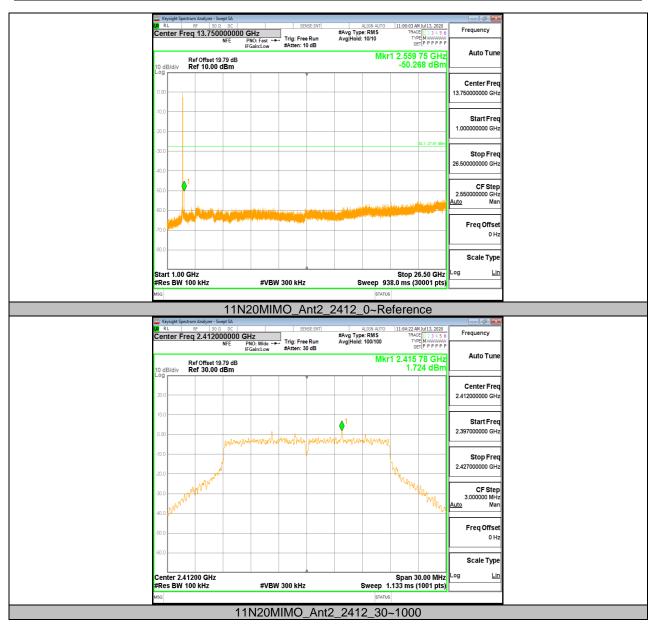
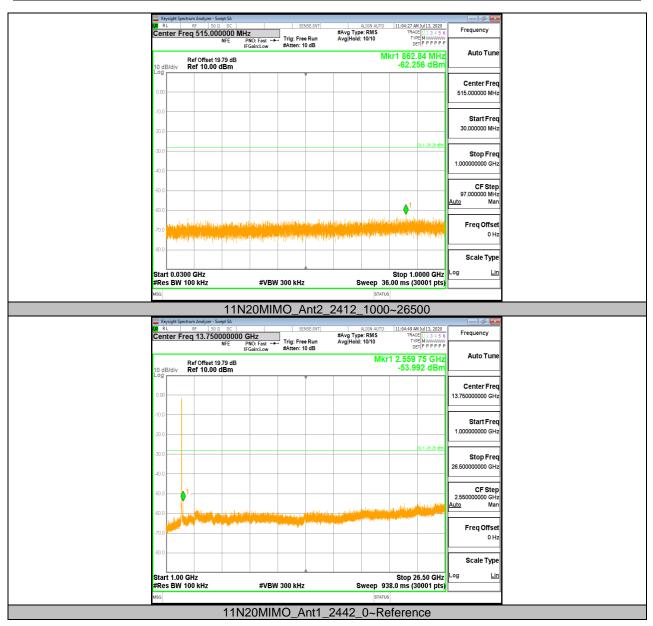


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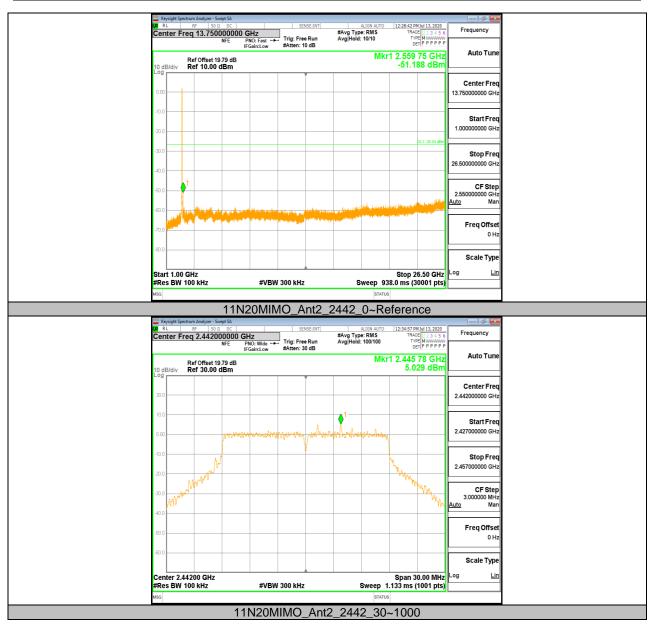


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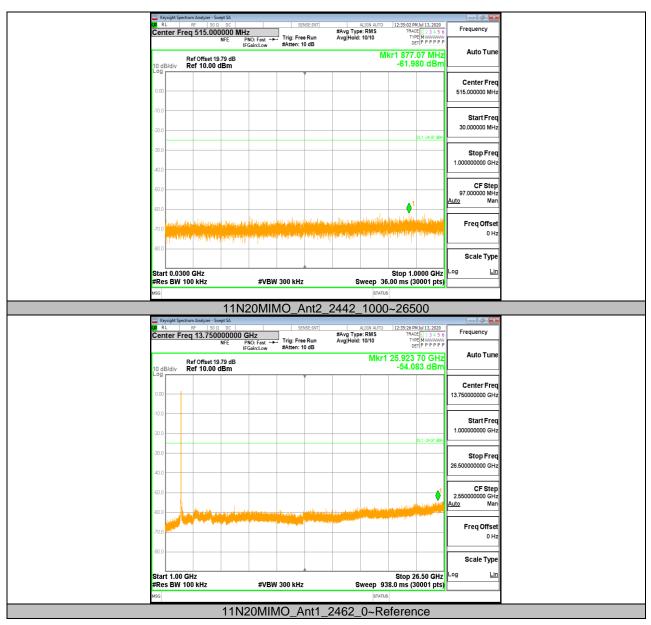


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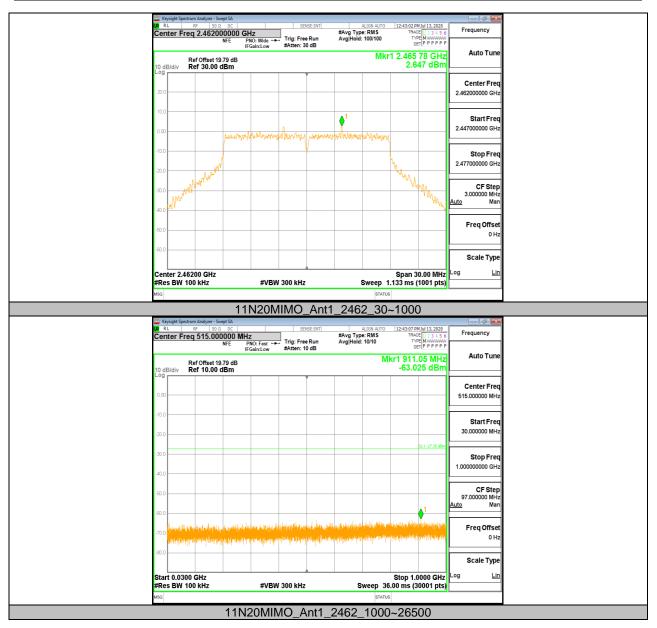


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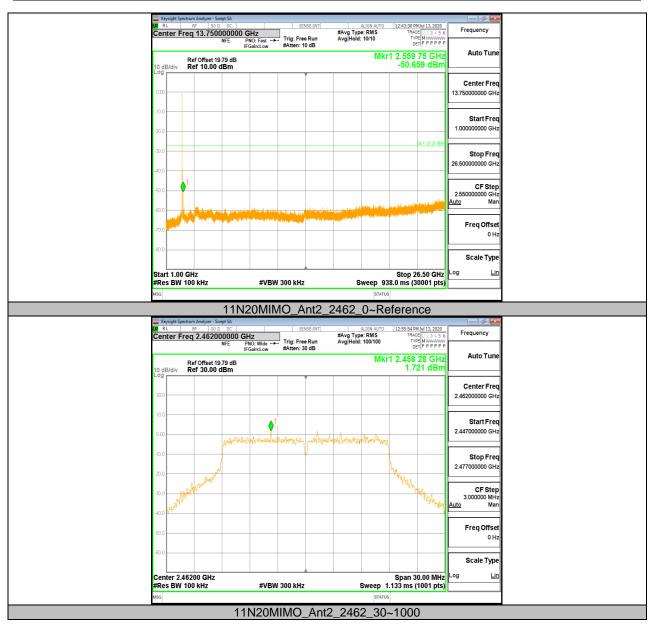


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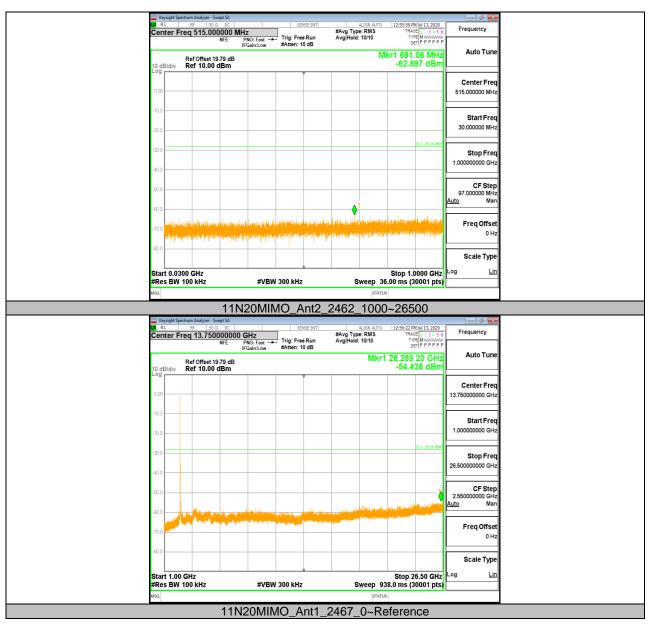


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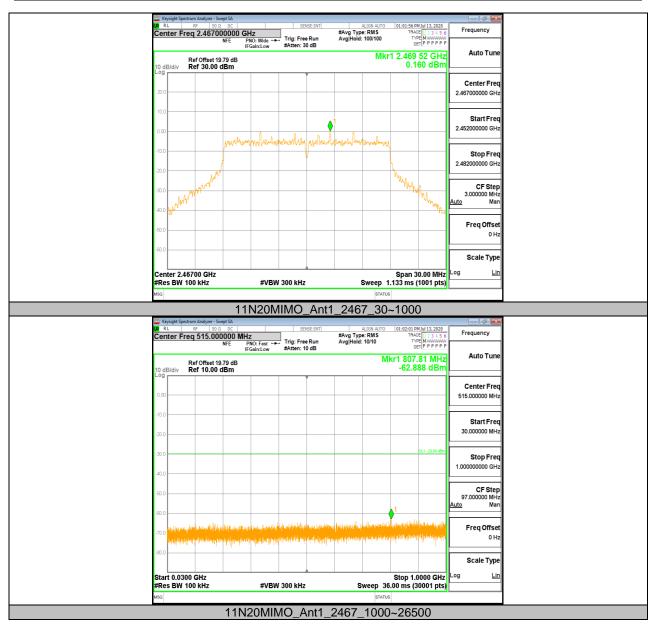


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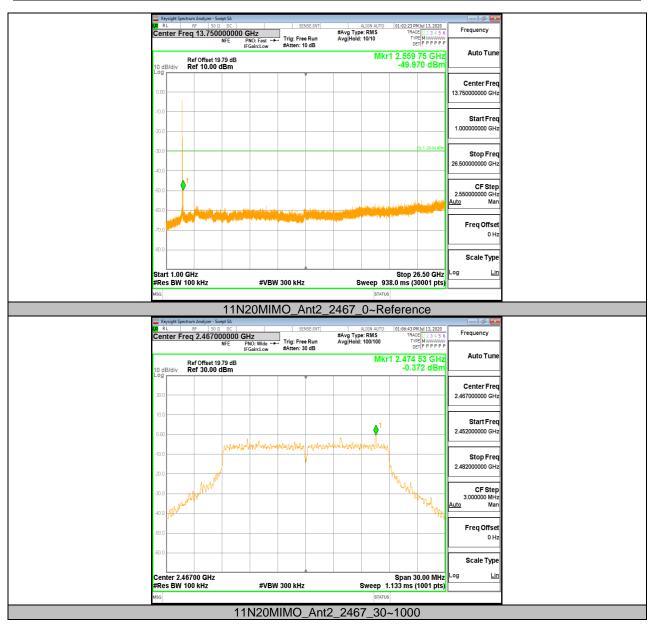


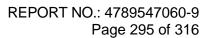
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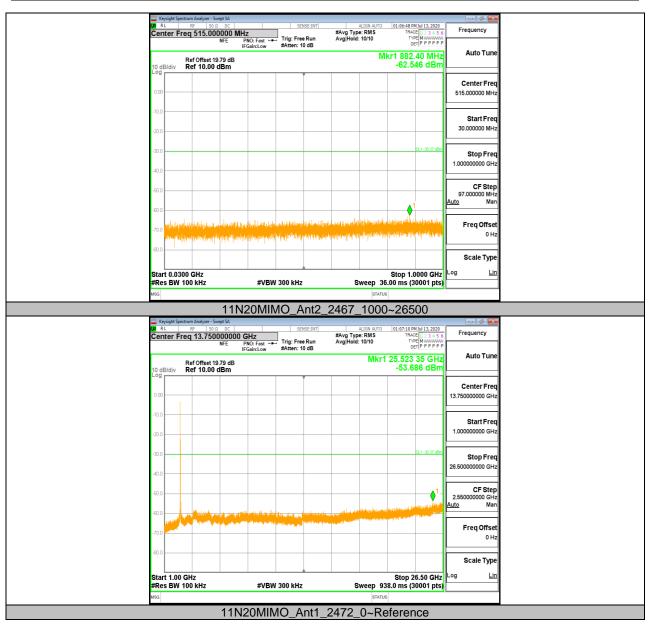


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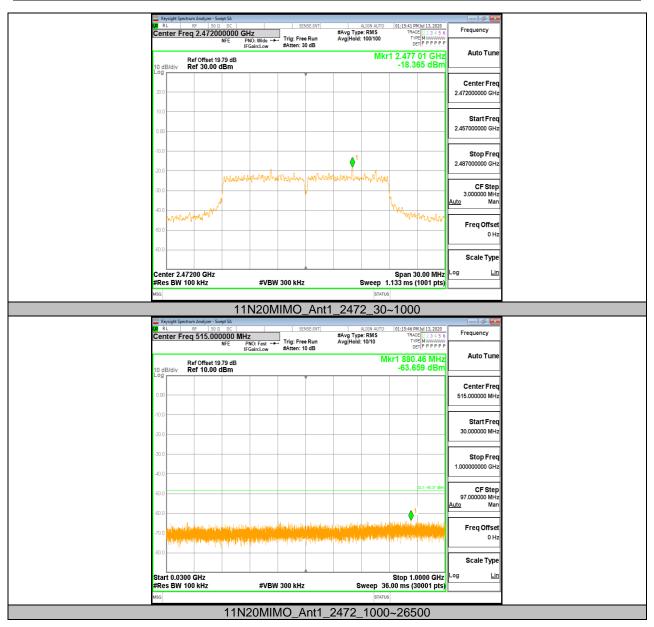






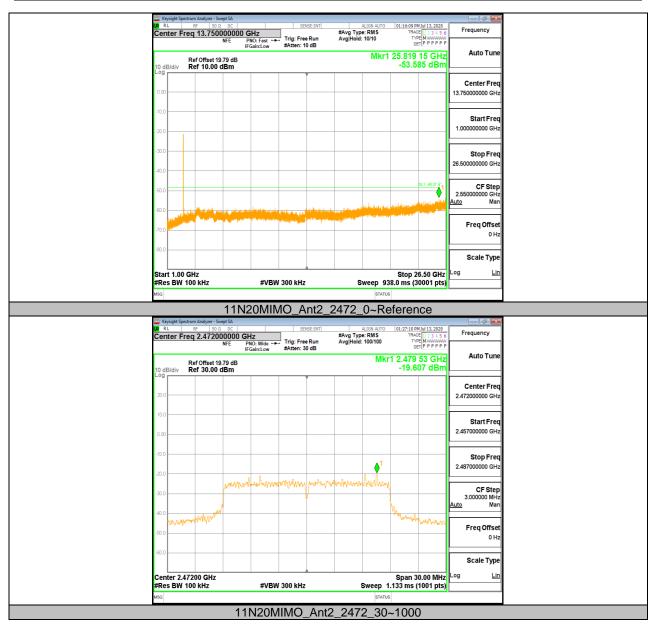


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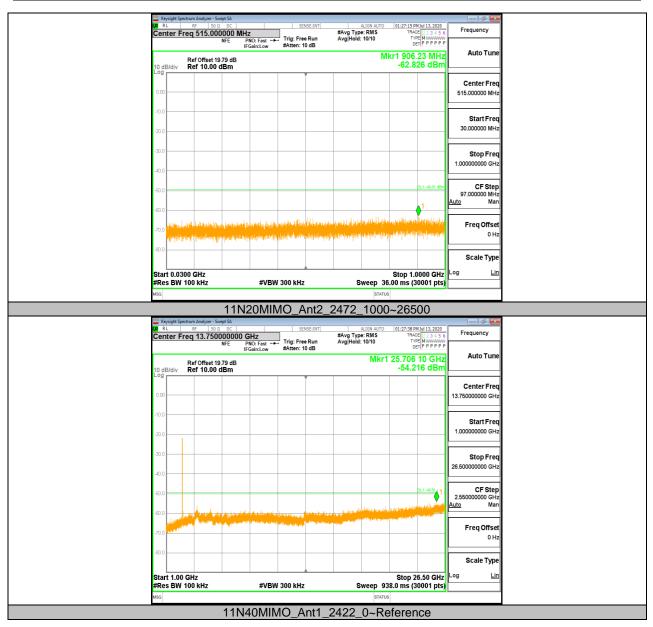


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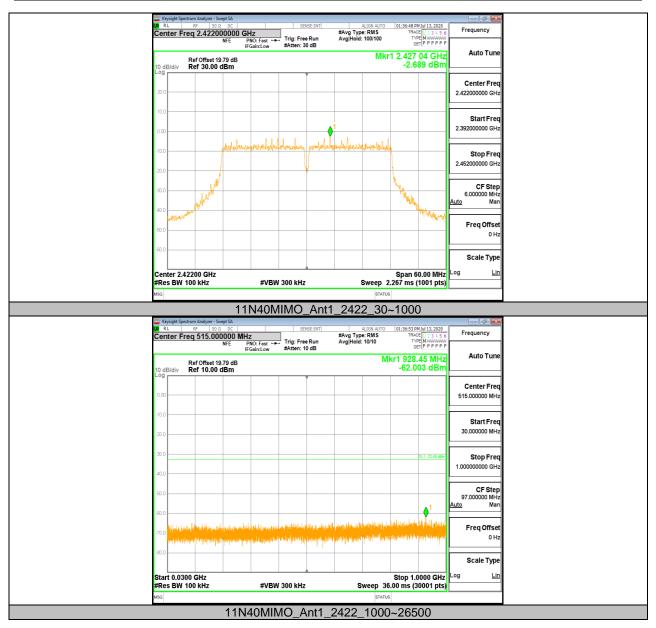


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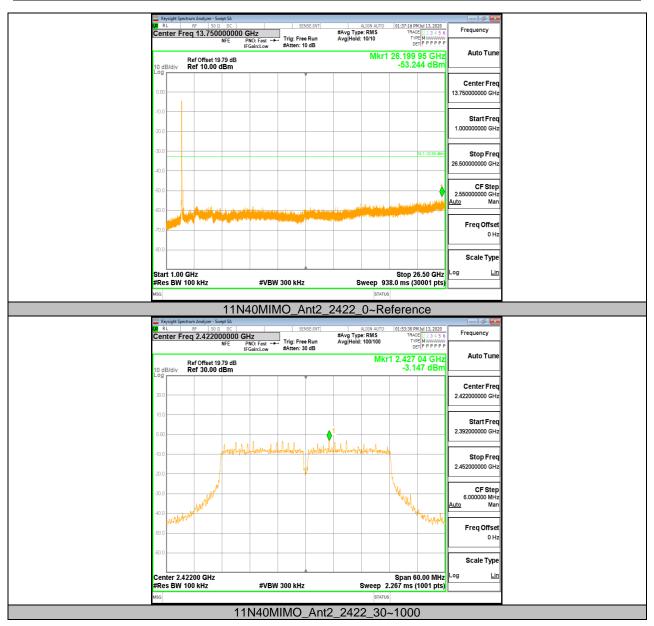


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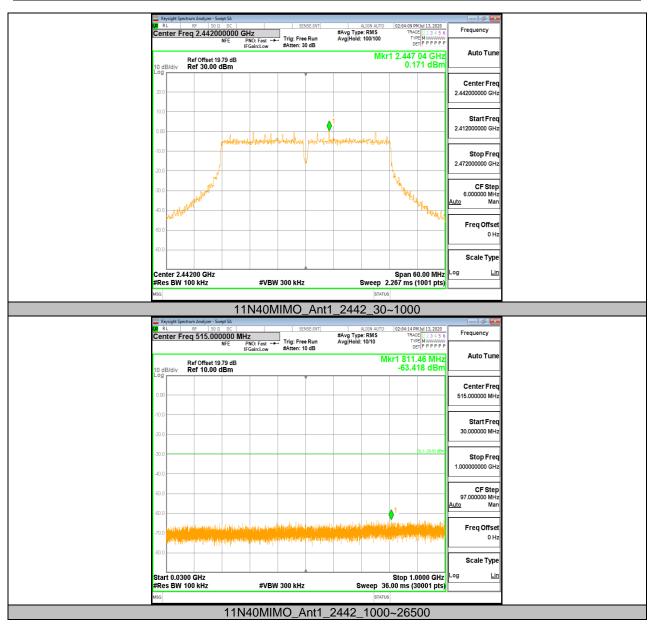


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Key:	sight Spectrum	Analyzer - Swe	ept SA								10 10
		515.000	000 MHz	lO:Fast ↔	1	e Run	#Avg Type Avg Hold:	LIGN AUTO : RMS 10/10	01:53:35 PI TRAC TVF	E 1 2 3 4 5 6 E M WWWWWW T P P P P P P	Frequency
	Re	f Offset 19.	79 dB	sain:Low	#Atten: 1	0 00		M	(r1 729.		Auto Tune
10 dB Log	/div Re	ef 10.00 d	Bm			Y			-02.4	оз авт	
0.00 -											Center Freq 515.000000 MHz
-10.0 -											Start Freq
-20.0 -											30.000000 MHz
-30.0 -										DL1 -33.15 dBm	Stop Freq
-40.0 -											1.00000000 GHz
-50.0 -											CF Step 97.000000 MHz
-60.0 -								<b>≬</b> <sup>1</sup>			<u>Auto</u> Man
-70.0	oblatbili	elastriata					abasıda			di teplekiti nasisitanan	Freq Offset 0 Hz
-80.0 -	La luduell	يهماله مر والحية	an la realit	alles partific	ulitation of a	مله بذير بورايا	holingfall	1. d. 1. d	a to male a	- 11 m.h	
Stort	0.0300 0								Stop 4 (	000 GHz	Scale Type
#Res	BW 100			#VBW	300 kHz		S		.00 ms (3	0000 GH2 0001 pts)	
MSG			1111			-+	1400			00	
- Key	sight Spectrum	Analyzer - Swe			/IO_A	nt2_2	<u> 422</u>	1000	~265	00	- 3 💌
CM RL	R	F 50 Ω 13.7500	DC	47	SE	NSE:INT	#Avg Type	LIGN AUTO	01:53:59 PI TRAC	4 Jul 13, 2020 E 1 2 3 4 5 6 E M	Frequency
Cent	errreg		NFE PI	IIZ IO: Fast ↔ Gain:Low	Trig: Fre #Atten: 1	e Run 0 dB	#Avg Type Avg Hold:		DE	TPPPPP	Auto Tune
10 dB	Re div <b>Re</b>	f Offset 19. ef 10.00 d	79 dB IBM					Mkr1	26.236 -54.1	50 GHz 57 dBm	
Log											Center Freq
0.00 -											13.750000000 GHz
-10.0 -											Start Freq
-20.0 -											1.000000000 GHz
-30.0 -										0L1 -33.15 dBm	Stop Freq 26.50000000 GHz
-40.0 -											
-50.0 -											CF Step 2.55000000 GHz <u>Auto</u> Man
-60.0 -				مىرى المىسى مىرى كى كەرى	and the state of the	a bili stali serej portis da Jana	and a state	itelijaatelij maarootelij	ala di selar Azartimina		
-70.0 -											Freq Offset 0 Hz
-80.0 -											Scale Type
	1.00 GH					<u> </u>				6.50 GHz	Log <u>Lin</u>
#Res	BW 100	KHZ		#vBM	300 kHz		SI		8.0 ms (3	0001 pts)	
MSG								STATUS			

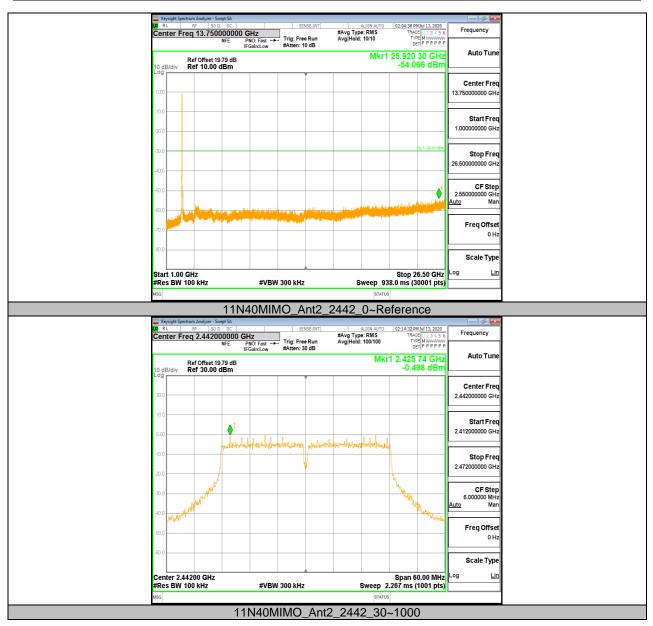


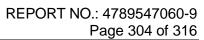
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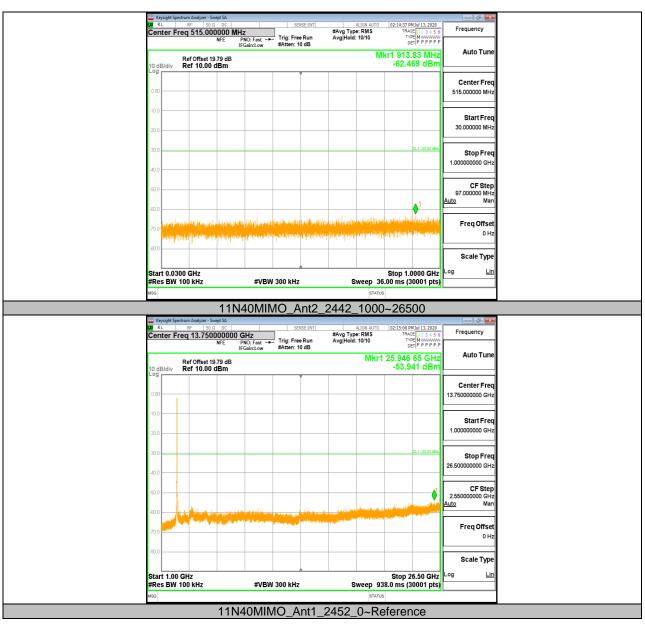


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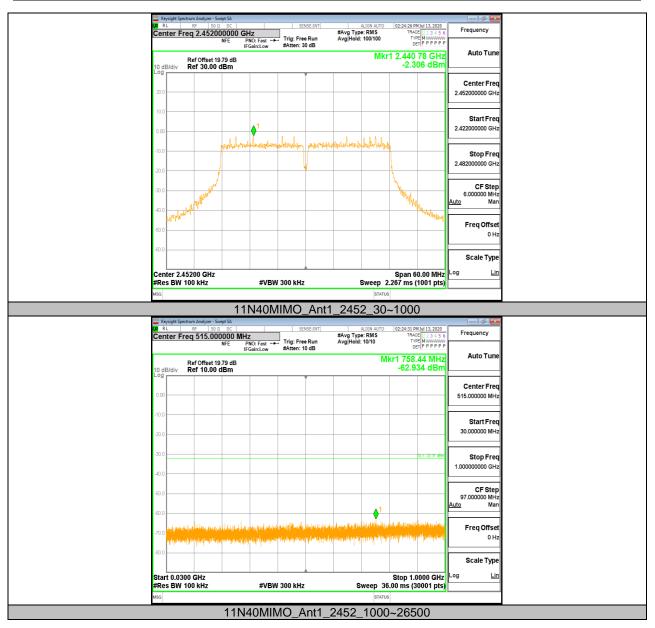






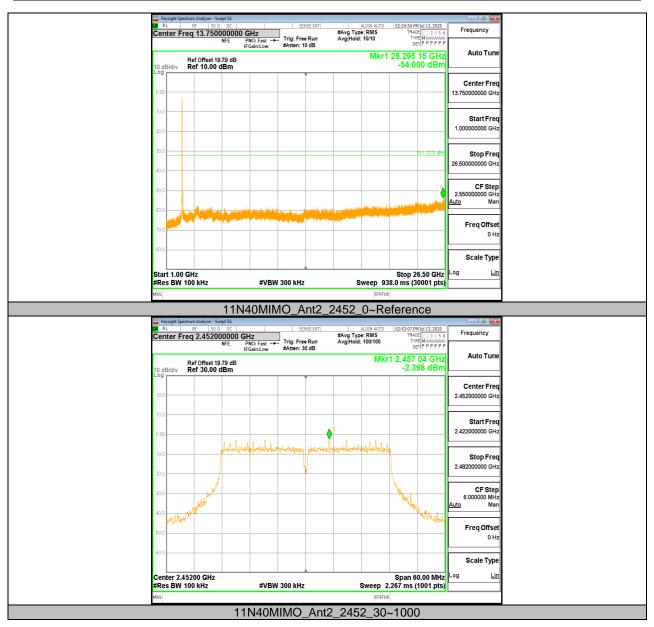


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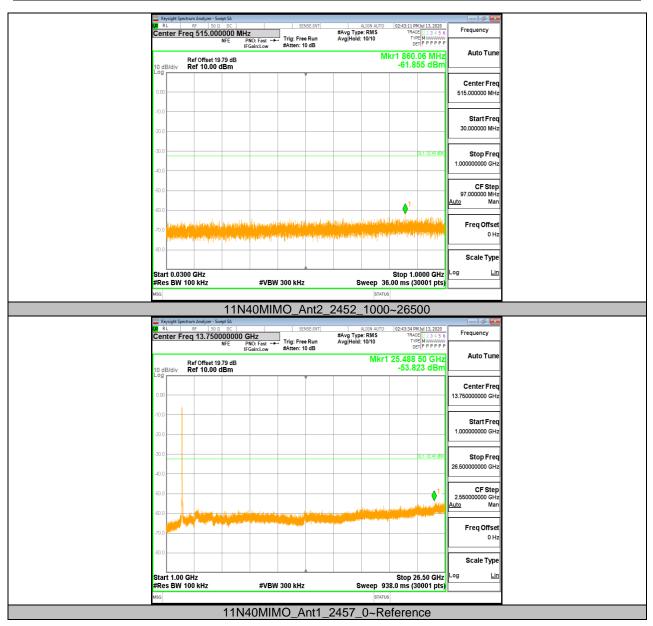


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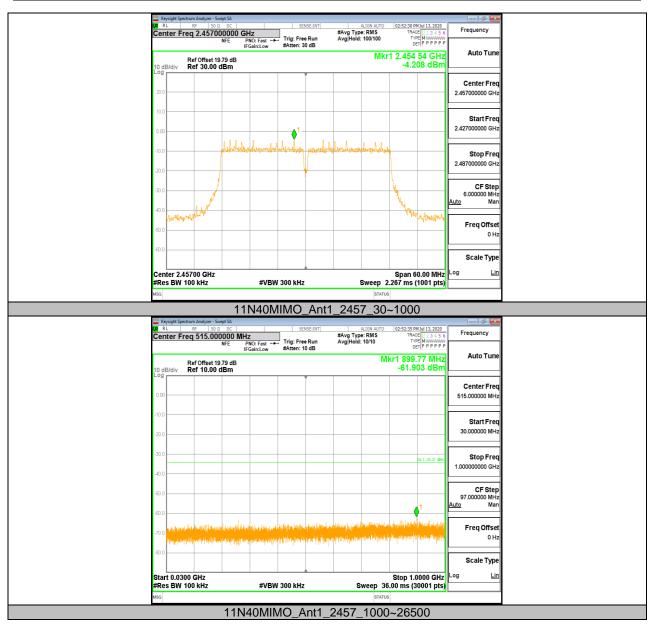


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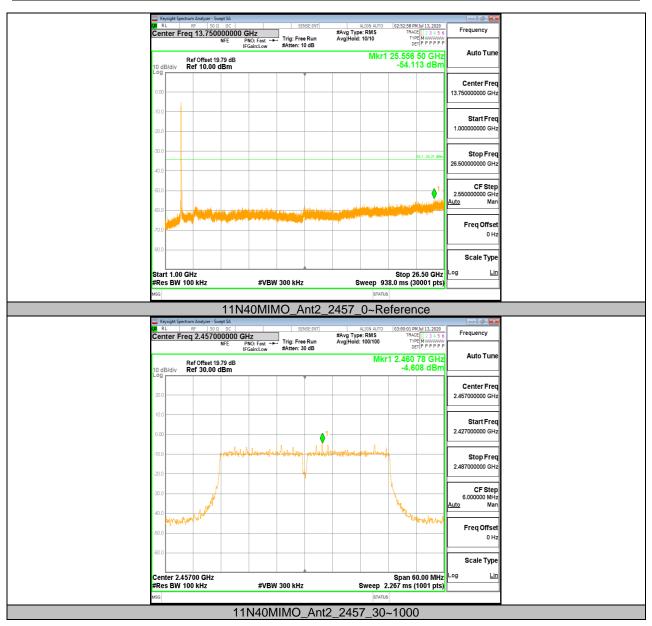


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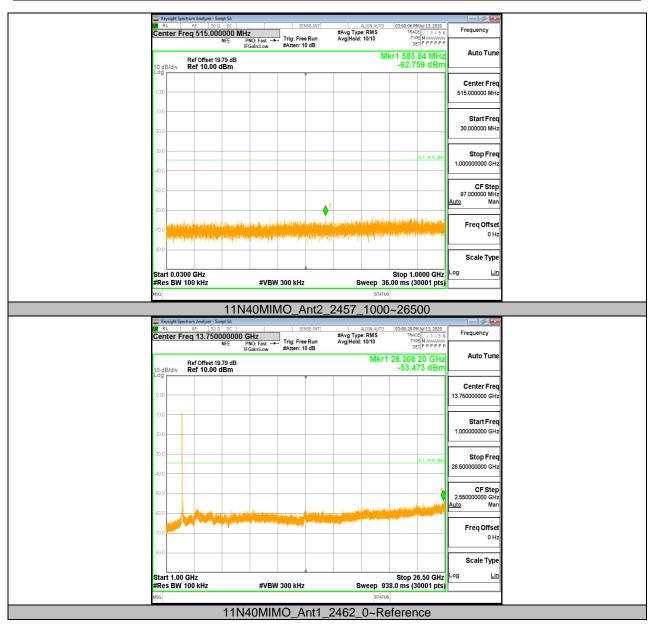


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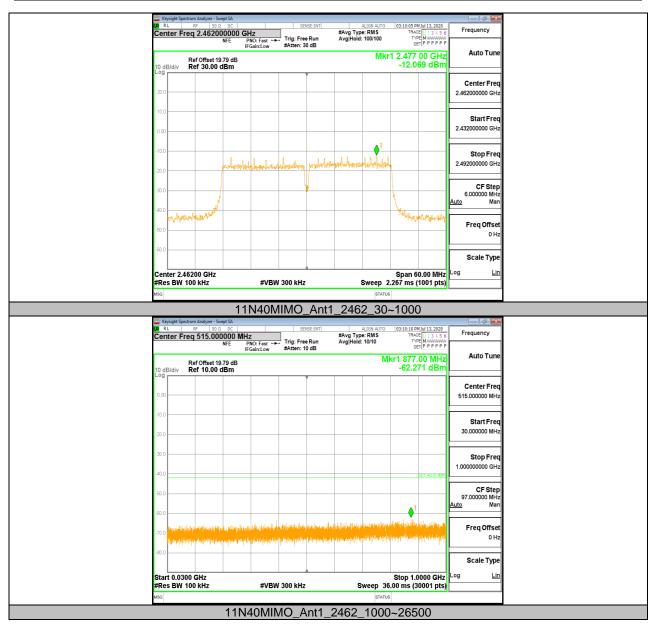


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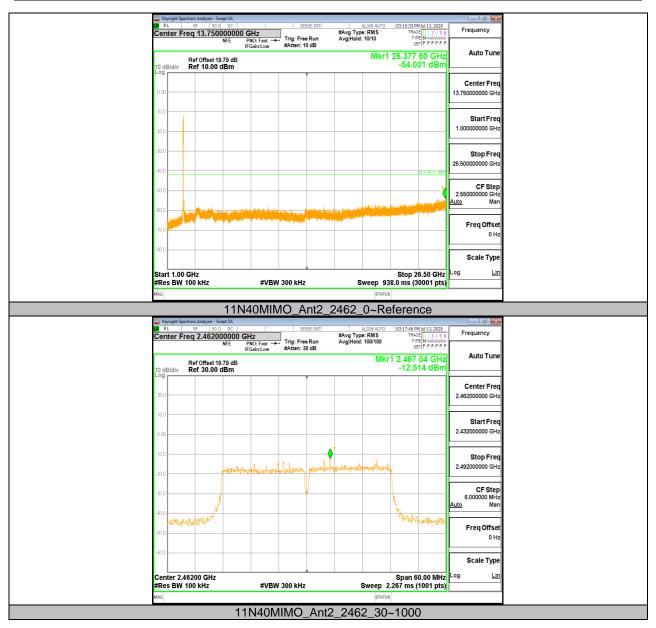


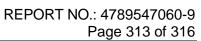
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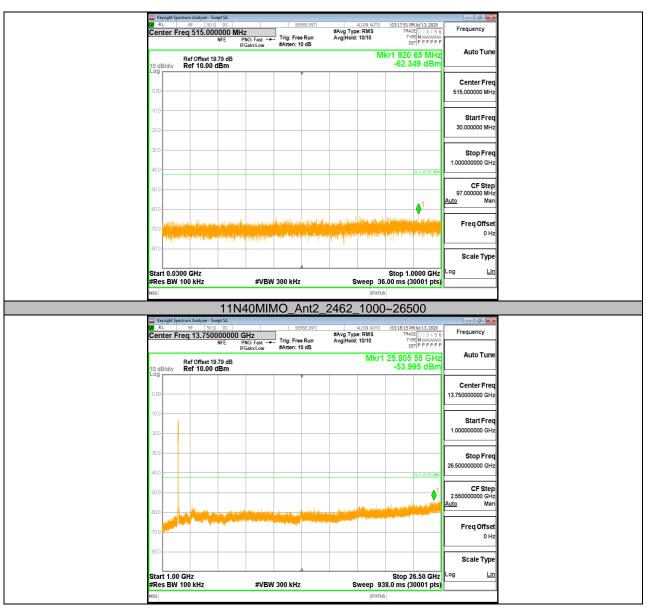


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## Appendix G: Duty Cycle

### Test Result

Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)	Final setting For VBW (kHz)
11b	12.31	12.45	0.989	98.9 %	0.048	0.08	0.1
11g	2.04	2.09	0.976	97.6 %	0.11	0.49	1
11n HT20	1.91	1.96	0.974	97.4 %	0.11	0.52	1
11n HT40	0.93	0.99	0.939	93.9 %	0.27	1.08	2

Note:

Duty Cycle Correction Factor=10log (1/x).

Where: x is Duty Cycle (Linear)

Where: T is On Time

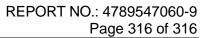
If that calculated VBW is not available on the analyzer then the next higher value should be used.



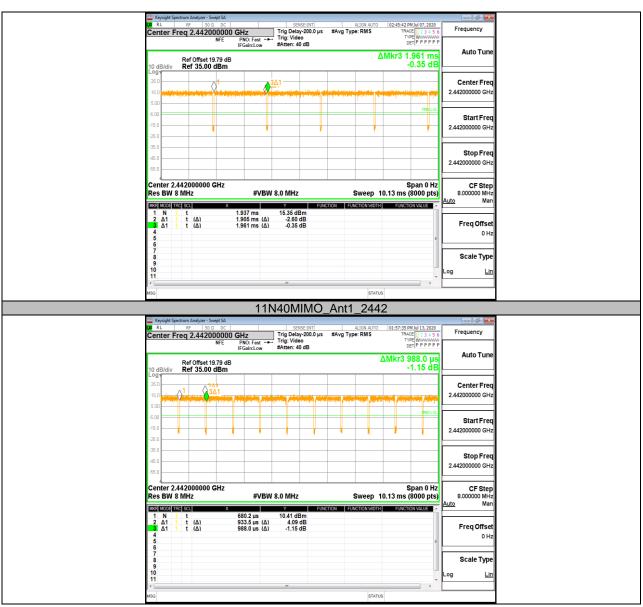
## **Test Graphs**

 11B_Ant	2_2442	
 RL RF 50 Ω SENSE:INT	ALIGN AUTO 10:12:24 AM Jul 13, 2020	
Center Freq 2.442000000 GHz NFE PN0: Fast ++ IFGain:Low #Atten: 40 dB	#Avg Type: RMS TRACE 1 2 3 4 5 6 TYPE WWWWWW DET P P P P P	Frequency
Ref Offset 19.79 dB 10 dB/div Ref 35.00 dBm	∆Mkr3 12.45 ms -0.29 dB	Auto Tune
25.0	3Δ1	Center Freq 2.442000000 GHz
5.00	TRIOLVE	2.442000000 GHz
-5.00		Start Freq 2.442000000 GHz
-25.0		Stan Frag
-45.0		Stop Freq 2.442000000 GHz
Center 2.442000000 GHz Res BW 8 MHz #VBW 8.0 MHz	Span 0 Hz Sweep 20.26 ms (8000 pts)	CF Step 8.000000 MHz
MRR MODE TRC SCL X Y FUN 1 N 1 t 848 7 us 22 78 dRm		luto Man
2 Δ1 1 t (Δ) 12.31 ms (Δ) 0.04 dB 3 Δ1 1 t (Δ) 12.45 ms (Δ) -0.29 dB 4 5		Freq Offset 0 Hz
6 7 8		Scale Type
9 10 11	- L	.og <u>Lin</u>
em	STATUS	
11G_Ant		
Keysight Spectrum Analyzer - Swept SA	2_2442	
K RL RF 50 Ω DC SENSE:INT	ALIGN AUTO 01:07:16 PM Jul 07, 2020	Frequency
Center Freq 2.442000000 GHz NFE PN0: Fast → Trig: Video IFGain:Low #Atten: 30 dB	DET PPPPP	Auto Tune
Ref Offset 9.79 dB 10 dB/div Ref 20.00 dBm	ΔMkr3 2.091 ms -0.50 dB	
	n alleman and a standard and a standard and a standard and a standard at the standard of the s	Center Freq 2.442000000 GHz
-10.0		
-40.0		Start Freq 2.442000000 GHz
-10.0		Stop Freq
-60.0		2.442000000 GHz
Center 2.442000000 GHz Res BW 8 MHz #VBW 8.0 MHz	Span 0 Hz Sweep 10.13 ms (8000 pts)	CF Step 8.000000 MHz Luto Man
1 N 1 t 814.5 μs 13.18 dBm 2 Δ1 1 t (Δ) 2.044 ms (Δ) -2.34 dB	CTION FUNCTION WIDTH FUNCTION VALUE	
<b>3</b> Δ1 1 t (Δ) 2.091 ms (Δ) -0.50 dB 4 5	E	Freq Offset 0 Hz
6 7 8 9		Scale Type
10	• L	og <u>Lin</u>
•		
 11N20MIMO	STATUS	

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