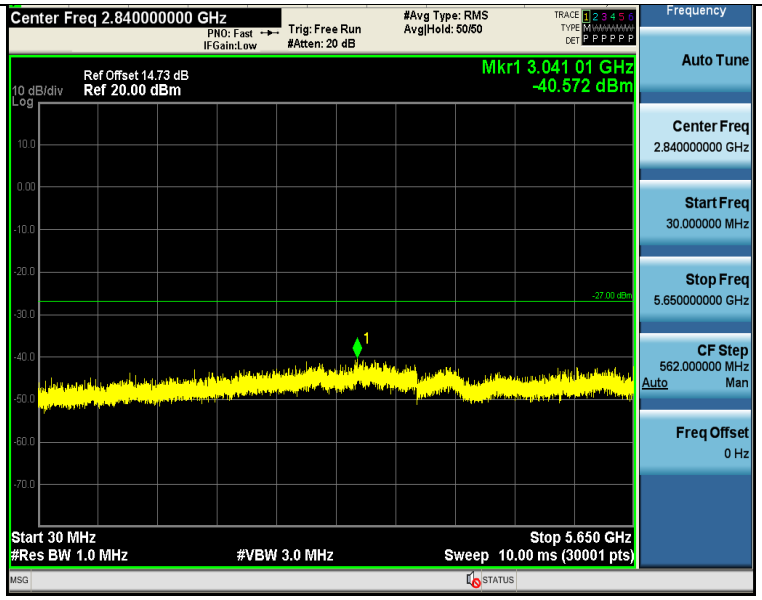
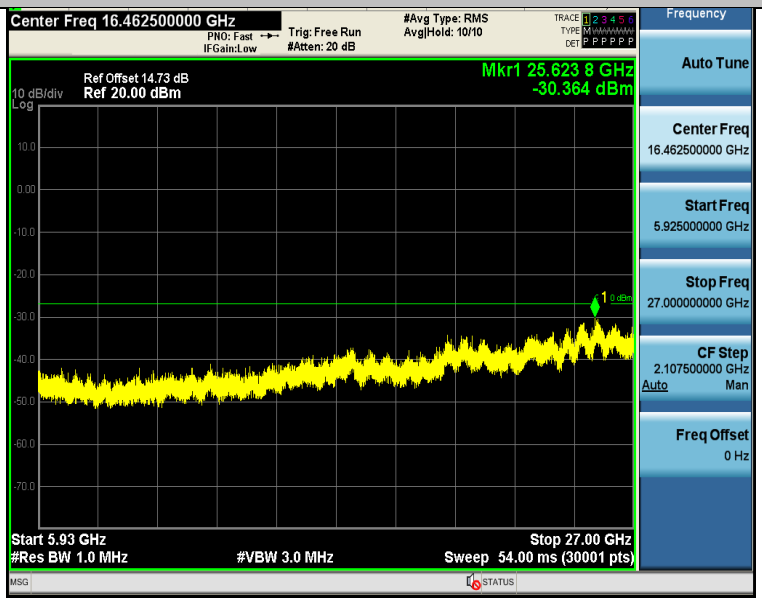
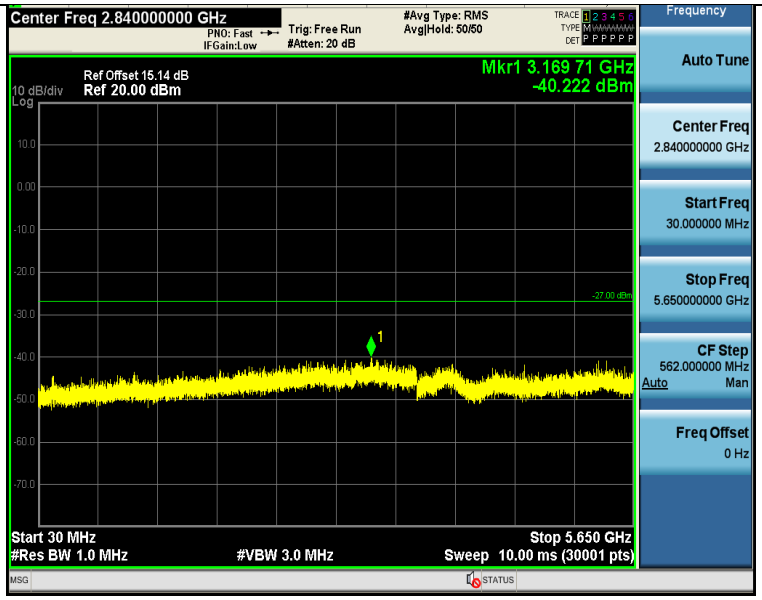


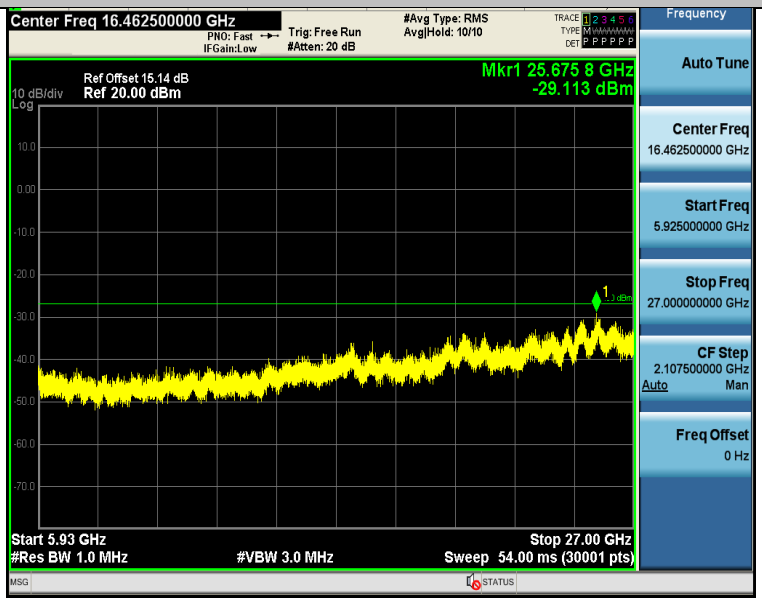
11AC40SISO-Ant1-5755-30~5650-PASS



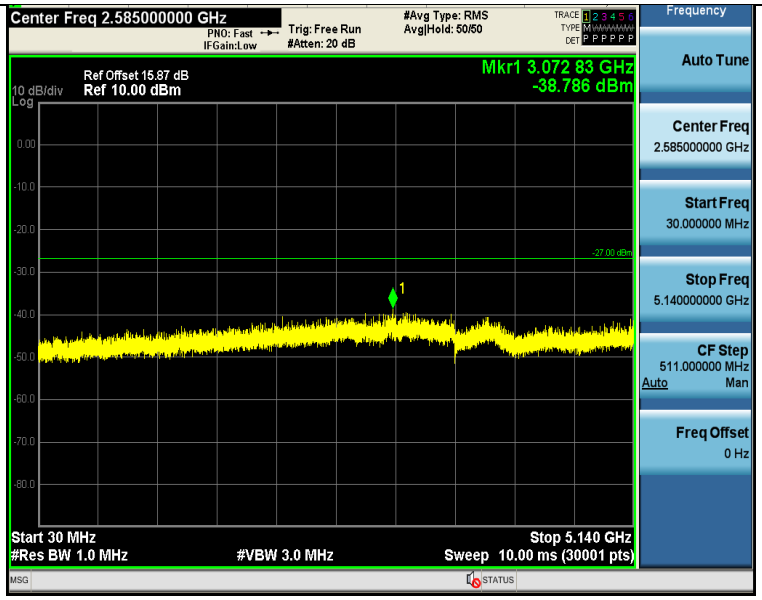
11AC40SISO-Ant1-5755-5925~27000-PASS



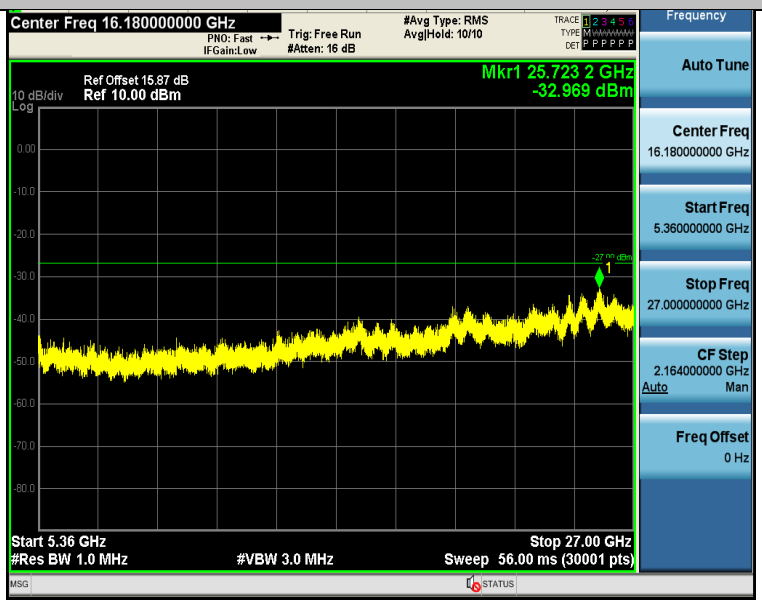
11AC40SISO-Ant1-5795-30~5650-PASS



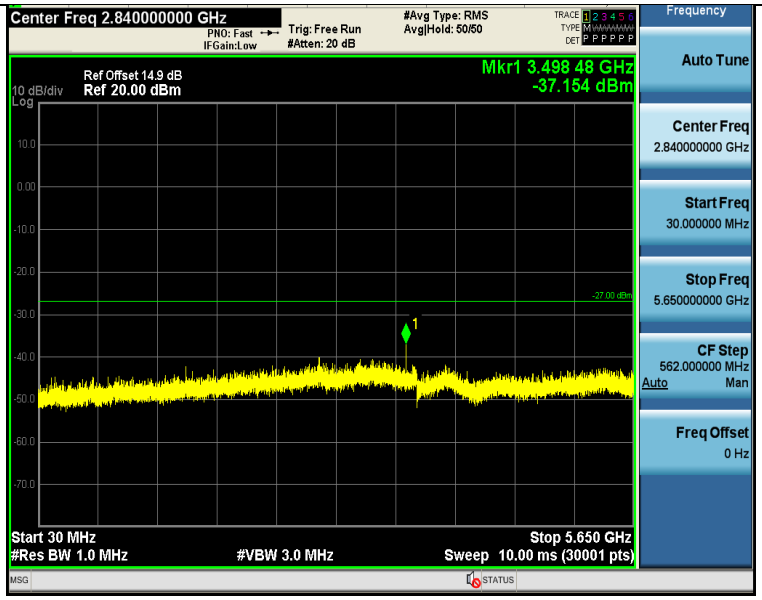
11AC40SISO-Ant1-5795-5925~27000-PASS



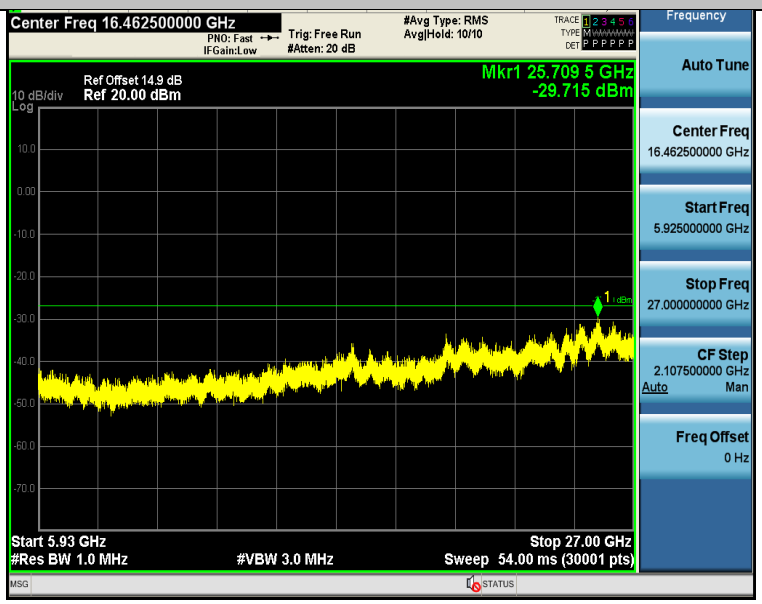
11AC80SISO-Ant1-5210-30~5140-PASS



11AC80SISO-Ant1-5210-5360~27000-PASS



11AC80SISO-Ant1-5775-30~5650-PASS



11AC80SISO-Ant1-5775-5925~27000-PASS

Note: 27~40GHz at least have 20dB margin. No recording in the test report.

6.6 Band edge measurements

Test Result:

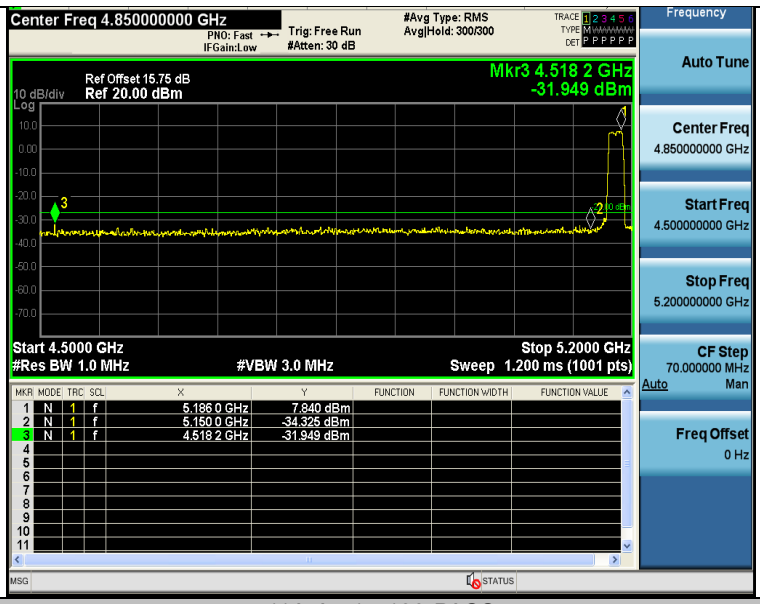
TestMode	Antenna	ChName	Frequency[MHz]	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-31.95	≤-27	PASS
11A	Ant1	High	5240	-31.83	≤-27	PASS
11N20SISO	Ant1	Low	5180	-32.21	≤-27	PASS
11N20SISO	Ant1	High	5240	-32.4	≤-27	PASS
11N40SISO	Ant1	Low	5190	-32.46	≤-27	PASS
11N40SISO	Ant1	High	5230	-31.67	≤-27	PASS
11AC20SISO	Ant1	Low	5180	-32.26	≤-27	PASS
11AC20SISO	Ant1	High	5240	-31.91	≤-27	PASS
11AC40SISO	Ant1	Low	5190	-31.96	≤-27	PASS
11AC40SISO	Ant1	High	5230	-31.73	≤-27	PASS
11AC80SISO	Ant1	Low	5210	-31.79	≤-27	PASS
11AC80SISO	Ant1	High	5210	-32.34	≤-27	PASS

TestMode	Antenna	ChName	Frequency[MHz]	FreqRange [MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	Low	5745	5720~5725	-34.2	≤23.42	PASS
11A	Ant1	Low	5745	5700~5720	-34.42	≤13.60	PASS
11A	Ant1	Low	5745	5650~5700	-33.6	≤1.64	PASS
11A	Ant1	Low	5745	5760~5650	-35.28	≤-27	PASS
11A	Ant1	High	5825	5850~5855	-30.47	≤25.03	PASS
11A	Ant1	High	5825	5855~5875	-32.23	≤10.10	PASS
11A	Ant1	High	5825	5875~5925	-31.61	≤-5.58	PASS
11A	Ant1	High	5825	5925~5935	-32.66	≤-27	PASS
11N20SISO	Ant1	Low	5745	5720~5725	-33.97	≤26.83	PASS
11N20SISO	Ant1	Low	5745	5700~5720	-33.61	≤12.79	PASS
11N20SISO	Ant1	Low	5745	5650~5700	-34.02	≤-19.72	PASS
11N20SISO	Ant1	Low	5745	5760~5650	-34.73	≤-27	PASS
11N20SISO	Ant1	High	5825	5850~5855	-32.37	≤15.79	PASS
11N20SISO	Ant1	High	5825	5855~5875	-31.23	≤12.18	PASS
11N20SISO	Ant1	High	5825	5875~5925	-32.41	≤-6.68	PASS
11N20SISO	Ant1	High	5825	5925~5935	-32.95	≤-27	PASS
11N40SISO	Ant1	Low	5755	5720~5725	-27.53	≤20.66	PASS
11N40SISO	Ant1	Low	5755	5700~5720	-29.62	≤13.95	PASS
11N40SISO	Ant1	Low	5755	5650~5700	-34.05	≤-10.32	PASS
11N40SISO	Ant1	Low	5755	5780~5650	-34.69	≤-27	PASS
11N40SISO	Ant1	High	5795	5850~5855	-33.21	≤26.19	PASS
11N40SISO	Ant1	High	5795	5855~5875	-31.75	≤15.21	PASS
11N40SISO	Ant1	High	5795	5875~5925	-31.12	≤-23.99	PASS
11N40SISO	Ant1	High	5795	5925~5935	-32.71	≤-27	PASS
11AC20SISO	Ant1	Low	5745	5720~5725	-32.98	≤22.90	PASS
11AC20SISO	Ant1	Low	5745	5700~5720	-33.29	≤10.67	PASS
11AC20SISO	Ant1	Low	5745	5650~5700	-33.33	≤8.70	PASS
11AC20SISO	Ant1	Low	5745	5760~5650	-35.45	≤-27	PASS
11AC20SISO	Ant1	High	5825	5850~5855	-31.85	≤25.64	PASS
11AC20SISO	Ant1	High	5825	5855~5875	-32.25	≤14.97	PASS
11AC20SISO	Ant1	High	5825	5875~5925	-32.12	≤4.21	PASS
11AC20SISO	Ant1	High	5825	5925~5935	-32.85	≤-27	PASS
11AC40SISO	Ant1	Low	5755	5720~5725	-31.37	≤20.05	PASS
11AC40SISO	Ant1	Low	5755	5700~5720	-33.75	≤13.84	PASS

11AC40SISO	Ant1	Low	5755	5650~5700	-33.92	≤9.96	PASS
11AC40SISO	Ant1	Low	5755	5780~5650	-35.64	≤-27	PASS
11AC40SISO	Ant1	High	5795	5850~5855	-33.24	≤17.54	PASS
11AC40SISO	Ant1	High	5795	5855~5875	-32.2	≤13.97	PASS
11AC40SISO	Ant1	High	5795	5875~5925	-32.05	≤8.24	PASS
11AC40SISO	Ant1	High	5795	5925~5935	-32.63	≤-27	PASS
11AC80SISO	Ant1	Low	5775	5720~5725	-26.6	≤25.89	PASS
11AC80SISO	Ant1	Low	5775	5700~5720	-28.32	≤15.35	PASS
11AC80SISO	Ant1	Low	5775	5650~5700	-33.49	≤-18.89	PASS
11AC80SISO	Ant1	Low	5775	5800~5650	-34.78	≤-27	PASS
11AC80SISO	Ant1	High	5775	5850~5855	-27.97	≤15.79	PASS
11AC80SISO	Ant1	High	5775	5855~5875	-27	≤12.56	PASS
11AC80SISO	Ant1	High	5775	5875~5925	-32.09	≤-5.19	PASS
11AC80SISO	Ant1	High	5775	5925~5935	-32.63	≤-27	PASS

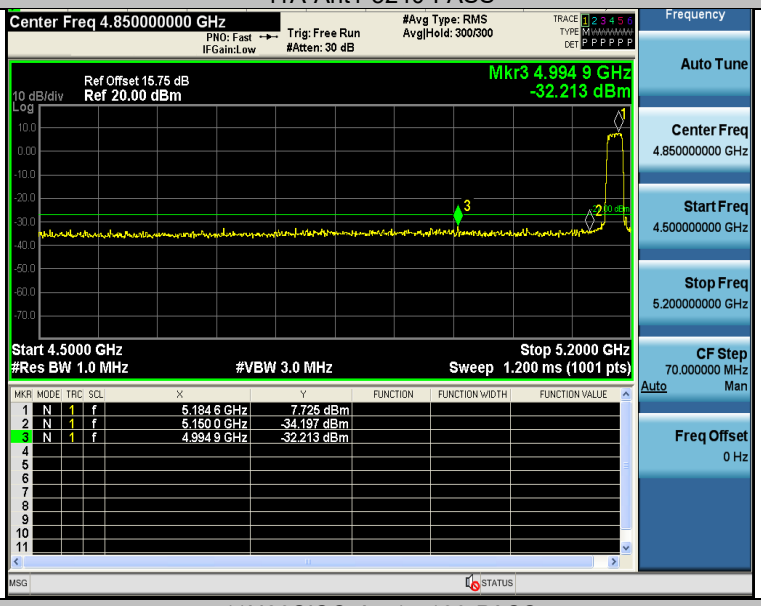
Note: 1. The Max. Level has been corrected by the cable loss and antenna gain**.**

Test Graphs:



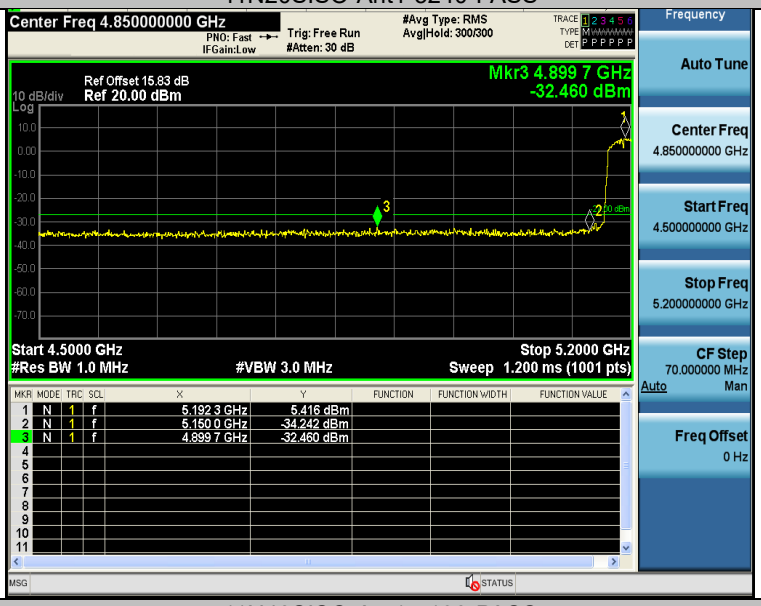
11A-Ant1-5180-PASS

11A-Ant1-5240-PASS

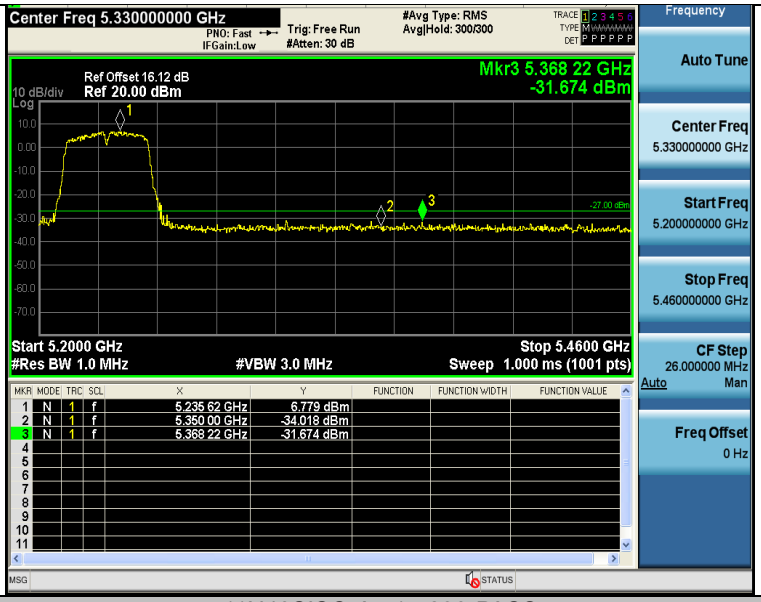


11N20SISO-Ant1-5180-PASS

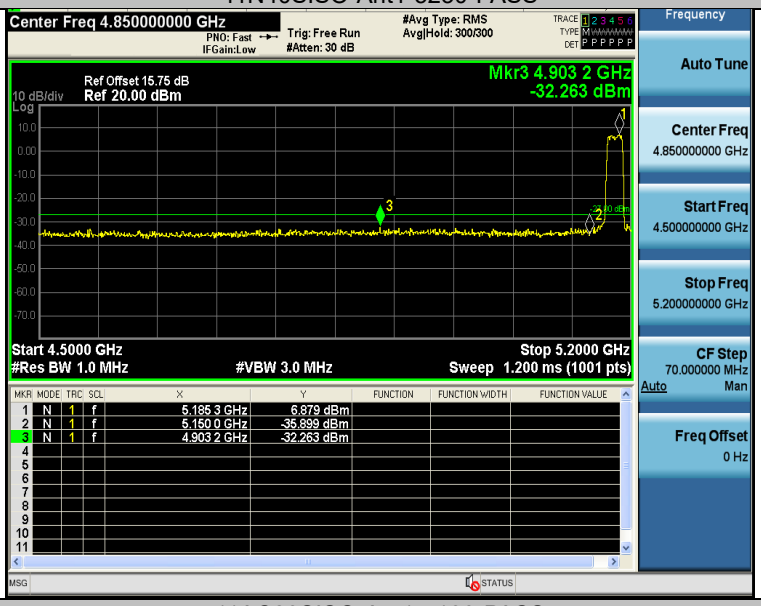
11N20SISO-Ant1-5240-PASS



11N40SISO-Ant1-5190-PASS

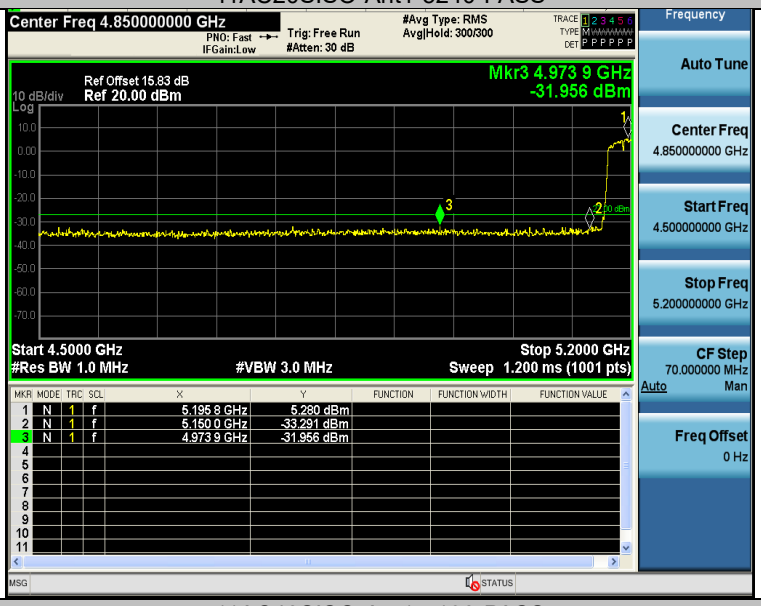


11N40SISO-Ant1-5230-PASS

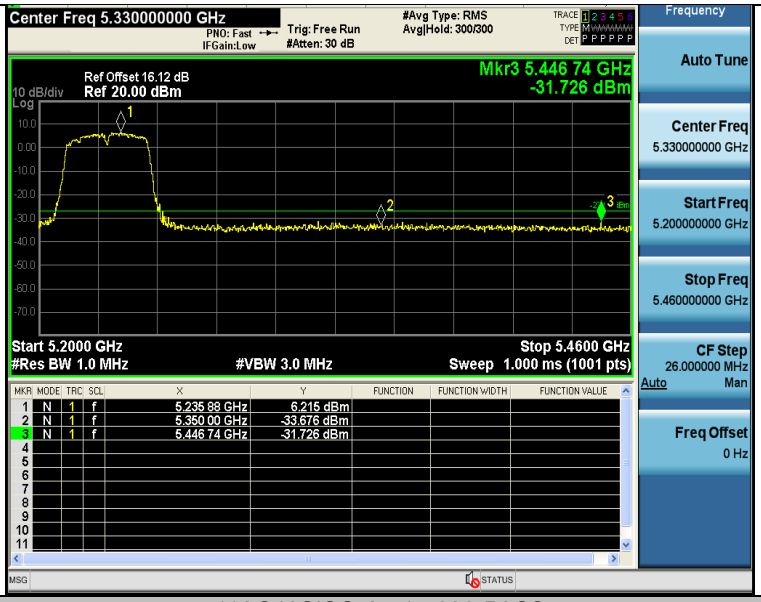


11AC20SISO-Ant1-5180-PASS

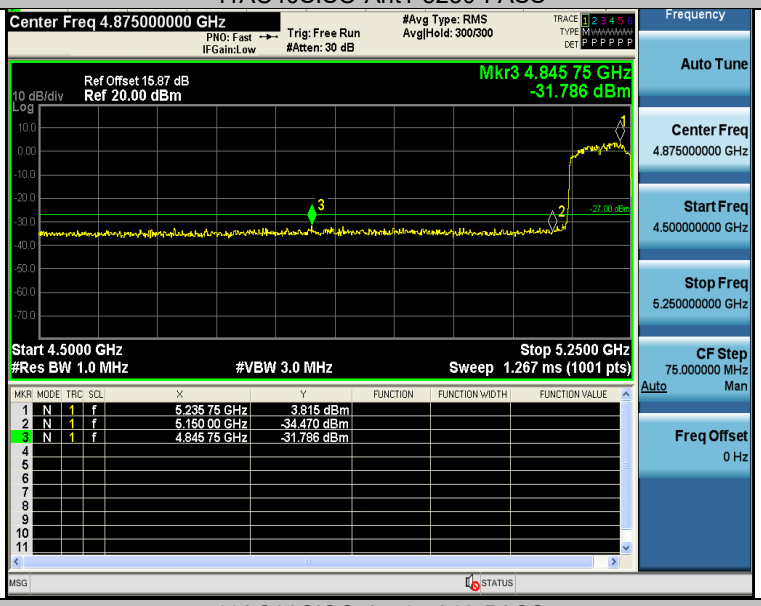
11AC20SISO-Ant1-5240-PASS



11AC40SISO-Ant1-5190-PASS



11AC40SISO-Ant1-5230-PASS

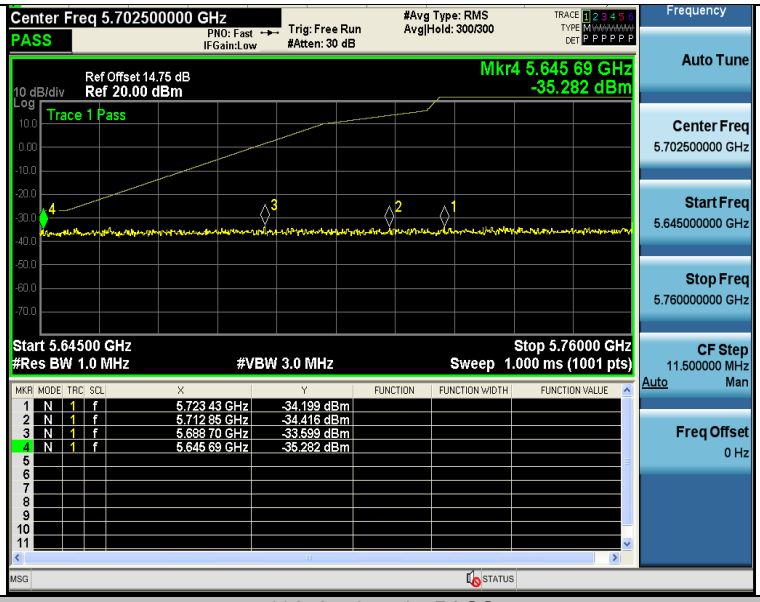


11AC80SISO-Ant1-5210-PASS

11AC80SISO-Ant1-5210-PASS

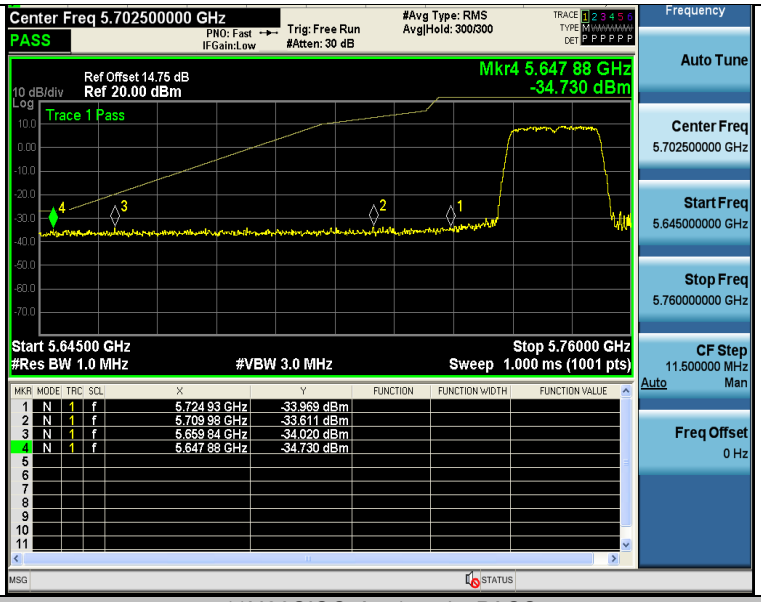
Note: 27~40GHz at least have 20dB margin. No recording in the test report.

Test plots B4:



11A-Ant1-5745-PASS

11A-Ant1-5825-PASS

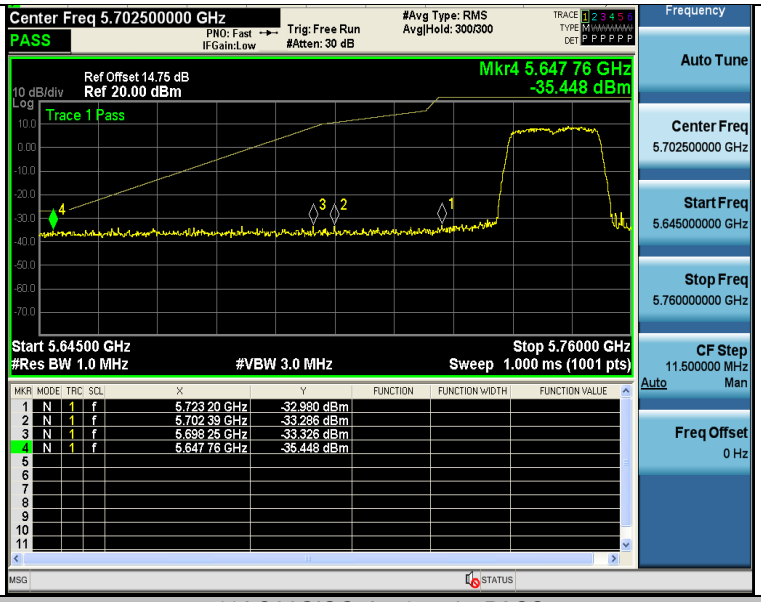


11N20SISO-Ant1-5745-PASS

11N20SISO-Ant1-5825-PASS

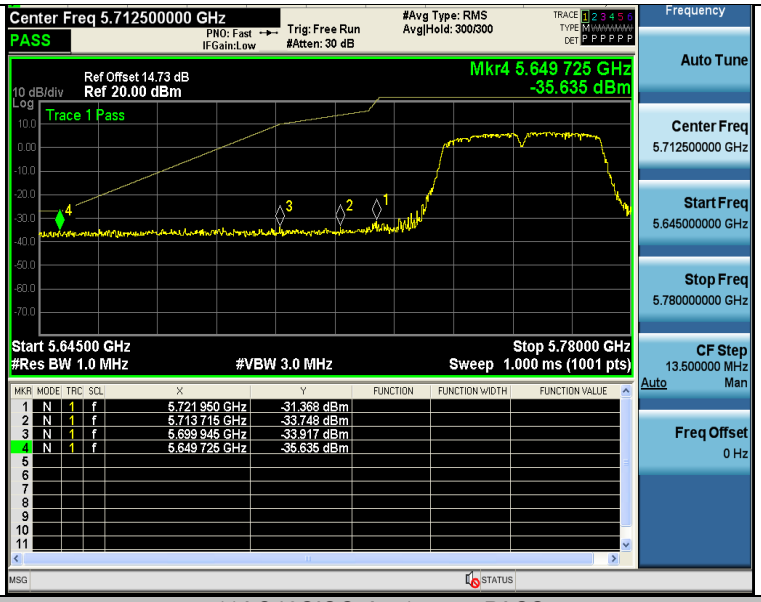
11N40SISO-Ant1-5755-PASS

11N40SISO-Ant1-5795-PASS



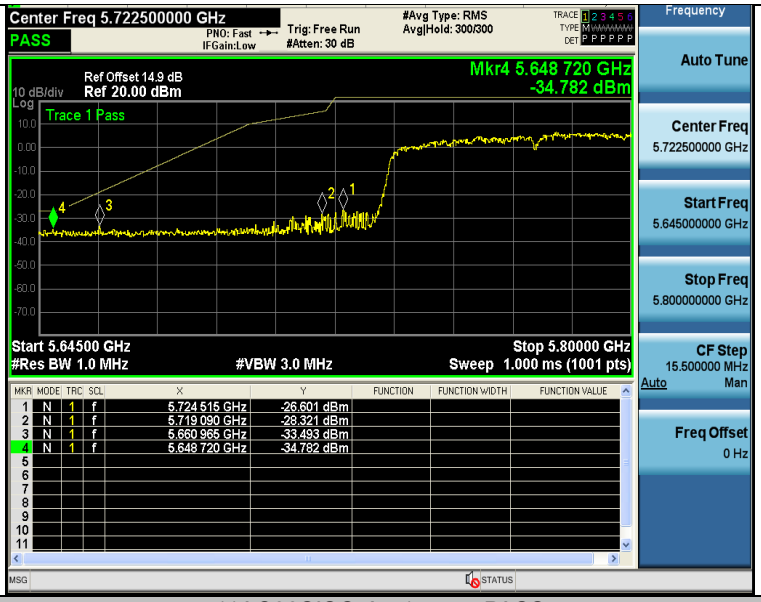
11AC20SISO-Ant1-5745-PASS

11AC20SISO-Ant1-5825-PASS



11AC40SISO-Ant1-5755-PASS

11AC40SISO-Ant1-5795-PASS



11AC80SISO-Ant1-5775-PASS

11AC80SISO-Ant1-5775-PASS

6.7 Restricted Band

Test Requirement : FCC Part15 E Section 15.407(b)

Test site : Measurement Distance: 3m

Test Limit :

Frequency	Limit (dBuV/m @3m)	Remark
Above 1GHz	74	Peak Value
	54	Average Value

Test Procedure:

1. The EUT was placed on a styrofoam table which is 1.5m above ground plane.

2. EUT is set 3m away from the receiving antenna, which is moved from 1m to 4m to find out the maximum emissions. The spectrum was investigated from the lowest radio frequency signal generated in the device, without going below 9 kHz, up to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.

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

7. The radiation measurements are tested under 3-axes(X,Y,Z) position(X denotes lying on the table, Y denotes side stand and Z denotes vertical stand), After pre-test, It was found that the worse radiation emission was get at the X position. So the data shown was the X position only.

8. The test above 1GHz must be use the fully anechoic room, and the test below 1GHz use the half anechoic room

Test Result:

Worst case mode:		802.11a(6Mbps)		Test channel:		36		
NO.	Freq. [MHz]	level [dBμV/m]	Factor [dB]	Emission level [dBμV/m]	Limit [dBμV/m]	Margin [dB]	Polarity	Detector Type
1	5150	50.15	6.53	56.68	74	17.32	H	Peak
2	5150	40.06	6.53	46.59	54	7.41	H	Average
3	5150	49.11	6.53	55.64	74	18.36	V	Peak
4	5150	38.24	6.53	44.77	54	9.23	V	Average

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	50.02	6.56	56.58	74	17.42	H	Peak
2	5350	40.01	6.56	46.57	54	7.43	H	Average
3	5350	49.56	6.56	56.12	74	17.88	V	Peak
4	5350	38.11	6.56	44.67	54	9.33	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	5640	49.71	6.61	56.32	68.23	11.91	H	Peak
2	5640	40.41	6.61	47.02	54	6.98	H	Average
3	5640	49.03	6.61	55.64	68.23	12.59	V	Peak
4	5640	38.29	6.61	44.9	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	49.79	6.64	56.43	68.23	11.8	H	Peak
2	5850	40.27	6.64	46.91	54	7.09	H	Average
3	5850	49.49	6.64	56.13	68.23	12.1	V	Peak
4	5850	38.08	6.64	44.72	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 C63.10:2013
Test Limit		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. 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.

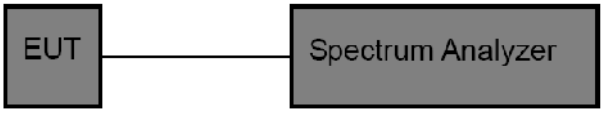
7.1 Test Procedure

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 ⩾ 3 • 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.

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	18.520	5170.760	5189.280	---	---
11A	Ant1	5200	18.440	5190.760	5209.200	---	---
11A	Ant1	5240	18.400	5230.840	5249.240	---	---
11A	Ant1	5745	21.880	5735.880	5757.760	---	---
11A	Ant1	5785	18.240	5775.920	5794.160	---	---
11A	Ant1	5825	18.600	5815.640	5834.240	---	---
11N20SISO	Ant1	5180	19.440	5170.360	5189.800	---	---
11N20SISO	Ant1	5200	19.560	5190.240	5209.800	---	---
11N20SISO	Ant1	5240	19.360	5230.320	5249.680	---	---
11N20SISO	Ant1	5745	19.280	5735.360	5754.640	---	---
11N20SISO	Ant1	5785	19.400	5775.240	5794.640	---	---
11N20SISO	Ant1	5825	19.280	5815.400	5834.680	---	---
11N40SISO	Ant1	5190	40.640	5169.840	5210.480	---	---
11N40SISO	Ant1	5230	41.040	5209.600	5250.640	---	---
11N40SISO	Ant1	5755	40.960	5734.760	5775.720	---	---
11N40SISO	Ant1	5795	41.040	5774.760	5815.800	---	---
11AC20SISO	Ant1	5180	19.560	5170.280	5189.840	---	---
11AC20SISO	Ant1	5200	19.240	5190.360	5209.600	---	---
11AC20SISO	Ant1	5240	19.440	5230.320	5249.760	---	---
11AC20SISO	Ant1	5745	19.320	5735.440	5754.760	---	---
11AC20SISO	Ant1	5785	19.440	5775.200	5794.640	---	---
11AC20SISO	Ant1	5825	19.600	5815.240	5834.840	---	---
11AC40SISO	Ant1	5190	40.560	5170.000	5210.560	---	---
11AC40SISO	Ant1	5230	40.960	5209.680	5250.640	---	---
11AC40SISO	Ant1	5755	40.960	5734.600	5775.560	---	---
11AC40SISO	Ant1	5795	40.960	5774.680	5815.640	---	---
11AC80SISO	Ant1	5210	80.480	5170.160	5250.640	---	---
11AC80SISO	Ant1	5775	81.600	5735.320	5816.920	---	---

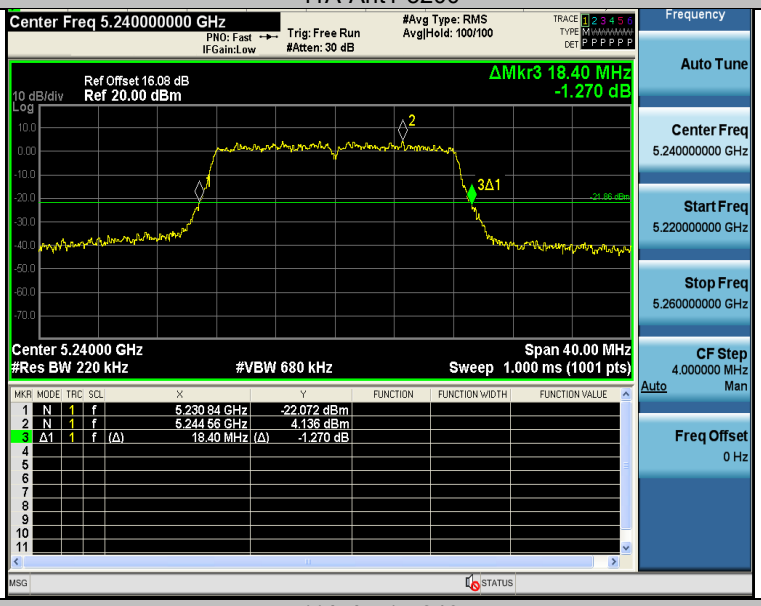
minimum 6 dB bandwidth:

TestMode	Antenna	Frequency[MHz]	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.040	5737.120	5753.160	0.5	PASS
11A	Ant1	5785	16.280	5776.880	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	5776.480	5793.760	0.5	PASS
11N20SISO	Ant1	5825	17.560	5816.200	5833.760	0.5	PASS
11N40SISO	Ant1	5755	35.120	5737.480	5772.600	0.5	PASS
11N40SISO	Ant1	5795	35.120	5777.480	5812.600	0.5	PASS
11AC20SISO	Ant1	5745	17.160	5736.600	5753.760	0.5	PASS
11AC20SISO	Ant1	5785	17.280	5776.480	5793.760	0.5	PASS
11AC20SISO	Ant1	5825	17.520	5816.240	5833.760	0.5	PASS
11AC40SISO	Ant1	5755	35.360	5737.480	5772.840	0.5	PASS
11AC40SISO	Ant1	5795	35.040	5777.480	5812.520	0.5	PASS
11AC80SISO	Ant1	5775	68.800	5743.800	5812.600	0.5	PASS

Test Graphs：

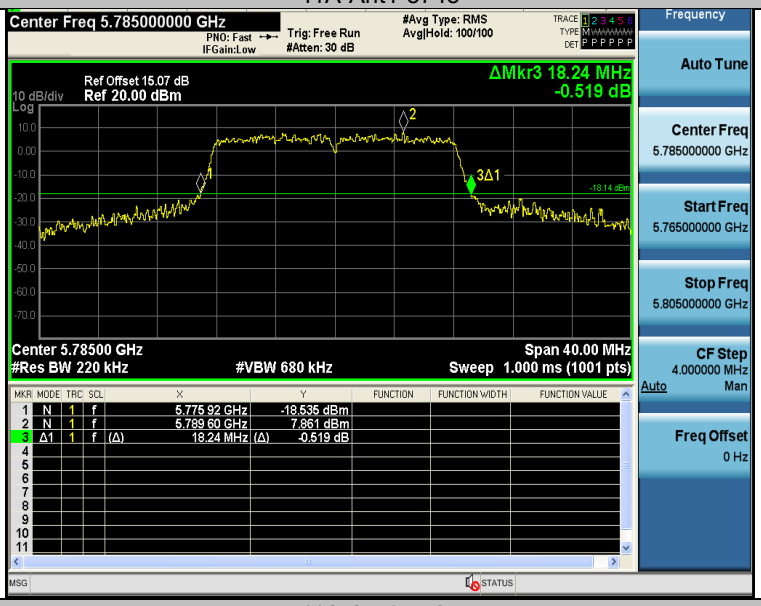
11A-Ant1-5180

11A-Ant1-5200



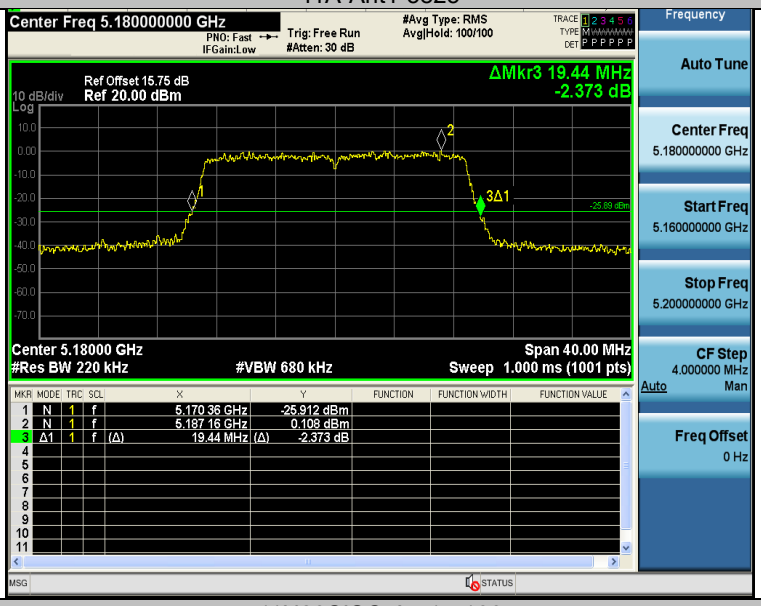
11A-Ant1-5240

11A-Ant1-5745



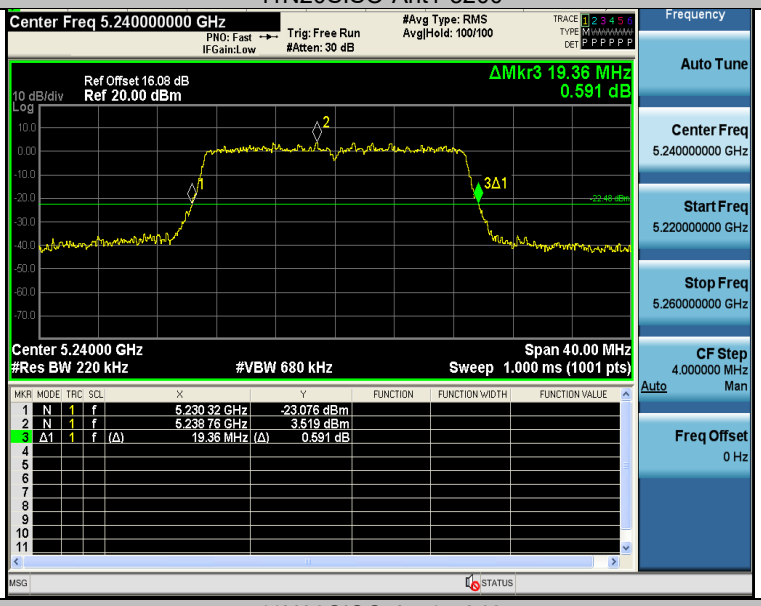
11A-Ant1-5785

11A-Ant1-5825



11N20SISO-Ant1-5180

11N20SISO-Ant1-5200

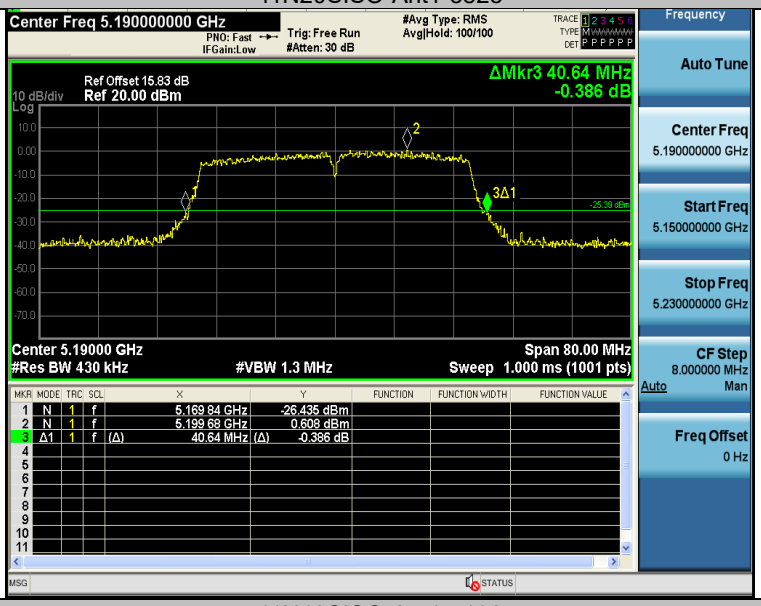


11N20SISO-Ant1-5240

11N20SISO-Ant1-5745

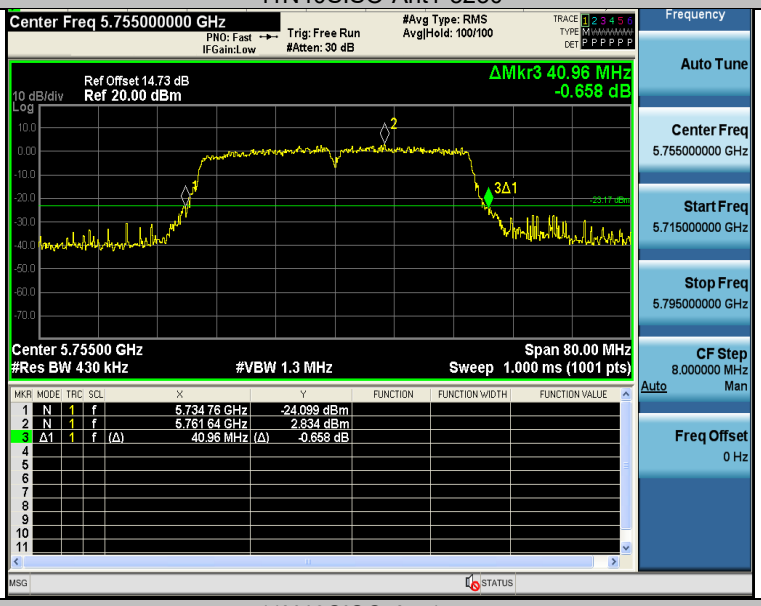
11N20SISO-Ant1-5785

11N20SISO-Ant1-5825



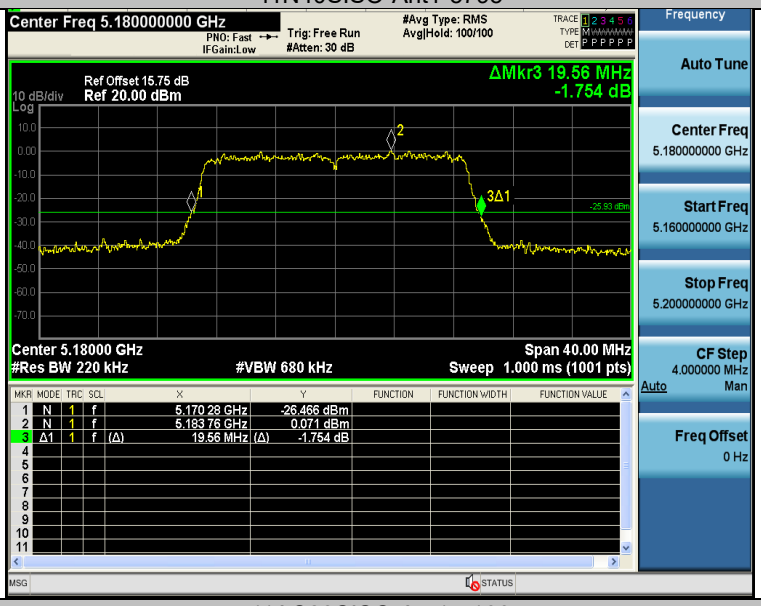
11N40SISO-Ant1-5190

11N40SISO-Ant1-5230



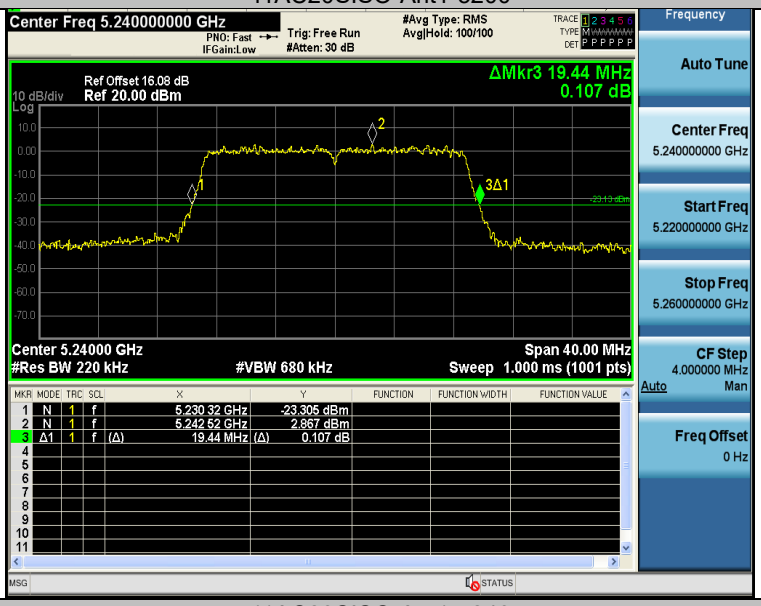
11N40SISO-Ant1-5755

11N40SISO-Ant1-5795



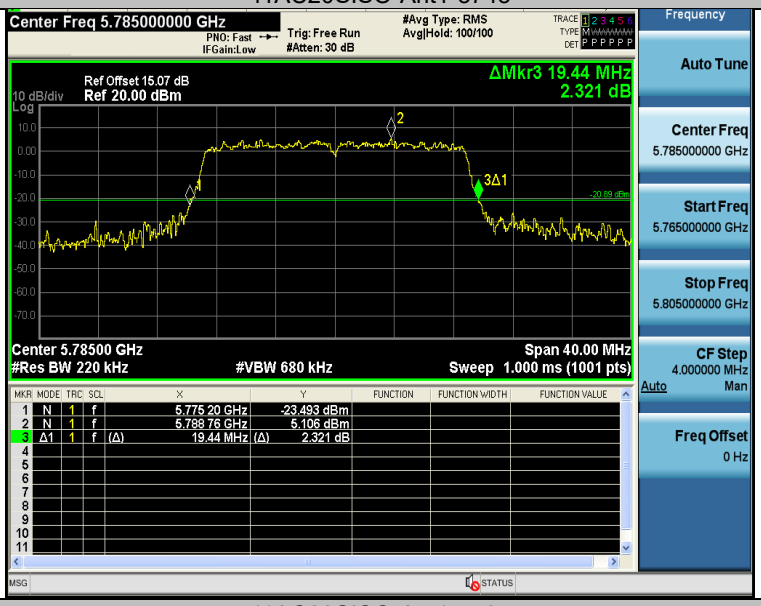
11AC20SISO-Ant1-5180

11AC20SISO-Ant1-5200



11AC20SISO-Ant1-5240

11AC20SISO-Ant1-5745

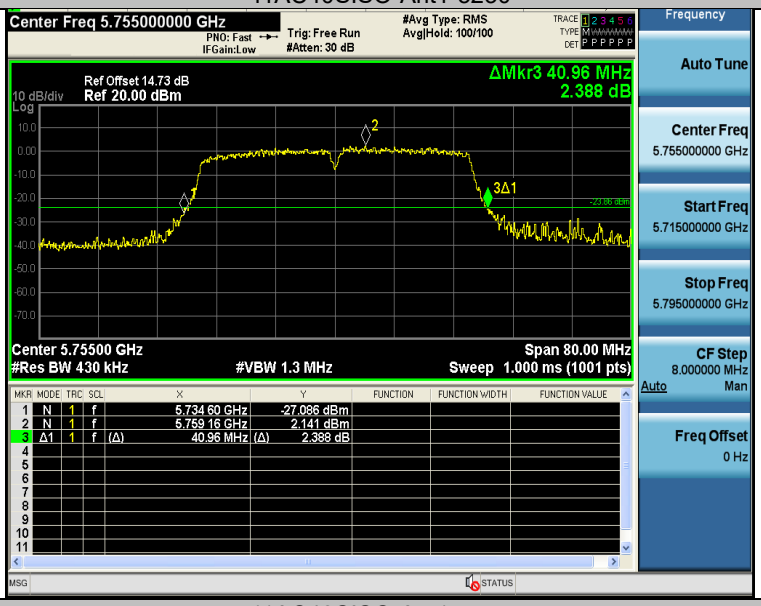


11AC20SISO-Ant1-5785

11AC20SISO-Ant1-5825

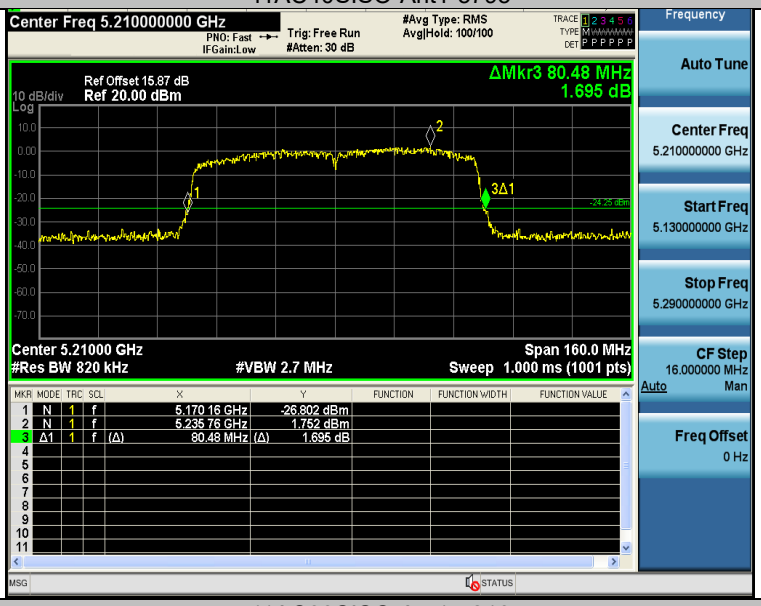
11AC40SISO-Ant1-5190

11AC40SISO-Ant1-5230

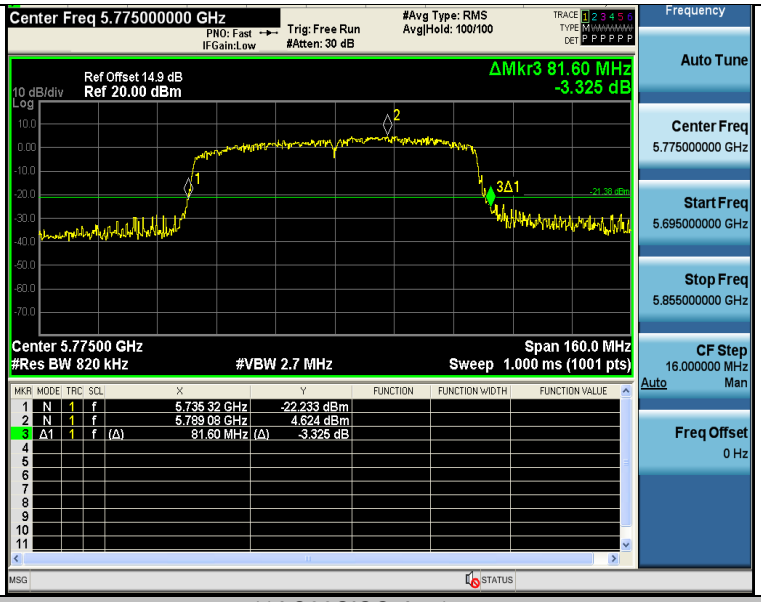


11AC40SISO-Ant1-5755

11AC40SISO-Ant1-5795

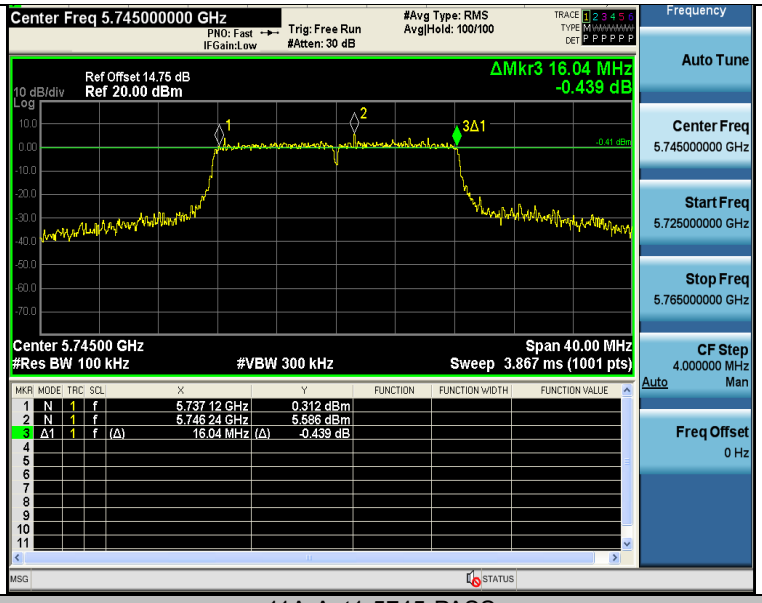


11AC80SISO-Ant1-5210

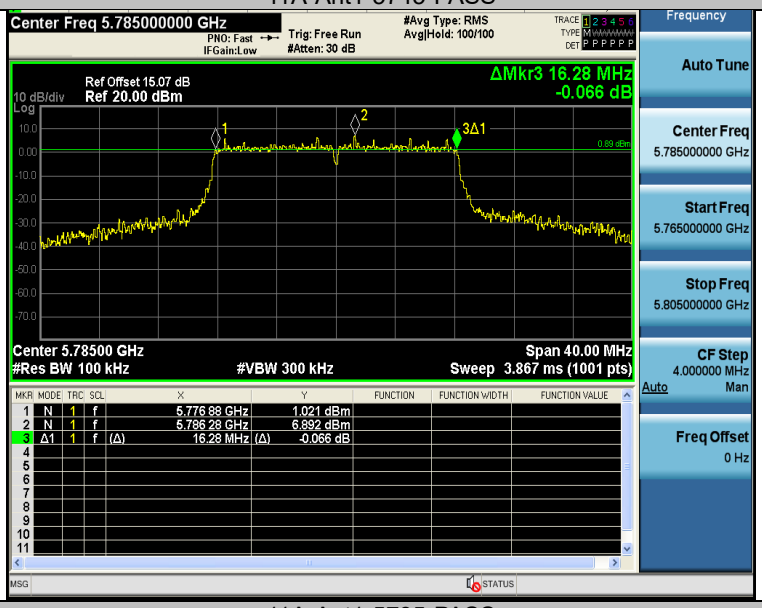


11AC80SISO-Ant1-5775

Min emission bandwidth Test Graphs:

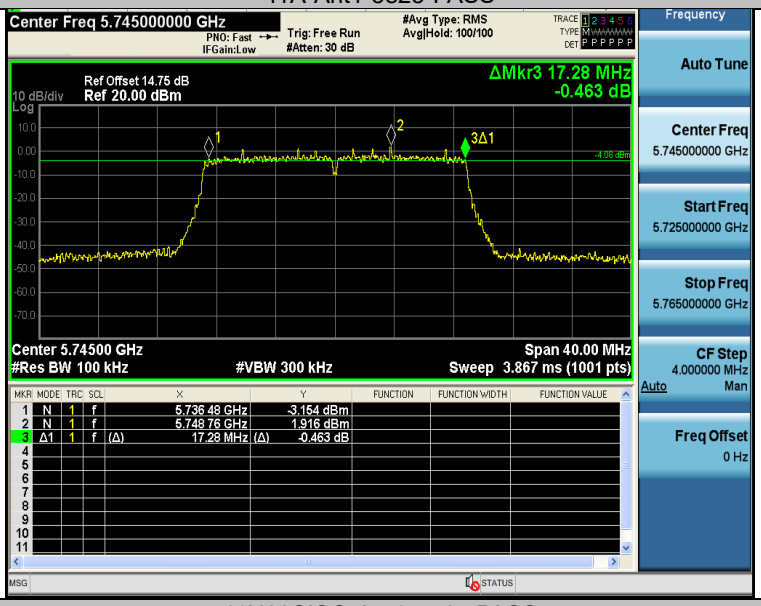


11A-Ant1-5745-PASS

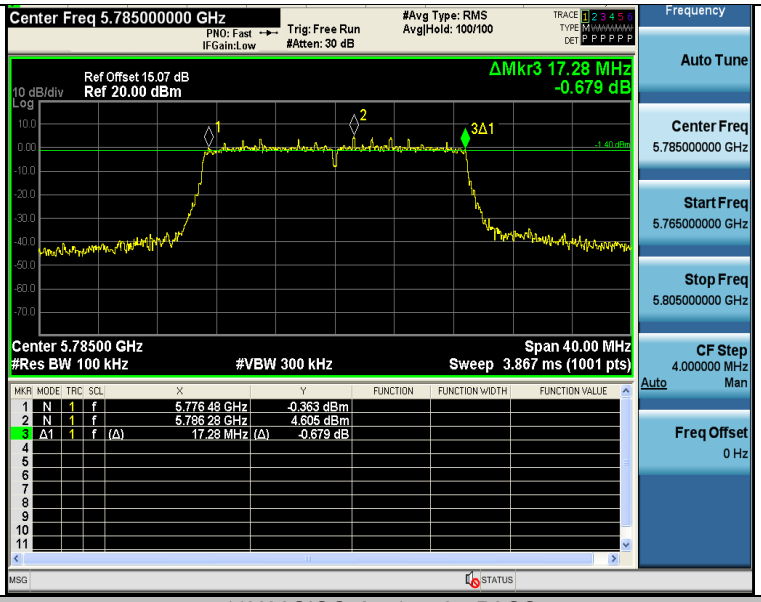


11A-Ant1-5785-PASS

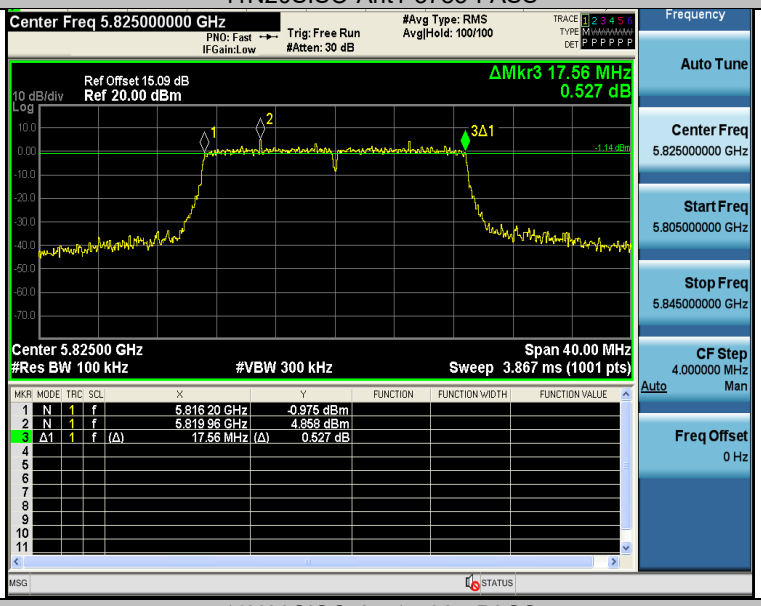
11A-Ant1-5825-PASS



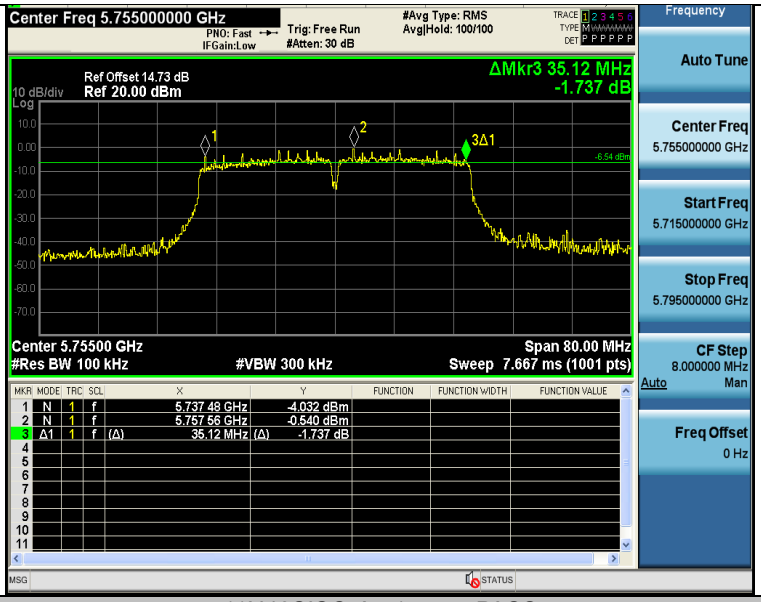
11N20SISO-Ant1-5745-PASS



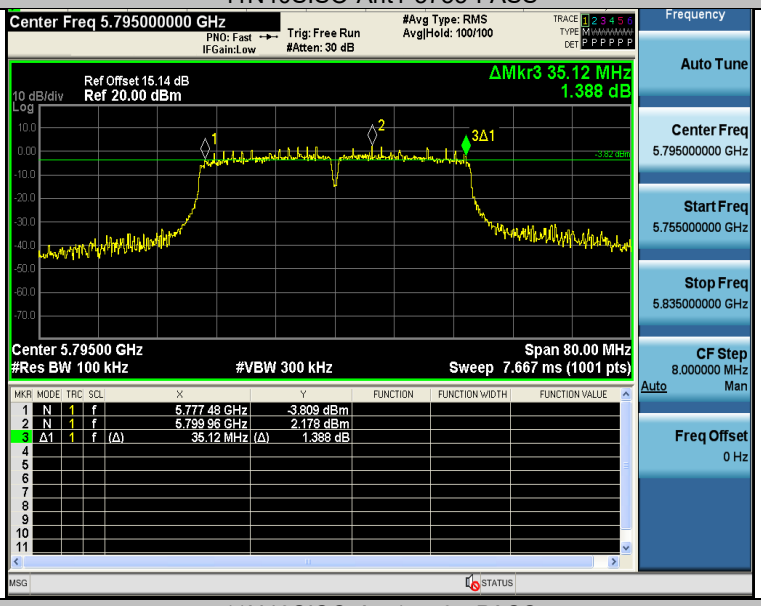
11N20SISO-Ant1-5785-PASS



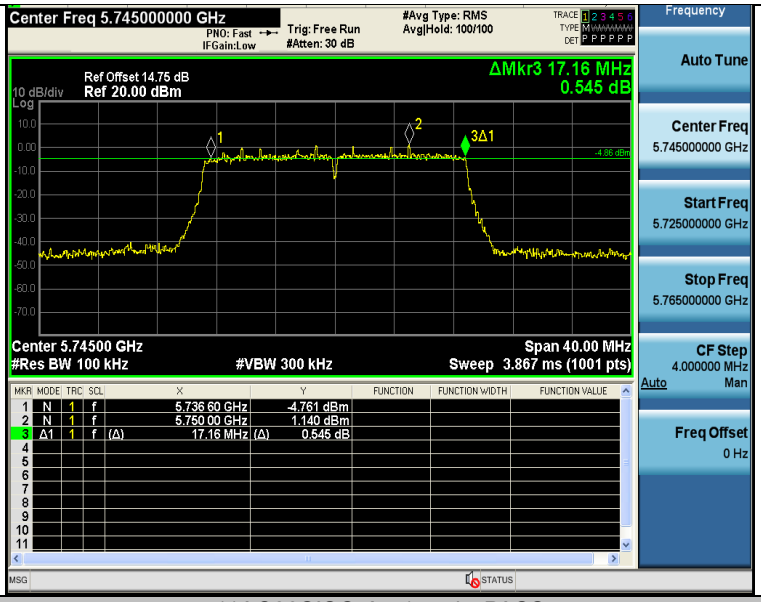
11N20SISO-Ant1-5825-PASS



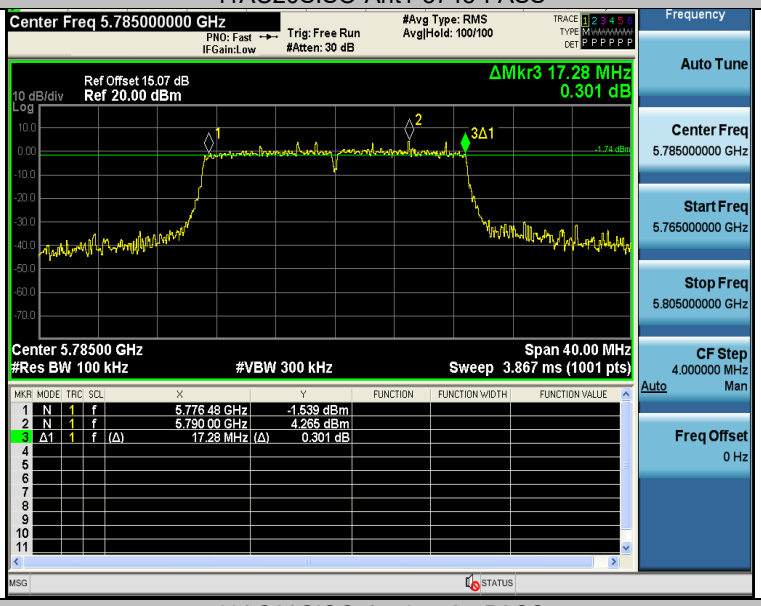
11N40SISO-Ant1-5755-PASS



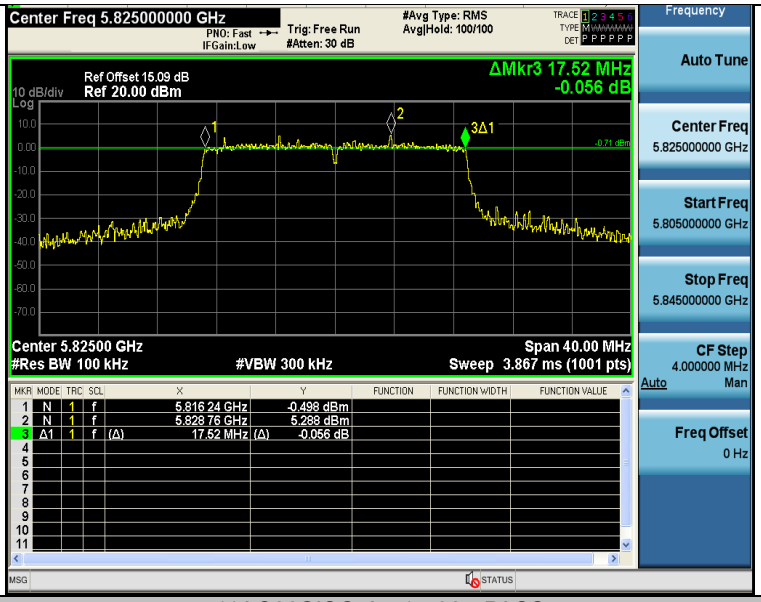
11N40SISO-Ant1-5795-PASS



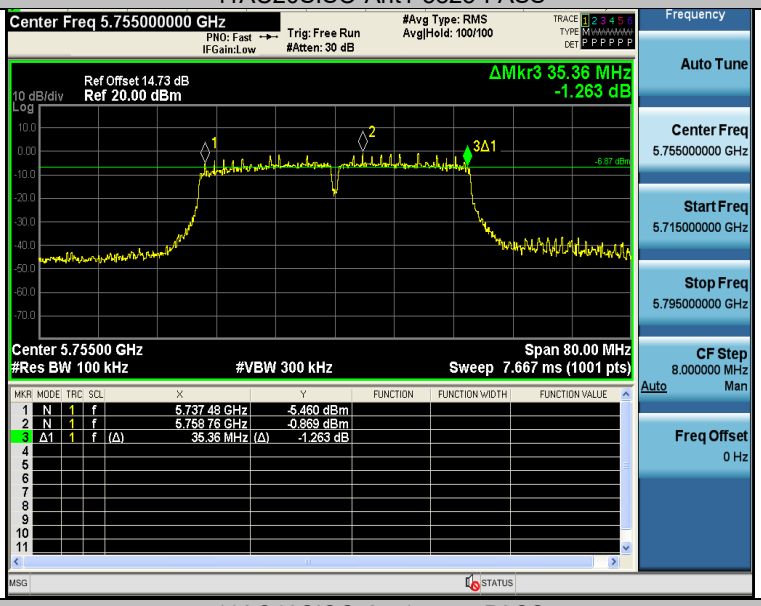
11AC20SISO-Ant1-5745-PASS



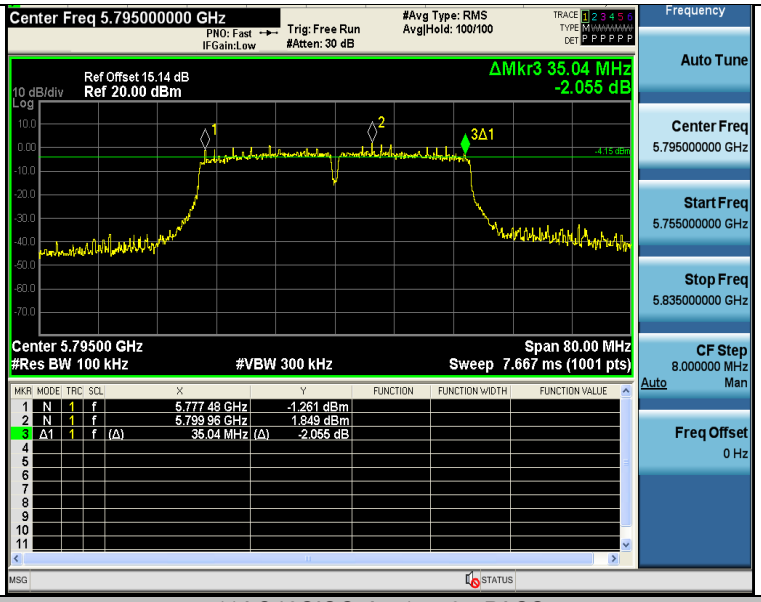
11AC20SISO-Ant1-5785-PASS



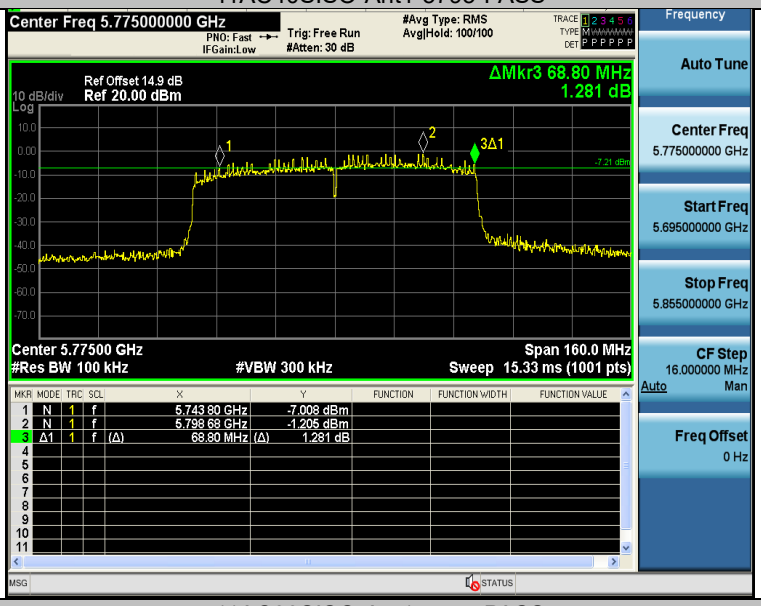
11AC20SISO-Ant1-5825-PASS



11AC40SISO-Ant1-5755-PASS



11AC40SISO-Ant1-5795-PASS

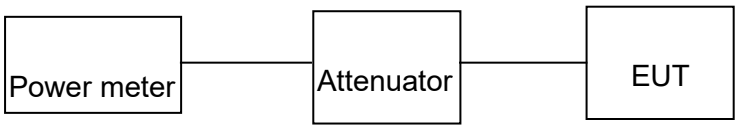


11AC80SISO-Ant1-5775-PASS

8 Maximum Conducted Output Power

Test Requirement	:	FCC CFR47 Part 15 Section 15.407(a)
Test Method	:	ANSI C63.10:2013
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 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.

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]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	10.80	≤23.98	PASS
11A	Ant1	5200	**14.65**	≤23.98	PASS
11A	Ant1	5240	14.32	≤23.98	PASS
11A	Ant1	5745	16.14	≤30.00	PASS
11A	Ant1	5785	**17.59**	≤30.00	PASS
11A	Ant1	5825	17.18	≤30.00	PASS
11N20SISO	Ant1	5180	10.82	≤23.98	PASS
11N20SISO	Ant1	5200	12.13	≤23.98	PASS
11N20SISO	Ant1	5240	13.81	≤23.98	PASS
11N20SISO	Ant1	5745	13.12	≤30.00	PASS
11N20SISO	Ant1	5785	15.67	≤30.00	PASS
11N20SISO	Ant1	5825	16.53	≤30.00	PASS
11N40SISO	Ant1	5190	11.36	≤23.98	PASS
11N40SISO	Ant1	5230	13.10	≤23.98	PASS
11N40SISO	Ant1	5755	13.29	≤30.00	PASS
11N40SISO	Ant1	5795	15.63	≤30.00	PASS
11AC20SISO	Ant1	5180	10.15	≤23.98	PASS
11AC20SISO	Ant1	5200	11.21	≤23.98	PASS
11AC20SISO	Ant1	5240	13.19	≤23.98	PASS
11AC20SISO	Ant1	5745	12.28	≤30.00	PASS
11AC20SISO	Ant1	5785	15.62	≤30.00	PASS
11AC20SISO	Ant1	5825	16.53	≤30.00	PASS
11AC40SISO	Ant1	5190	10.80	≤23.98	PASS
11AC40SISO	Ant1	5230	12.53	≤23.98	PASS
11AC40SISO	Ant1	5755	12.64	≤30.00	PASS
11AC40SISO	Ant1	5795	15.49	≤30.00	PASS
11AC80SISO	Ant1	5210	11.97	≤23.98	PASS
11AC80SISO	Ant1	5775	14.76	≤30.00	PASS

9 Power Spectral density

Test Requirement	:	FCC CFR47 Part 15 Section 15.2407(a)
Test Method	:	ANSI C63.10:2013
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-tomultipoint 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).

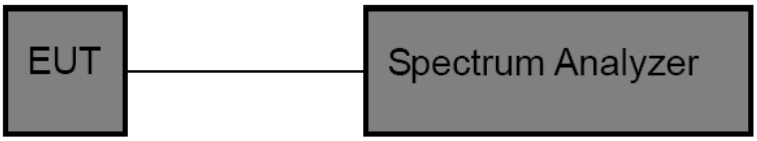
c) Set the frequency span to examine the spectrum across a convenient frequency segment (e.g., 600 MHz).

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

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

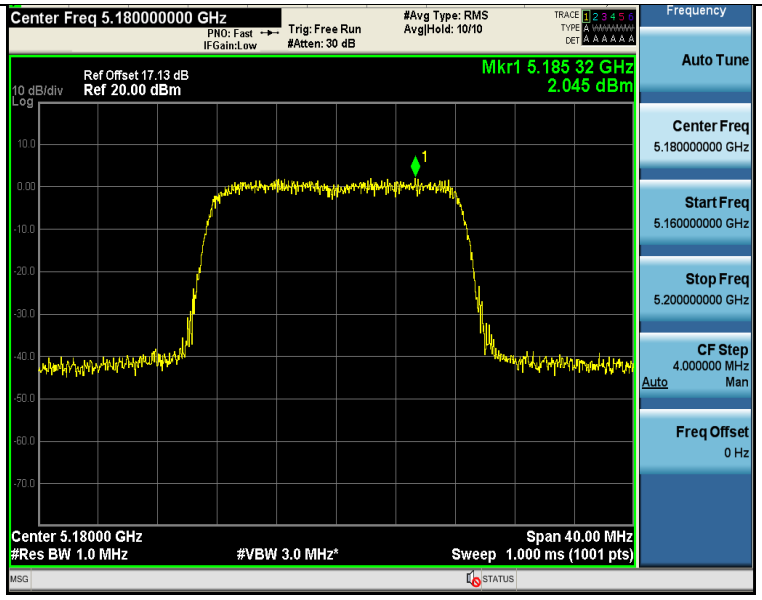
TestMode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	2.05	≤11.00	PASS
11A	Ant1	5200	5.42	≤11.00	PASS
11A	Ant1	5240	4.34	≤11.00	PASS
11N20SISO	Ant1	5180	1.49	≤11.00	PASS
11N20SISO	Ant1	5200	2.67	≤11.00	PASS
11N20SISO	Ant1	5240	3.79	≤11.00	PASS
11N40SISO	Ant1	5190	-0.63	≤11.00	PASS
11N40SISO	Ant1	5230	1.17	≤11.00	PASS
11AC20SISO	Ant1	5180	-0.11	≤11.00	PASS
11AC20SISO	Ant1	5200	1.91	≤11.00	PASS
11AC20SISO	Ant1	5240	3.73	≤11.00	PASS
11AC40SISO	Ant1	5190	-0.68	≤11.00	PASS
11AC40SISO	Ant1	5230	1.41	≤11.00	PASS
11AC80SISO	Ant1	5210	-2.6	≤11.00	PASS

TestMode	Antenna	Frequency[MHz]	Result [dBm/300kHz]	Result [dBm/500kHz]	Result [dBm/500kHz]	Verdict
11A	Ant1	5745	3.3	5.52	≤30.00	PASS
11A	Ant1	5785	5.41	7.63	≤30.00	PASS
11A	Ant1	5825	4.58	6.80	≤30.00	PASS
11N20SISO	Ant1	5745	0.6	2.82	≤30.00	PASS
11N20SISO	Ant1	5785	3.15	5.37	≤30.00	PASS
11N20SISO	Ant1	5825	3.92	6.14	≤30.00	PASS
11N40SISO	Ant1	5755	-0.31	1.91	≤30.00	PASS
11N40SISO	Ant1	5795	0.98	3.20	≤30.00	PASS
11AC20SISO	Ant1	5745	0.83	3.05	≤30.00	PASS
11AC20SISO	Ant1	5785	2.46	4.68	≤30.00	PASS
11AC20SISO	Ant1	5825	4.63	6.85	≤30.00	PASS
11AC40SISO	Ant1	5755	-2.81	-0.59	≤30.00	PASS
11AC40SISO	Ant1	5795	0.87	3.09	≤30.00	PASS
11AC80SISO	Ant1	5775	-2.22	0.00	≤30.00	PASS

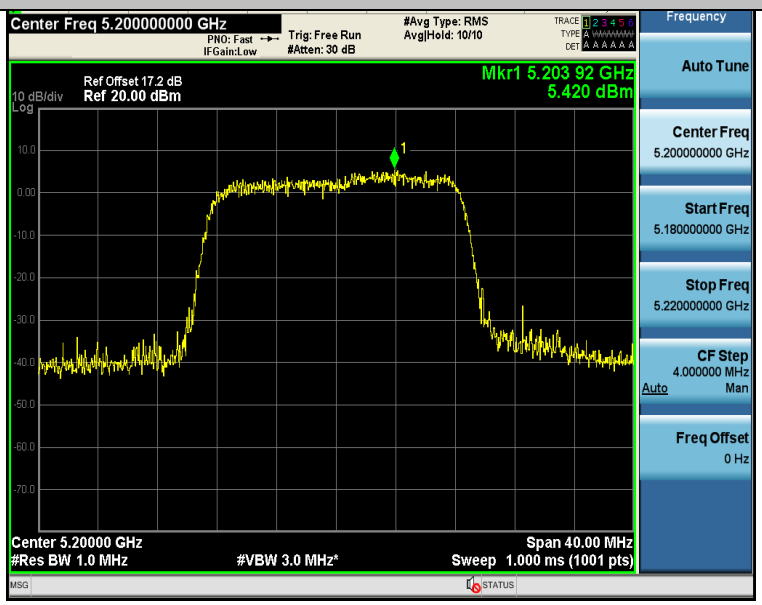
Note：1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

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).

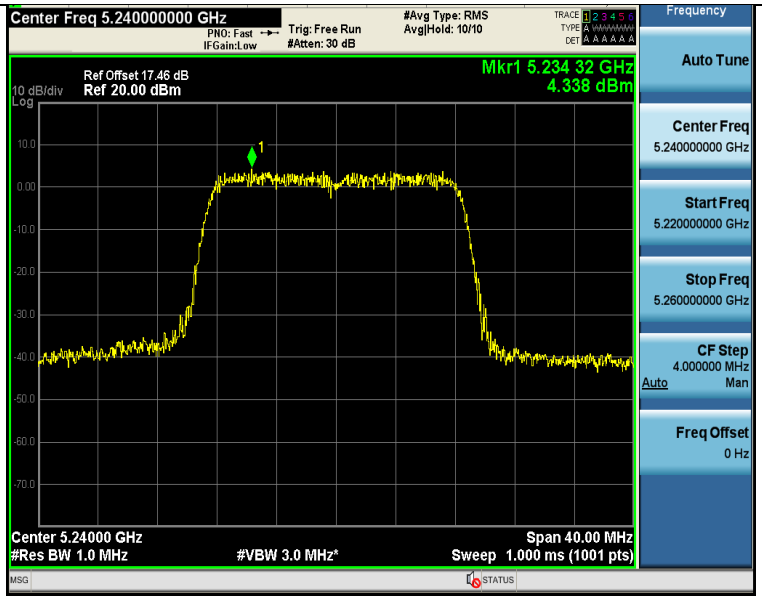
Test Graphs:



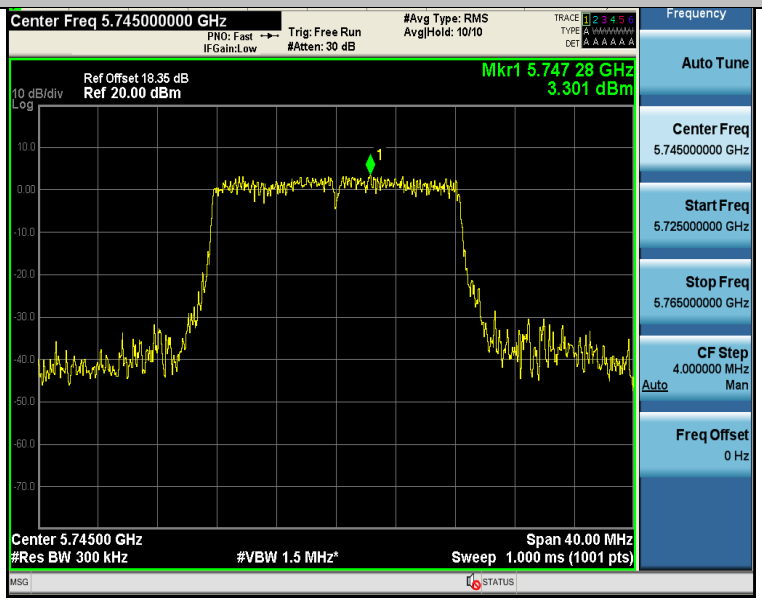
11A-Ant1-5180-PASS



11A-Ant1-5200-PASS

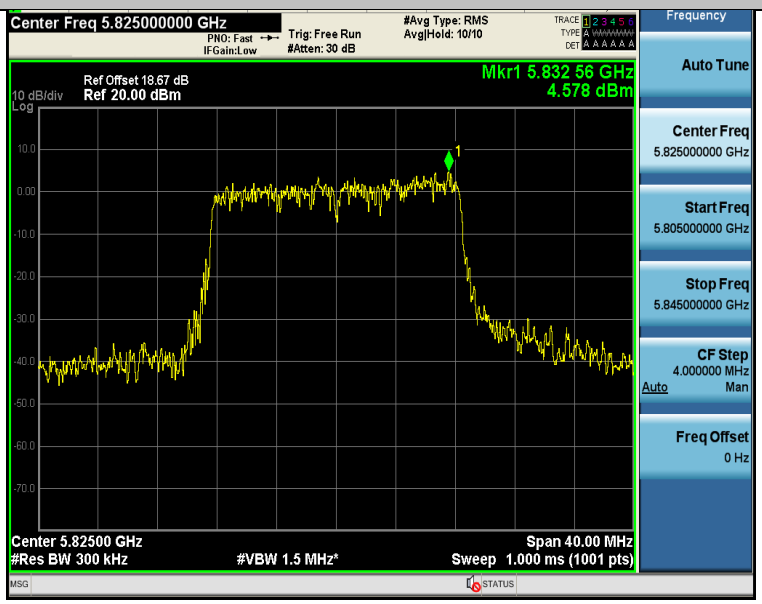


11A-Ant1-5240-PASS

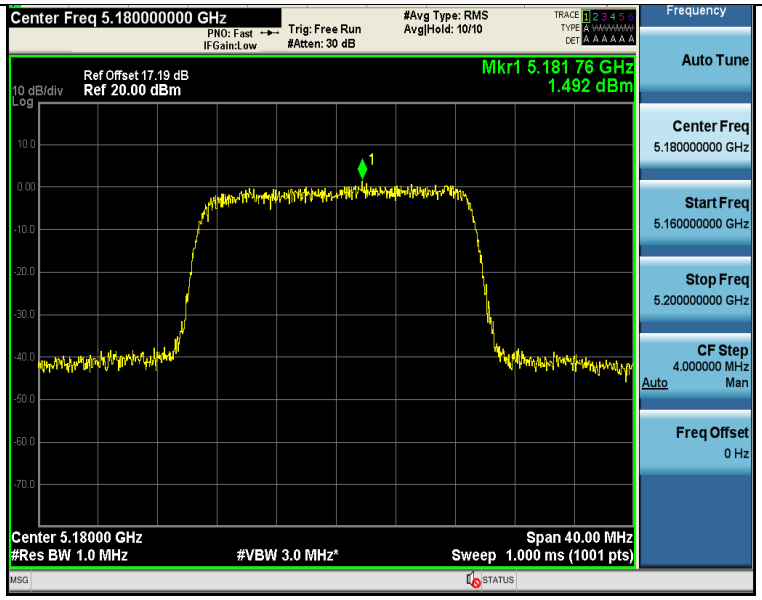


11A-Ant1-5745-PASS

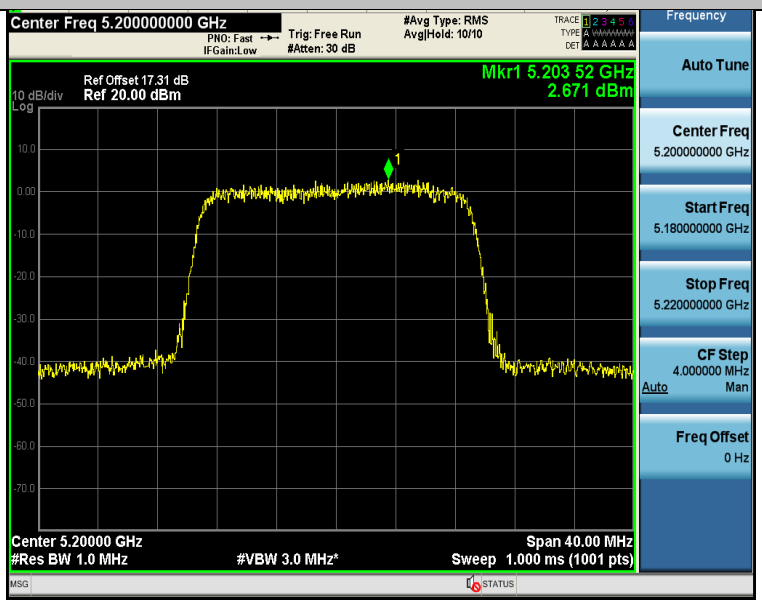
11A-Ant1-5785-PASS



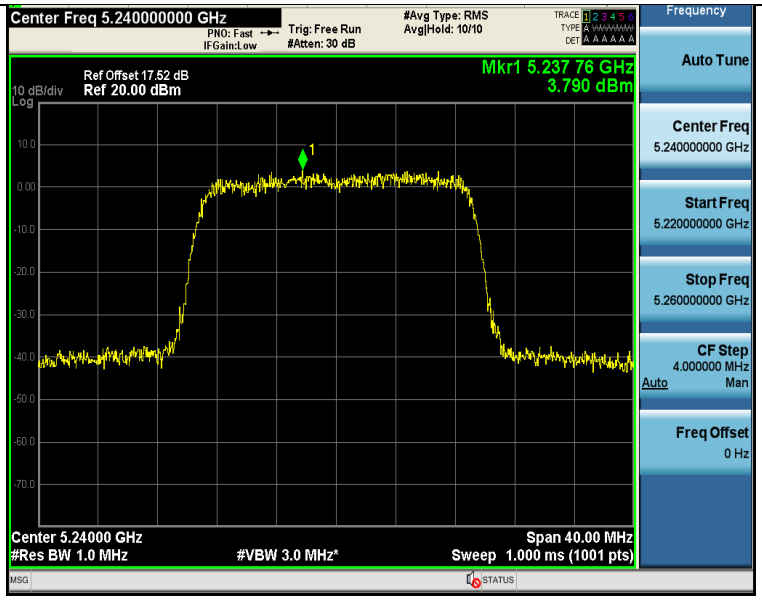
11A-Ant1-5825-PASS



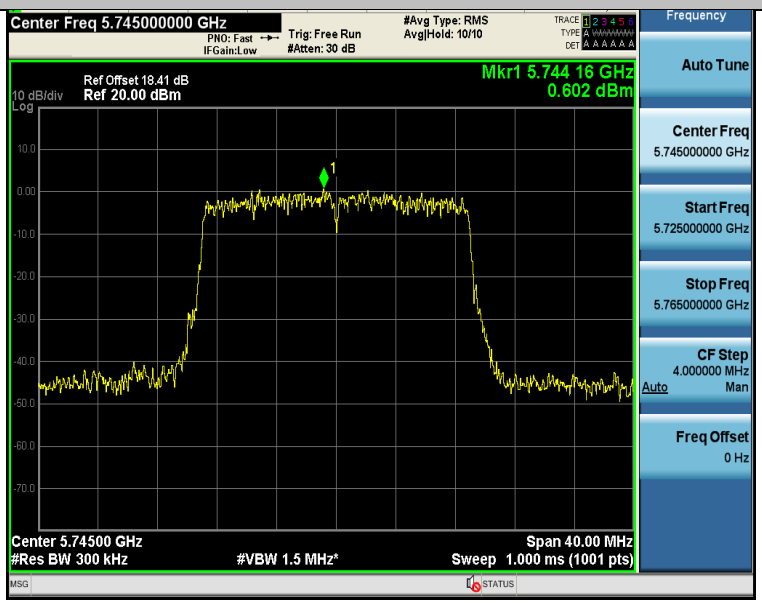
11N20SISO-Ant1-5180-PASS



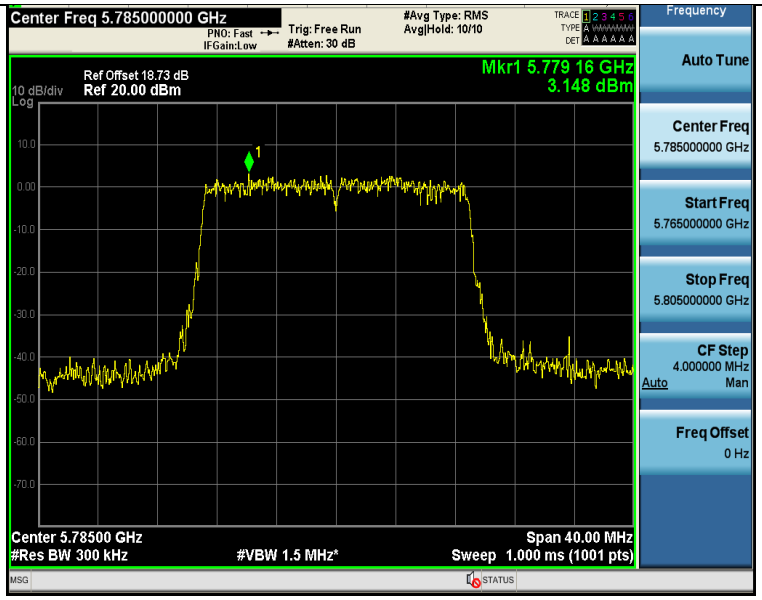
11N20SISO-Ant1-5200-PASS



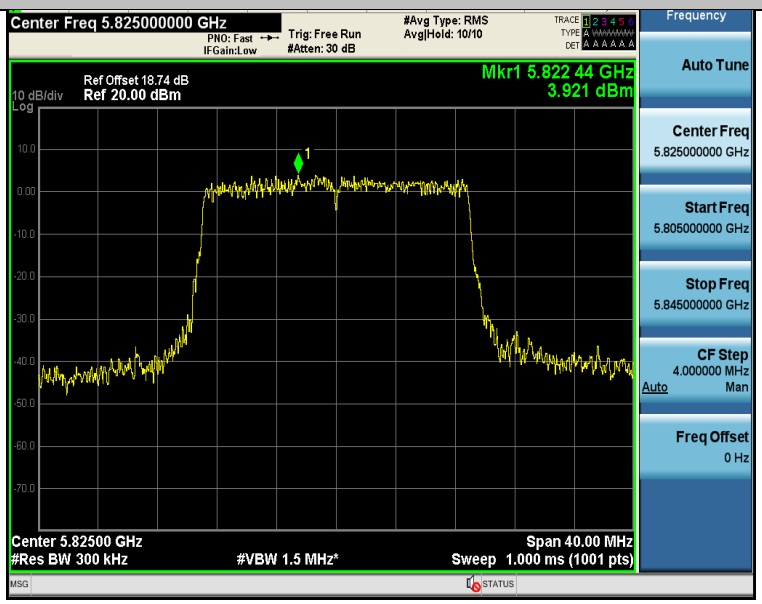
11N20SISO-Ant1-5240-PASS



11N20SISO-Ant1-5745-PASS

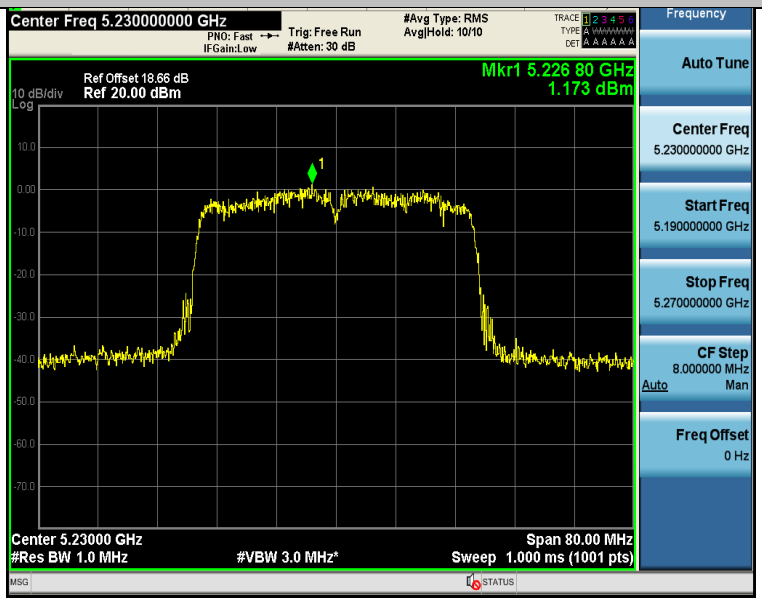


11N20SISO-Ant1-5785-PASS

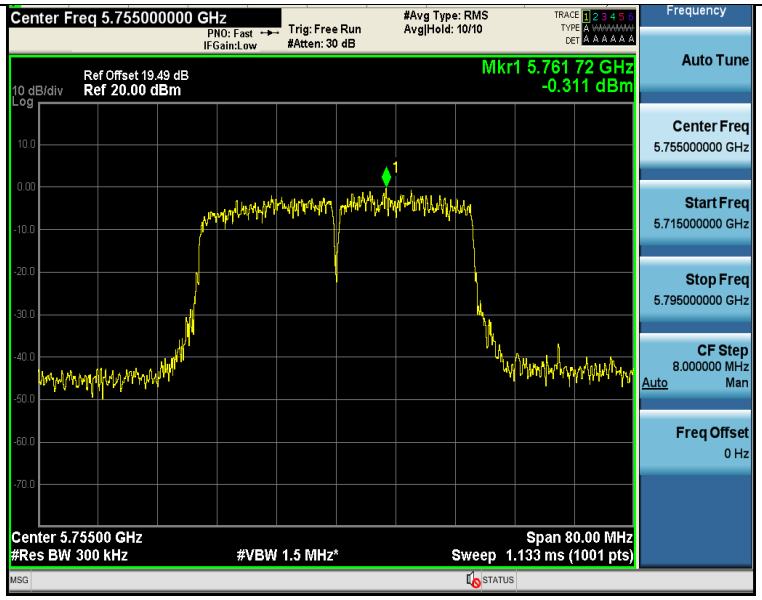


11N20SISO-Ant1-5825-PASS

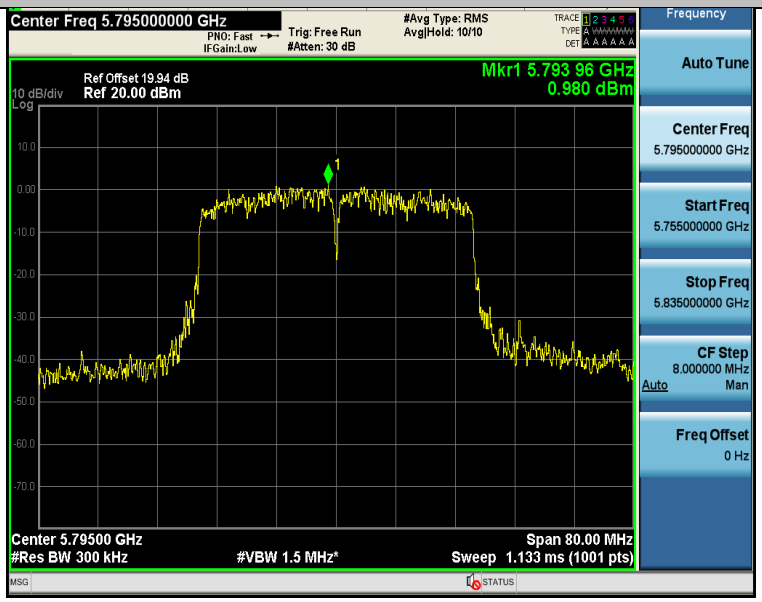
11N40SISO-Ant1-5190-PASS



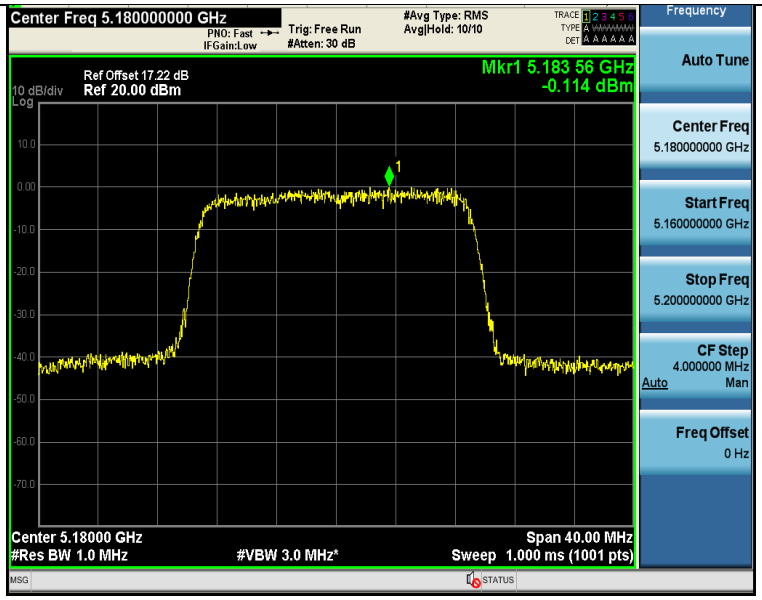
11N40SISO-Ant1-5230-PASS



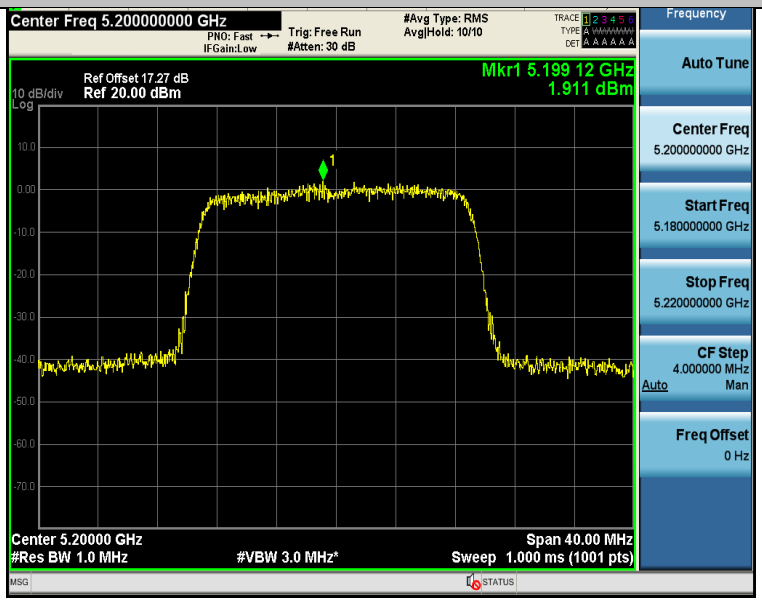
11N40SISO-Ant1-5755-PASS



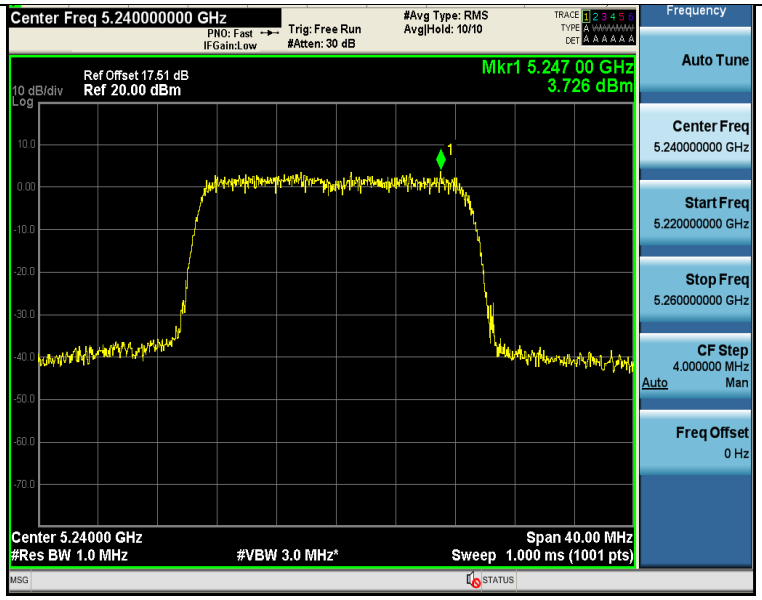
11N40SISO-Ant1-5795-PASS



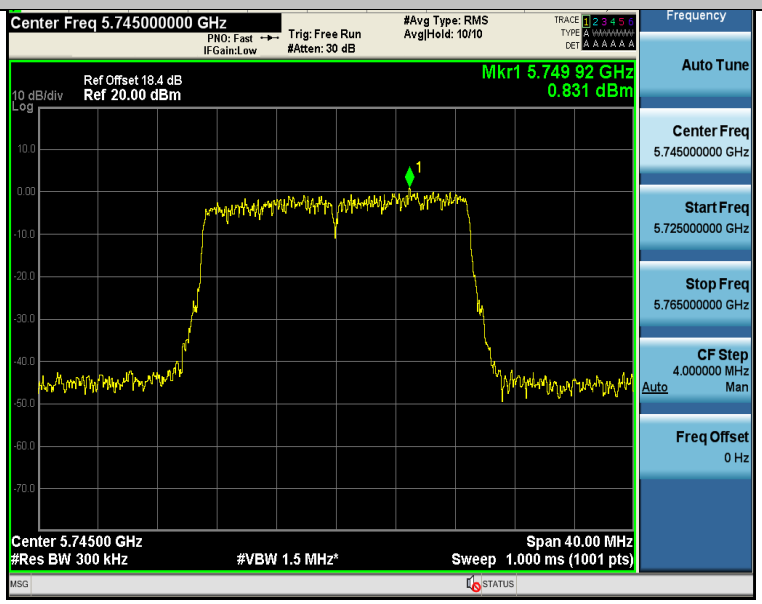
11AC20SISO-Ant1-5180-PASS



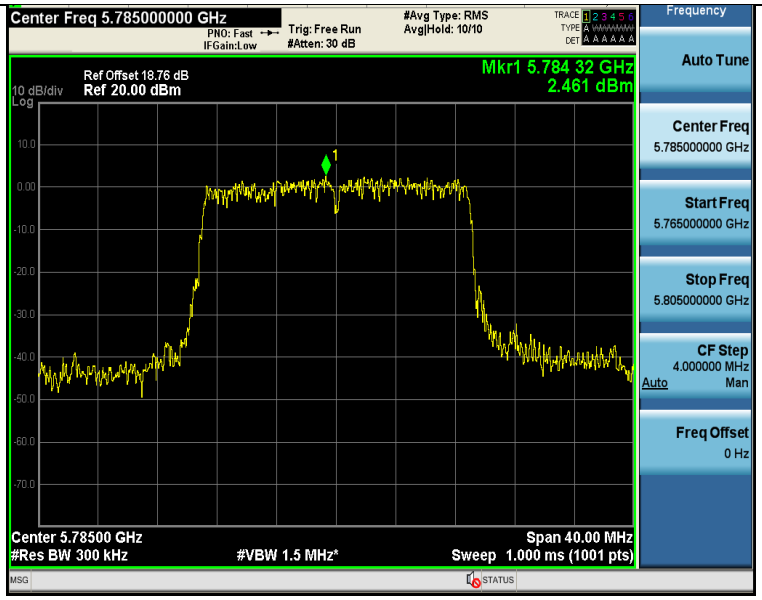
11AC20SISO-Ant1-5200-PASS



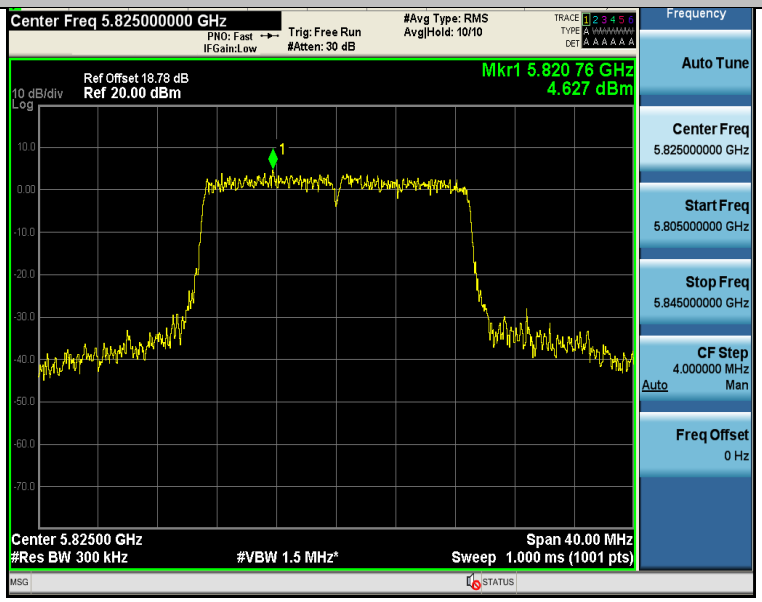
11AC20SISO-Ant1-5240-PASS



11AC20SISO-Ant1-5745-PASS

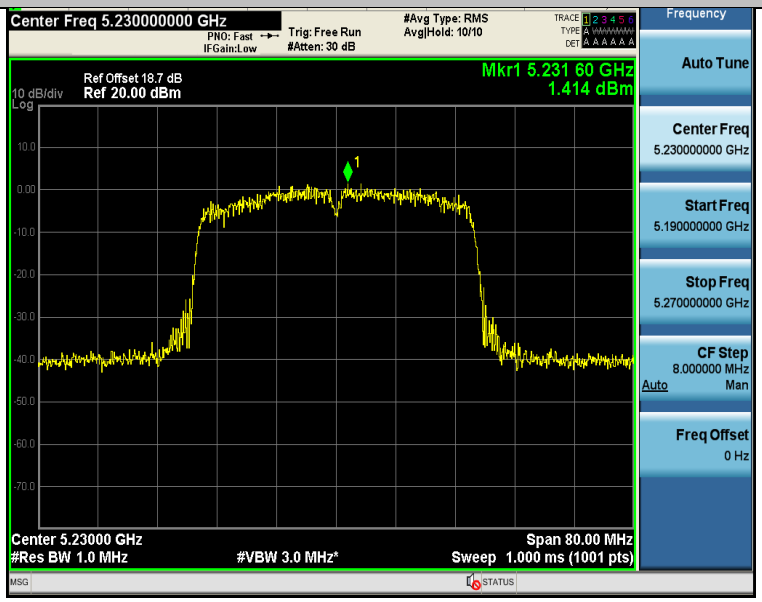


11AC20SISO-Ant1-5785-PASS

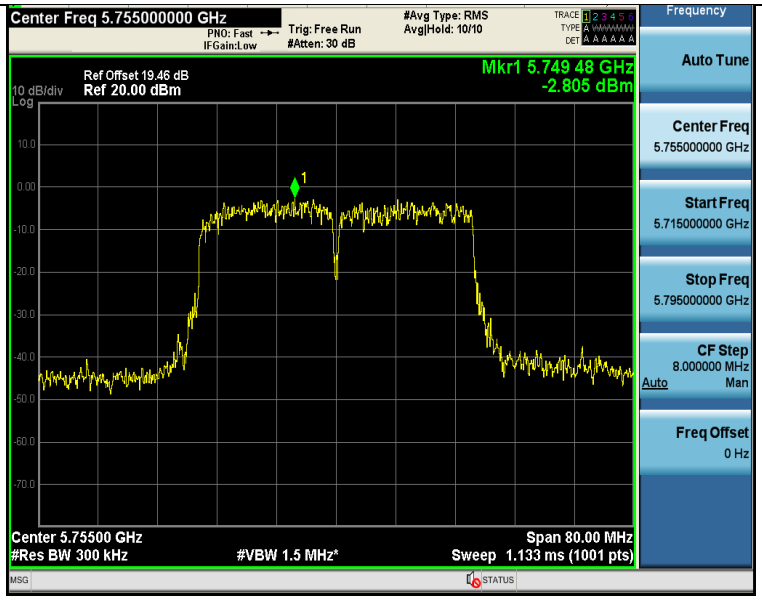


11AC20SISO-Ant1-5825-PASS

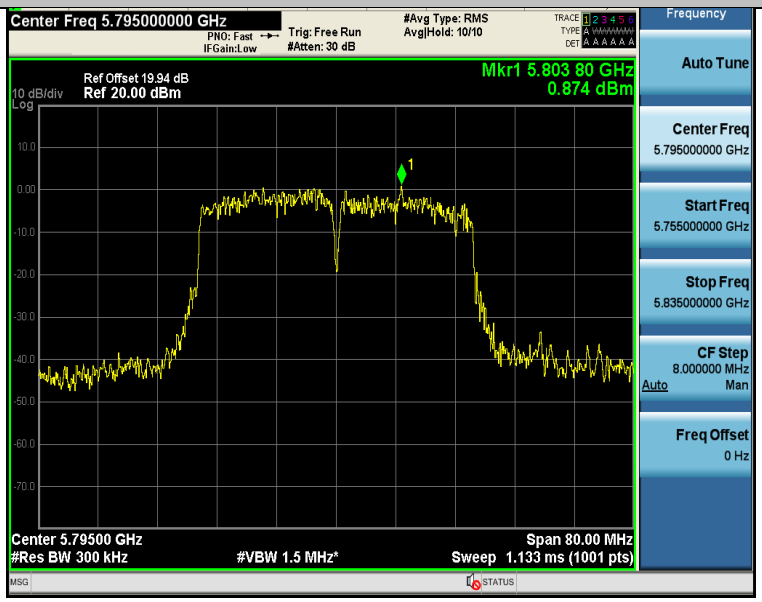
11AC40SISO-Ant1-5190-PASS



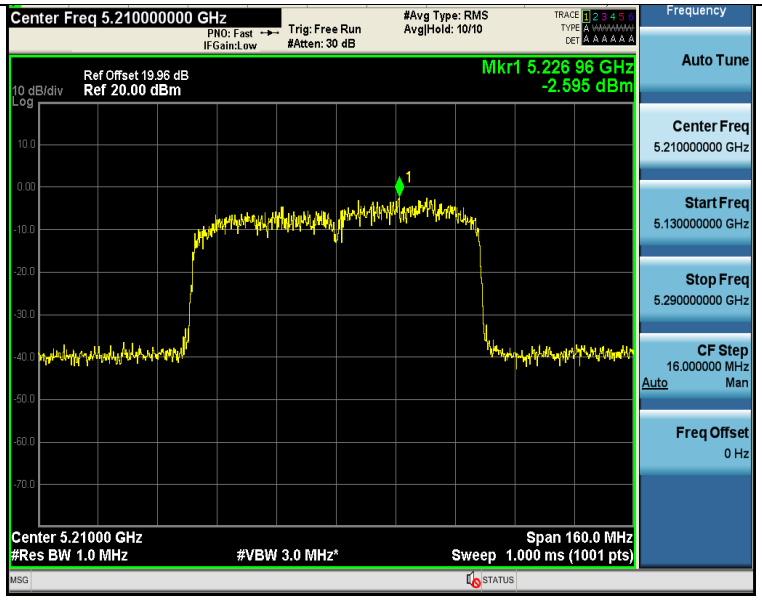
11AC40SISO-Ant1-5230-PASS



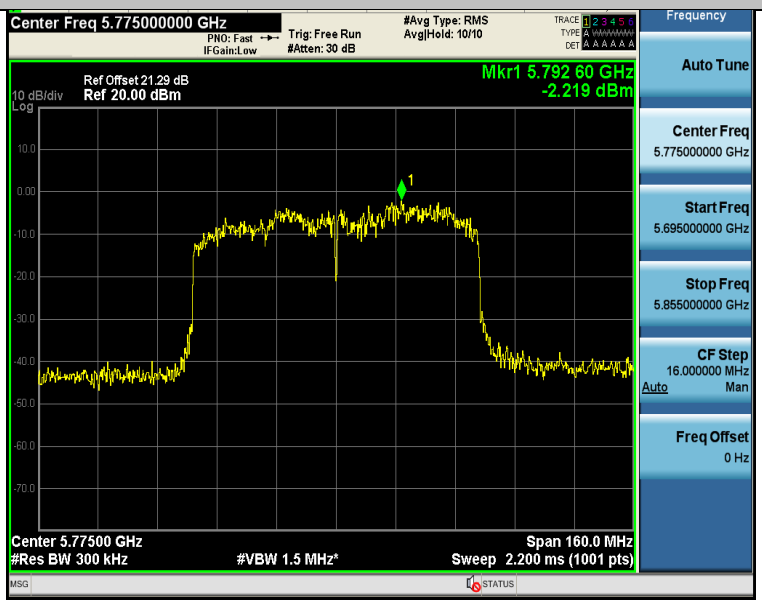
11AC40SISO-Ant1-5755-PASS



11AC40SISO-Ant1-5795-PASS



11AC80SISO-Ant1-5210-PASS



11AC80SISO-Ant1-5775-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 2.36 dBi and meets the requirement.

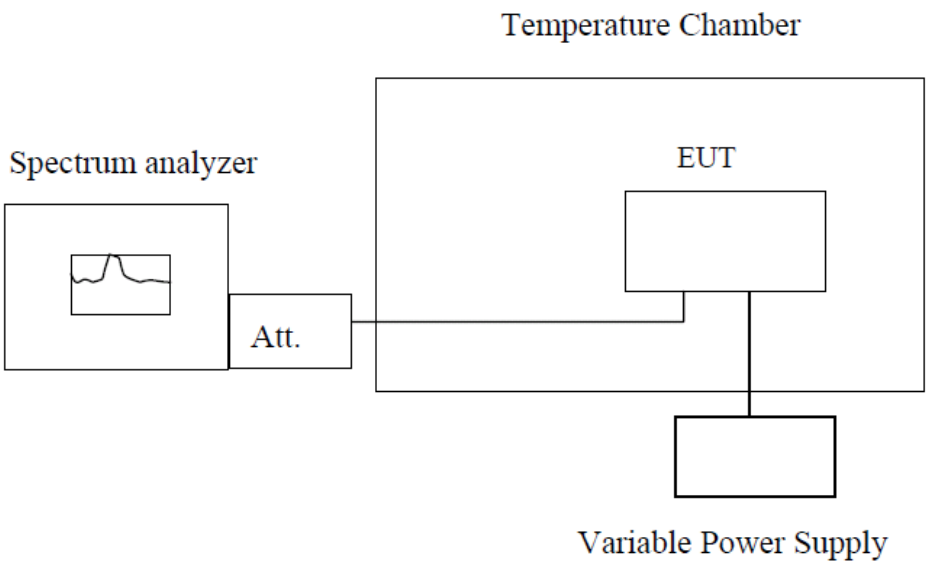
10 Frequency Stability

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	Frequency[MHz]	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5180	NV	NT	-34000.00	-6.563707	20	PASS
11A	Ant1	5180	LV	NT	-34000.00	-6.563707	20	PASS
11A	Ant1	5180	HV	NT	-35000.00	-6.756757	20	PASS
11A	Ant1	5200	NV	NT	-39000.00	-7.500000	20	PASS
11A	Ant1	5200	LV	NT	-40000.00	-7.692308	20	PASS
11A	Ant1	5200	HV	NT	-39000.00	-7.500000	20	PASS
11A	Ant1	5240	NV	NT	-39000.00	-7.442748	20	PASS
11A	Ant1	5240	LV	NT	-40000.00	-7.633588	20	PASS
11A	Ant1	5240	HV	NT	-40000.00	-7.633588	20	PASS
11A	Ant1	5745	NV	NT	-41000.00	-7.136641	20	PASS
11A	Ant1	5745	LV	NT	-42000.00	-7.310705	20	PASS
11A	Ant1	5745	HV	NT	-43000.00	-7.484769	20	PASS
11A	Ant1	5785	NV	NT	-3000.00	-0.518583	20	PASS
11A	Ant1	5785	LV	NT	-6000.00	-1.037165	20	PASS
11A	Ant1	5785	HV	NT	-9000.00	-1.555748	20	PASS
11A	Ant1	5825	NV	NT	-14000.00	-2.403433	20	PASS
11A	Ant1	5825	LV	NT	-15000.00	-2.575107	20	PASS
11A	Ant1	5825	HV	NT	-15000.00	-2.575107	20	PASS
11N20SISO	Ant1	5180	NV	NT	-15000.00	-2.895753	20	PASS
11N20SISO	Ant1	5180	LV	NT	-17000.00	-3.281853	20	PASS
11N20SISO	Ant1	5180	HV	NT	-18000.00	-3.474903	20	PASS
11N20SISO	Ant1	5200	NV	NT	-18000.00	-3.461538	20	PASS
11N20SISO	Ant1	5200	LV	NT	-19000.00	-3.653846	20	PASS
11N20SISO	Ant1	5200	HV	NT	-20000.00	-3.846154	20	PASS
11N20SISO	Ant1	5240	NV	NT	-20000.00	-3.816794	20	PASS
11N20SISO	Ant1	5240	LV	NT	-20000.00	-3.816794	20	PASS
11N20SISO	Ant1	5240	HV	NT	-21000.00	-4.007634	20	PASS
11N20SISO	Ant1	5745	NV	NT	-22000.00	-3.829417	20	PASS
11N20SISO	Ant1	5745	LV	NT	-23000.00	-4.003481	20	PASS
11N20SISO	Ant1	5745	HV	NT	-23000.00	-4.003481	20	PASS
11N20SISO	Ant1	5785	NV	NT	-21000.00	-3.630078	20	PASS
11N20SISO	Ant1	5785	LV	NT	-23000.00	-3.975799	20	PASS
11N20SISO	Ant1	5785	HV	NT	-23000.00	-3.975799	20	PASS
11N20SISO	Ant1	5825	NV	NT	-22000.00	-3.776824	20	PASS
11N20SISO	Ant1	5825	LV	NT	-23000.00	-3.948498	20	PASS
11N20SISO	Ant1	5825	HV	NT	-24000.00	-4.120172	20	PASS
11N40SISO	Ant1	5190	NV	NT	-18000.00	-3.468208	20	PASS
11N40SISO	Ant1	5190	LV	NT	-20000.00	-3.853565	20	PASS
11N40SISO	Ant1	5190	HV	NT	-21000.00	-4.046243	20	PASS
11N40SISO	Ant1	5230	NV	NT	-22000.00	-4.206501	20	PASS
11N40SISO	Ant1	5230	LV	NT	-23000.00	-4.397706	20	PASS
11N40SISO	Ant1	5230	HV	NT	-23000.00	-4.397706	20	PASS
11N40SISO	Ant1	5755	NV	NT	-25000.00	-4.344049	20	PASS
11N40SISO	Ant1	5755	LV	NT	-25000.00	-4.344049	20	PASS
11N40SISO	Ant1	5755	HV	NT	-26000.00	-4.517811	20	PASS
11N40SISO	Ant1	5795	NV	NT	-24000.00	-4.141501	20	PASS
11N40SISO	Ant1	5795	LV	NT	-25000.00	-4.314064	20	PASS
11N40SISO	Ant1	5795	HV	NT	-26000.00	-4.486626	20	PASS
11AC20SISO	Ant1	5180	NV	NT	-21000.00	-4.054054	20	PASS
11AC20SISO	Ant1	5180	LV	NT	-22000.00	-4.247104	20	PASS
11AC20SISO	Ant1	5180	HV	NT	-23000.00	-4.440154	20	PASS

11AC20SISO	Ant1	5200	NV	NT	-23000.00	-4.423077	20	PASS
11AC20SISO	Ant1	5200	LV	NT	-24000.00	-4.615385	20	PASS
11AC20SISO	Ant1	5200	HV	NT	-25000.00	-4.807692	20	PASS
11AC20SISO	Ant1	5240	NV	NT	-24000.00	-4.580153	20	PASS
11AC20SISO	Ant1	5240	LV	NT	-25000.00	-4.770992	20	PASS
11AC20SISO	Ant1	5240	HV	NT	-25000.00	-4.770992	20	PASS
11AC20SISO	Ant1	5745	NV	NT	-25000.00	-4.351610	20	PASS
11AC20SISO	Ant1	5745	LV	NT	-26000.00	-4.525674	20	PASS
11AC20SISO	Ant1	5745	HV	NT	-26000.00	-4.525674	20	PASS
11AC20SISO	Ant1	5785	NV	NT	-25000.00	-4.321521	20	PASS
11AC20SISO	Ant1	5785	LV	NT	-25000.00	-4.321521	20	PASS
11AC20SISO	Ant1	5785	HV	NT	-26000.00	-4.494382	20	PASS
11AC20SISO	Ant1	5825	NV	NT	-24000.00	-4.120172	20	PASS
11AC20SISO	Ant1	5825	LV	NT	-25000.00	-4.291845	20	PASS
11AC20SISO	Ant1	5825	HV	NT	-25000.00	-4.291845	20	PASS
11AC40SISO	Ant1	5190	NV	NT	-21000.00	-4.046243	20	PASS
11AC40SISO	Ant1	5190	LV	NT	-22000.00	-4.238921	20	PASS
11AC40SISO	Ant1	5190	HV	NT	-22000.00	-4.238921	20	PASS
11AC40SISO	Ant1	5230	NV	NT	-22000.00	-4.206501	20	PASS
11AC40SISO	Ant1	5230	LV	NT	-23000.00	-4.397706	20	PASS
11AC40SISO	Ant1	5230	HV	NT	-23000.00	-4.397706	20	PASS
11AC40SISO	Ant1	5755	NV	NT	-25000.00	-4.344049	20	PASS
11AC40SISO	Ant1	5755	LV	NT	-25000.00	-4.344049	20	PASS
11AC40SISO	Ant1	5755	HV	NT	-25000.00	-4.344049	20	PASS
11AC40SISO	Ant1	5795	NV	NT	-25000.00	-4.314064	20	PASS
11AC40SISO	Ant1	5795	LV	NT	-25000.00	-4.314064	20	PASS
11AC40SISO	Ant1	5795	HV	NT	-25000.00	-4.314064	20	PASS
11AC80SISO	Ant1	5210	NV	NT	-21000.00	-4.030710	20	PASS
11AC80SISO	Ant1	5210	LV	NT	-23000.00	-4.414587	20	PASS
11AC80SISO	Ant1	5210	HV	NT	-23000.00	-4.414587	20	PASS
11AC80SISO	Ant1	5775	NV	NT	-24000.00	-4.155844	20	PASS
11AC80SISO	Ant1	5775	LV	NT	-25000.00	-4.329004	20	PASS
11AC80SISO	Ant1	5775	HV	NT	-26000.00	-4.502165	20	PASS

TestMode	Antenna	Frequency[MHz]	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	Ant1	5180	NV	-30	-36000.00	-6.949807	20	PASS
11A	Ant1	5180	NV	-20	-36000.00	-6.949807	20	PASS
11A	Ant1	5180	NV	-10	-36000.00	-6.949807	20	PASS
11A	Ant1	5180	NV	0	-37000.00	-7.142857	20	PASS
11A	Ant1	5180	NV	10	-37000.00	-7.142857	20	PASS
11A	Ant1	5180	NV	20	-38000.00	-7.335907	20	PASS
11A	Ant1	5180	NV	30	-38000.00	-7.335907	20	PASS
11A	Ant1	5180	NV	40	-38000.00	-7.335907	20	PASS
11A	Ant1	5180	NV	50	-39000.00	-7.528958	20	PASS
11A	Ant1	5200	NV	-30	-40000.00	-7.692308	20	PASS
11A	Ant1	5200	NV	-20	-40000.00	-7.692308	20	PASS
11A	Ant1	5200	NV	0	-40000.00	-7.692308	20	PASS
11A	Ant1	5200	NV	10	-40000.00	-7.692308	20	PASS
11A	Ant1	5200	NV	-10	-40000.00	-7.692308	20	PASS
11A	Ant1	5200	NV	20	-40000.00	-7.692308	20	PASS
11A	Ant1	5200	NV	30	-40000.00	-7.692308	20	PASS
11A	Ant1	5200	NV	40	-40000.00	-7.692308	20	PASS
11A	Ant1	5200	NV	50	-40000.00	-7.692308	20	PASS
11A	Ant1	5240	NV	-30	-40000.00	-7.633588	20	PASS
11A	Ant1	5240	NV	-20	-40000.00	-7.633588	20	PASS
11A	Ant1	5240	NV	-10	-40000.00	-7.633588	20	PASS
11A	Ant1	5240	NV	0	-40000.00	-7.633588	20	PASS
11A	Ant1	5240	NV	10	-40000.00	-7.633588	20	PASS
11A	Ant1	5240	NV	20	-40000.00	-7.633588	20	PASS
11A	Ant1	5240	NV	30	-40000.00	-7.633588	20	PASS
11A	Ant1	5240	NV	40	-40000.00	-7.633588	20	PASS
11A	Ant1	5240	NV	50	-40000.00	-7.633588	20	PASS
11A	Ant1	5745	NV	-30	-43000.00	-7.484769	20	PASS
11A	Ant1	5745	NV	-20	-44000.00	-7.658834	20	PASS
11A	Ant1	5745	NV	-10	-44000.00	-7.658834	20	PASS
11A	Ant1	5745	NV	0	-44000.00	-7.658834	20	PASS
11A	Ant1	5745	NV	10	-44000.00	-7.658834	20	PASS
11A	Ant1	5745	NV	20	-44000.00	-7.658834	20	PASS
11A	Ant1	5745	NV	30	-44000.00	-7.658834	20	PASS
11A	Ant1	5745	NV	40	-44000.00	-7.658834	20	PASS
11A	Ant1	5745	NV	50	-43000.00	-7.484769	20	PASS
11A	Ant1	5785	NV	-30	-10000.00	-1.728608	20	PASS
11A	Ant1	5785	NV	-20	-11000.00	-1.901469	20	PASS
11A	Ant1	5785	NV	-10	-11000.00	-1.901469	20	PASS
11A	Ant1	5785	NV	0	-12000.00	-2.074330	20	PASS
11A	Ant1	5785	NV	10	-13000.00	-2.247191	20	PASS
11A	Ant1	5785	NV	20	-13000.00	-2.247191	20	PASS
11A	Ant1	5785	NV	30	-14000.00	-2.420052	20	PASS
11A	Ant1	5785	NV	40	-14000.00	-2.420052	20	PASS
11A	Ant1	5785	NV	50	-14000.00	-2.420052	20	PASS
11A	Ant1	5825	NV	-30	-16000.00	-2.746781	20	PASS
11A	Ant1	5825	NV	-20	-17000.00	-2.918455	20	PASS
11A	Ant1	5825	NV	-10	-17000.00	-2.918455	20	PASS
11A	Ant1	5825	NV	0	-17000.00	-2.918455	20	PASS
11A	Ant1	5825	NV	10	-18000.00	-3.090129	20	PASS
11A	Ant1	5825	NV	20	-18000.00	-3.090129	20	PASS
11A	Ant1	5825	NV	30	-18000.00	-3.090129	20	PASS

11A	Ant1	5825	NV	40	-18000.00	-3.090129	20	PASS
11A	Ant1	5825	NV	50	-18000.00	-3.090129	20	PASS
11N20SISO	Ant1	5180	NV	-30	-18000.00	-3.474903	20	PASS
11N20SISO	Ant1	5180	NV	-20	-18000.00	-3.474903	20	PASS
11N20SISO	Ant1	5180	NV	-10	-19000.00	-3.667954	20	PASS
11N20SISO	Ant1	5180	NV	0	-19000.00	-3.667954	20	PASS
11N20SISO	Ant1	5180	NV	10	-19000.00	-3.667954	20	PASS
11N20SISO	Ant1	5180	NV	20	-19000.00	-3.667954	20	PASS
11N20SISO	Ant1	5180	NV	30	-19000.00	-3.667954	20	PASS
11N20SISO	Ant1	5180	NV	40	-19000.00	-3.667954	20	PASS
11N20SISO	Ant1	5180	NV	50	-20000.00	-3.861004	20	PASS
11N20SISO	Ant1	5200	NV	-30	-20000.00	-3.846154	20	PASS
11N20SISO	Ant1	5200	NV	-20	-20000.00	-3.846154	20	PASS
11N20SISO	Ant1	5200	NV	-10	-20000.00	-3.846154	20	PASS
11N20SISO	Ant1	5200	NV	0	-21000.00	-4.038462	20	PASS
11N20SISO	Ant1	5200	NV	10	-21000.00	-4.038462	20	PASS
11N20SISO	Ant1	5200	NV	20	-21000.00	-4.038462	20	PASS
11N20SISO	Ant1	5200	NV	30	-21000.00	-4.038462	20	PASS
11N20SISO	Ant1	5200	NV	40	-21000.00	-4.038462	20	PASS
11N20SISO	Ant1	5200	NV	50	-21000.00	-4.038462	20	PASS
11N20SISO	Ant1	5240	NV	-30	-21000.00	-4.007634	20	PASS
11N20SISO	Ant1	5240	NV	-20	-21000.00	-4.007634	20	PASS
11N20SISO	Ant1	5240	NV	-10	-22000.00	-4.198473	20	PASS
11N20SISO	Ant1	5240	NV	0	-22000.00	-4.198473	20	PASS
11N20SISO	Ant1	5240	NV	10	-22000.00	-4.198473	20	PASS
11N20SISO	Ant1	5240	NV	20	-22000.00	-4.198473	20	PASS
11N20SISO	Ant1	5240	NV	30	-22000.00	-4.198473	20	PASS
11N20SISO	Ant1	5240	NV	40	-22000.00	-4.198473	20	PASS
11N20SISO	Ant1	5240	NV	50	-22000.00	-4.198473	20	PASS
11N20SISO	Ant1	5745	NV	-30	-23000.00	-4.003481	20	PASS
11N20SISO	Ant1	5745	NV	-20	-23000.00	-4.003481	20	PASS
11N20SISO	Ant1	5745	NV	-10	-24000.00	-4.177546	20	PASS
11N20SISO	Ant1	5745	NV	0	-24000.00	-4.177546	20	PASS
11N20SISO	Ant1	5745	NV	10	-24000.00	-4.177546	20	PASS
11N20SISO	Ant1	5745	NV	20	-24000.00	-4.177546	20	PASS
11N20SISO	Ant1	5745	NV	30	-24000.00	-4.177546	20	PASS
11N20SISO	Ant1	5745	NV	40	-24000.00	-4.177546	20	PASS
11N20SISO	Ant1	5745	NV	50	-24000.00	-4.177546	20	PASS
11N20SISO	Ant1	5785	NV	-30	-23000.00	-3.975799	20	PASS
11N20SISO	Ant1	5785	NV	-20	-24000.00	-4.148660	20	PASS
11N20SISO	Ant1	5785	NV	-10	-24000.00	-4.148660	20	PASS
11N20SISO	Ant1	5785	NV	0	-24000.00	-4.148660	20	PASS
11N20SISO	Ant1	5785	NV	10	-24000.00	-4.148660	20	PASS
11N20SISO	Ant1	5785	NV	20	-24000.00	-4.148660	20	PASS
11N20SISO	Ant1	5785	NV	30	-24000.00	-4.148660	20	PASS
11N20SISO	Ant1	5785	NV	40	-24000.00	-4.148660	20	PASS
11N20SISO	Ant1	5785	NV	50	-24000.00	-4.148660	20	PASS
11N20SISO	Ant1	5825	NV	-30	-24000.00	-4.120172	20	PASS
11N20SISO	Ant1	5825	NV	-20	-24000.00	-4.120172	20	PASS
11N20SISO	Ant1	5825	NV	-10	-24000.00	-4.120172	20	PASS
11N20SISO	Ant1	5825	NV	0	-24000.00	-4.120172	20	PASS
11N20SISO	Ant1	5825	NV	10	-24000.00	-4.120172	20	PASS
11N20SISO	Ant1	5825	NV	20	-25000.00	-4.291845	20	PASS
11N20SISO	Ant1	5825	NV	30	-24000.00	-4.120172	20	PASS
11N20SISO	Ant1	5825	NV	40	-24000.00	-4.120172	20	PASS
11N20SISO	Ant1	5825	NV	50	-25000.00	-4.291845	20	PASS

11N40SISO	Ant1	5190	NV	-30	-21000.00	-4.046243	20	PASS
11N40SISO	Ant1	5190	NV	-20	-22000.00	-4.238921	20	PASS
11N40SISO	Ant1	5190	NV	-10	-22000.00	-4.238921	20	PASS
11N40SISO	Ant1	5190	NV	0	-22000.00	-4.238921	20	PASS
11N40SISO	Ant1	5190	NV	10	-23000.00	-4.431599	20	PASS
11N40SISO	Ant1	5190	NV	20	-23000.00	-4.431599	20	PASS
11N40SISO	Ant1	5190	NV	30	-23000.00	-4.431599	20	PASS
11N40SISO	Ant1	5190	NV	40	-23000.00	-4.431599	20	PASS
11N40SISO	Ant1	5190	NV	50	-23000.00	-4.431599	20	PASS
11N40SISO	Ant1	5230	NV	-30	-23000.00	-4.397706	20	PASS
11N40SISO	Ant1	5230	NV	-20	-23000.00	-4.397706	20	PASS
11N40SISO	Ant1	5230	NV	-10	-23000.00	-4.397706	20	PASS
11N40SISO	Ant1	5230	NV	0	-23000.00	-4.397706	20	PASS
11N40SISO	Ant1	5230	NV	10	-24000.00	-4.588910	20	PASS
11N40SISO	Ant1	5230	NV	20	-24000.00	-4.588910	20	PASS
11N40SISO	Ant1	5230	NV	30	-24000.00	-4.588910	20	PASS
11N40SISO	Ant1	5230	NV	40	-24000.00	-4.588910	20	PASS
11N40SISO	Ant1	5230	NV	50	-24000.00	-4.588910	20	PASS
11N40SISO	Ant1	5755	NV	-30	-25000.00	-4.344049	20	PASS
11N40SISO	Ant1	5755	NV	-20	-25000.00	-4.344049	20	PASS
11N40SISO	Ant1	5755	NV	-10	-26000.00	-4.517811	20	PASS
11N40SISO	Ant1	5755	NV	0	-26000.00	-4.517811	20	PASS
11N40SISO	Ant1	5755	NV	10	-26000.00	-4.517811	20	PASS
11N40SISO	Ant1	5755	NV	20	-26000.00	-4.517811	20	PASS
11N40SISO	Ant1	5755	NV	30	-26000.00	-4.517811	20	PASS
11N40SISO	Ant1	5755	NV	40	-26000.00	-4.517811	20	PASS
11N40SISO	Ant1	5755	NV	50	-26000.00	-4.517811	20	PASS
11N40SISO	Ant1	5795	NV	-30	-26000.00	-4.486626	20	PASS
11N40SISO	Ant1	5795	NV	-20	-26000.00	-4.486626	20	PASS
11N40SISO	Ant1	5795	NV	-10	-26000.00	-4.486626	20	PASS
11N40SISO	Ant1	5795	NV	0	-26000.00	-4.486626	20	PASS
11N40SISO	Ant1	5795	NV	10	-26000.00	-4.486626	20	PASS
11N40SISO	Ant1	5795	NV	20	-26000.00	-4.486626	20	PASS
11N40SISO	Ant1	5795	NV	30	-26000.00	-4.486626	20	PASS
11N40SISO	Ant1	5795	NV	40	-26000.00	-4.486626	20	PASS
11N40SISO	Ant1	5795	NV	50	-26000.00	-4.486626	20	PASS
11AC20SISO	Ant1	5180	NV	-30	-24000.00	-4.633205	20	PASS
11AC20SISO	Ant1	5180	NV	-20	-24000.00	-4.633205	20	PASS
11AC20SISO	Ant1	5180	NV	-10	-24000.00	-4.633205	20	PASS
11AC20SISO	Ant1	5180	NV	0	-24000.00	-4.633205	20	PASS
11AC20SISO	Ant1	5180	NV	10	-24000.00	-4.633205	20	PASS
11AC20SISO	Ant1	5180	NV	20	-24000.00	-4.633205	20	PASS
11AC20SISO	Ant1	5180	NV	30	-24000.00	-4.633205	20	PASS
11AC20SISO	Ant1	5180	NV	40	-24000.00	-4.633205	20	PASS
11AC20SISO	Ant1	5180	NV	50	-24000.00	-4.633205	20	PASS
11AC20SISO	Ant1	5200	NV	-30	-25000.00	-4.807692	20	PASS
11AC20SISO	Ant1	5200	NV	-20	-25000.00	-4.807692	20	PASS
11AC20SISO	Ant1	5200	NV	-10	-25000.00	-4.807692	20	PASS
11AC20SISO	Ant1	5200	NV	0	-25000.00	-4.807692	20	PASS
11AC20SISO	Ant1	5200	NV	10	-25000.00	-4.807692	20	PASS
11AC20SISO	Ant1	5200	NV	20	-25000.00	-4.807692	20	PASS
11AC20SISO	Ant1	5200	NV	30	-25000.00	-4.807692	20	PASS
11AC20SISO	Ant1	5200	NV	40	-25000.00	-4.807692	20	PASS
11AC20SISO	Ant1	5200	NV	50	-25000.00	-4.807692	20	PASS
11AC20SISO	Ant1	5240	NV	-30	-25000.00	-4.770992	20	PASS
11AC20SISO	Ant1	5240	NV	-20	-25000.00	-4.770992	20	PASS

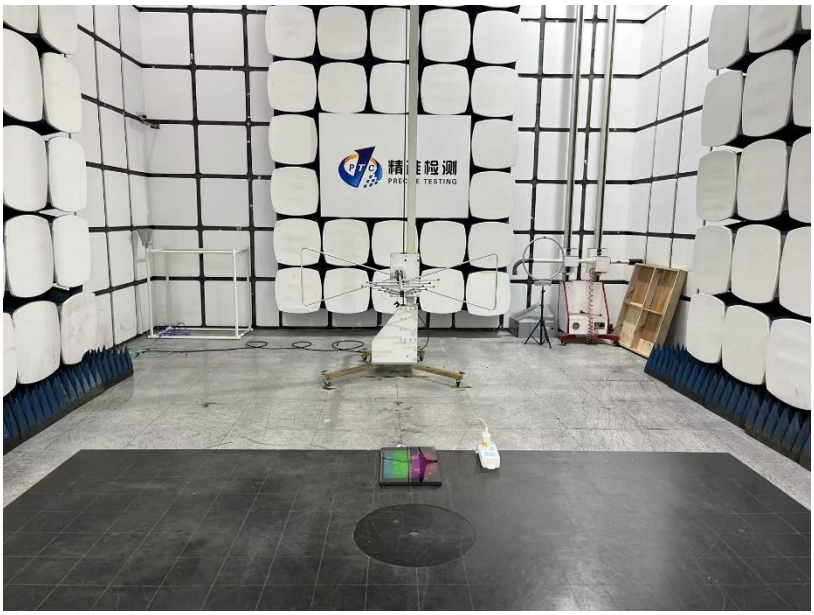
11AC20SISO	Ant1	5240	NV	-10	-25000.00	-4.770992	20	PASS
11AC20SISO	Ant1	5240	NV	0	-25000.00	-4.770992	20	PASS
11AC20SISO	Ant1	5240	NV	10	-25000.00	-4.770992	20	PASS
11AC20SISO	Ant1	5240	NV	20	-25000.00	-4.770992	20	PASS
11AC20SISO	Ant1	5240	NV	30	-25000.00	-4.770992	20	PASS
11AC20SISO	Ant1	5240	NV	40	-25000.00	-4.770992	20	PASS
11AC20SISO	Ant1	5240	NV	50	-25000.00	-4.770992	20	PASS
11AC20SISO	Ant1	5745	NV	-30	-26000.00	-4.525674	20	PASS
11AC20SISO	Ant1	5745	NV	-20	-26000.00	-4.525674	20	PASS
11AC20SISO	Ant1	5745	NV	-10	-26000.00	-4.525674	20	PASS
11AC20SISO	Ant1	5745	NV	0	-26000.00	-4.525674	20	PASS
11AC20SISO	Ant1	5745	NV	10	-26000.00	-4.525674	20	PASS
11AC20SISO	Ant1	5745	NV	20	-26000.00	-4.525674	20	PASS
11AC20SISO	Ant1	5745	NV	30	-26000.00	-4.525674	20	PASS
11AC20SISO	Ant1	5745	NV	40	-26000.00	-4.525674	20	PASS
11AC20SISO	Ant1	5745	NV	50	-26000.00	-4.525674	20	PASS
11AC20SISO	Ant1	5785	NV	-30	-25000.00	-4.321521	20	PASS
11AC20SISO	Ant1	5785	NV	-20	-26000.00	-4.494382	20	PASS
11AC20SISO	Ant1	5785	NV	-10	-26000.00	-4.494382	20	PASS
11AC20SISO	Ant1	5785	NV	0	-26000.00	-4.494382	20	PASS
11AC20SISO	Ant1	5785	NV	10	-26000.00	-4.494382	20	PASS
11AC20SISO	Ant1	5785	NV	20	-26000.00	-4.494382	20	PASS
11AC20SISO	Ant1	5785	NV	30	-26000.00	-4.494382	20	PASS
11AC20SISO	Ant1	5785	NV	40	-26000.00	-4.494382	20	PASS
11AC20SISO	Ant1	5785	NV	50	-26000.00	-4.494382	20	PASS
11AC20SISO	Ant1	5825	NV	-30	-25000.00	-4.291845	20	PASS
11AC20SISO	Ant1	5825	NV	-20	-25000.00	-4.291845	20	PASS
11AC20SISO	Ant1	5825	NV	-10	-25000.00	-4.291845	20	PASS
11AC20SISO	Ant1	5825	NV	0	-25000.00	-4.291845	20	PASS
11AC20SISO	Ant1	5825	NV	10	-25000.00	-4.291845	20	PASS
11AC20SISO	Ant1	5825	NV	20	-25000.00	-4.291845	20	PASS
11AC20SISO	Ant1	5825	NV	30	-25000.00	-4.291845	20	PASS
11AC20SISO	Ant1	5825	NV	40	-25000.00	-4.291845	20	PASS
11AC20SISO	Ant1	5825	NV	50	-25000.00	-4.291845	20	PASS
11AC40SISO	Ant1	5190	NV	-30	-23000.00	-4.431599	20	PASS
11AC40SISO	Ant1	5190	NV	-20	-23000.00	-4.431599	20	PASS
11AC40SISO	Ant1	5190	NV	-10	-23000.00	-4.431599	20	PASS
11AC40SISO	Ant1	5190	NV	0	-23000.00	-4.431599	20	PASS
11AC40SISO	Ant1	5190	NV	10	-23000.00	-4.431599	20	PASS
11AC40SISO	Ant1	5190	NV	20	-23000.00	-4.431599	20	PASS
11AC40SISO	Ant1	5190	NV	30	-23000.00	-4.431599	20	PASS
11AC40SISO	Ant1	5190	NV	40	-24000.00	-4.624277	20	PASS
11AC40SISO	Ant1	5190	NV	50	-24000.00	-4.624277	20	PASS
11AC40SISO	Ant1	5230	NV	-30	-23000.00	-4.397706	20	PASS
11AC40SISO	Ant1	5230	NV	-20	-24000.00	-4.588910	20	PASS
11AC40SISO	Ant1	5230	NV	-10	-24000.00	-4.588910	20	PASS
11AC40SISO	Ant1	5230	NV	0	-24000.00	-4.588910	20	PASS
11AC40SISO	Ant1	5230	NV	10	-24000.00	-4.588910	20	PASS
11AC40SISO	Ant1	5230	NV	20	-24000.00	-4.588910	20	PASS
11AC40SISO	Ant1	5230	NV	30	-24000.00	-4.588910	20	PASS
11AC40SISO	Ant1	5230	NV	40	-24000.00	-4.588910	20	PASS
11AC40SISO	Ant1	5230	NV	50	-24000.00	-4.588910	20	PASS
11AC40SISO	Ant1	5755	NV	-30	-25000.00	-4.344049	20	PASS
11AC40SISO	Ant1	5755	NV	-20	-26000.00	-4.517811	20	PASS
11AC40SISO	Ant1	5755	NV	-10	-25000.00	-4.344049	20	PASS
11AC40SISO	Ant1	5755	NV	0	-26000.00	-4.517811	20	PASS

11AC40SISO	Ant1	5755	NV	10	-26000.00	-4.517811	20	PASS
11AC40SISO	Ant1	5755	NV	20	-25000.00	-4.344049	20	PASS
11AC40SISO	Ant1	5755	NV	30	-26000.00	-4.517811	20	PASS
11AC40SISO	Ant1	5755	NV	40	-26000.00	-4.517811	20	PASS
11AC40SISO	Ant1	5755	NV	50	-25000.00	-4.344049	20	PASS
11AC40SISO	Ant1	5795	NV	-30	-25000.00	-4.314064	20	PASS
11AC40SISO	Ant1	5795	NV	-20	-26000.00	-4.486626	20	PASS
11AC40SISO	Ant1	5795	NV	-10	-26000.00	-4.486626	20	PASS
11AC40SISO	Ant1	5795	NV	0	-26000.00	-4.486626	20	PASS
11AC40SISO	Ant1	5795	NV	10	-26000.00	-4.486626	20	PASS
11AC40SISO	Ant1	5795	NV	20	-26000.00	-4.486626	20	PASS
11AC40SISO	Ant1	5795	NV	30	-26000.00	-4.486626	20	PASS
11AC40SISO	Ant1	5795	NV	40	-26000.00	-4.486626	20	PASS
11AC40SISO	Ant1	5795	NV	50	-26000.00	-4.486626	20	PASS
11AC80SISO	Ant1	5210	NV	-30	-23000.00	-4.414587	20	PASS
11AC80SISO	Ant1	5210	NV	-20	-23000.00	-4.414587	20	PASS
11AC80SISO	Ant1	5210	NV	-10	-24000.00	-4.606526	20	PASS
11AC80SISO	Ant1	5210	NV	0	-24000.00	-4.606526	20	PASS
11AC80SISO	Ant1	5210	NV	10	-24000.00	-4.606526	20	PASS
11AC80SISO	Ant1	5210	NV	20	-24000.00	-4.606526	20	PASS
11AC80SISO	Ant1	5210	NV	30	-24000.00	-4.606526	20	PASS
11AC80SISO	Ant1	5210	NV	40	-24000.00	-4.606526	20	PASS
11AC80SISO	Ant1	5210	NV	50	-24000.00	-4.606526	20	PASS
11AC80SISO	Ant1	5775	NV	-30	-26000.00	-4.502165	20	PASS
11AC80SISO	Ant1	5775	NV	-20	-26000.00	-4.502165	20	PASS
11AC80SISO	Ant1	5775	NV	-10	-26000.00	-4.502165	20	PASS
11AC80SISO	Ant1	5775	NV	0	-26000.00	-4.502165	20	PASS
11AC80SISO	Ant1	5775	NV	10	-26000.00	-4.502165	20	PASS
11AC80SISO	Ant1	5775	NV	20	-26000.00	-4.502165	20	PASS
11AC80SISO	Ant1	5775	NV	30	-26000.00	-4.502165	20	PASS
11AC80SISO	Ant1	5775	NV	40	-26000.00	-4.502165	20	PASS
11AC80SISO	Ant1	5775	NV	50	-26000.00	-4.502165	20	PASS

11 Test Setup

Conducted Emissions

Radiated Spurious Emissions
From 30MHz-1000MHz



Test frequency from Above 1GHz

12 EUT PHOTOS

Refer to “ External Photos” and “Internal Photos”.

********THE END REPORT********