Case No. : GTS20220323004-1-4	
Ambient Condition: 26 ℃, 47%RH,	
Test Date: 2022-7-06	**Test Engineer:** Jenny Zeng

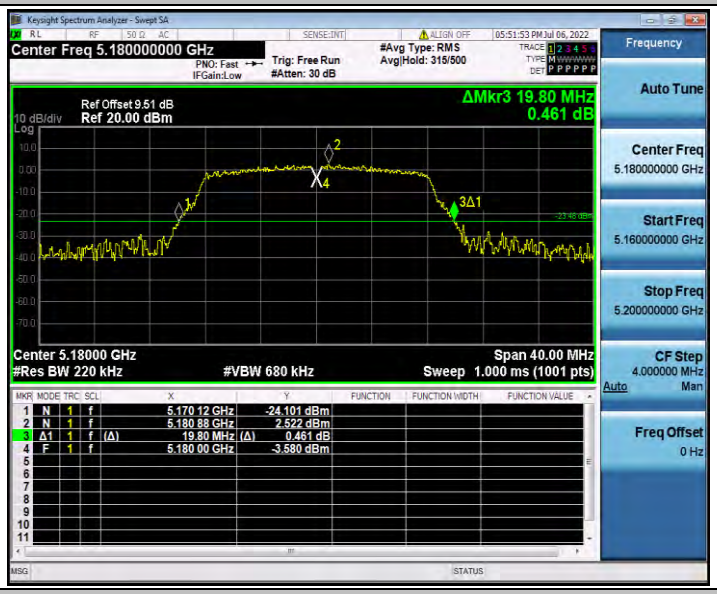
Appendix D.1: Emission Bandwidth

Test Result

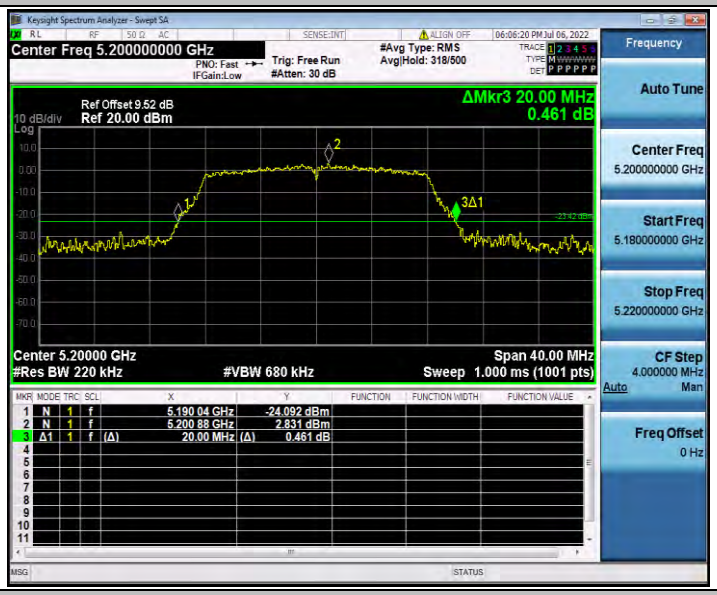
TestMode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	19.800	5170.120	5189.920	---	---
		5200	20.000	5190.040	5210.040	---	---
		5240	19.840	5230.000	5249.840	---	---
11N20SISO	Ant1	5180	20.360	5169.880	5190.240	---	---
		5200	22.760	5189.760	5212.520	---	---
		5240	20.240	5229.880	5250.120	---	---
11N40SISO	Ant1	5190	40.960	5169.680	5210.640	---	---
		5230	40.640	5209.680	5250.320	---	---
11AC20SISO	Ant1	5180	20.320	5170.000	5190.320	---	---
		5200	20.440	5189.800	5210.240	---	---
		5240	20.320	5229.920	5250.240	---	---
11AC40SISO	Ant1	5190	40.480	5169.760	5210.240	---	---
		5230	40.320	5209.840	5250.160	---	---
11AC80SISO	Ant1	5210	80.320	5170.000	5250.320	---	---

Test Graphs

11A_Ant1_5180



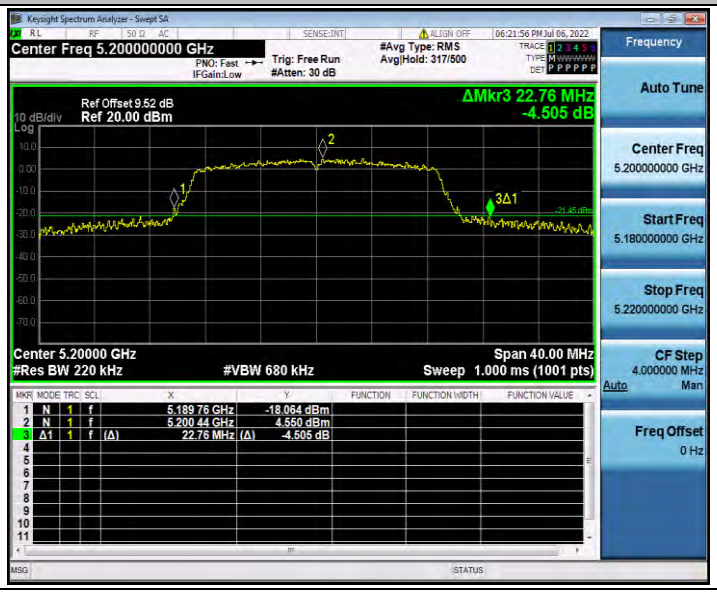
11A_Ant1_5200



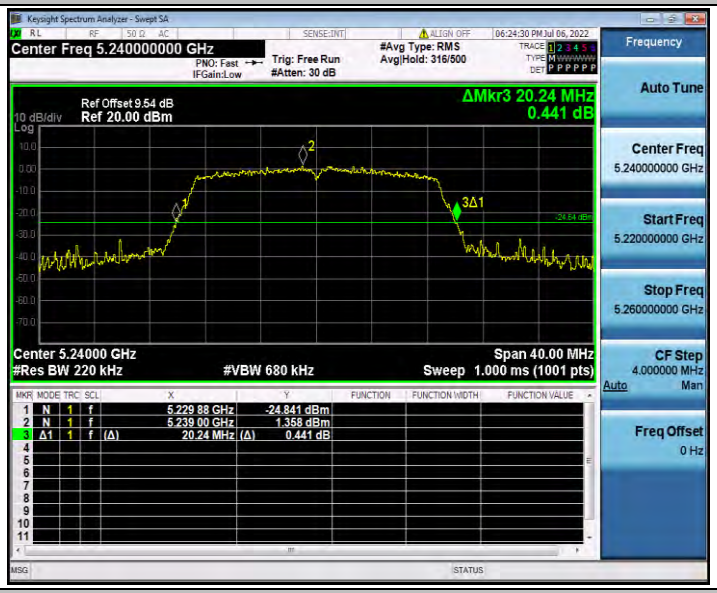
11A_Ant1_5240

11N20SISO_Ant1_5180

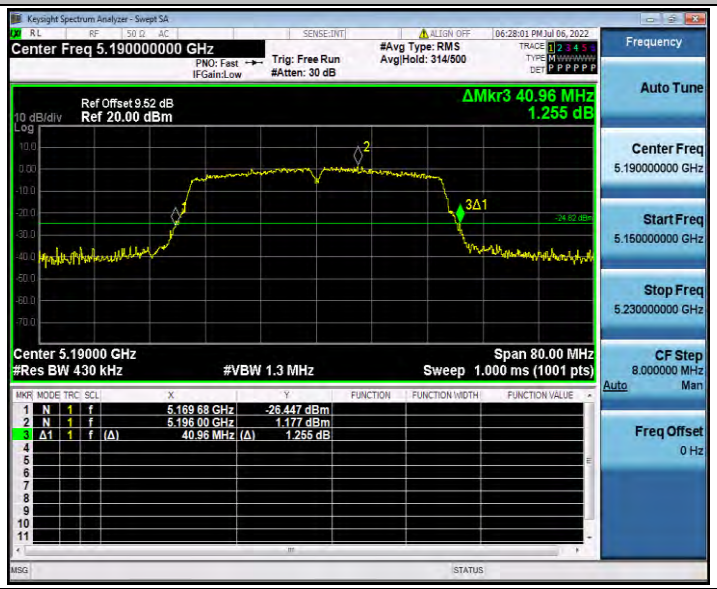
11N20SISO_Ant1_5200



11N20SISO_Ant1_5240

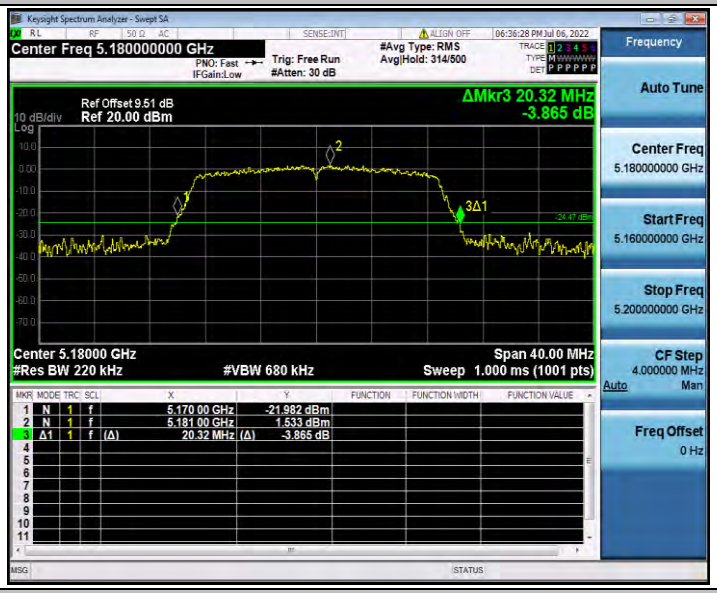


11N40SISO_Ant1_5190

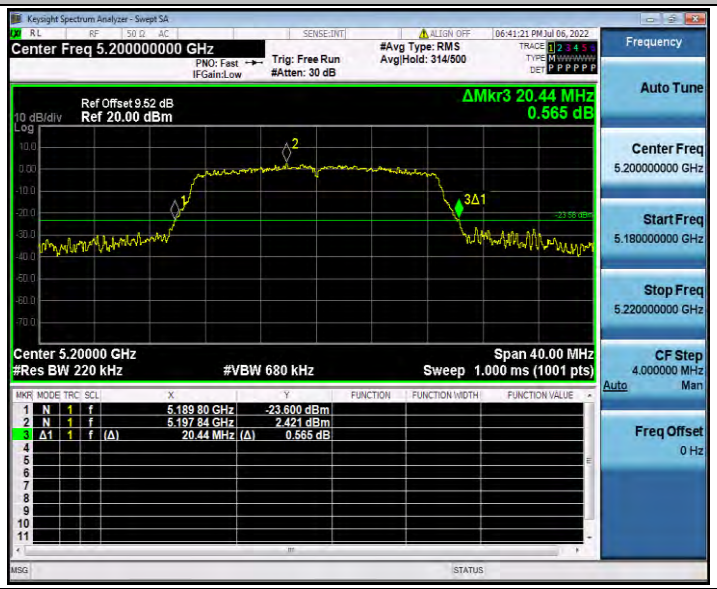


11N40SISO_Ant1_5230

11AC20SISO_Ant1_5180

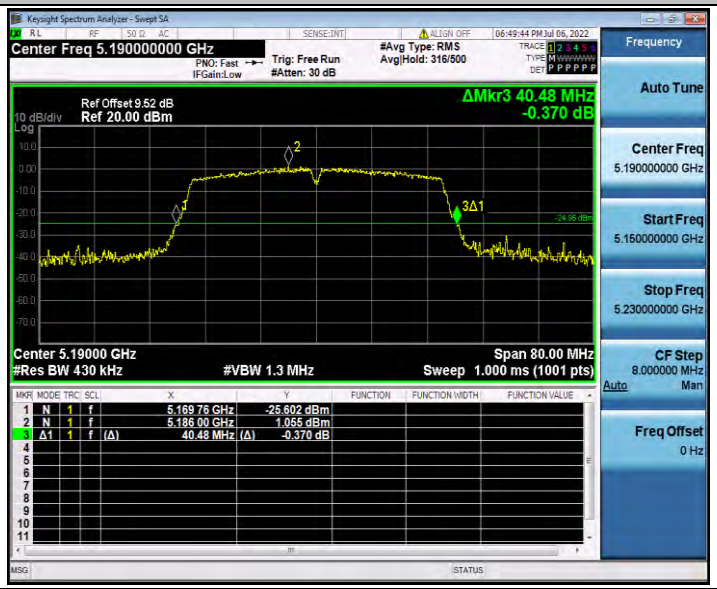


11AC20SISO_Ant1_5200



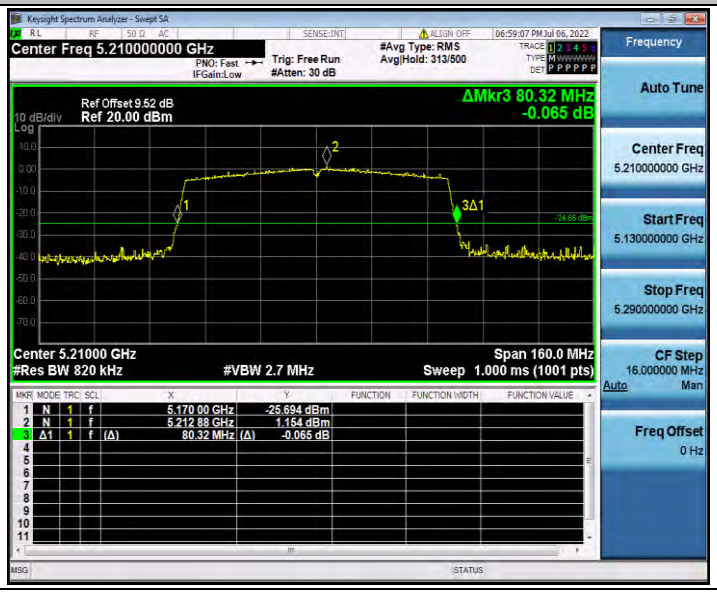
11AC20SISO_Ant1_5240

11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230

11AC80SISO_Ant1_5210



Appendix D.2: Occupied channel bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	16.973	5171.545	5188.518	---	---
		5200	16.936	5191.550	5208.486	---	---
		5240	16.965	5231.501	5248.466	---	---
11N20SISO	Ant1	5180	17.831	5171.117	5188.948	---	---
		5200	18.030	5191.031	5209.061	---	---
		5240	17.886	5231.026	5248.912	---	---
11N40SISO	Ant1	5190	36.267	5171.918	5208.185	---	---
		5230	36.251	5211.889	5248.140	---	---
11AC20SISO	Ant1	5180	17.859	5171.104	5188.963	---	---
		5200	17.842	5191.103	5208.945	---	---
		5240	17.886	5231.061	5248.947	---	---
11AC40SISO	Ant1	5190	36.335	5171.894	5208.229	---	---
		5230	36.113	5211.936	5248.049	---	---
11AC80SISO	Ant1	5210	75.081	5172.589	5247.670	---	---

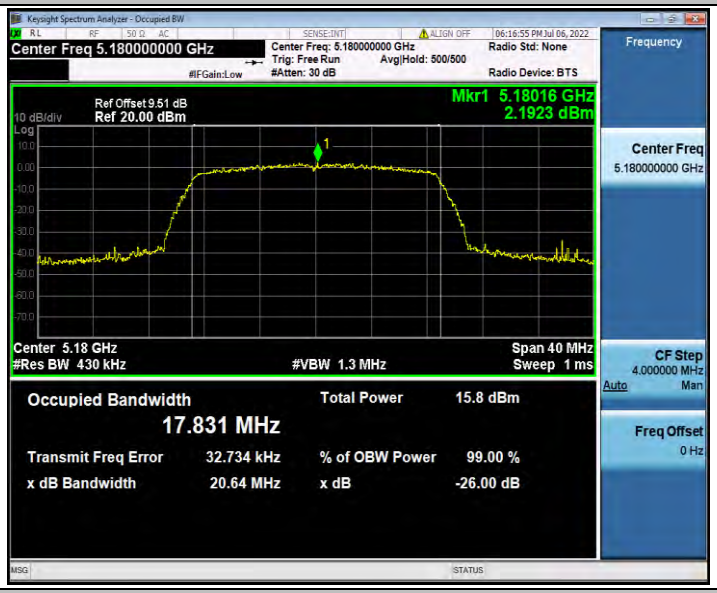
Test Graphs

11A_Ant1_5180

11A_Ant1_5200

11A_Ant1_5240

11N20SISO_Ant1_5180

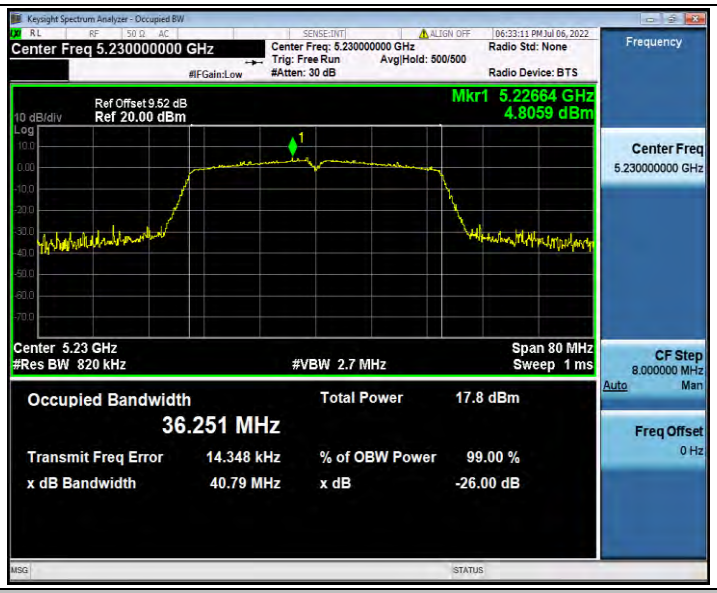


11N20SISO_Ant1_5200

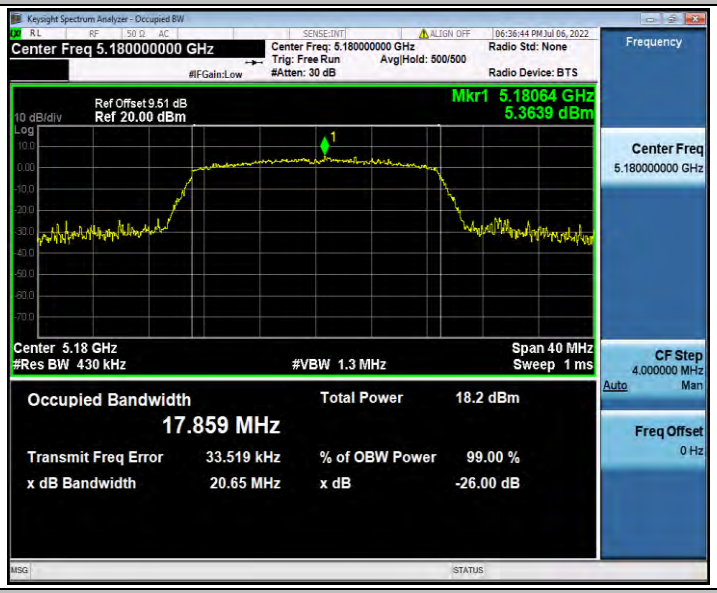
11N20SISO_Ant1_5240

11N40SISO_Ant1_5190

11N40SISO_Ant1_5230

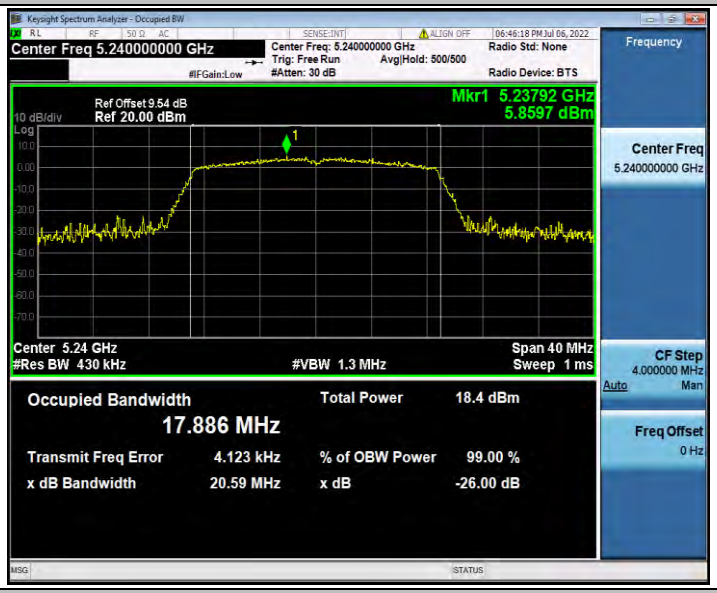


11AC20SISO_Ant1_5180



11AC20SISO_Ant1_5200

11AC20SISO_Ant1_5240



11AC40SISO_Ant1_5190

11AC40SISO_Ant1_5230

11AC80SISO_Ant1_5210

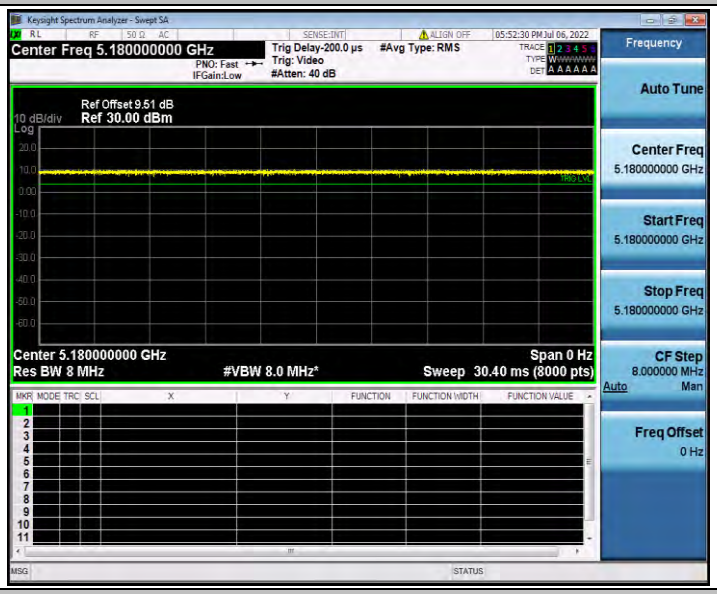
Appendix D.3: Duty Cycle

Test Result

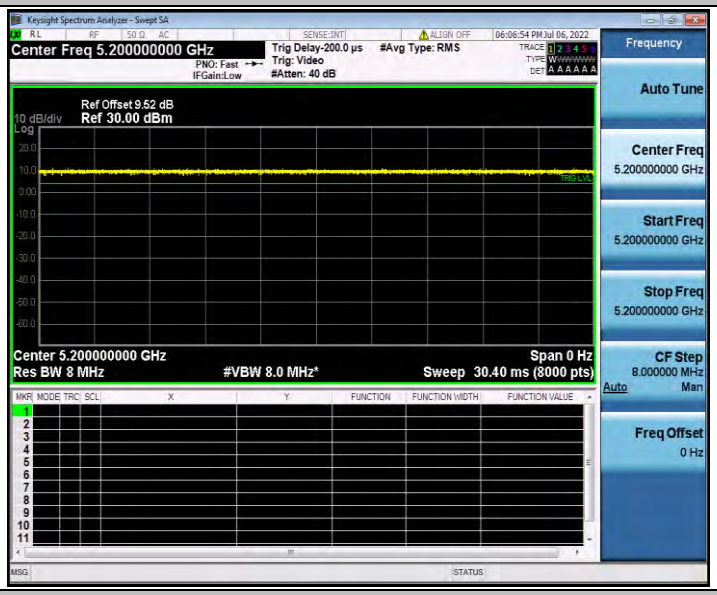
TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	DC Factor [dBm]
11A	Ant1	5180	30.00	30.00	100.00	0
		5200	30.00	30.00	100.00	0
		5240	30.00	30.00	100.00	0
11N20SISO	Ant1	5180	30.00	30.00	100.00	0
		5200	30.00	30.00	100.00	0
		5240	30.00	30.00	100.00	0
11N40SISO	Ant1	5190	30.00	30.00	100.00	0
		5230	30.00	30.00	100.00	0
11AC20SISO	Ant1	5180	30.00	30.00	100.00	0
		5200	30.00	30.00	100.00	0
		5240	30.00	30.00	100.00	0
11AC40SISO	Ant1	5190	30.00	30.00	100.00	0
		5230	30.00	30.00	100.00	0
11AC80SISO	Ant1	5210	30.00	30.00	100.00	0

Test Graphs

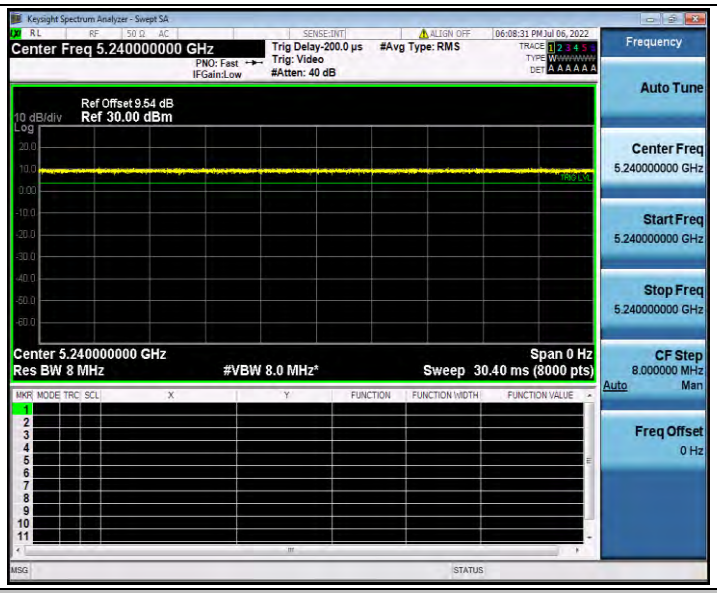
11A_Ant1_5180



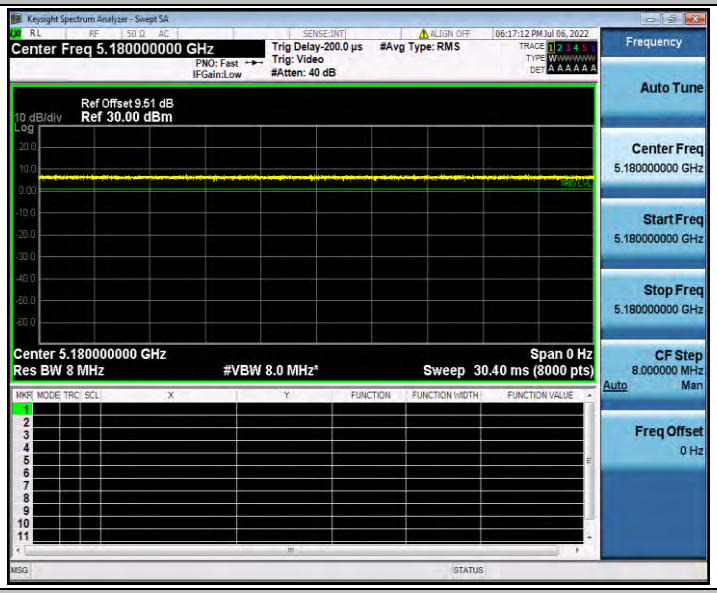
11A_Ant1_5200



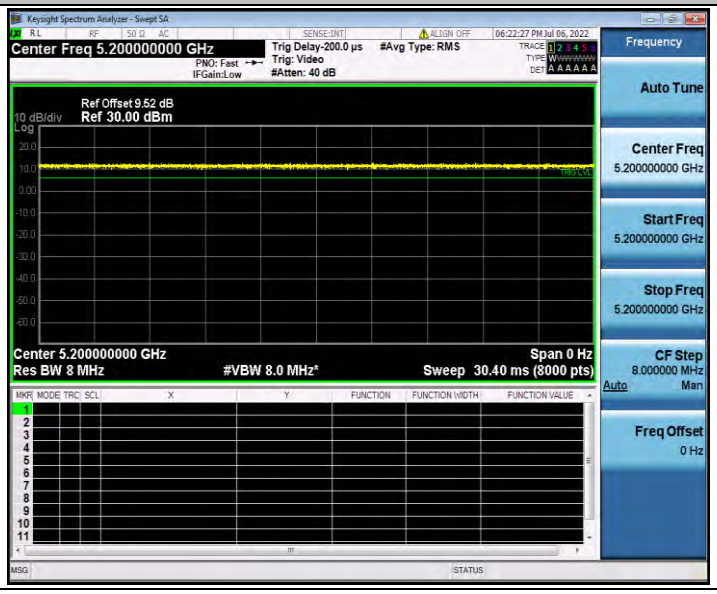
11A_Ant1_5240



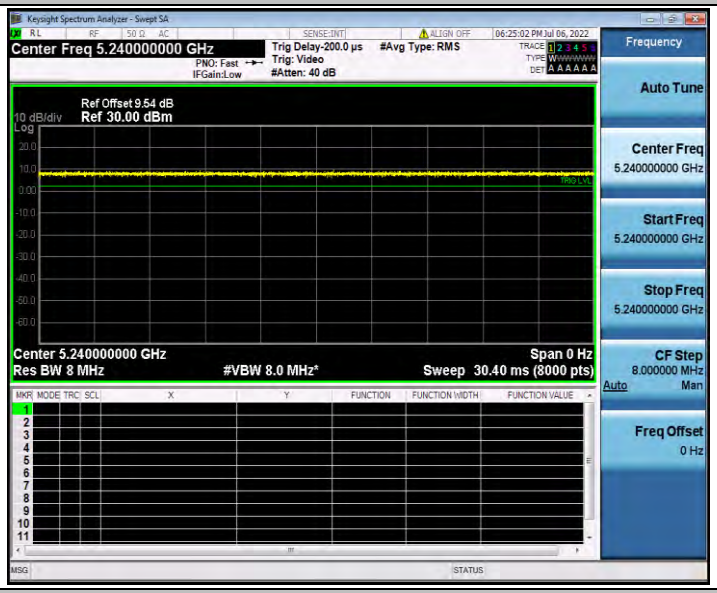
11N20SISO_Ant1_5180



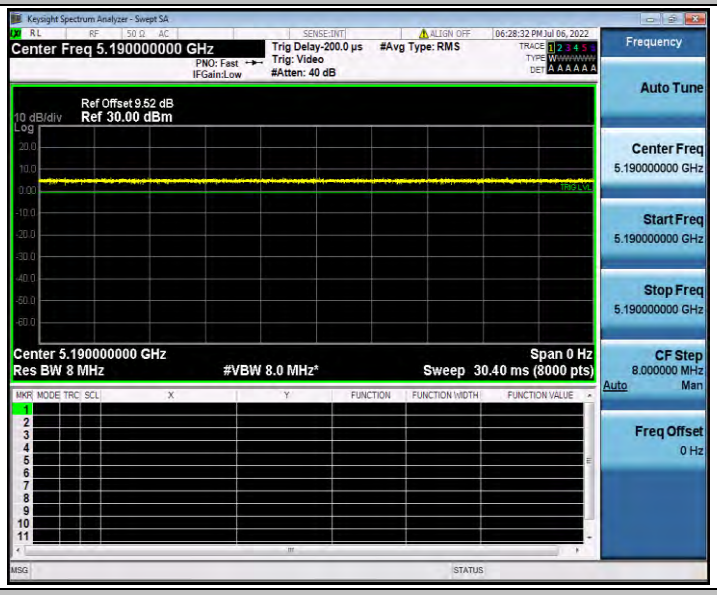
11N20SISO_Ant1_5200



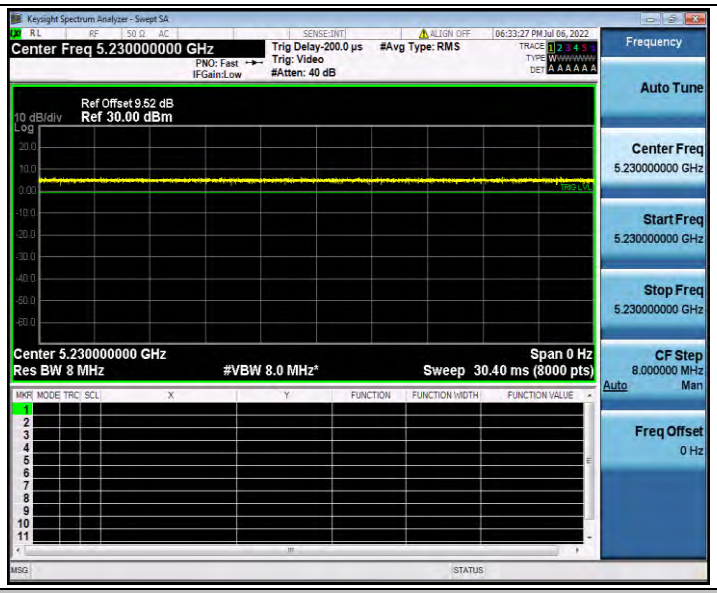
11N20SISO_Ant1_5240



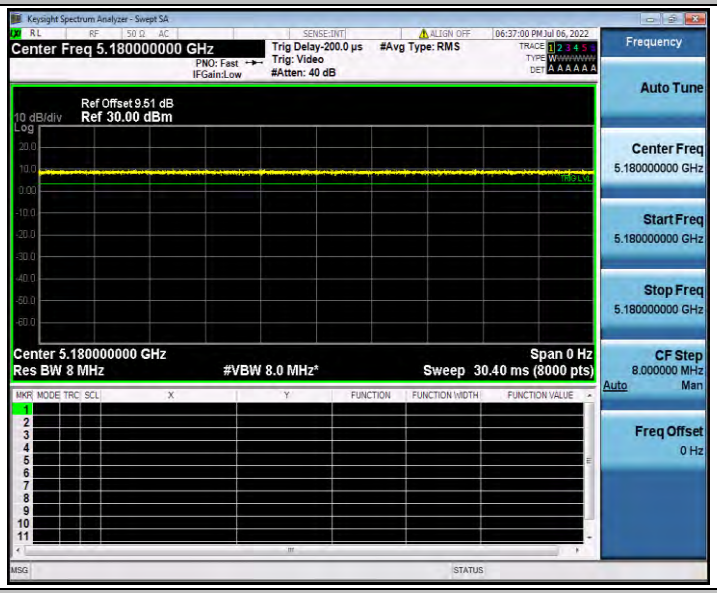
11N40SISO_Ant1_5190



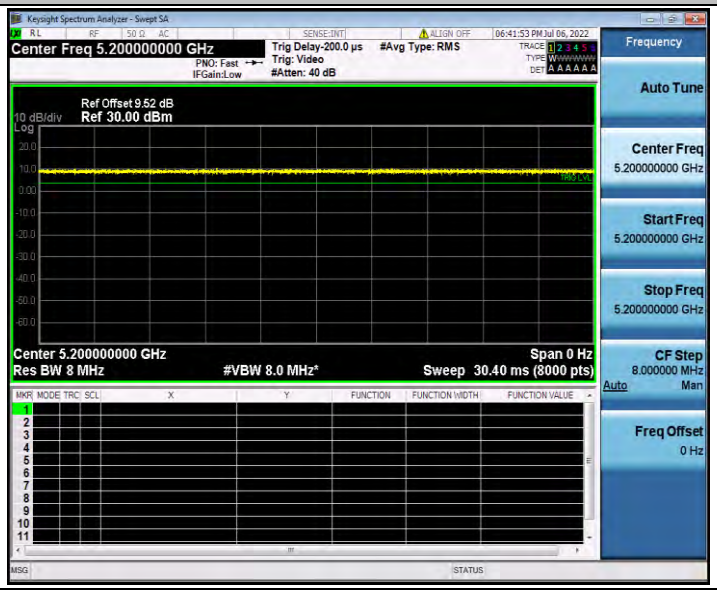
11N40SISO_Ant1_5230



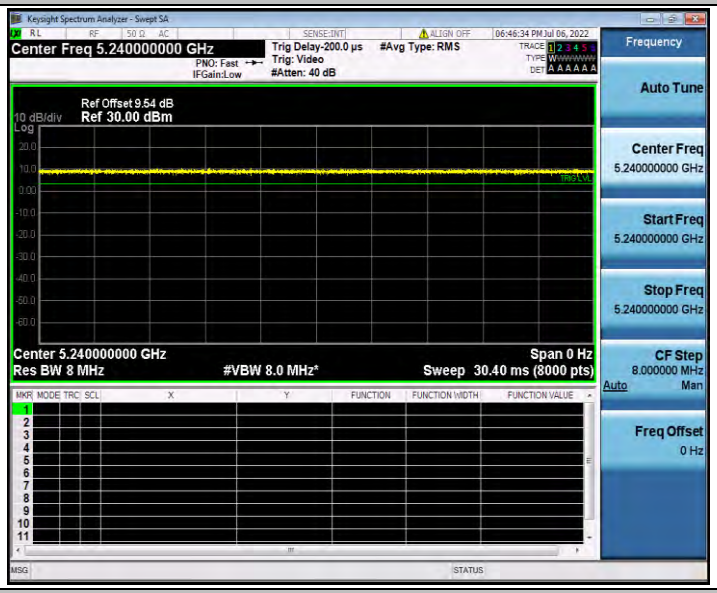
11AC20SISO_Ant1_5180



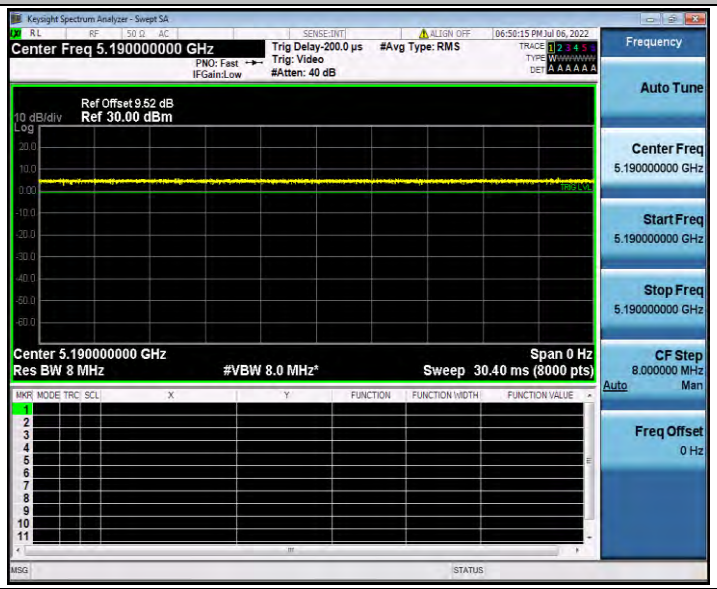
11AC20SISO_Ant1_5200



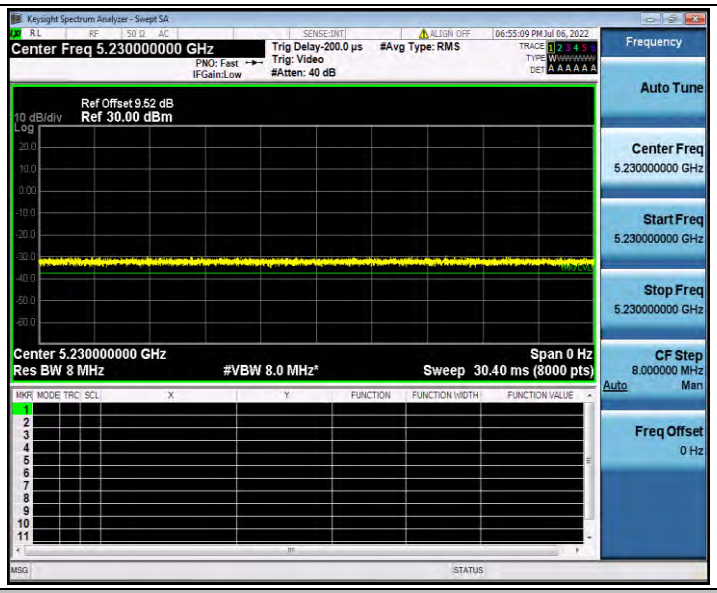
11AC20SISO_Ant1_5240



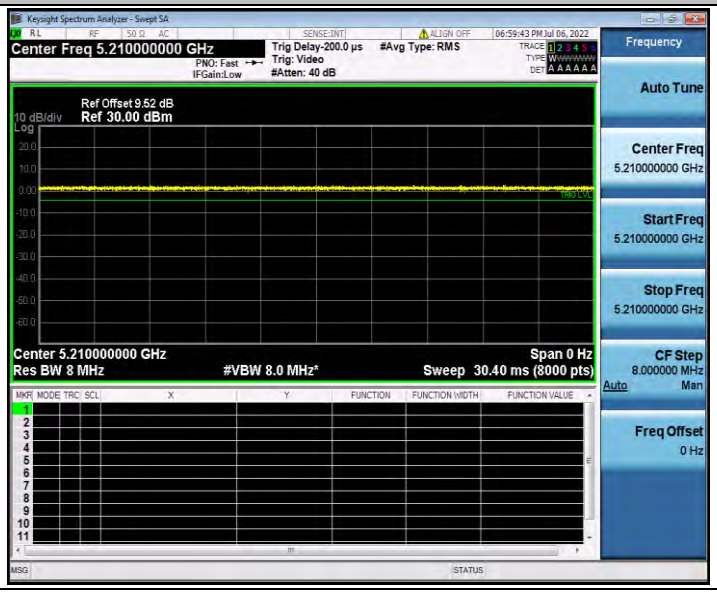
11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



11AC80SISO_Ant1_5210



Appendix D.4: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	6.80	≤11.00	PASS
		5200	7.36	≤11.00	PASS
		5240	6.94	≤11.00	PASS
11N20SISO	Ant1	5180	4.42	≤11.00	PASS
		5200	8.50	≤11.00	PASS
		5240	5.22	≤11.00	PASS
11N40SISO	Ant1	5190	2.23	≤11.00	PASS
		5230	2.23	≤11.00	PASS
11AC20SISO	Ant1	5180	6.32	≤11.00	PASS
		5200	7.07	≤11.00	PASS
		5240	6.17	≤11.00	PASS
11AC40SISO	Ant1	5190	2.23	≤11.00	PASS
		5230	2.23	≤11.00	PASS
11AC80SISO	Ant1	5210	-1.32	≤11.00	PASS

Note：1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

11A_Ant1_5180
11A_Ant1_5200
11A_Ant1_5240

11N20SISO_Ant1_5180

11N20SISO_Ant1_5200

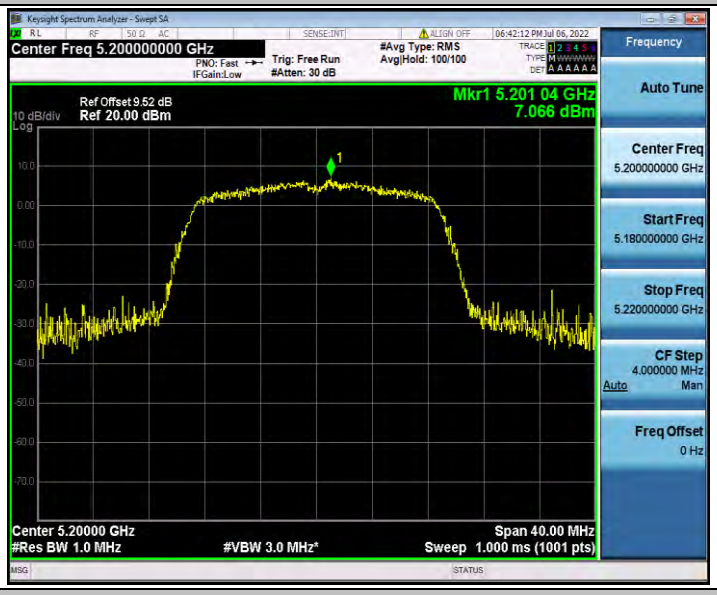
11N20SISO_Ant1_5240

11N40SISO_Ant1_5190

11N40SISO_Ant1_5230

11AC20SISO_Ant1_5180

11AC20SISO_Ant1_5200



11AC20SISO_Ant1_5240

11AC40SISO_Ant1_5190

11AC40SISO_Ant1_5230

11AC80SISO_Ant1_5210

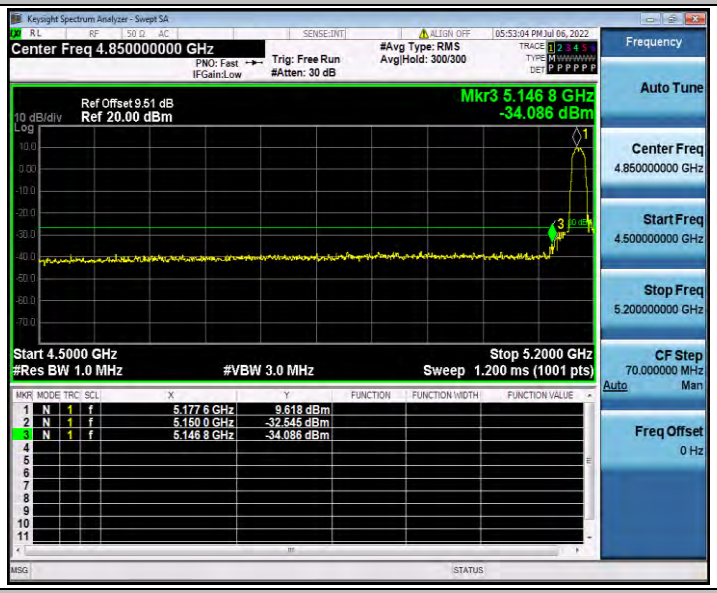
Appendix D.5: Band edge measurements

Test Result B1

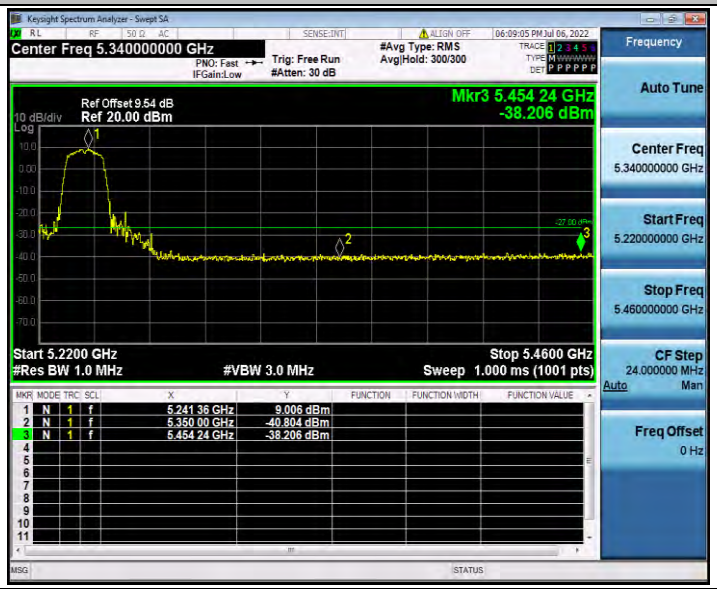
TestMode	Antenna	ChName	Frequency[MHz]	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-34.09	≤-27	PASS
		High	5240	-38.21	≤-27	PASS
11N20SISO	Ant1	Low	5180	-37.69	≤-27	PASS
		High	5240	-36.8	≤-27	PASS
11N40SISO	Ant1	Low	5190	-31.29	≤-27	PASS
		High	5230	-38.27	≤-27	PASS
11AC20SISO	Ant1	Low	5180	-30.53	≤-27	PASS
		High	5240	-37.59	≤-27	PASS
11AC40SISO	Ant1	Low	5190	-33.92	≤-27	PASS
		High	5230	-38.3	≤-27	PASS
11AC80SISO	Ant1	Low	5210	-35.96	≤-27	PASS
		High	5210	-37.56	≤-27	PASS

Test Graphs B1

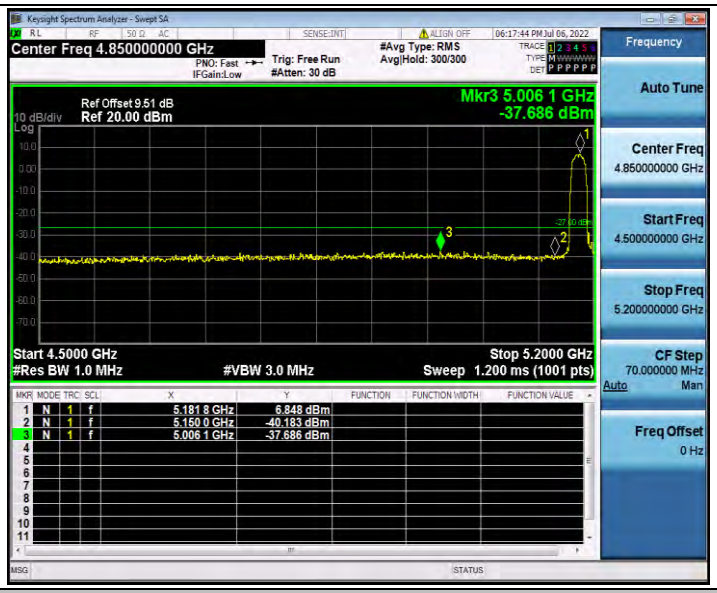
11A_Ant1_Low_5180



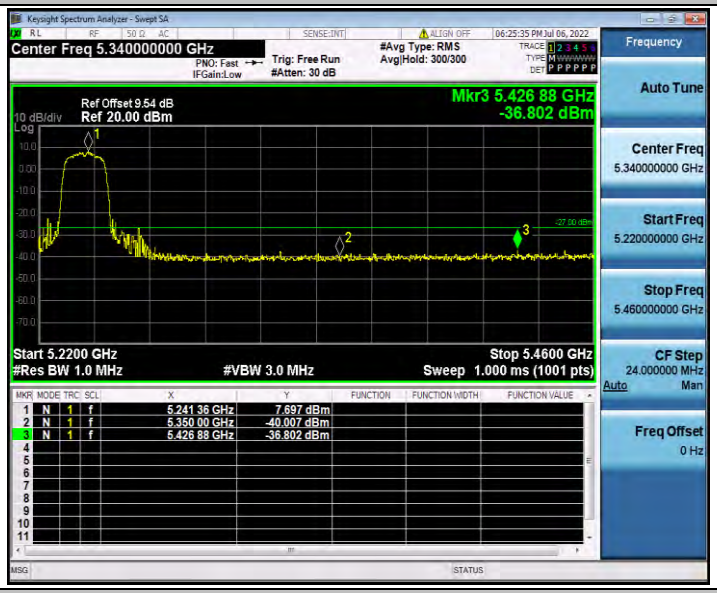
11A_Ant1_High_5240



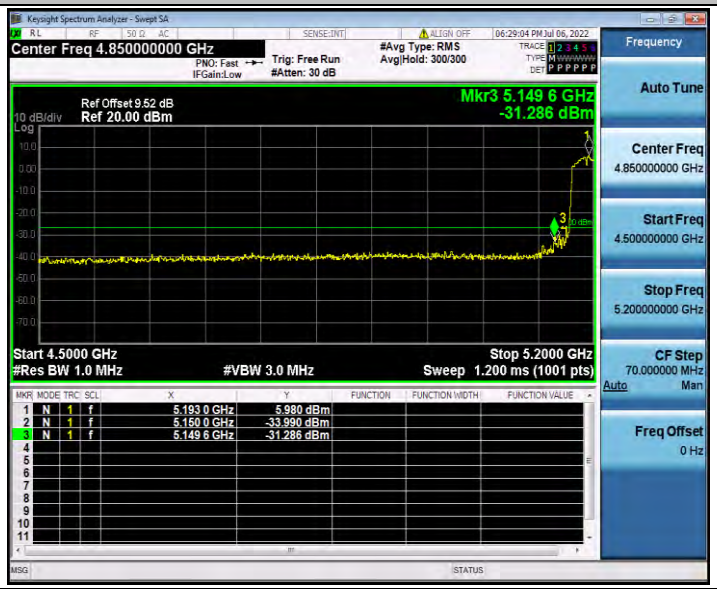
11N20SISO_Ant1_Low_5180



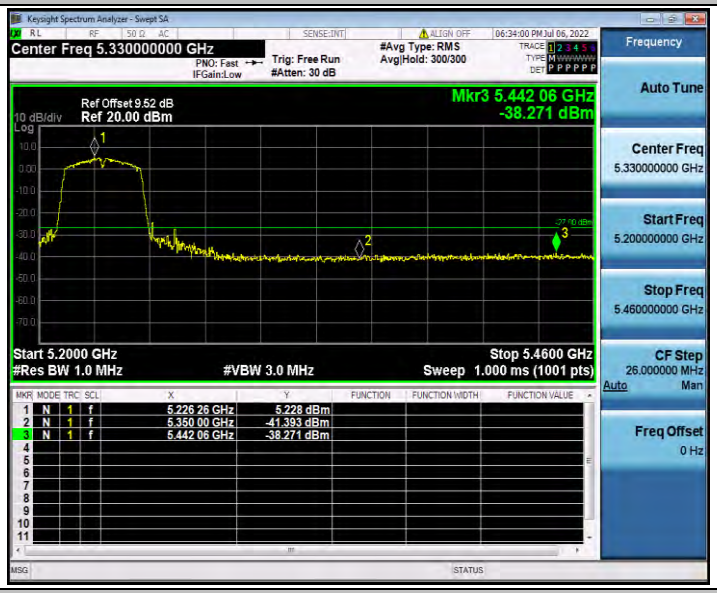
11N20SISO_Ant1_High_5240



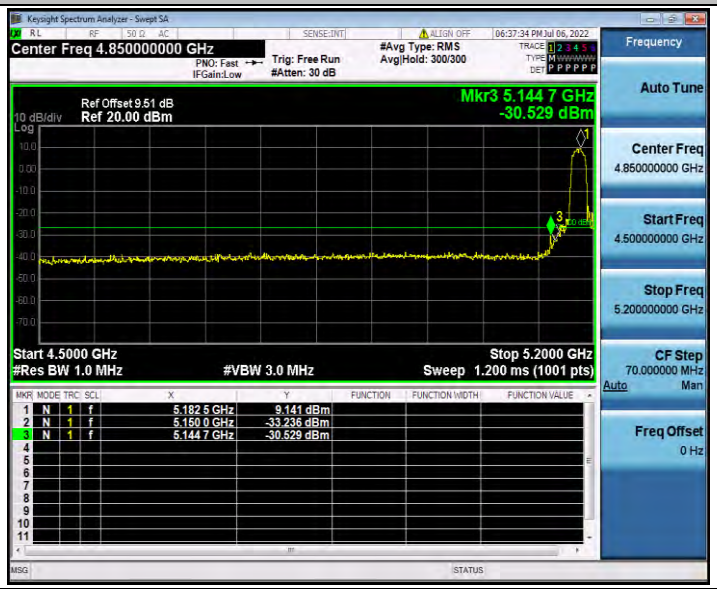
11N40SISO_Ant1_Low_5190



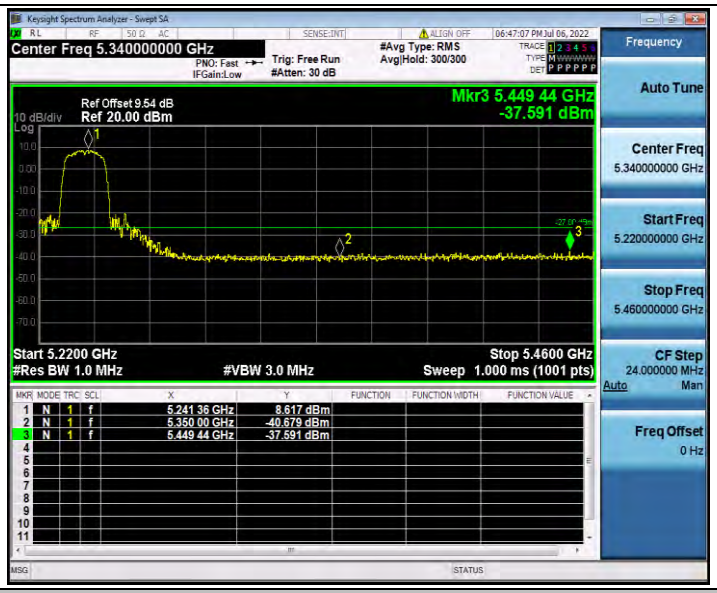
11N40SISO_Ant1_High_5230



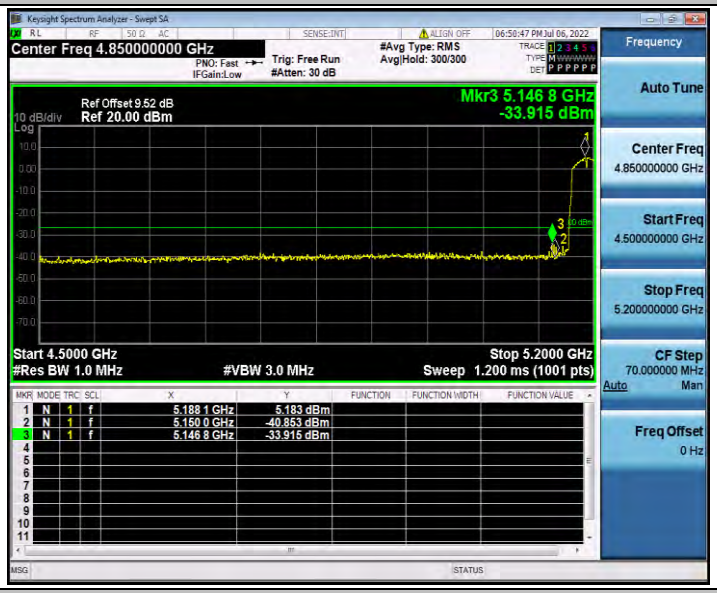
11AC20SISO_Ant1_Low_5180



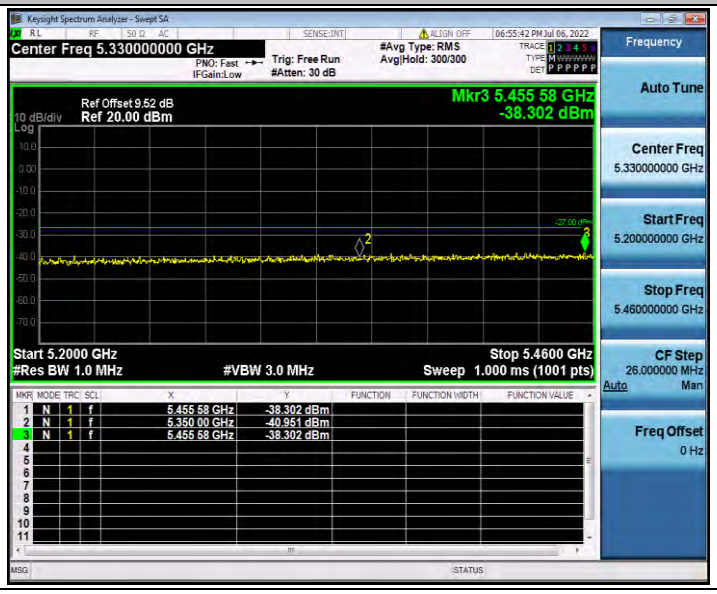
11AC20SISO_Ant1_High_5240



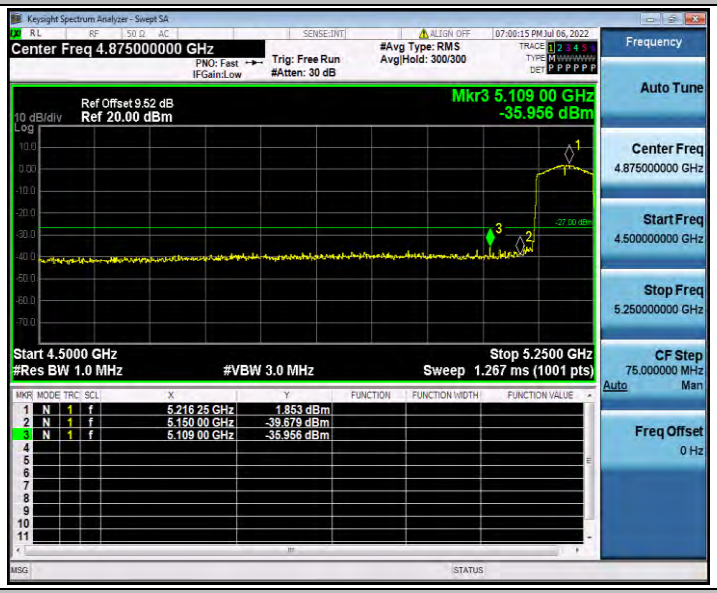
11AC40SISO_Ant1_Low_5190



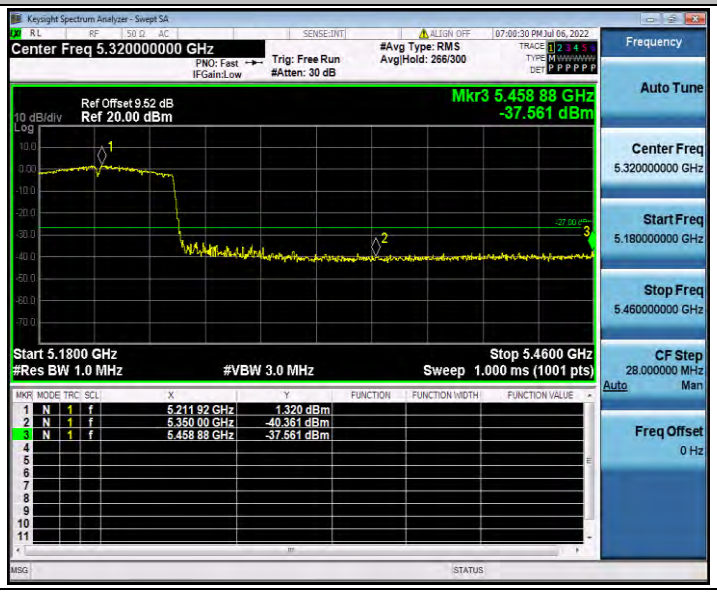
11AC40SISO_Ant1_High_5230



11AC80SISO_Ant1_Low_5210



11AC80SISO_Ant1_High_5210



Appendix D.6: Conducted Spurious Emission

Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	Max. Fre [MHz]	Max. Level [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	30~5140	5131.14	-46.14	≤-27	PASS
			5360~40000	24890.1	-37.9	≤-27	PASS
		5200	30~5140	5140	-45.99	≤-27	PASS
			5360~40000	24257.49	-37.94	≤-27	PASS
		5240	30~5140	833.29	-43.76	≤-27	PASS
			5360~40000	24277.69	-37.33	≤-27	PASS
11N20SISO	Ant1	5180	30~5140	4952.97	-45.74	≤-27	PASS
			5360~40000	26680.45	-37.56	≤-27	PASS
		5200	30~5140	5139.66	-43.35	≤-27	PASS
			5360~40000	15589.95	-36.18	≤-27	PASS
		5240	30~5140	5125.01	-47.32	≤-27	PASS
			5360~40000	25666.98	-37.94	≤-27	PASS
11N40SISO	Ant1	5190	30~5140	5128.25	-43.72	≤-27	PASS
			5360~40000	23516.68	-38.05	≤-27	PASS
		5230	30~5140	833.46	-41.38	≤-27	PASS
			5360~40000	26553.49	-38.06	≤-27	PASS
11AC20SISO	Ant1	5180	30~5140	5137.62	-44.41	≤-27	PASS
			5360~40000	26832.65	-37.91	≤-27	PASS
		5200	30~5140	39.37	-44.5	≤-27	PASS
			5360~40000	24191.13	-37.95	≤-27	PASS
		5240	30~5140	39.54	-44.64	≤-27	PASS
			5360~40000	26992.79	-38.23	≤-27	PASS
11AC40SISO	Ant1	5190	30~5140	908.58	-38.24	≤-27	PASS
			5360~40000	26031.97	-37	≤-27	PASS
		5230	30~5140	2621.45	-46.09	≤-27	PASS
			5360~40000	26691.99	-38.16	≤-27	PASS
11AC80SISO	Ant1	5210	30~5140	5113.43	-41.87	≤-27	PASS
			5360~40000	24822.29	-37.19	≤-27	PASS

Test Graphs

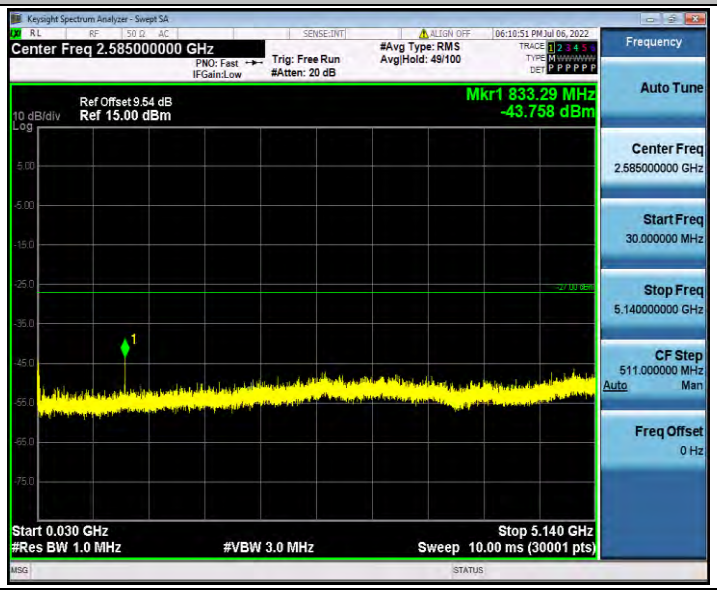
11A_Ant1_5180_30~5140

11A_Ant1_5180_5360~40000

11A_Ant1_5200_30~5140

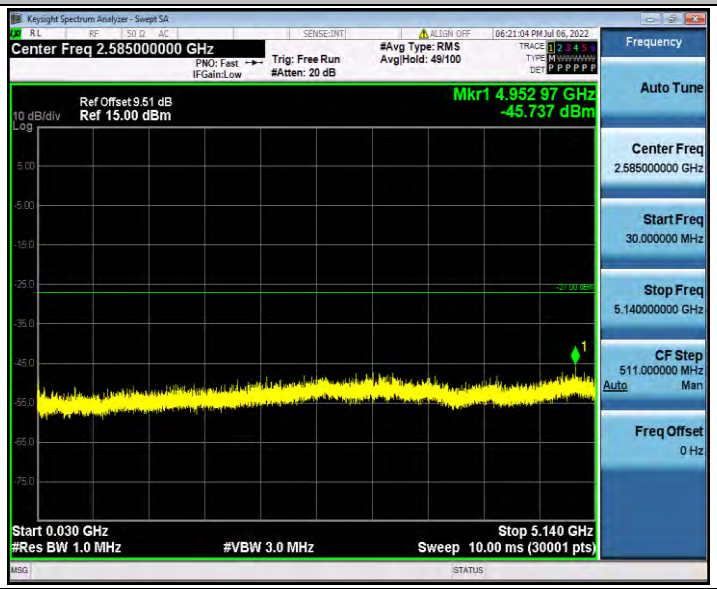
11A_Ant1_5200_5360~40000

11A_Ant1_5240_30~5140



11A_Ant1_5240_5360~40000

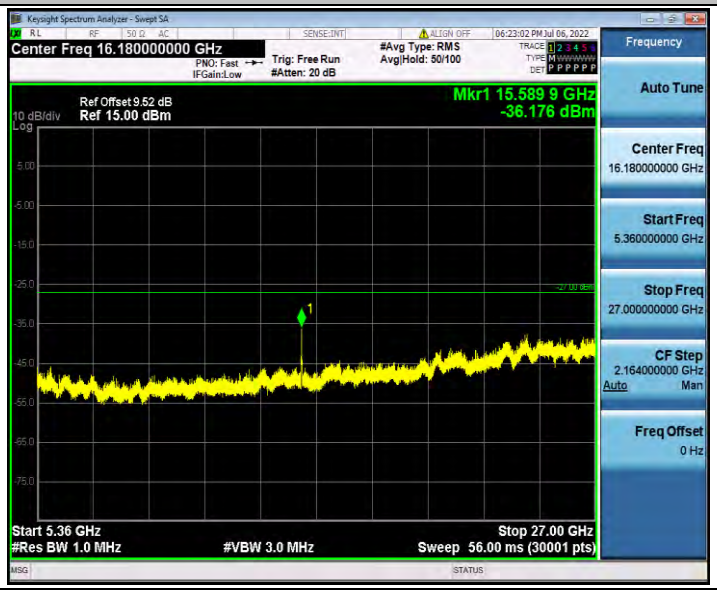
11N20SISO_Ant1_5180_30~5140



11N20SISO_Ant1_5180_5360~40000

11N20SISO_Ant1_5200_30~5140

11N20SISO_Ant1_5200_5360~40000



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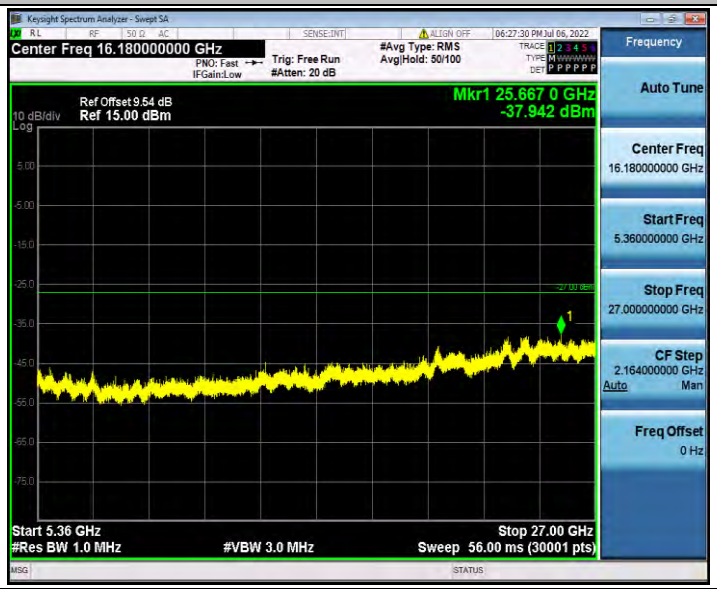
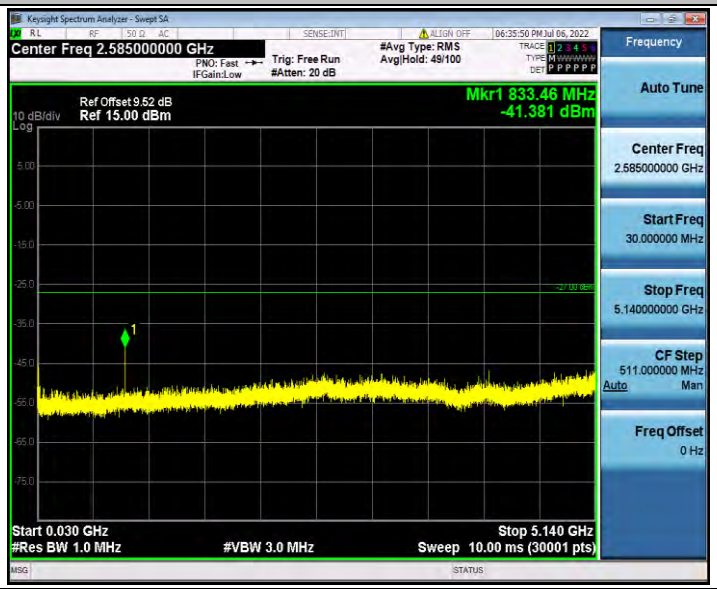
11N20SISO_Ant1_5240_5360~40000



11N40SISO_Ant1_5190_30~5140

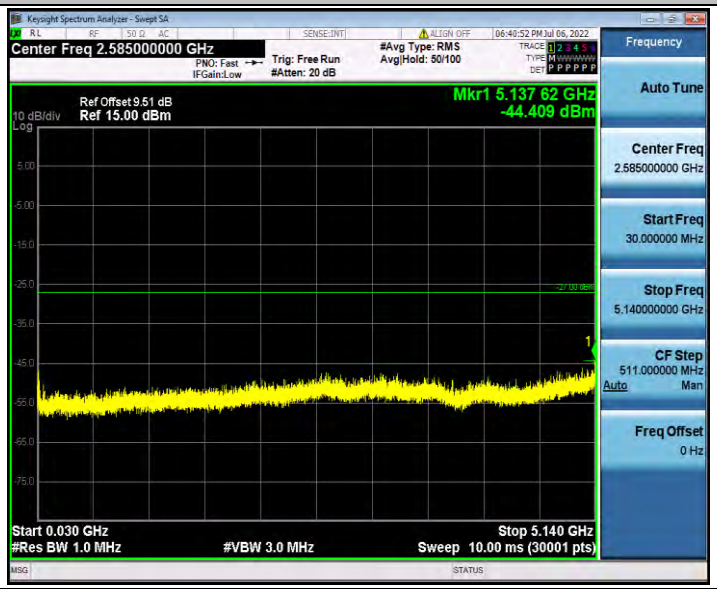
11N40SISO_Ant1_5190_5360~40000

11N40SISO_Ant1_5230_30~5140



11N40SISO_Ant1_5230_5360~40000

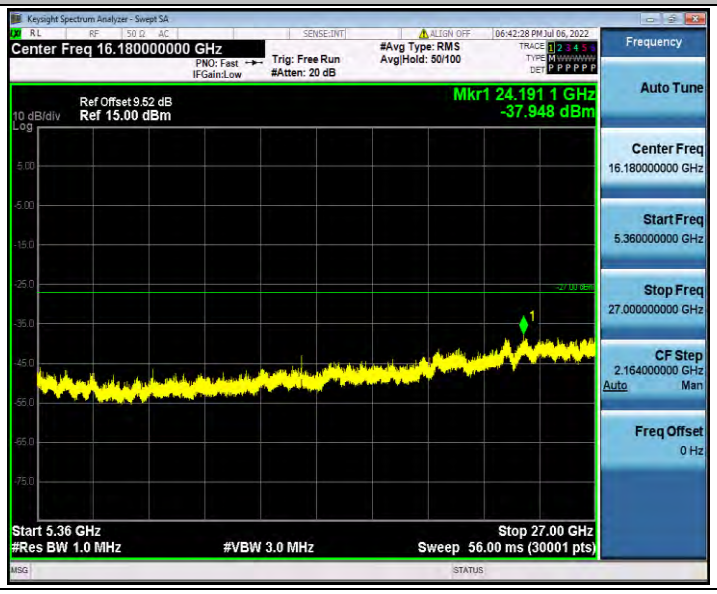
11AC20SISO_Ant1_5180_30~5140



11AC20SISO_Ant1_5180_5360~40000

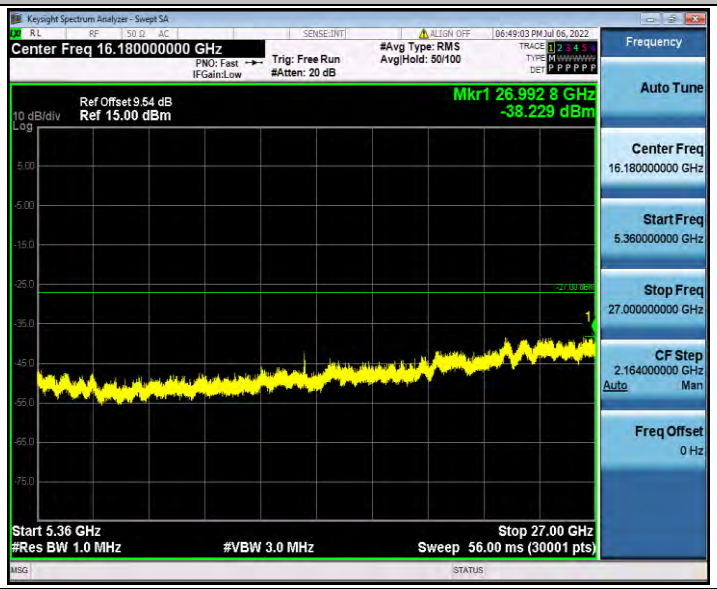
11AC20SISO_Ant1_5200_30~5140

11AC20SISO_Ant1_5200_5360~40000



11AC20SISO_Ant1_5240_30~5140

11AC20SISO_Ant1_5240_5360~40000



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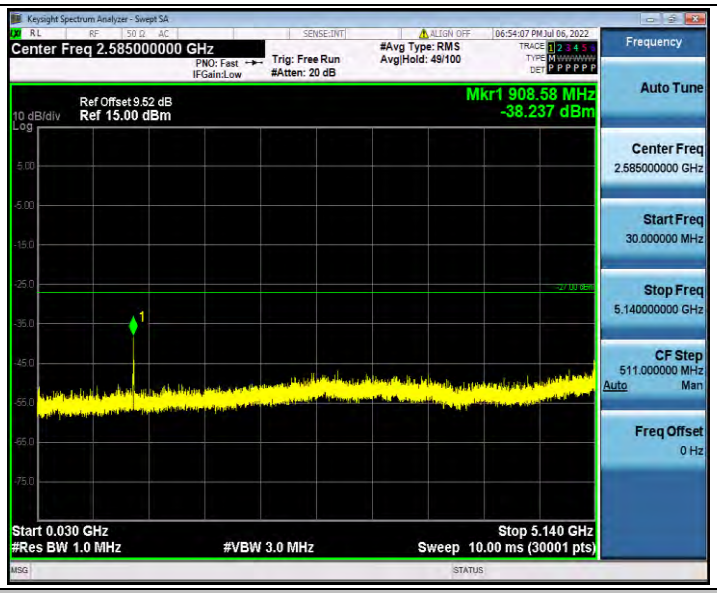
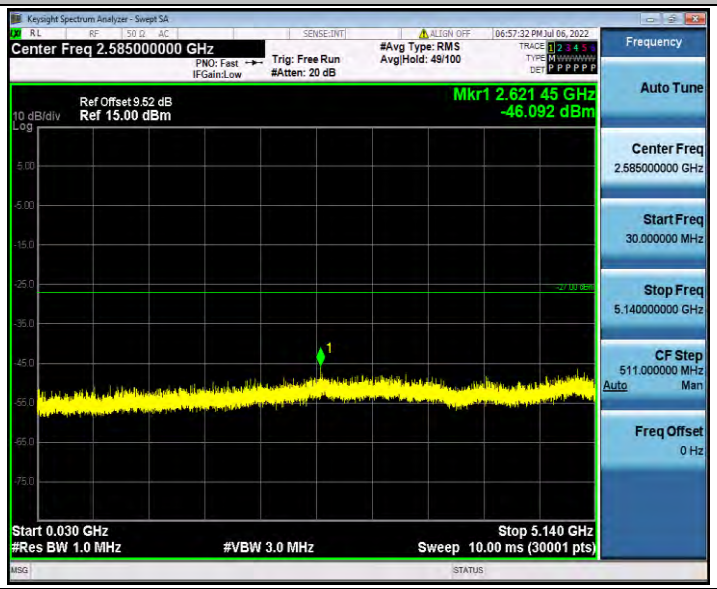


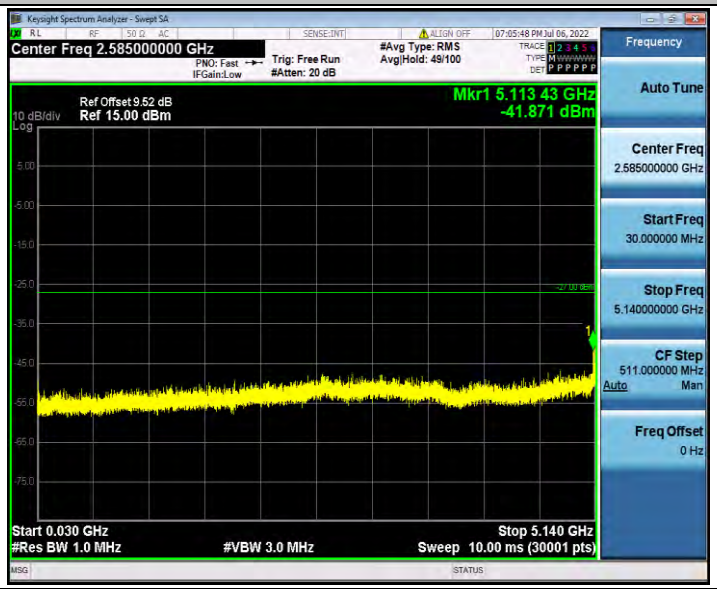
11AC40SISO_Ant1_5190_5360~40000

11AC40SISO_Ant1_5230_30~5140



11AC40SISO_Ant1_5230_5360~40000

11AC80SISO_Ant1_5210_30~5140



11AC80SISO_Ant1_5210_5360~40000

Keysight Spectrum Analyzer - Swept SA
RL
RF
50 Ω AC
SENSE:INT
ALIGN OFF
07:05:57 PM Jul 06, 2022
Center Freq 16.180000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
#Avg Type: RMS
Avg|Hold: 50/100
TRACE 1 2 3 4 5 6
TYPE M
DET P P P P P
Frequency
Auto Tune
Center Freq
16.180000000 GHz
Start Freq
5.360000000 GHz
Stop Freq
27.000000000 GHz
CF Step
2.164000000 GHz
Auto
Man
Freq Offset
0 Hz
Mkr1 24.822 3 GHz
-37.192 dBm
Ref Offset 9.52 dB
10 dB/div
Ref 15.00 dBm
Log
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
-75.0
1
Start 5.36 GHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 27.00 GHz
Sweep 56.00 ms (30001 pts)
MSG
STATUS