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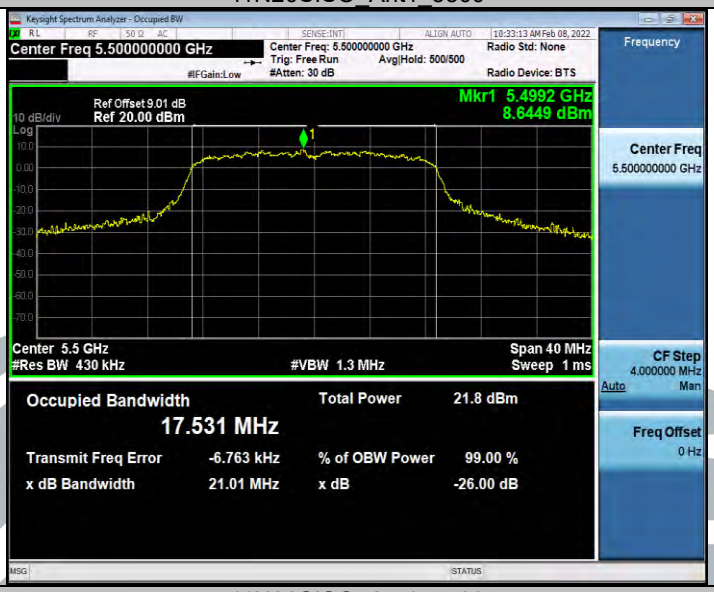
11N20SISO_Ant1_5300

11N20SISO_Ant1_5320

11N20SISO_Ant1_5500



11N20SISO_Ant1_5580

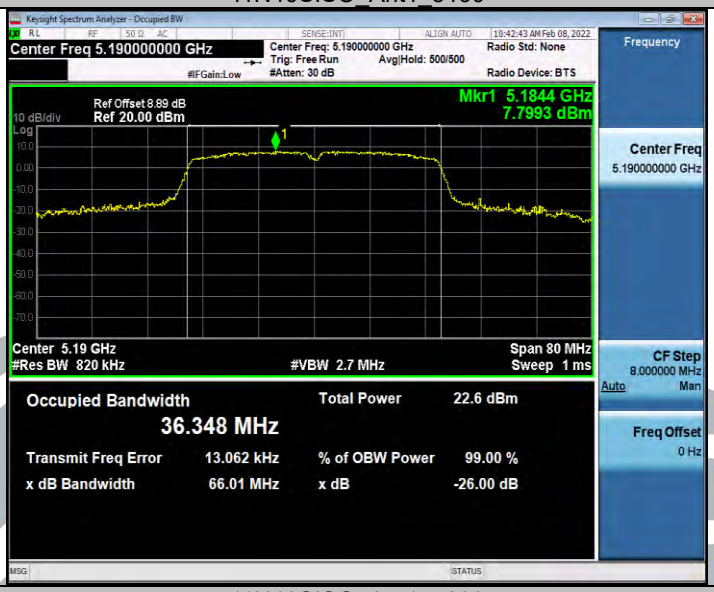
11N20SISO_Ant1_5700

11N20SISO_Ant1_5745

11N20SISO_Ant1_5785

11N20SISO_Ant1_5825

11N40SISO_Ant1_5190

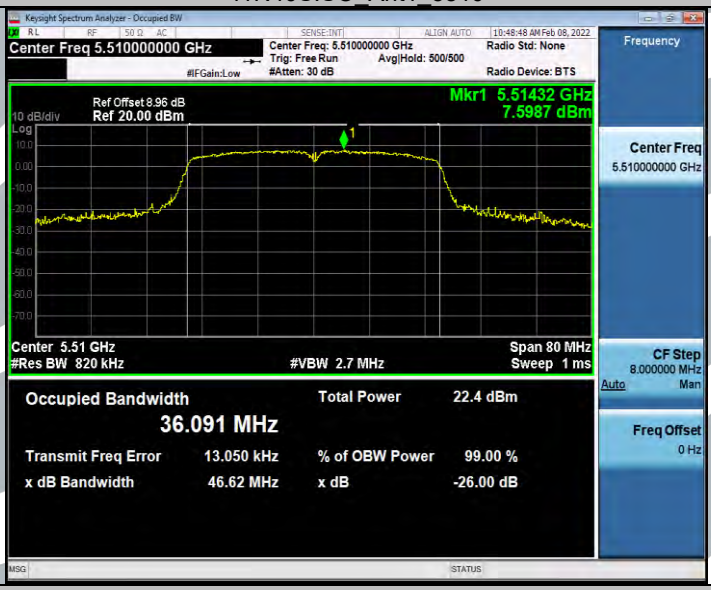


11N40SISO_Ant1_5230

11N40SISO_Ant1_5270

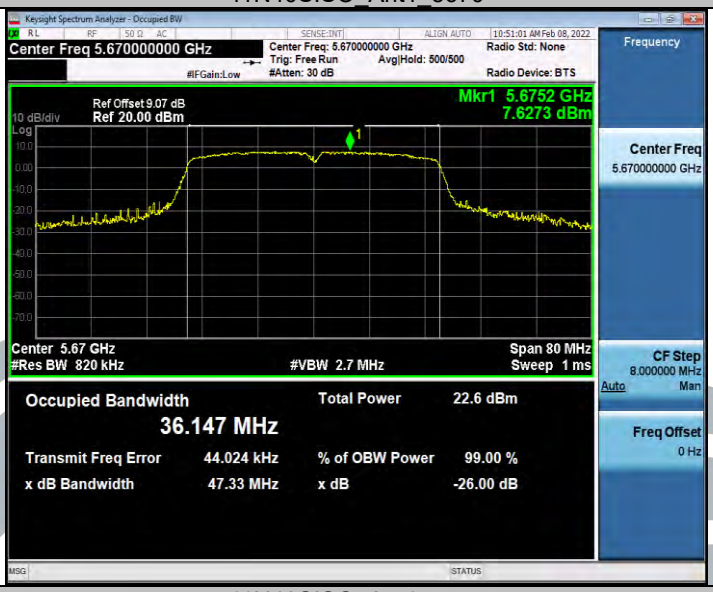
11N40SISO_Ant1_5310

11N40SISO_Ant1_5510



11N40SISO_Ant1_5550

11N40SISO_Ant1_5670



11N40SISO_Ant1_5755

11N40SISO_Ant1_5795

11AC20SISO_Ant1_5180

11AC20SISO_Ant1_5220

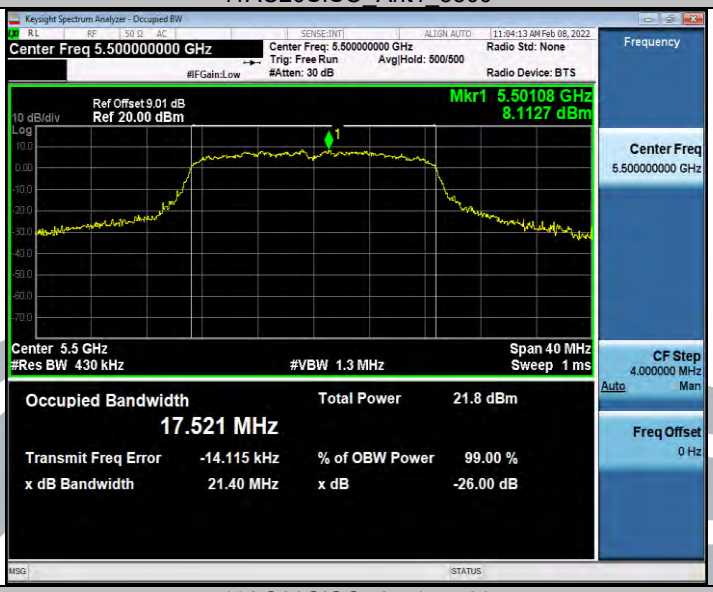
11AC20SISO_Ant1_5240

11AC20SISO_Ant1_5260

11AC20SISO_Ant1_5300

11AC20SISO_Ant1_5320

11AC20SISO_Ant1_5500



11AC20SISO_Ant1_5580

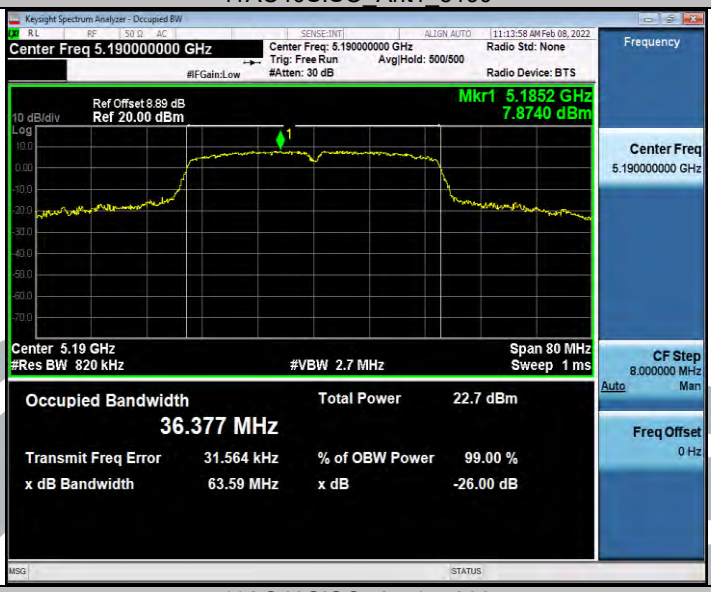
11AC20SISO_Ant1_5700

11AC20SISO_Ant1_5745

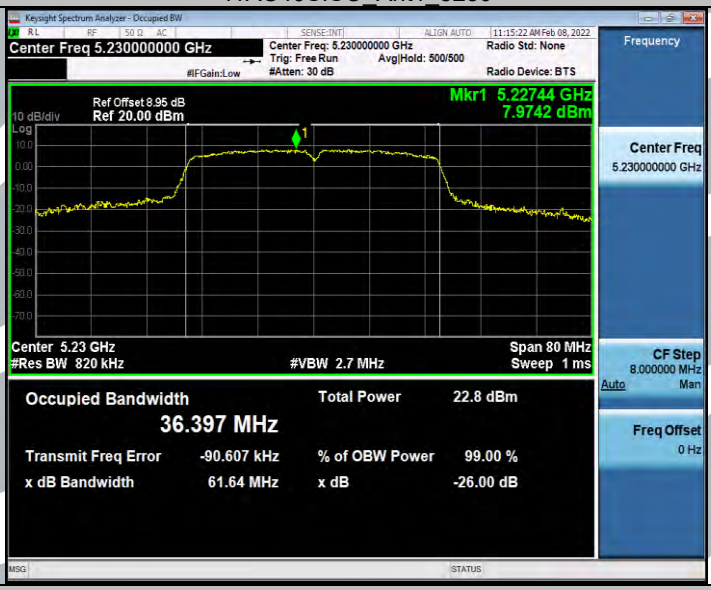
11AC20SISO_Ant1_5785

11AC20SISO_Ant1_5825

11AC40SISO_Ant1_5190

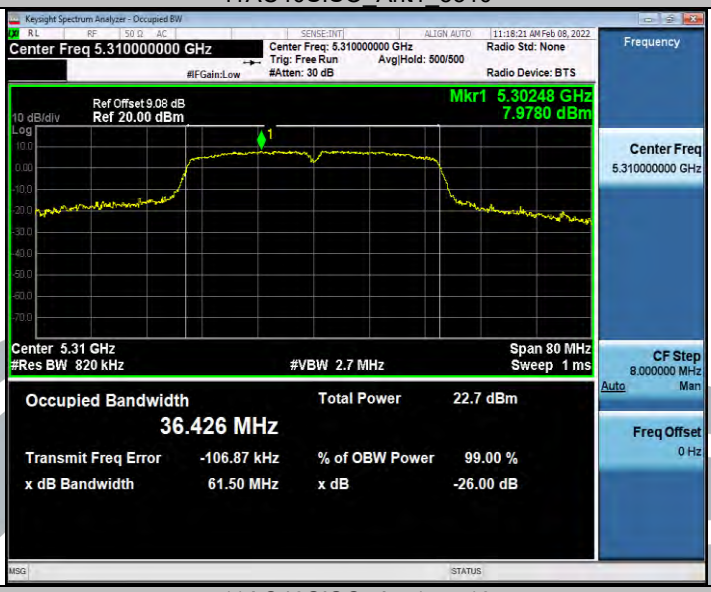


11AC40SISO_Ant1_5230



11AC40SISO_Ant1_5270

11AC40SISO_Ant1_5310



11AC40SISO_Ant1_5510

11AC40SISO_Ant1_5550

11AC40SISO_Ant1_5670

11AC40SISO_Ant1_5755

11AC40SISO_Ant1_5795

11AC80SISO_Ant1_5210

11AC80SISO_Ant1_5290

11AC80SISO_Ant1_5530

11AC80SISO_Ant1_5775


5.46 DB BANDWIDTH & OCCUPIED BANDWIDTH

Test Requirement: FCC 47 CFR Part 15 Subpart E Section 15.407 (e)
RSS-247 Issue 2 Section 6.2.4.1

Test Method: KDB 789033 D02 v02r01 Section C.2

Limit: Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

Test Procedure:

The output from the transmitter was connected to an attenuator and then to the input of the RF Spectrum Analyzer.

Spectrum analyzer according to the following Settings:

6dB Bandwidth

a) Set RBW = 100 kHz.
b) Set the video bandwidth (VBW) ≥ 3 * RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Sweep = auto couple.
f) Allow the trace to stabilize.
g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

Occupied Bandwidth

a) Set RBW = 1% to 5% of the occupied bandwidth
b) Set the video bandwidth (VBW) ≥ 3 x RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Sweep = auto couple.
f) Allow the trace to stabilize.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

Test Setup: Refer to section 4.5.3 for details.

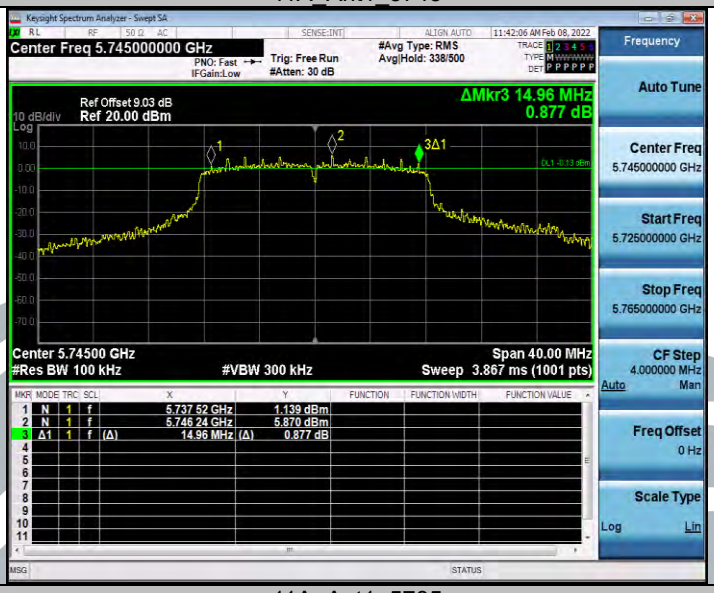
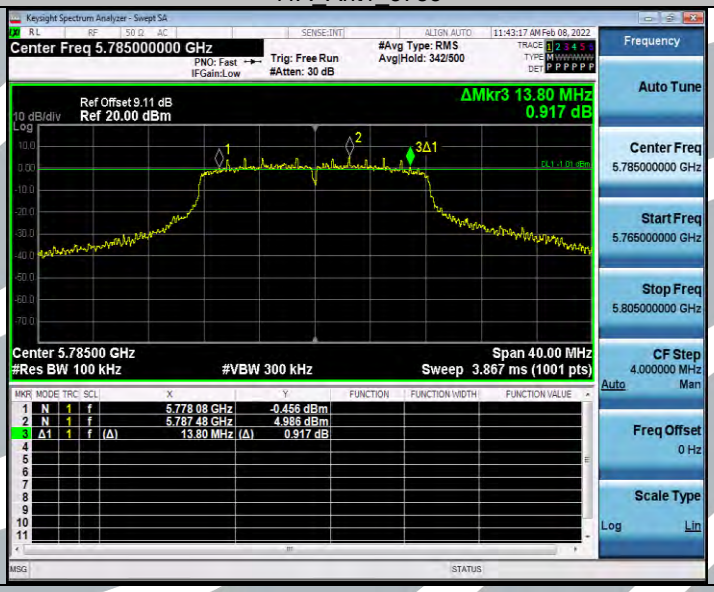
Instruments Used: Refer to section 3 for details

Test Mode: Transmitter mode

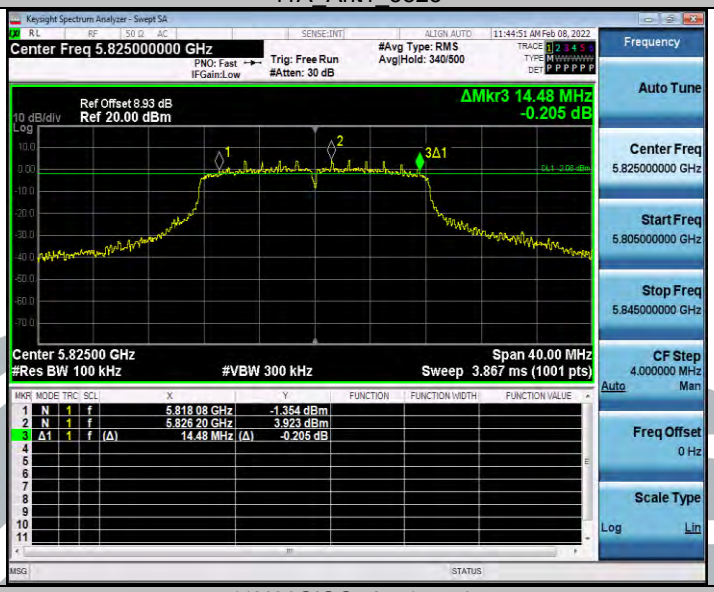
Test Results: Pass

Test Mode	Antenna	Channel	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	14.960	5737.520	5752.480	0.5	PASS
		5785	13.800	5778.080	5791.880	0.5	PASS
		5825	14.480	5818.080	5832.560	0.5	PASS
11N20SISO	Ant1	5745	15.160	5737.400	5752.560	0.5	PASS
		5785	15.400	5777.120	5792.520	0.5	PASS
		5825	15.040	5817.520	5832.560	0.5	PASS
11N40SISO	Ant1	5755	35.120	5737.400	5772.520	0.5	PASS
		5795	35.120	5777.400	5812.520	0.5	PASS
11AC20SISO	Ant1	5745	15.440	5737.120	5752.560	0.5	PASS
		5785	15.080	5777.400	5792.480	0.5	PASS
		5825	15.400	5817.080	5832.480	0.5	PASS
11AC40SISO	Ant1	5755	35.120	5737.400	5772.520	0.5	PASS
		5795	35.120	5777.400	5812.520	0.5	PASS
11AC80SISO	Ant1	5775	75.040	5737.400	5812.440	0.5	PASS

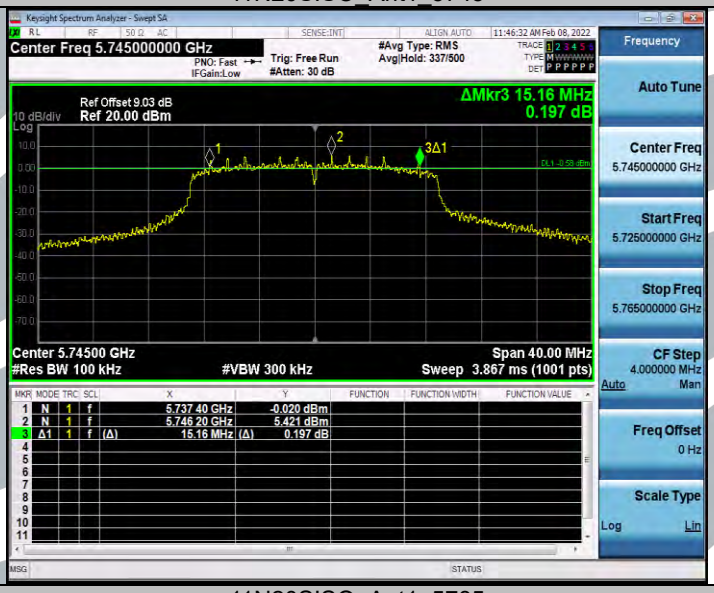
Test Graphs:

11A_Ant1_5745

11A_Ant1_5785


11A_Ant1_5825

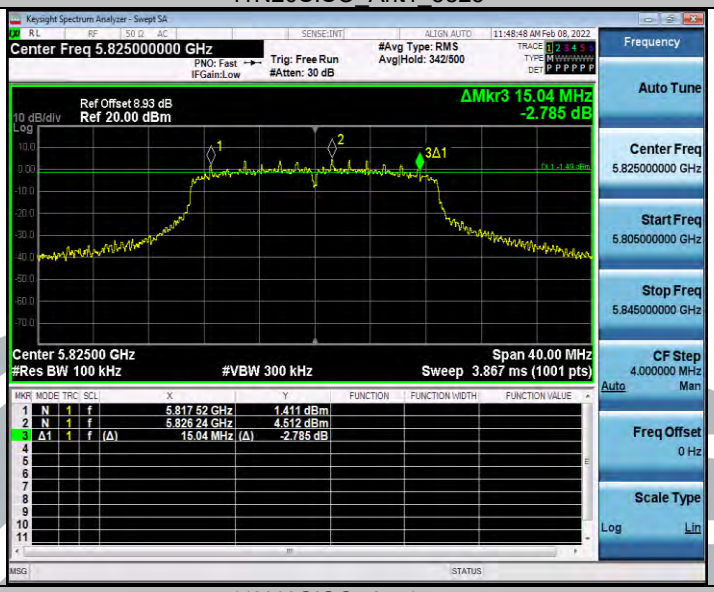


11N20SISO_Ant1_5745

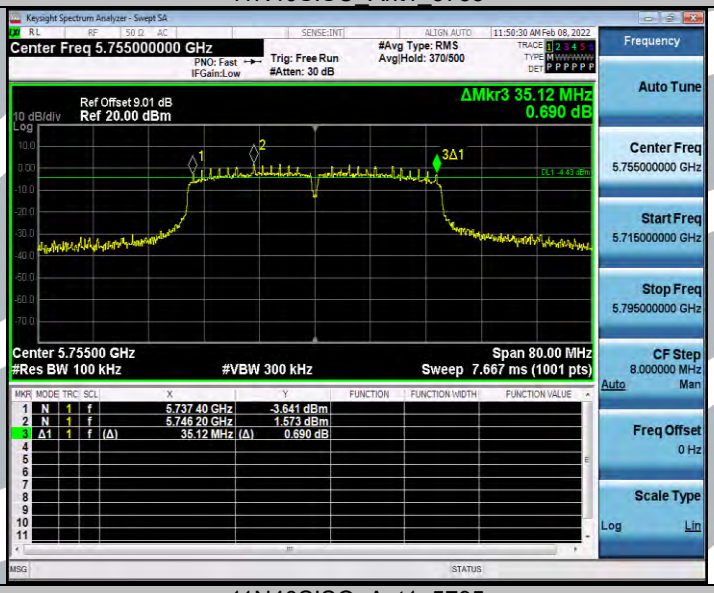


11N20SISO_Ant1_5785

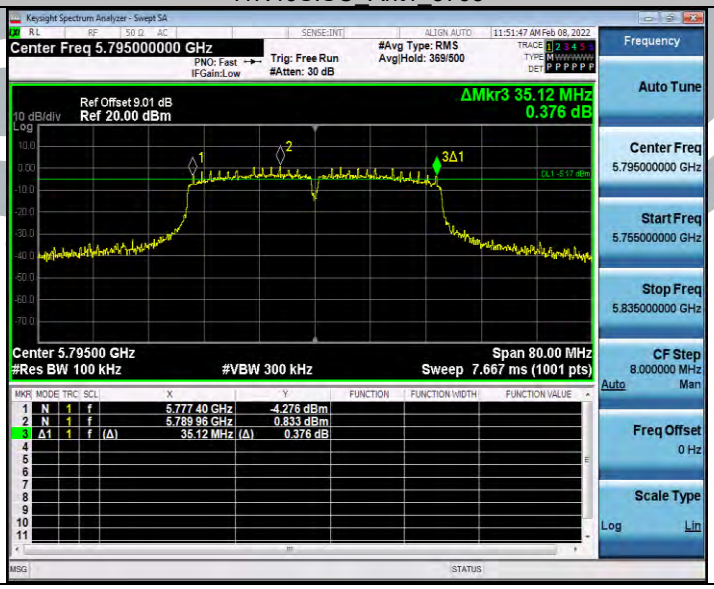
11N20SISO_Ant1_5825



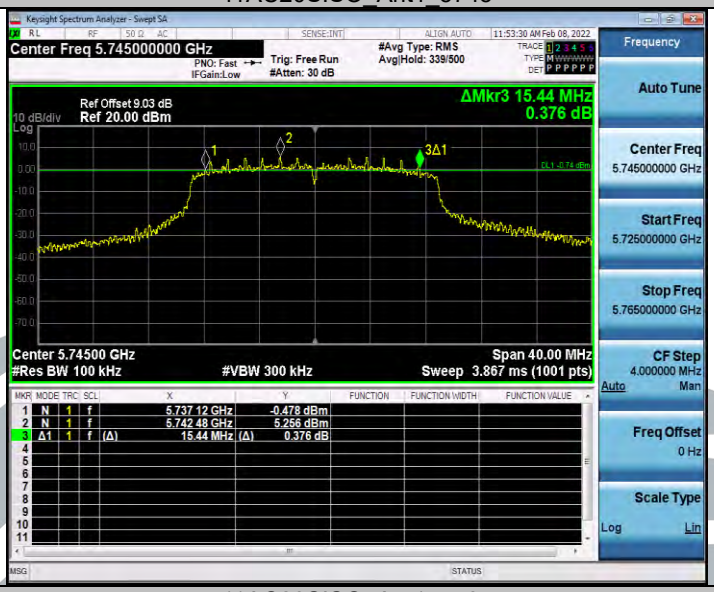
11N40SISO_Ant1_5755



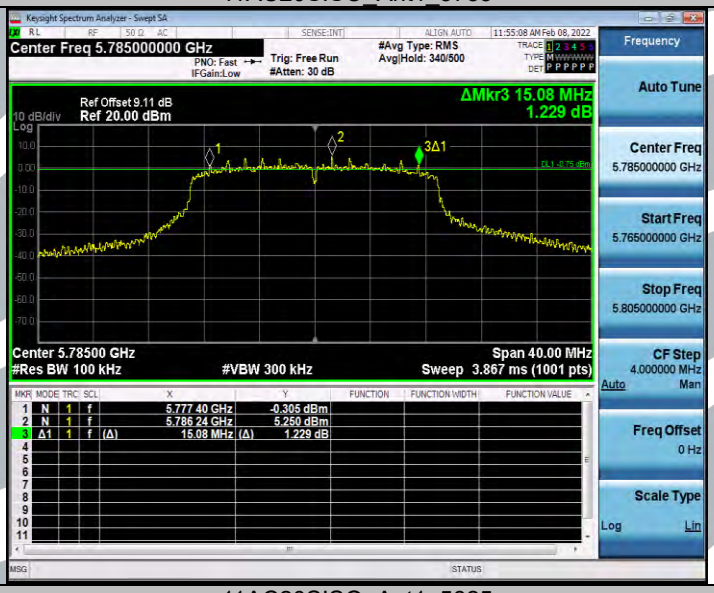
11N40SISO_Ant1_5795



11AC20SISO_Ant1_5745

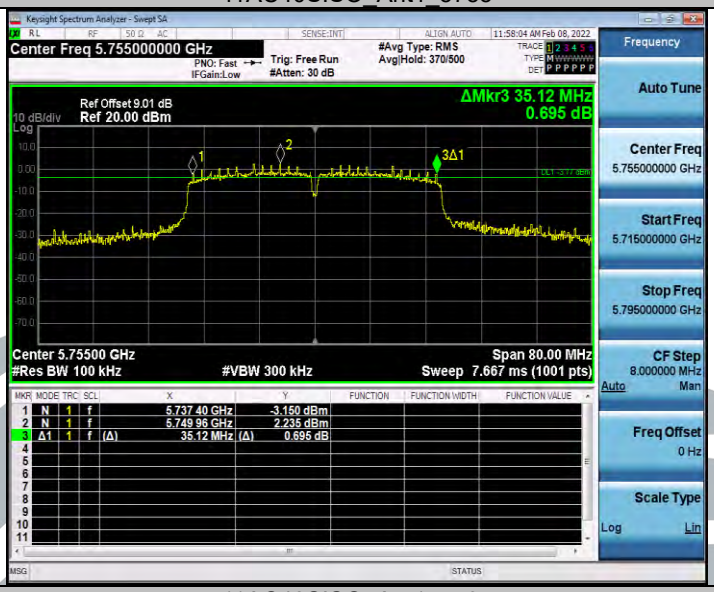


11AC20SISO_Ant1_5785

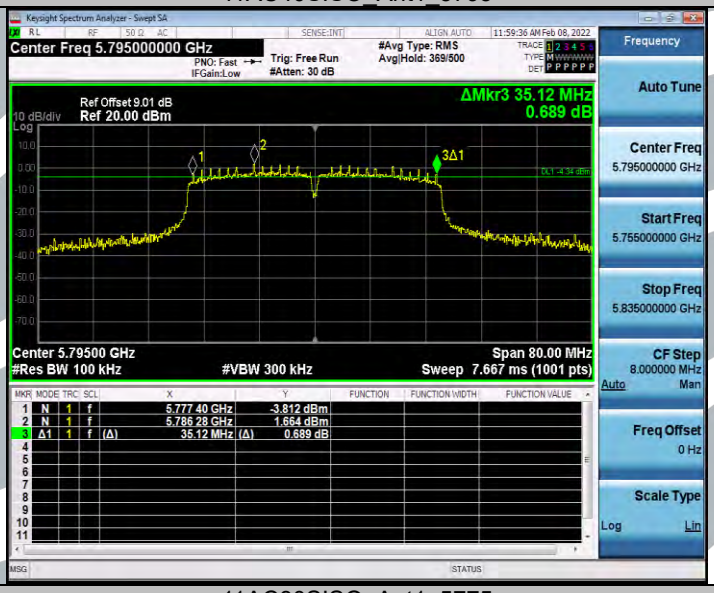


11AC20SISO_Ant1_5825

11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5775

5.5 MAXIMUM CONDUCTED OUTPUT POWER OR E.I.R.P

Test Requirement: FCC 47 CFR Part 15 Subpart E Section 15.407 (a)(1)(2)(3)
RSS-247 Issue 2 Section 6.2.1.1/6.2.2.1/6.2.3.1/6.2.4.1

Test Method: KDB 789033 D02 v02r01 Section E.2 (Method SA)

Limits: FCC 47 CFR Part 15 Subpart E

1. For the band 5.15-5.25 GHz.
   (i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

   (ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

   (iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

   (iv) For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

2. For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3. For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

Limits: RSS-247 Issue 2

1. **Frequency band 5150-5250 MHz**
For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or 1.76 + 10 $\log_{10}$B, dBm, whichever is less. Devices shall implement transmitter power control (TPC) in order to have the capability to operate at least 3 dB below the maximum permitted e.i.r.p. of 30 mW.

For other devices, the maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 $\log_{10}$B, dBm, whichever power is less. B is the 99% emission bandwidth in megahertz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

2. **Frequency band 5250-5350 MHz**
For OEM devices installed in vehicles, the maximum e.i.r.p. shall not exceed 30 mW or 1.76 + 10 $\log_{10}$B, dBm, whichever is less. Devices shall implement TPC in order to have the capability to operate at least 3 dB below the maximum permitted e.i.r.p. of 30 mW.

Devices, other than devices installed in vehicles, shall comply with the following:

a) The maximum conducted output power shall not exceed 250 mW or 11 + 10 $\log_{10}$B, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band;

b) The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 $\log_{10}$B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

Additional requirements

In addition to the above requirements, devices shall comply with the following, where applicable:

a) Outdoor fixed devices with a maximum e.i.r.p. greater than 200 mW shall comply with the following e.i.r.p. at different elevations, where θ is the angle above the local horizontal plane (of the Earth) as shown below:

i. -13 dBW/MHz for $0^o \le \theta < 8^o$

ii. -13 − 0.716 (θ-8) dBW/MHz for $8^o \le \theta < 40^o$

iii. -35.9 − 1.22 (θ-40) dBW/MHz for $40^o \le \theta \le 45^o$

iv. -42 dBW/MHz for $\theta > 45^o$

The measurement procedure defined in Annex A of this document shall be used to verify the compliance to the e.i.r.p. at different elevations.

b) Devices, other than outdoor fixed devices, having an e.i.r.p. greater than 200 mW shall comply with either i. or ii. below:

i. devices shall comply with the e.i.r.p. elevation mask in 6.2.2.3(a); or

ii. devices shall implement a method to permanently reduce their e.i.r.p. via a firmwarefeature in the event that the Department requires it. The test report must demonstratehow the device's power table can be updated to meet this firmware requirement. Themanufacturer shall provide this firmware to update all systems automatically incompliance with the directions received from the Department.

3. **Frequency bands 5470-5600 MHz and 5650-5725 MHz**
The maximum conducted output power shall not exceed 250 mW or 11 + 10 $\log_{10}$B, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 $\log_{10}$B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

4. **Frequency band 5725-5850 MHz**

The maximum conducted output power shall not exceed 1 W. The output power spectral density shall not exceed 30 dBm in any 500 kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the output power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point devices

operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed point-to-point operations exclude the use of point-to-multipoint[3] systems, omnidirectional applications and multiple collocated transmitters transmitting the same information.

Test Procedure:

Measurement of maximum conducted output power using a spectrum analyzer requires integrating the spectrum across a frequency span that encompasses, at a minimum, either the EBW or the 99% occupied bandwidth of the signal.1 However, the EBW must be used to determine bandwidth dependent limits on maximum conducted output power in accordance with Section 15.407(a).

a) The test method shall be selected as follows:

(i) Method SA-1 or SA-1 Alternative (averaging with the EUT transmitting at full power throughout each sweep) shall be applied if either of the following conditions can be satisfied:

The EUT transmits continuously (or with a duty cycle ≥ 98%).

Sweep triggering or gating can be implemented in a way that the device transmits at the maximum power control level throughout the duration of each of the instrument sweeps to be averaged. This condition can generally be achieved by triggering the instrument's sweep if the duration of the sweep (with the analyzer configured as in Method SA-1, i.e., II.E.2.b)) is equal to or shorter than the duration T of each transmission from the EUT and if those transmissions exhibit full power throughout their durations.

(ii) Method SA-2 or SA-2 Alternative (averaging across on and off times of the EUT transmissions, followed by duty cycle correction) shall be applied if the conditions of (i) cannot be achieved and the transmissions exhibit a constant duty cycle during the measurement duration. Duty cycle will be considered to be constant if variations are less than ± 2%.

(iii) Method SA-3 (power averaging (rms) detection with max hold) or SA-3 Alternative (reduced VBW with max hold) shall be applied if the conditions of (i) and (ii) cannot be achieved.

b) Method SA-1 (trace averaging with the EUT transmitting at full power throughout each sweep):

(i) Set span to encompass the entire emission bandwidth (EBW) (or, alternatively, the entire 99% occupied bandwidth) of the signal.

(ii) Set RBW = 1 MHz.

(iii) Set VBW ≥ 3 MHz.

(iv) Number of points in sweep ≥ 2 × span / RBW. (This ensures that bin-to-bin spacing is ≤ RBW/2, so that narrowband signals are not lost between frequency bins.)

(v) Sweep time = auto.

(vi) Detector = power averaging (rms), if available. Otherwise, use sample detector mode.

(vii) If transmit duty cycle < 98%, use a video trigger with the trigger level set to enable triggering only on full power pulses. Transmitter must operate at maximum power control level for the entire duration of every sweep. If the EUT transmits continuously (i.e., with no off intervals) or at duty cycle ≥ 98%, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to "free run."

(viii) Trace average at least 100 traces in power averaging (rms) mode.

(ix) Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument's band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1 MHz intervals extending across the EBW (or, alternatively, the

entire 99% occupied bandwidth) of the spectrum.

Test Setup: Refer to section 4.5.3 for details.

Instruments Used: Refer to section 3 for details

Test Mode: Transmitter mode

Test Results: Pass

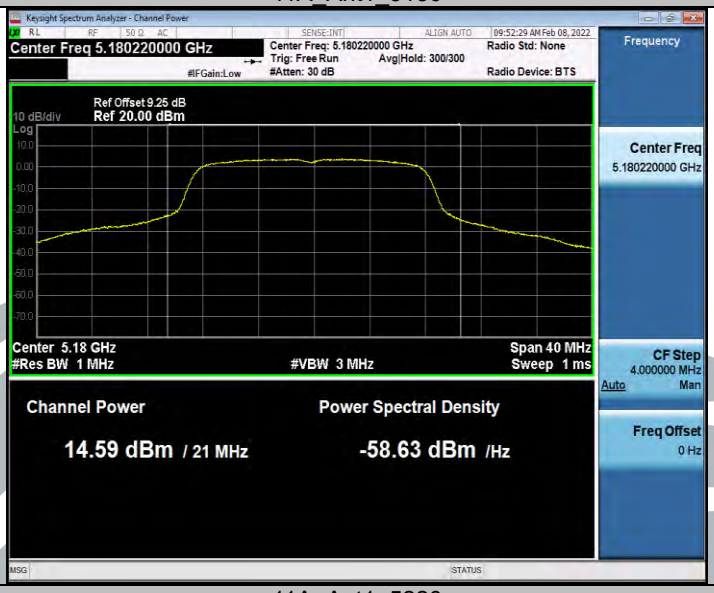
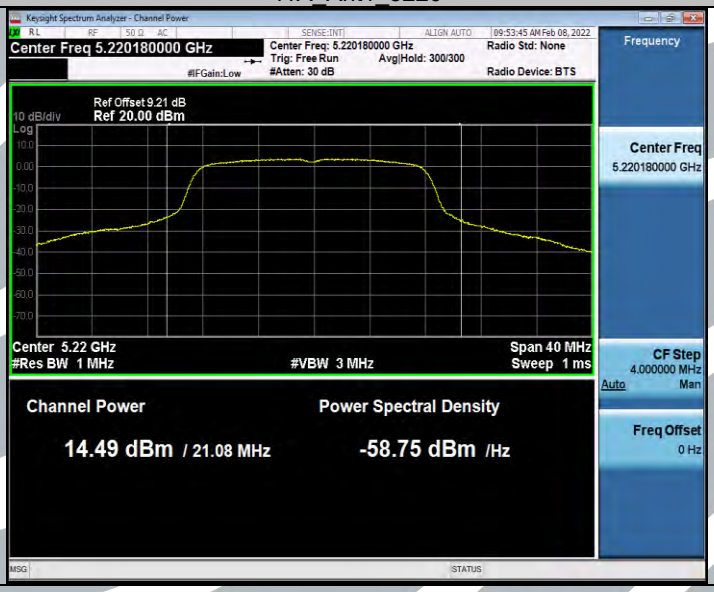
Test Mode	Antenna	Channel	Power [dBm]	Final Limit [dBm]	Verdict
11A	Ant1	5180	14.59	23.98	PASS
		5220	14.49	23.98	PASS
		5240	14.59	23.98	PASS
		5260	14.51	23.98	PASS
		5300	14.6	23.98	PASS
		5320	14.63	23.98	PASS
		5500	15.99	23.98	PASS
		5580	16.38	23.98	PASS
		5700	16.3	23.98	PASS
		5745	15.81	30.00	PASS
		5785	15.13	30.00	PASS
		5825	14.42	30.00	PASS
11N20SISO	Ant1	5180	15.16	23.98	PASS
		5220	15.26	23.98	PASS
		5240	15.32	23.98	PASS
		5260	15.06	23.98	PASS
		5300	15.38	23.98	PASS
		5320	15.34	23.98	PASS
		5500	14.98	23.98	PASS
		5580	15.44	23.98	PASS
		5700	15.49	23.98	PASS
		5745	15.58	30.00	PASS
		5785	14.98	30.00	PASS
		5825	14.12	30.00	PASS
11N40SISO	Ant1	5190	15.34	23.98	PASS
		5230	15.44	23.98	PASS
		5270	15.25	23.98	PASS
		5310	15.45	23.98	PASS
		5510	15.12	23.98	PASS
		5550	14.69	23.98	PASS
		5670	15.33	23.98	PASS
		5755	14.93	30.00	PASS
		5795	14.07	30.00	PASS
11AC20SISO	Ant1	5180	15.11	23.98	PASS
		5220	15.18	23.98	PASS
		5240	15.28	23.98	PASS
		5260	15.12	23.98	PASS
		5300	15.24	23.98	PASS

		5320	15.34	23.98	PASS
		5500	14.96	23.98	PASS
		5580	15.38	23.98	PASS
		5700	15.5	23.98	PASS
		5745	15.55	30.00	PASS
		5785	14.96	30.00	PASS
		5825	14.05	30.00	PASS
11AC40SISO	Ant1	5190	15.17	23.98	PASS
		5230	15.29	23.98	PASS
		5270	15.24	23.98	PASS
		5310	15.36	23.98	PASS
		5510	14.9	23.98	PASS
		5550	14.77	23.98	PASS
		5670	15.15	23.98	PASS
		5755	15.47	30.00	PASS
		5795	14.73	30.00	PASS
11AC80SISO	Ant1	5210	14.05	23.98	PASS
		5290	14.2	23.98	PASS
		5530	12.78	23.98	PASS
		5775	15.09	30.00	PASS

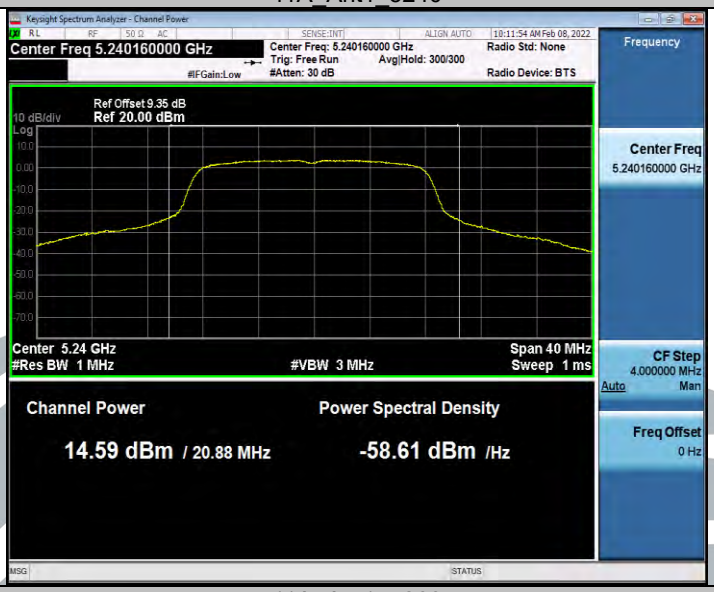
Test Mode	Antenna	Channel	Power [dBm]	Limit [dBm]	EIRP [dBm]	Final EIRPLimit [dBm]	Verdict
11A	Ant1	5180	14.59	---	19.09	22.17	PASS
		5220	14.49	---	18.99	22.17	PASS
		5240	14.59	---	19.09	22.17	PASS
		5260	14.51	23.16	19.01	29.16	PASS
		5300	14.6	23.17	19.1	29.17	PASS
		5320	14.63	23.17	19.13	29.17	PASS
		5500	15.99	23.19	20.49	29.19	PASS
		5580	16.38	23.19	20.88	29.19	PASS
		5700	16.3	23.23	20.8	29.23	PASS
		5745	15.81	30.00	20.31	---	PASS
		5785	15.13	30.00	19.63	---	PASS
		5825	14.42	30.00	18.92	---	PASS
11N20SISO	Ant1	5180	15.16	---	19.66	22.47	PASS
		5220	15.26	---	19.76	22.46	PASS
		5240	15.32	---	19.82	22.46	PASS
		5260	15.06	23.47	19.56	29.47	PASS
		5300	15.38	23.47	19.88	29.47	PASS
		5320	15.34	23.46	19.84	29.46	PASS
		5500	14.98	23.44	19.48	29.44	PASS
		5580	15.44	23.44	19.94	29.44	PASS
		5700	15.49	23.45	19.99	29.45	PASS
		5745	15.58	30.00	20.08	---	PASS

		5785	14.98	30.00	19.48	---	PASS
		5825	14.12	30.00	18.62	---	PASS
11N40SISO	Ant1	5190	15.34	---	19.84	23.01	PASS
		5230	15.44	---	19.94	23.01	PASS
		5270	15.25	23.98	19.75	30.00	PASS
		5310	15.45	23.98	19.95	30.00	PASS
		5510	15.12	23.98	19.62	30.00	PASS
		5550	14.69	23.98	19.19	30.00	PASS
		5670	15.33	23.98	19.83	30.00	PASS
		5755	14.93	30.00	19.43	---	PASS
		5795	14.07	30.00	18.57	---	PASS
11AC20SISO	Ant1	5180	15.11	---	19.61	22.48	PASS
		5220	15.18	---	19.68	22.47	PASS
		5240	15.28	---	19.78	22.48	PASS
		5260	15.12	23.46	19.62	29.46	PASS
		5300	15.24	23.54	19.74	29.54	PASS
		5320	15.34	23.46	19.84	29.46	PASS
		5500	14.96	23.44	19.46	29.44	PASS
		5580	15.38	23.44	19.88	29.44	PASS
		5700	15.5	23.44	20	29.44	PASS
		5745	15.55	30.00	20.05	---	PASS
		5785	14.96	30.00	19.46	---	PASS
		5825	14.05	30.00	18.55	---	PASS
11AC40SISO	Ant1	5190	15.17	---	19.67	23.01	PASS
		5230	15.29	---	19.79	23.01	PASS
		5270	15.24	23.98	19.74	30.00	PASS
		5310	15.36	23.98	19.86	30.00	PASS
		5510	14.9	23.98	19.4	30.00	PASS
		5550	14.77	23.98	19.27	30.00	PASS
		5670	15.15	23.98	19.65	30.00	PASS
		5755	15.47	30.00	19.97	---	PASS
		5795	14.73	30.00	19.23	---	PASS
11AC80SISO	Ant1	5210	14.05	---	18.55	23.01	PASS
		5290	14.2	23.98	18.7	30.00	PASS
		5530	12.78	23.98	17.28	30.00	PASS
		5775	15.09	30.00	19.59	---	PASS

Test Graphs:

11A_Ant1_5180

11A_Ant1_5220


11A_Ant1_5240



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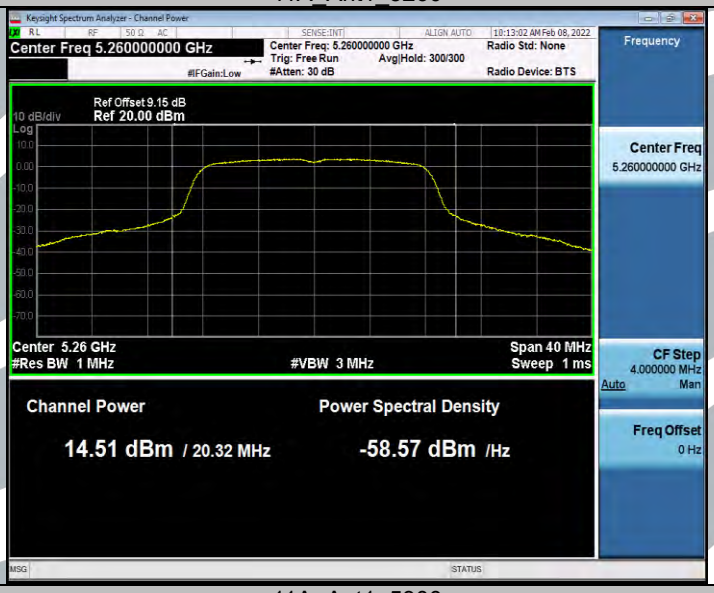

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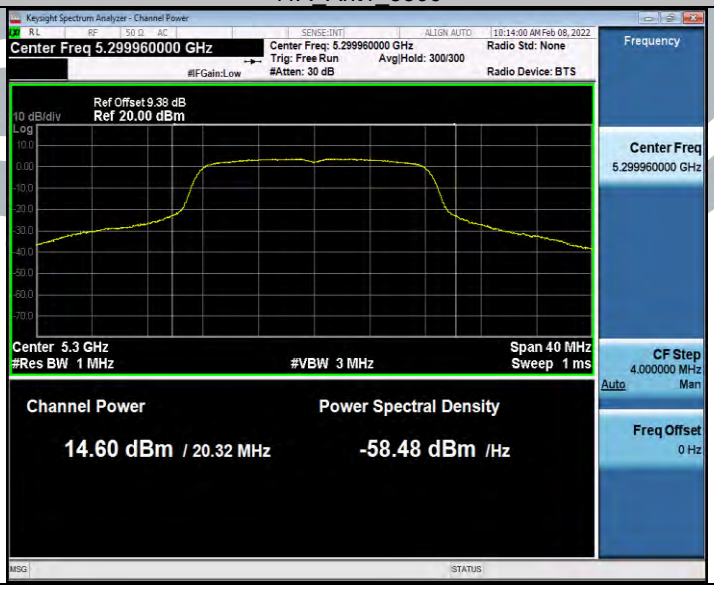

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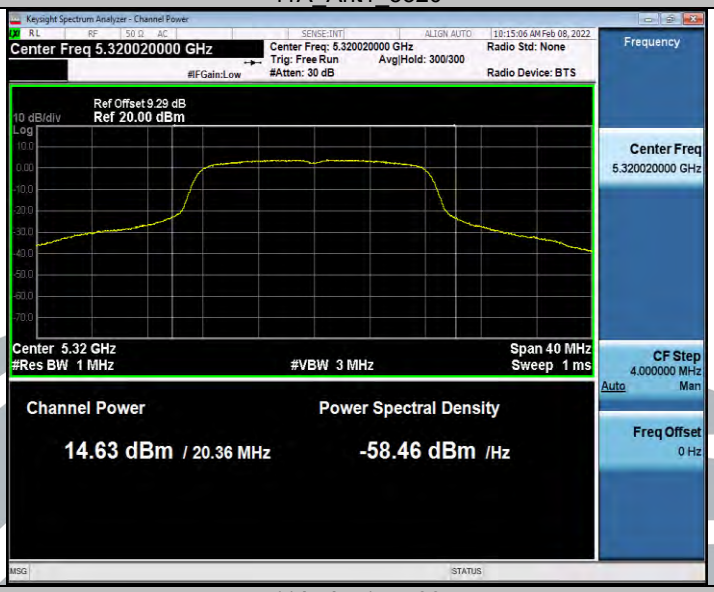

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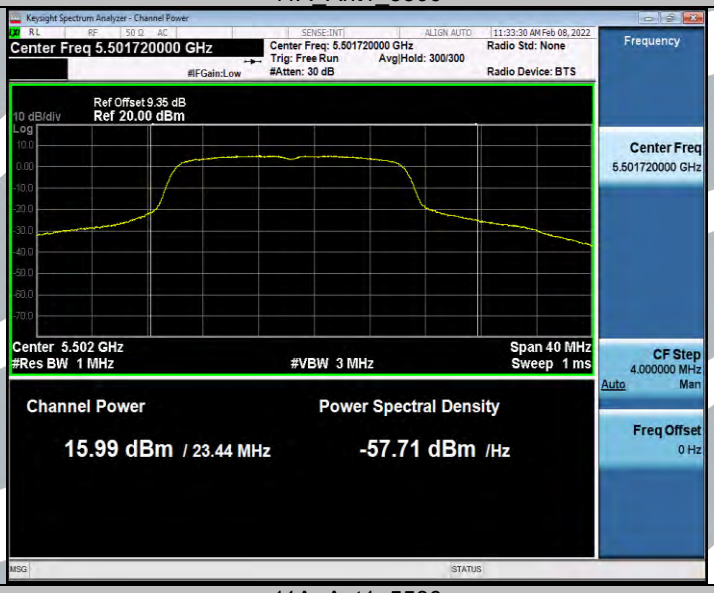

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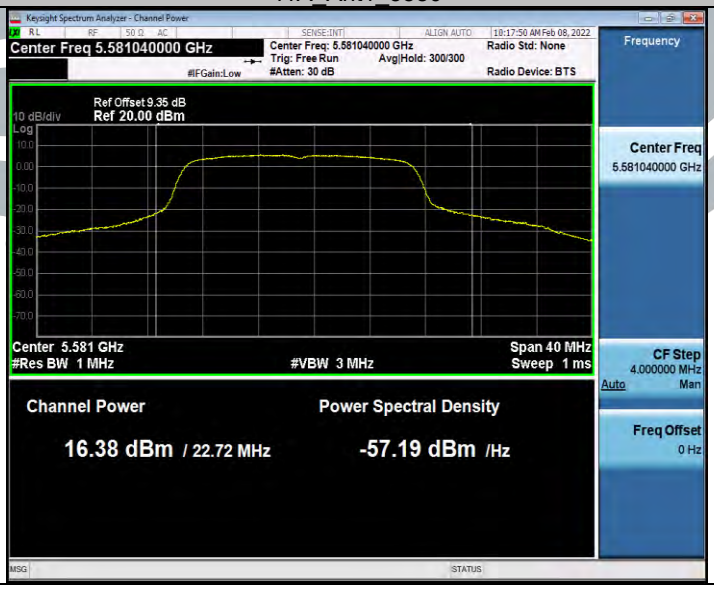

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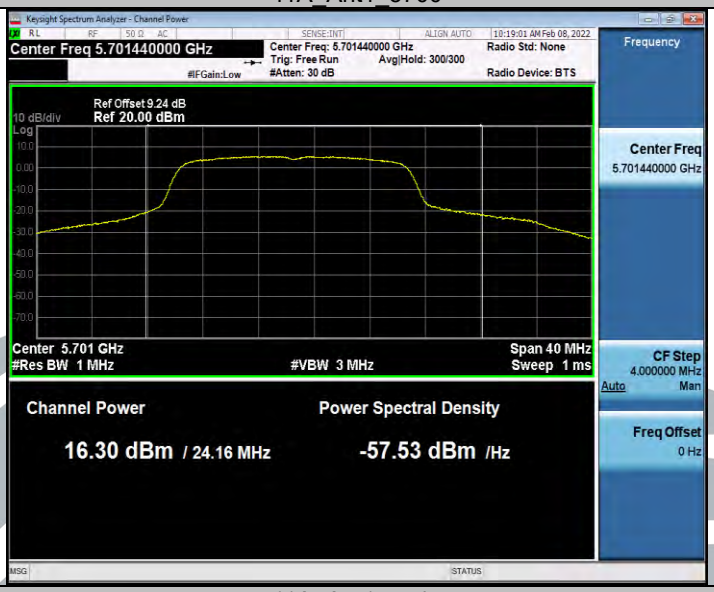

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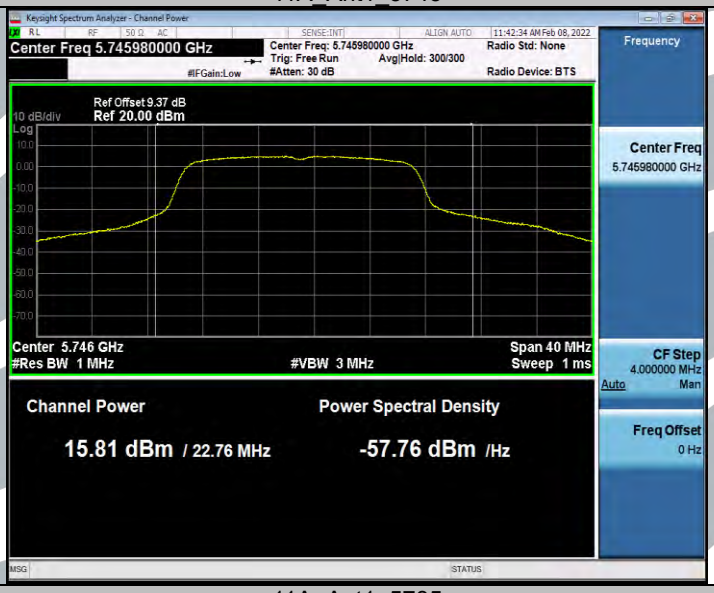

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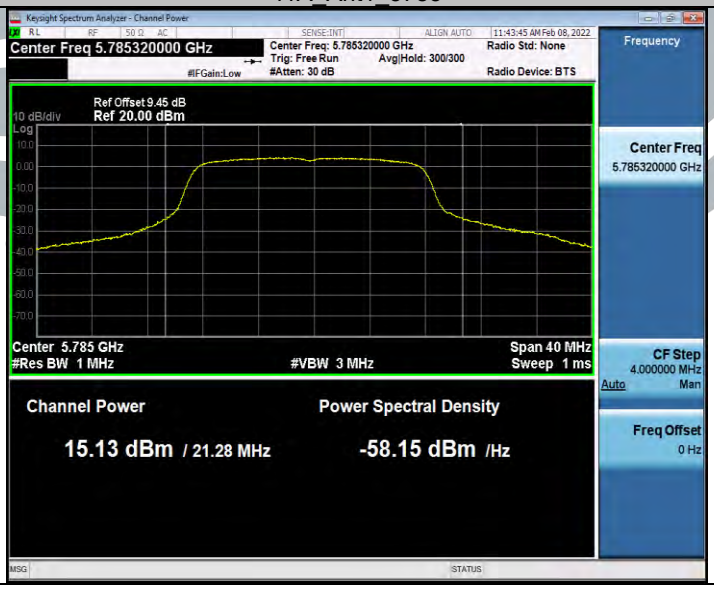
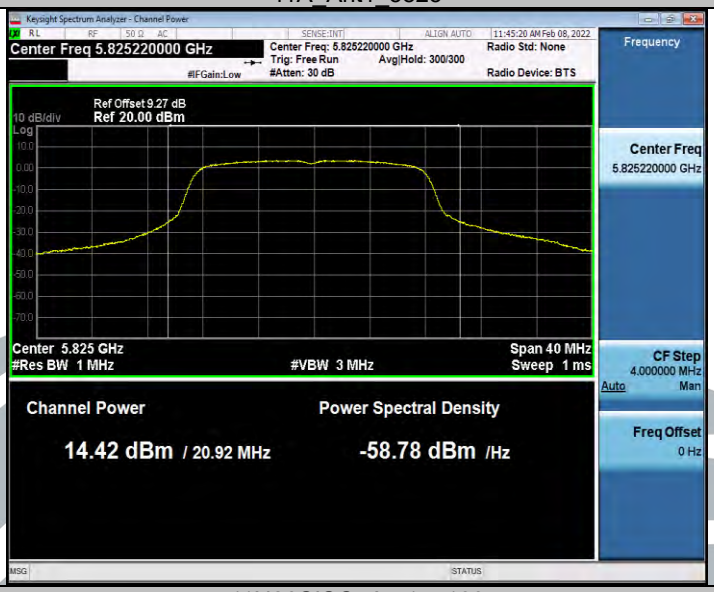
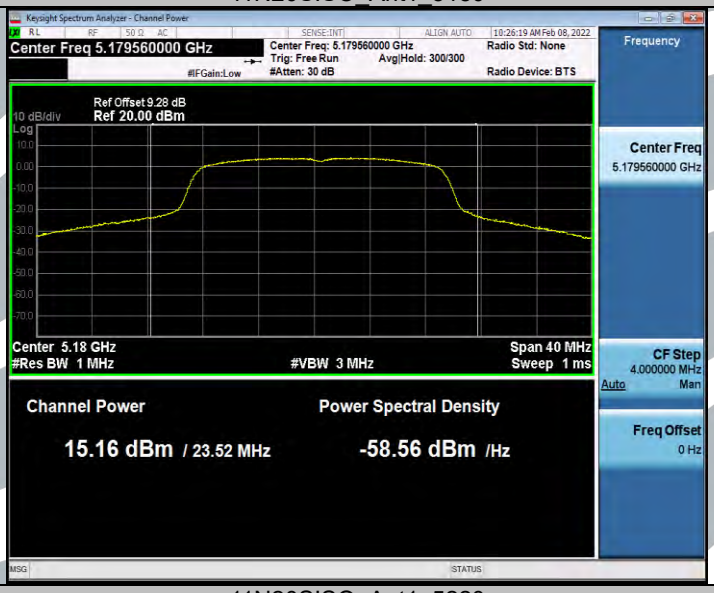


11A_Ant1_5825



11N20SISO_Ant1_5180



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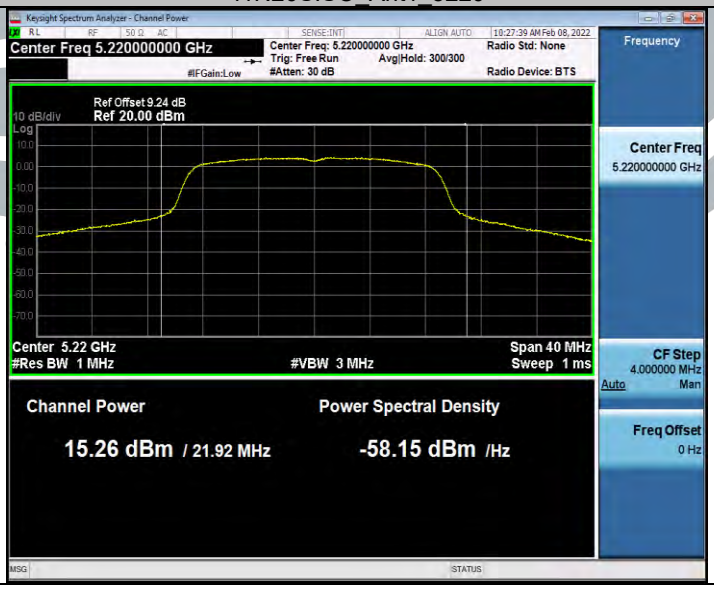

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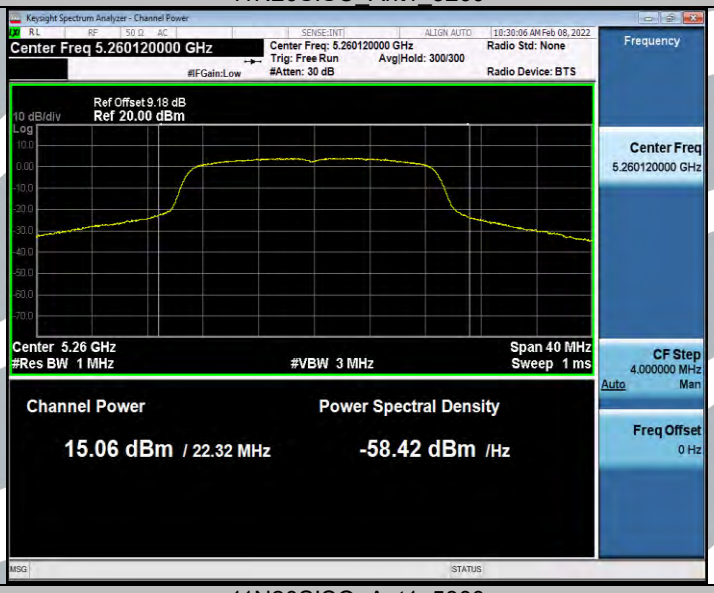
11N20SISO_Ant1_5260



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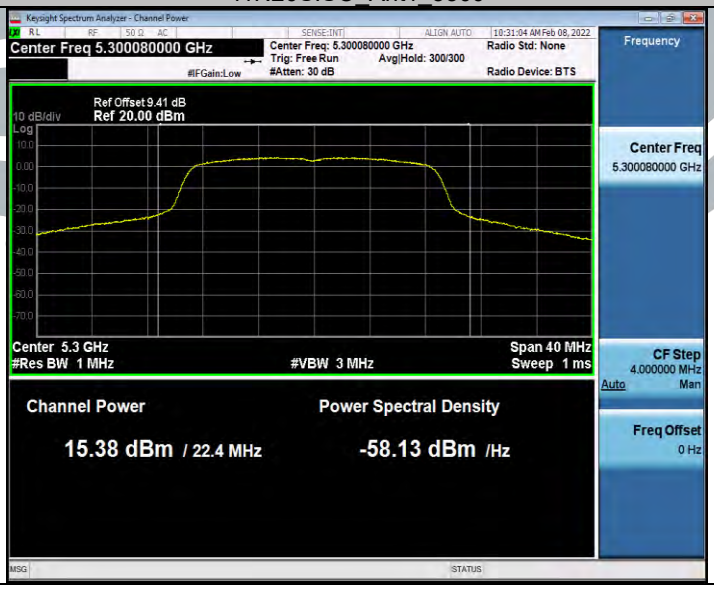

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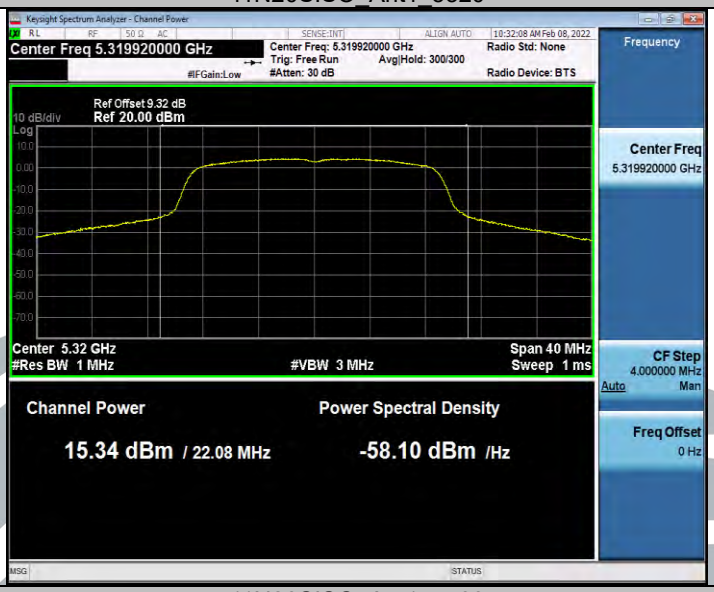

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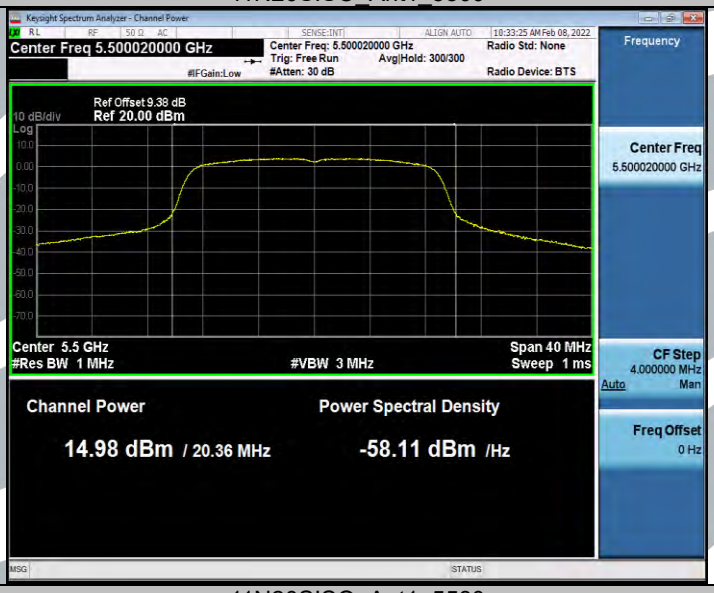

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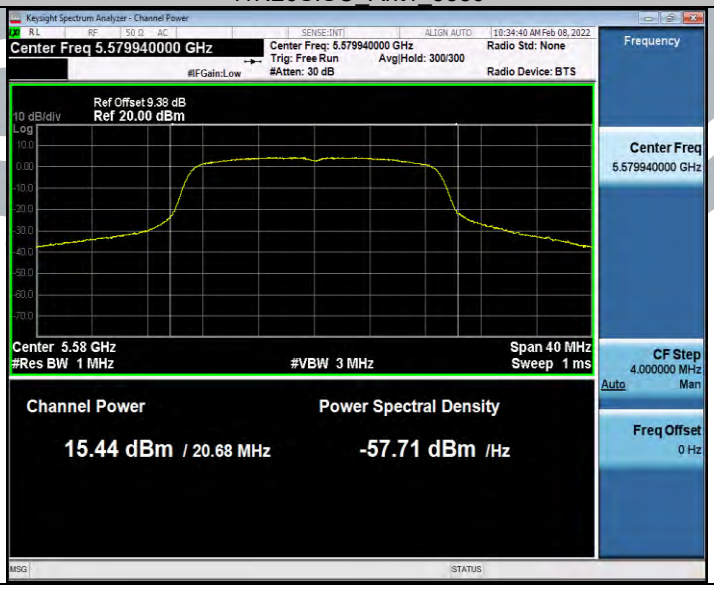

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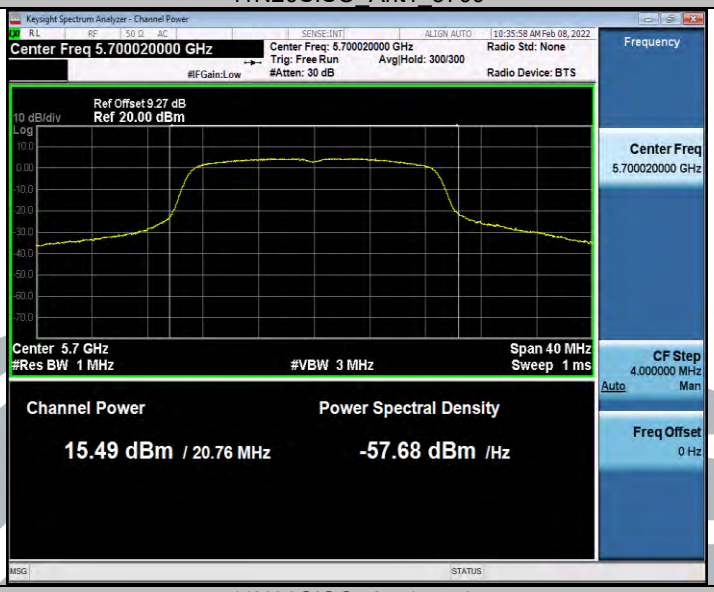

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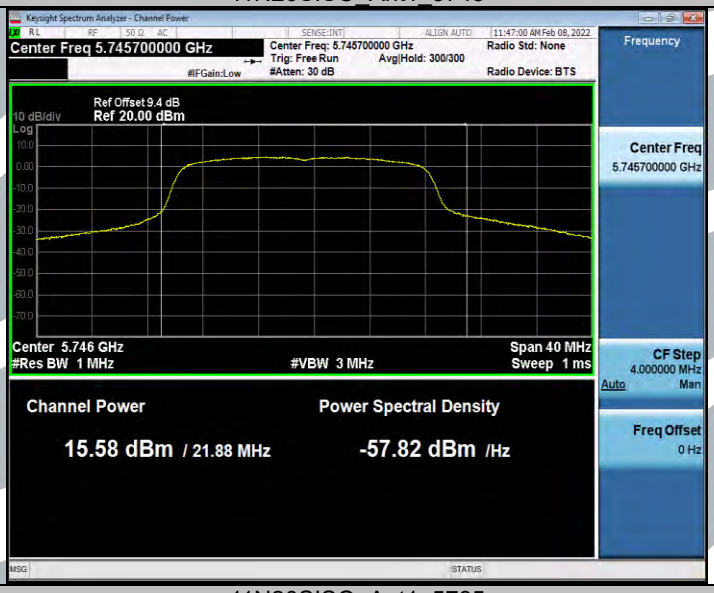

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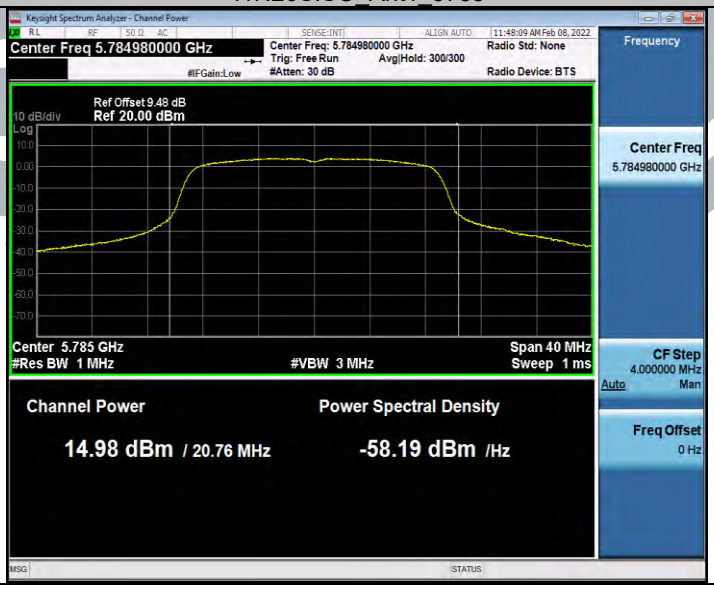
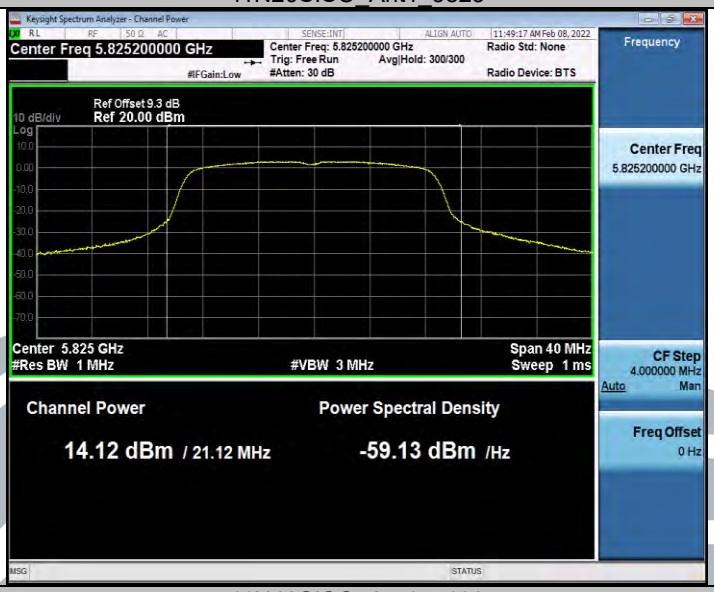
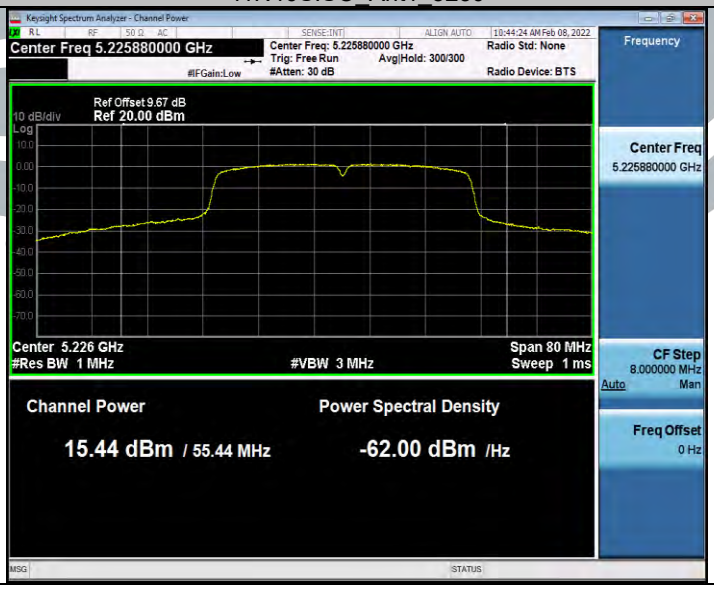


11N20SISO_Ant1_5825



11N40SISO_Ant1_5190

11N40SISO_Ant1_5230



11N40SISO_Ant1_5270

11N40SISO_Ant1_5310

11N40SISO_Ant1_5510

11N40SISO_Ant1_5550

11N40SISO_Ant1_5670

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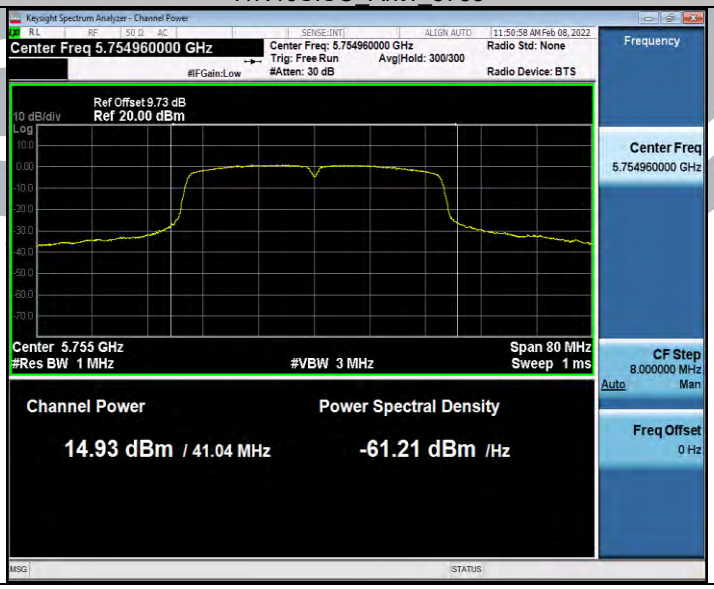

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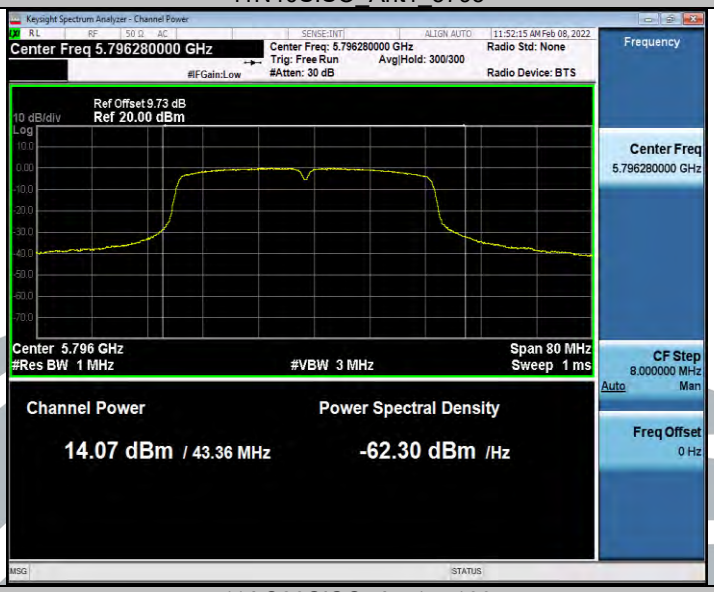

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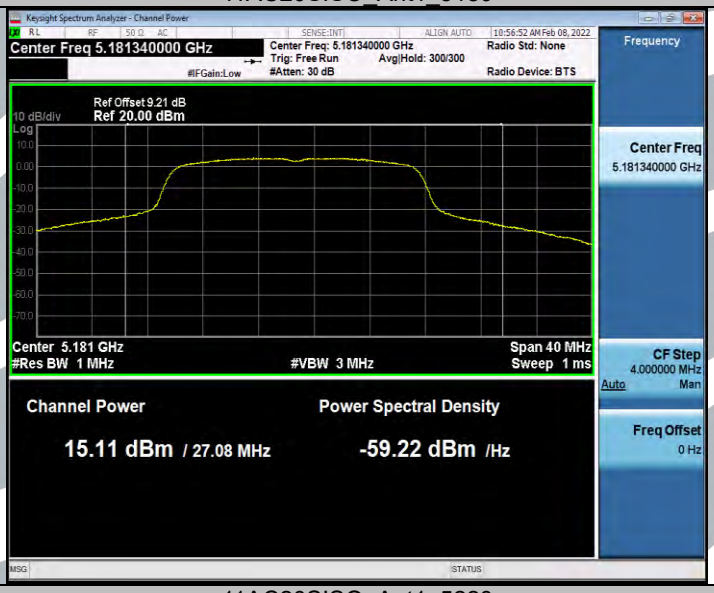

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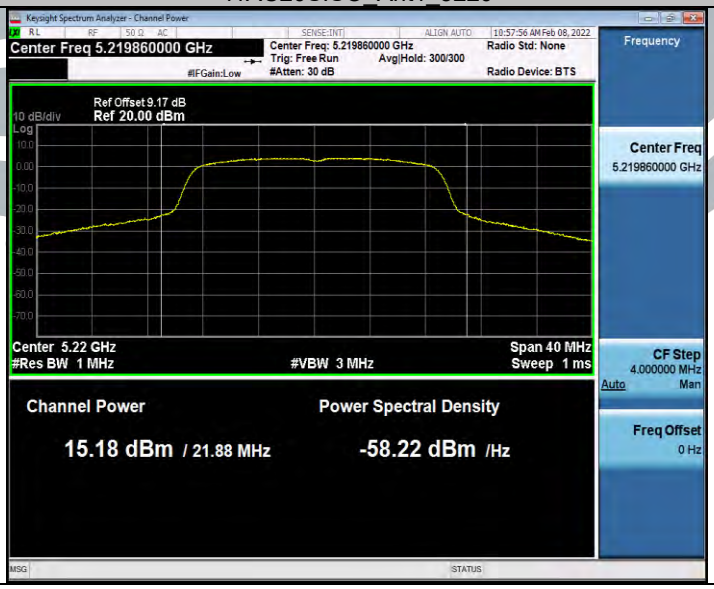

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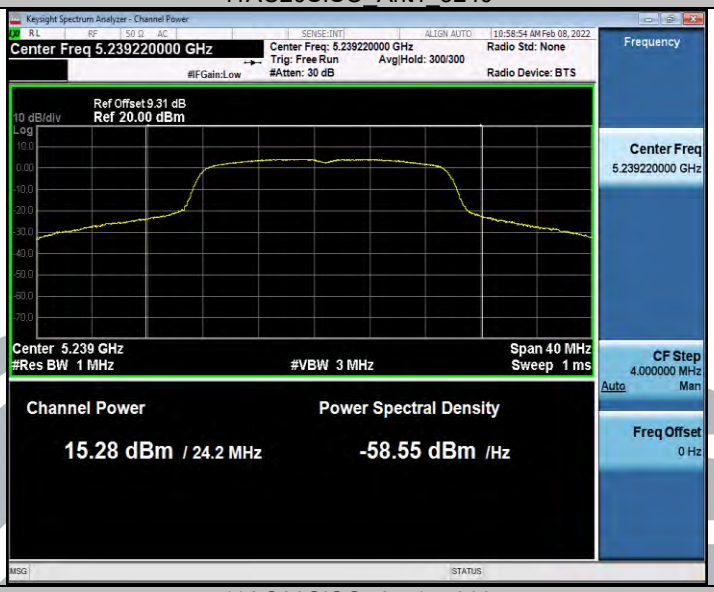

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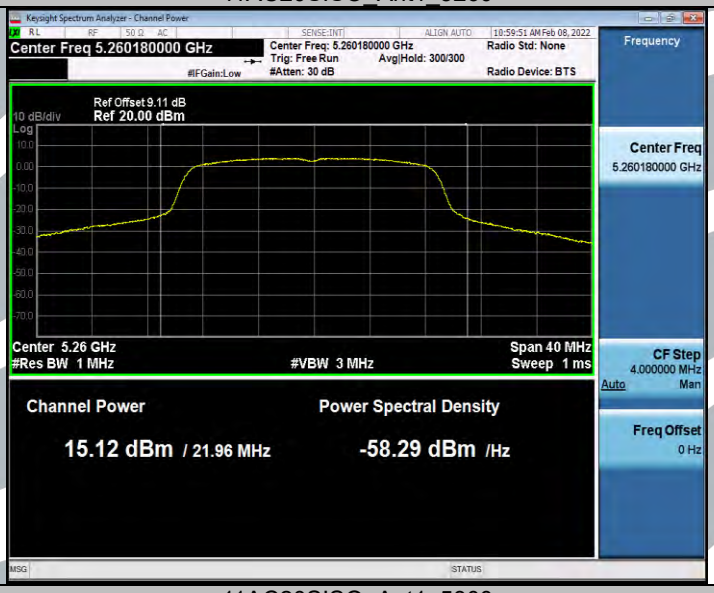

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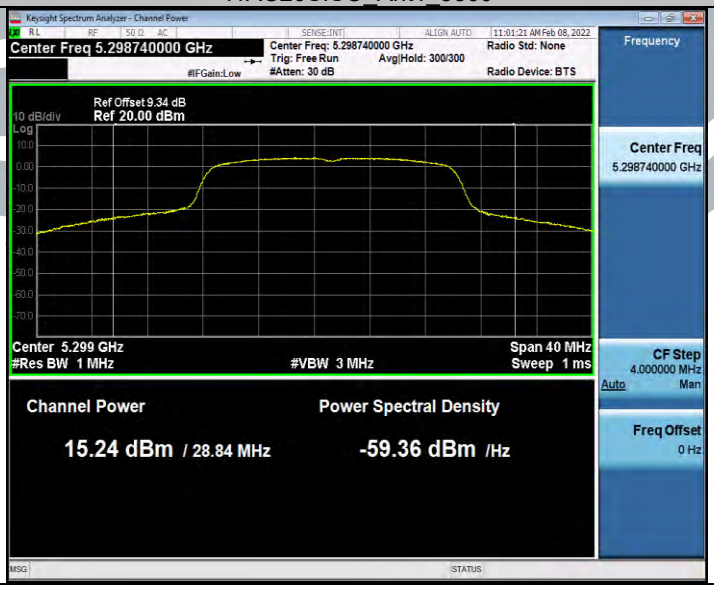

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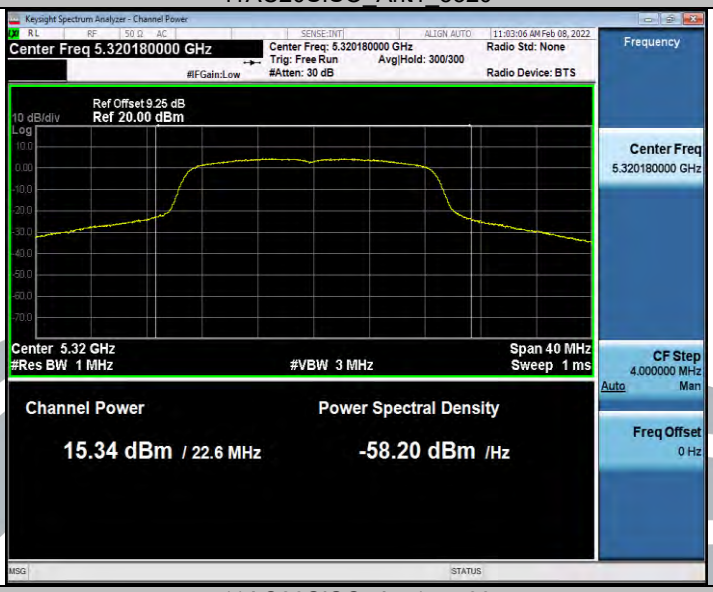

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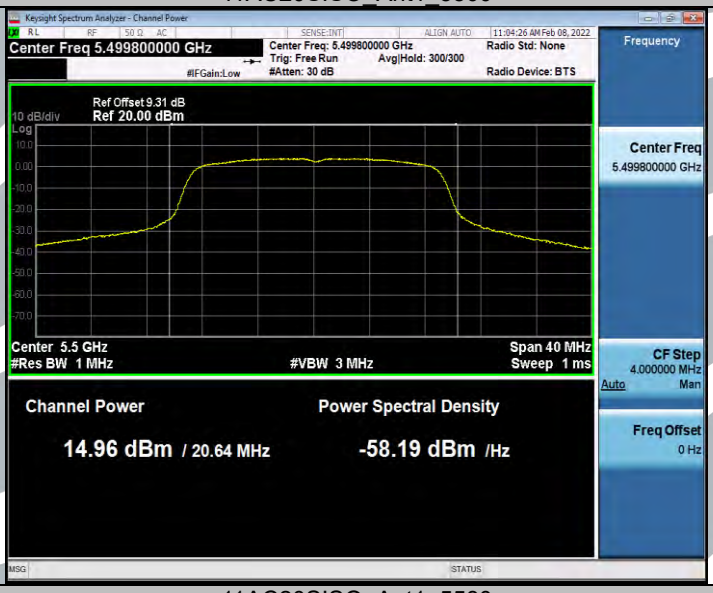

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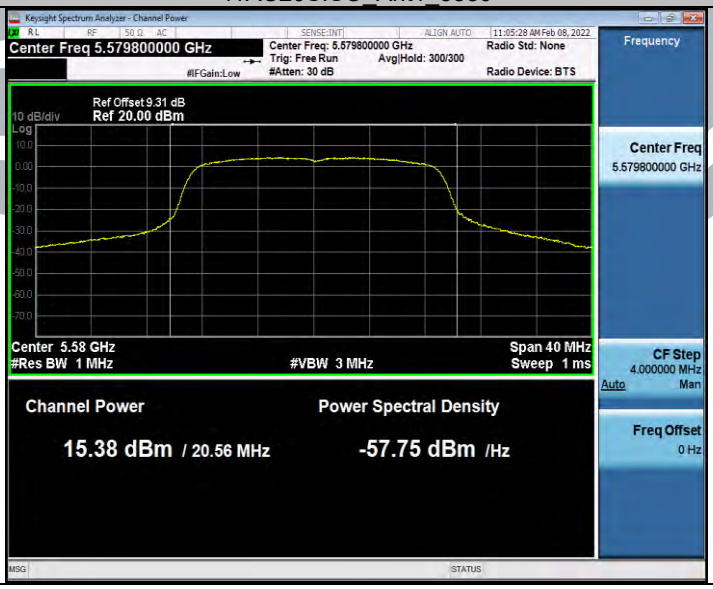

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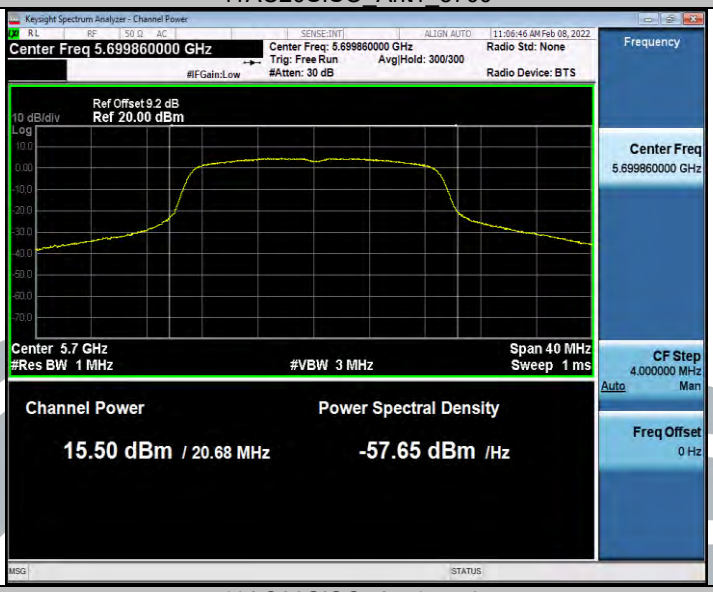

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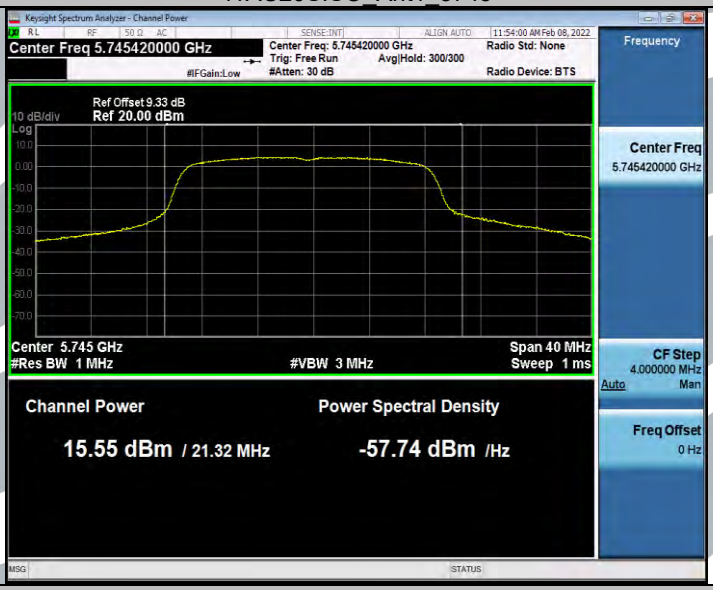

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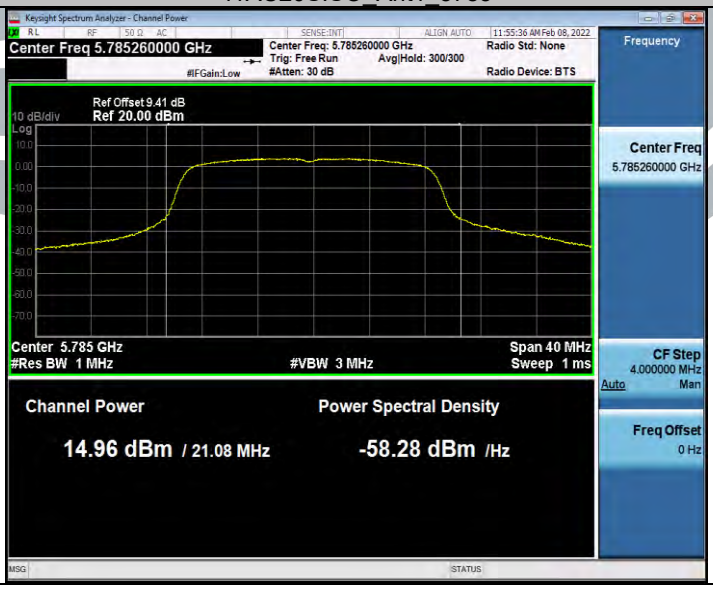

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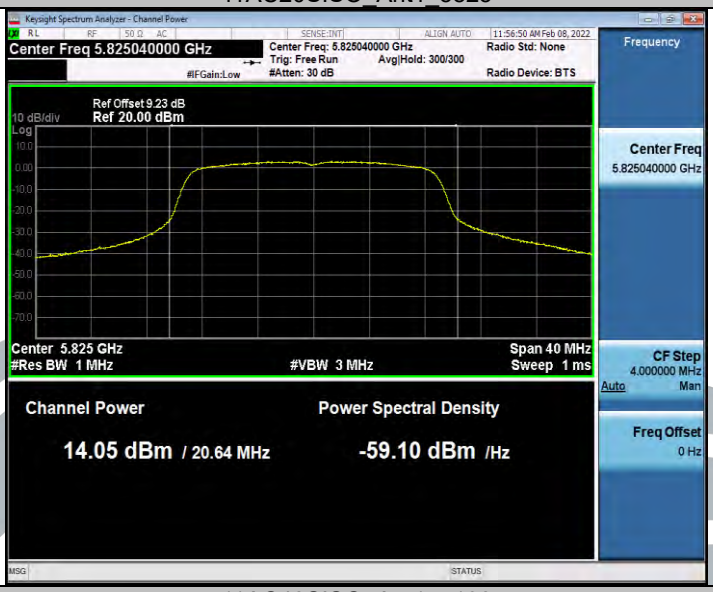

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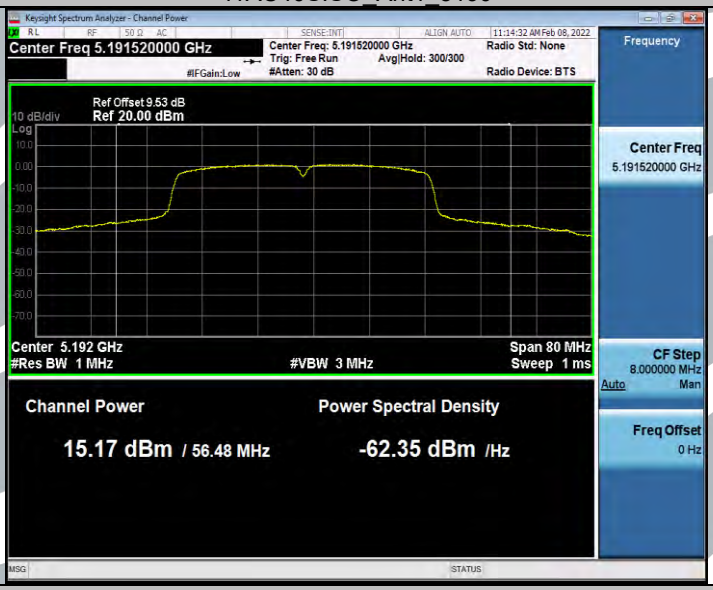

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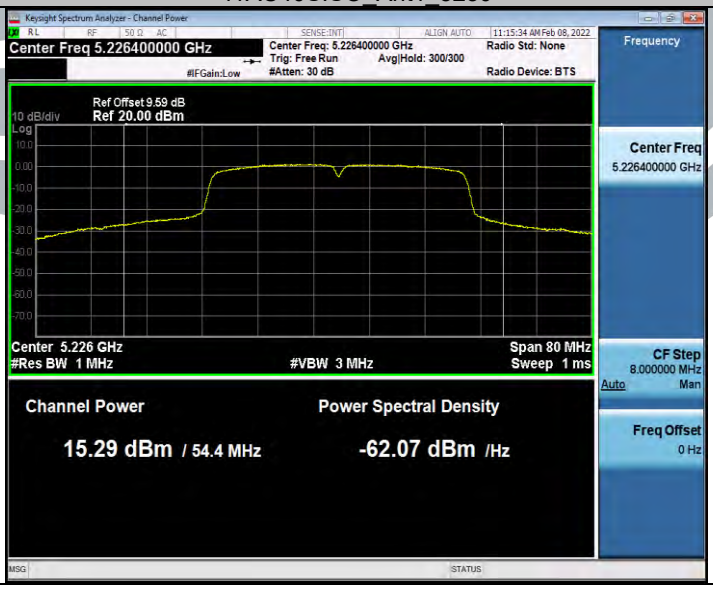

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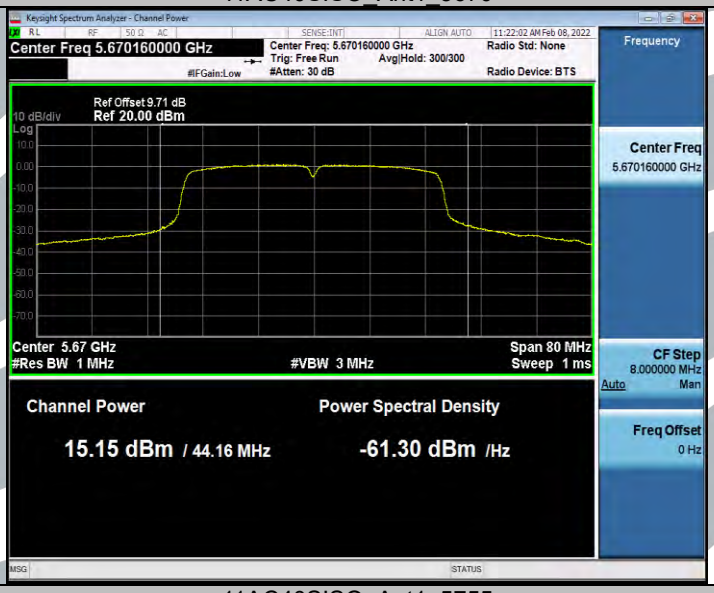
11AC40SISO_Ant1_5310

11AC40SISO_Ant1_5510

11AC40SISO_Ant1_5550

11AC40SISO_Ant1_5670



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