



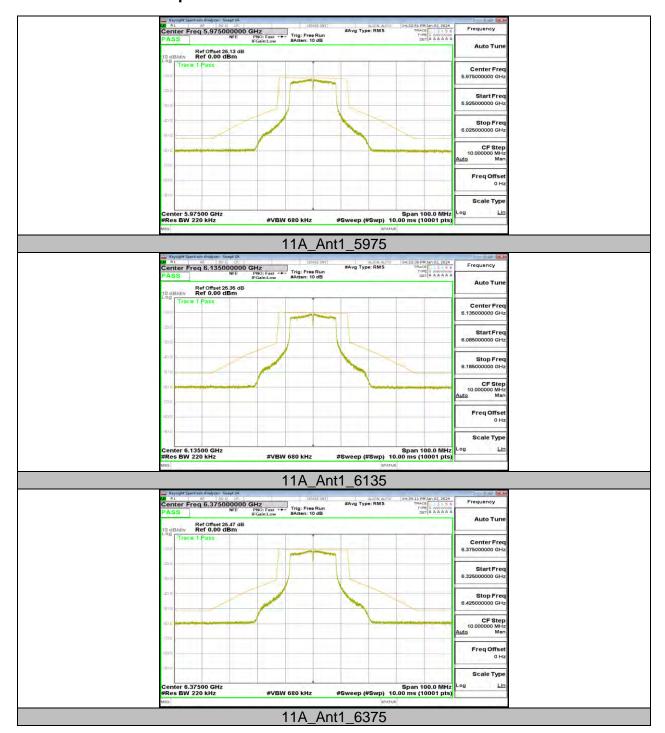
Page 698 of 735

## 11.10. APPENDIX F1: IN-BAND EMISSIONS 11.10.1. Test Result

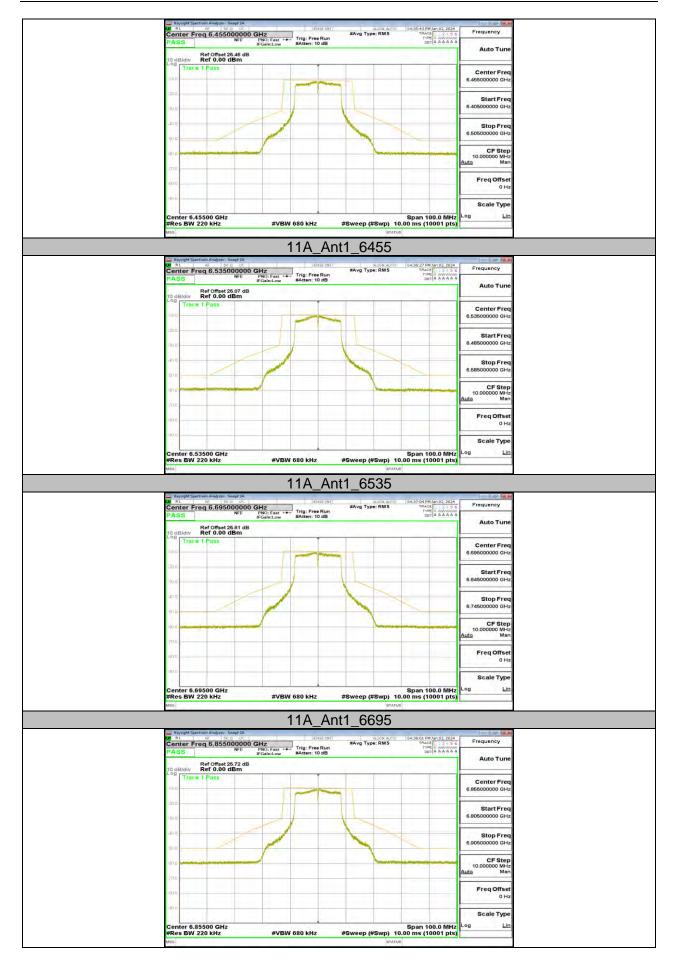
Test Mode	Antenna	Frequency [MHz]	Result	Limit	Verdict
	Ant1	5975	See test graph	See test graph	PASS
	Ant1	6135	See test graph	See test graph	PASS
	Ant1	6375	See test graph	See test graph	PASS
	Ant1	6455	See test graph	See test graph	PASS
440	Ant1	6535	See test graph	See test graph	PASS
11A	Ant1	6695	See test graph	See test graph	PASS
	Ant1	6855	See test graph	See test graph	PASS
	Ant1	6935	See test graph	See test graph	PASS
	Ant1	7015	See test graph	See test graph	PASS
	Ant1	7095	See test graph	See test graph	PASS



### 11.10.2. Test Graphs









11A\_Ant1\_6855 Rt #F 80 0 DC enter Freq 6.935000000 GHz NFE PNO: Fast + Trig: Free Run Erz-din'd ow #Atten: 10 dB 157 PM Jan 02, 2024 TRACE 1 1 3 4 5 TYPE A MANAGE DET A A A A A #Avg Type: RMS Ref Offset 25.86 dB Ref 0.00 dBm Center Free 6.935000000 GH Start Fred 5.885000000 GH: Scale Type enter 6.93500 GHz Res BW 220 kHz Span 100.0 MHz #Sweep (#Swp) 10.00 ms (10001 pts) **#VBW** 680 kHz 11A\_Ant1\_6935 H:39:42 PMJan 02, 2024 TRACE | 3 4 5 TYPE A MANAGED DET A A A A A Rt MF 500 DC GHz
enter Freq 7.015000000 GHz
NFE PNO: Fast + Trig: Free Run
Aften: 10 dB Frequency Ref Offset 25.89 dB Ref 0.00 dBm Center Fre 7.015000000 GH Start Fre Freq Offse Span 100.0 MHz #Sweep (#Swp) 10.00 ms (10001 pts) #VBW 680 kHz 11A\_Ant1\_7015 Rt RF SGD DC SERSE.

Center Freq 7.095000000 GHz

NFE PRO: Fast HARREN: 10 dB MARREN: 10 dB Frequency Auto Tun Ref Offset 26.28 dB Ref 0.00 dBm Start Fred 7.045000000 GH: Stop Fred 7.145000000 GH; Freq Offse Scale Type Span 100.0 MHz #Sweep (#Swp) 10.00 ms (10001 pts) 11A\_Ant1\_7095



Page 702 of 735

### 11.11. APPENDIX F2: INBAND EMISSIONS FOR OFDMA 11.11.1. Test Result

Test Mode	Antenna	Channel	RuSize	RuIndex	Result	Limit	Verdict		
		5955	242Tone	RU61	See test graph	See test graph	PASS		
		6175	242Tone	RU61	See test graph	See test graph	PASS		
		6415	242Tone	RU61	See test graph	See test graph	PASS		
		6435	242Tone	RU61	See test graph	See test graph	PASS		
		6475	242Tone	RU61	See test graph	See test graph	PASS		
11AX20MIMO	Ant1	6515	242Tone	RU61	See test graph	See test graph	PASS		
TTAXZUWIIWO	Anti	6535	242Tone	RU61	See test graph	See test graph	PASS		
		6715	242Tone	RU61	See test graph	See test graph	PASS		
		6855	242Tone	RU61	See test graph	See test graph	PASS		
		6875	242Tone	RU61	See test graph	See test graph	PASS		
				7015	242Tone	RU61	See test graph	See test graph	PASS
		7115	242Tone	RU61	See test graph	See test graph	PASS		
		5965	484Tone	RU65	See test graph	See test graph	PASS		
		6165	484Tone	RU65	See test graph	See test graph	PASS		
		6405	484Tone	RU65	See test graph	See test graph	PASS		
		6445	484Tone	RU65	See test graph	See test graph	PASS		
		6485	484Tone	RU65	See test graph	See test graph	PASS		
11AX40MIMO	Ant1	6525	484Tone	RU65	See test graph	See test graph	PASS		
I IAA40IVIIIVIO	Aliti	6565	484Tone	RU65	See test graph	See test graph	PASS		
		6725	484Tone	RU65	See test graph	See test graph	PASS		
		6845	484Tone	RU65	See test graph	See test graph	PASS		
		6885	484Tone	RU65	See test graph	See test graph	PASS		
		7005	484Tone	RU65	See test graph	See test graph	PASS		
		7085	484Tone	RU65	See test graph	See test graph	PASS		

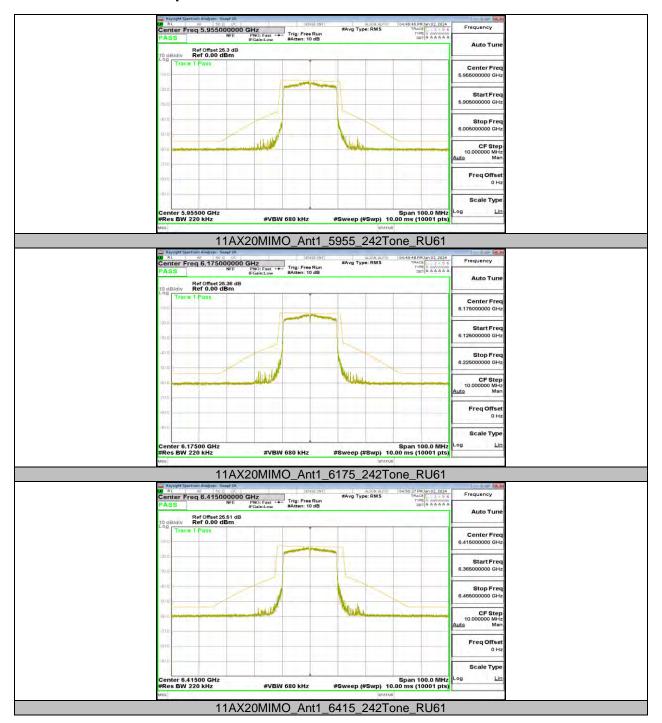


Page 703 of 735

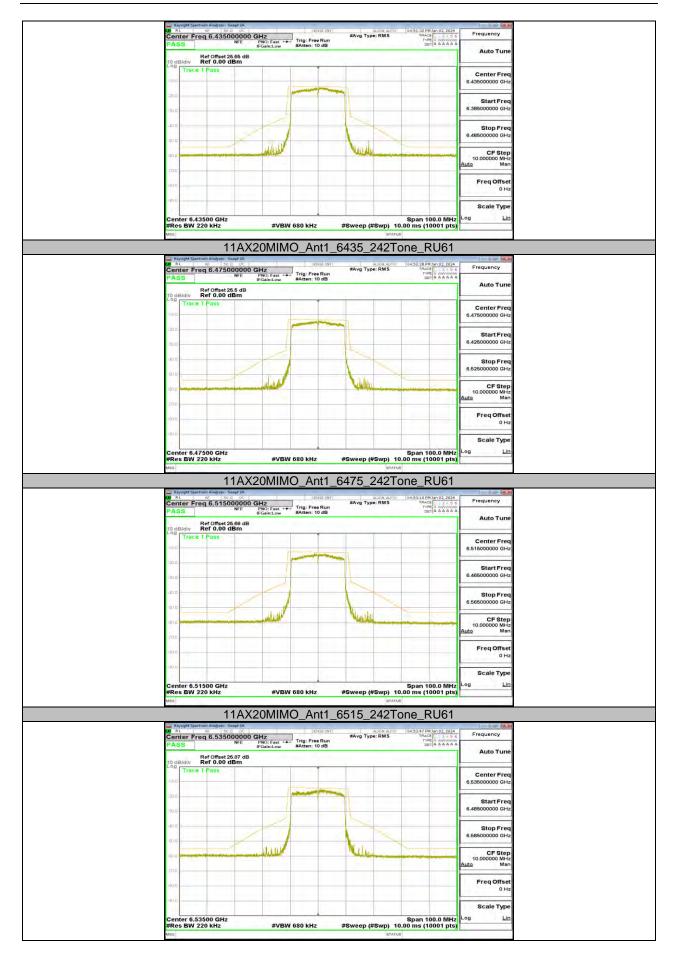
		5985	996Tone	RU67	See test graph	See test graph	PASS
		6145	996Tone	RU67	See test graph	See test graph	PASS
		6385	996Tone	RU67	See test graph	See test graph	PASS
		6465	996Tone	RU67	See test graph	See test graph	PASS
11AX80MIMO	Ant1	6545	996Tone	RU67	See test graph	See test graph	PASS
TIAXOUMINO	Anti	6705	996Tone	RU67	See test graph	See test graph	PASS
		6785	996Tone	RU67	See test graph	See test graph	PASS
		6865	996Tone	RU67	See test graph	See test graph	PASS
		6945	996Tone	RU67	See test graph	See test graph	PASS
		7025	996Tone	RU67	See test graph	See test graph	PASS



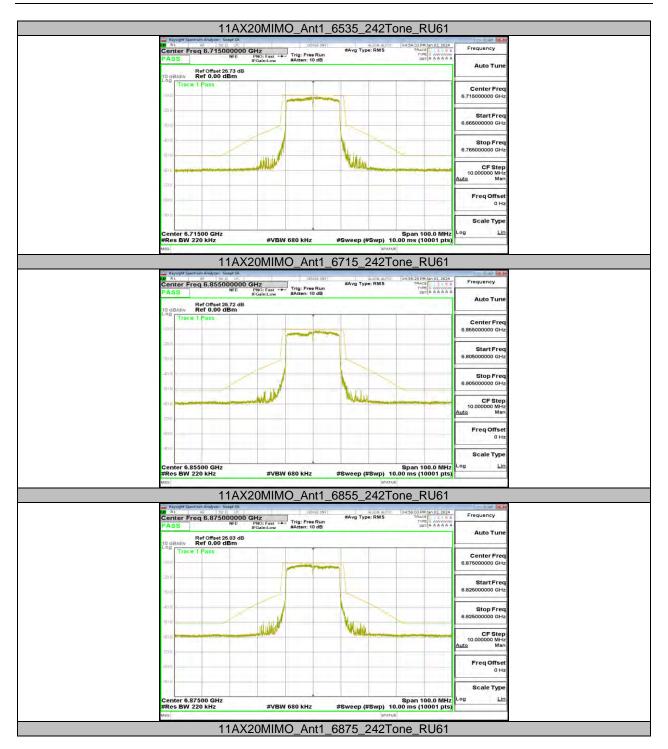
### 11.11.2. Test Graphs



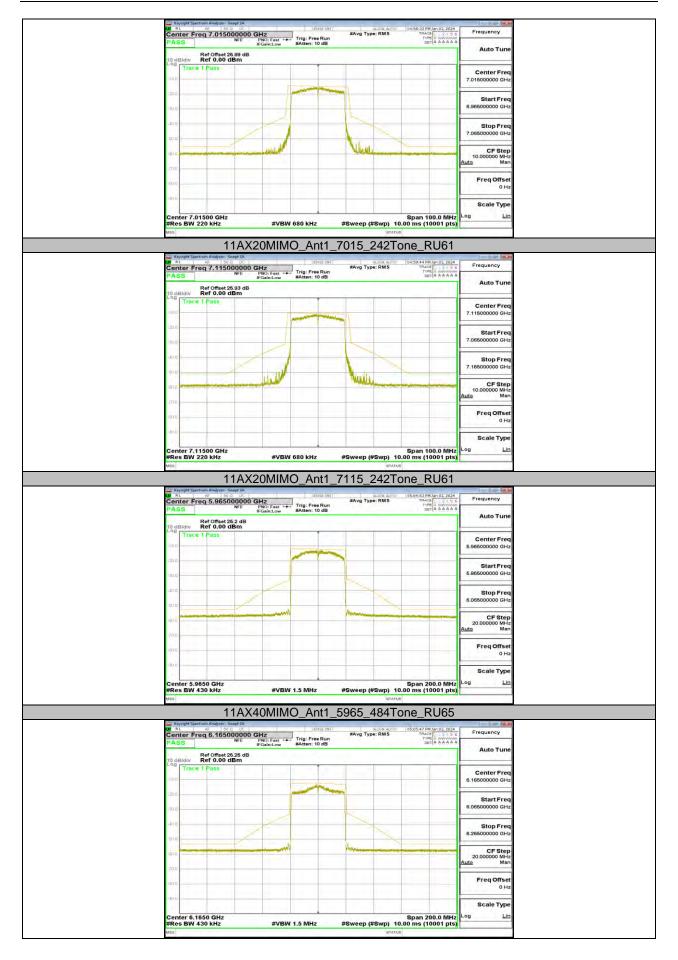




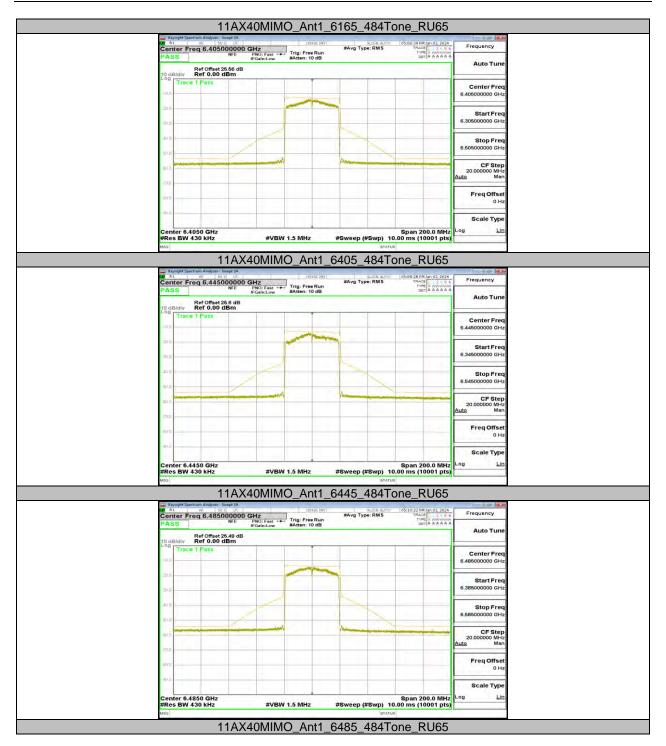




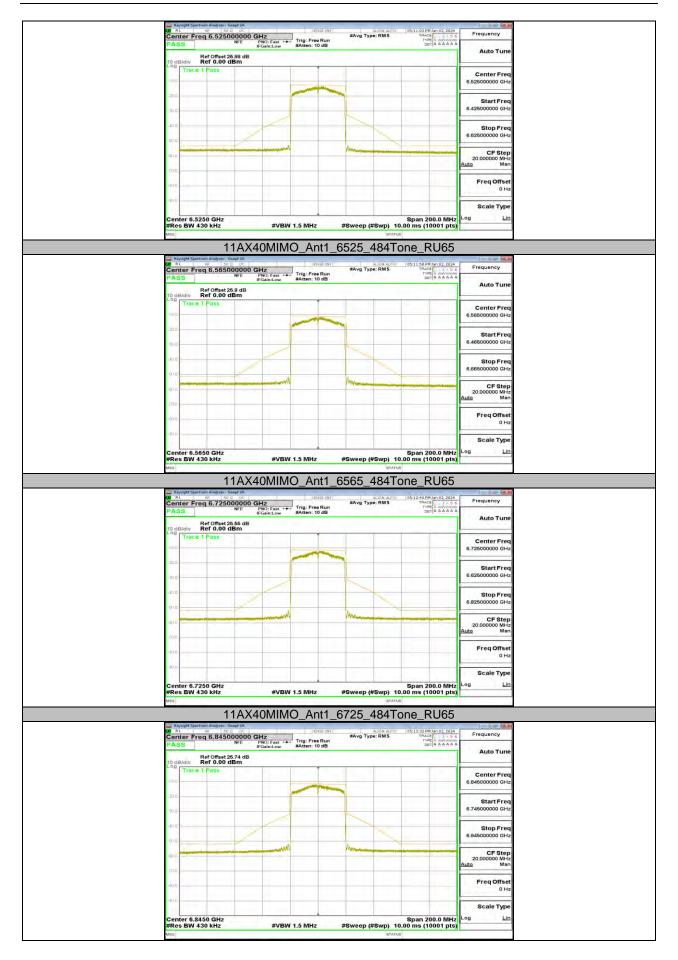




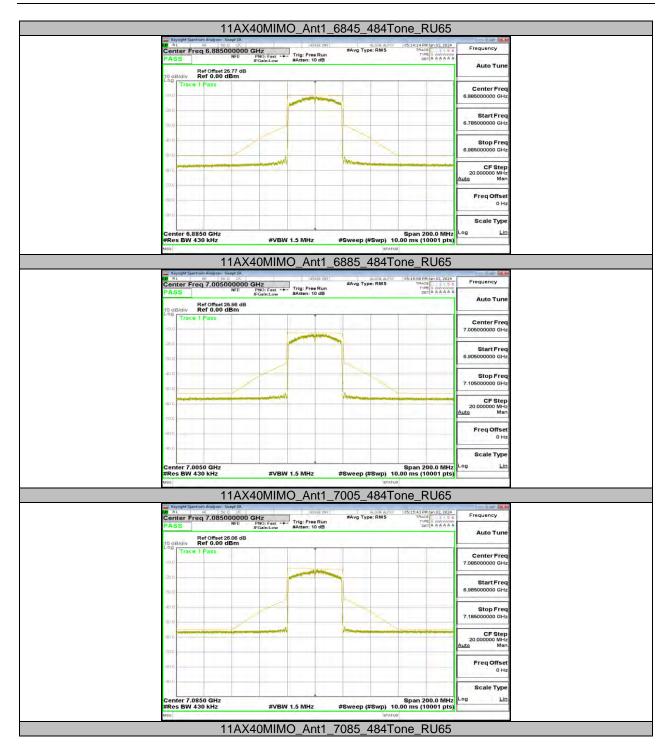




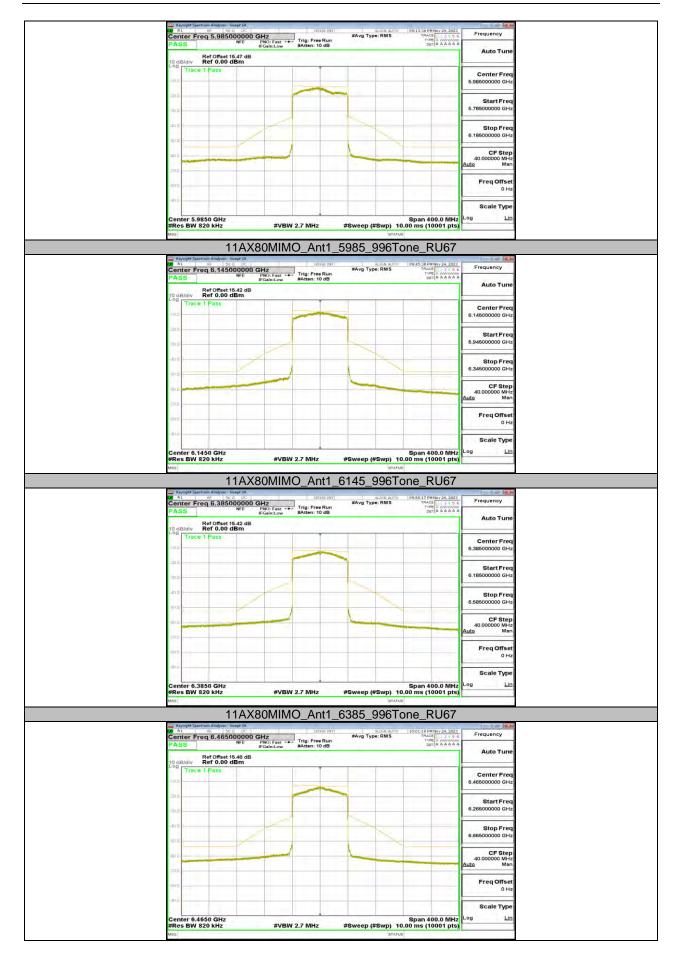




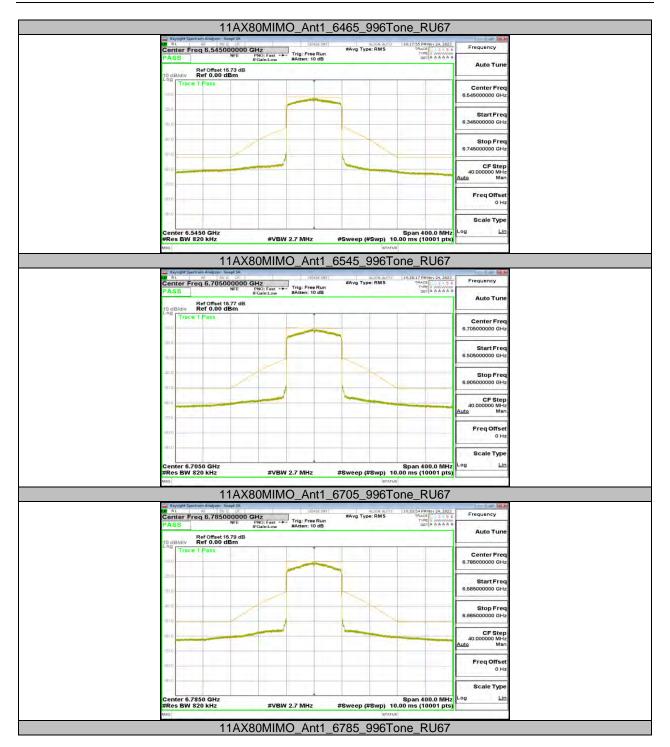




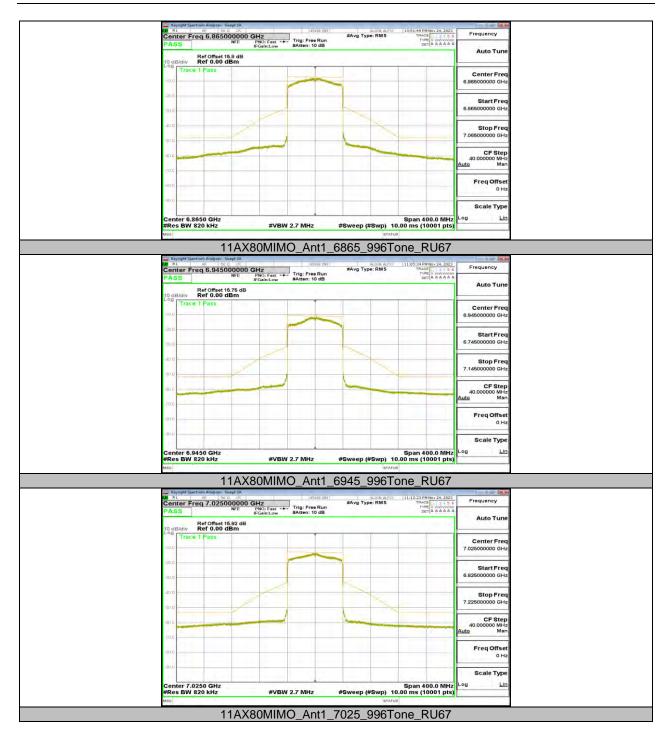














Page 714 of 735

## 11.12. APPENDIX G: FREQUENCY STABILITY 11.12.1. Test Result

	Frequency Error vs. Voltage											
	802.11ax HE20:5955MHz											
_	0 Minute 2 Minute 5 Minute 10 Minute											
Temp.	Volt.	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)			
TN	VL	5954.9846	-2.59	5954.9824	-2.96	5955.0157	2.63	5955.0118	1.98			
TN	VN	5955.0130	2.19	5955.0071	1.20	5954.9843	-2.64	5954.9905	-1.60			
TN	VH	5954.9862	-2.31	5955.0177	2.97	5954.9888	-1.89	5954.9751	-4.19			
				Fraguenay	Error vo. Tom	ooroturo						

#### Frequency Error vs. Temperature

#### 802.11ax HE20:5955MHz

_		0 Min	ute	2 Min	2 Minute		ute	10 Minute		
Temp.	Volt.	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	Freq.Error (MHz)	Tolerance (ppm)	
50	VN	5954.9863	-2.30	5955.0144	2.42	5954.9797	-3.41	5954.9876	-2.09	
40	VN	5955.0232	3.89	5955.0239	4.01	5954.9811	-3.17	5954.9973	-0.45	
30	VN	5955.0087	1.47	5954.9875	-2.11	5955.0179	3.01	5955.0242	4.06	
20	VN	5955.0129	2.17	5954.9990	-0.17	5955.0022	0.36	5954.9948	-0.88	
10	VN	5954.9762	-3.99	5955.0165	2.77	5954.9801	-3.34	5955.0038	0.64	
0	VN	5954.9870	-2.18	5954.9843	-2.63	5954.9965	-0.59	5955.0125	2.10	
-10	VN	5955.0058	0.97	5954.9914	-1.44	5955.0137	2.31	5954.9833	-2.81	
-20	VN	5954.9818	-3.05	5955.0203	3.40	5954.9791	-3.51	5954.9905	-1.59	

#### Note:

<sup>1.</sup> All antennas, test modes and test channels have been tested, only the worst data record in the report.

<sup>2.</sup> For the detail Test Conditions, please refer to section 7.6 TEST ENVIRONMENT.

Page 715 of 735

# 11.13. APPENDIX H: CONTENTION BASED PROTOCOL 11.13.1. Test Result

Mode	Frequency (MHz)	Antenna	AWGN Location	AWGN Frequency (MHz)	Pmeas (dBm)	Loss (dB)	Pinj (dBm)	Gant (dBi)	Limit (dBm)	Adjusted Limit (dBm)	UT Tx Status (Note1)	Verdict
				6115	-69.23	1	-70.23	-2.06	-62	-64.06	ON	-
	6115	Ant0	Center	6115	-66.35	1	-67.35	-2.06	-62	-64.06	Minimal	-
				6115	-64.96	1	-65.96	-2.06	-62	-64.06	OFF	PASS
				6435	-69.19	1	-70.19	-2.06	-62	-64.06	ON	-
	6435	Ant0	Center	6435	-66.07	1	-67.07	-2.06	-62	-64.06	Minimal	-
00				6435	-64.61	1	-65.61	-2.06	-62	-64.06	OFF	PASS
ax20				6615	-69.16	1	-70.16	-2.06	-62	-64.06	ON	-
	6615	Ant0	Center	6615	-67.39	1	-68.39	-2.06	-62	-64.06	Minimal	-
				6615	-65.01	1	-66.01	-2.06	-62	-64.06	OFF	PASS
				7015	-69.10	1	-70.10	-2.06	-62	-64.06	ON	-
	7015	Ant0	Center	7015	-66.33	1	-67.33	-2.06	-62	-64.06	Minimal	-
				7015	-64.95	1	-65.95	-2.06	-62	-64.06	OFF	PASS
				6110	-69.23	1	-70.23	-2.06	-62	-64.06	ON	-
		Ant0	Low	6110	-68.00	1	-69.00	-2.06	-62	-64.06	Minimal	-
				6110	-64.89	1	-65.89	-2.06	-62	-64.06	OFF	PASS
				6145	-69.23	1	-70.23	-2.06	-62	-64.06	ON	-
	6145	Ant0	Center	6145	-66.23	1	-67.23	-2.06	-62	-64.06	Minimal	-
				6145	-64.85	1	-65.85	-2.06	-62	-64.06	OFF	PASS
				6180	-69.23	1	-70.23	-2.06	-62	-64.06	ON	-
		Ant0	High	6180	-67.46	1	-68.46	-2.06	-62	-64.06	Minimal	-
				6180	-64.95	1	-65.95	-2.06	-62	-64.06	OFF	PASS
				6430	-69.18	1	-70.18	-2.06	-62	-64.06	ON	-
		Ant0	Low	6430	-66.93	1	-67.93	-2.06	-62	-64.06	Minimal	-
				6430	-64.53	1	-65.53	-2.06	-62	-64.06	OFF	PASS
				6465	-69.18	1	-70.18	-2.06	-62	-64.06	ON	-
	6465	Ant0	Center	6465	-67.41	1	-68.41	-2.06	-62	-64.06	Minimal	-
ax80				6465	-64.47	1	-65.47	-2.06	-62	-64.06	OFF	PASS
				6500	-69.18	1	-70.18	-2.06	-62	-64.06	ON	-
		Ant0	High	6500	-66.41	1	-67.41	-2.06	-62	-64.06	Minimal	-
				6500	-64.81	1	-65.81	-2.06	-62	-64.06	OFF	PASS
				6670	-69.15	1	-70.15	-2.06	-62	-64.06	ON	-
		Ant0	Low	6670	-67.36	1	-68.36	-2.06	-62	-64.06	Minimal	-
				6670	-65.06	1	-66.06	-2.06	-62	-64.06	OFF	PASS
				6705	-69.15	1	-70.15	-2.06	-62	-64.06	ON	-
	6705	Ant0	Center	6705	-66.38	1	-67.38	-2.06	-62	-64.06	Minimal	-
				6705	-64.76	1	-65.76	-2.06	-62	-64.06	OFF	PASS
				6740	-69.15	1	-70.15	-2.06	-62	-64.06	ON	-
		Ant0	High	6740	-67.58	1	-68.58	-2.06	-62	-64.06	Minimal	-
				6740	-64.79	1	-65.79	-2.06	-62	-64.06	OFF	PASS
	6945	Ant0	Low	6910	-69.11	1	-70.11	-2.06	-62	-64.06	ON	-



REPORT NO.: 4791021404-RF-5 Page 716 of 735

			6910	-66.76	1	-67.76	-2.06	-62	-64.06	Minimal	-
			6910	-64.77	1	-65.77	-2.06	-62	-64.06	OFF	PASS
			6945	-69.11	1	-70.11	-2.06	-62	-64.06	ON	-
	Ant0	Center	6945	-66.26	1	-67.26	-2.06	-62	-64.06	Minimal	-
			6945	-64.67	1	-65.67	-2.06	-62	-64.06	OFF	PASS
			6980	-69.11	1	-70.11	-2.06	-62	-64.06	ON	-
	Ant0	High	6980	-67.27	1	-68.27	-2.06	-62	-64.06	Minimal	-
			6980	-64.42	1	-65.42	-2.06	-62	-64.06	OFF	PASS

Note 1: The AWGN level is reported for the following conditions:

- OFF = AWGN level at which no transmission is detected, consistently for a minimum period of 10 seconds
- Minimal: AWGN level at which the system begins to trigger the transmission switch-off, albeit not being kept off consistently
- ON = AWGN level at which no impact on the transmission is detected, consistently for a minimum period of 10 seconds.

Pmeas is measured AWGN signal level.

Loss is the total path losses of cables / attenuators / couplers between measurement point and EUT injection point. If the measurement is made at the end of the cable that connects to the EUT antenna port then this is 0dBm.

Pinj is the power injected at EUT's antenna port.

Gant = EUT antenna gain (for a MIMO system it is the lowest gain across all antennas)

Limit = minimum required detection level

Adjusted limit is the FCC limit (-62dBm) corrected for the EUT antenna gain (= -62dBm - Gant)

Note 2: The EUT does not support channel puncturing.

Note 3: The EUT does not support channel bandwidth reduction.

Note 5: Test is performed by starting at a level much lower than required detection level and then increased based on KDB 987594.

Test Mode	Antenna	Channel	Interference I [MH:		Test Number [n]	Number Detected [n]	Result [%]	Limit [%]	Verdict
		6115	Center	6115	10	10	100	90	PASS
11AX20MIMO	Ant0	6435	Center	6455	10	10	100	90	PASS
TTAXZUIVIIIVIO	Anto	6615	Center	6615	10	10	100	90	PASS
		7015	Center	7015	10	10	100	90	PASS
			High	6110	10	10	100	90	PASS
		6145	Center	6145	10	10	100	90	PASS
			Low	6180	10	10	100	90	PASS
			High	6430	10	10	100	90	PASS
		6465	Center	6465	10	10	100	90	PASS
44 A V 90 M I M O	A = 40		Low	6500	10	10	100	90	PASS
11AX80MIMO	Ant0		High	6670	10	10	100	90	PASS
		6705	Center	6705	10	10	100	90	PASS
			Low	6740	10	10	100	90	PASS
			High	6910	10	10	100	90	PASS
		6945	Center	6945	10	10	100	90	PASS
			Low	6980	10	10	100	90	PASS

Test Mode	Antenna	Channel	Interference I [MH:		Test Time	Is Detected	Verdict
			Center	6115	1	Yes	PASS
			Center	6115	2	Yes	PASS
			Center	6115	3	Yes	PASS
			Center	6115	4	Yes	PASS
		0445	Center	6115	5	Yes	PASS
		6115	Center	6115	6	Yes	PASS
			Center	6115	7	Yes	PASS
			Center	6115	8	Yes	PASS
			Center	6115	9	Yes	PASS
			Center	6115	10	Yes	PASS
11AX20MIMO	Ant0		Center	6435	1	Yes	PASS
			Center	6435	2	Yes	PASS
			Center	6435	3	Yes	PASS
			Center	6435	4	Yes	PASS
		6435	Center	6435	5	Yes	PASS
		6435	Center	6435	6	Yes	PASS
			Center	6435	7	Yes	PASS
			Center	6435	8	Yes	PASS
			Center	6435	9	Yes	PASS
			Center	6435	10	Yes	PASS
		6615	Center	6615	1	Yes	PASS



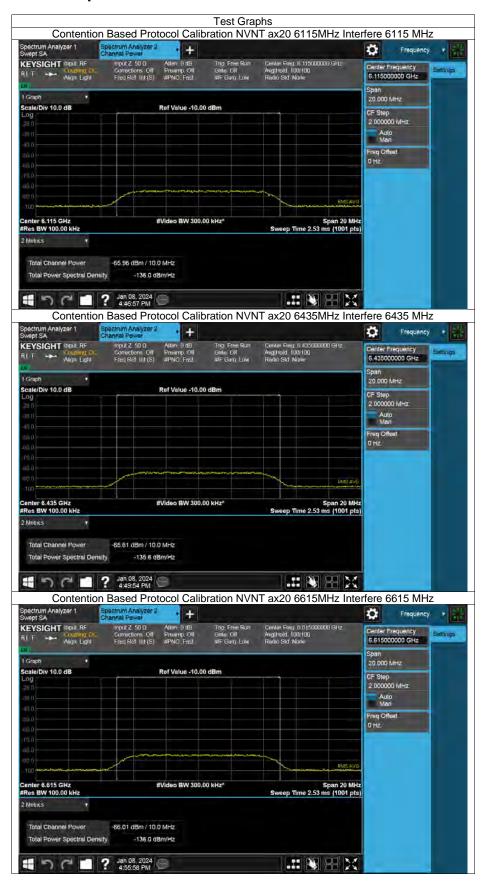
			Center	6615	2	Yes	PASS
			Center	6615	3	Yes	PASS
			Center	6615	4	Yes	PASS
	1		Center	6615	5	Yes	PASS
	1		Center	6615	6	Yes	PASS
	1		Center	6615	7	Yes	PASS
	1		Center	6615	8	Yes	PASS
	1		Center	6615	9	Yes	PASS
			Center	6615	10	Yes	PASS
			Center	7015	1	Yes	PASS
			Center	7015	2	Yes	PASS
			Center	7015	3	Yes	PASS
			Center	7015	4	Yes	PASS
		7015	Center	7015	5	Yes	PASS
		7010	Center	7015	6	Yes	PASS
			Center	7015	7	Yes	PASS
			Center	7015	8	Yes	PASS
			Center	7015	9	Yes	PASS
			Center	7015	10	Yes	PASS
			High	6110	1	Yes	PASS
			High	6110	2	Yes	PASS
			High	6110	3	Yes	PASS
			High	6110	4	Yes	PASS
			High	6110	5	Yes	PASS
	1		High	6110	6	Yes	PASS
	1		High	6110	7	Yes	PASS
	1		High	6110	8	Yes	PASS
	1		High	6110	9	Yes	PASS
	1		High	6110	10	Yes	PASS
	1		Center	6145	1	Yes	PASS
	1		Center	6145	2	Yes	PASS
	1		Center	6145	3	Yes	PASS
	1		Center	6145	4	Yes	PASS
	1	6145	Center	6145	5	Yes	PASS
	1	0145	Center	6145	6	Yes	PASS
	1		Center	6145	7	Yes	PASS
	1		Center	6145	8	Yes	PASS
	1		Center	6145	9	Yes	PASS
	1		Center	6145	10	Yes	PASS
	1		Low	6180	1	Yes	PASS
	1		Low	6180	2	Yes	PASS
	1		Low	6180	3	Yes	PASS
	1		Low	6180	4	Yes	PASS
	1		Low	6180	5	Yes	PASS
	1		Low	6180	6	Yes	PASS
	1		Low	6180	7	Yes	PASS
	1		Low	6180	8	Yes	PASS
	1		Low	6180	9	Yes	PASS
	1		Low	6180	10	Yes	PASS
44.4.7.00.4114.0	A = 40		High	6430	1	Yes	PASS
11AX80MIMO	Ant0		High	6430	2	Yes	PASS
	1		High	6430	3	Yes	PASS
	1		High	6430	4	Yes	PASS
	1		High	6430	5	Yes	PASS
	1		High	6430	6	Yes	PASS
	1		High	6430	7	Yes	PASS
	1		High	6430	8	Yes	PASS
	1		High	6430	9	Yes	PASS
	1		High	6430	10	Yes	PASS
	1		Center	6465	1	Yes	PASS
	1		Center	6465	2	Yes	PASS
	1		Center	6465	3	Yes	PASS
	1		Center	6465	4	Yes	PASS
	1		Center	6465	5	Yes	PASS
	1	6465	Center	6465	6	Yes	PASS
	1		Center	6465	7	Yes	PASS
	1		Center	6465	8	Yes	PASS
	1		Center	6465	9	Yes	PASS
	1		Center	6465	10	Yes	PASS
	1		Low	6500	10	Yes	PASS
	1		Low	6500	2	Yes	PASS
	1		Low	6500	3	Yes	PASS
	1			6500	4	Yes	PASS
	1		Low		5		PASS
	1		Low	6500 6500		Yes	
	1		Low		<u>6</u> 7	Yes	PASS
			Low Low	6500		Yes	PASS
			1 CW/	6500	8	Yes	PASS
					^	V	2
			Low	6500	9	Yes	PASS
			Low Low	6500 6500	10	Yes	PASS
		6705	Low	6500			



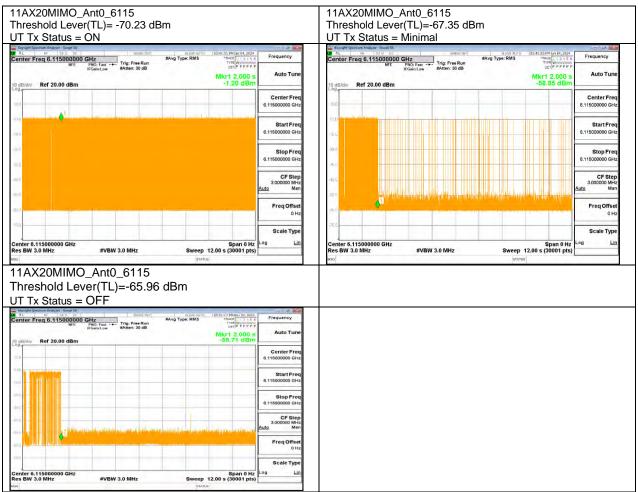
•					
	High	6670	3	Yes	PASS
	High	6670	4	Yes	PASS
	High	6670	5	Yes	PASS
	High	6670	6	Yes	PASS
	High	6670	7	Yes	PASS
	High	6670	8	Yes	PASS
	High	6670	9	Yes	PASS
	High	6670	10	Yes	PASS
	Center	6705	1	Yes	PASS
	Center	6705	2	Yes	PASS
	Center	6705	3	Yes	PASS
	Center	6705	4	Yes	PASS
	Center	6705	5	Yes	PASS
	Center	6705	6	Yes	PASS
	Center	6705	7	Yes	PASS
	Center	6705	8	Yes	PASS
	Center	6705	9	Yes	PASS
	Center	6705	10	Yes	PASS
	Low	6740	11	Yes	PASS
	Low	6740	2	Yes	PASS
	Low	6740	3	Yes	PASS
	Low	6740	4	Yes	PASS
	Low	6740	5	Yes	PASS
	Low	6740	6	Yes	PASS
	Low	6740	7	Yes	PASS
	Low	6740	8	Yes	PASS
	Low	6740	9	Yes	PASS
	Low	6740	10	Yes	PASS
	High	6910	11	Yes	PASS
	High	6910	2	Yes	PASS
	High	6910	3	Yes	PASS
	High	6910	4	Yes	PASS
	High	6910	5	Yes	PASS
	High	6910	6	Yes	PASS
	High	6910	7	Yes	PASS
	High	6910	8	Yes	PASS
	High	6910	9	Yes	PASS
	High	6910	10	Yes	PASS
	Center	6945	1	Yes	PASS
	Center	6945	2	Yes	PASS
	Center	6945	3	Yes	PASS
ı	Center	6945	4	Yes	PASS
6045	Center	6945	5	Yes	PASS
6945	Center Center	6945 6945		Yes Yes	
6945			5		PASS
6945	Center	6945	5 6	Yes	PASS PASS
6945	Center Center	6945 6945	5 6 7	Yes Yes	PASS PASS PASS
6945	Center Center Center	6945 6945 6945	5 6 7 8	Yes Yes Yes	PASS PASS PASS PASS
6945	Center Center Center Center	6945 6945 6945 6945	5 6 7 8 9	Yes Yes Yes Yes	PASS PASS PASS PASS PASS
6945	Center Center Center Center Center Center	6945 6945 6945 6945 6945	5 6 7 8 9	Yes Yes Yes Yes Yes Yes Yes	PASS PASS PASS PASS PASS PASS PASS
6945	Center Center Center Center Center Center Low	6945 6945 6945 6945 6945 6980	5 6 7 8 9 10	Yes Yes Yes Yes Yes Yes Yes Yes	PASS PASS PASS PASS PASS PASS PASS PASS
6945	Center Center Center Center Center Center Low Low	6945 6945 6945 6945 6945 6980 6980	5 6 7 8 9 10 1	Yes Yes Yes Yes Yes Yes Yes Yes Yes	PASS PASS PASS PASS PASS PASS PASS PASS
6945	Center Center Center Center Center Low Low Low	6945 6945 6945 6945 6945 6980 6980	5 6 7 8 9 10 1 2 3	Yes	PASS PASS PASS PASS PASS PASS PASS PASS
6945	Center Center Center Center Center Low Low Low Low Low	6945 6945 6945 6945 6945 6980 6980 6980 6980	5 6 7 8 9 10 1 2 3 4 5	Yes	PASS PASS PASS PASS PASS PASS PASS PASS
6945	Center Center Center Center Center Low Low Low Low Low Low Low	6945 6945 6945 6945 6945 6980 6980 6980 6980 6980	5 6 7 8 9 10 1 2 3 4 5 6	Yes	PASS PASS PASS PASS PASS PASS PASS PASS
6945	Center Center Center Center Low Low Low Low Low Low	6945 6945 6945 6945 6945 6980 6980 6980 6980	5 6 7 8 9 10 1 2 3 4 5	Yes	PASS PASS PASS PASS PASS PASS PASS PASS
6945	Center Center Center Center Center Low	6945 6945 6945 6945 6945 6980 6980 6980 6980 6980 6980	5 6 7 8 9 10 1 2 3 4 5 6	Yes	PASS PASS PASS PASS PASS PASS PASS PASS



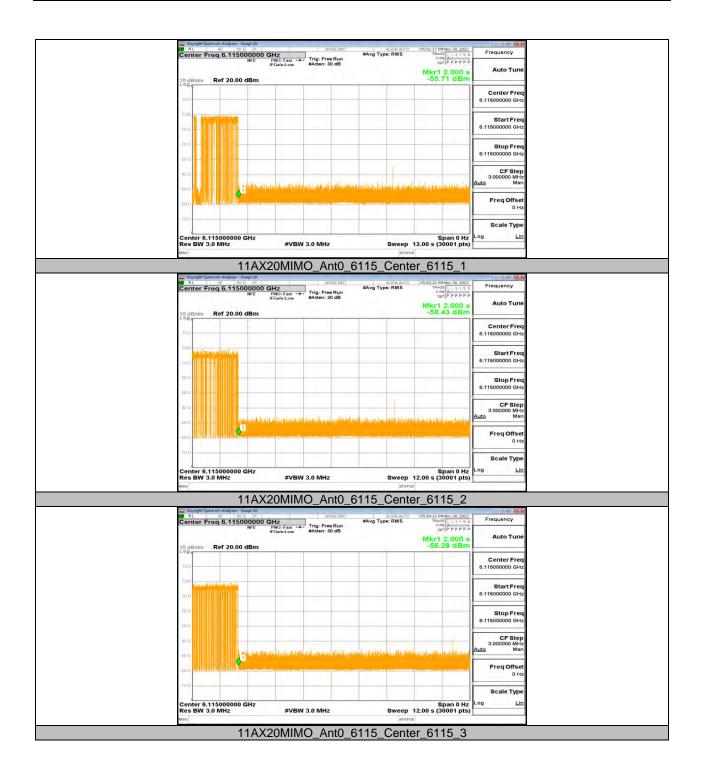
## 11.13.2. Test Graphs for worst case



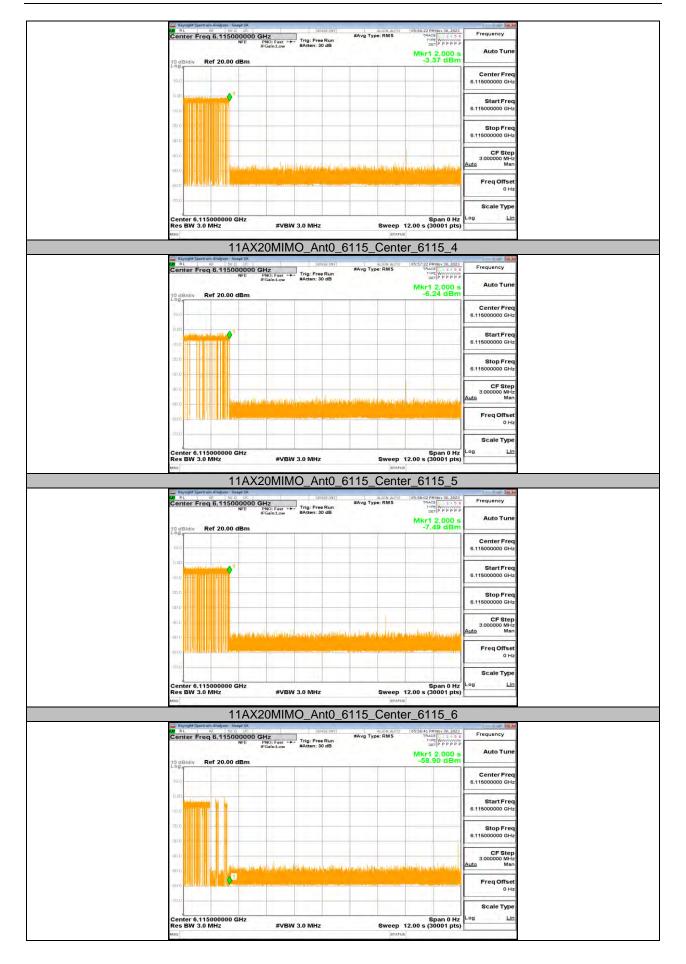




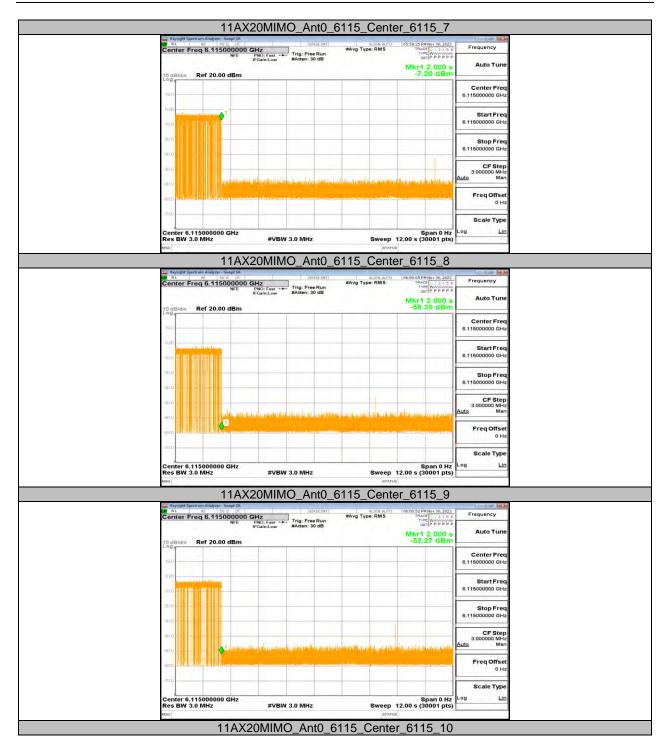




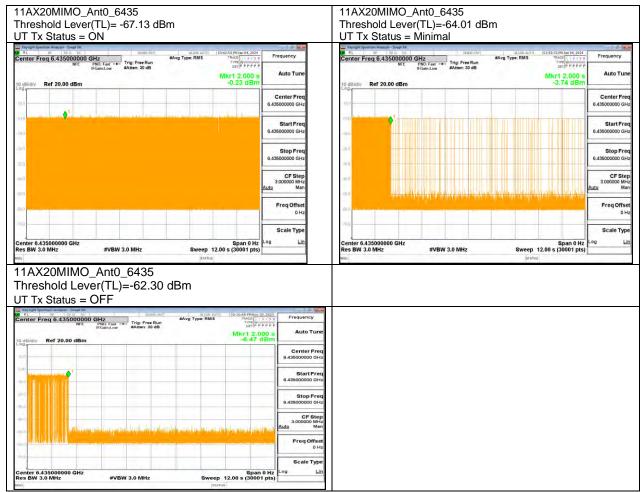




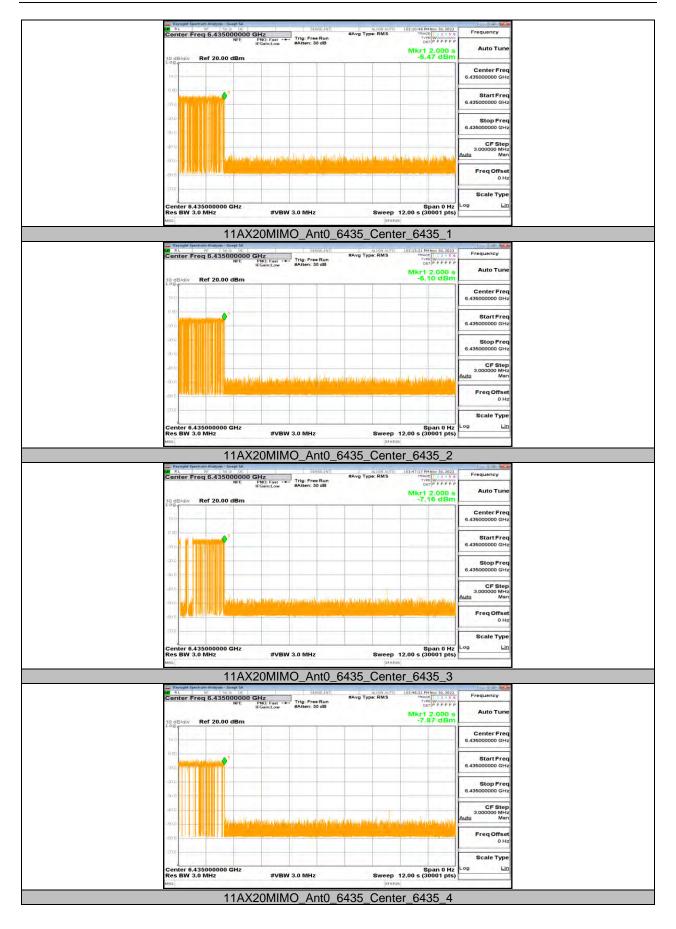




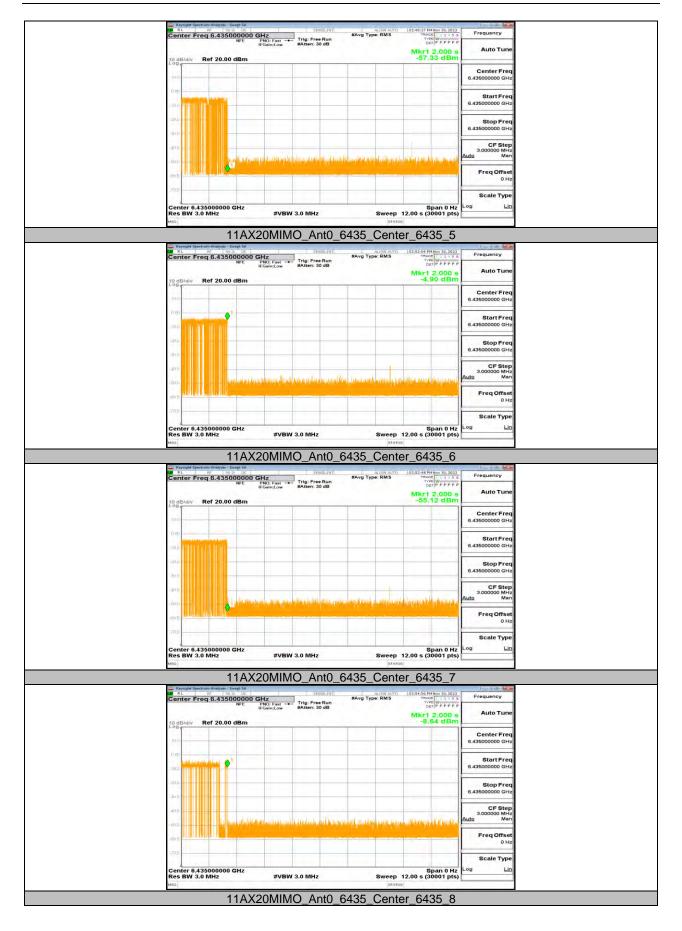




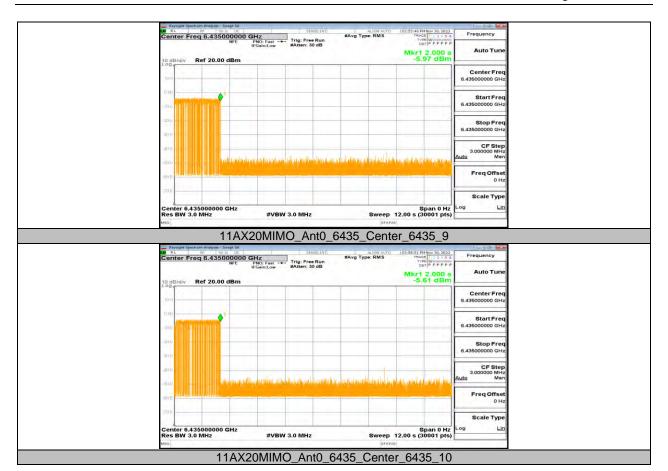




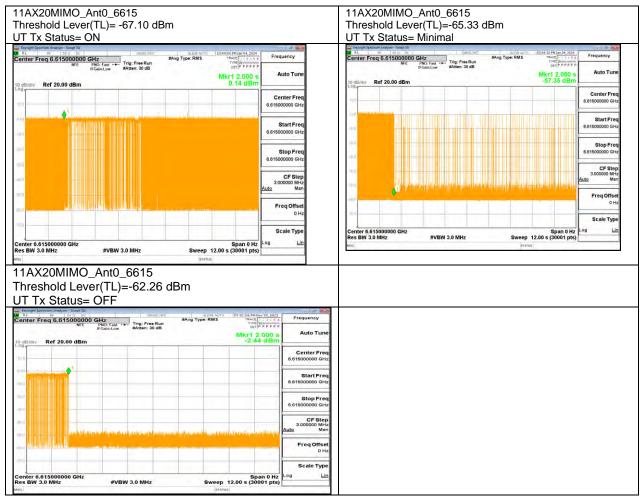




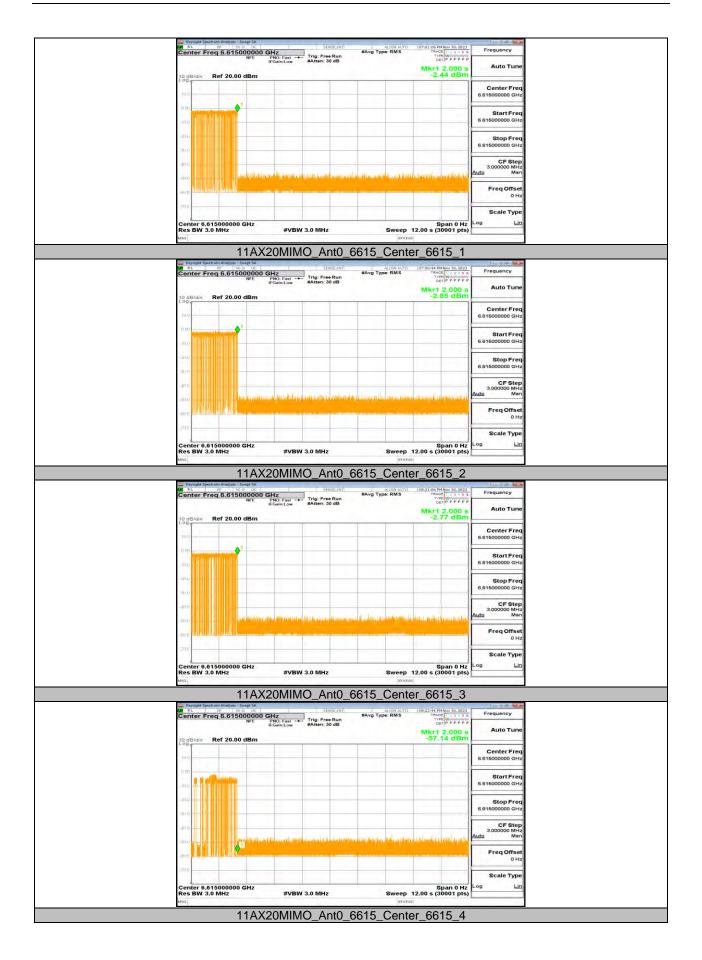




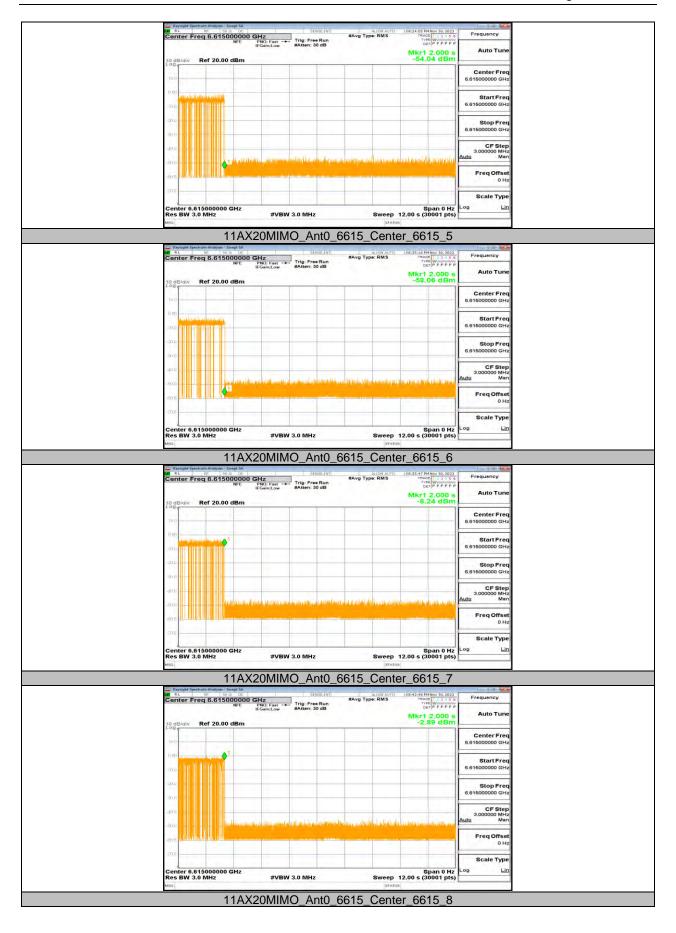




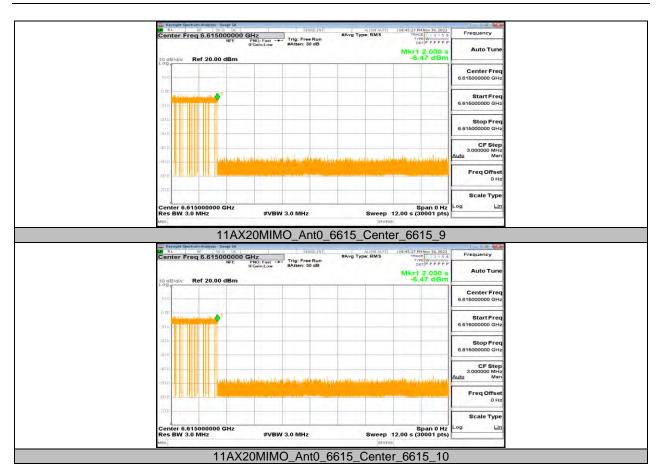




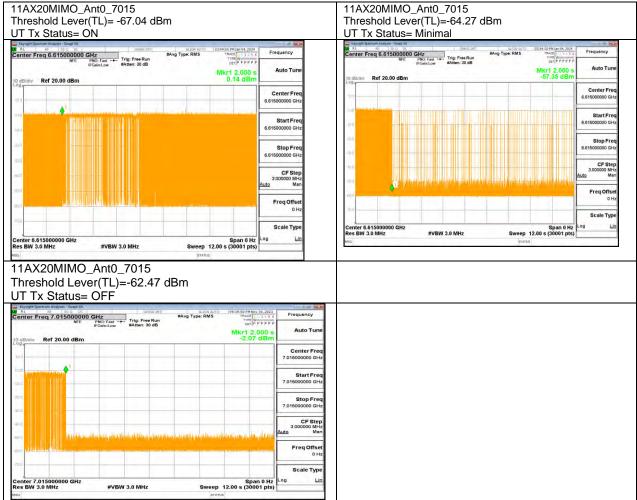




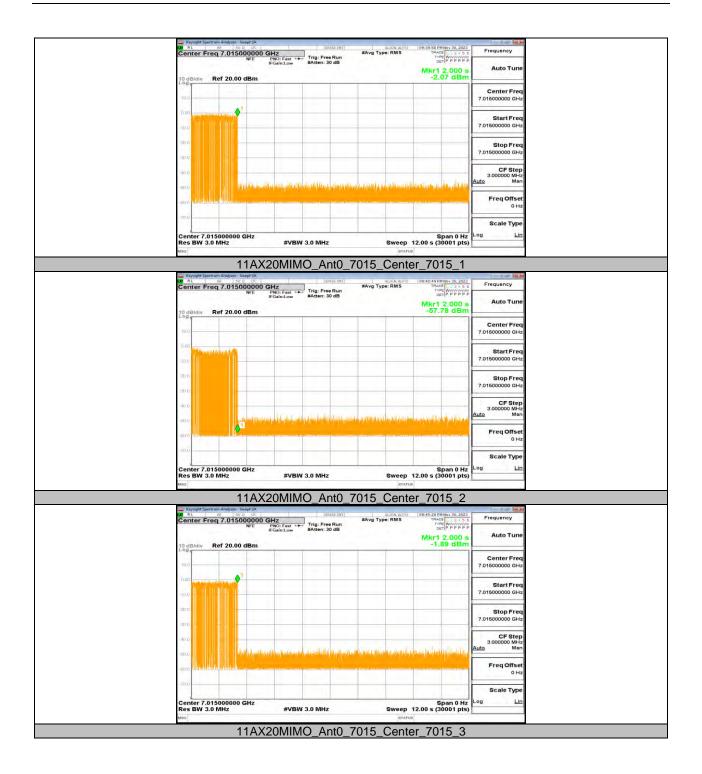




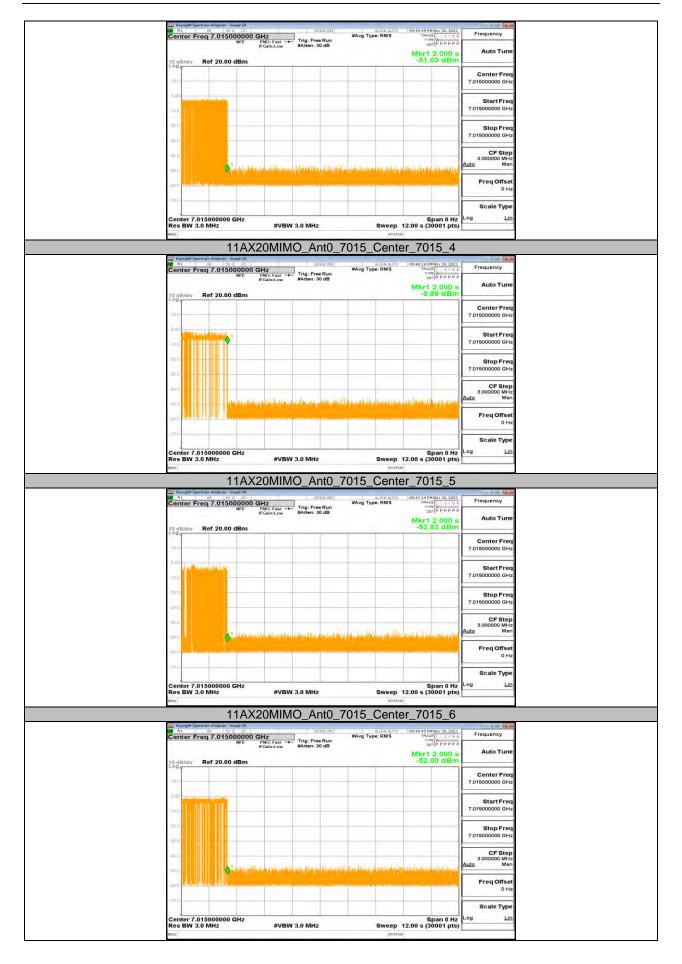






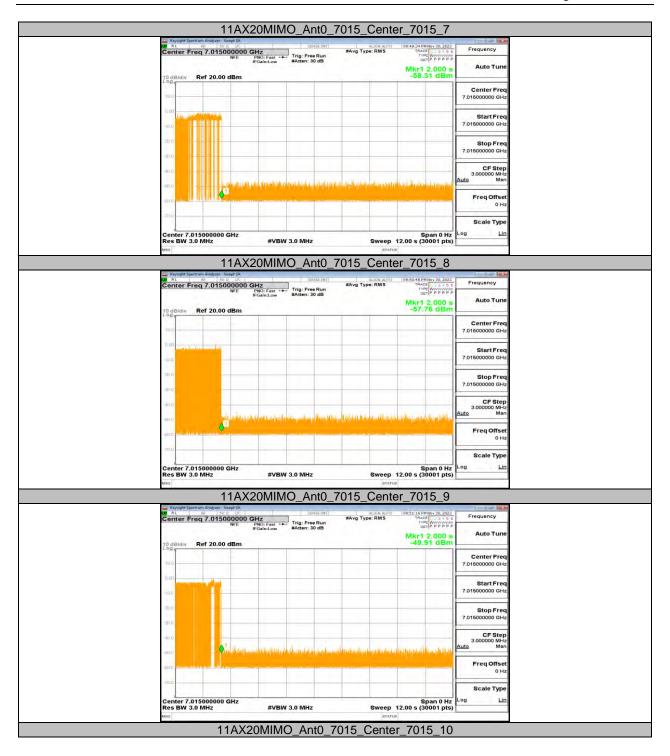






Page 735 of 735





## **END OF REPORT**