

Worst case mode:		802.11a(6Mbps)		Test channel:		48		
NO.	Freq. [MHz]	level [dBμV/m]	Factor [dB]	Emission level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector Type
1	5350	50.85	6.53	57.38	68.23	10.85	H	Peak
2	5350	39.72	6.53	46.25	54	7.75	H	Average
3	5350	49.35	6.53	55.88	68.23	12.35	V	Peak
4	5350	38.39	6.53	44.92	54	9.08	V	Average

Worst case mode:		802.11a(6Mbps)		Test channel:		CH149(5745MHz)		
NO.	Freq. [MHz]	level [dBμV/m]	Factor [dB]	Emission level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector Type
1	5460	38.44	6.58	56.16	68.23	11.91	H	Peak
2	5460	37.78	6.58	47.13	54	6.98	H	Average
3	5460	38	6.58	55.4	68.23	12.59	V	Peak
4	5460	37.94	6.58	44.74	54	9.1	V	Average

Worst case mode:		802.11a(6Mbps)		Test channel:		CH 165(5825MHz)		
NO.	Freq. [MHz]	level [dBμV/m]	Factor [dB]	Emission level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector Type
1	5850	49.52	6.64	45.02	68.23	11.8	H	Peak
2	5850	40.49	6.64	44.36	54	7.09	H	Average
3	5850	48.76	6.64	44.58	68.23	12.1	V	Peak
4	5850	38.1	6.64	44.52	54	9.28	V	Average

Note: Only recorded the worst case in the report.



7 Emission Bandwidth and Occupied Bandwidth

Test Requirement	: FCC CFR47 Part 15 Section 15.407(a)(e)
Test Method	: ANSI C63.10-2020 According to FCC §15.407(a), The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used. Measurements in the 5.725-5.85 GHz band are made over a reference bandwidth of 500 kHz or the 26 dB emission bandwidth of the device, whichever is less.
Test Limit	: Measurements in the 5.15-5.25 GHz, 5.25-5.35 GHz, and the 5.47-5.725 GHz bands are made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth. As per FCC §15.407(e): for equipment operating in the band 5725 – 5850 MHz, the minimum 6 dB bandwidth of U-NII devices shall be 500 kHz.

7.1 Test Procedure

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01,
Emission Bandwidth (EBW)

a) Set RBW = approximately 1% of the emission bandwidth; b) Set the VBW > RBW; c) Detector = Peak; d) Trace mode = max hold; e) Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%; 99% Occupied Bandwidth
The 99% occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5 % of the total mean power of the given emission. Measurement of the 99% occupied bandwidth is required only as a condition for using the optional band-edge measurement techniques described in II.G.3.d). Measurements of 99% occupied bandwidth may also optionally be used in lieu of the EBW to define the minimum frequency range over which the spectrum is integrated when measuring maximum conducted output power as described in II.E. However, the EBW must be measured to determine bandwidth dependent limits on maximum conducted output power in accordance with 15.407(a).

The following procedure shall be used for measuring (99 %) power bandwidth:

1. Set center frequency to the nominal EUT channel center frequency.
2. Set span = 1.5 times to 5.0 times the OBW.
3. Set RBW = 1 % to 5 % of the OBW
4. Set $VBW \geq 3 \cdot RBW$
5. Video averaging is not permitted. Where practical, a sample detection and single sweep mode shall be used. Otherwise, peak detection and max hold mode (until the trace stabilizes) shall be used.
6. Use the 99 % power bandwidth function of the instrument (if available).
7. If the instrument does not have a 99 % power bandwidth function, the trace data points are recovered and directly summed in power units. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached; that frequency is recorded as the lower frequency.



The process is repeated until 99.5 % of the total is reached; that frequency is recorded as the upper frequency. The 99% occupied bandwidth is the difference between these two frequencies.

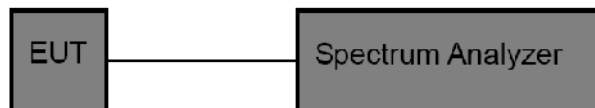
Minimum Emission Bandwidth for the band 5.725–5.85 GHz:

The following procedure shall be used for measuring this bandwidth:

- Set RBW = 100 kHz.
- Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
- Detector = Peak.
- Trace mode = max hold.
- Sweep = auto couple.
- Allow the trace to stabilize.
- 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.

Note: The automatic bandwidth measurement capability of a spectrum analyzer or EMI receiver may be employed if it implements the functionality described in this section. For devices that use channel aggregation refer to III.A and III.C for determining emission bandwidth.

7.2 Test setup



7.3 Test Result

PASS

Pre-scan has been conducted to determine the worst-case mode from all possible combinations between available modulations / data rates and antenna ports.

Following channel was selected for the final test as listed below.

26 dB emission bandwidth:

TestMode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	18.720	5170.760	5189.480	---	---
11A	Ant1	5200	18.240	5190.920	5209.160	---	---
11A	Ant1	5240	18.400	5230.800	5249.200	---	---
11A	Ant1	5745	18.520	5735.880	5754.400	---	---
11A	Ant1	5785	18.520	5775.760	5794.280	---	---
11A	Ant1	5825	18.560	5815.760	5834.320	---	---
11N20SISO	Ant1	5180	19.520	5170.200	5189.720	---	---
11N20SISO	Ant1	5200	19.400	5190.240	5209.640	---	---
11N20SISO	Ant1	5240	19.400	5230.280	5249.680	---	---
11N20SISO	Ant1	5745	19.480	5735.240	5754.720	---	---
11N20SISO	Ant1	5785	19.560	5775.240	5794.800	---	---
11N20SISO	Ant1	5825	19.400	5815.320	5834.720	---	---
11N40SISO	Ant1	5190	41.120	5169.440	5210.560	---	---
11N40SISO	Ant1	5230	40.880	5209.360	5250.240	---	---
11N40SISO	Ant1	5755	40.560	5735.000	5775.560	---	---
11N40SISO	Ant1	5795	40.880	5774.600	5815.480	---	---
11AC20SISO	Ant1	5180	19.480	5170.240	5189.720	---	---
11AC20SISO	Ant1	5200	19.280	5190.360	5209.640	---	---
11AC20SISO	Ant1	5240	19.440	5230.320	5249.760	---	---



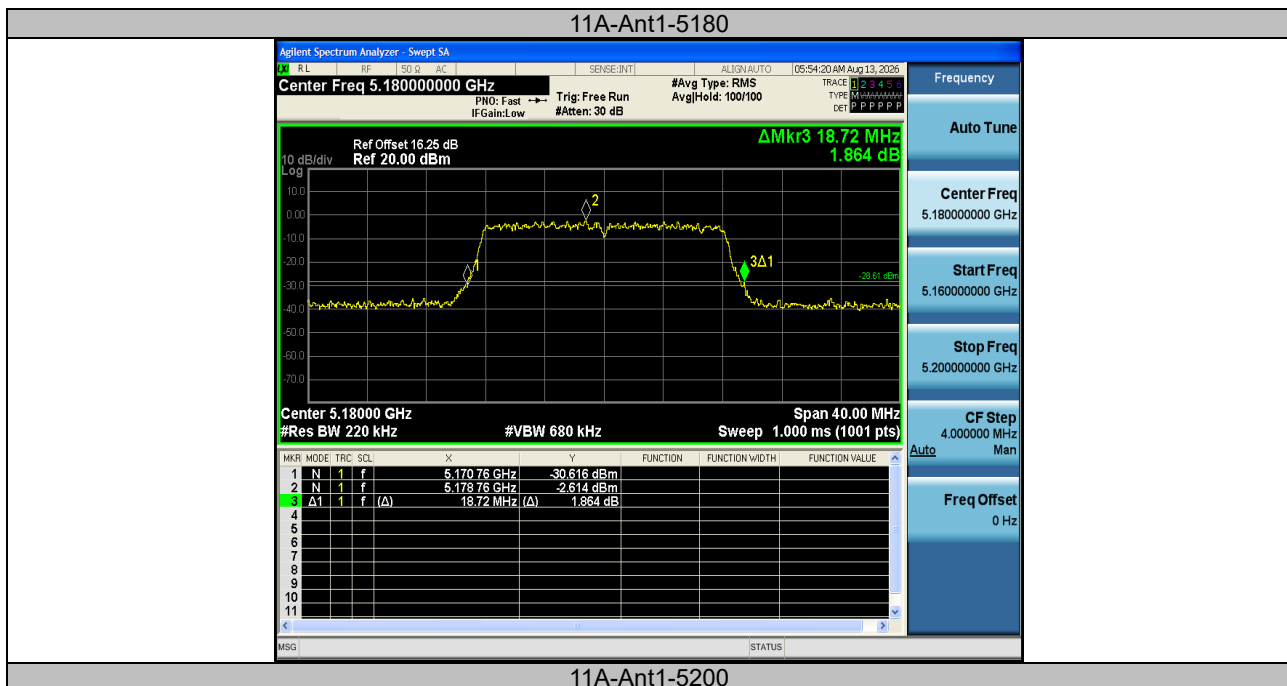
11AC20SISO	Ant1	5745	19.400	5735.400	5754.800	---	---
11AC20SISO	Ant1	5785	19.360	5775.360	5794.720	---	---
11AC20SISO	Ant1	5825	19.320	5815.360	5834.680	---	---
11AC40SISO	Ant1	5190	40.480	5169.760	5210.240	---	---
11AC40SISO	Ant1	5230	40.480	5209.760	5250.240	---	---
11AC40SISO	Ant1	5755	40.400	5735.160	5775.560	---	---
11AC40SISO	Ant1	5795	40.480	5774.840	5815.320	---	---
11AX20SISO	Ant1	5180	19.120	5170.440	5189.560	---	---
11AX20SISO	Ant1	5200	19.240	5190.360	5209.600	---	---
11AX20SISO	Ant1	5240	19.280	5230.280	5249.560	---	---
11AX20SISO	Ant1	5745	19.200	5735.440	5754.640	---	---
11AX20SISO	Ant1	5785	19.320	5775.360	5794.680	---	---
11AX20SISO	Ant1	5825	19.360	5815.240	5834.600	---	---
11AX40SISO	Ant1	5190	40.320	5169.840	5210.160	---	---
11AX40SISO	Ant1	5230	40.000	5209.920	5249.920	---	---
11AX40SISO	Ant1	5755	40.480	5734.600	5775.080	---	---
11AX40SISO	Ant1	5795	40.320	5774.680	5815.000	---	---

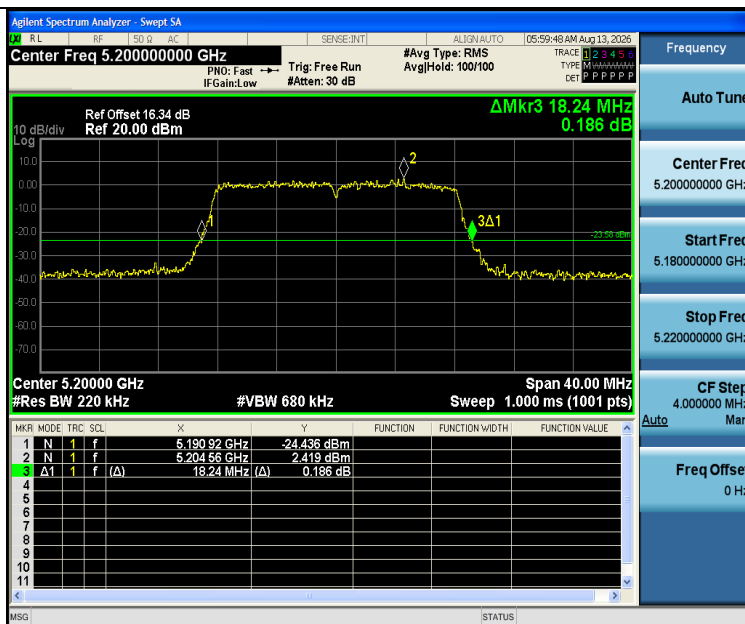


minimum 6 dB bandwidth:

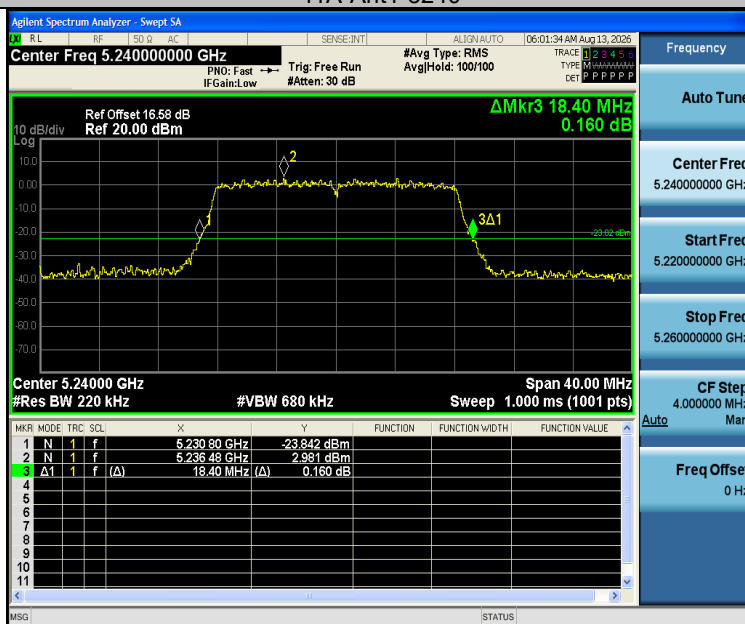
TestMode	Antenna	Frequency[MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.320	5736.840	5753.160	0.5	PASS
11A	Ant1	5785	16.320	5776.840	5793.160	0.5	PASS
11A	Ant1	5825	16.320	5816.840	5833.160	0.5	PASS
11N20SISO	Ant1	5745	17.280	5736.480	5753.760	0.5	PASS
11N20SISO	Ant1	5785	17.280	5776.240	5793.520	0.5	PASS
11N20SISO	Ant1	5825	17.520	5816.240	5833.760	0.5	PASS
11N40SISO	Ant1	5755	33.760	5738.760	5772.520	0.5	PASS
11N40SISO	Ant1	5795	35.040	5777.480	5812.520	0.5	PASS
11AC20SISO	Ant1	5745	17.280	5736.480	5753.760	0.5	PASS
11AC20SISO	Ant1	5785	17.040	5776.480	5793.520	0.5	PASS
11AC20SISO	Ant1	5825	17.120	5816.240	5833.360	0.5	PASS
11AC40SISO	Ant1	5755	35.280	5737.480	5772.760	0.5	PASS
11AC40SISO	Ant1	5795	35.040	5777.480	5812.520	0.5	PASS
11AX20SISO	Ant1	5745	17.160	5736.600	5753.760	0.5	PASS
11AX20SISO	Ant1	5785	17.040	5776.480	5793.520	0.5	PASS
11AX20SISO	Ant1	5825	17.240	5816.240	5833.480	0.5	PASS
11AX40SISO	Ant1	5755	33.840	5738.680	5772.520	0.5	PASS
11AX40SISO	Ant1	5795	35.120	5777.400	5812.520	0.5	PASS

Test Graphs:





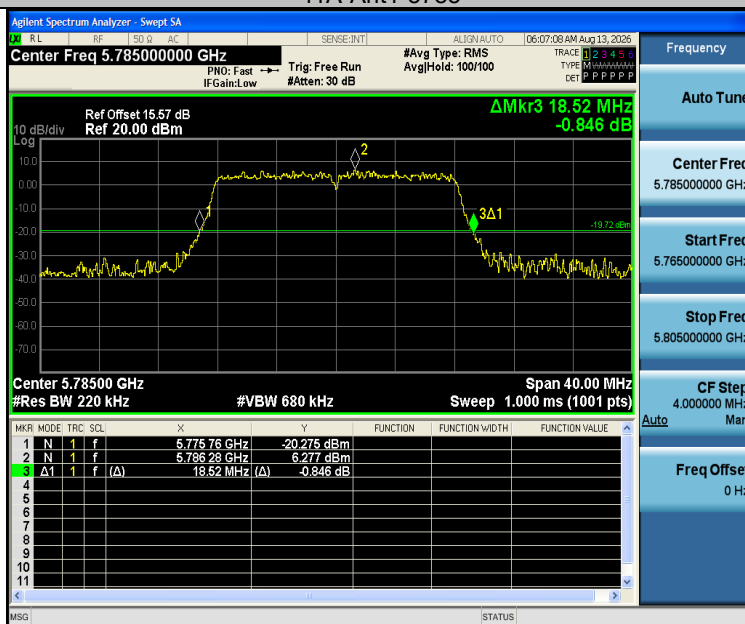
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11A-Ant1-5745



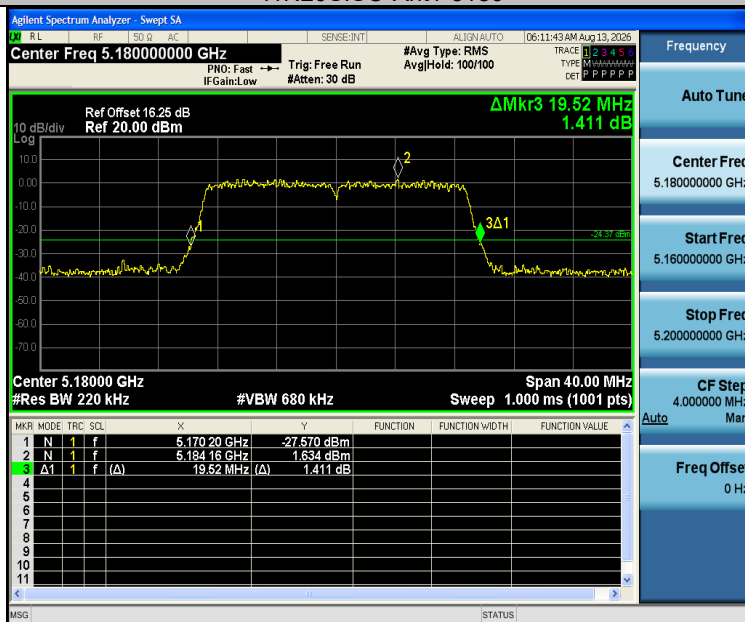
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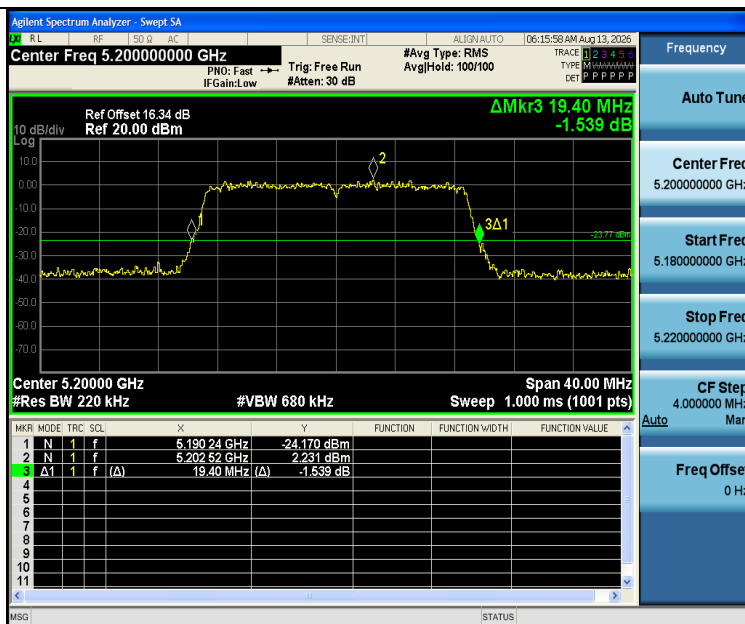
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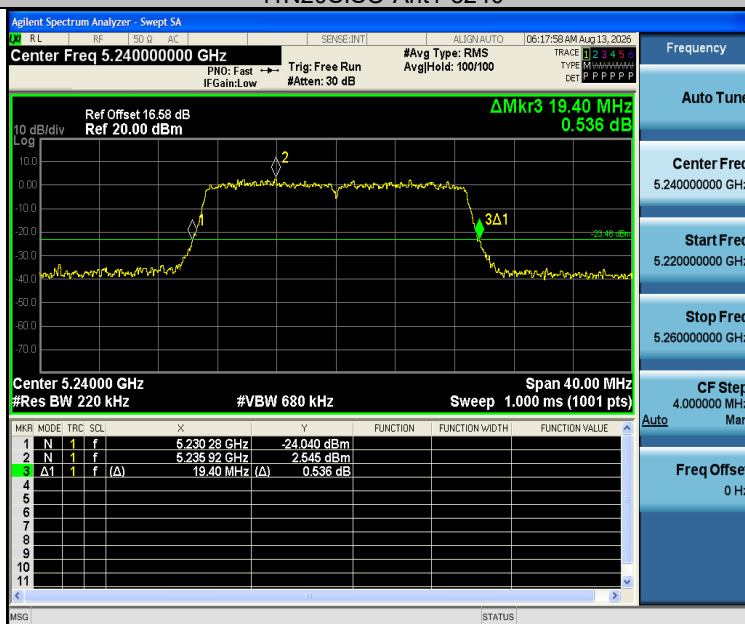
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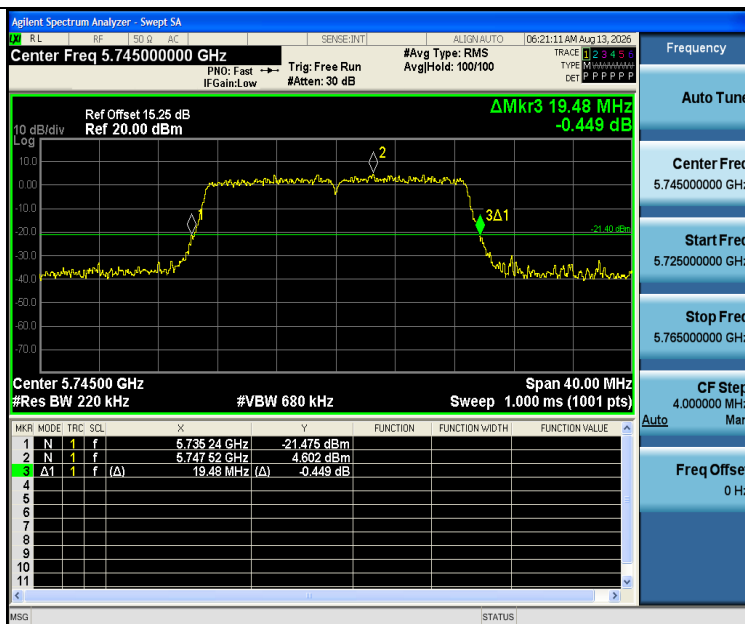
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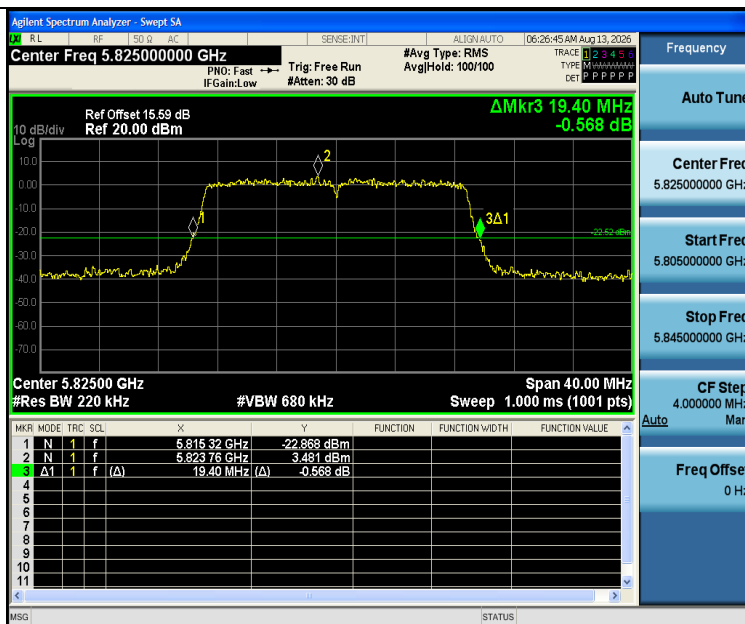
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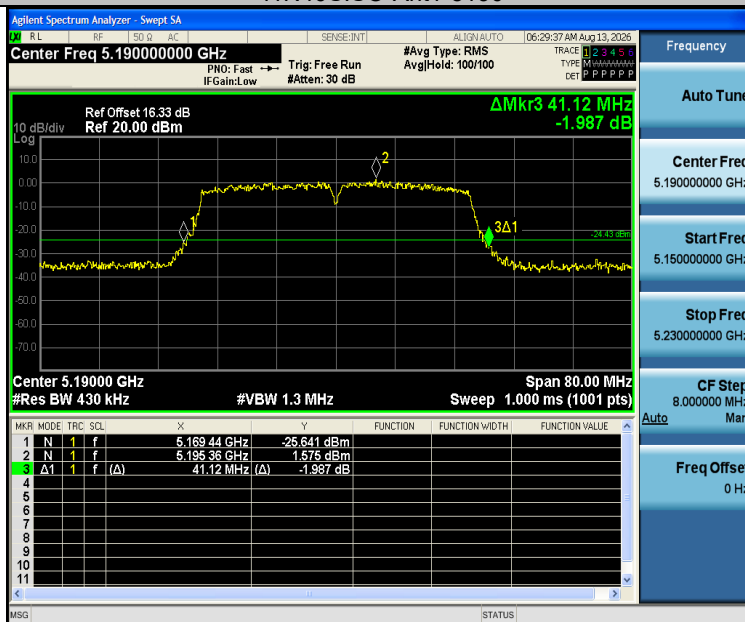
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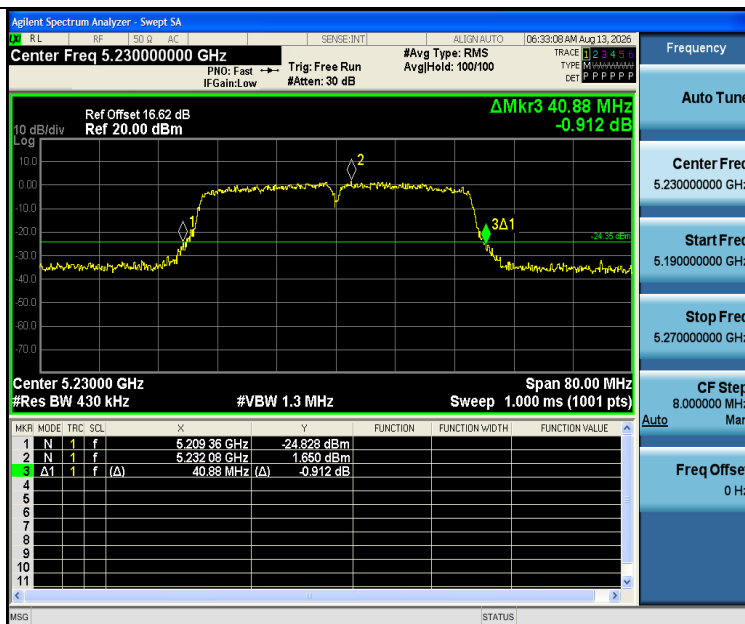
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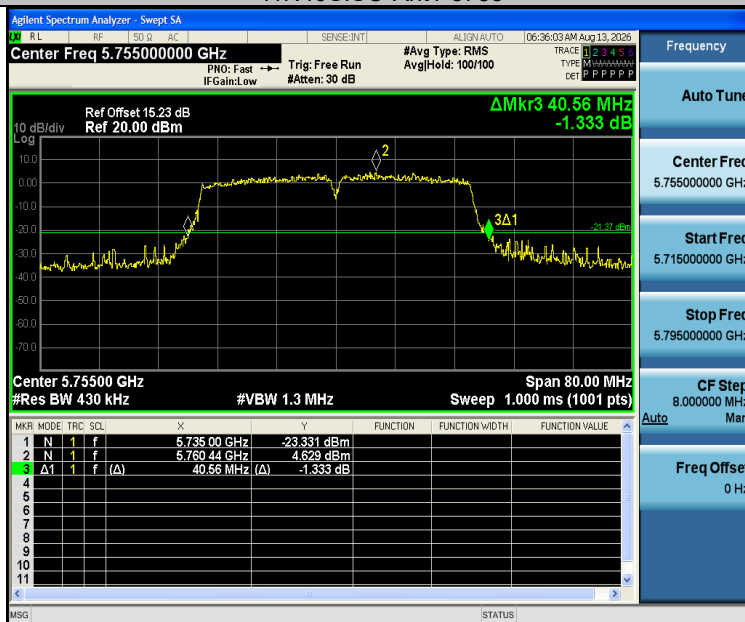
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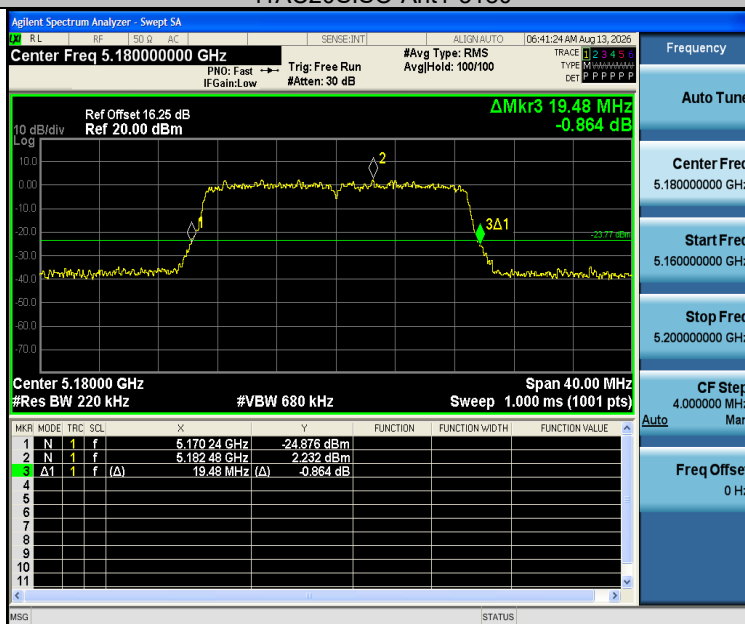
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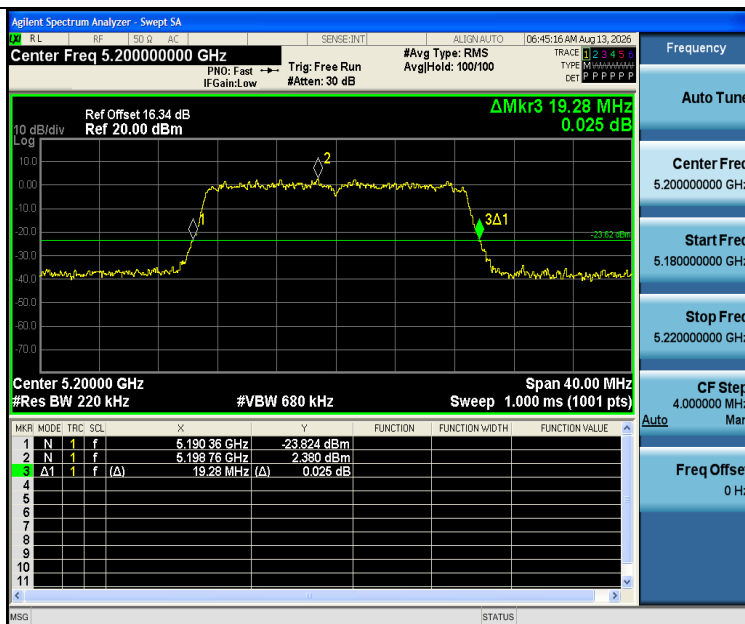
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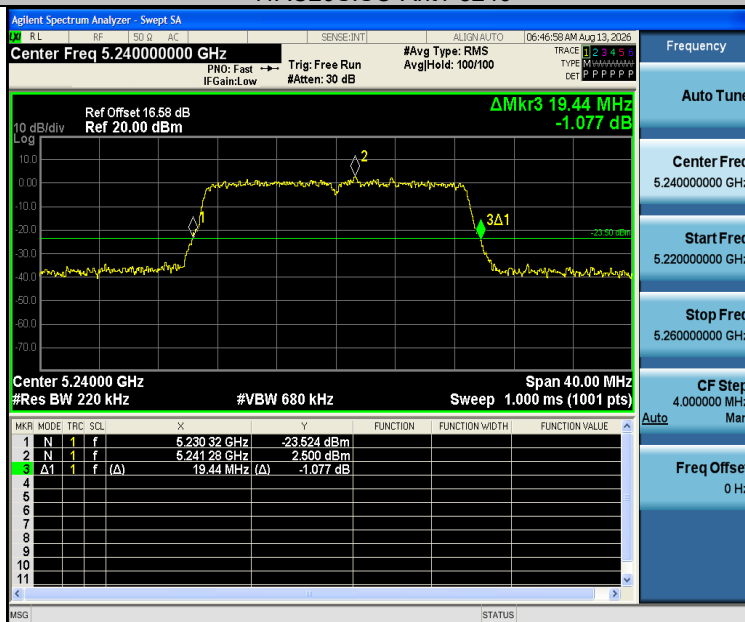
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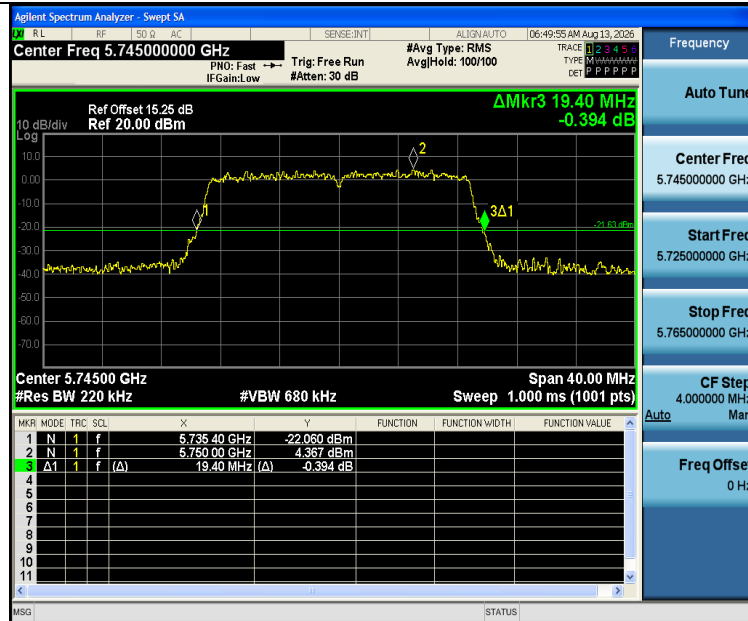
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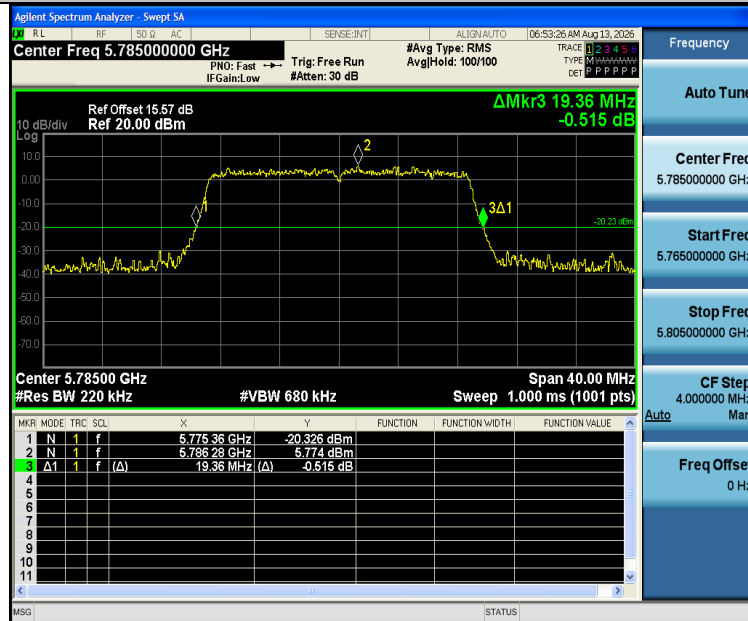
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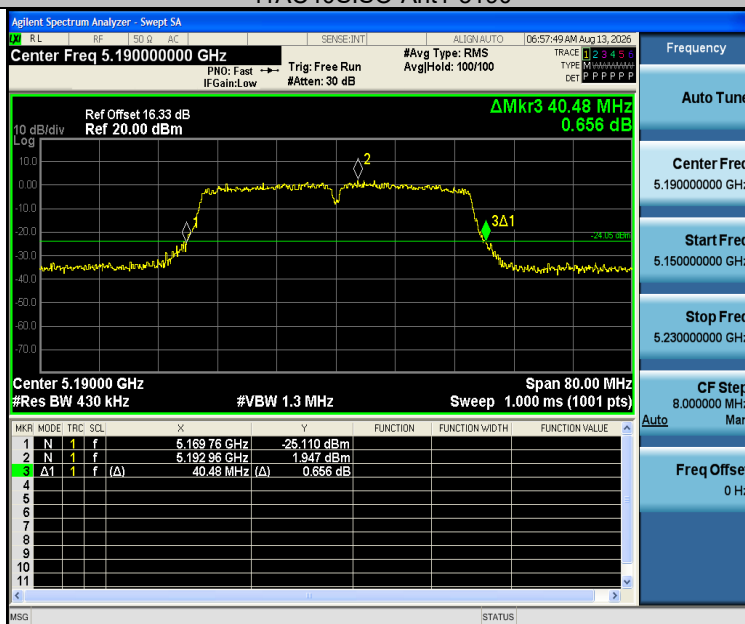
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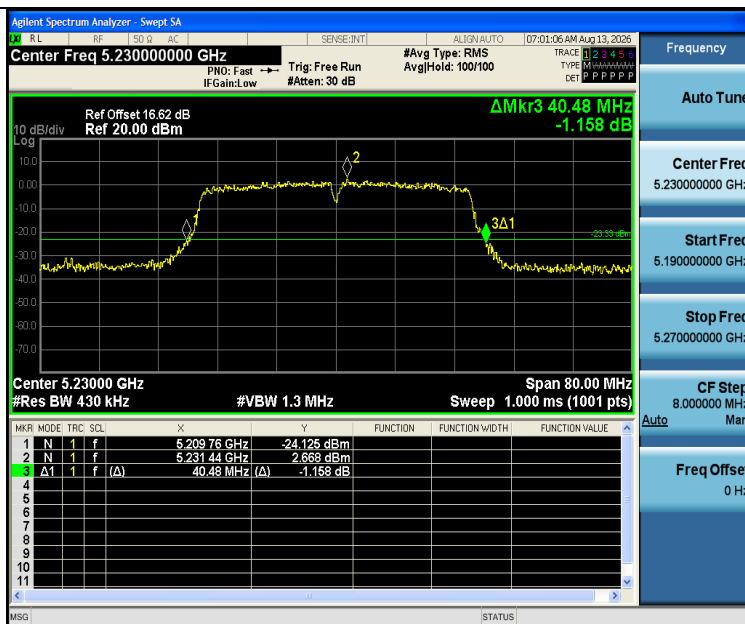
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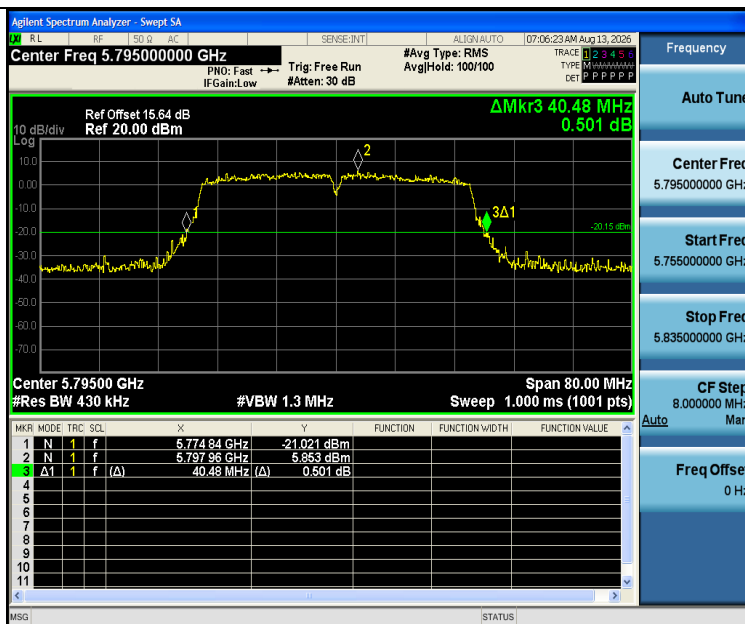
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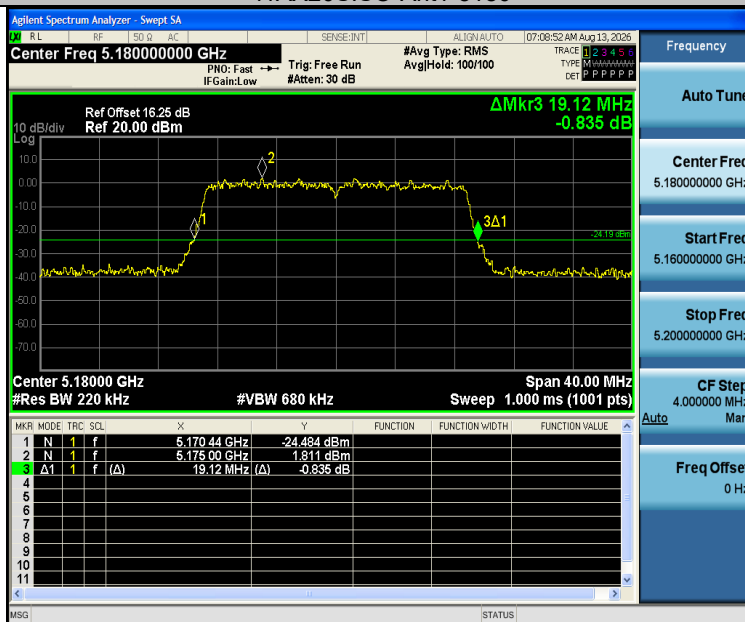
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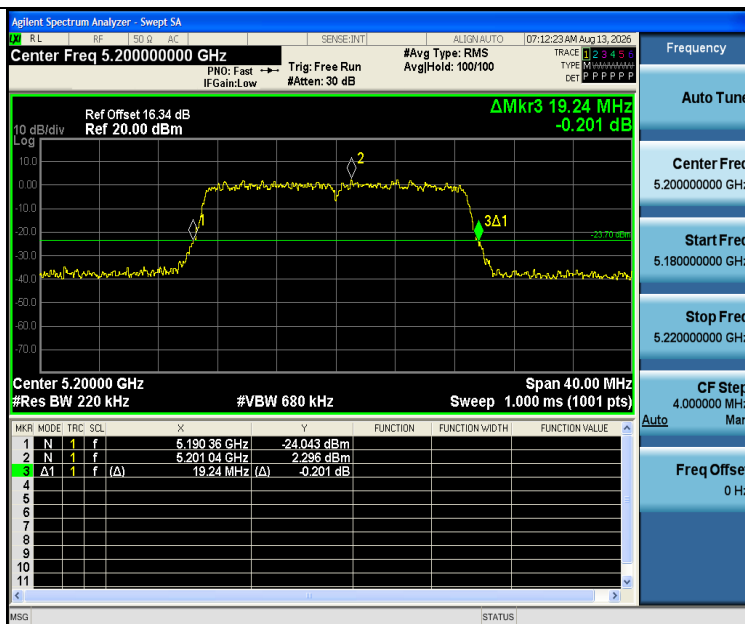
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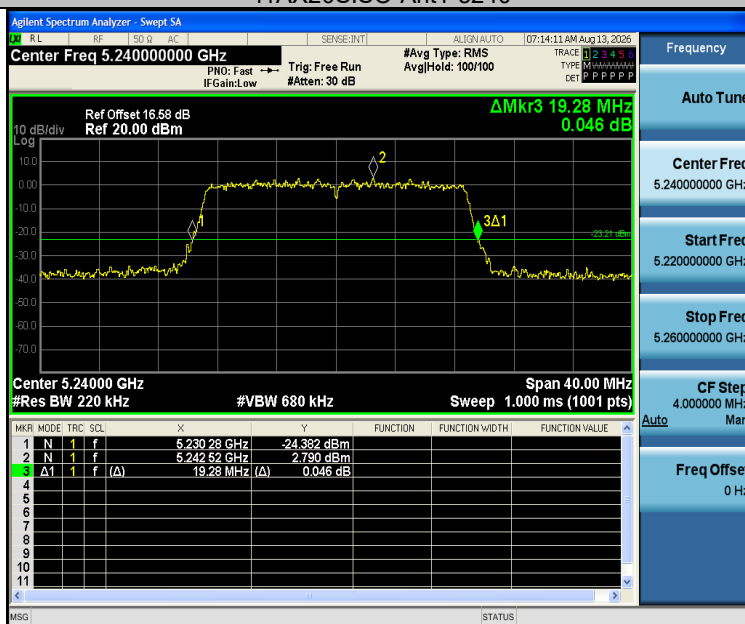
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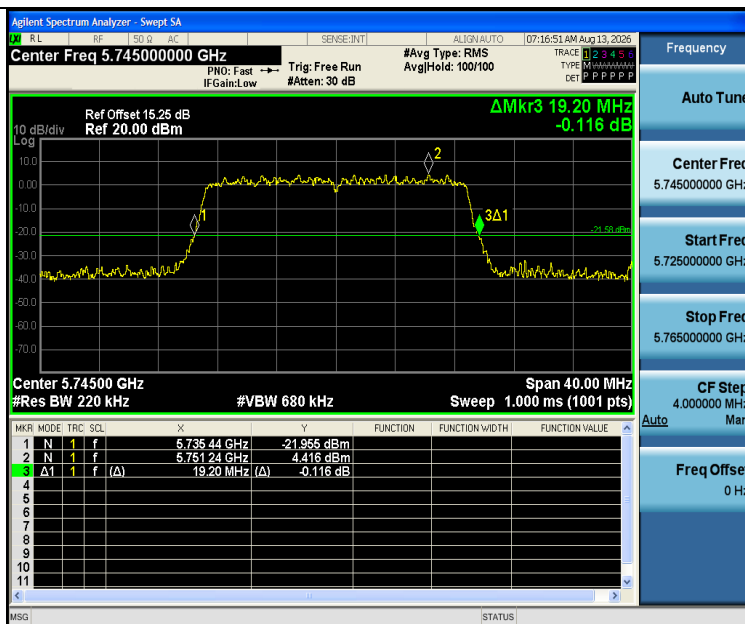
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11AX20SISO-Ant1-5240



11AX20SISO-Ant1-5745



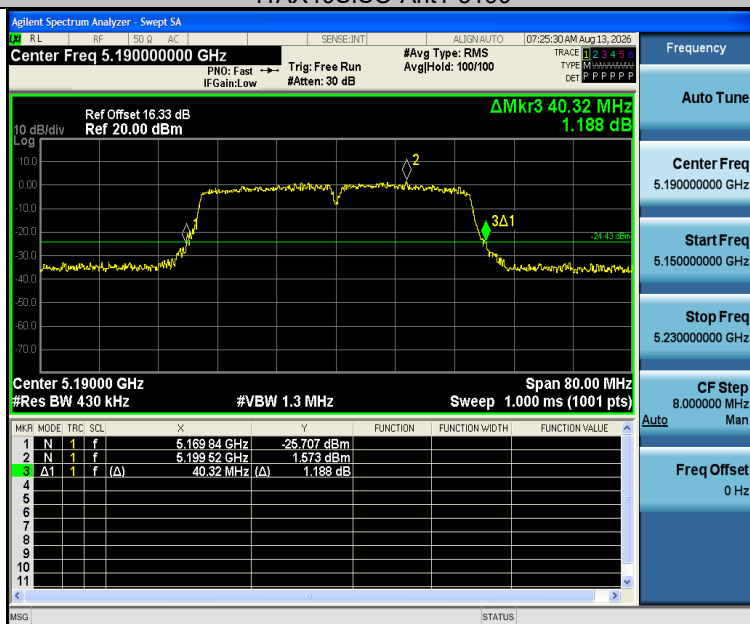
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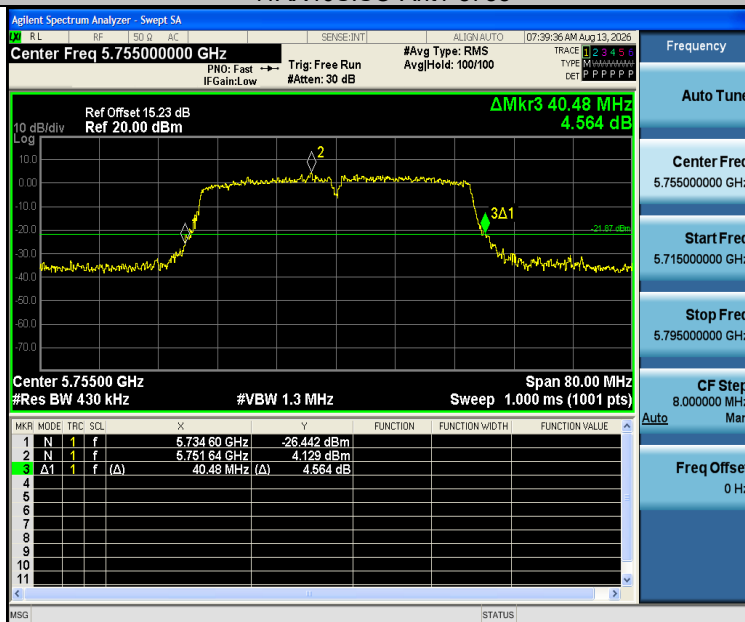
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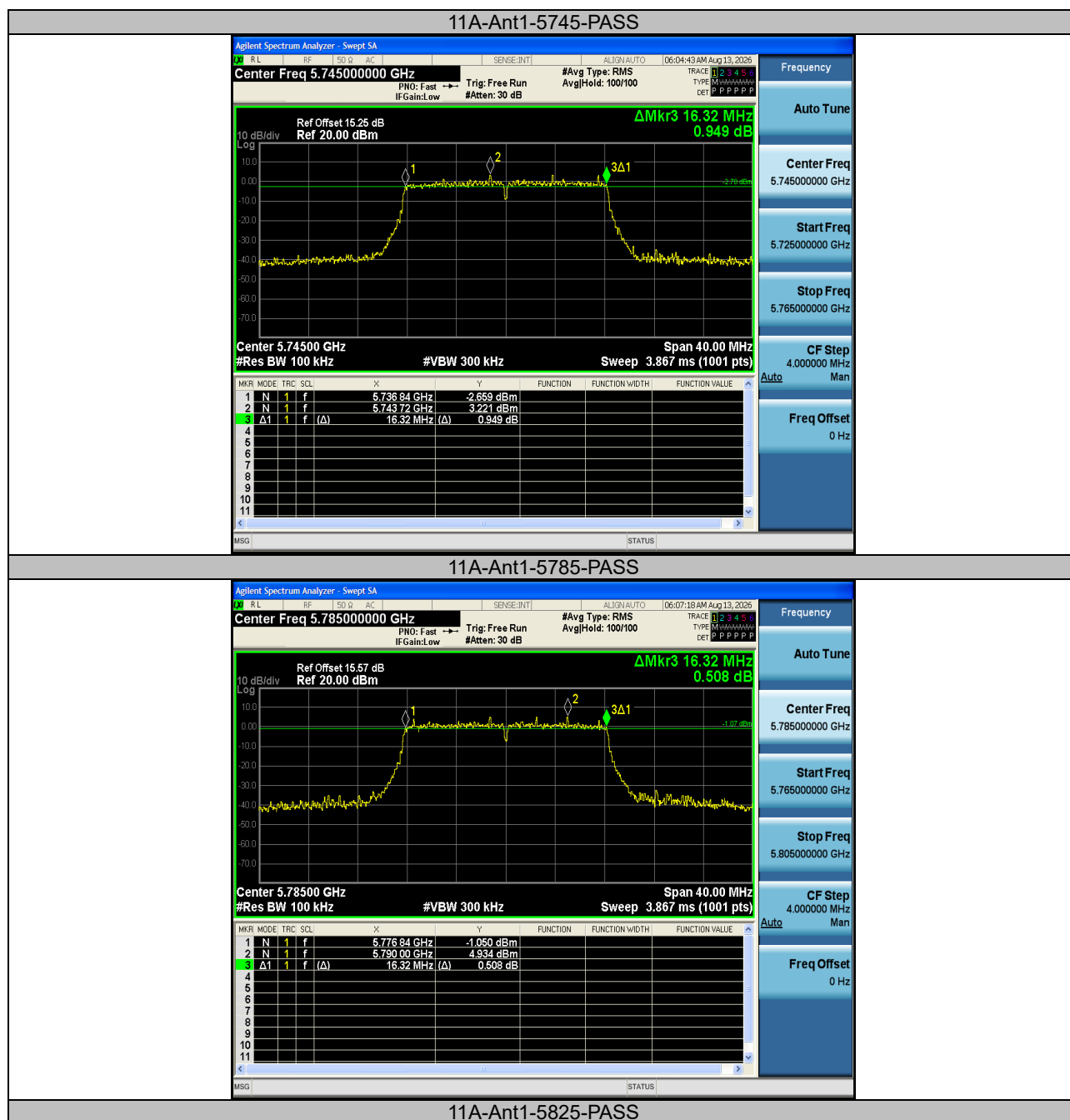


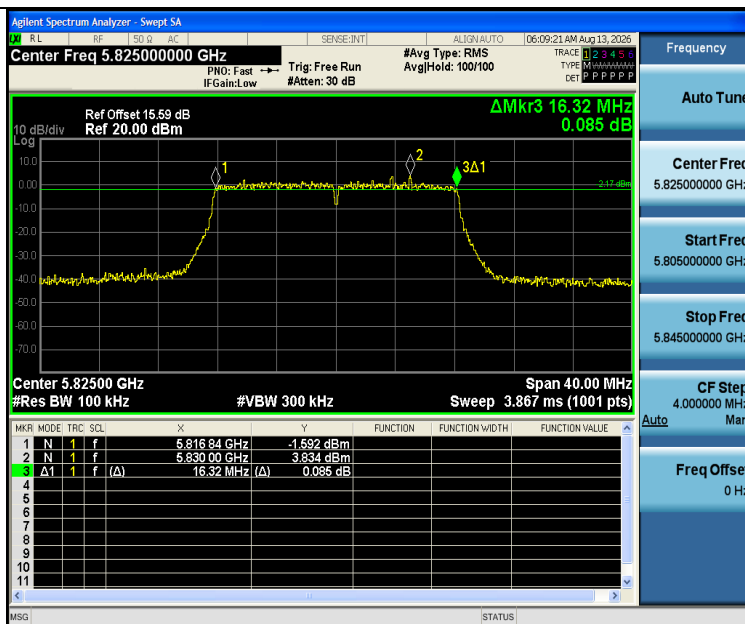
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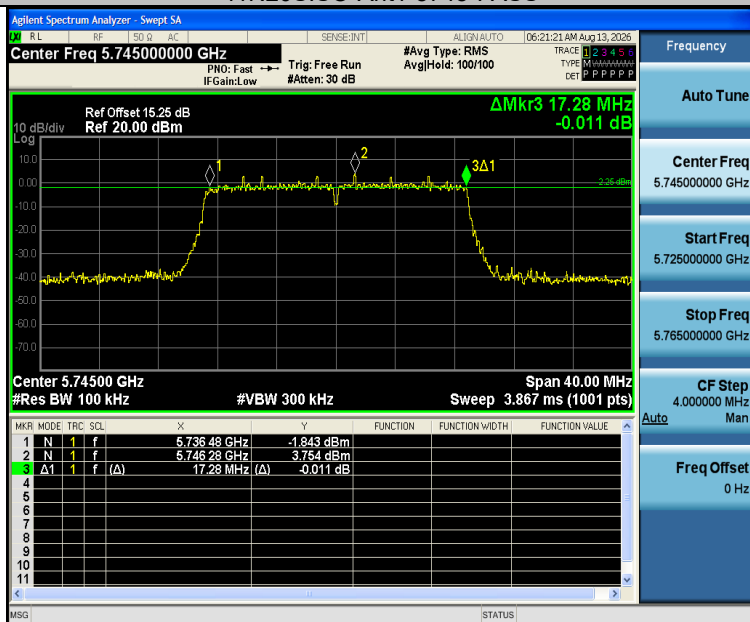


Min emission bandwidth Test Graphs:

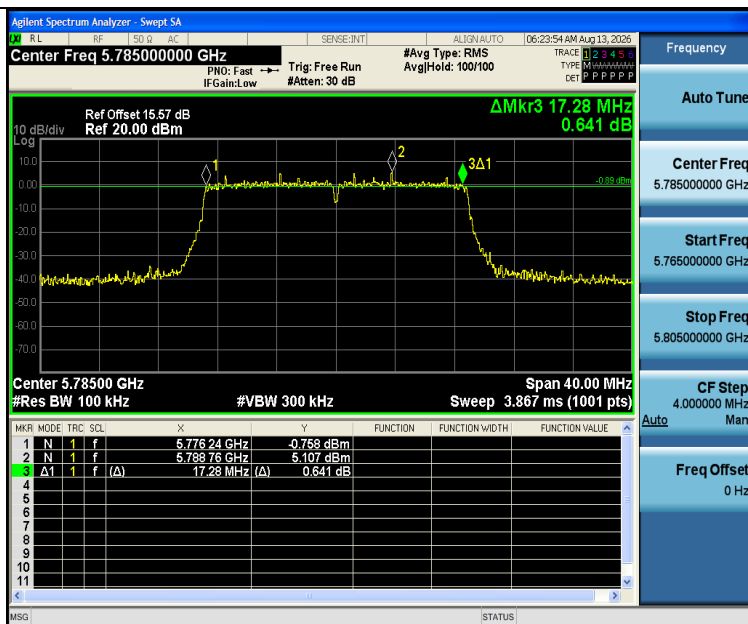




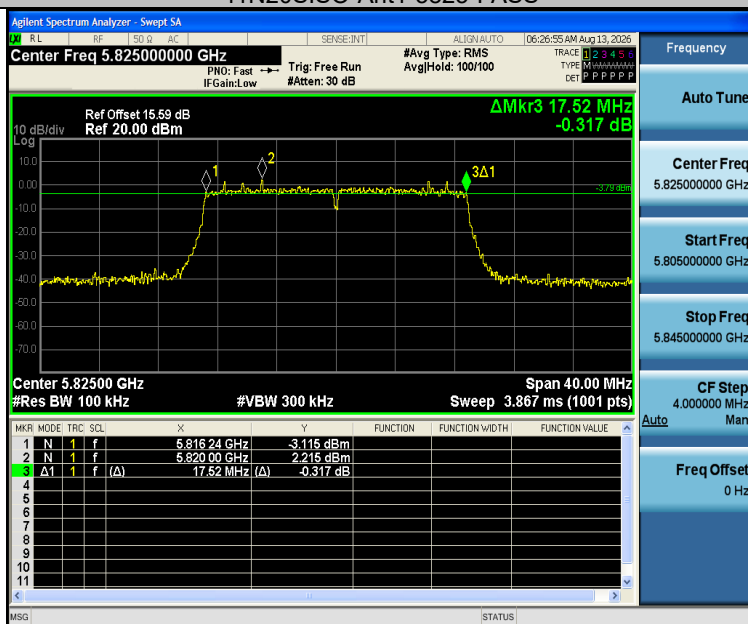
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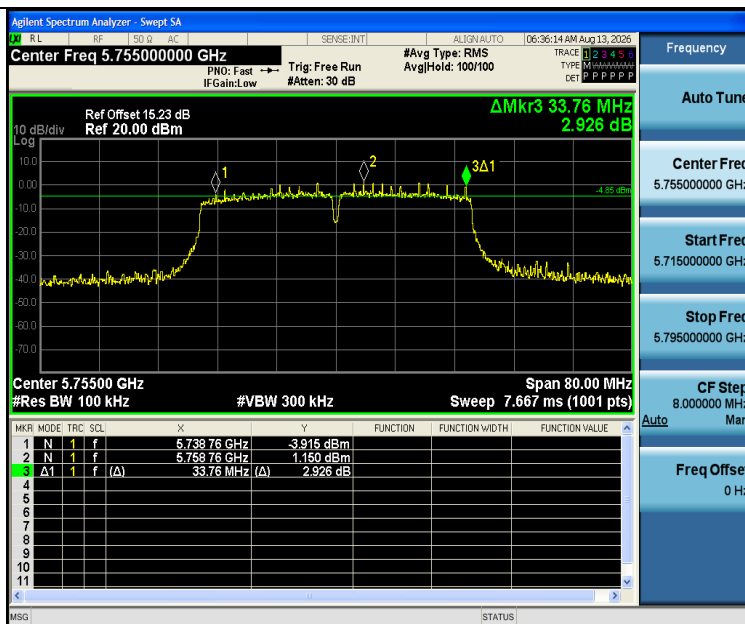
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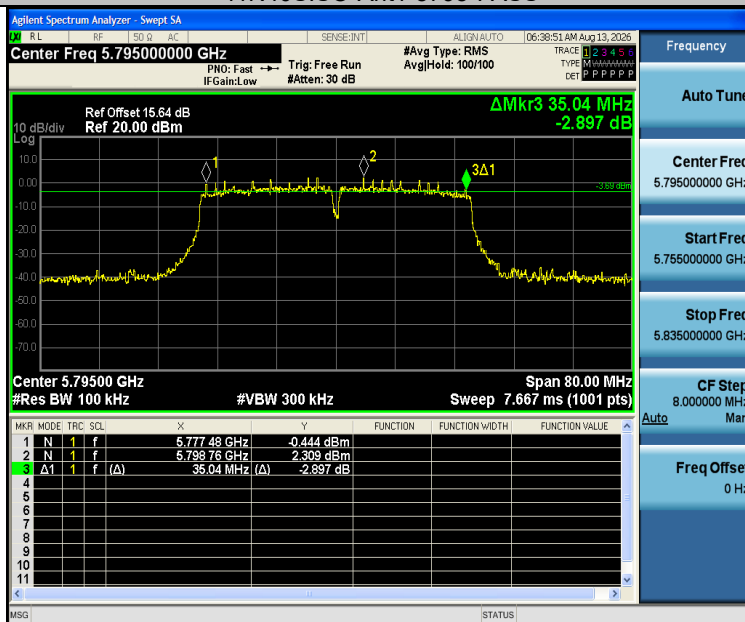
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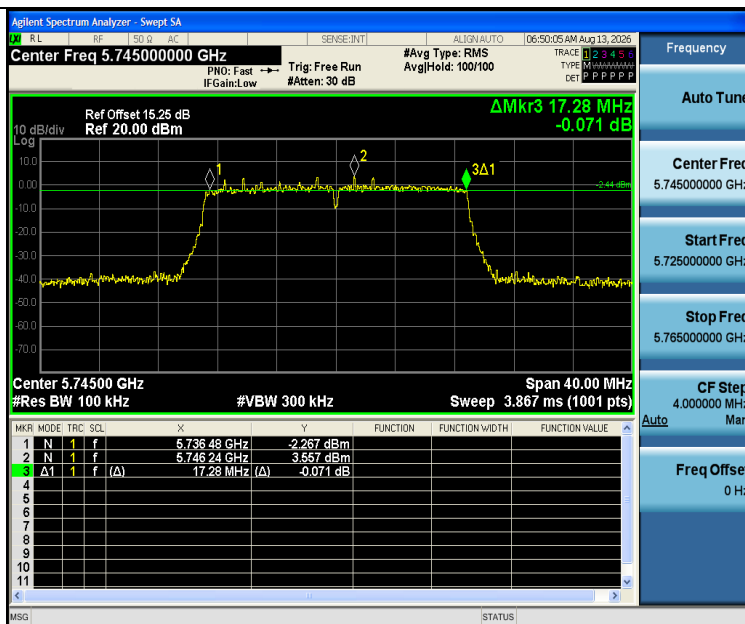
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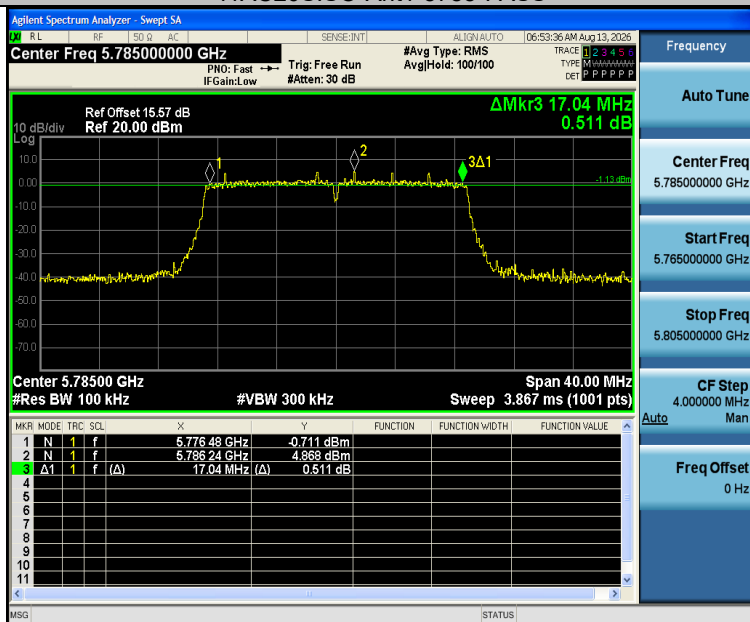
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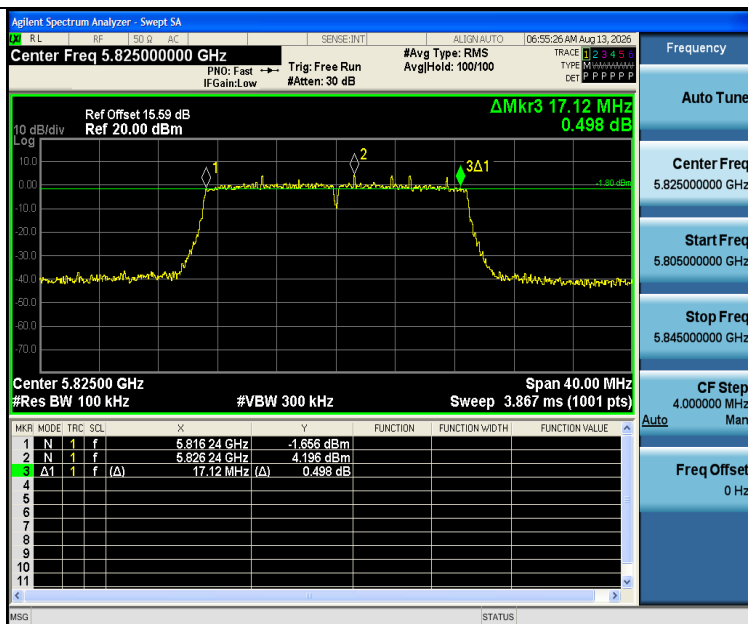
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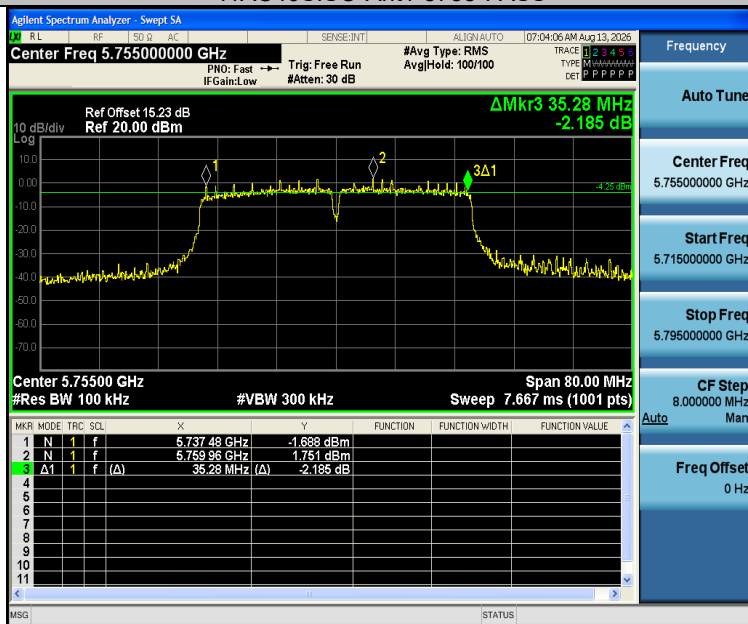
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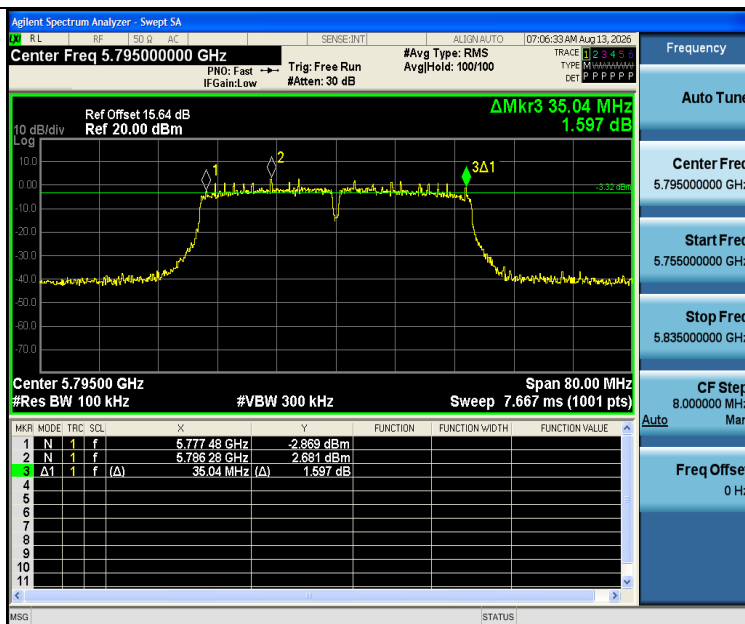
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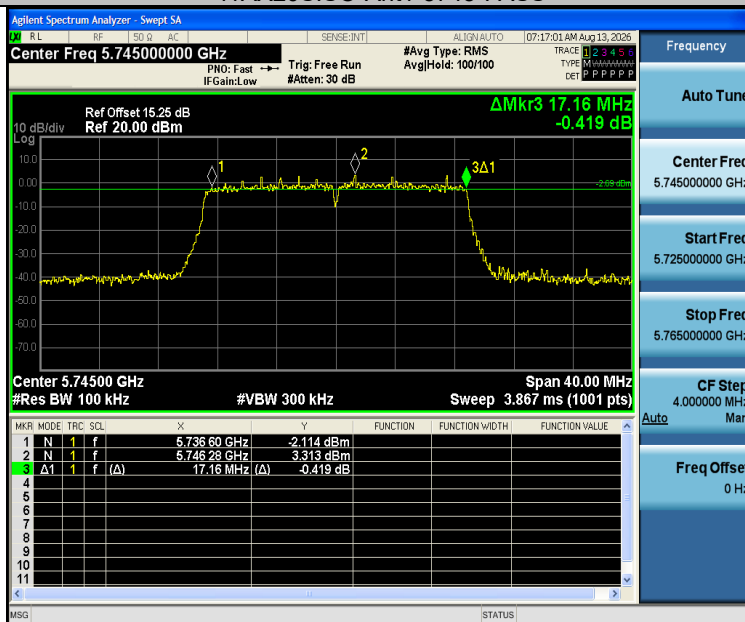
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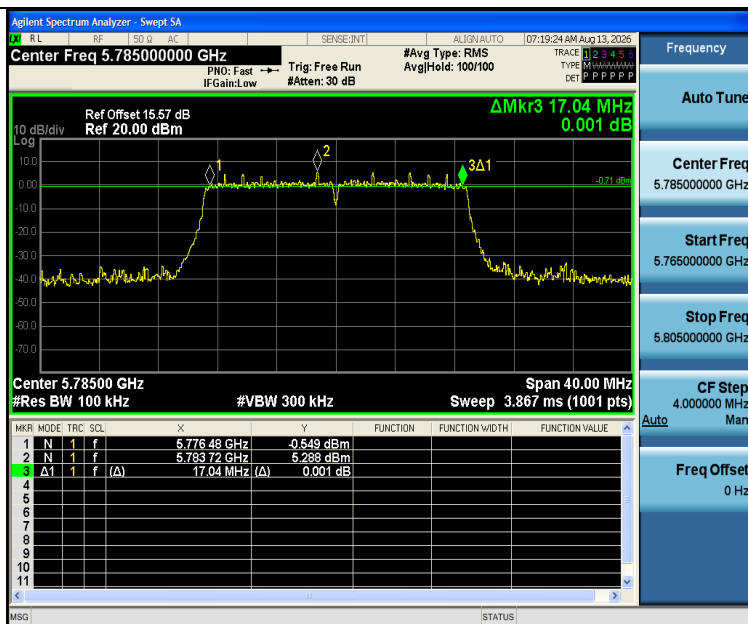
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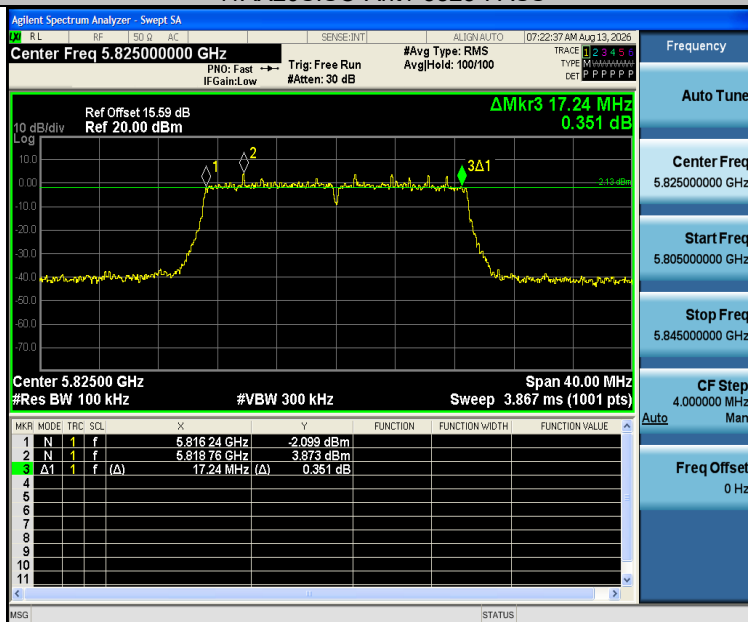
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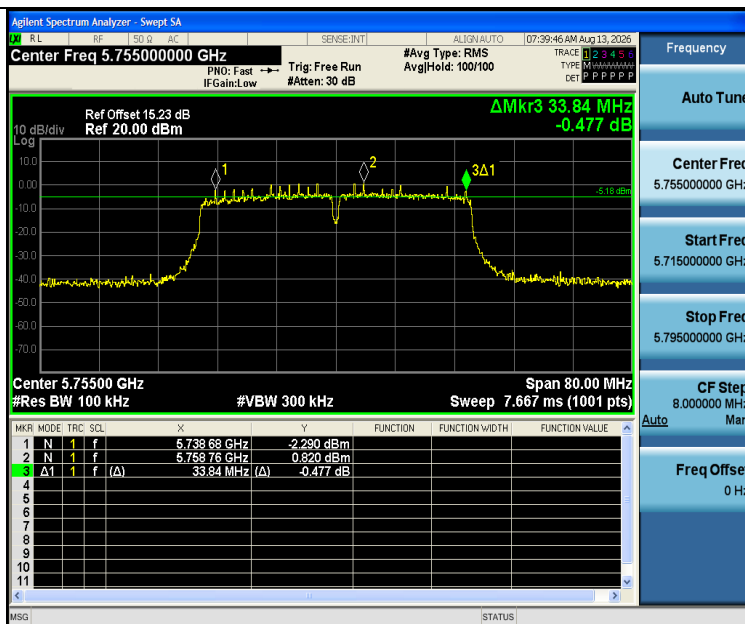
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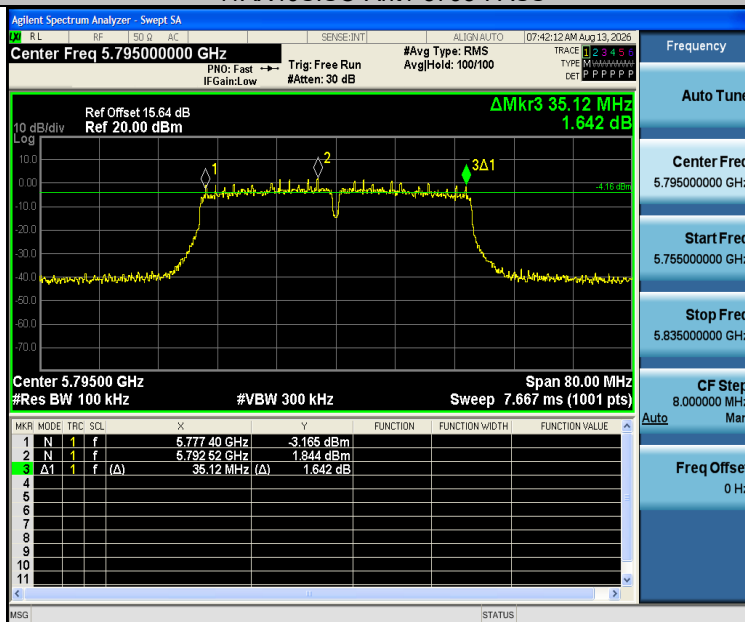
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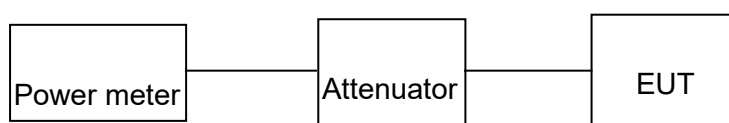


8 Maximum Conducted Output Power

Test Requirement	: FCC CFR47 Part 15 Section 15.407(a)
Test Method	: ANSI C63.10-2020
Test Limit	: 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.

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 colocated 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.

8.1 Test Setup



8.2 Test Procedure

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01, The use Power Meter 1. Place the EUT on a bench and set it in transmitting mode. 2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to a Power meter.



8.3 Test Result

Test Mode	Antenna	Frequency[MHz]	Channel Power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	11.19	72.73	1.38	12.57	≤23.98	PASS
11A	Ant1	5200	10.97	73.12	1.36	12.33	≤23.98	PASS
11A	Ant1	5240	11.33	73.12	1.36	12.69	≤23.98	PASS
11A	Ant1	5745	12.83	72.73	1.38	14.21	≤30.00	PASS
11A	Ant1	5785	14.75	73.12	1.36	16.11	≤30.00	PASS
11A	Ant1	5825	13.94	72.73	1.38	15.32	≤30.00	PASS
11N20SISO	Ant1	5180	10.52	71.75	1.44	11.96	≤23.98	PASS
11N20SISO	Ant1	5200	10.94	71.75	1.44	12.38	≤23.98	PASS
11N20SISO	Ant1	5240	11.18	71.35	1.47	12.65	≤23.98	PASS
11N20SISO	Ant1	5745	12.97	71.91	1.43	14.40	≤30.00	PASS
11N20SISO	Ant1	5785	11.97	71.75	1.44	13.41	≤30.00	PASS
11N20SISO	Ant1	5825	11.99	71.91	1.43	13.42	≤30.00	PASS
11N40SISO	Ant1	5190	8.95	55.75	2.54	11.49	≤23.98	PASS
11N40SISO	Ant1	5230	9.09	56.14	2.51	11.60	≤23.98	PASS
11N40SISO	Ant1	5755	11.64	55.75	2.54	14.18	≤30.00	PASS
11N40SISO	Ant1	5795	13.59	55.75	2.54	16.13	≤30.00	PASS
11AC20SISO	Ant1	5180	10.76	71.35	1.47	12.23	≤23.98	PASS
11AC20SISO	Ant1	5200	11.01	71.35	1.47	12.48	≤23.98	PASS
11AC20SISO	Ant1	5240	10.91	71.91	1.43	12.34	≤23.98	PASS
11AC20SISO	Ant1	5745	12.87	71.35	1.47	14.34	≤30.00	PASS
11AC20SISO	Ant1	5785	14.32	71.35	1.47	15.79	≤30.00	PASS
11AC20SISO	Ant1	5825	13.83	71.35	1.47	15.30	≤30.00	PASS
11AC40SISO	Ant1	5190	9.72	56.14	2.51	12.23	≤23.98	PASS
11AC40SISO	Ant1	5230	10.26	56.14	2.51	12.77	≤23.98	PASS
11AC40SISO	Ant1	5755	12.67	55.26	2.58	15.25	≤30.00	PASS
11AC40SISO	Ant1	5795	13.42	56.14	2.51	15.93	≤30.00	PASS
11AX20SISO	Ant1	5180	9.43	57.26	2.42	11.85	≤23.98	PASS
11AX20SISO	Ant1	5200	9.96	56.41	2.49	12.45	≤23.98	PASS



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11AX20SISO	Ant1	5240	10.30	56.41	2.49	12.79	≤23.98	PASS
11AX20SISO	Ant1	5745	11.97	57.26	2.42	14.39	≤30.00	PASS
11AX20SISO	Ant1	5785	12.26	56.41	2.49	14.75	≤30.00	PASS
11AX20SISO	Ant1	5825	12.52	57.26	2.42	14.94	≤30.00	PASS
11AX40SISO	Ant1	5190	8.42	41.18	3.85	12.27	≤23.98	PASS
11AX40SISO	Ant1	5230	8.41	40.00	3.98	12.39	≤23.98	PASS
11AX40SISO	Ant1	5755	10.29	40.00	3.98	14.27	≤30.00	PASS
11AX40SISO	Ant1	5795	11.36	40.48	3.93	15.29	≤30.00	PASS



9 Power Spectral density

Test Requirement	: FCC CFR47 Part 15 Section 15.2407(a)
Test Method	: ANSI C63.10-2020
Test Limit	: 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.. 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-kHzband. 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

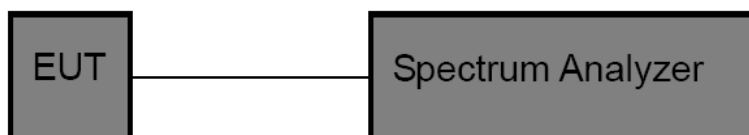


9.1 Test Procedure

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01 and ANSI 63.10: 2013 Sec 10.3.7. For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in Section 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, "provided that the measured power is integrated over the full reference bandwidth" to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 kHz bandwidth, the following adjustments to the procedures apply:

- a) Set the RBW to 1 MHz.
- b) Set the VBW to be at least 1 MHz (a VBW of 3 MHz is desirable).
- c) Set the frequency span to examine the spectrum across a convenient frequency segment (e.g., 600 MHz).
- d) Select the power averaging (rms) detector.
- e) Set the sweep time so that there is no more than a 1 ms integration period over each measurement bin.
- f) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

9.2 Test Setup





9.3 Test Result

TestMode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	1.43	≤11.00	PASS
11A	Ant1	5200	1.74	≤11.00	PASS
11A	Ant1	5240	1.84	≤11.00	PASS
11N20SISO	Ant1	5180	1.06	≤11.00	PASS
11N20SISO	Ant1	5200	1.08	≤11.00	PASS
11N20SISO	Ant1	5240	1.6	≤11.00	PASS
11N40SISO	Ant1	5190	-1.86	≤11.00	PASS
11N40SISO	Ant1	5230	-1.58	≤11.00	PASS
11AC20SISO	Ant1	5180	0.97	≤11.00	PASS
11AC20SISO	Ant1	5200	1.23	≤11.00	PASS
11AC20SISO	Ant1	5240	1.32	≤11.00	PASS
11AC40SISO	Ant1	5190	-1.71	≤11.00	PASS
11AC40SISO	Ant1	5230	-1.33	≤11.00	PASS
11AX20SISO	Ant1	5180	0.91	≤11.00	PASS
11AX20SISO	Ant1	5200	1.71	≤11.00	PASS
11AX20SISO	Ant1	5240	1.98	≤11.00	PASS
11AX40SISO	Ant1	5190	-1.03	≤11.00	PASS
11AX40SISO	Ant1	5230	0.09	≤11.00	PASS

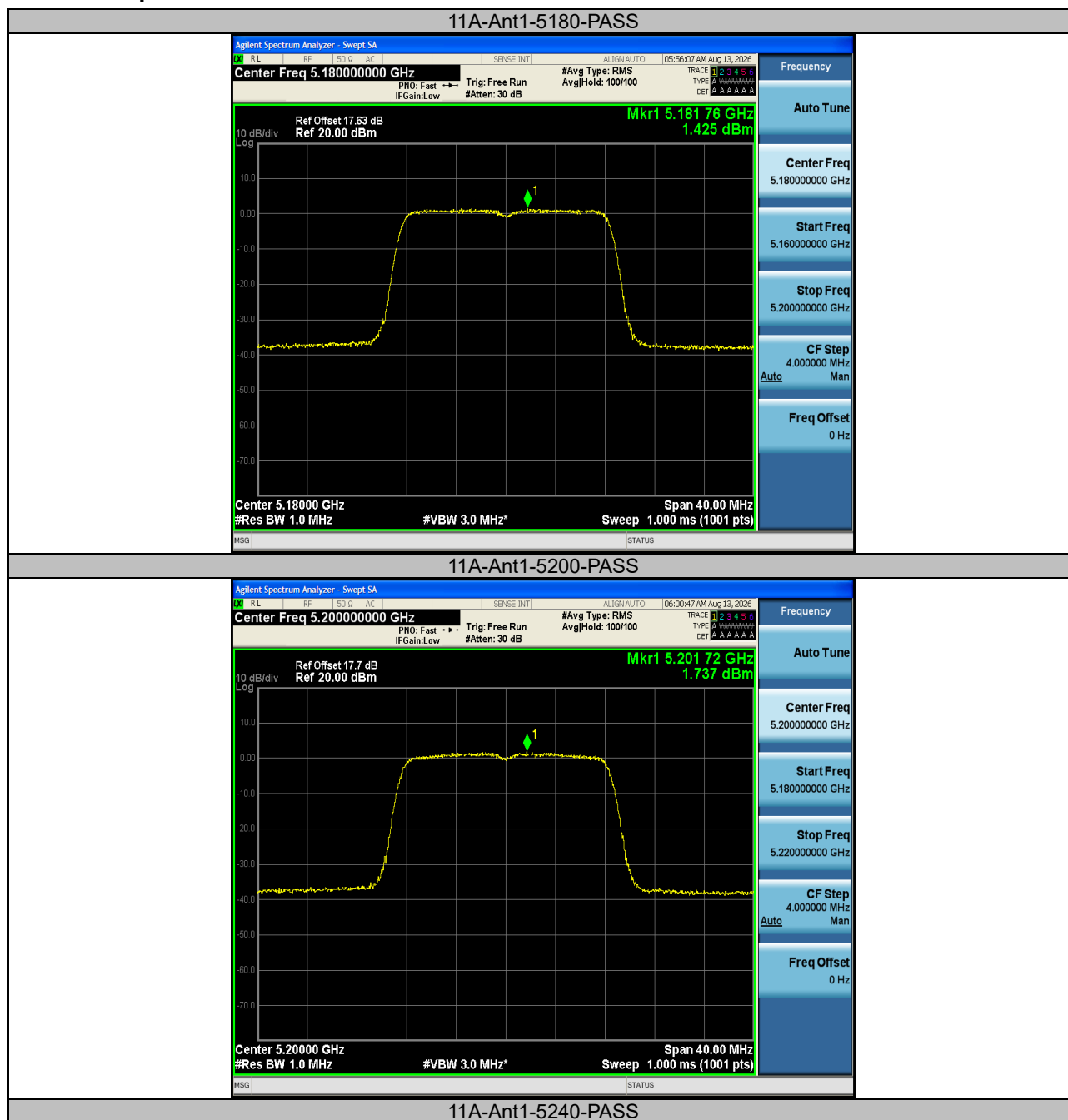
TestMode	Antenna	Frequency[MHz]	Result [dBm/300kHz]	Result [dBm/500kHz]	Result [dBm/500kHz]	Verdict
11A	Ant1	5180	1.43	3.65	≤30.00	PASS
11A	Ant1	5745	1.07	3.29	≤30.00	PASS
11A	Ant1	5785	2.41	4.63	≤30.00	PASS
11A	Ant1	5825	1.14	3.36	≤30.00	PASS
11N20SISO	Ant1	5745	0.38	2.60	≤30.00	PASS
11N20SISO	Ant1	5785	-0.22	2.00	≤30.00	PASS
11N20SISO	Ant1	5825	-0.3	1.92	≤30.00	PASS
11N40SISO	Ant1	5755	-1.74	0.48	≤30.00	PASS
11N40SISO	Ant1	5795	-0.26	1.96	≤30.00	PASS
11AC20SISO	Ant1	5745	0.6	2.82	≤30.00	PASS
11AC20SISO	Ant1	5785	2.11	4.33	≤30.00	PASS
11AC20SISO	Ant1	5825	1.33	3.55	≤30.00	PASS
11AC40SISO	Ant1	5755	-0.81	1.41	≤30.00	PASS
11AC40SISO	Ant1	5795	-0.16	2.06	≤30.00	PASS
11AX20SISO	Ant1	5745	1.37	3.59	≤30.00	PASS
11AX20SISO	Ant1	5785	1.34	3.56	≤30.00	PASS
11AX20SISO	Ant1	5825	1.22	3.44	≤30.00	PASS
11AX40SISO	Ant1	5755	-2.33	-0.11	≤30.00	PASS
11AX40SISO	Ant1	5795	-0.66	1.56	≤30.00	PASS

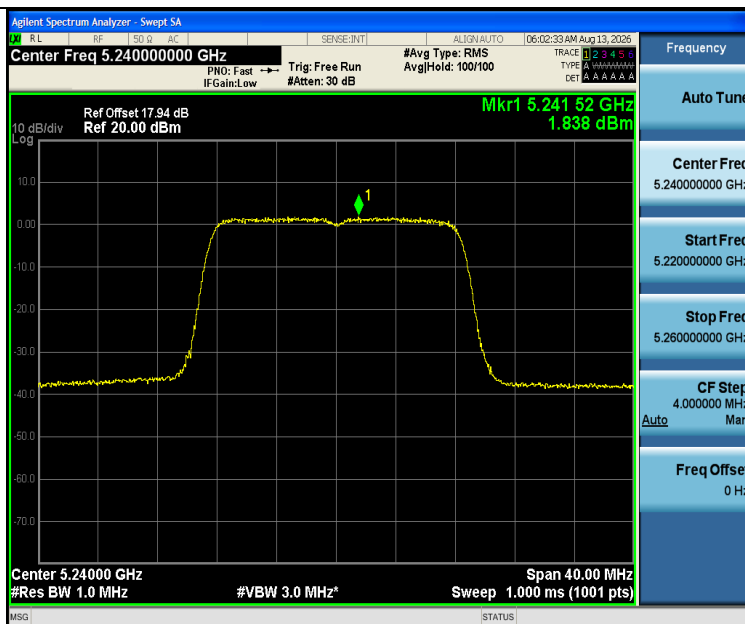
Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

2. in the band 5.725–5.85 GHz the test RBW select 300KHz,so the measured result corrected by Result+10 log (500 kHz/300kHz).

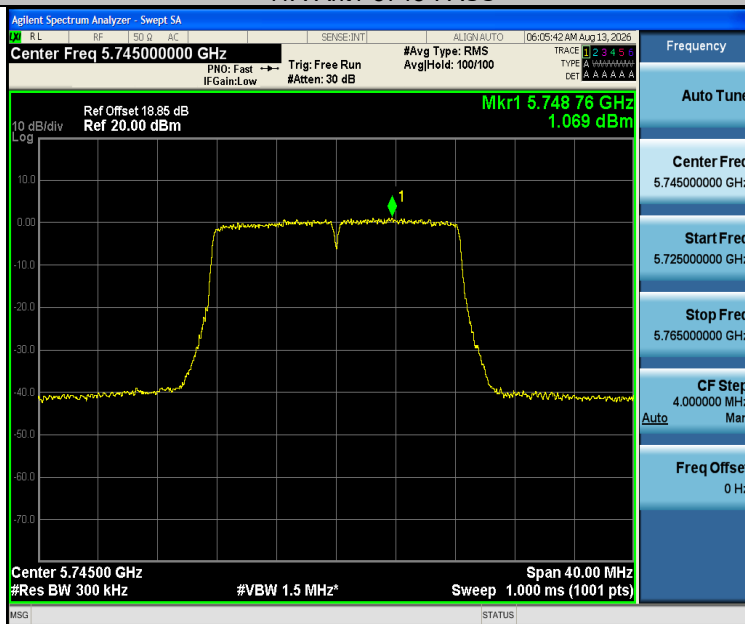


Test Graphs:





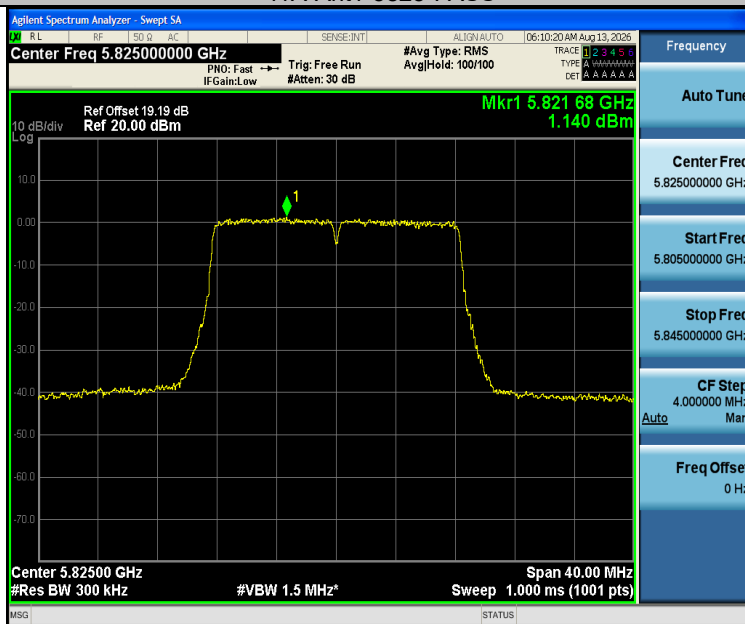
11A-Ant1-5745-PASS



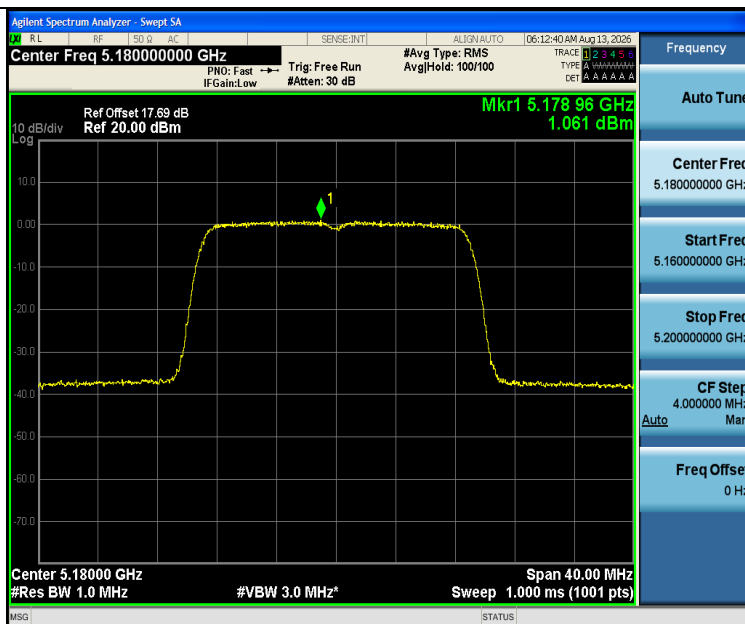
11A-Ant1-5785-PASS



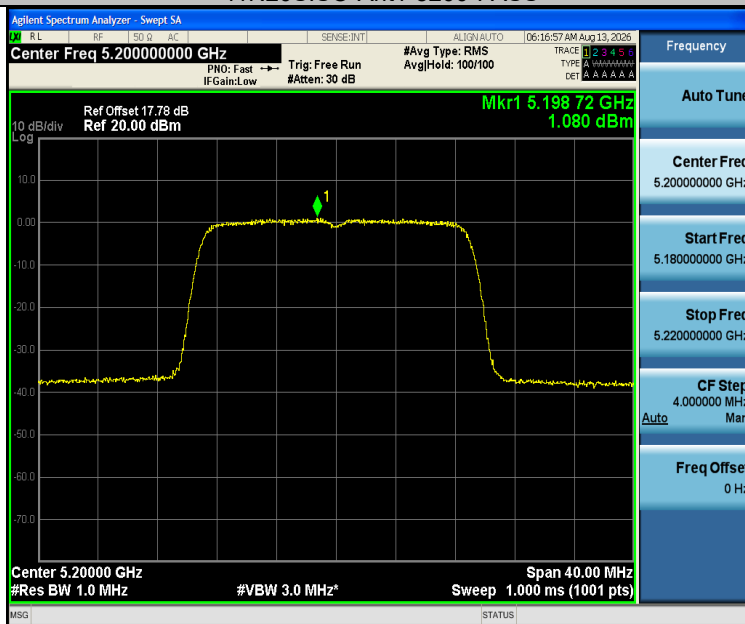
11A-Ant1-5825-PASS



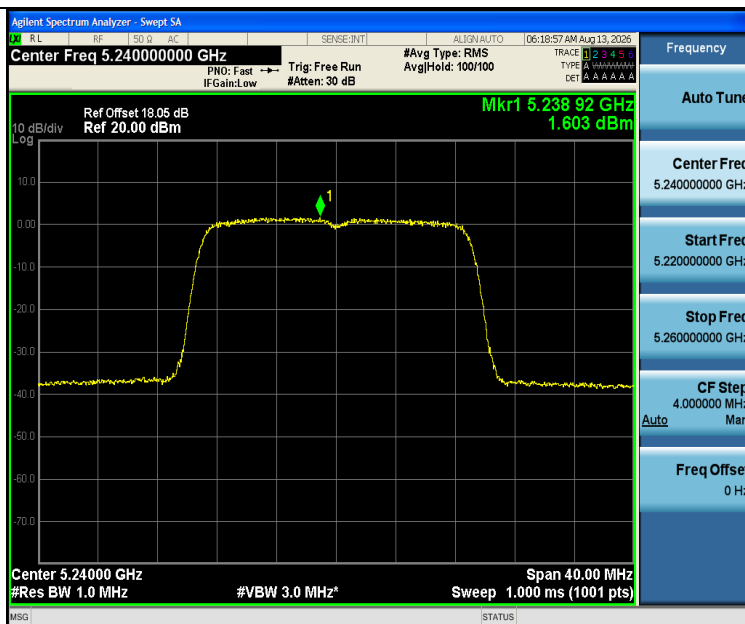
11N20SISO-Ant1-5180-PASS



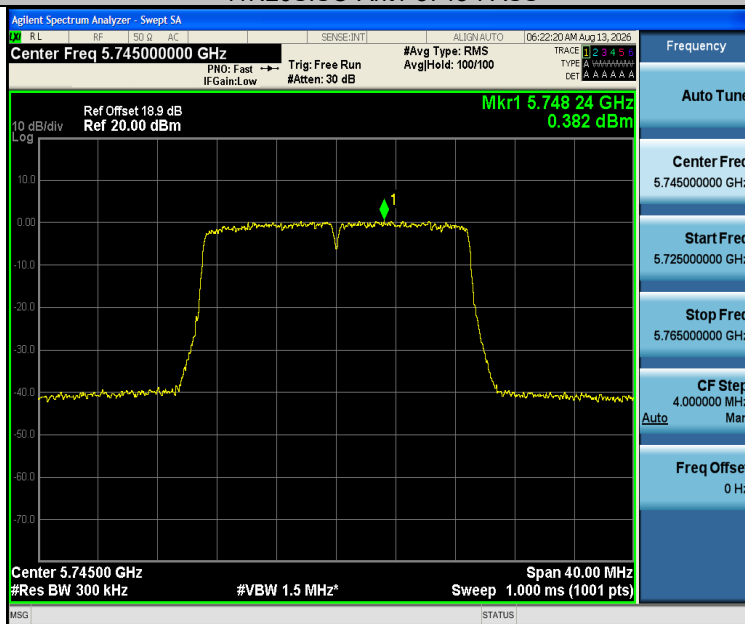
11N20SISO-Ant1-5200-PASS



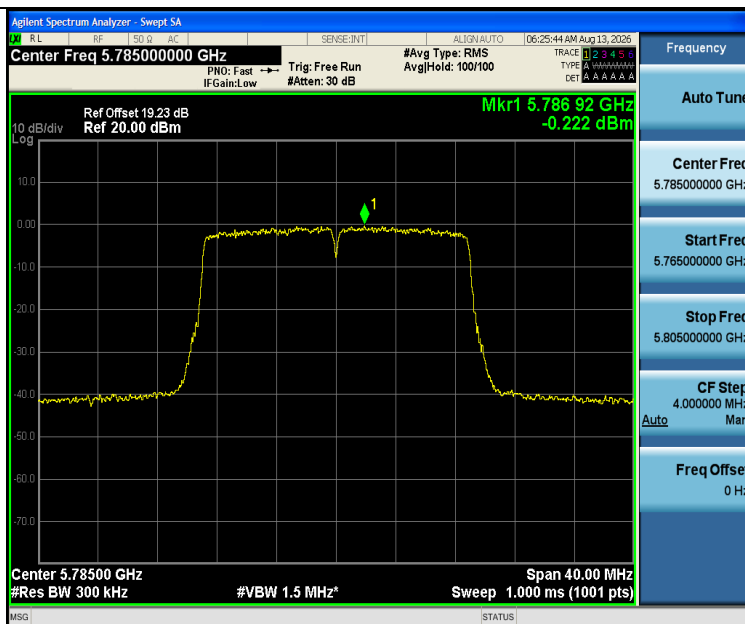
11N20SISO-Ant1-5240-PASS



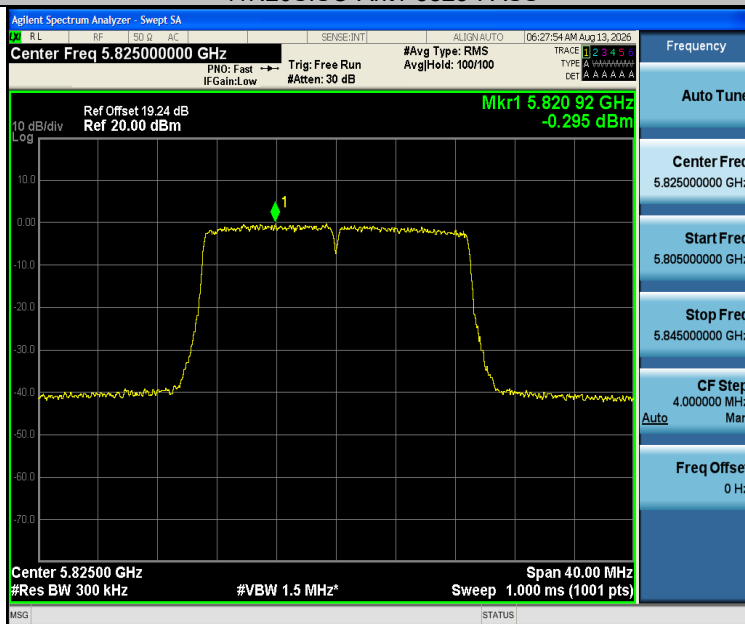
11N20SISO-Ant1-5745-PASS



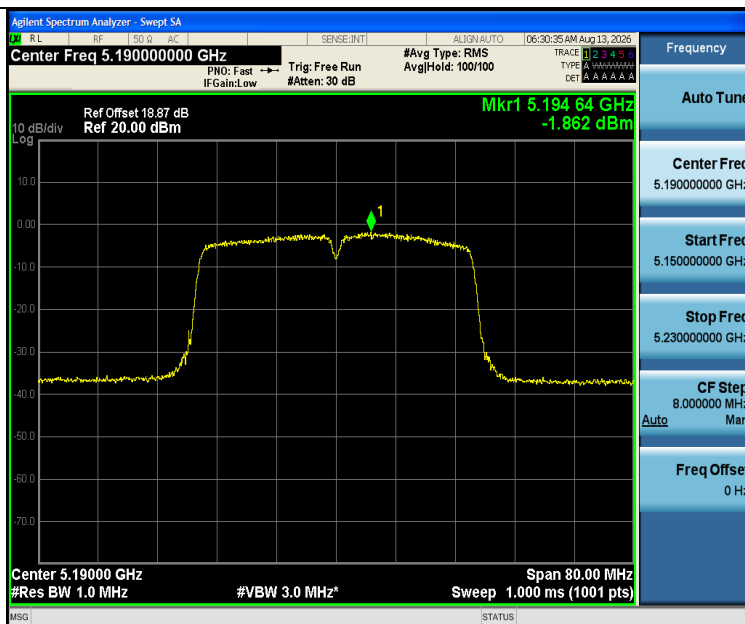
11N20SISO-Ant1-5785-PASS



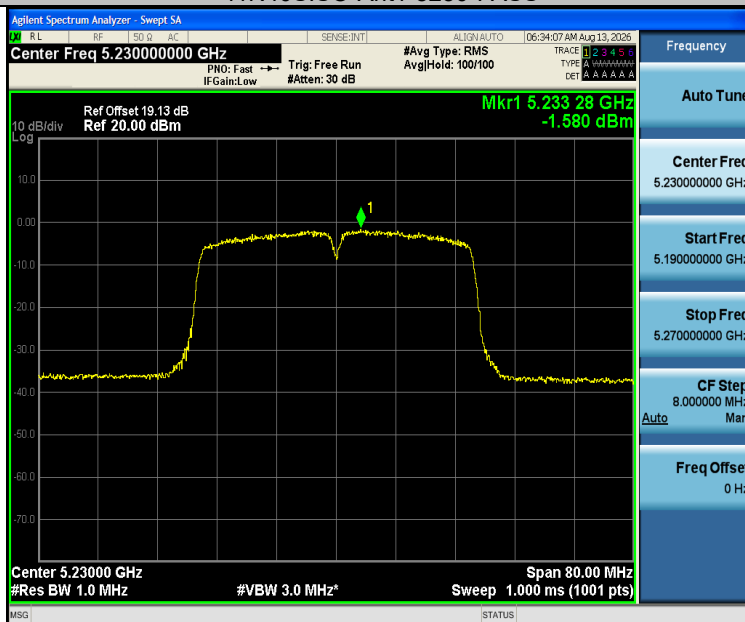
11N20SISO-Ant1-5825-PASS



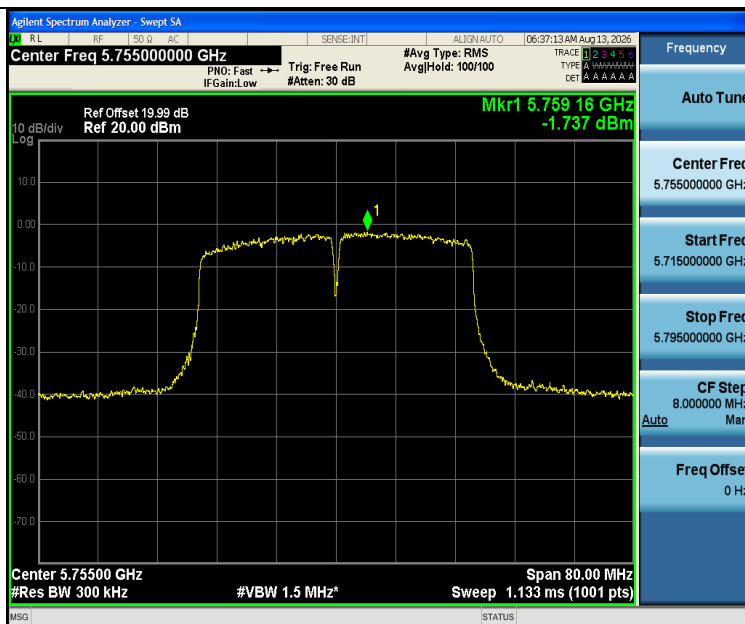
11N40SISO-Ant1-5190-PASS



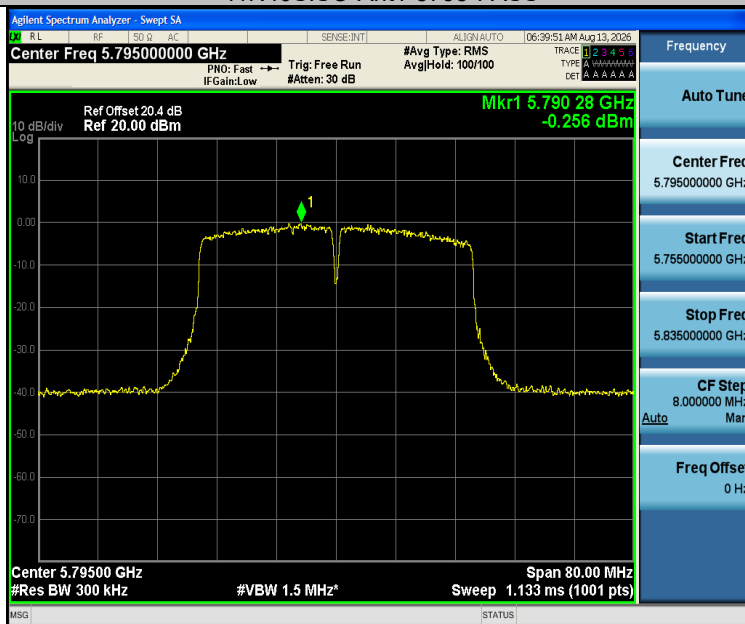
11N40SISO-Ant1-5230-PASS



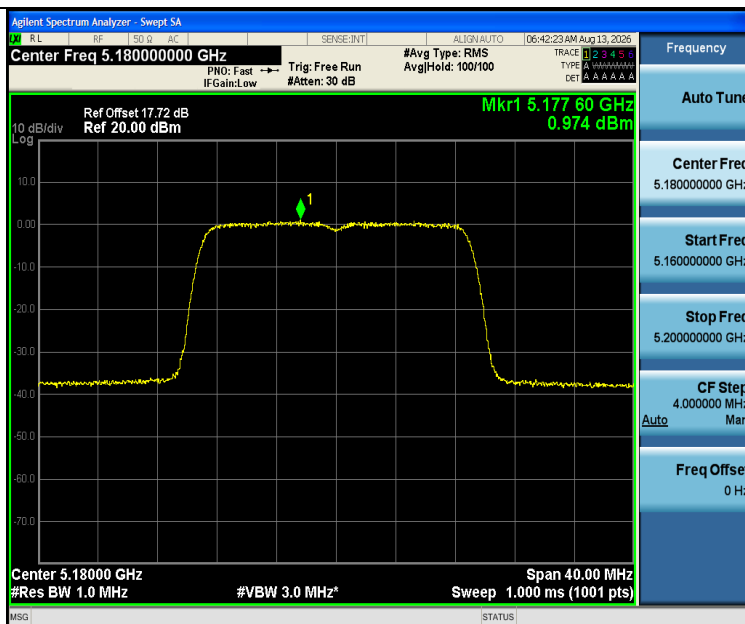
11N40SISO-Ant1-5755-PASS



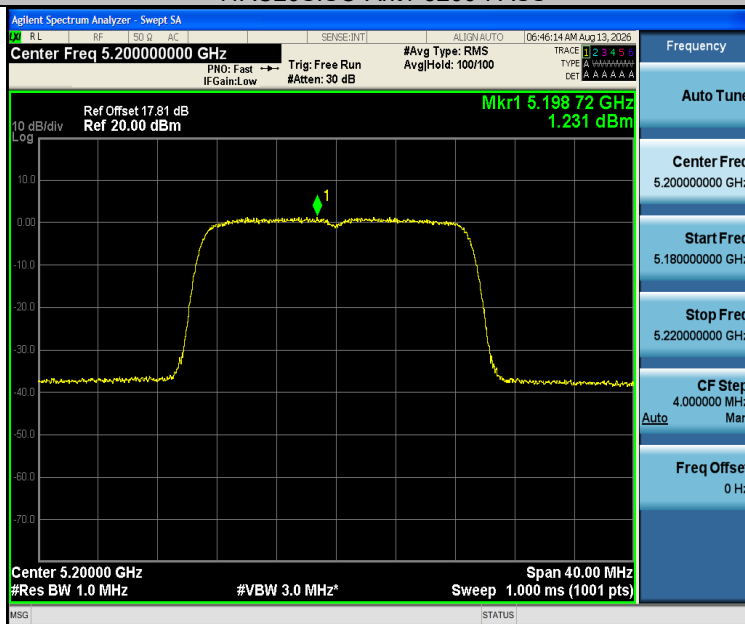
11N40SISO-Ant1-5795-PASS



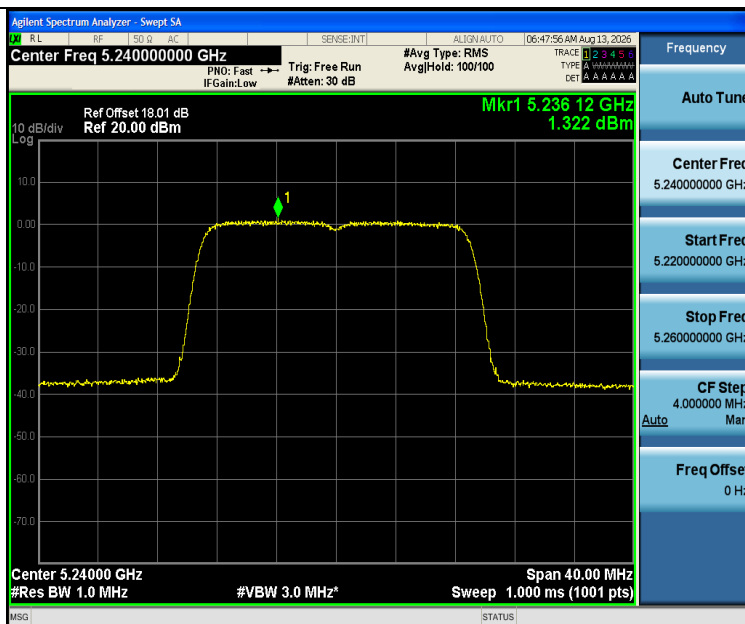
11AC20SISO-Ant1-5180-PASS



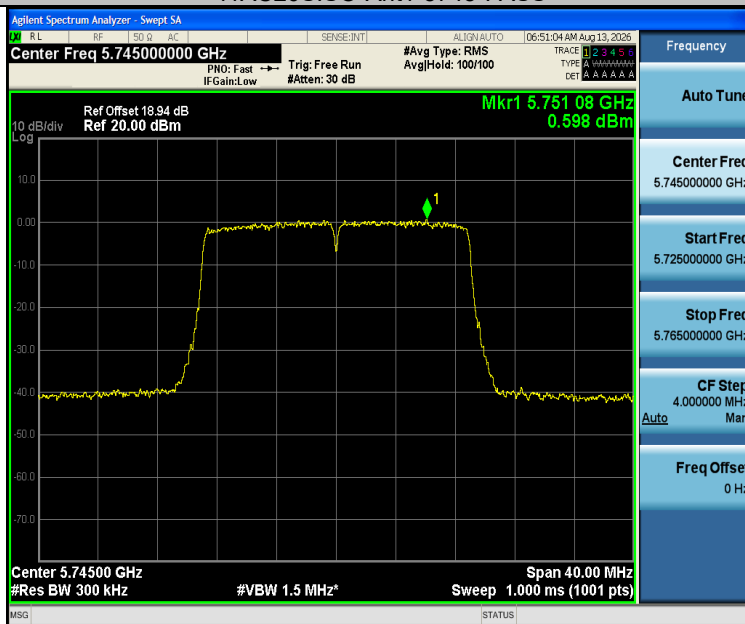
11AC20SISO-Ant1-5200-PASS



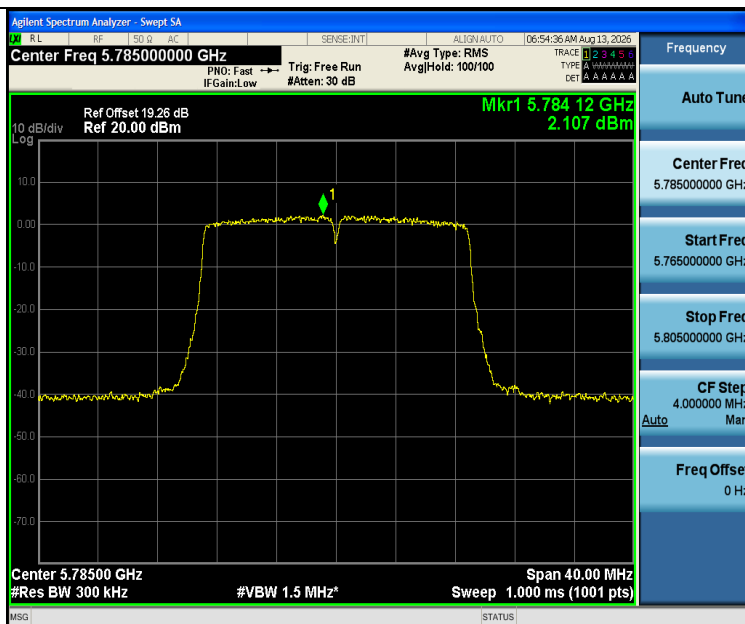
11AC20SISO-Ant1-5240-PASS



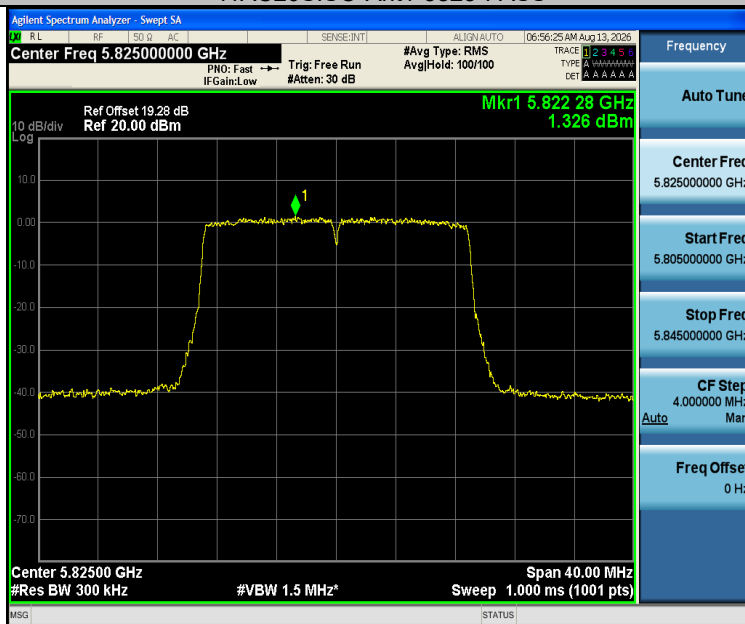
11AC20SISO-Ant1-5745-PASS



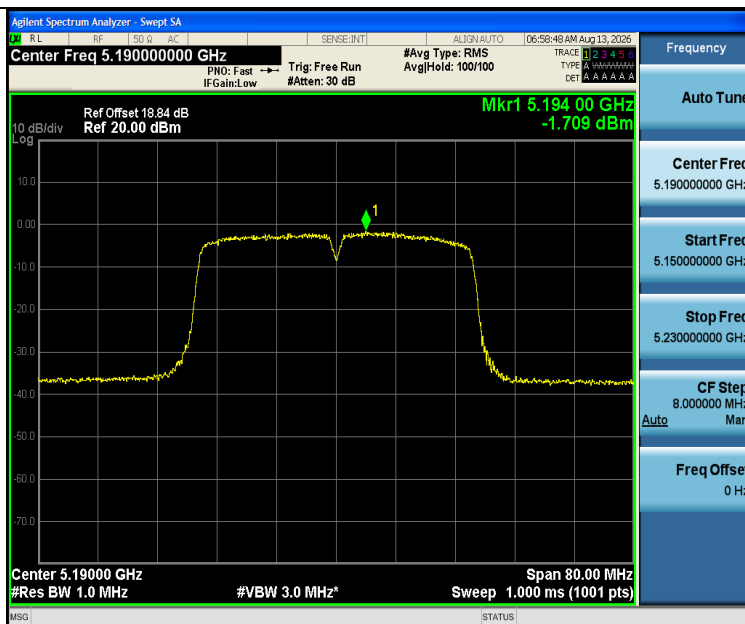
11AC20SISO-Ant1-5785-PASS



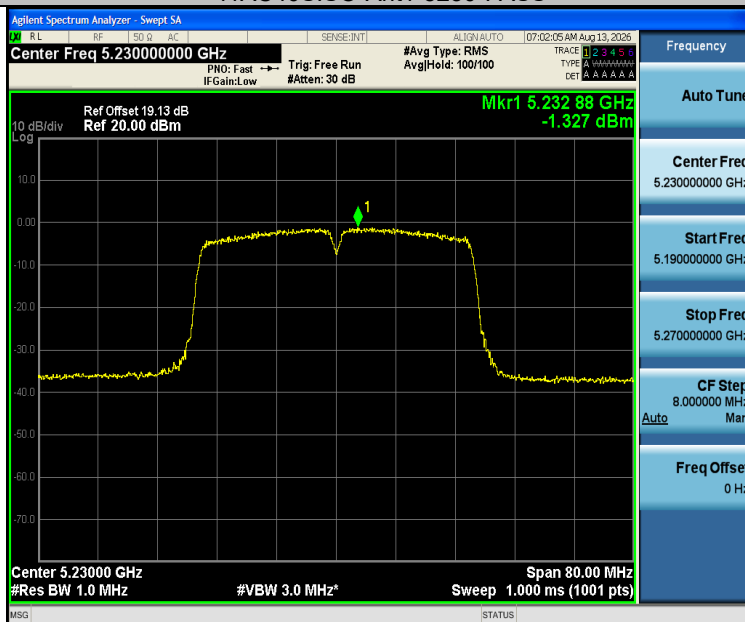
11AC20SISO-Ant1-5825-PASS



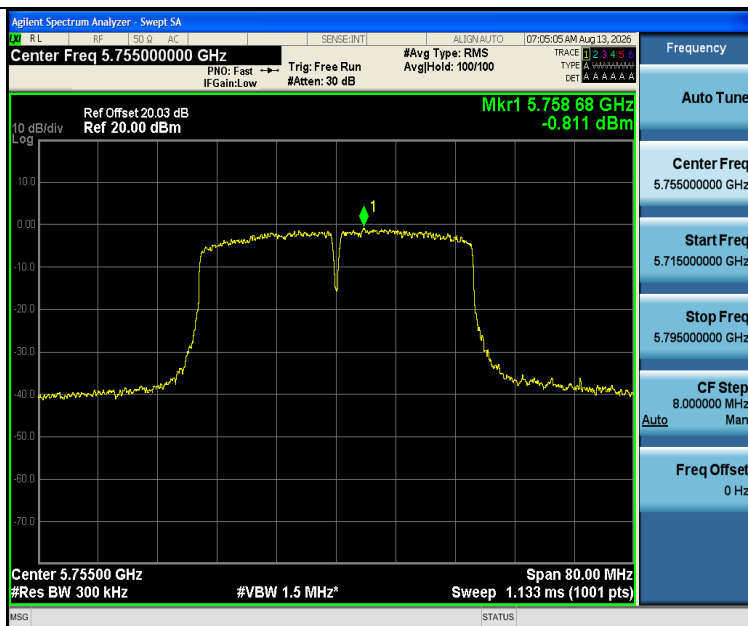
11AC40SISO-Ant1-5190-PASS



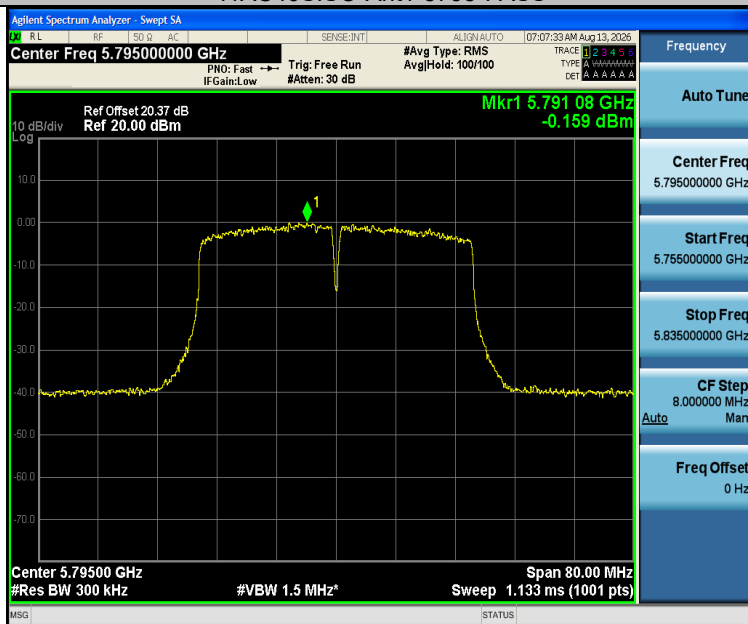
11AC40SISO-Ant1-5230-PASS



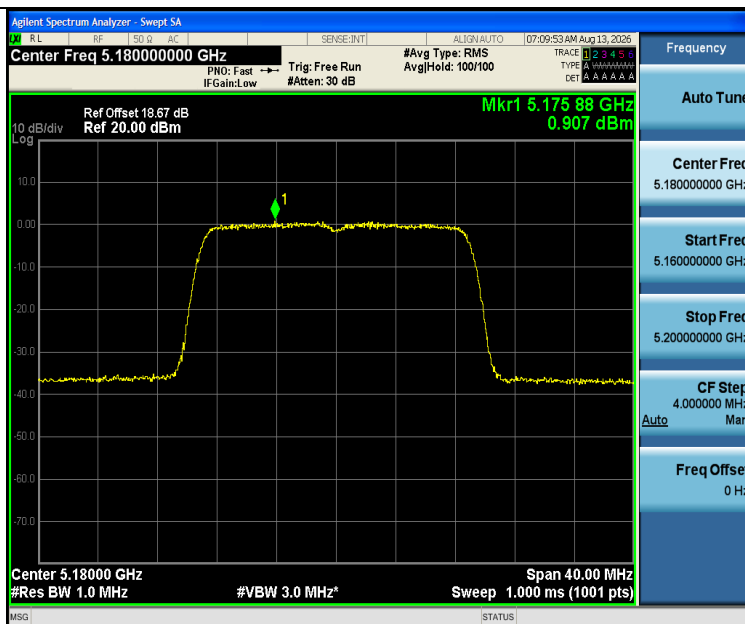
11AC40SISO-Ant1-5755-PASS



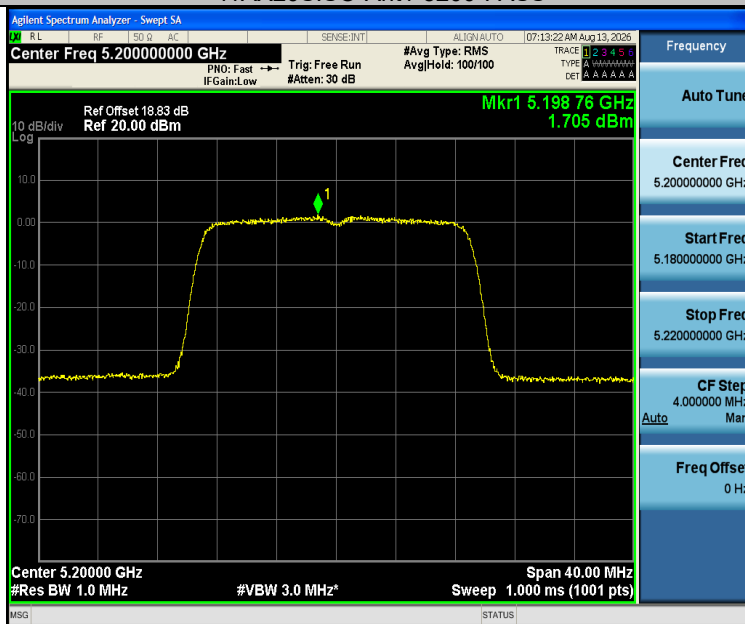
11AC40SISO-Ant1-5795-PASS



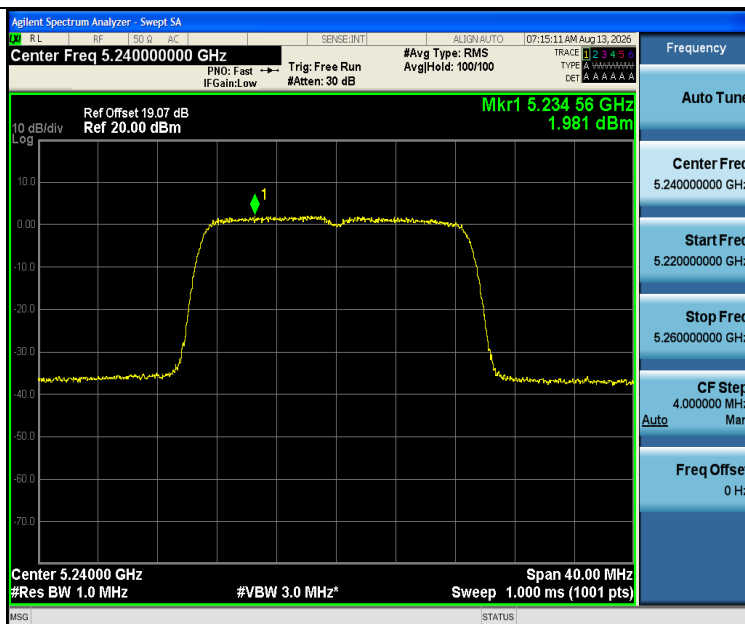
11AX20SISO-Ant1-5180-PASS



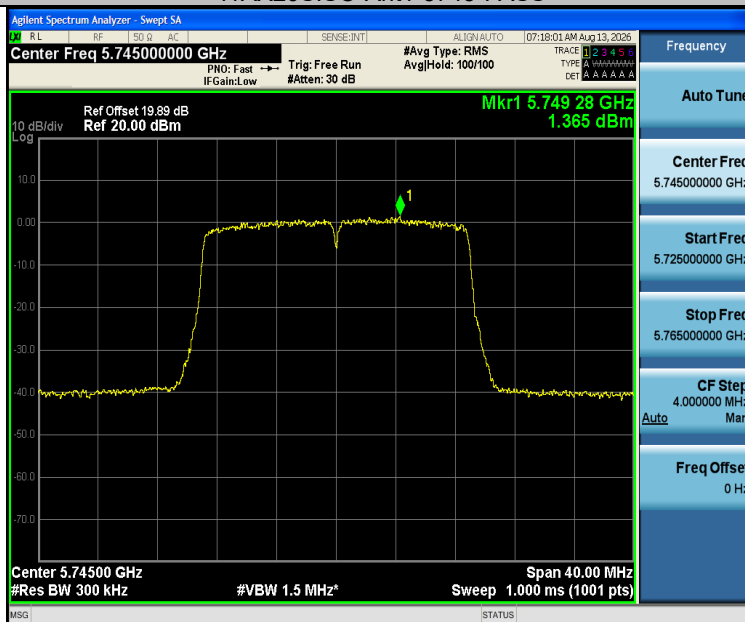
11AX20SISO-Ant1-5200-PASS



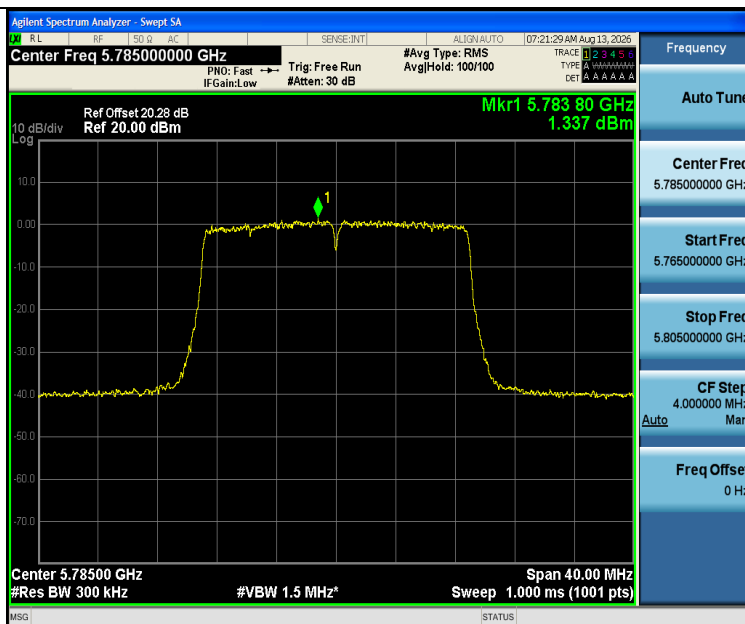
11AX20SISO-Ant1-5240-PASS



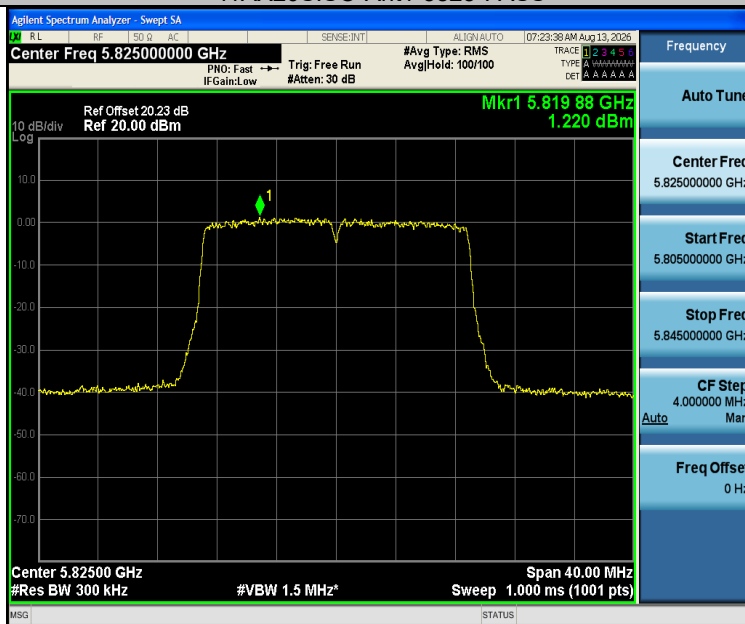
11AX20SISO-Ant1-5745-PASS



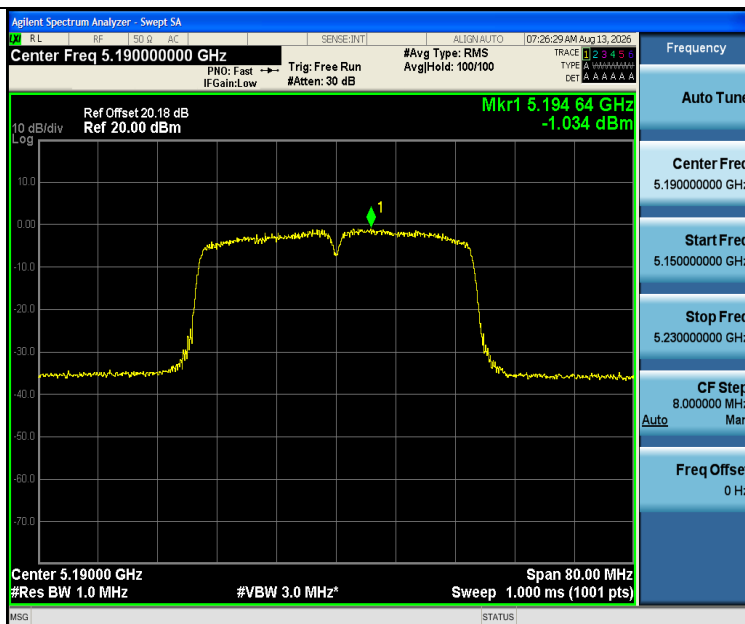
11AX20SISO-Ant1-5785-PASS



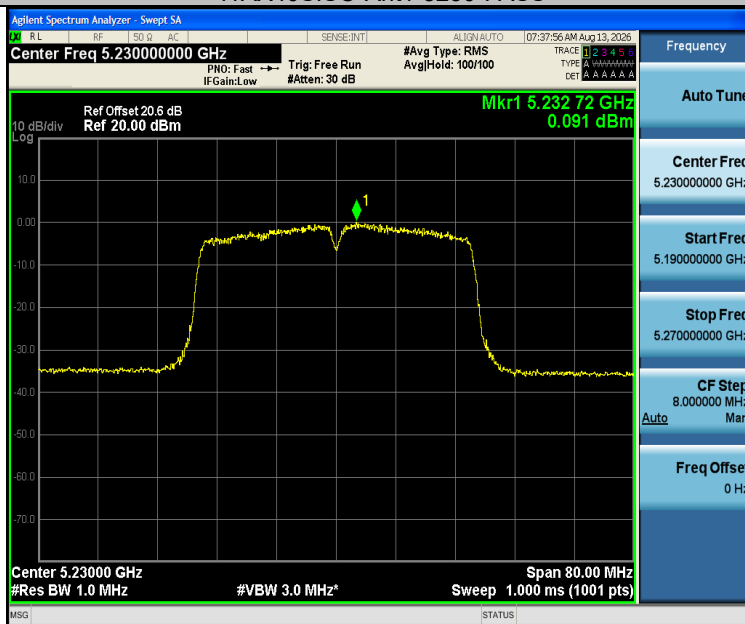
11AX20SISO-Ant1-5825-PASS



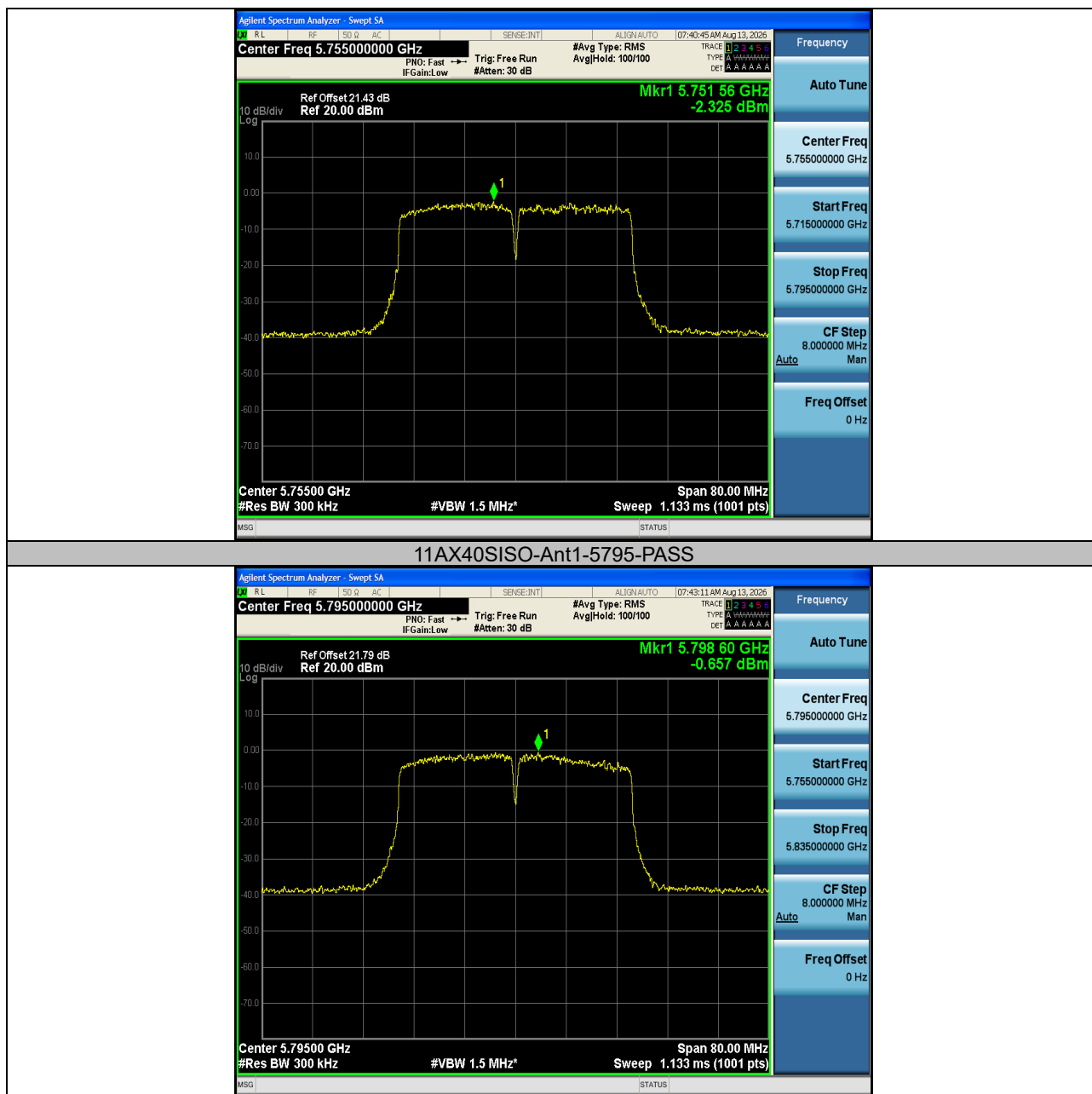
11AX40SISO-Ant1-5190-PASS



11AX40SISO-Ant1-5230-PASS



11AX40SISO-Ant1-5755-PASS



Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.



9.4 Antenna Requirement

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 15.247 (b), 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.

9.5 Result

The EUT'S antenna, permanent attached antenna, is FPC Antenna. The antenna's gain is 3.99 dBi and meets the requirement.



10 Frequency Stability

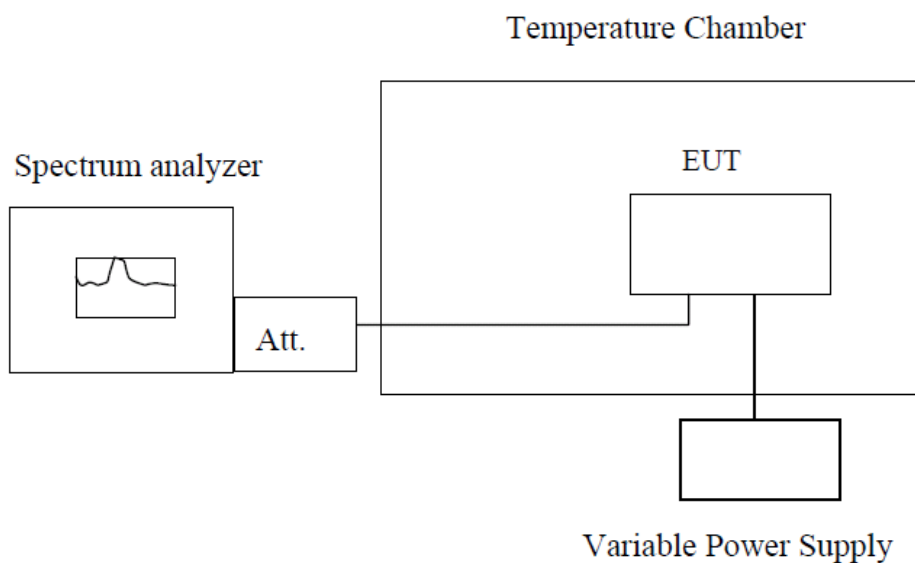
Test Requirement : FCC Part15 E Section 15.407 (g)

Test 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.

10.1 Test Procedure

1. The EUT is installed in an environment test chamber with external power source.
2. Set the chamber to operate at 50 centigrade and external power source to output at nominal voltage of EUT.
3. A sufficient stabilization period at each temperature is used prior to each frequency measurement.
4. When temperature is stabled, measure the frequency stability.
5. The test shall be performed under -30 to 50 centigrade and 85 to 115 percent of the nominal voltage. Change setting of chamber and external power source to complete all conditions.

10.2 Test Setup





10.3 Test Result

TestMode	Antenna	Frequenc y[MHz]	Voltage [Vdc]	Temperat ure (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5180	NV	NT	-15000.00	-2.895753	20	PASS
11A	Ant1	5180	LV	NT	-12000.00	-2.316602	20	PASS
11A	Ant1	5180	HV	NT	-11000.00	-2.123552	20	PASS
11A	Ant1	5200	NV	NT	-2000.00	-0.384615	20	PASS
11A	Ant1	5200	LV	NT	2000.00	0.384615	20	PASS
11A	Ant1	5200	HV	NT	3000.00	0.576923	20	PASS
11A	Ant1	5240	NV	NT	6000.00	1.145038	20	PASS
11A	Ant1	5240	LV	NT	9000.00	1.717557	20	PASS
11A	Ant1	5240	HV	NT	11000.00	2.099237	20	PASS
11A	Ant1	5745	NV	NT	6000.00	1.044386	20	PASS
11A	Ant1	5745	LV	NT	13000.00	2.262837	20	PASS
11A	Ant1	5745	HV	NT	14000.00	2.436902	20	PASS
11A	Ant1	5785	NV	NT	7000.00	1.210026	20	PASS
11A	Ant1	5785	LV	NT	15000.00	2.592913	20	PASS
11A	Ant1	5785	HV	NT	17000.00	2.938634	20	PASS
11A	Ant1	5825	NV	NT	8000.00	1.373391	20	PASS
11A	Ant1	5825	LV	NT	14000.00	2.403433	20	PASS
11A	Ant1	5825	HV	NT	16000.00	2.746781	20	PASS
11N20SIS O	Ant1	5180	NV	NT	7000.00	1.351351	20	PASS
11N20SIS O	Ant1	5180	LV	NT	14000.00	2.702703	20	PASS
11N20SIS O	Ant1	5180	HV	NT	16000.00	3.088803	20	PASS
11N20SIS O	Ant1	5200	NV	NT	12000.00	2.307692	20	PASS
11N20SIS O	Ant1	5200	LV	NT	15000.00	2.884615	20	PASS
11N20SIS O	Ant1	5200	HV	NT	16000.00	3.076923	20	PASS
11N20SIS O	Ant1	5240	NV	NT	7000.00	1.335878	20	PASS
11N20SIS O	Ant1	5240	LV	NT	15000.00	2.862595	20	PASS
11N20SIS O	Ant1	5240	HV	NT	17000.00	3.244275	20	PASS
11N20SIS O	Ant1	5745	NV	NT	6000.00	1.044386	20	PASS
11N20SIS O	Ant1	5745	LV	NT	14000.00	2.436902	20	PASS
11N20SIS O	Ant1	5745	HV	NT	16000.00	2.785030	20	PASS
11N20SIS O	Ant1	5785	NV	NT	9000.00	1.555748	20	PASS
11N20SIS O	Ant1	5785	LV	NT	17000.00	2.938634	20	PASS
11N20SIS O	Ant1	5785	HV	NT	19000.00	3.284356	20	PASS
11N20SIS O	Ant1	5825	NV	NT	9000.00	1.545064	20	PASS
11N20SIS O	Ant1	5825	LV	NT	17000.00	2.918455	20	PASS



11N20SIS O	Ant1	5825	HV	NT	19000.00	3.261803	20	PASS
11N40SIS O	Ant1	5190	NV	NT	8000.00	1.541426	20	PASS
11N40SIS O	Ant1	5190	LV	NT	15000.00	2.890173	20	PASS
11N40SIS O	Ant1	5190	HV	NT	17000.00	3.275530	20	PASS
11N40SIS O	Ant1	5230	NV	NT	9000.00	1.720841	20	PASS
11N40SIS O	Ant1	5230	LV	NT	16000.00	3.059273	20	PASS
11N40SIS O	Ant1	5230	HV	NT	18000.00	3.441683	20	PASS
11N40SIS O	Ant1	5755	NV	NT	9000.00	1.563858	20	PASS
11N40SIS O	Ant1	5755	LV	NT	18000.00	3.127715	20	PASS
11N40SIS O	Ant1	5755	HV	NT	21000.00	3.649001	20	PASS
11N40SIS O	Ant1	5795	NV	NT	13000.00	2.243313	20	PASS
11N40SIS O	Ant1	5795	LV	NT	20000.00	3.451251	20	PASS
11N40SIS O	Ant1	5795	HV	NT	22000.00	3.796376	20	PASS
11AC20SIS O	Ant1	5180	NV	NT	9000.00	1.737452	20	PASS
11AC20SIS O	Ant1	5180	LV	NT	16000.00	3.088803	20	PASS
11AC20SIS O	Ant1	5180	HV	NT	18000.00	3.474903	20	PASS
11AC20SIS O	Ant1	5200	NV	NT	5000.00	0.961538	20	PASS
11AC20SIS O	Ant1	5200	LV	NT	12000.00	2.307692	20	PASS
11AC20SIS O	Ant1	5200	HV	NT	14000.00	2.692308	20	PASS
11AC20SIS O	Ant1	5240	NV	NT	5000.00	0.954198	20	PASS
11AC20SIS O	Ant1	5240	LV	NT	12000.00	2.290076	20	PASS
11AC20SIS O	Ant1	5240	HV	NT	15000.00	2.862595	20	PASS
11AC20SIS O	Ant1	5745	NV	NT	6000.00	1.044386	20	PASS
11AC20SIS O	Ant1	5745	LV	NT	13000.00	2.262837	20	PASS
11AC20SIS O	Ant1	5745	HV	NT	16000.00	2.785030	20	PASS
11AC20SIS O	Ant1	5785	NV	NT	9000.00	1.555748	20	PASS
11AC20SIS O	Ant1	5785	LV	NT	17000.00	2.938634	20	PASS
11AC20SIS O	Ant1	5785	HV	NT	19000.00	3.284356	20	PASS
11AC20SIS	Ant1	5825	NV	NT	7000.00	1.201717	20	PASS



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O								
11AC20SIS O	Ant1	5825	LV	NT	15000.00	2.575107	20	PASS
11AC20SIS O	Ant1	5825	HV	NT	17000.00	2.918455	20	PASS
11AC40SIS O	Ant1	5190	NV	NT	8000.00	1.541426	20	PASS
11AC40SIS O	Ant1	5190	LV	NT	15000.00	2.890173	20	PASS
11AC40SIS O	Ant1	5190	HV	NT	17000.00	3.275530	20	PASS
11AC40SIS O	Ant1	5230	NV	NT	7000.00	1.338432	20	PASS
11AC40SIS O	Ant1	5230	LV	NT	15000.00	2.868069	20	PASS
11AC40SIS O	Ant1	5230	HV	NT	17000.00	3.250478	20	PASS
11AC40SIS O	Ant1	5755	NV	NT	9000.00	1.563858	20	PASS
11AC40SIS O	Ant1	5755	LV	NT	17000.00	2.953953	20	PASS
11AC40SIS O	Ant1	5755	HV	NT	20000.00	3.475239	20	PASS
11AC40SIS O	Ant1	5795	NV	NT	13000.00	2.243313	20	PASS
11AC40SIS O	Ant1	5795	LV	NT	20000.00	3.451251	20	PASS
11AC40SIS O	Ant1	5795	HV	NT	22000.00	3.796376	20	PASS
11AX20SIS O	Ant1	5180	NV	NT	11000.00	2.123552	20	PASS
11AX20SIS O	Ant1	5180	LV	NT	18000.00	3.474903	20	PASS
11AX20SIS O	Ant1	5180	HV	NT	20000.00	3.861004	20	PASS
11AX20SIS O	Ant1	5200	NV	NT	9000.00	1.730769	20	PASS
11AX20SIS O	Ant1	5200	LV	NT	16000.00	3.076923	20	PASS
11AX20SIS O	Ant1	5200	HV	NT	18000.00	3.461538	20	PASS
11AX20SIS O	Ant1	5240	NV	NT	8000.00	1.526718	20	PASS
11AX20SIS O	Ant1	5240	LV	NT	16000.00	3.053435	20	PASS
11AX20SIS O	Ant1	5240	HV	NT	18000.00	3.435115	20	PASS
11AX20SIS O	Ant1	5745	NV	NT	9000.00	1.566580	20	PASS
11AX20SIS O	Ant1	5745	LV	NT	17000.00	2.959095	20	PASS
11AX20SIS O	Ant1	5745	HV	NT	19000.00	3.307224	20	PASS
11AX20SIS O	Ant1	5785	NV	NT	10000.00	1.728608	20	PASS
11AX20SIS O	Ant1	5785	LV	NT	18000.00	3.111495	20	PASS



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11AX20SIS O	Ant1	5785	HV	NT	20000.00	3.457217	20	PASS
11AX20SIS O	Ant1	5825	NV	NT	10000.00	1.716738	20	PASS
11AX20SIS O	Ant1	5825	LV	NT	18000.00	3.090129	20	PASS
11AX20SIS O	Ant1	5825	HV	NT	20000.00	3.433476	20	PASS
11AX20SIS O	Ant1	5190	NV	NT	9000.00	1.734104	20	PASS
11AX40SIS O	Ant1	5190	LV	NT	16000.00	3.082852	20	PASS
11AX40SIS O	Ant1	5190	HV	NT	18000.00	3.468208	20	PASS
11AX40SIS O	Ant1	5230	NV	NT	7000.00	1.338432	20	PASS
11AX40SIS O	Ant1	5230	LV	NT	14000.00	2.676864	20	PASS
11AX40SIS O	Ant1	5230	HV	NT	16000.00	3.059273	20	PASS
11AX40SIS O	Ant1	5755	NV	NT	11000.00	1.911381	20	PASS
11AX40SIS O	Ant1	5755	LV	NT	20000.00	3.475239	20	PASS
11AX40SIS O	Ant1	5755	HV	NT	22000.00	3.822763	20	PASS
11AX40SIS O	Ant1	5795	NV	NT	12000.00	2.070751	20	PASS
11AX40SIS O	Ant1	5795	LV	NT	21000.00	3.623814	20	PASS
11AX40SIS O	Ant1	5795	HV	NT	23000.00	3.968939	20	PASS