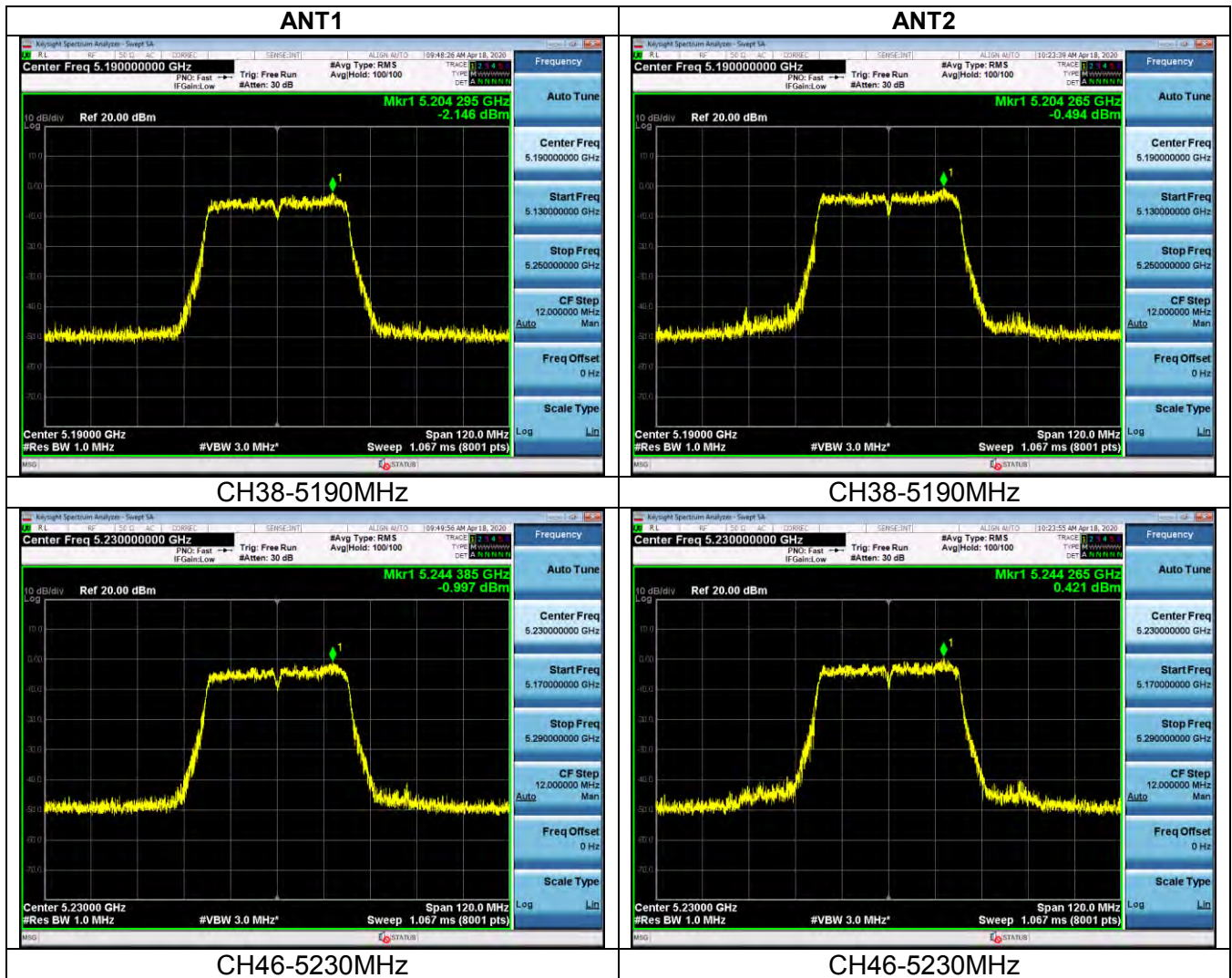


band 1 -- n (20MHz)



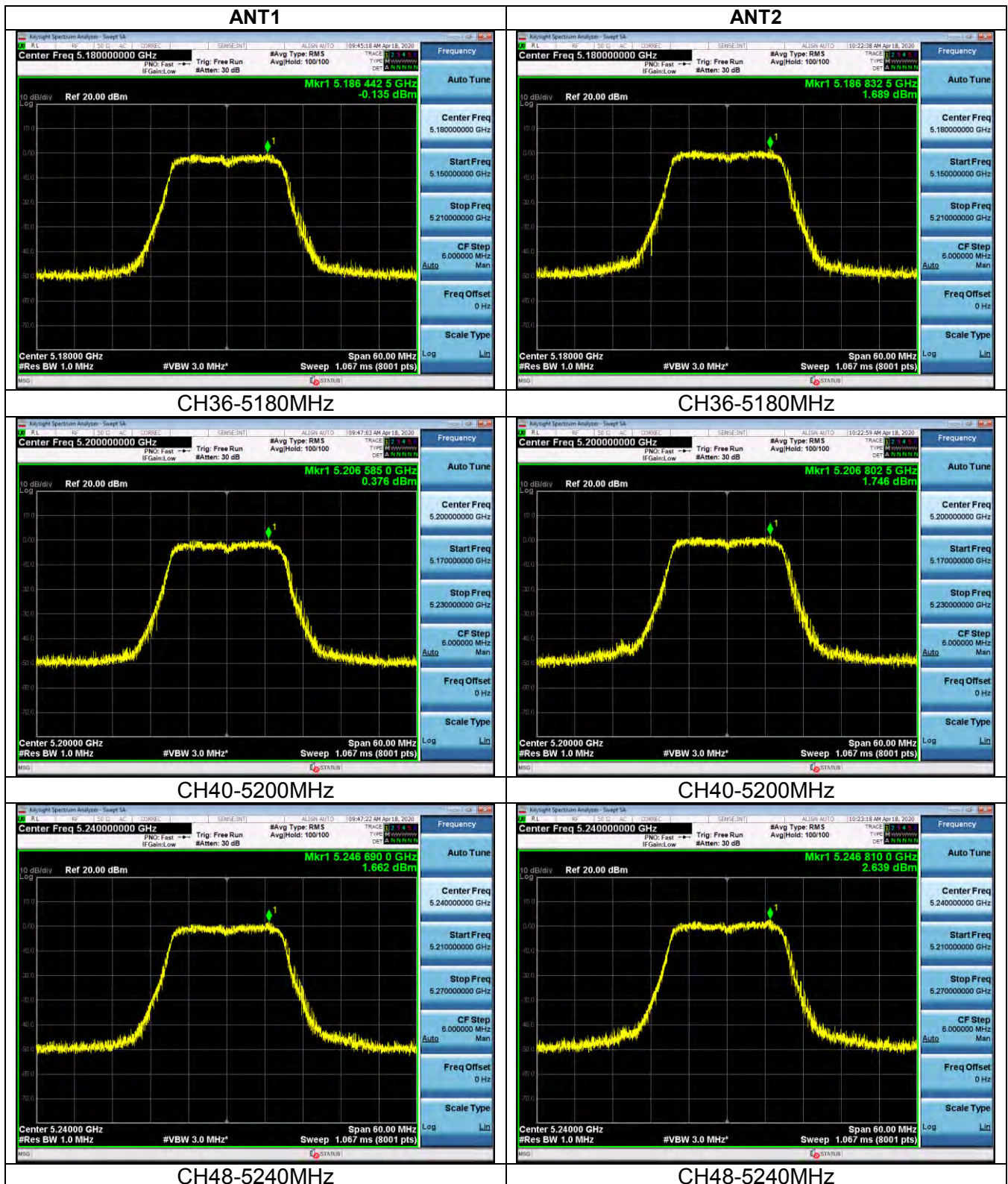


band 1 -- n (40MHz)



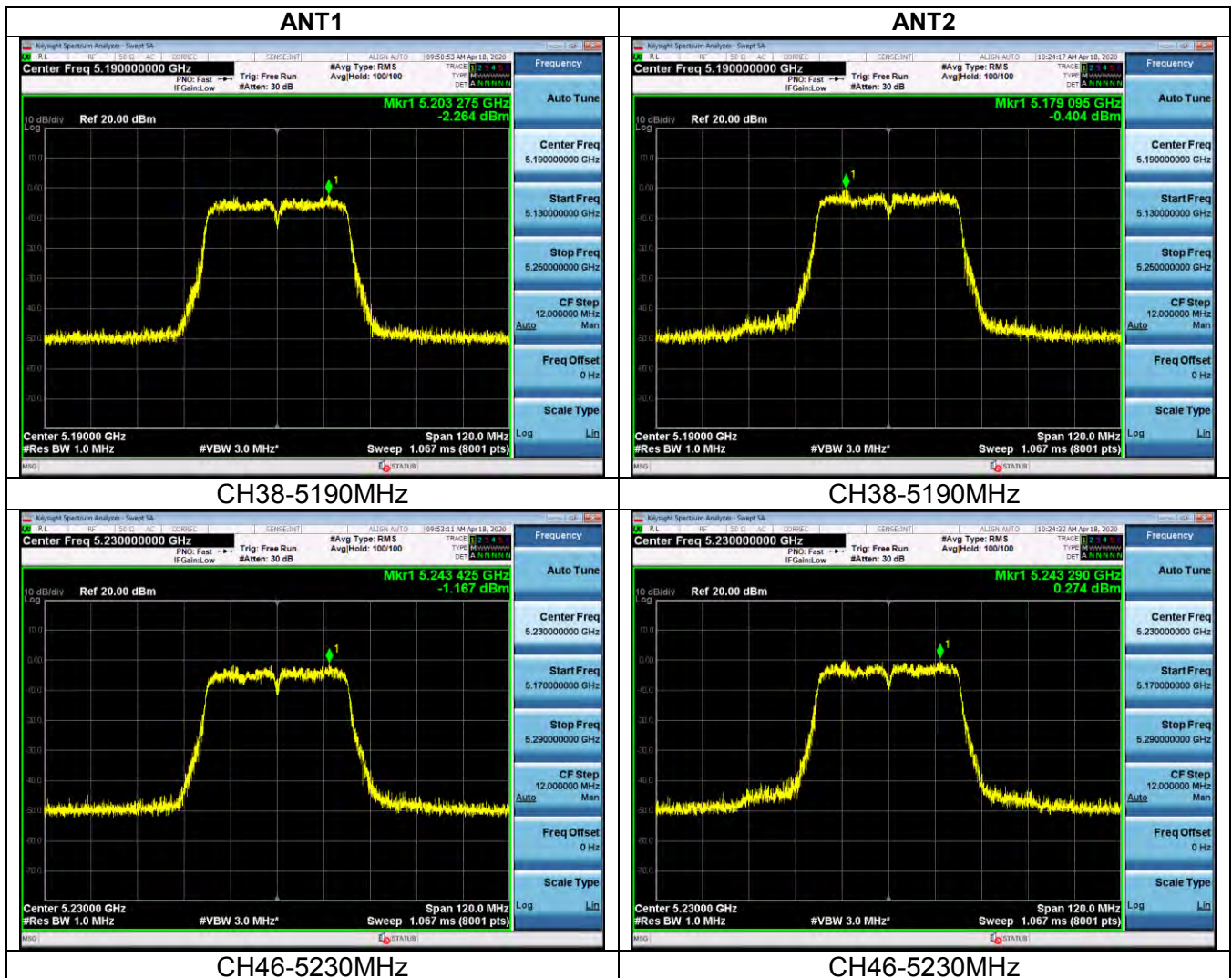


band 1 -- ac(20MHz)

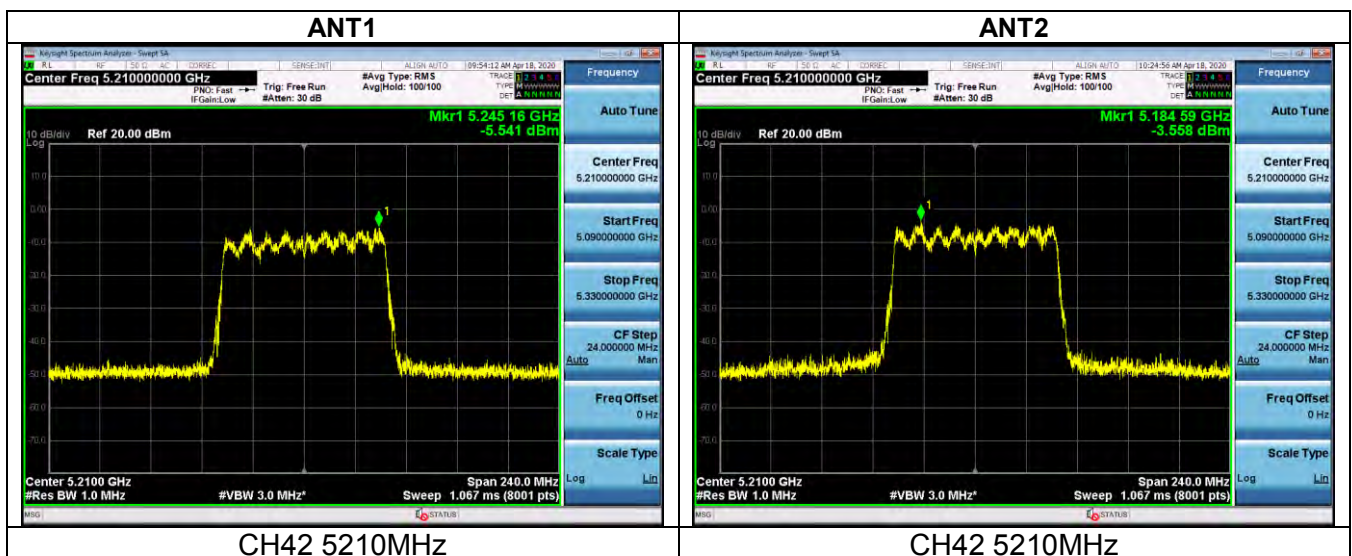




band 1 --ac (40MHz)

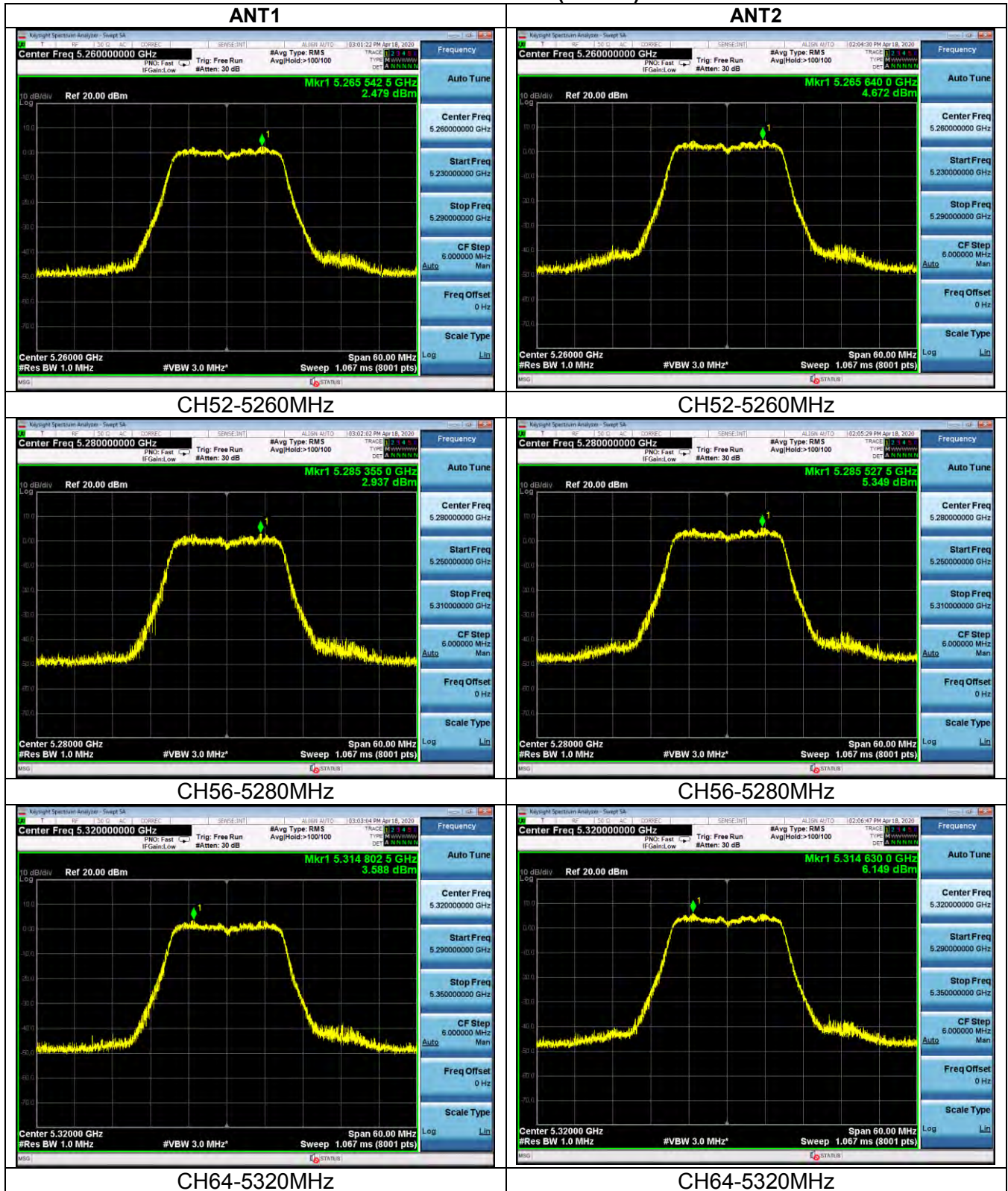


band 1 --ac (80MHz)



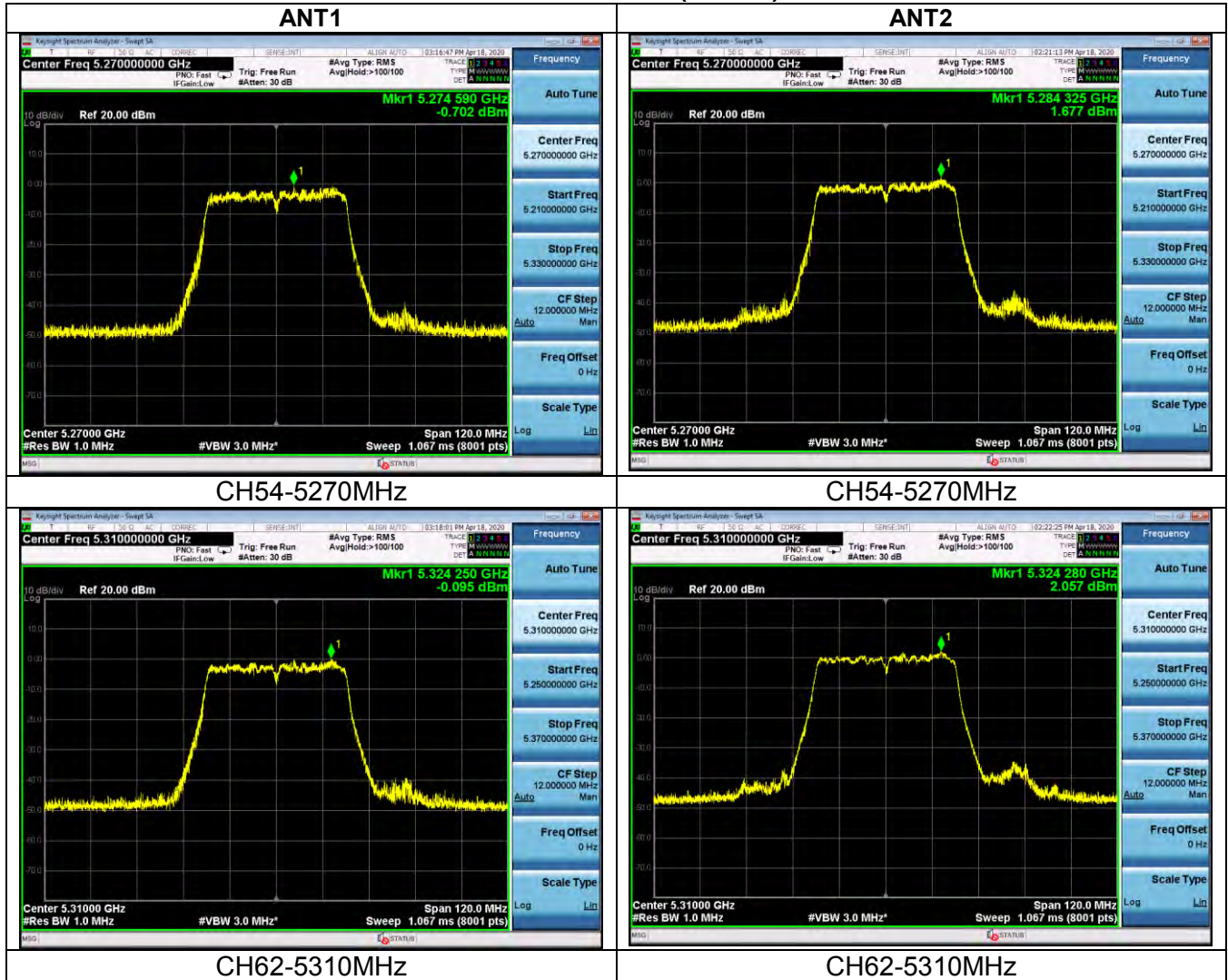


band 2A -- n (20MHz)



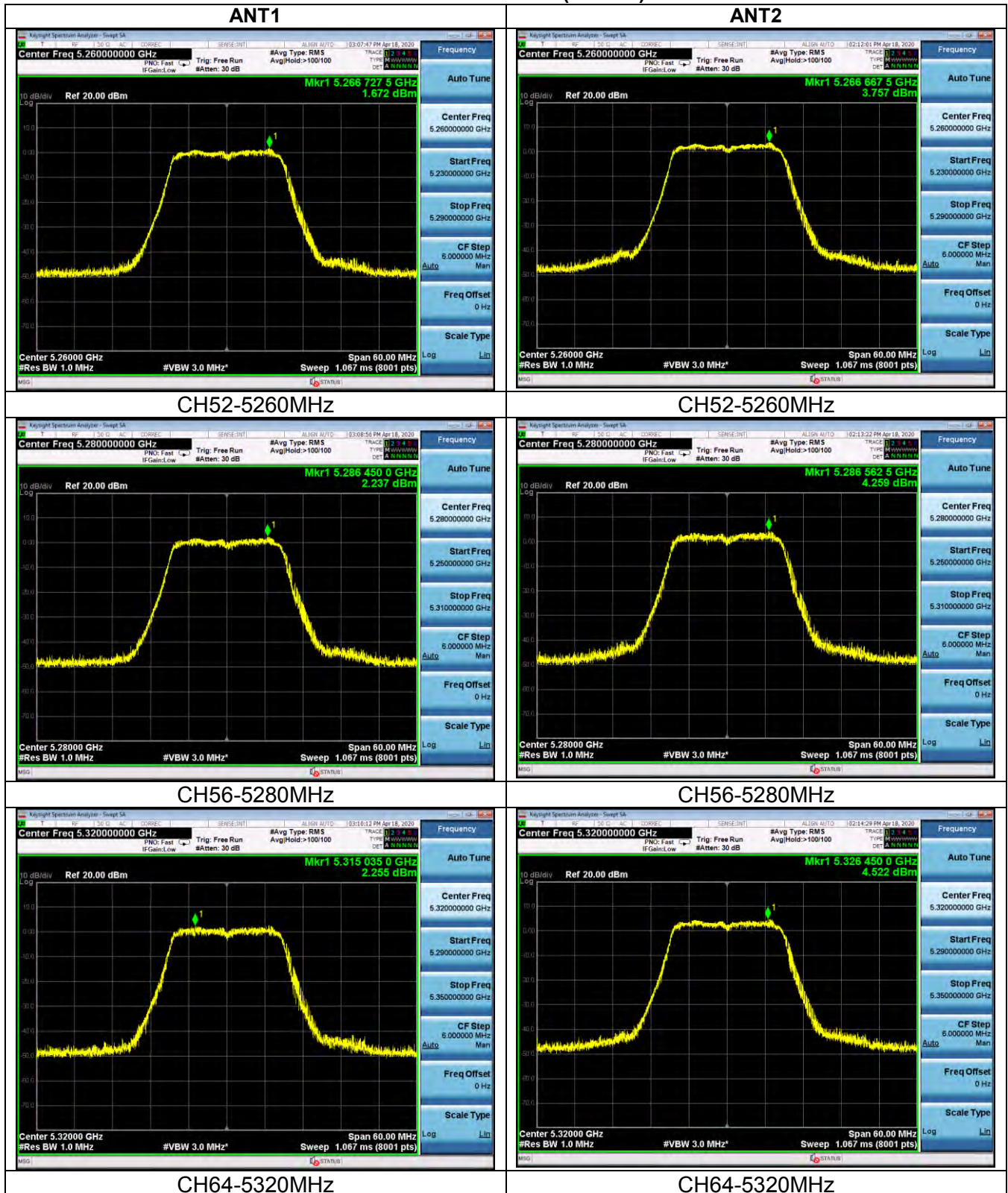


band 2A -- n (40MHz)



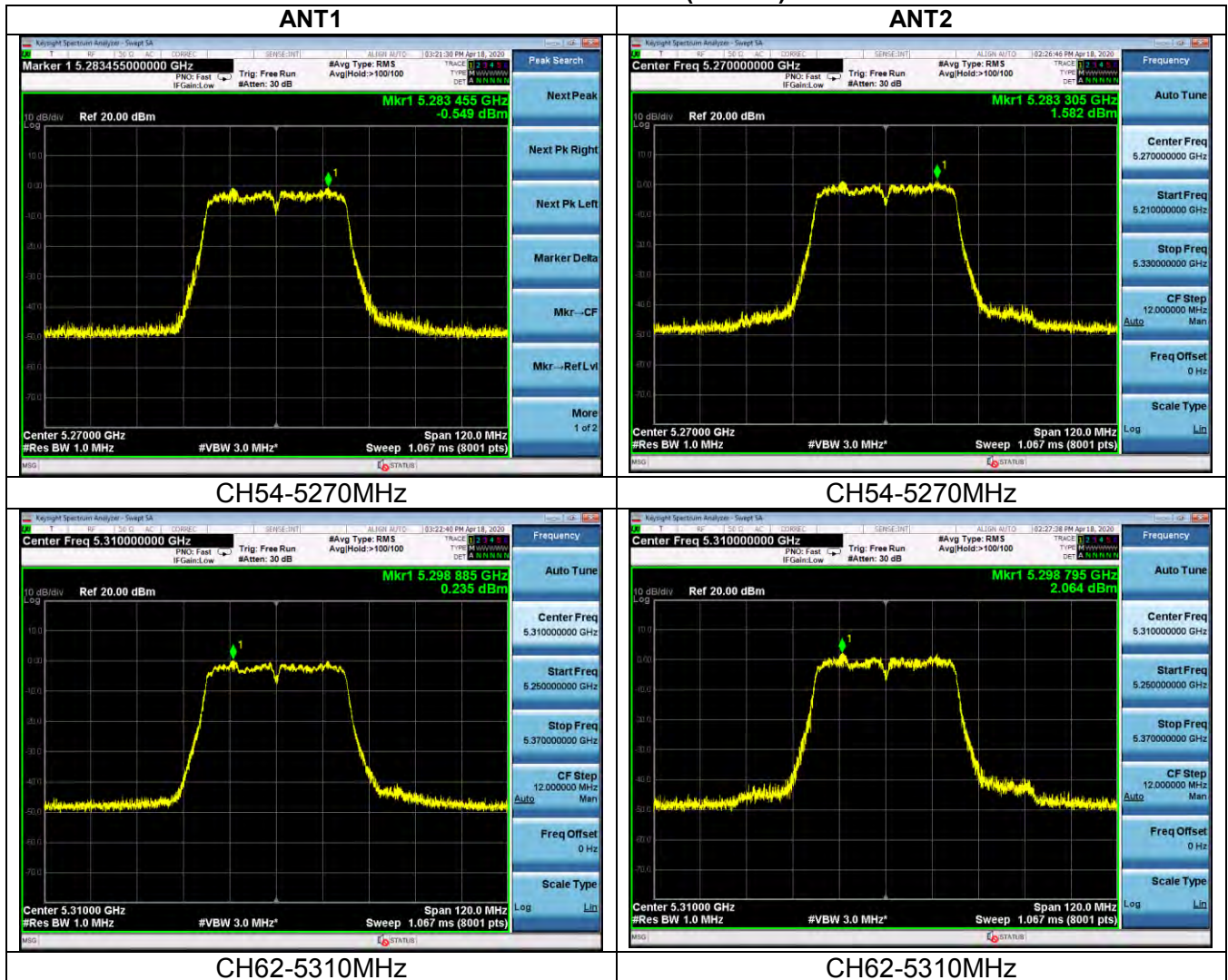


band 2A -- ac (20MHz)

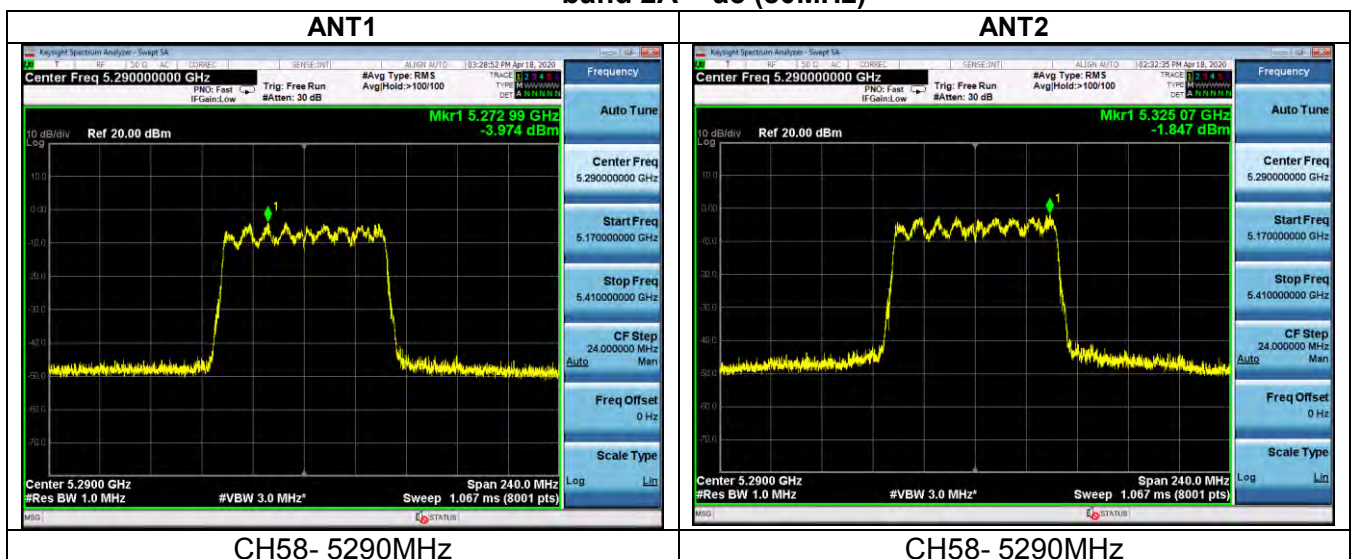




band 2A -- ac (40MHz)

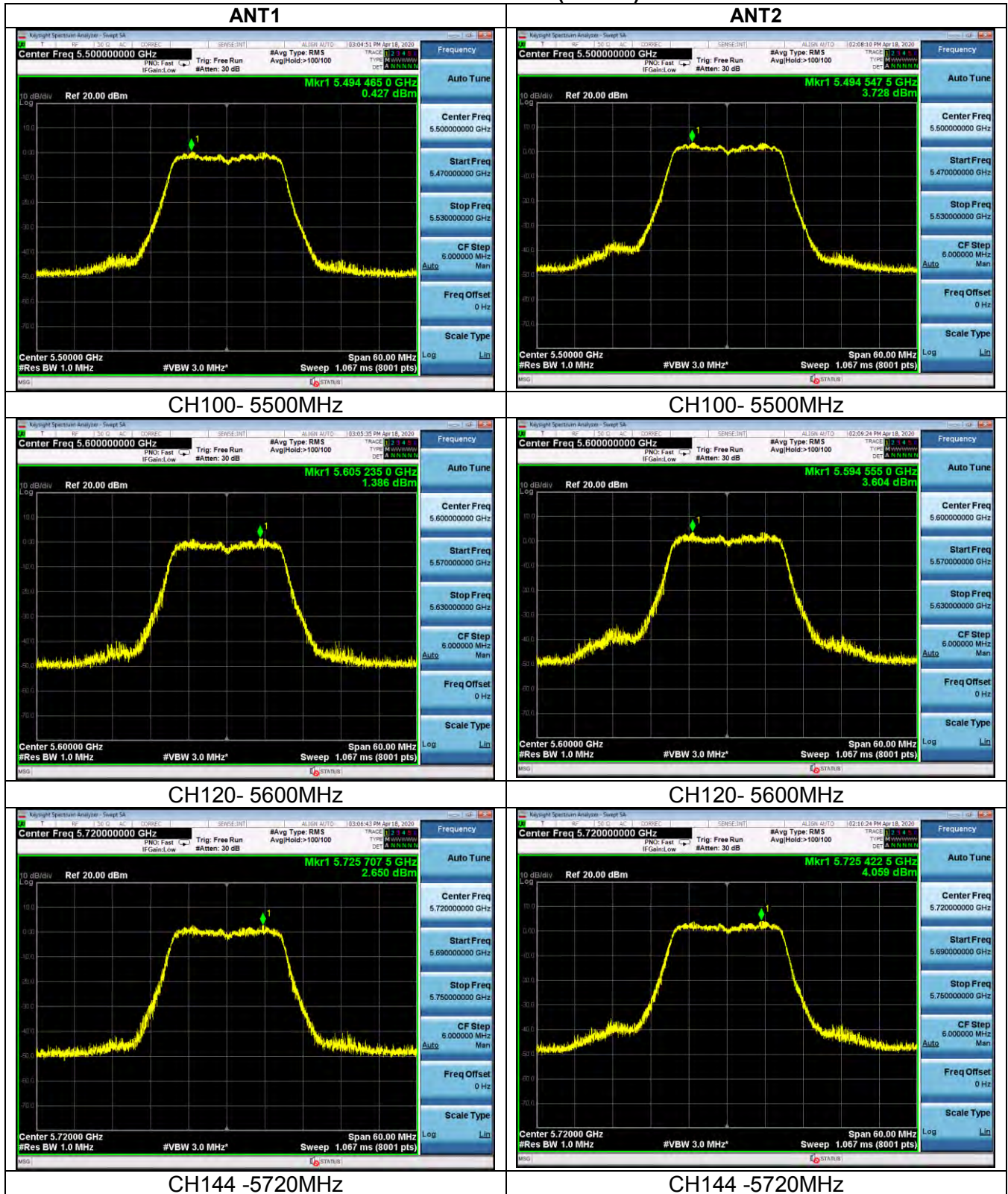


band 2A -- ac (80MHz)



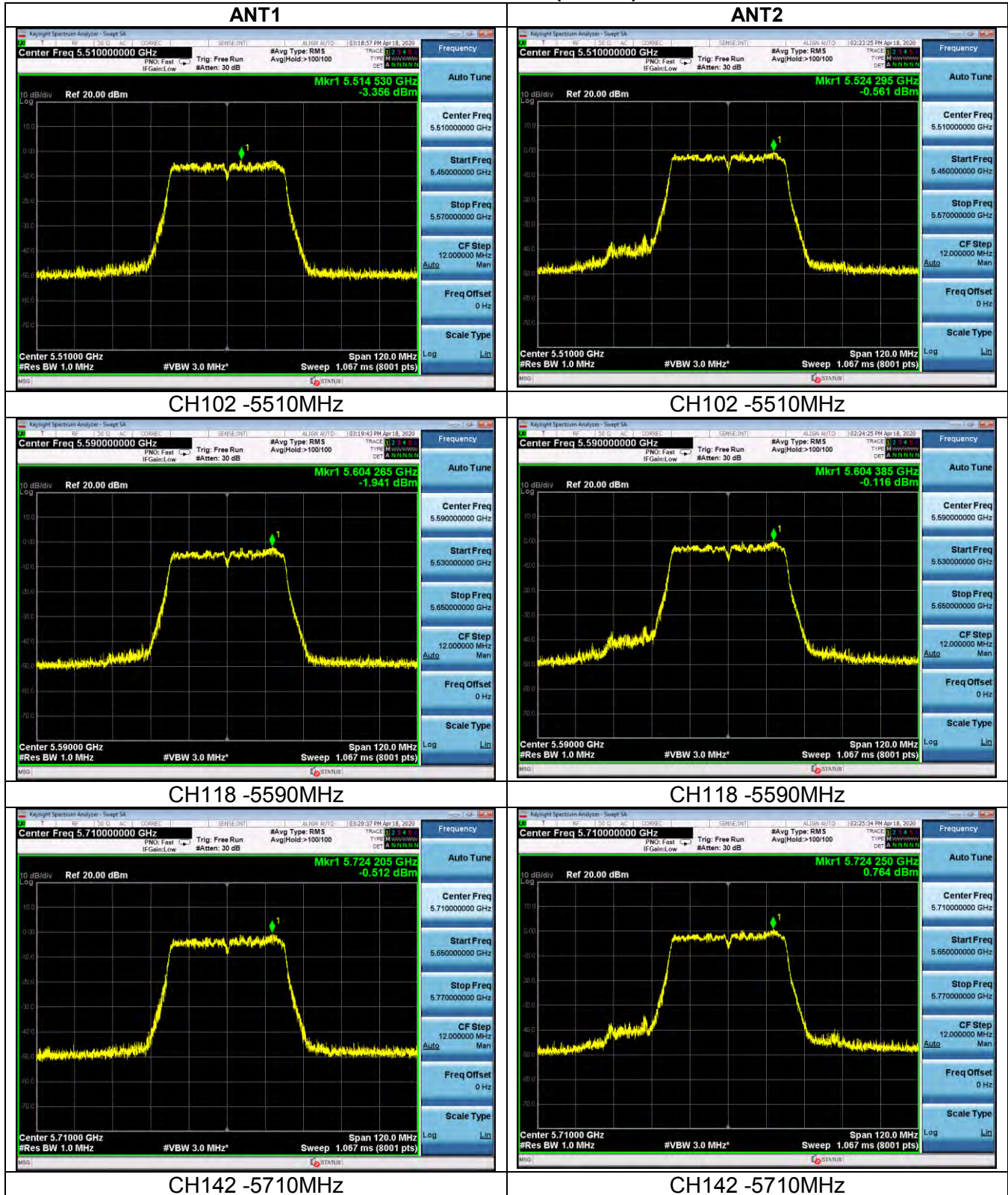


band 2C -- n (20MHz)



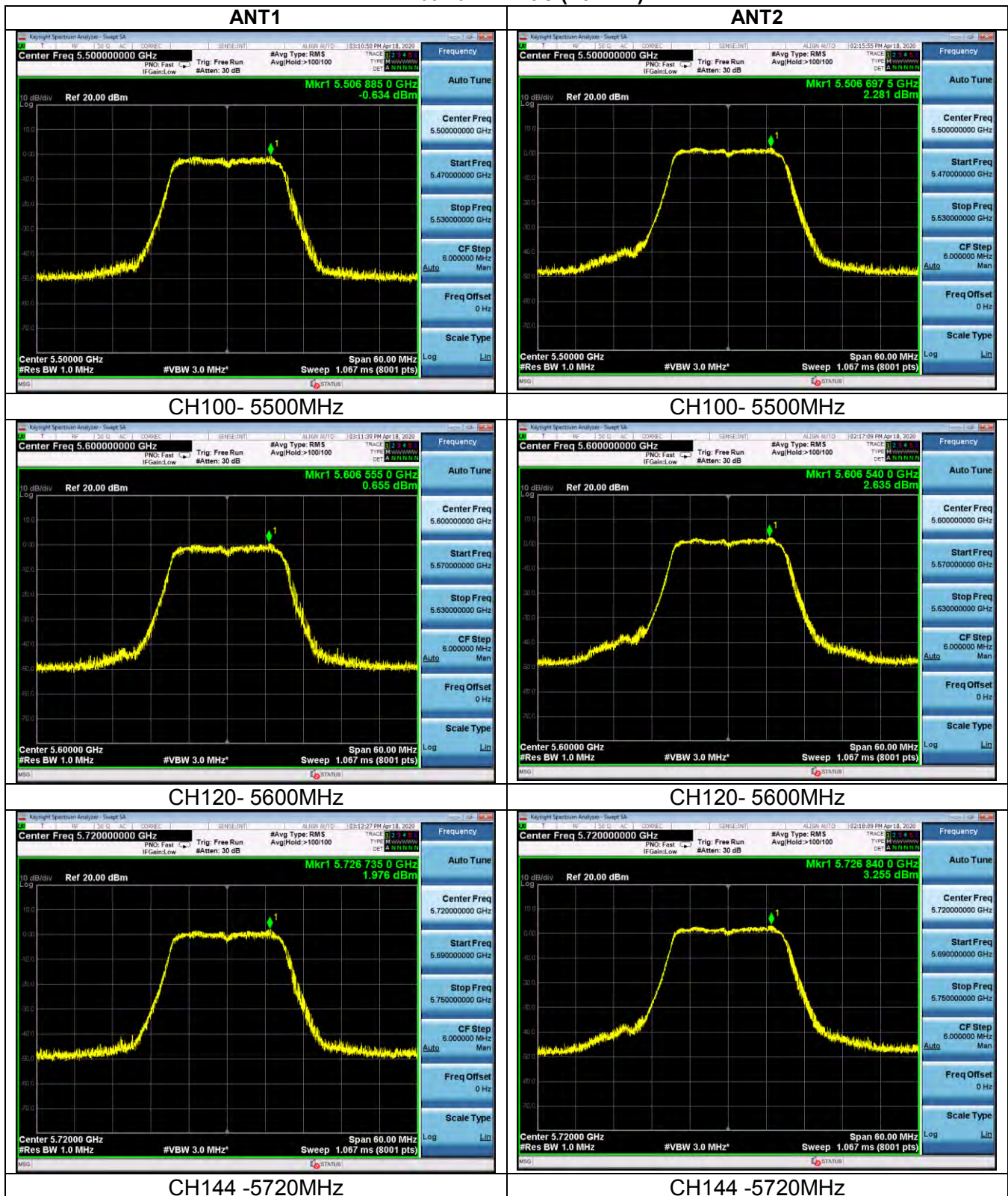


band 2C -- n (40MHz)



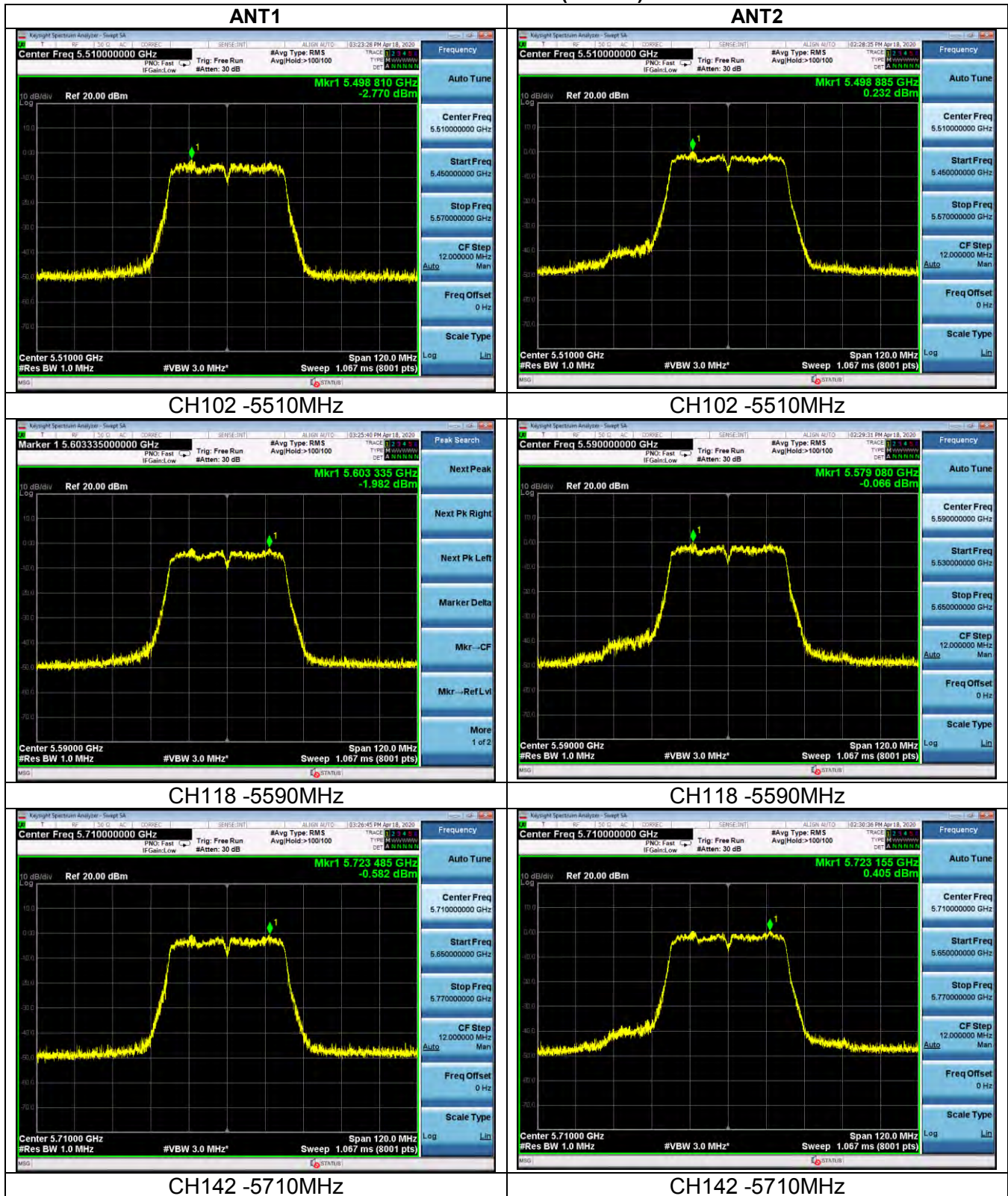


band 2C -- ac (20MHz)



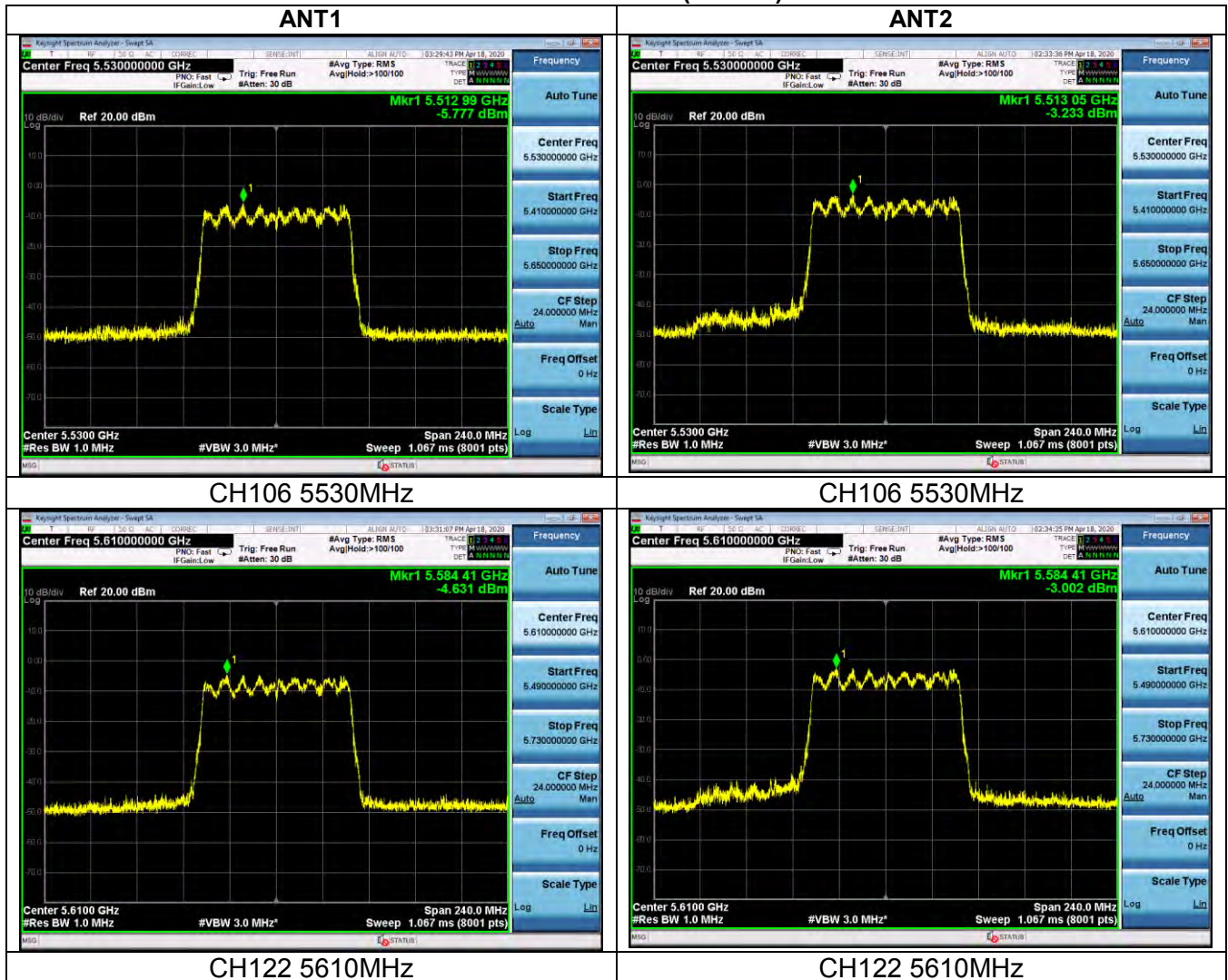


band 2C -- ac (40MHz)





band 2C -- ac (80MHz)



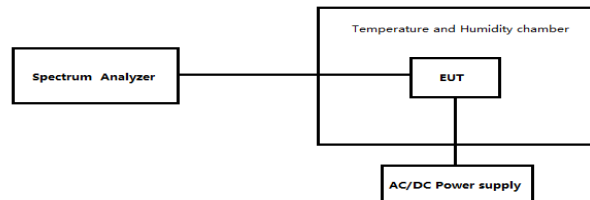


4.5 FREQUENCY STABILITY MEASUREMENT

LIMIT

According to §15.407(g), 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.

TEST CONFIGURATION



TEST PROCEDURE

1. To ensure emission at the band edge is maintained within the authorized band, those values shall be measured by radiation emissions at upper and lower frequency points, and finally compensated by frequency deviation as procedures below.
2. The EUT was operated at the maximum output power, and connected to the spectrum analyzer, which is set to maximum hold function and peak detector. The peak value of the power envelope was measured and noted. The upper and lower frequency points were respectively measured relatively 10dB lower than the measured peak value.
3. The frequency deviation was calculated by adding the upper frequency point and the lower frequency point divided by two. Those detailed values of frequency deviation are provided in table below.

TEST RESULTS

The report only shows the test results in the worst test mode:

MODE	CH.	FRE.	
802.11n(HT20)	36	5180	ANT1/ANT2
802.11n(HT20)	52	5260	ANT1/ANT2
802.11n(HT20)	100	5500	ANT1/ANT2
802.11n(HT40)	46	5230	ANT1/ANT2
802.11ac(HT20)	36	5180	ANT1/ANT2
802.11ac(HT20)	52	5260	ANT1/ANT2
802.11ac(HT20)	100	5500	ANT1/ANT2
802.11ac(HT40)	46	5230	ANT1/ANT2
802.11ac(HT80)	42	5210	ANT1/ANT2



ANT1-- 802.11n(HT20)-CH36

Temperature (°C)	Voltage (V)	Freq.(MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability (ppm)
25	V _{min}	5180	5180.026	0.026	5.048
25	V _{max}	5180	5180.001	0.001	0.283
25	V _{nor}	5180	5180.020	0.020	3.905
-10	V _{nor}	5180	5179.998	-0.002	-0.478
40	V _{nor}	5180	5180.024	0.024	4.669

ANT1-- 802.11n(HT20)-CH52

Temperature (°C)	Voltage (V)	Freq.(MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability
25	V _{min}	5260	5260.038	0.038	7.139
25	V _{max}	5260	5260.045	0.045	8.462
25	V _{nor}	5260	5259.996	-0.004	-0.754
-10	V _{nor}	5260	5260.049	0.049	9.368
40	V _{nor}	5260	5259.994	-0.006	-1.162

ANT1-- 802.11n(HT20)-CH100

Temperature (°C)	Voltage (V)	Freq.(MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability
25	V _{min}	5500	5500.002	0.002	0.277
25	V _{max}	5500	5500.003	0.003	0.509
25	V _{nor}	5500	5500.030	0.030	5.428
-10	V _{nor}	5500	5499.997	-0.003	-0.458
40	V _{nor}	5500	5499.992	-0.008	-1.486

ANT1-- 802.11n(HT40)-CH46

Temperature (°C)	Voltage (V)	Freq.(MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability
25	V _{min}	5230	5229.987	-0.013	-2.409
25	V _{max}	5230	5230.014	0.014	2.726
25	V _{nor}	5230	5230.024	0.024	4.622
-10	V _{nor}	5230	5230.052	0.052	9.851
40	V _{nor}	5230	5230.011	0.011	2.008

ANT1-- 802.11ac(HT20)-CH36

Temperature (°C)	Voltage (V)	Freq.(MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability
25	V _{min}	5180	5180.041	0.041	8.005
25	V _{max}	5180	5179.998	-0.002	-0.326
25	V _{nor}	5180	5180.003	0.003	0.487
-10	V _{nor}	5180	5180.029	0.029	5.556
40	V _{nor}	5180	5180.020	0.020	3.777



ANT1-- 802.11ac(HT20)-CH52

Temperature (°C)	Voltage (V)	Freq.(MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability
25	V _{min}	5260	5260.000	0.000	0.067
25	V _{max}	5260	5260.047	0.047	8.876
25	V _{nor}	5260	5260.021	0.021	4.039
-10	V _{nor}	5260	5259.992	-0.008	-1.444
40	V _{nor}	5260	5260.009	0.009	1.774

ANT1-- 802.11ac(HT20)-CH100

Temperature (°C)	Voltage (V)	Freq.(MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability
25	V _{min}	5500	5500.025	0.025	4.553
25	V _{max}	5500	5500.032	0.032	5.828
25	V _{nor}	5500	5499.988	-0.012	-2.177
-10	V _{nor}	5500	5500.043	0.043	7.860
40	V _{nor}	5500	5500.043	0.043	7.854

ANT1-- 802.11ac(HT40)-CH46

Temperature (°C)	Voltage (V)	Freq.(MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability
25	V _{min}	5230	5230.032	0.032	6.121
25	V _{max}	5230	5230.002	0.002	0.388
25	V _{nor}	5230	5230.019	0.019	3.628
-10	V _{nor}	5230	5230.023	0.023	4.380
40	V _{nor}	5230	5230.037	0.037	7.010

ANT1-- 802.11ac(HT80)-CH42

Temperature (°C)	Voltage (V)	Freq.(MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability
25	V _{min}	5210	5209.991	-0.009	-1.689
25	V _{max}	5210	5209.990	-0.010	-1.943
25	V _{nor}	5210	5210.040	0.040	7.610
-10	V _{nor}	5210	5210.009	0.009	1.727
40	V _{nor}	5210	5210.027	0.027	5.162



ANT2-- 802.11n(HT20)-CH36

Temperature (°C)	Voltage (V)	Freq.(MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability
25	V _{min}	5180	5180.038	0.038	7.322
25	V _{max}	5180	5180.025	0.025	4.852
25	V _{nor}	5180	5180.029	0.029	5.522
-10	V _{nor}	5180	5179.991	-0.009	-1.697
40	V _{nor}	5180	5179.992	-0.008	-1.537

ANT2-- 802.11n(HT20)-CH52

Temperature (°C)	Voltage (V)	Freq.(MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability
25	V _{min}	5260	5260.043	0.043	8.105
25	V _{max}	5260	5260.000	0.000	0.056
25	V _{nor}	5260	5259.991	-0.009	-1.632
-10	V _{nor}	5260	5259.998	-0.002	-0.388
40	V _{nor}	5260	5260.021	0.021	4.036

ANT2-- 802.11n(HT20)-CH100

Temperature (°C)	Voltage (V)	Freq.(MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability
25	V _{min}	5500	5499.994	-0.006	-1.128
25	V _{max}	5500	5500.027	0.027	4.939
25	V _{nor}	5500	5500.042	0.042	7.556
-10	V _{nor}	5500	5499.992	-0.008	-1.520
40	V _{nor}	5500	5500.024	0.024	4.391

ANT2-- 802.11n(HT40)-CH46

Temperature (°C)	Voltage (V)	Freq.(MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability
25	V _{min}	5230	5230.012	0.012	2.389
25	V _{max}	5230	5229.991	-0.009	-1.685
25	V _{nor}	5230	5230.032	0.032	6.050
-10	V _{nor}	5230	5230.036	0.036	6.969
40	V _{nor}	5230	5229.993	-0.007	-1.306

ANT2-- 802.11ac(HT20)-CH36

Temperature (°C)	Voltage (V)	Freq.(MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability
25	V _{min}	5180	5180.006	0.006	1.204
25	V _{max}	5180	5180.007	0.007	1.435
25	V _{nor}	5180	5179.998	-0.002	-0.320
-10	V _{nor}	5180	5180.036	0.036	6.908
40	V _{nor}	5180	5180.004	0.004	0.803



ANT2-- 802.11ac(HT20)-CH52

Temperature (°C)	Voltage (V)	Freq.(MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability
25	V_{min}	5260	5260.000	0.000	0.060
25	V_{max}	5260	5260.016	0.016	3.036
25	V_{nor}	5260	5260.023	0.023	4.436
-10	V_{nor}	5260	5259.988	-0.012	-2.237
40	V_{nor}	5260	5260.004	0.004	0.742

ANT2-- 802.11ac(HT20)-CH100

Temperature (°C)	Voltage (V)	Freq.(MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability
25	V_{min}	5500	5500.041	0.041	7.410
25	V_{max}	5500	5500.004	0.004	0.784
25	V_{nor}	5500	5500.048	0.048	8.717
-10	V_{nor}	5500	5499.997	-0.003	-0.542
40	V_{nor}	5500	5500.024	0.024	4.374

ANT2-- 802.11ac(HT40)-CH46

Temperature (°C)	Voltage (V)	Freq.(MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability
25	V_{min}	5230	5230.045	0.045	8.509
25	V_{max}	5230	5230.000	0.000	-0.022
25	V_{nor}	5230	5229.992	-0.008	-1.516
-10	V_{nor}	5230	5230.022	0.022	4.191
40	V_{nor}	5230	5230.021	0.021	4.054

ANT2-- 802.11ac(HT80)-CH42

Temperature (°C)	Voltage (V)	Freq.(MHz)	Center Frequency (MHz)	Frequency Deviation (MHz)	Frequency Stability
25	V_{min}	5210	5210.022	0.022	4.250
25	V_{max}	5210	5209.995	-0.005	-1.019
25	V_{nor}	5210	5210.013	0.013	2.446
-10	V_{nor}	5210	5210.038	0.038	7.352
40	V_{nor}	5210	5210.006	0.006	1.106



4.6 RADIATED UNDESIRABLE EMISSION

LIMIT

Radiated emissions from 9 kHz to 25 GHz were measured according to the methods defined in ANSI C63.10-2013. The EUT was placed above the ground plane, 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz. The interface cables and equipment positions were varied within limits of reasonable applications to determine the positions producing maximum radiated emissions.

1. For transmitters operating in the 5150-5250 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27 dBm/MHz.

For transmitters operating in the 5250-5350 MHz band: all emissions outside of the 5150-5350 MHz band shall not exceed an EIRP of -27 dBm/MHz. Devices operating in the 5250-5350 MHz band that generate emissions in the 5150-5250 MHz band must meet all applicable technical requirements for operation in the 5150-5250 MHz band (including indoor use) or alternatively meet an out-of-band emission EIRP limit of -27 dBm/MHz in the 5150-5250 MHz band.

For transmitters operating in the 5470-5600 MHz and 5650-5725 MHz band: all emissions outside of the 5470-5600 MHz and 5650-5725 MHz band shall not exceed an EIRP of -27 dBm/MHz.

2. KDB789033v02r01G2)c) As specified in 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in 15.407(b)(4)). However, an out-of-band emission that complies with both the average and peak limits of 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz peak emission limit.
3. According to §15.209(a), except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

FREQUENCIES(MHz)	FIELD STRENGTH (microvolt/meter)	MEASUREMENT DISTANCE(meters)
0.009~0.490	2400/F(kHz)	300
0.490~1.705	24000/F(kHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

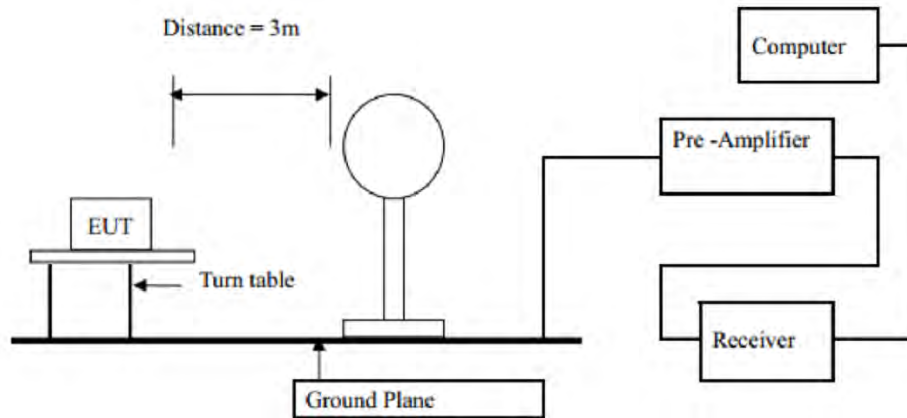
Remark: Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

4. In the emission table above, the tighter limit applies at the band edges.

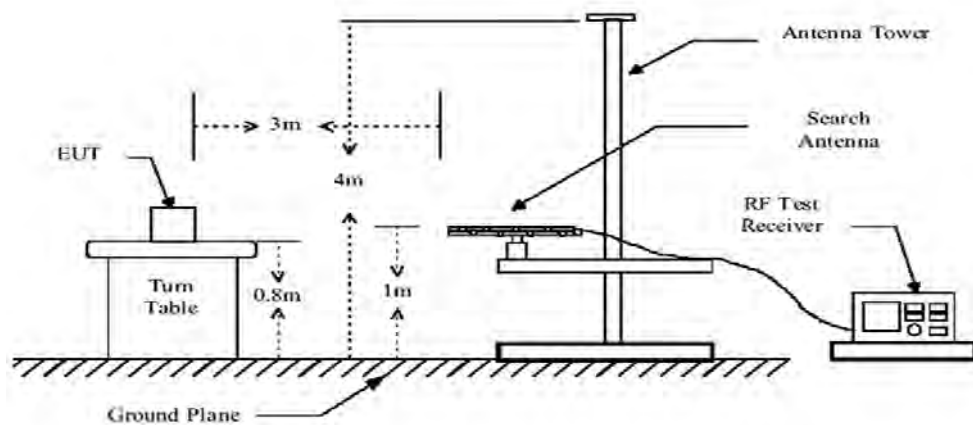
Frequency (MHz)	Field Strength(μV/m)	Field Strength(dBμV/m)
30-88	100	40
88-216	150	43.5
216-960	200	46
Above 960	500	54

Test Configuration

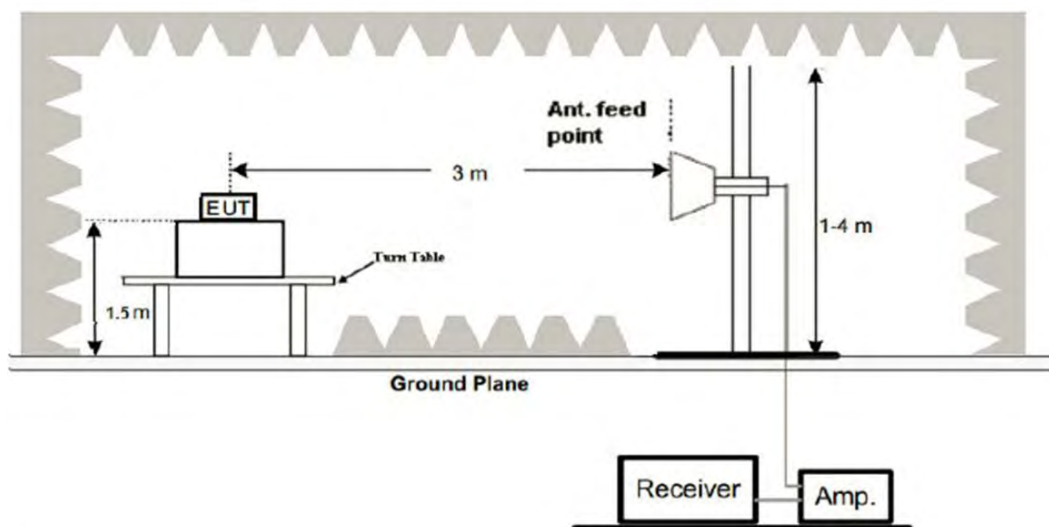
Below 30MHz



Below 1GHz



Above 1 GHz



**TESTPROCEDURE**

1. The EUT is placed on a turntable above ground plane, which is 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz.
2. The turntable shall be rotated for 360degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Set the spectrum analyzer in the following setting as:

Below 1GHz:

RBW=100kHz / VBW=300kHz / Sweep=AUTO

Above 1GHz:

(a) PEAK: RBW=VBW=1MHz / Sweep=AUTO

(b) AVERAGE: RBW=1MHz / Sweep=AUTO

VBW=10Hz, when duty cycle is no less than 98 percent.

VBW $\geq 1/T$, when duty cycle is less than 98 percent, where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.

7. Repeat above procedures until the measurements for all frequencies are complete.

TES TRESULTS**Harmonics and Spurious Emissions****Frequency Range (9 kHz-30MHz)**

Frequency (MHz)	Level@3m (dBμV/m)	Limit@3m (dBμV/m)
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Note: 1. Emission Level=Reading+ Cable loss-Antenna factor-Amp factor

2. The emission levels are 20 dB below the limit value, which are not reported. It is deemed to comply with the requirement

**Test Results**

radiated emission 30MHz – 1Ghz:

Note: The test data for the worst mode of radiation emission has been recorded in the report:
HK2004170655-1E

Above 1 GHz

Note: The test results only show the test results of mode 802.11ac(HT20)/(HT40)/(HT80) of ANT1 and MIMO for BAND1

ANT1

TEST BAND	BW	TEST CH.	TEST FRE.(MHz)
BAND I	20	36	5180
		40	5200
		48	5240
	40	38	5190
		46	5230
		42	5210
BAND 2A	20	52	5260
		56	5280
		64	5320
	40	54	5270
		62	5310
		58	5290
BAND 2C	20	100	5500
		120	5600
		144	5720
	40	102	5510
		118	5590
		142	5710
	80	106	5530
		122	5610

MIMO

TEST BAND	BW	TEST CH.	TEST FRE.(MHz)
BAND I	20	36	5180
		40	5200
		48	5240
	40	38	5190
		46	5230
	80	42	5210

**BAND I**

Operation Mode: Tx / IEEE 802.11ac(HT20) Low Channel

Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10360.40	37.24	11.21	48.45	74.00	-25.55			peak
2	15540.01	36.76	12.25	49.01	74.00	-24.99			peak
N/A									

Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10360.97	36.43	11.21	47.64	74.00	-26.36			peak
2	15540.13	35.71	12.25	47.96	74.00	-26.04			peak
N/A									

Operation Mode: Tx / IEEE 802.11ac(HT20) Mid Channel

Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10400.32	36.54	10.64	47.18	74.00	-26.82			peak
2	15600.48	30.94	12.29	43.23	74.00	-30.77			peak
N/A									

Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10400.58	38.61	10.64	49.25	74.00	-24.75			peak
2	15600.62	35.68	12.29	47.97	74.00	-26.03			peak
N/A									

Operation Mode: Tx / IEEE 802.11ac(HT20) High Channel

Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10480.46	37.98	10.86	48.84	74.00	-25.16			peak
2	15720.09	30.36	12.33	42.69	74.00	-31.31			peak
N/A									



Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	10480.97	37.17	10.86	48.03	74.00	-25.97			peak
2	15720.49	30.44	12.33	42.77	74.00	-31.23			peak
N/A									

Operation Mode: TX / IEEE 802.11ac HT40 mode /Low Channel

Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	10380.07	36.31	11.21	47.52	74.00	-26.48			peak
2	15570.42	35.77	12.25	48.02	74.00	-25.98			peak
N/A									

Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	10380.77	38.91	11.21	50.12	74.00	-23.88			peak
2	15570.92	33.73	12.25	45.98	74.00	-28.02			peak
N/A									

Operation Mode: TX / IEEE 802.11ac HT40mode /High Channel

Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	10460.25	39.09	10.86	49.95	74.00	-24.05			peak
2	15690.21	34.58	16.53	51.11	74.00	-22.89			peak
N/A									

Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	10460.44	36.25	10.86	47.11	74.00	-26.89			peak
2	15690.43	32.54	16.53	49.07	74.00	-24.93			peak
N/A									

Operation Mode: TX / IEEE 802.11ac HT80mode /High Channel

Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	10422.94	38.60	10.64	49.24	74.00	-24.76			peak
2	15632.90	35.02	12.29	47.31	74.00	-26.69			peak
N/A									



Vertical
I

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10423.68	37.39	10.64	48.03	74.00	-25.97			peak
2	15634.14	33.93	12.29	46.22	74.00	-27.78			peak
N/A									

Band 2A

Operation Mode: Tx / IEEE 802.11ac(HT20) mode Low Channel

Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10520.38	38.69	11.53	50.22	74.00	-23.78			peak
2	15780.57	32.87	13.73	46.60	74.00	-27.40			peak
N/A									

Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10520.85	39.99	11.53	51.52	74.00	-22.48			peak
2	15780.78	32.98	13.73	46.71	74.00	-27.29			peak
N/A									

Operation Mode: Tx / IEEE 802.11ac(HT20) mode Mid Channel

Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10560.76	39.89	11.61	51.50	74.00	-22.50			peak
2	15840.13	32.45	13.79	46.24	74.00	-27.76			peak
N/A									

Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10560.85	36.73	11.61	48.34	74.00	-25.66			peak
2	15840.13	33.35	13.79	47.14	74.00	-26.86			peak
N/A									



Operation Mode: Tx / IEEE 802.11ac(HT20) mode High Channel

Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10640.37	39.60	12.89	52.49	74.00	-21.51			peak
2	15960.17	32.16	13.94	46.10	74.00	-27.90			peak
N/A									

Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10640.34	36.28	12.89	49.17	74.00	-24.83			peak
2	15960.10	31.18	13.94	45.12	74.00	-28.88			peak
N/A									

Operation Mode: TX / IEEE 802.11ac HT40mode /Low Channel

Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10540.42	36.25	11.53	47.78	74.00	-26.22			peak
2	15810.51	34.85	13.73	48.58	74.00	-25.42			peak
N/A									

Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10540.12	39.46	11.53	50.99	74.00	-23.01		77	peak
2	15810.17	32.54	13.73	46.27	74.00	-27.73		282	peak
N/A									

Operation Mode: TX / IEEE 802.11ac HT40mode /High Channel

Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10620.40	36.33	12.89	49.22	74.00	-24.78			peak
2	15930.47	33.33	13.49	46.82	74.00	-27.18			peak
N/A									

Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10620.52	36.89	12.89	49.78	74.00	-24.22			peak
2	15930.19	30.40	13.49	43.89	74.00	-30.11			peak
N/A									



Operation Mode: TX / IEEE 802.11ac HT80mode

Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10547.38	37.55	11.61	49.16	74.00	-24.84			peak
2	15811.45	31.73	13.79	45.52	74.00	-28.48			peak
N/A									

Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10543.30	37.74	11.61	49.35	74.00	-24.65			peak
2	15815.85	34.88	13.79	48.67	74.00	-25.33			peak
N/A									

Band 2C

Operation Mode: Tx / IEEE 802.11ac(HT20) mode Low Channel

Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	11000.21	37.43	12.89	50.32	74.00	-23.68			peak
2	16500.65	33.98	13.49	47.47	74.00	-26.53			peak
N/A									

Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	11000.08	39.80	12.89	52.69	74.00	-21.31			peak
2	16500.95	35.52	13.49	49.01	74.00	-24.99			peak
N/A									

Operation Mode: Tx / IEEE 802.11ac(HT20) mode Mid Channel

Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	11200.66	39.73	12.94	52.67	74.00	-21.33			peak
2	16800.48	34.82	13.53	48.35	74.00	-25.65			peak
N/A									



Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	11200.46	38.31	12.94	51.25	74.00	-22.75			peak
2	16800.60	30.46	13.53	43.99	74.00	-30.01			peak
N/A									

Operation Mode: Tx / IEEE 802.11ac(HT20) mode High Channel

Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	11448.99	37.31	12.96	50.27	74.00	-23.73			peak
2	17163.05	35.75	13.59	49.34	74.00	-24.66			peak
N/A									

Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	11445.00	36.73	12.96	49.69	74.00	-24.31			peak
2	17164.01	33.40	13.59	46.99	74.00	-27.01			peak
N/A									

Operation Mode: TX / IEEE 802.11ac HT40mode / Low Channel

Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	11024.72	37.28	12.89	50.17	74.00	-23.83			peak
2	16535.23	35.72	13.49	49.21	74.00	-24.79			peak
N/A									

Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	11020.80	37.36	12.89	50.25	74.00	-23.75			peak
2	16536.19	32.72	13.49	46.21	74.00	-27.79			peak
N/A									



Operation Mode: TX / IEEE 802.11ac HT40mode /Mid Channel

Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	11186.08	39.94	12.91	52.85	74.00	-21.15			peak
2	16771.51	32.04	13.52	45.56	74.00	-28.44			peak
N/A									

Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	11182.62	38.57	12.91	51.48	74.00	-22.52			peak
2	16778.65	34.14	13.52	47.66	74.00	-26.34			peak
N/A									

Operation Mode: TX / IEEE 802.11ac HT40mode /High Channel

Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	11426.58	37.19	12.96	50.15	74.00	-23.85			peak
2	17136.70	34.60	13.59	48.19	74.00	-25.81			peak
N/A									

Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	11427.95	38.83	12.96	51.79	74.00	-22.21			peak
2	17137.47	35.90	13.59	49.49	74.00	-24.51			peak
N/A									

Operation Mode: TX / IEEE 802.11ac HT80mode /Low Channel

Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	11065.46	37.82	12.90	50.72	74.00	-23.28			peak
2	16594.17	31.74	13.47	45.21	74.00	-28.79			peak
N/A									

Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	11062.31	38.98	12.90	51.88	74.00	-22.12			peak
2	16597.81	32.86	13.47	46.33	74.00	-27.67			peak
N/A									



Operation Mode: TX / IEEE 802.11ac HT80mode /highChannel

Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	11228.61	37.00	12.92	49.92	74.00	-24.08			peak
2	16836.79	30.92	13.49	44.41	74.00	-29.59			peak
N/A									

Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	11220.93	39.23	12.92	52.15	74.00	-21.85			peak
2	16831.68	32.33	13.49	45.82	74.00	-28.18			peak
N/A									

Spurious emission for MIMO

Operation Mode: Tx / BAND 1 -- MIMO 802.11n20 - Low Channel

Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10362.46	37.23	11.21	48.44	74.00	-25.56			peak
2	15547.04	35.45	12.25	47.70	74.00	-26.30			peak
N/A									

Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10363.93	38.54	11.21	49.75	74.00	-24.25			peak
2	15548.67	33.57	12.25	45.82	74.00	-28.18			peak
N/A									

Operation Mode: Tx / BAND 1 -- MIMO 802.11n20 - mid Channel

Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10403.70	39.48	10.64	50.12	74.00	-23.88			peak
2	15606.71	35.89	12.29	48.18	74.00	-25.82			peak
N/A									



Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10408.49	39.18	10.64	49.82	74.00	-24.18			peak
2	15601.29	33.73	12.29	46.02	74.00	-27.98			peak
N/A									

Operation Mode: Tx / BAND 1 -- MIMO 802.11 n20 High Channel

Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10483.98	37.90	10.86	48.76	74.00	-25.24			peak
2	15721.85	35.31	12.33	47.64	74.00	-26.36			peak
N/A									

Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10484.09	39.16	10.86	50.02	74.00	-23.98			peak
2	15723.93	32.15	12.33	44.48	74.00	-29.52			peak
N/A									

Operation Mode: TX / BAND 1 -- MIMO 802.11 n40 Low Channel

Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10380.09	38.72	11.21	49.93	74.00	-24.07			peak
2	15571.79	33.34	12.25	45.59	74.00	-28.41			peak
N/A									

Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10385.68	39.58	11.21	50.79	74.00	-23.21			peak
2	15573.68	31.44	12.25	43.69	74.00	-30.31			peak
N/A									

Operation Mode: TX / BAND 1 -- MIMO 802.11 n40 /High Channel



Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10467.63	39.28	10.86	50.14	74.00	-23.86			peak
2	15695.34	30.25	16.53	46.78	74.00	-27.22			peak
N/A									

Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10461.76	37.82	10.86	48.68	74.00	-25.32			peak
2	15691.96	30.10	16.53	46.63	74.00	-27.37			peak
N/A									

Operation Mode: Tx / BAND 1 -- MIMO 802.11ac 20 - Low Channel

Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10360.43	36.10	11.21	47.31	74.00	-26.69			peak
2	15547.75	34.01	12.25	46.26	74.00	-27.74			peak
N/A									

Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10367.71	39.15	11.21	50.36	74.00	-23.64			peak
2	15543.12	32.20	12.25	44.45	74.00	-29.55			peak
N/A									

Operation Mode: Tx / BAND 1 -- MIMO 802.11ac20 - mid Channel

Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10402.30	37.55	10.64	48.19	74.00	-25.81			peak
2	15608.93	31.32	12.29	43.61	74.00	-30.39			peak
N/A									

Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10403.41	37.12	10.64	47.76	74.00	-26.24			peak
2	15606.69	35.68	12.29	47.97	74.00	-26.03			peak
N/A									



Operation Mode: Tx / BAND 1 -- MIMO 802.11 ac20 High Channel

Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	10481.97	39.17	10.86	50.03	74.00	-23.97			peak
2	15722.29	30.07	12.33	42.40	74.00	-31.60			peak
N/A									

Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	10488.86	36.90	10.86	47.76	74.00	-26.24			peak
2	15721.45	32.44	12.33	44.77	74.00	-29.23			peak
N/A									

Operation Mode: TX / BAND 1 -- MIMO 802.11 ac40 Low Channel

Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	10388.66	36.22	11.21	47.43	74.00	-26.57			peak
2	15572.88	31.62	12.25	43.87	74.00	-30.13			peak
N/A									

Vertical

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	10383.43	37.82	11.21	49.03	74.00	-24.97			peak
2	15573.20	33.35	12.25	45.60	74.00	-28.40			peak
N/A									

Operation Mode: TX / BAND 1 -- MIMO 802.11 ac40 /High Channel

Horizontal

No.	Frequency	Reading	Correct	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(deg.)	
1	10462.67	37.23	10.86	48.09	74.00	-25.91			peak
2	15696.33	35.19	16.53	51.72	74.00	-22.28			peak
N/A									



Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10463.81	38.96	10.86	49.82	74.00	-24.18			peak
2	15694.30	35.31	16.53	51.84	74.00	-22.16			peak
N/A									

Operation Mode: TX / MIMO 802.11 ac80

Horizontal

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10421.78	37.23	10.64	47.87	74.00	-26.13			peak
2	15634.32	34.55	12.29	46.84	74.00	-27.16			peak
N/A									

Vertical

No.	Frequency (MHz)	Reading (dBuV)	Correct Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (deg.)	Remark
1	10420.17	36.68	10.64	47.32	74.00	-26.68			peak
2	15631.30	31.87	12.29	44.16	74.00	-29.84			peak
N/A									



Radiated Band Edge Test:

ANT 1

Operation Mode: BAND 1--802.11ac20 Mode - CH Low

Horizontal

Frequency	Reading	Factor	Emission level	Limits	Margin	Detector type
(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
5150	53.38	-2.49	50.89	74.00	-23.11	PK
5150	/	-2.49	/	54.00	/	AV
Remark: Factor= Antenna Factor + Cable loss – Pre-amplifier						

Vertical:

Frequency	Reading	Factor	Emission level	Limits	Margin	Detector type
(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
5150	46.77	-2.49	44.28	74.00	-29.72	PK
5150	/	-2.49	/	54.00	/	AV
Remark: Factor= Antenna Factor + Cable loss – Pre-amplifier						

Operation Mode: BAND 2A-- 802.11ac20 Mode - CH High

Horizontal

Frequency	Reading	Factor	Emission level	Limits	Margin	Detector type
(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
5350	46.77	-2.49	44.28	74.00	-29.72	PK
5350	/	-2.49	/	54.00	/	AV
Remark: Factor= Antenna Factor + Cable loss – Pre-amplifier						

Vertical:

Frequency	Reading	Factor	Emission level	Limits	Margin	Detector type
(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
5350	48.75	-2.49	46.26	74.00	-27.74	PK
5350	/	-2.49	/	54.00	/	AV
Remark: Factor= Antenna Factor + Cable loss – Pre-amplifier						



Operation Mode: BAND 2C-- 802.11ac20 Mode - CH Low

Horizontal

Frequency	Reading	Factor	Emission level	Limits	Margin	Detector type
(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
5460	51.94	-2.44	49.50	74.00	-24.50	PK
5460	/	-2.44	/	54.00	/	AV
Remark: Factor= Antenna Factor + Cable loss – Pre-amplifier						

Vertical

Frequency	Reading	Factor	Emission level	Limits	Margin	Detector type
(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
5460	51.62	-2.44	49.18	74.00	-24.82	PK
5460	/	-2.44	/	54.00	/	AV
Remark: Factor= Antenna Factor + Cable loss – Pre-amplifier						

Operation Mode: BAND 2C-- 802.11ac20 Mode - CH High

Frequency	Reading	Factor	Emission level	Limits	Margin	Detector type
(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
5725	48.22	-2.41	45.81	74.00	-28.19	PK
5725	/	-2.41	/	54.00	/	AV
Remark: Factor= Antenna Factor + Cable loss – Pre-amplifier						

Vertical

Frequency	Reading	Factor	Emission level	Limits	Margin	Detector type
(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
5725	53.05	-2.41	50.64	74.00	-23.36	PK
5725	/	-2.41	/	54.00	/	AV
Remark: Factor= Antenna Factor + Cable loss – Pre-amplifier						



Operation Mode: BAND I-- 802.11 ac40 Mode - CH Low

Horizontal

Frequency	Reading	Factor	Emission level	Limits	Margin	Detector type
(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
5150	49.96	-2.49	47.47	74.00	-26.53	PK
5150	/	-2.49	/	54.00	/	AV
Remark: Factor= Antenna Factor + Cable loss – Pre-amplifier						

Vertical:

Frequency	Reading	Factor	Emission level	Limits	Margin	Detector type
(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
5150	49.46	-2.49	46.97	74.00	-27.03	PK
5150	/	-2.49	/	54.00	/	AV
Remark: Factor= Antenna Factor + Cable loss – Pre-amplifier						

Operation Mode: BAND 2A -- 802.11 ac40 Mode - CH High

Horizontal

Frequency	Reading	Factor	Emission level	Limits	Margin	Detector type
(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
5350	49.33	-2.49	46.84	74.00	-27.16	PK
5350	/	-2.49	/	54.00	/	AV
Remark: Factor= Antenna Factor + Cable loss – Pre-amplifier						

Vertical:

Frequency	Reading	Factor	Emission level	Limits	Margin	Detector type
(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
5350	46.49	-2.49	44.00	74.00	-30.00	PK
5350	/	-2.49	/	54.00	/	AV
Remark: Factor= Antenna Factor + Cable loss – Pre-amplifier						

Operation Mode: BAND 2C -- 802.11 ac40 Mode - CH Low



Horizontal

Frequency	Reading	Factor	Emission level	Limits	Margin	Detector type
(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
5460	53.11	-2.44	50.67	74.00	-23.33	PK
5460	/	-2.44	/	54.00	/	AV
Remark: Factor= Antenna Factor + Cable loss – Pre-amplifier						

Vertical:

Frequency	Reading	Factor	Emission level	Limits	Margin	Detector type
(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
5460	51.60	-2.44	49.16	74.00	-24.84	PK
5460	/	-2.44	/	54.00	/	AV
Remark: Factor= Antenna Factor + Cable loss – Pre-amplifier						

Operation Mode: BAND 2C -- 802.11 ac40 Mode - CH High

Horizontal

Frequency	Reading	Factor	Emission level	Limits	Margin	Detector type
(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
5725	51.51	-2.41	49.10	74.00	-24.90	PK
5725	/	-2.41	/	54.00	/	AV
Remark: Factor= Antenna Factor + Cable loss – Pre-amplifier						

Vertical:

Frequency	Reading	Factor	Emission level	Limits	Margin	Detector type
(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
5725	47.13	-2.41	44.72	74.00	-29.28	PK
5725	/	-2.41	/	54.00	/	AV
Remark: Factor= Antenna Factor + Cable loss – Pre-amplifier						



Operation Mode: BAND I -- 802.11 ac80 Mode - CH Low

Horizontal

Frequency	Reading	Factor	Emission level	Limits	Margin	Detector type
(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
5150	46.95	-2.49	44.46	74.00	-29.54	PK
5150	/	-2.49	/	54.00	/	AV
Remark: Factor= Antenna Factor + Cable loss – Pre-amplifier						

Vertical:

Frequency	Reading	Factor	Emission level	Limits	Margin	Detector type
(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
5150	52.01	-2.49	49.52	74.00	-24.48	PK
5150	/	-2.49	/	54.00	/	AV
Remark: Factor= Antenna Factor + Cable loss – Pre-amplifier						

Operation Mode: BAND 2A -- 802.11 ac80 Mode - CH High

Horizontal

Frequency	Reading	Factor	Emission level	Limits	Margin	Detector type
(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
5350	52.74	-2.49	50.25	74.00	-23.75	PK
5350	/	-2.49	/	54.00	/	AV
Remark: Factor= Antenna Factor + Cable loss – Pre-amplifier						

Vertical:

Frequency	Reading	Factor	Emission level	Limits	Margin	Detector type
(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
5350	49.60	-2.49	47.11	74.00	-26.89	PK
5350	/	-2.49	/	54.00	/	AV
Remark: Factor= Antenna Factor + Cable loss – Pre-amplifier						



Operation Mode: BAND 2C -- 802.11 ac80 Mode - CH Low

Horizontal

Frequency	Reading	Factor	Emission level	Limits	Margin	Detector type
(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
5460	47.87	-2.44	45.43	74.00	-28.57	PK
5460	/	-2.44	/	54.00	/	AV
Remark: Factor= Antenna Factor + Cable loss – Pre-amplifier						

Vertical:

Frequency	Reading	Factor	Emission level	Limits	Margin	Detector type
(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
5460	52.13	-2.44	49.69	74.00	-24.31	PK
5460	/	-2.44	/	54.00	/	AV
Remark: Factor= Antenna Factor + Cable loss – Pre-amplifier						

Operation Mode: BAND 2C -- 802.11 ac80 Mode - CH High

Horizontal

Frequency	Reading	Factor	Emission level	Limits	Margin	Detector type
(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
5725	47.75	-2.41	45.34	74.00	-28.66	PK
5725	/	-2.41	/	54.00	/	AV
Remark: Factor= Antenna Factor + Cable loss – Pre-amplifier						

Vertical:

Frequency	Reading	Factor	Emission level	Limits	Margin	Detector type
(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
5725	47.49	-2.41	45.08	74.00	-28.92	PK
5725	/	-2.41	/	54.00	/	AV
Remark: Factor= Antenna Factor + Cable loss – Pre-amplifier						



4.7 POWERLINE CONDUCTED EMISSIONS

LIMIT

According to §15.207(a), except as shown in paragraphs (b) and (c) of this section, 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 μ H/50 ohms 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 Range (MHz)	Limits (dB μ V)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56*	56 to 46*
0.50 to 5	56	46
5 to 30	60	50

* Decreases with the logarithm of the frequency.

TEST CONFIGURATION

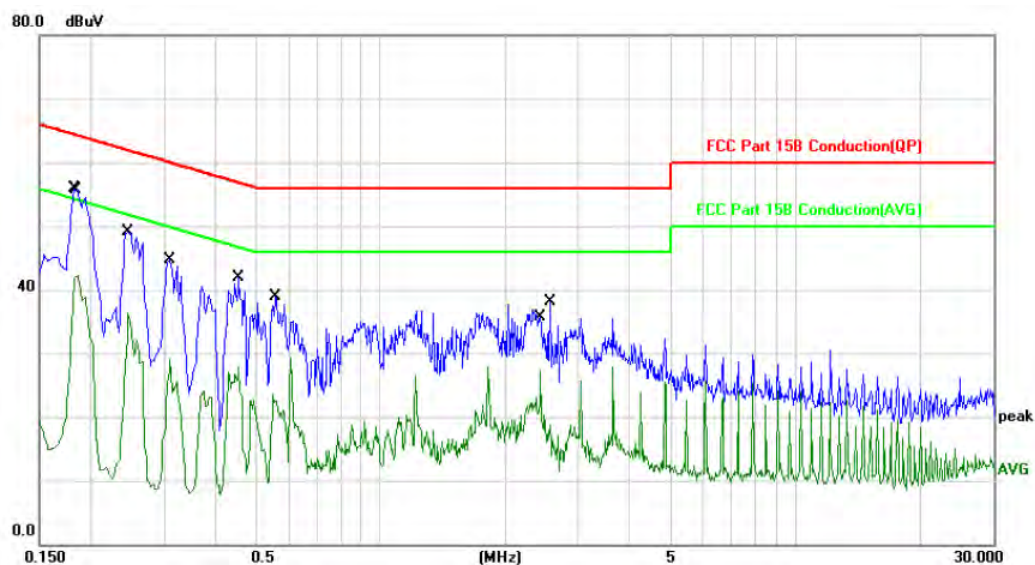
See test photographs attached in Appendix 1 for the actual connections between EUT and support equipment.

TEST PROCEDURE

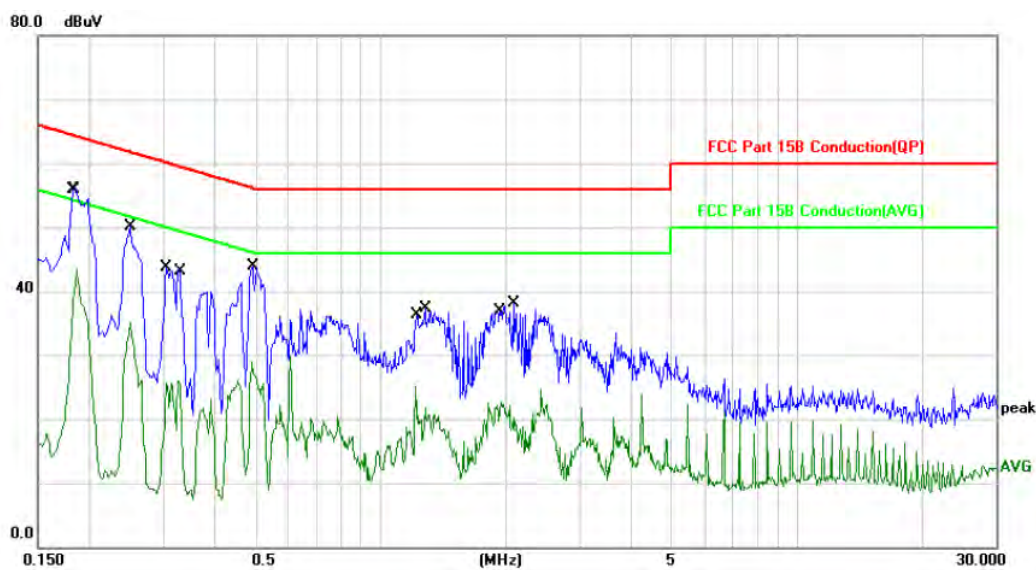
1. The EUT was placed on a table, which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. Repeat above procedures until all frequency measured were complete.

TEST RESULTS

The initial step in collecting conducted data is a spectrum analyzer peak scan of the measurement range. Significant peaks are then marked as shown on the following data page, and these signals are then quasi-peaked.

**TestData**

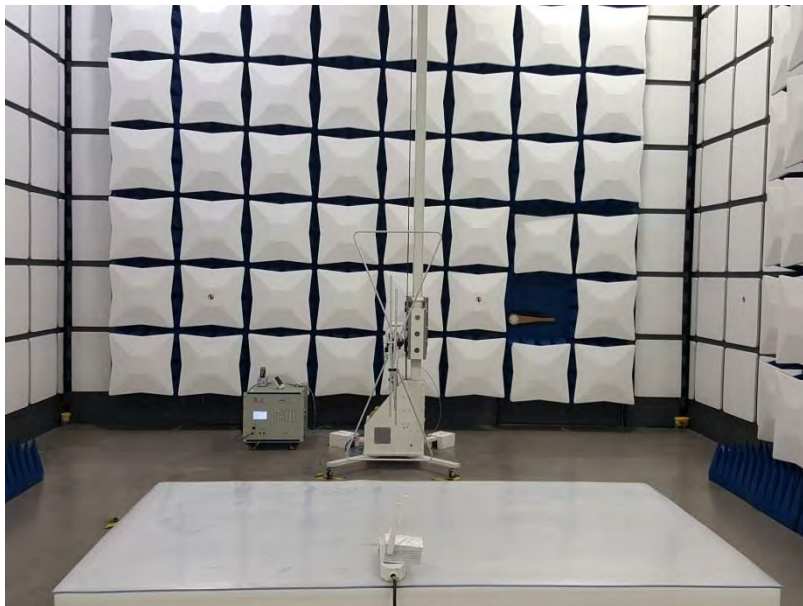
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV	dBuV	dB		
1	*	0.1819	56.05	-0.13	55.92	64.39	-8.47	QP	
2		0.1860	42.52	-0.13	42.39	54.21	-11.82	AVG	
3		0.2460	49.17	-0.11	49.06	61.89	-12.83	QP	
4		0.2460	36.48	-0.11	36.37	51.89	-15.52	AVG	
5		0.3100	44.80	-0.01	44.79	59.97	-15.18	QP	
6		0.3100	29.14	-0.01	29.13	49.97	-20.84	AVG	
7		0.4540	41.90	-0.02	41.88	56.80	-14.92	QP	
8		0.4540	27.91	-0.02	27.89	46.80	-18.91	AVG	
9		0.5500	23.62	-0.04	23.58	46.00	-22.42	AVG	
10		0.5580	39.00	-0.04	38.96	56.00	-17.04	QP	
11		2.4219	27.58	-0.23	27.35	46.00	-18.65	AVG	
12		2.5620	38.17	-0.16	38.01	56.00	-17.99	QP	



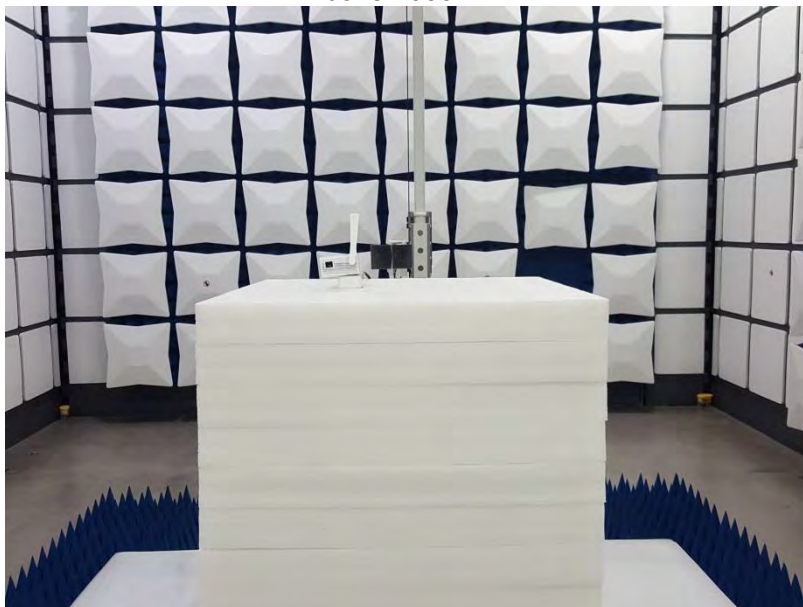
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV	dBuV	dB		
1	*	0.1819	55.99	-0.13	55.86	64.39	-8.53	QP	
2		0.1860	43.62	-0.13	43.49	54.21	-10.72	AVG	
3		0.2500	50.21	-0.11	50.10	61.75	-11.65	QP	
4		0.2500	35.21	-0.11	35.10	51.75	-16.65	AVG	
5		0.3060	43.70	-0.01	43.69	60.08	-16.39	QP	
6		0.3260	26.01	-0.02	25.99	49.55	-23.56	AVG	
7		0.4900	28.99	-0.03	28.96	46.17	-17.21	AVG	
8		0.4940	43.88	-0.03	43.85	56.10	-12.25	QP	
9		1.2140	25.24	-0.15	25.09	46.00	-20.91	AVG	
10		1.2820	37.51	-0.16	37.35	56.00	-18.65	QP	
11		1.9460	22.90	-0.23	22.67	46.00	-23.33	AVG	
12		2.0780	38.26	-0.23	38.03	56.00	-17.97	QP	

7 Photographs of Test Setup

Radiation Emission below 1000MHz



Above 1000MHz

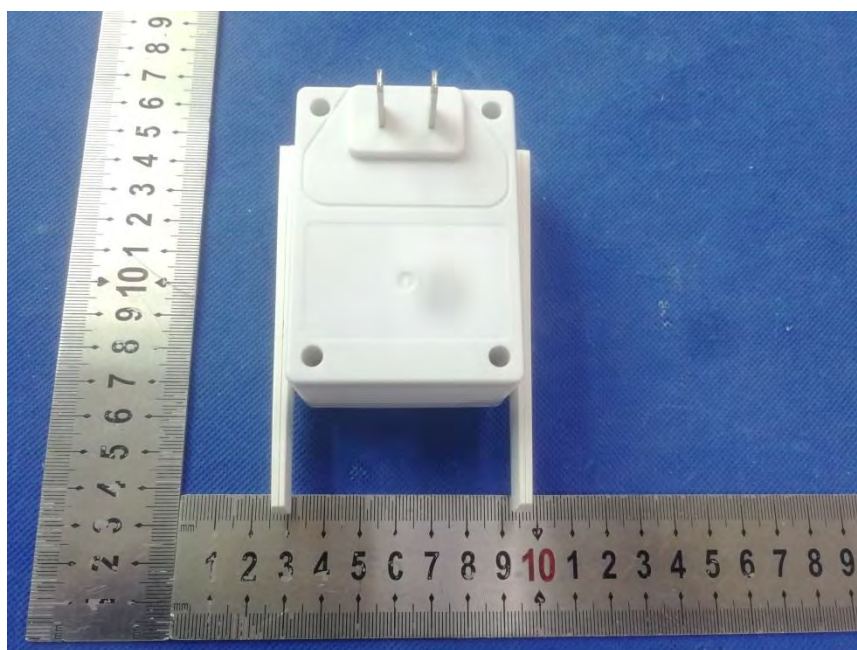
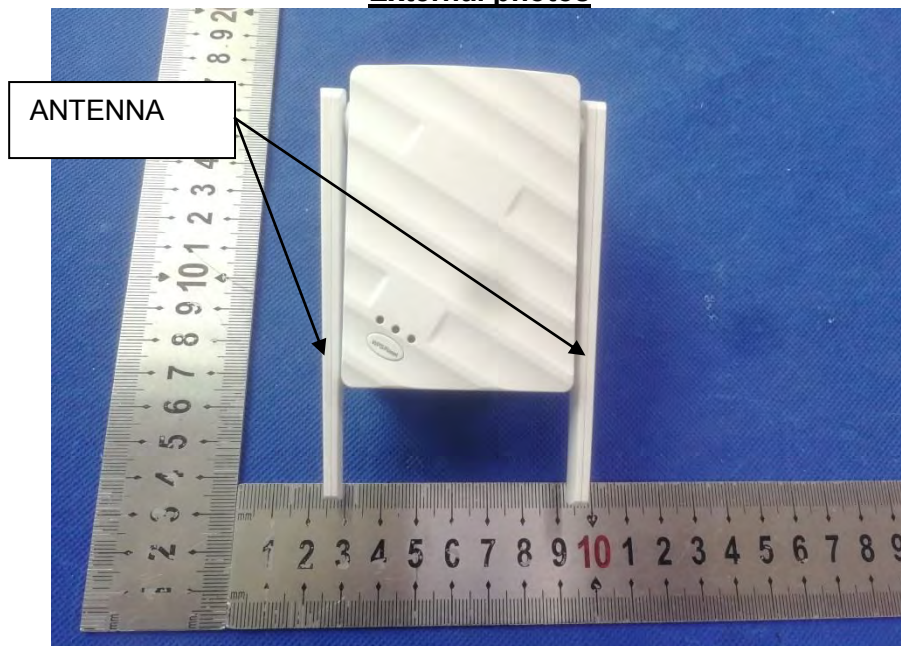


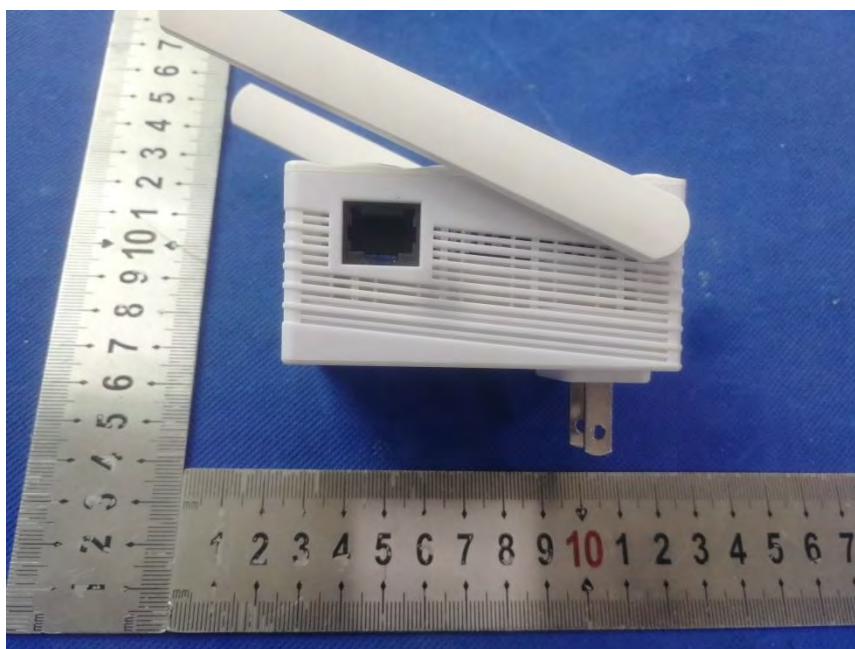
Conducted emission

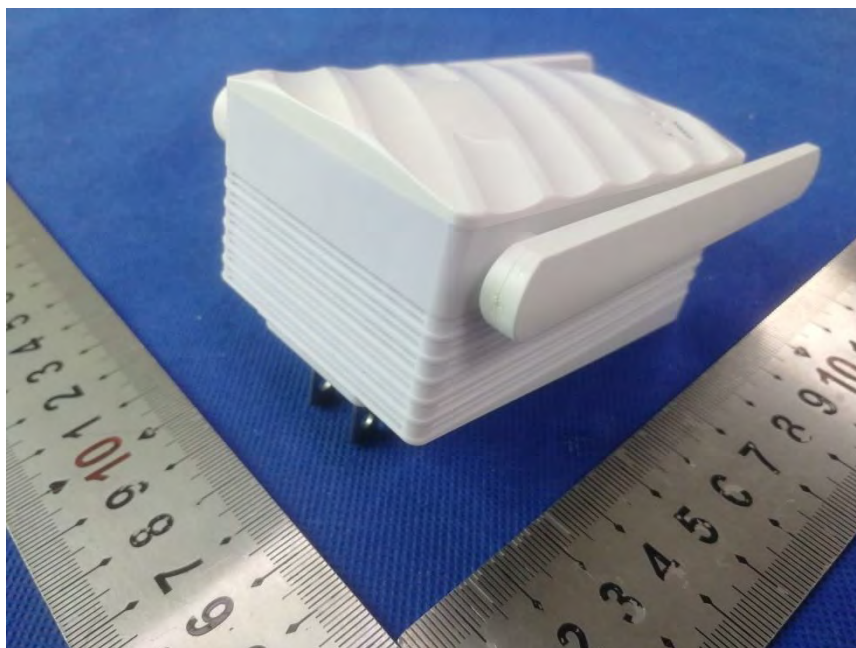
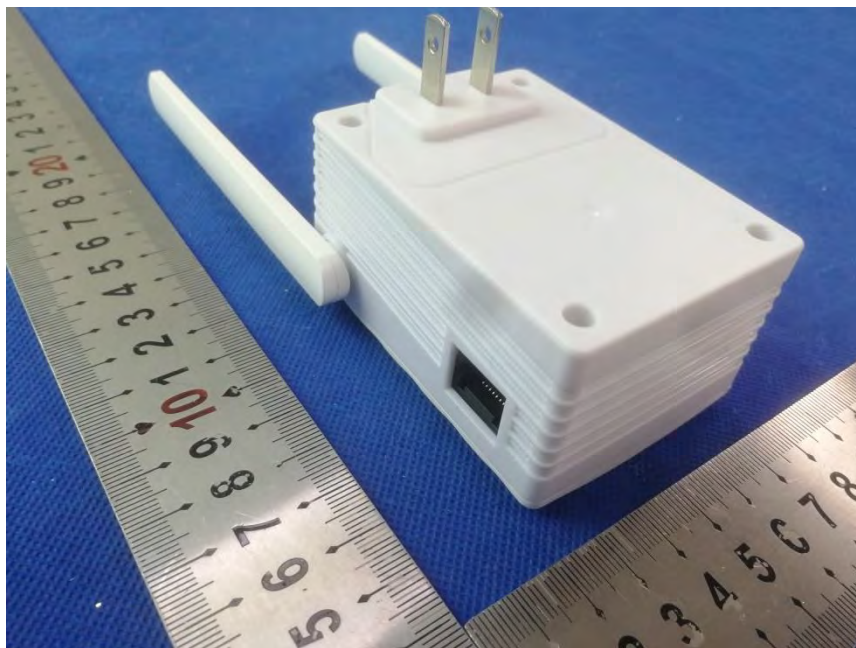


8 PHOTOS OF THE EUT

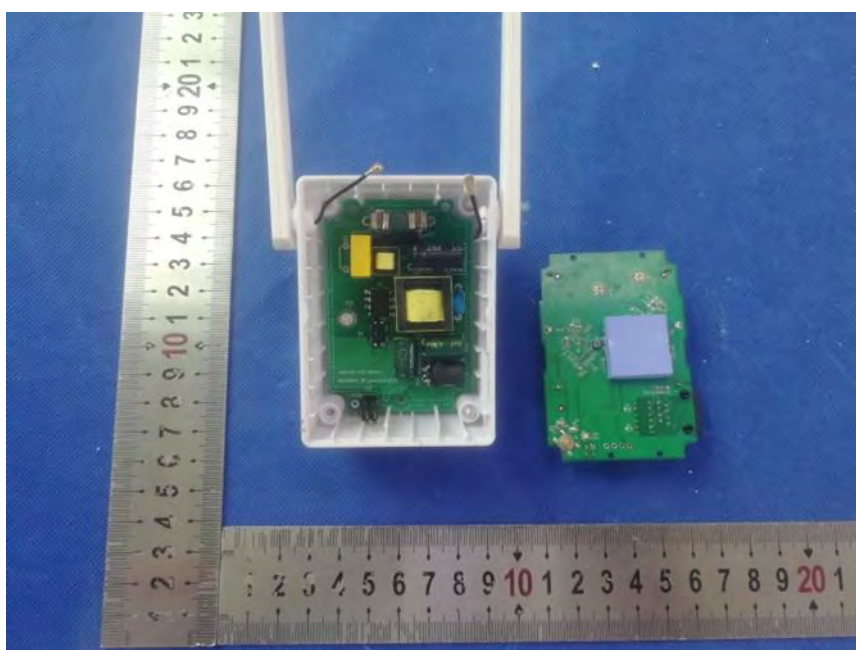
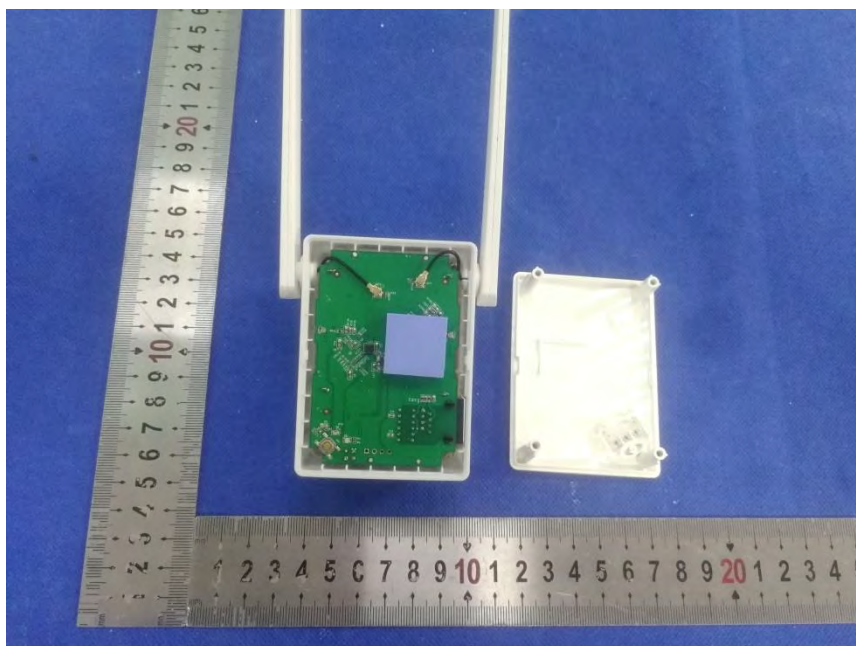
External photos

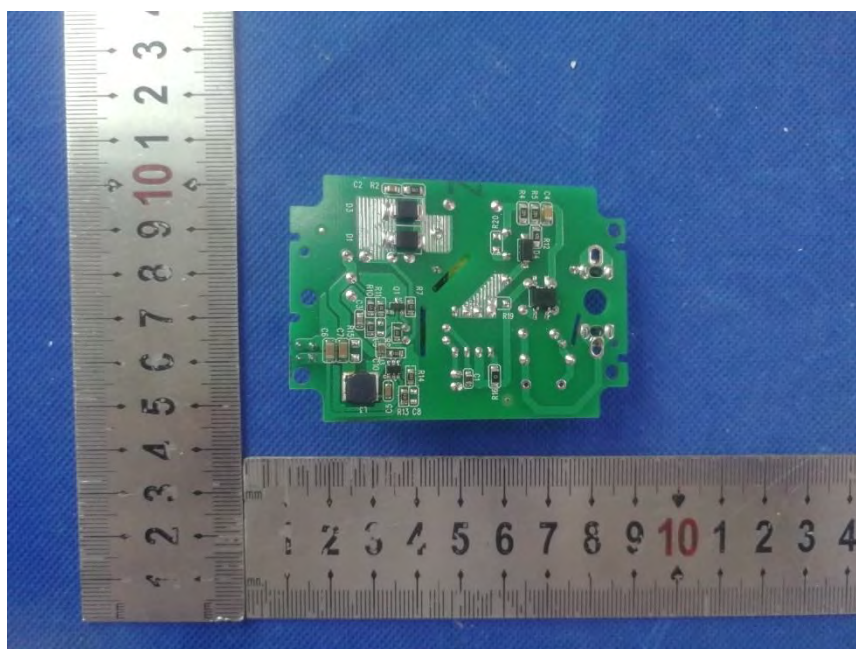
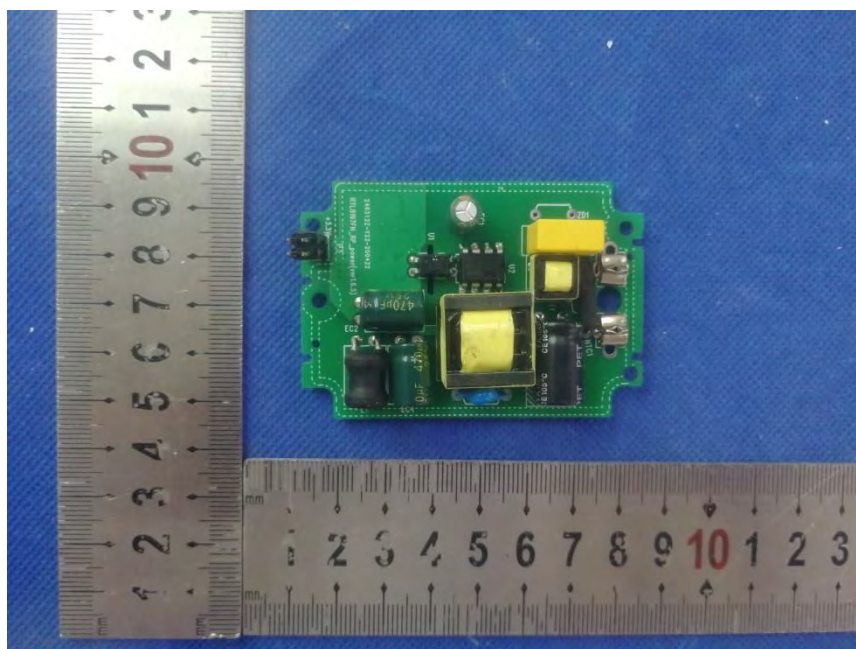


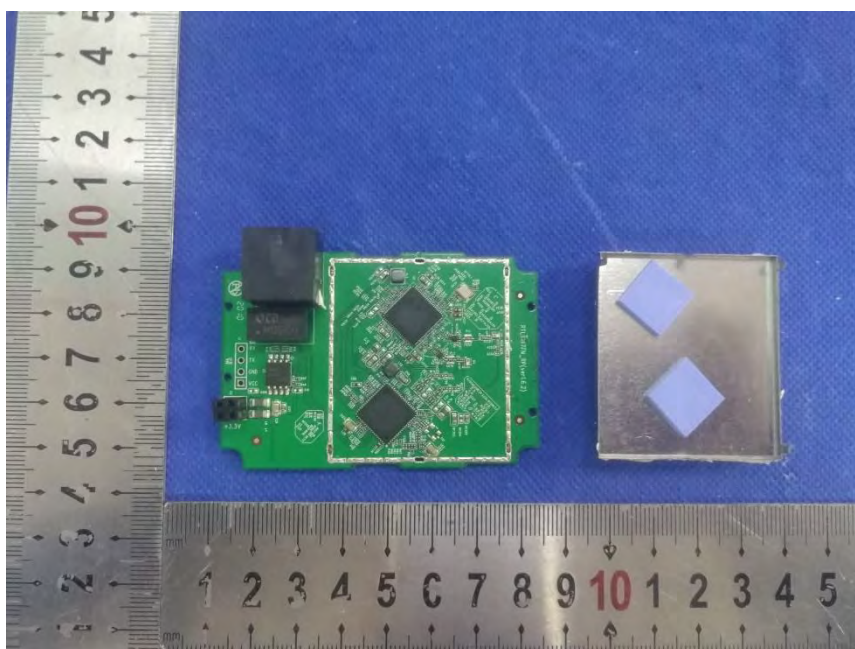
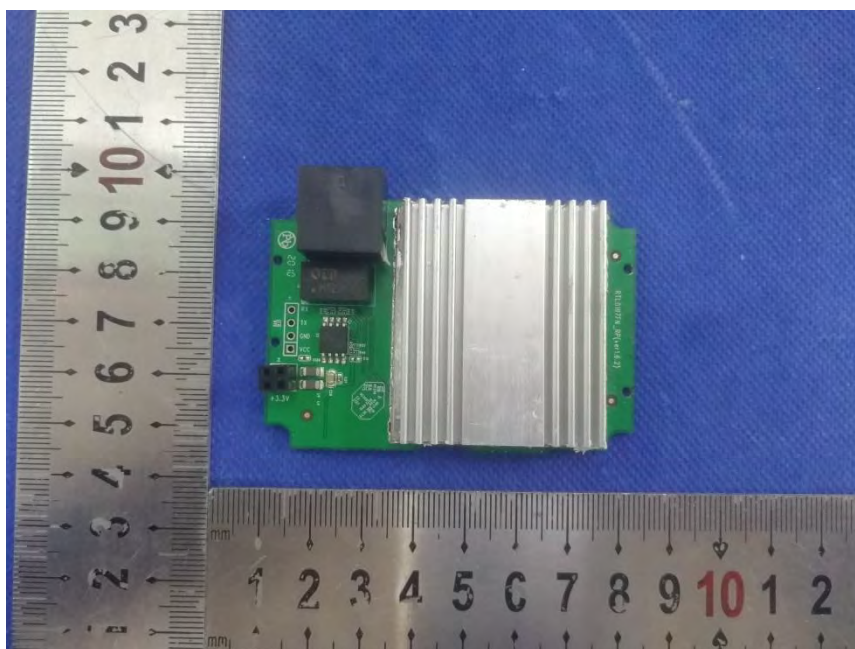


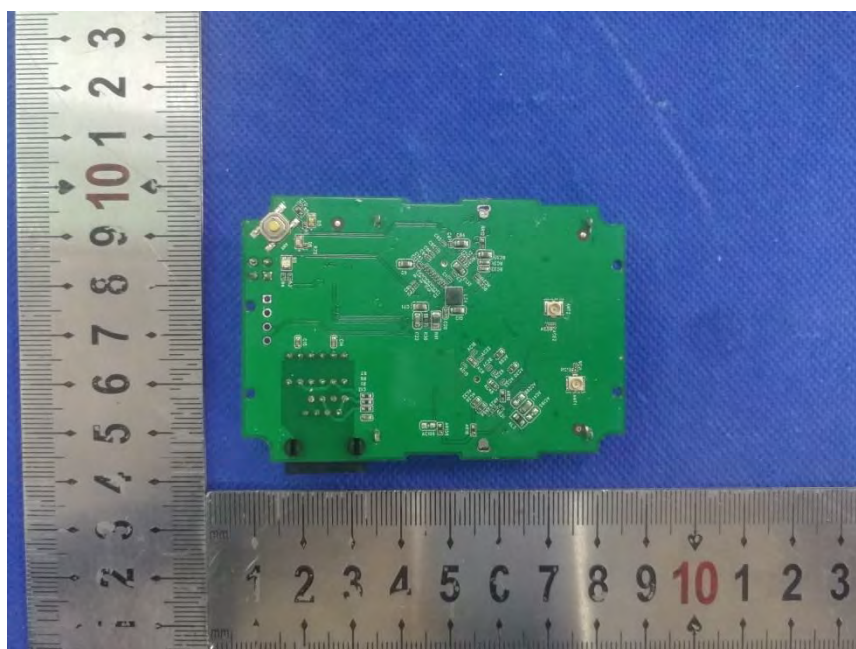
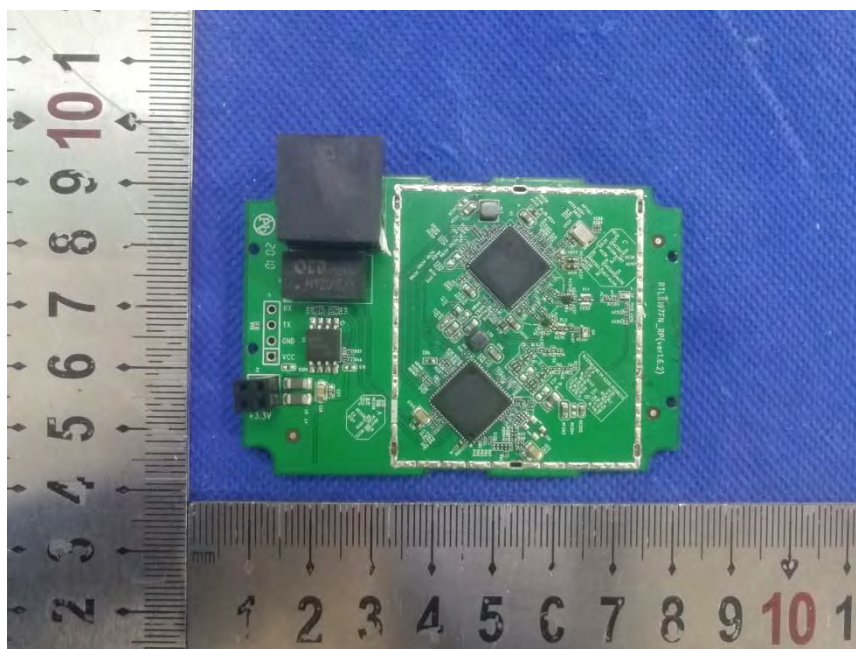


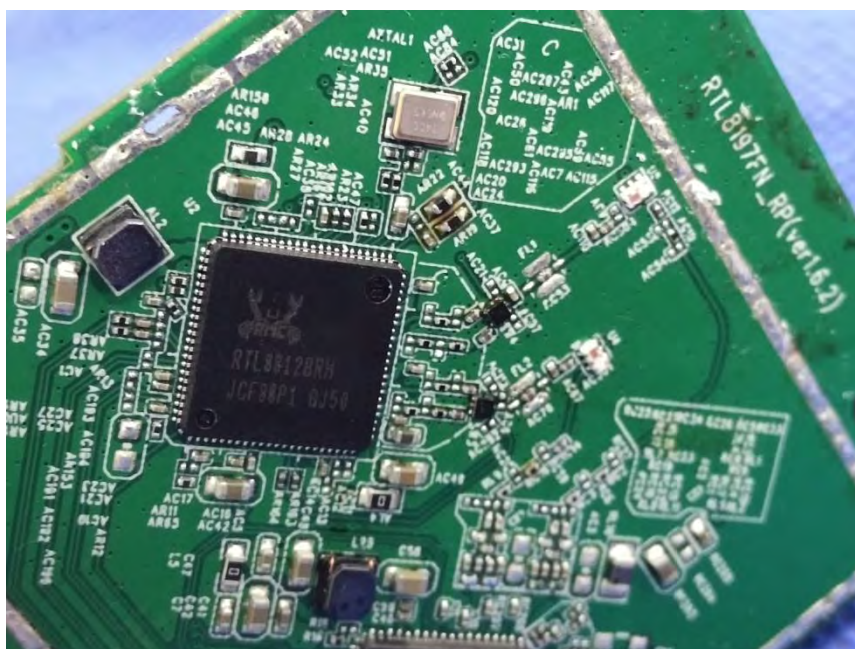
Internal photos











*****END OF REPORT*****