Case No. : GTS20220323004-1-4	
Ambient Condition: 26 ℃, 47 %RH,	
Test Date: 2022.7.6	**Test Engineer:** Jenny zeng

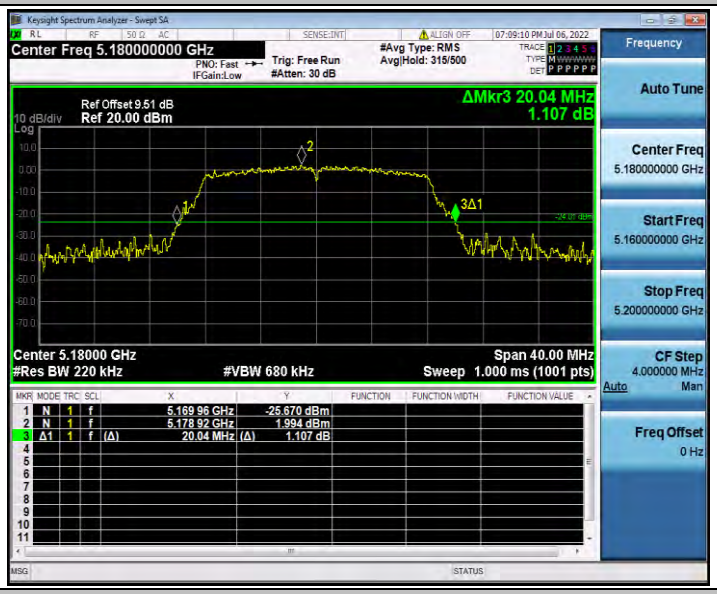
Appendix D.1: Emission Bandwidth

Test Result

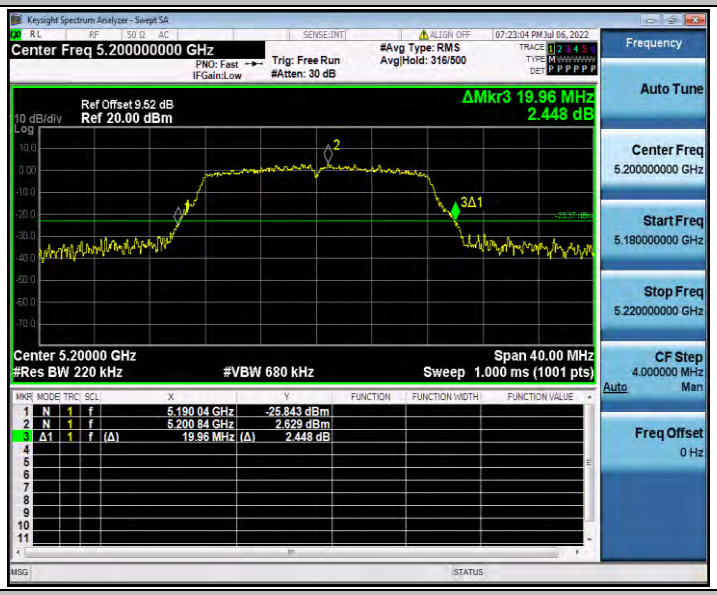
TestMode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	20.040	5169.960	5190.000	---	---
		5200	19.960	5190.040	5210.000	---	---
		5240	19.760	5230.120	5249.880	---	---
11N20SISO	Ant1	5180	20.320	5169.760	5190.080	---	---
		5200	21.440	5189.120	5210.560	---	---
		5240	22.080	5228.920	5251.000	---	---
11N40SISO	Ant1	5190	40.080	5170.160	5210.240	---	---
		5230	40.480	5209.680	5250.160	---	---
11AC20SISO	Ant1	5180	20.160	5169.920	5190.080	---	---
		5200	20.240	5189.840	5210.080	---	---
		5240	20.320	5229.800	5250.120	---	---
11AC40SISO	Ant1	5190	40.160	5170.000	5210.160	---	---
		5230	40.240	5209.840	5250.080	---	---
11AC80SISO	Ant1	5210	80.960	5169.680	5250.640	---	---

Test Graphs

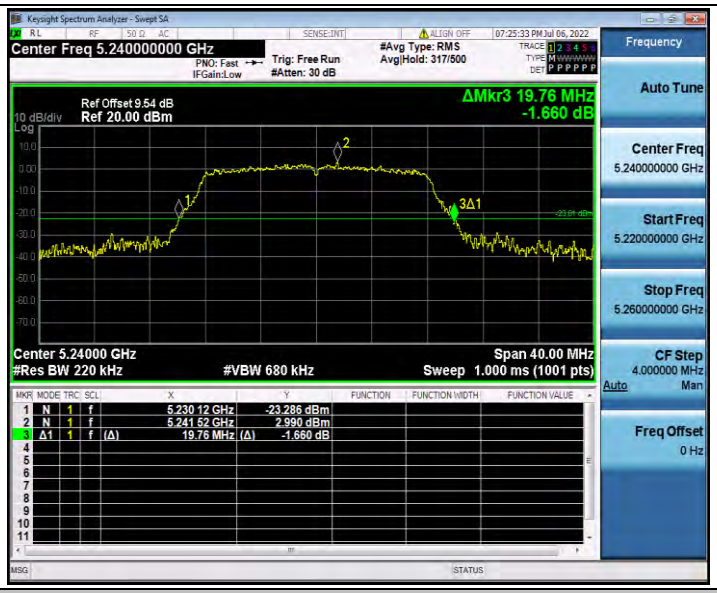
11A_Ant1_5180



11A_Ant1_5200



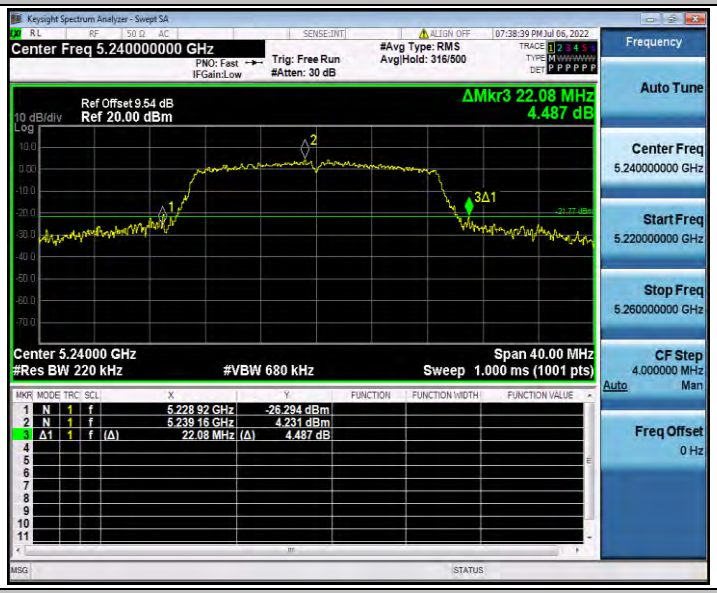
11A_Ant1_5240



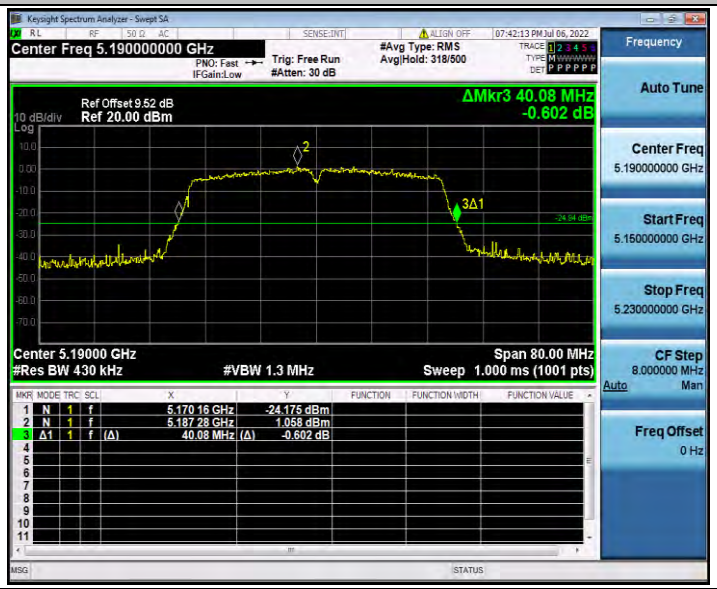
11N20SISO_Ant1_5180

11N20SISO_Ant1_5200

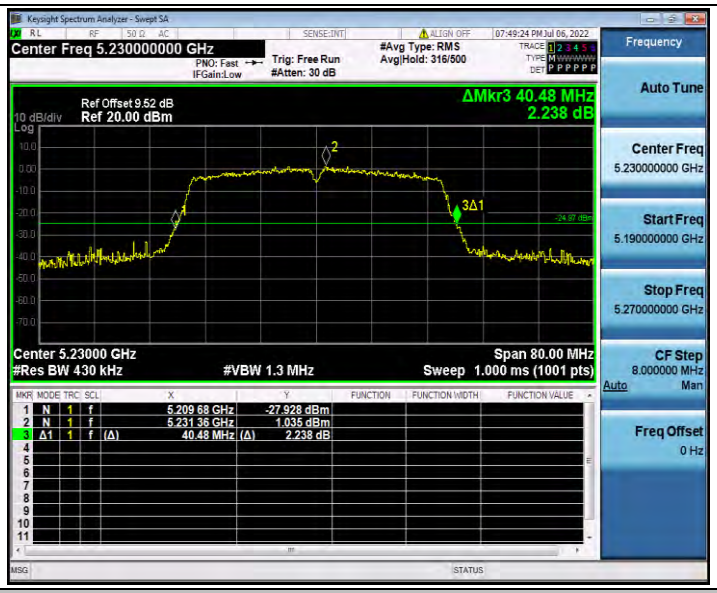
11N20SISO_Ant1_5240



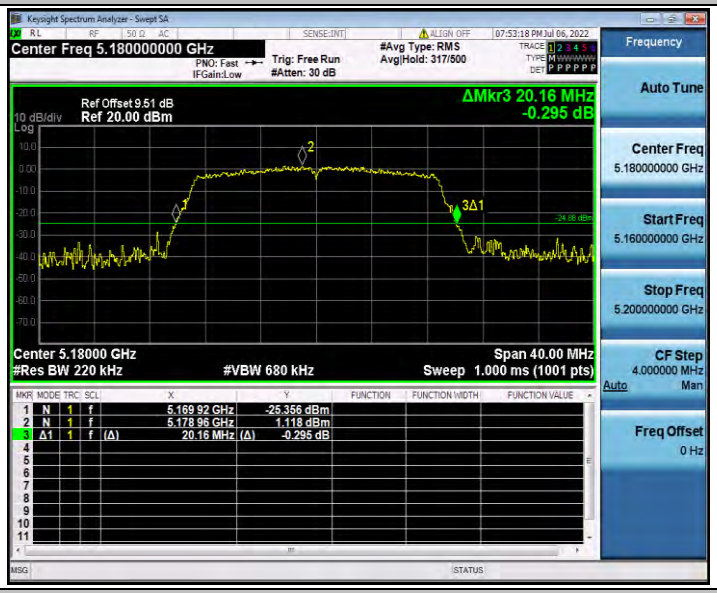
11N40SISO_Ant1_5190



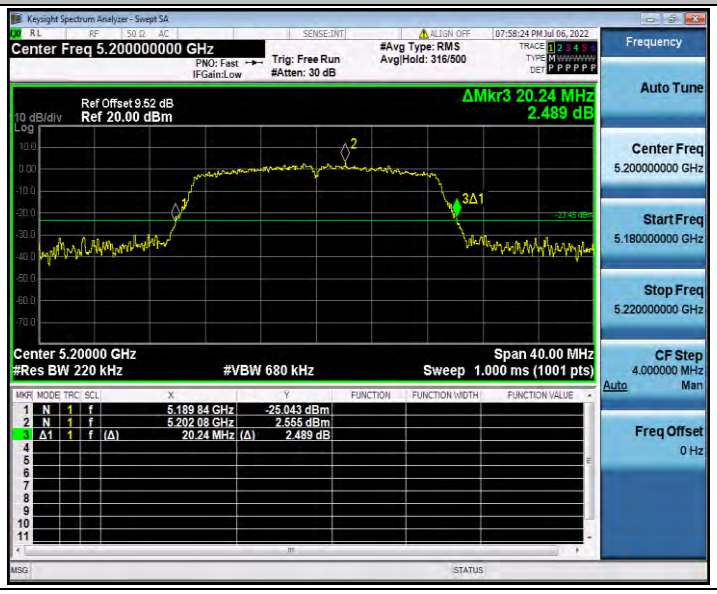
11N40SISO_Ant1_5230



11AC20SISO_Ant1_5180



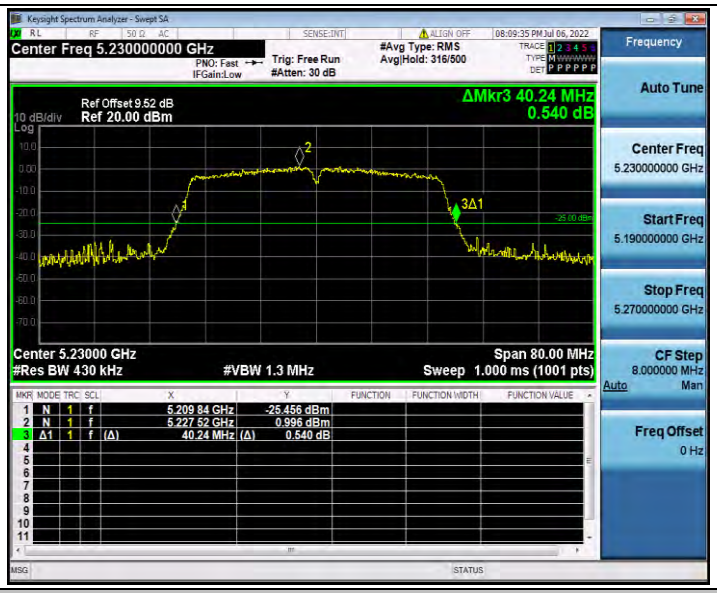
11AC20SISO_Ant1_5200



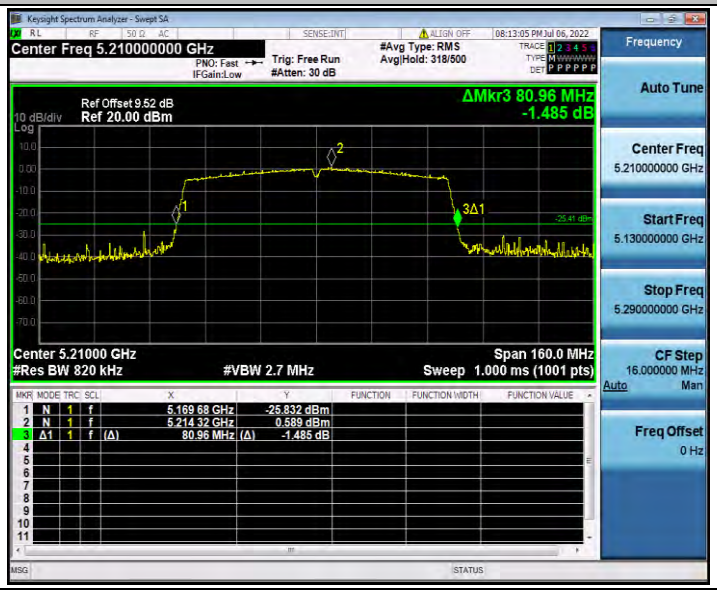
11AC20SISO_Ant1_5240

11AC40SISO_Ant1_5190

11AC40SISO_Ant1_5230



11AC80SISO_Ant1_5210



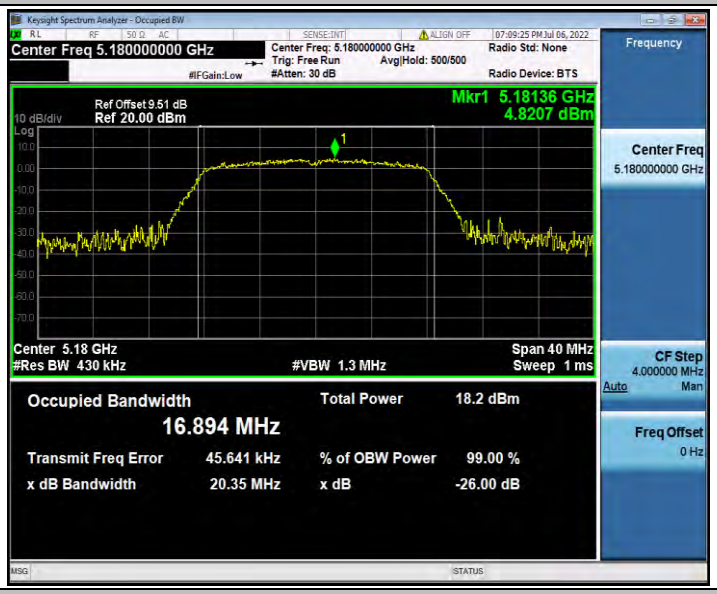
Appendix D.2: Occupied channel bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	16.894	5171.599	5188.493	---	---
		5200	16.886	5191.595	5208.481	---	---
		5240	16.921	5231.550	5248.471	---	---
11N20SISO	Ant1	5180	17.906	5171.065	5188.971	---	---
		5200	17.946	5191.032	5208.978	---	---
		5240	17.981	5231.016	5248.997	---	---
11N40SISO	Ant1	5190	36.316	5171.905	5208.221	---	---
		5230	36.322	5211.808	5248.130	---	---
11AC20SISO	Ant1	5180	17.845	5171.101	5188.946	---	---
		5200	17.864	5191.061	5208.925	---	---
		5240	17.873	5231.015	5248.888	---	---
11AC40SISO	Ant1	5190	36.229	5171.931	5208.160	---	---
		5230	36.250	5211.861	5248.111	---	---
11AC80SISO	Ant1	5210	75.069	5172.570	5247.639	---	---

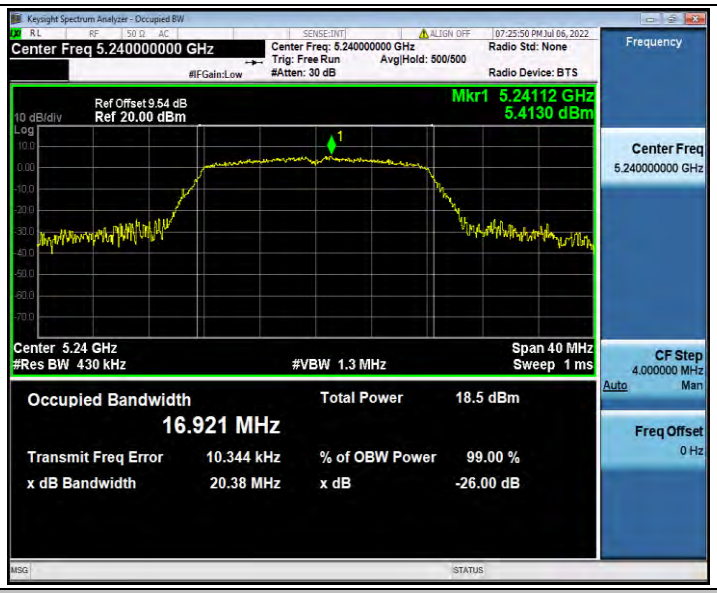
Test Graphs

11A_Ant1_5180

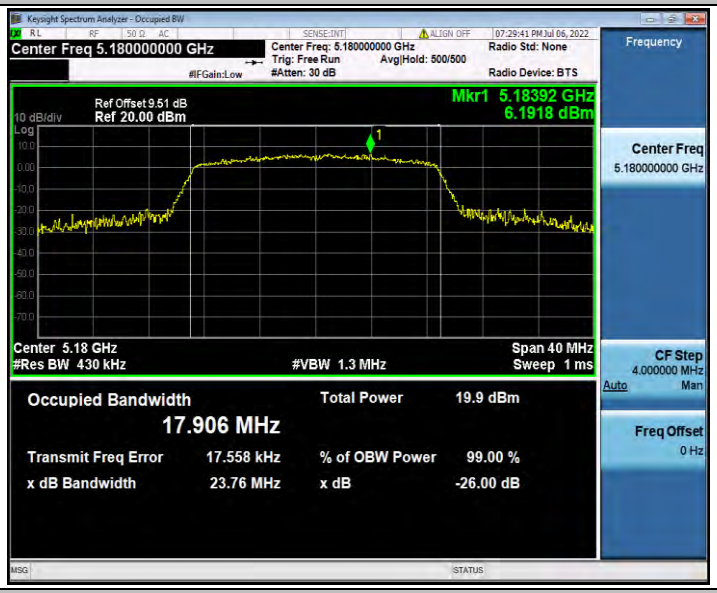


11A_Ant1_5200

11A_Ant1_5240



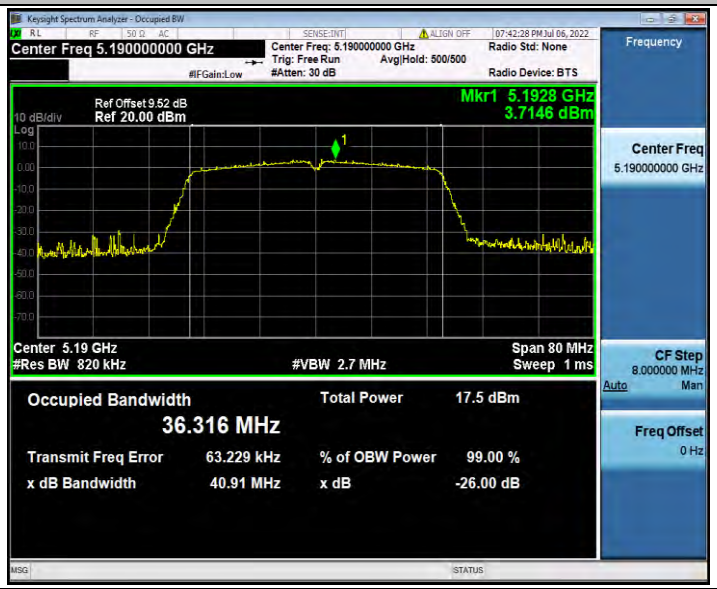
11N20SISO_Ant1_5180



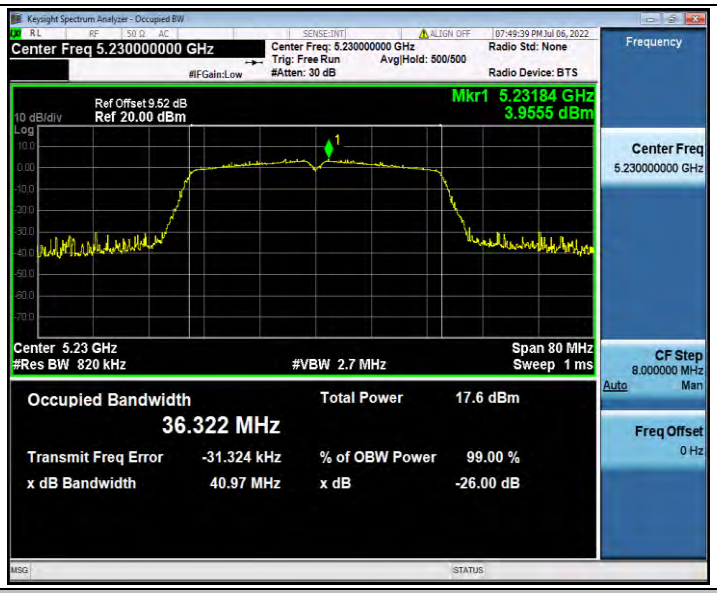
11N20SISO_Ant1_5200

11N20SISO_Ant1_5240

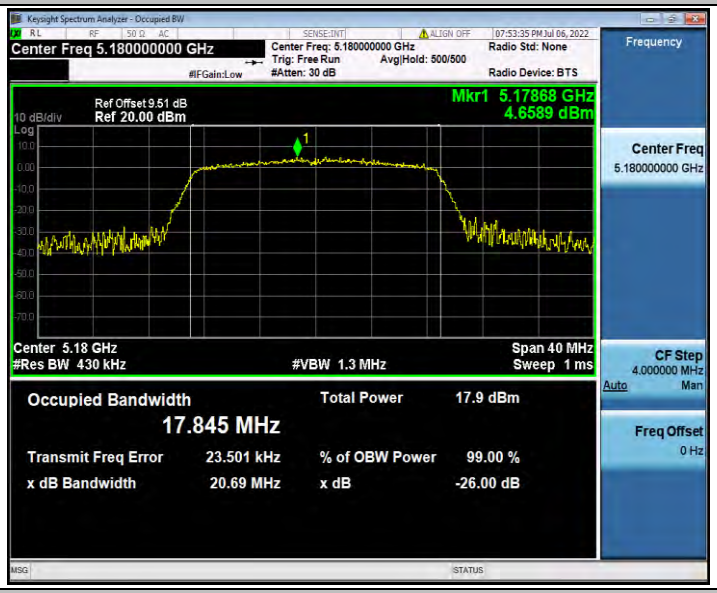
11N40SISO_Ant1_5190



11N40SISO_Ant1_5230

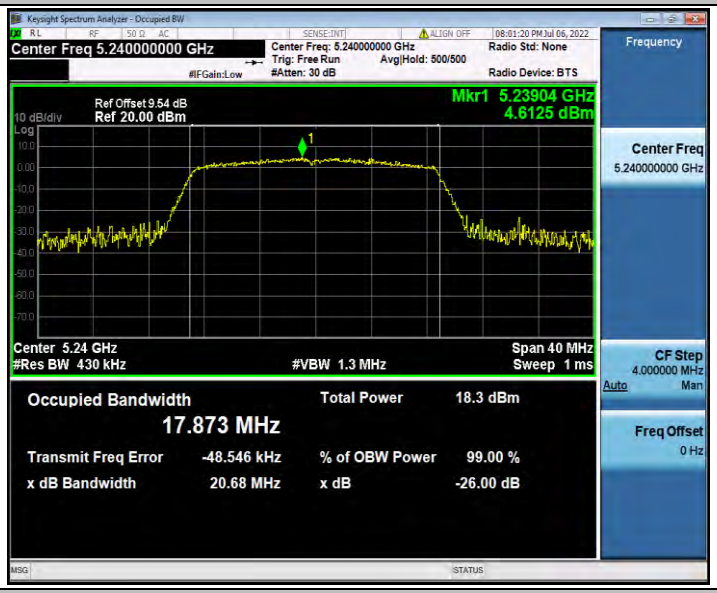


11AC20SISO_Ant1_5180

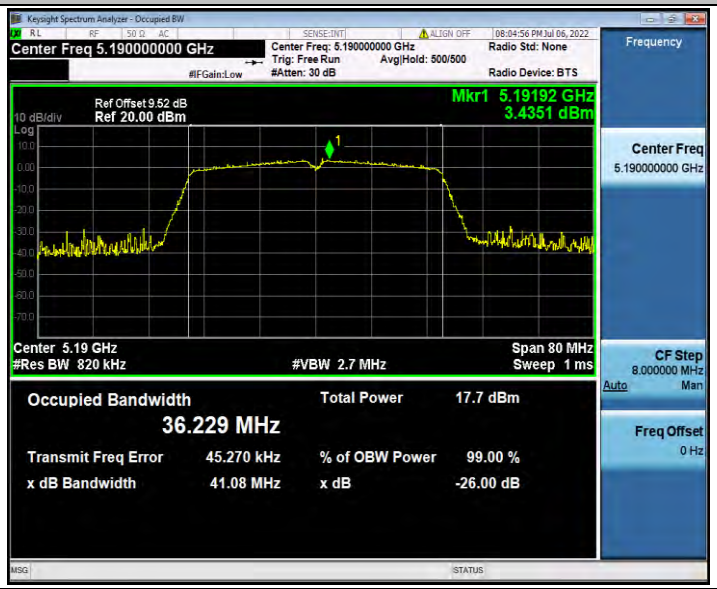


11AC20SISO_Ant1_5200

11AC20SISO_Ant1_5240



11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230

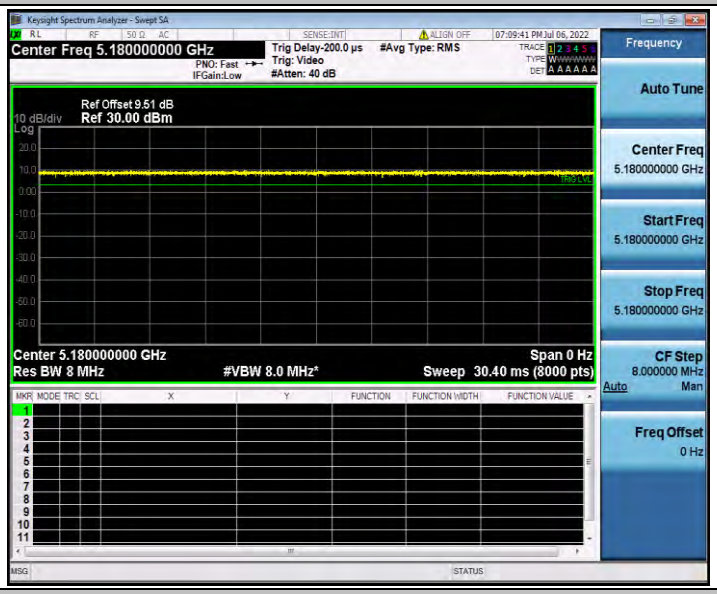
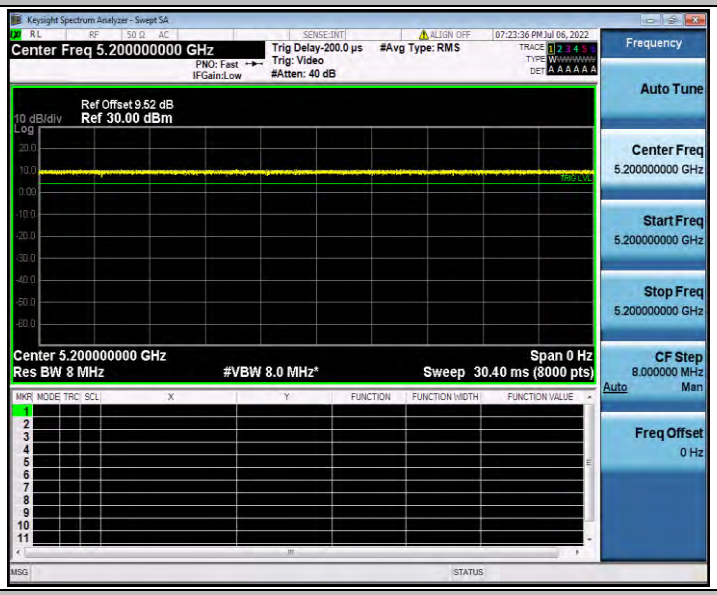
11AC80SISO_Ant1_5210

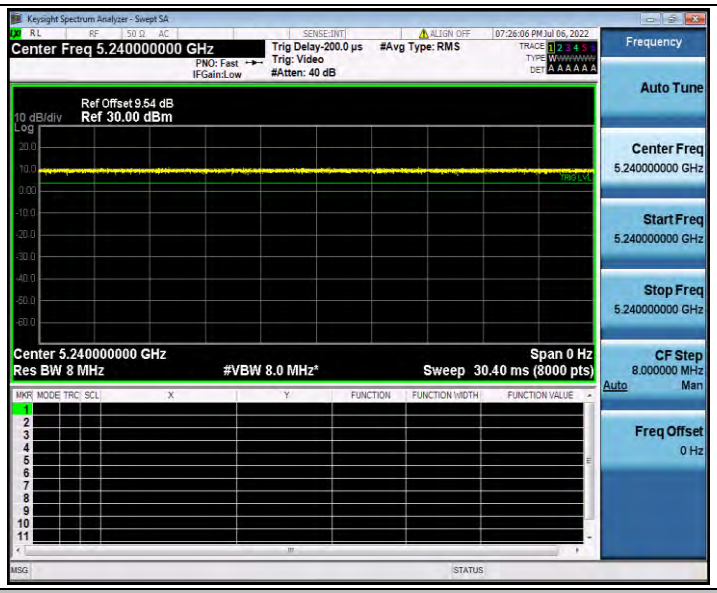
Appendix D.3: Duty Cycle

Test Result

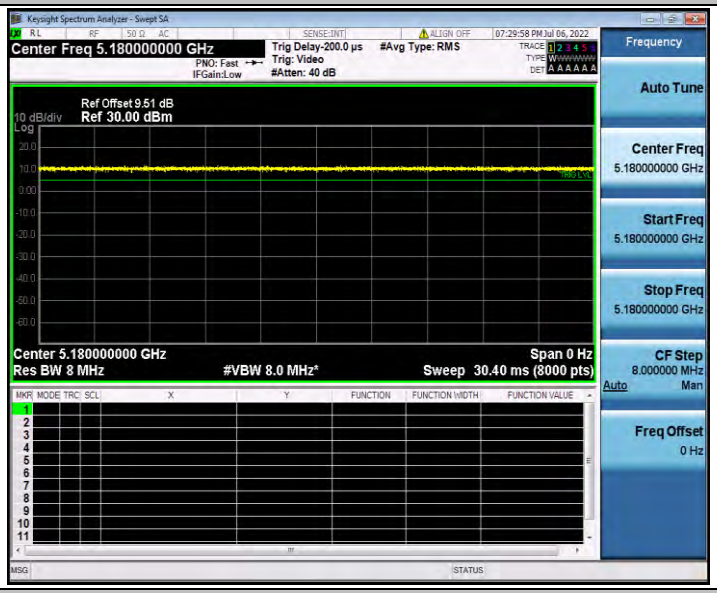
TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	DC Factor [dBm]
11A	Ant1	5180	30.00	30.00	100.00	0
		5200	30.00	30.00	100.00	0
		5240	30.00	30.00	100.00	0
11N20SISO	Ant1	5180	30.00	30.00	100.00	0
		5200	30.00	30.00	100.00	0
		5240	30.00	30.00	100.00	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

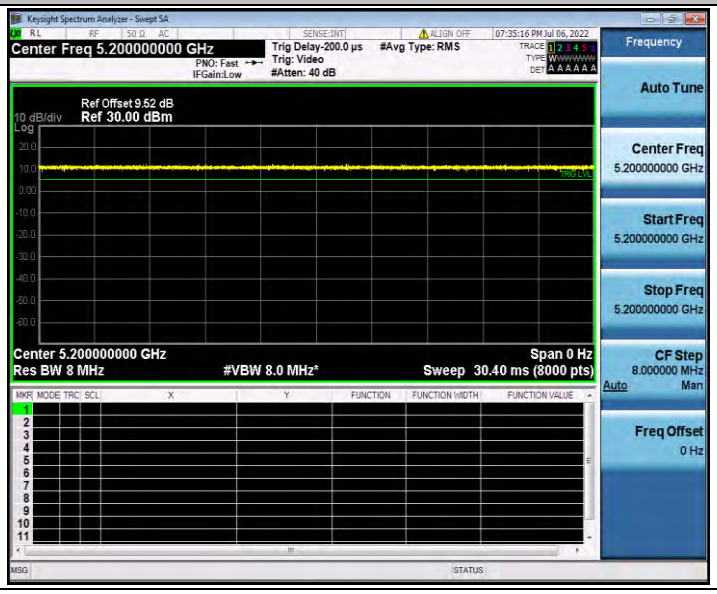
11A_Ant1_5180

11A_Ant1_5200

11A_Ant1_5240



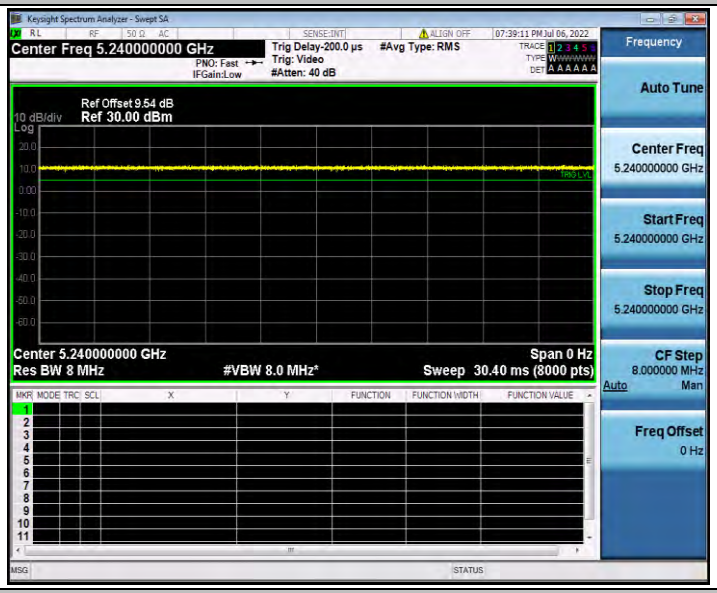
11N20SISO_Ant1_5180



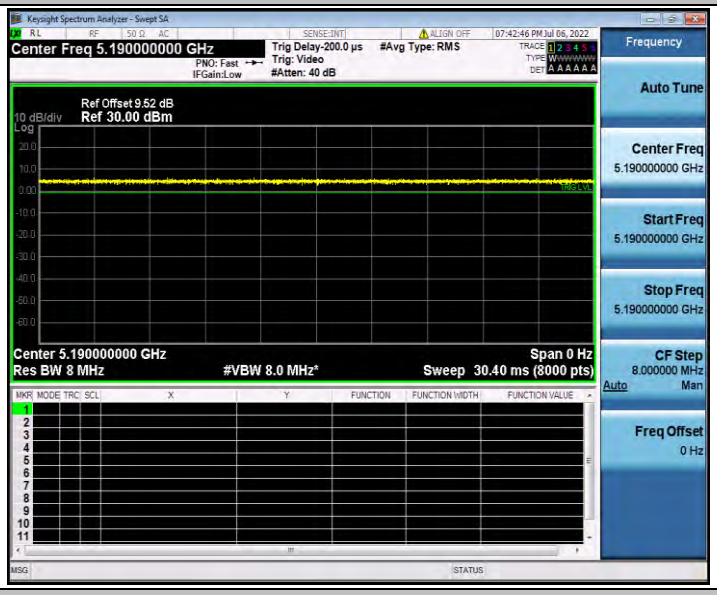
11N20SISO_Ant1_5200



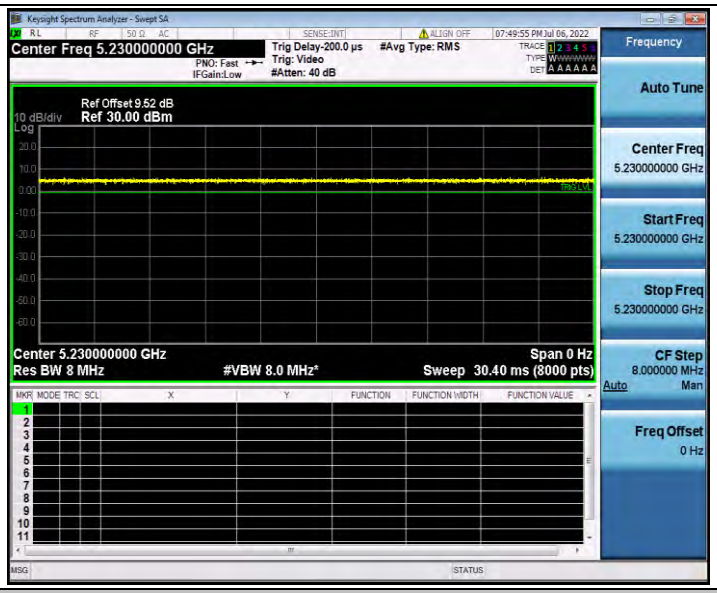
11N20SISO_Ant1_5240



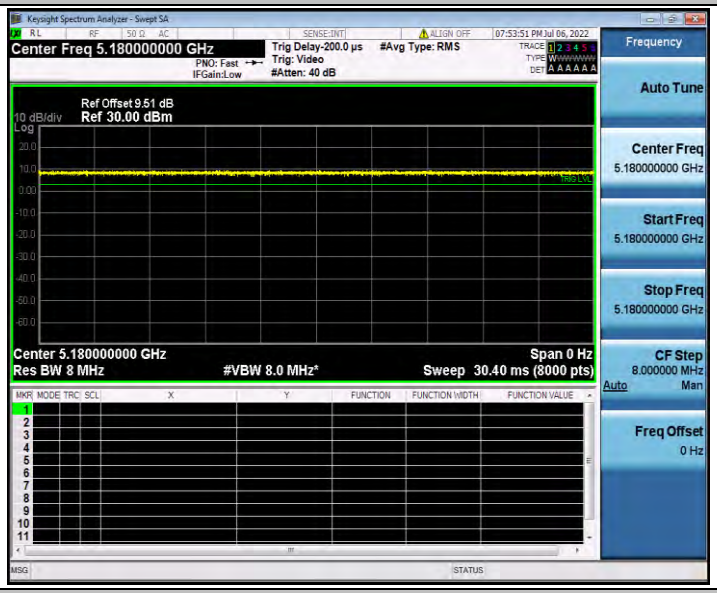
11N40SISO_Ant1_5190



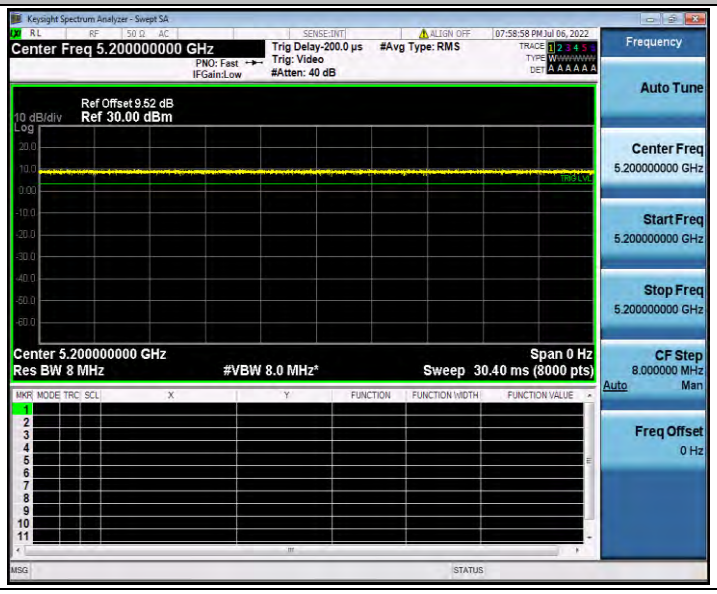
11N40SISO_Ant1_5230



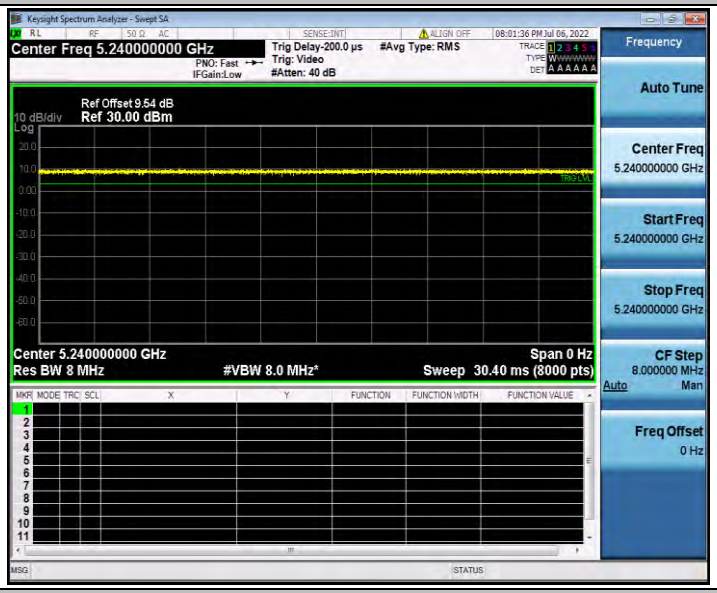
11AC20SISO_Ant1_5180



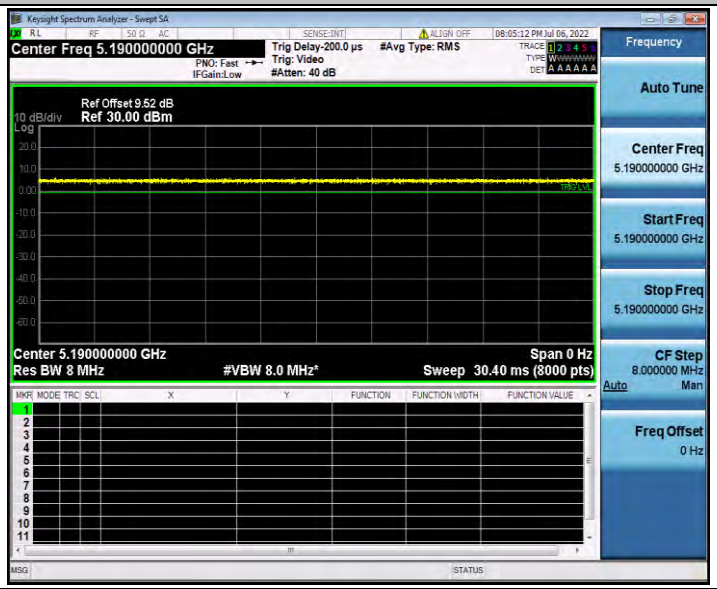
11AC20SISO_Ant1_5200



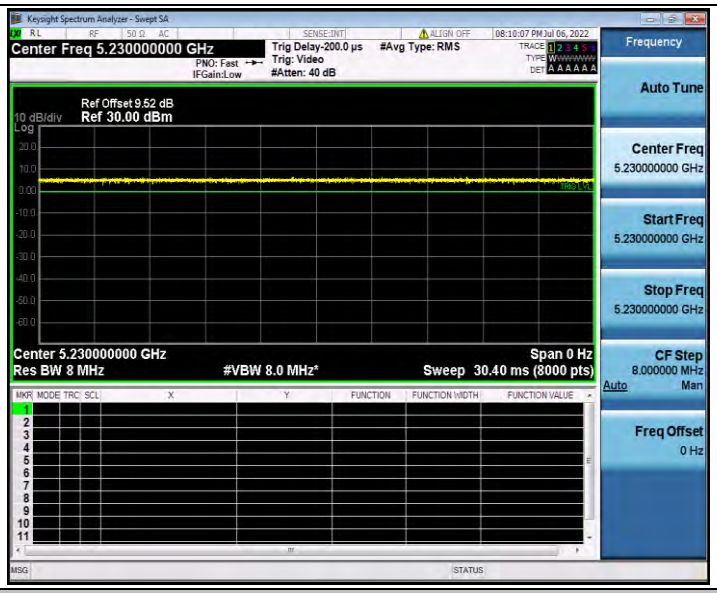
11AC20SISO_Ant1_5240



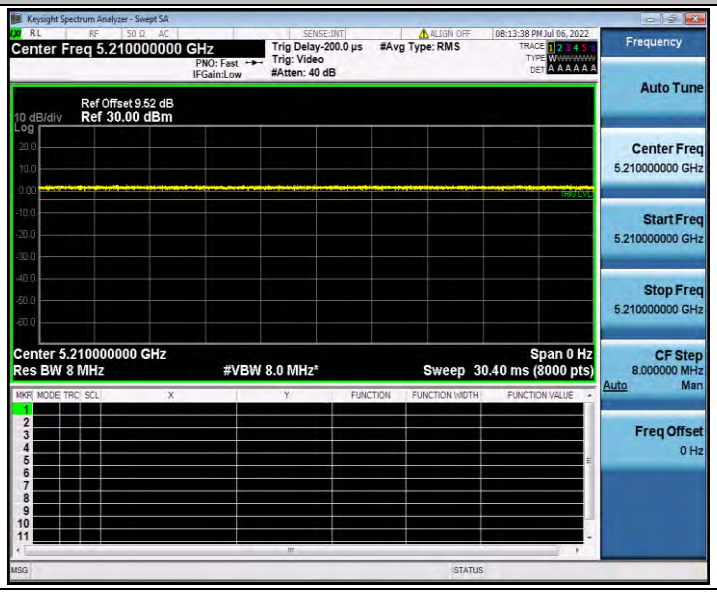
11AC40SISO_Ant1_5190



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	6.14	≤11.00	PASS
		5200	6.94	≤11.00	PASS
		5240	6.58	≤11.00	PASS
11N20SISO	Ant1	5180	7.67	≤11.00	PASS
		5200	7.01	≤11.00	PASS
		5240	7.96	≤11.00	PASS
11N40SISO	Ant1	5190	1.66	≤11.00	PASS
		5230	2.25	≤11.00	PASS
11AC20SISO	Ant1	5180	5.65	≤11.00	PASS
		5200	6.2	≤11.00	PASS
		5240	7.19	≤11.00	PASS
11AC40SISO	Ant1	5190	2.08	≤11.00	PASS
		5230	2.27	≤11.00	PASS
11AC80SISO	Ant1	5210	0.24	≤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

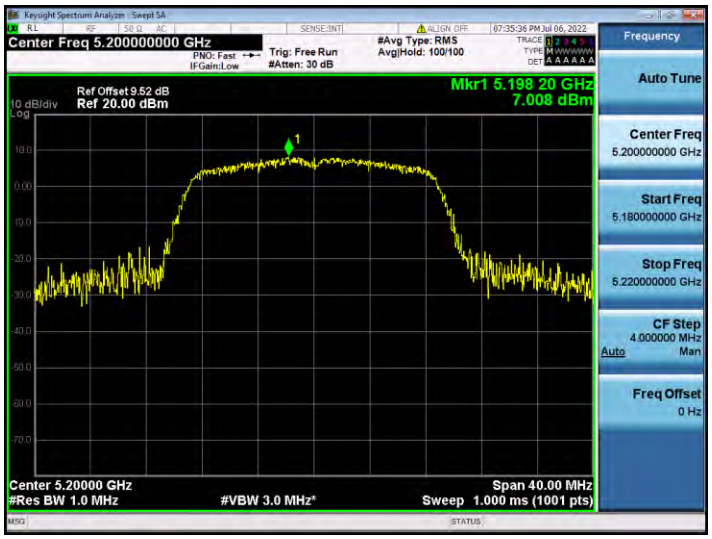
11A_Ant1_5180

11A_Ant1_5200

11A_Ant1_5240

11N20SISO_Ant1_5180

11N20SISO_Ant1_5200



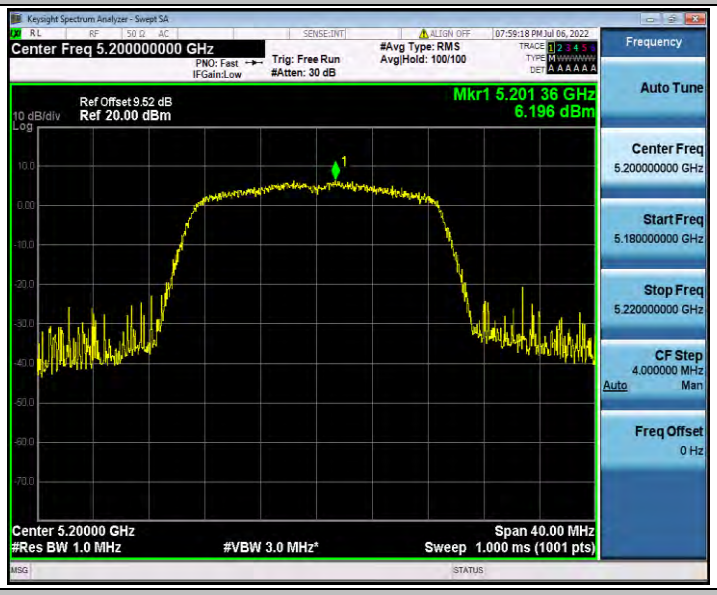
11N20SISO_Ant1_5240

11N40SISO_Ant1_5190

11N40SISO_Ant1_5230

11AC20SISO_Ant1_5180

11AC20SISO_Ant1_5200



11AC20SISO_Ant1_5240

11AC40SISO_Ant1_5190

11AC40SISO_Ant1_5230

11AC80SISO_Ant1_5210

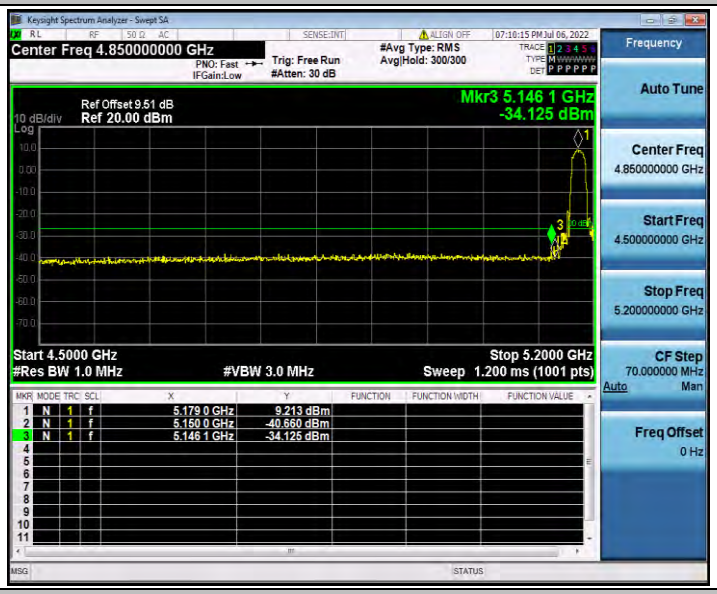
Appendix D.5: Band edge measurements

Test Result B1

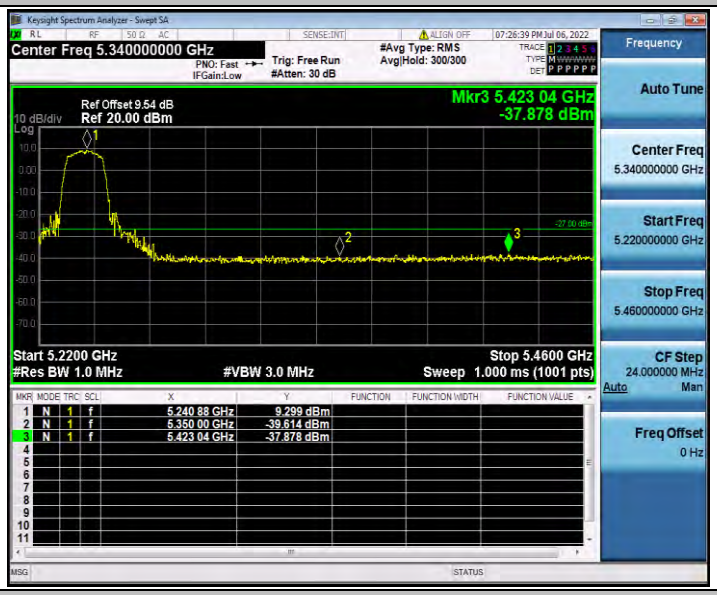
TestMode	Antenna	ChName	Frequency[MHz]	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	Low	5180	-34.13	≤-27	PASS
		High	5240	-37.88	≤-27	PASS
11N20SISO	Ant1	Low	5180	-29.21	≤-27	PASS
		High	5240	-38.14	≤-27	PASS
11N40SISO	Ant1	Low	5190	-37.21	≤-27	PASS
		High	5230	-38.17	≤-27	PASS
11AC20SISO	Ant1	Low	5180	-35.34	≤-27	PASS
		High	5240	-37.86	≤-27	PASS
11AC40SISO	Ant1	Low	5190	-33.09	≤-27	PASS
		High	5230	-38.14	≤-27	PASS
11AC80SISO	Ant1	Low	5210	-36.41	≤-27	PASS
		High	5210	-37.57	≤-27	PASS

Test Graphs B1

11A_Ant1_Low_5180



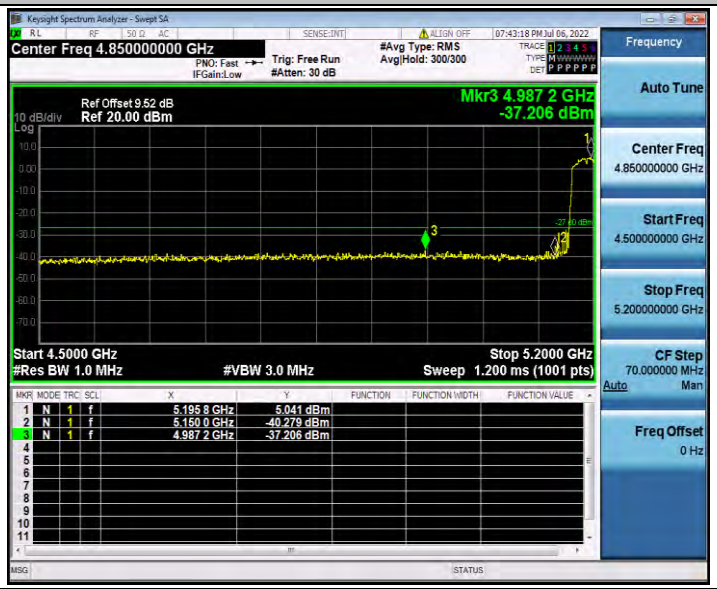
11A_Ant1_High_5240



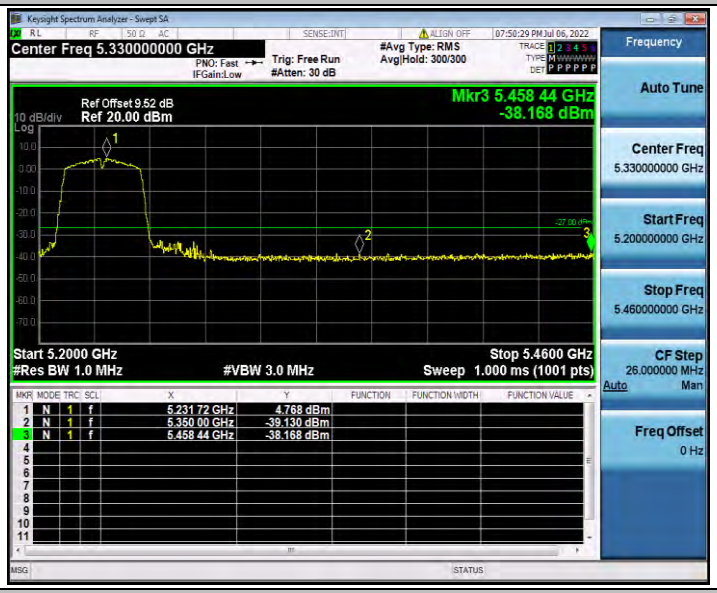
11N20SISO_Ant1_Low_5180

11N20SISO_Ant1_High_5240

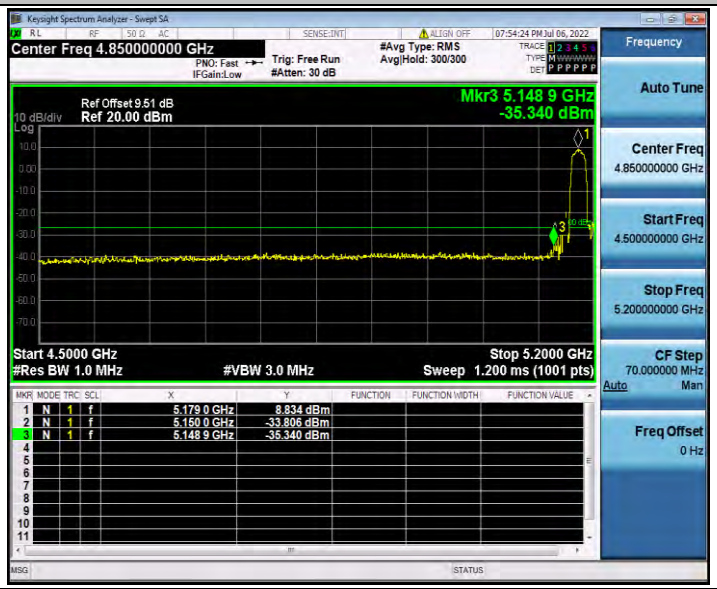
11N40SISO_Ant1_Low_5190



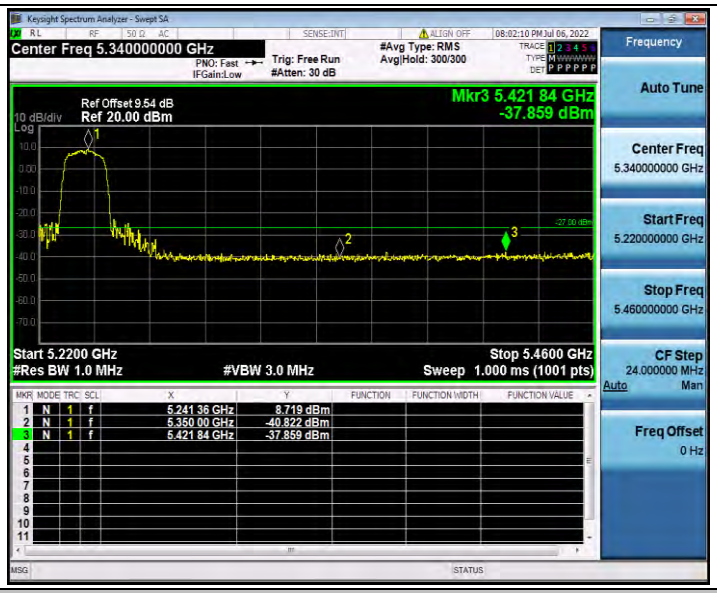
11N40SISO_Ant1_High_5230



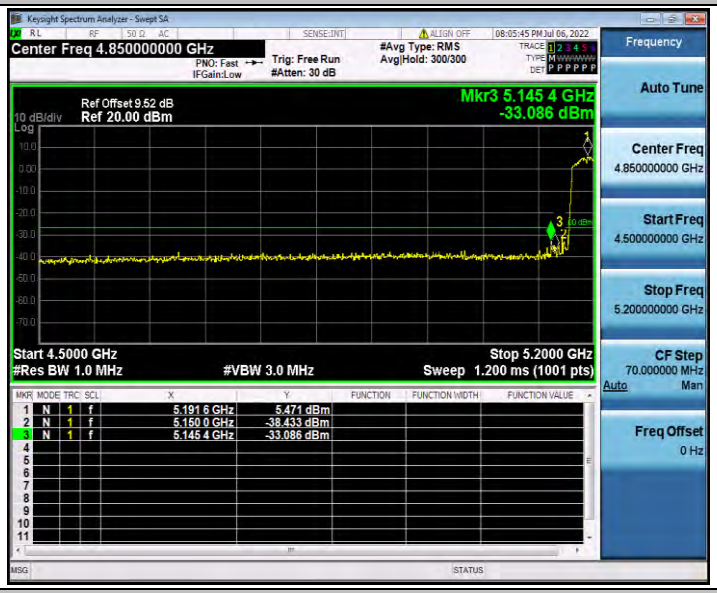
11AC20SISO_Ant1_Low_5180



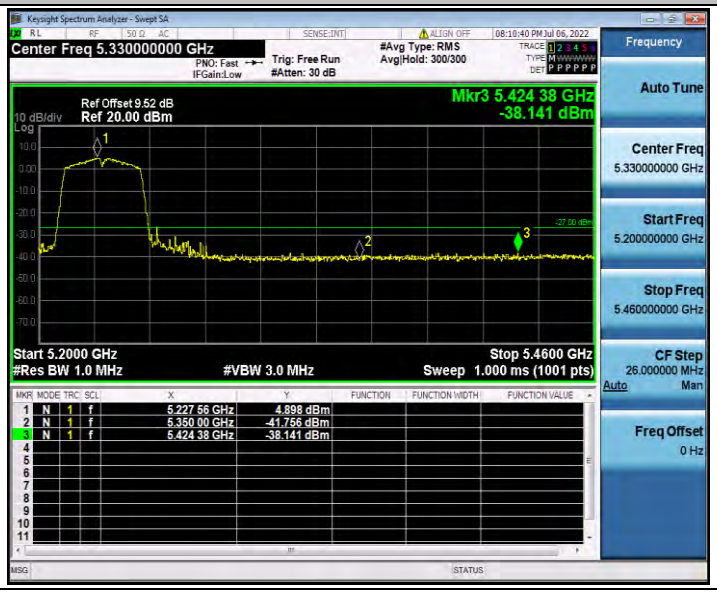
11AC20SISO_Ant1_High_5240

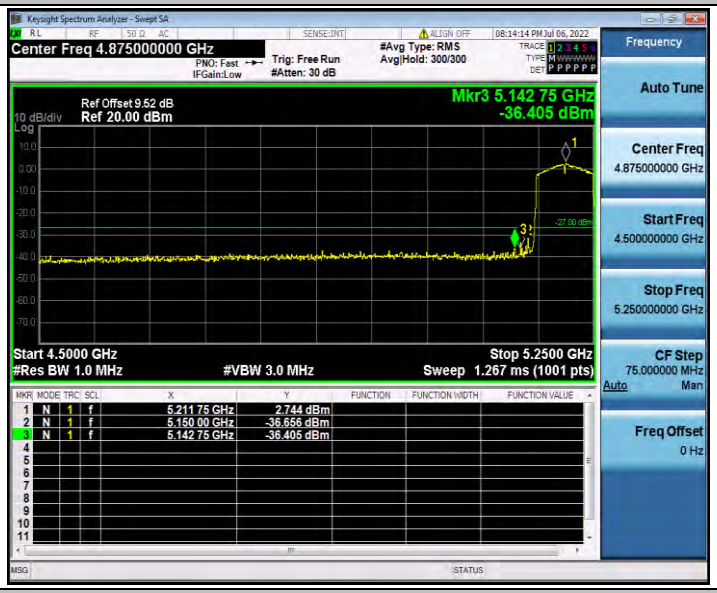


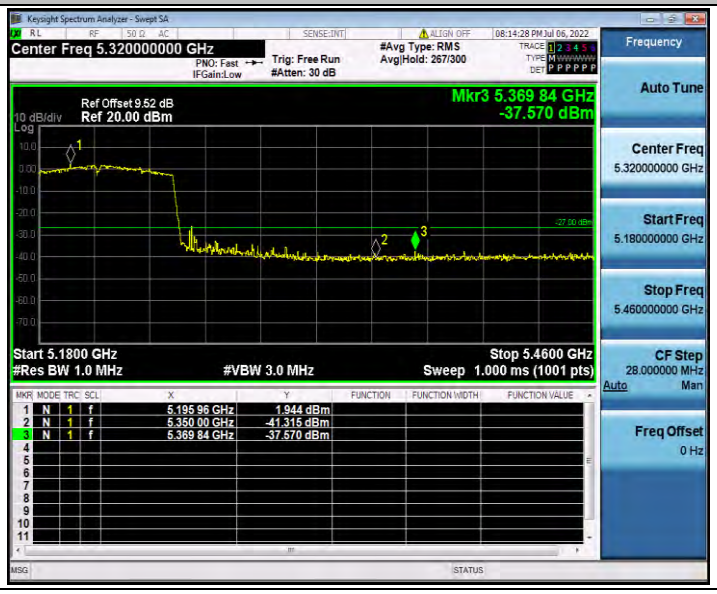
11AC40SISO_Ant1_Low_5190



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	5140	-45.86	≤-27	PASS
			5360~40000	24287.79	-37.59	≤-27	PASS
		5200	30~5140	2647.51	-46.35	≤-27	PASS
			5360~40000	24984.59	-38.05	≤-27	PASS
		5240	30~5140	4860.31	-47.03	≤-27	PASS
			5360~40000	24802.82	-38.02	≤-27	PASS
11N20SISO	Ant1	5180	30~5140	5138.3	-37.49	≤-27	PASS
			5360~40000	24261.82	-37.78	≤-27	PASS
		5200	30~5140	5126.88	-45.34	≤-27	PASS
			5360~40000	23503.7	-38.05	≤-27	PASS
		5240	30~5140	833.46	-37.87	≤-27	PASS
			5360~40000	26879.54	-37.69	≤-27	PASS
11N40SISO	Ant1	5190	30~5140	5130.46	-41.92	≤-27	PASS
			5360~40000	26060.1	-37.58	≤-27	PASS
		5230	30~5140	834.14	-45.98	≤-27	PASS
			5360~40000	26510.94	-37.55	≤-27	PASS
11AC20SISO	Ant1	5180	30~5140	5139.83	-45.94	≤-27	PASS
			5360~40000	26786.49	-38.05	≤-27	PASS
		5200	30~5140	5122.29	-45.13	≤-27	PASS
			5360~40000	25192.34	-37.74	≤-27	PASS
		5240	30~5140	5085.32	-46.95	≤-27	PASS
			5360~40000	25558.05	-37.72	≤-27	PASS
11AC40SISO	Ant1	5190	30~5140	5134.04	-40.04	≤-27	PASS
			5360~40000	26053.61	-38.34	≤-27	PASS
		5230	30~5140	2639.17	-46.3	≤-27	PASS
			5360~40000	26037.74	-37.25	≤-27	PASS
11AC80SISO	Ant1	5210	30~5140	5135.91	-38.59	≤-27	PASS
			5360~40000	26847.8	-37.83	≤-27	PASS

Test Graphs

11A_Ant1_5180_30~5140

11A_Ant1_5180_5360~40000

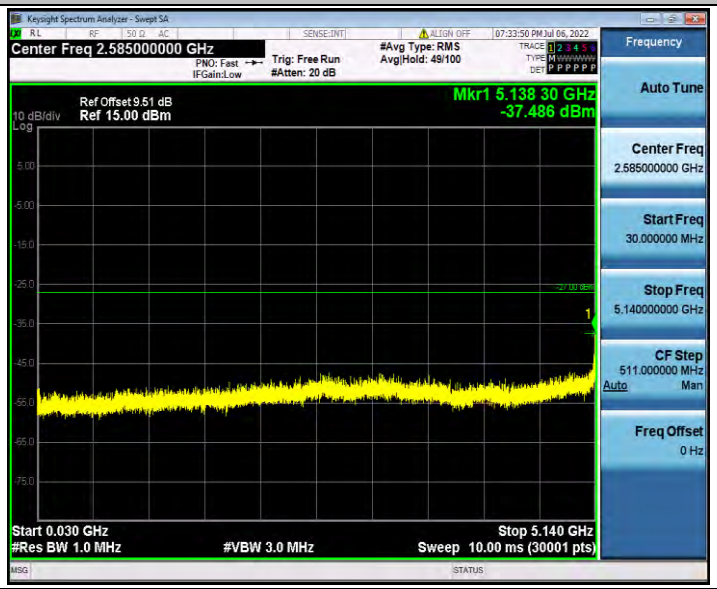
11A_Ant1_5200_30~5140

11A_Ant1_5200_5360~40000

11A_Ant1_5240_30~5140

11A_Ant1_5240_5360~40000

11N20SISO_Ant1_5180_30~5140



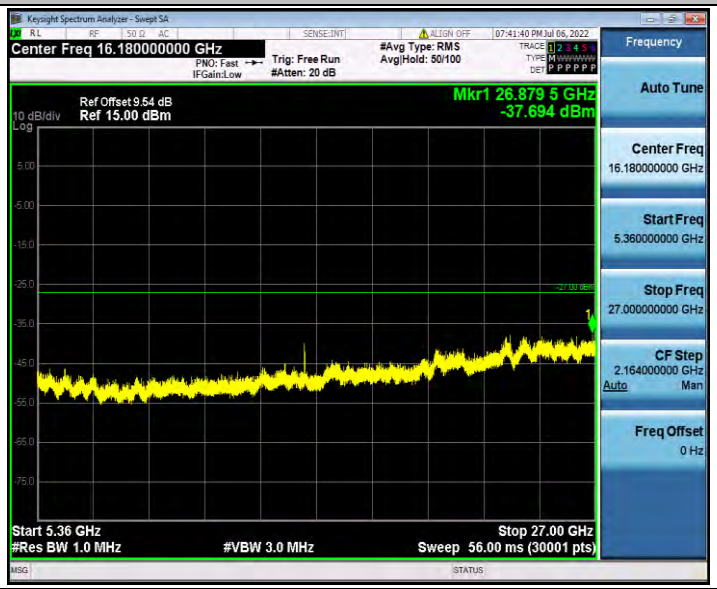
11N20SISO_Ant1_5180_5360~40000

11N20SISO_Ant1_5200_30~5140

11N20SISO_Ant1_5200_5360~40000

11N20SISO_Ant1_5240_30~5140

11N20SISO_Ant1_5240_5360~40000



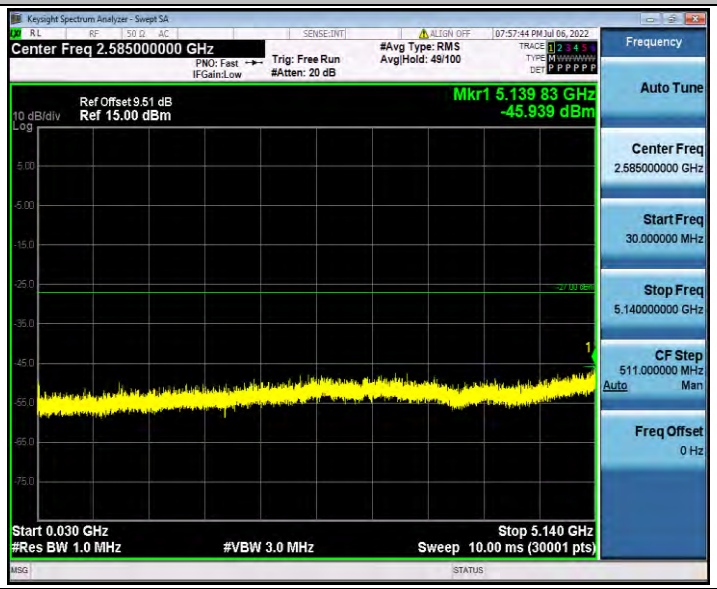
11N40SISO_Ant1_5190_30~5140

11N40SISO_Ant1_5190_5360~40000

11N40SISO_Ant1_5230_30~5140

11N40SISO_Ant1_5230_5360~40000

11AC20SISO_Ant1_5180_30~5140



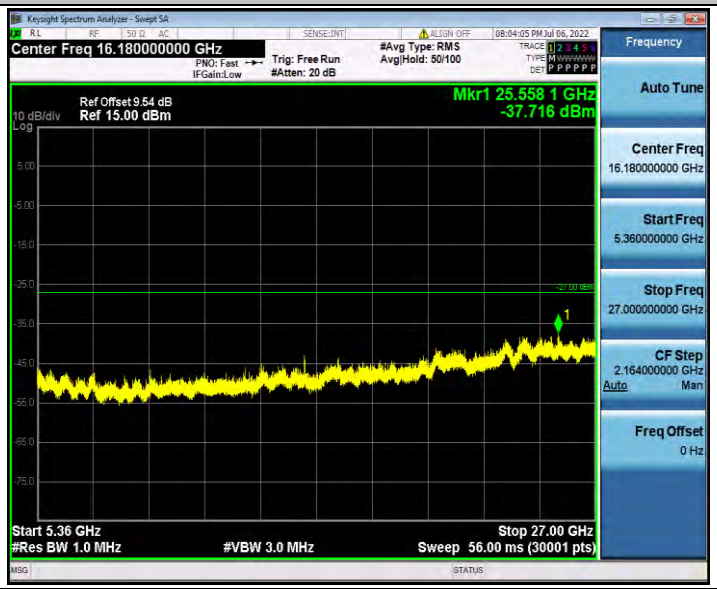
11AC20SISO_Ant1_5180_5360~40000

11AC20SISO_Ant1_5200_30~5140

11AC20SISO_Ant1_5200_5360~40000

11AC20SISO_Ant1_5240_30~5140

11AC20SISO_Ant1_5240_5360~40000



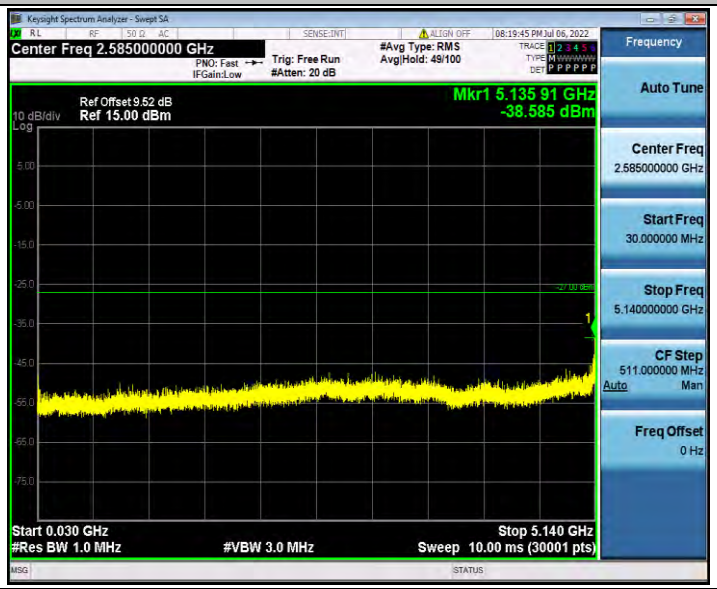
11AC40SISO_Ant1_5190_30~5140

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
08:19:54 PM Jul 06, 2022
Center Freq 16.180000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
#Avg Type: RMS
Avg|Hold: 51/100
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
Ref Offset 9.52 dB
10 dB/div
Ref 15.00 dBm
Log
Mkr1 26.847 8 GHz
-37.831 dBm
5.00
-5.00
-15.0
-25.0
-35.0
-45.0
-55.0
-65.0
-75.0
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