

BAND EDGE COMPLIANCE PART 1



XMIT 2020.03.25.0

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Analyzer - Spectrum Analyzer	Agilent	N9010A	AFL	27-Feb-20	27-Feb-21
Generator - Signal	Keysight	N5171B-506	TEW	2-May-18	2-May-21
Block - DC	Fairview Microwave	SD3464	ANA	25-Sep-20	25-Sep-21

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. The spurious RF conducted emissions at the edges of the authorized bands were measured with the EUT set to low and high transmit frequencies in the available band. The channels closest to the band edges were selected. The EUT was transmitting at the data rate(s) listed in the datasheet.

The spectrum was scanned below the lower band edge and above the higher band edge.

All limits were adjusted by a factor of $[-10 \cdot \log(4)]$ dB to account for the device operation as a 4 port MIMO transmitter, as per FCC KDB 622911.

Per section 27.53(h)(1), RSS-170 5.4 & 5.4.2.1 and RSS-139 6.6, the power of any emission outside of the authorized operating frequency range cannot exceed -13 dBm. The limit is adjusted to -19 dBm $[-13 \text{ dBm} - 10 \log(4)]$ per FCC KDB 662911D01 v02r01 because the BTS may operate as a 4 port MIMO transmitter.

Per 27.53(h)(3), RSS-170 5.4 and RSS-139 6.6, emissions seen up to 1 MHz outside of authorized operating frequency range band edges shall be measured with a RBW of 1% of the measured emission bandwidth (not from part 27 but from TCB Meeting/TCB Correspondence on other testing). Any emission seen to be > 1 MHz further outside the band edges shall be measured with a RBW of 1 MHz. However, a narrower RBW of at least 1% of the emission bandwidth is still allowed provided that the measured power is integrated over the full reference bandwidth of 1 MHz.

RF conducted emissions testing was performed only on one port. The testing was performed on the same version of hardware (FRIJ) as the original certification test. The FRIJ antenna ports are essentially electrically identical (the RF power variation between antenna ports is small as shown in the original certification testing) and antenna port 4 was selected to perform the testing under this effort as allowed by ANSI C63.26-2015 paragraph 5.7.2i.

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EUT: FRIJ		Work Order: NOKI0019	
Serial Number: YK160800020		Date: 2-Nov-20	
Customer: Nokia Solutions and Networks		Temperature: 23.6 °C	
Attendees: Mitchell Hill, John Rattanavong		Humidity: 33.9% RH	
Project: None		Barometric Pres.: 1037 mbar	
Tested by: Brandon Hobbs		Power: 54 VDC	Job Site: TX05
TEST SPECIFICATIONS		Test Method	
FCC 27:2020		ANSI C63.26:2015	
RSS-139:2015, RSS-170:2015		RSS-139:2015, RSS-170:2015	
COMMENTS			
All measurement path losses were accounted for in the reference level offset including any attenuators, filters and DC blocks. Band n66 carriers are enabled at maximum power (40 watts/carrier). The measurement marker was offset by RBW/2 from the band edge frequency as allowed by ANSI C63.26 clause 5.7.2g for some test cases.			
DEVIATIONS FROM TEST STANDARD			
None			
Configuration #	2	Signature 	
		Frequency Range	Value (dBm) Limit (dBm) Result
Port 4, Band n66, 2110 MHz - 2200 MHz			
5 MHz Bandwidth			
QPSK Modulation			
Low Channel 2112.5 MHz		1	-20.18 -19 Pass
Low Channel 2112.5 MHz		2	-24.21 -19 Pass
Low Channel 2112.5 MHz		3	-23.39 -19 Pass
High Channel 2197.5 MHz		1	-20.72 -19 Pass
High Channel 2197.5 MHz		2	-24.48 -19 Pass
High Channel 2197.5 MHz		3	-23.38 -19 Pass
16-QAM Modulation			
Low Channel 2112.5 MHz		1	-23.06 -19 Pass
Low Channel 2112.5 MHz		2	-24.19 -19 Pass
Low Channel 2112.5 MHz		3	-24.03 -19 Pass
High Channel 2197.5 MHz		1	-20.84 -19 Pass
High Channel 2197.5 MHz		2	-24.39 -19 Pass
High Channel 2197.5 MHz		3	-23.00 -19 Pass
64-QAM Modulation			
Low Channel 2112.5 MHz		1	-22.36 -19 Pass
Low Channel 2112.5 MHz		2	-24.41 -19 Pass
Low Channel 2112.5 MHz		3	-23.37 -19 Pass
High Channel 2197.5 MHz		1	-20.25 -19 Pass
High Channel 2197.5 MHz		2	-24.16 -19 Pass
High Channel 2197.5 MHz		3	-24.08 -19 Pass
256-QAM Modulation			
Low Channel 2112.5 MHz		1	-22.24 -19 Pass
Low Channel 2112.5 MHz		2	-24.09 -19 Pass
Low Channel 2112.5 MHz		3	-23.60 -19 Pass
High Channel 2197.5 MHz		1	-21.66 -19 Pass
High Channel 2197.5 MHz		2	-24.46 -19 Pass
High Channel 2197.5 MHz		3	-22.99 -19 Pass
10 MHz Bandwidth			
QPSK Modulation			
Low Channel 2115 MHz		1	-21.02 -19 Pass
Low Channel 2115 MHz		2	-24.10 -19 Pass
Low Channel 2115 MHz		3	-23.35 -19 Pass
High Channel 2195 MHz		1	-21.43 -19 Pass
High Channel 2195 MHz		2	-24.47 -19 Pass
High Channel 2195 MHz		3	-22.89 -19 Pass
16-QAM Modulation			
Low Channel 2115 MHz		1	-20.97 -19 Pass
Low Channel 2115 MHz		2	-23.90 -19 Pass
Low Channel 2115 MHz		3	-22.08 -19 Pass
High Channel 2195 MHz		1	-23.14 -19 Pass
High Channel 2195 MHz		2	-24.46 -19 Pass
High Channel 2195 MHz		3	-23.99 -19 Pass
64-QAM Modulation			
Low Channel 2115 MHz		1	-22.13 -19 Pass
Low Channel 2115 MHz		2	-24.35 -19 Pass
Low Channel 2115 MHz		3	-22.77 -19 Pass
High Channel 2195 MHz		1	-22.23 -19 Pass
High Channel 2195 MHz		2	-24.77 -19 Pass
High Channel 2195 MHz		3	-24.32 -19 Pass
256-QAM Modulation			
Low Channel 2115 MHz		1	-19.83 -19 Pass
Low Channel 2115 MHz		2	-24.13 -19 Pass
Low Channel 2115 MHz		3	-23.32 -19 Pass
High Channel 2195 MHz		1	-20.94 -19 Pass
High Channel 2195 MHz		2	-24.95 -19 Pass
High Channel 2195 MHz		3	-23.56 -19 Pass
15 MHz Bandwidth			
QPSK Modulation			
Low Channel 2117.5 MHz		1	-19.51 -19 Pass
Low Channel 2117.5 MHz		2	-24.49 -19 Pass
Low Channel 2117.5 MHz		3	-23.35 -19 Pass
16-QAM Modulation			
Low Channel 2117.5 MHz		1	-19.38 -19 Pass
Low Channel 2117.5 MHz		2	-24.14 -19 Pass
Low Channel 2117.5 MHz		3	-23.26 -19 Pass
64-QAM Modulation			
Low Channel 2117.5 MHz		1	-22.69 -19 Pass
Low Channel 2117.5 MHz		2	-25.04 -19 Pass
Low Channel 2117.5 MHz		3	-23.42 -19 Pass
256-QAM Modulation			
Low Channel 2117.5 MHz		1	-19.76 -19 Pass
Low Channel 2117.5 MHz		2	-24.41 -19 Pass
Low Channel 2117.5 MHz		3	-22.60 -19 Pass

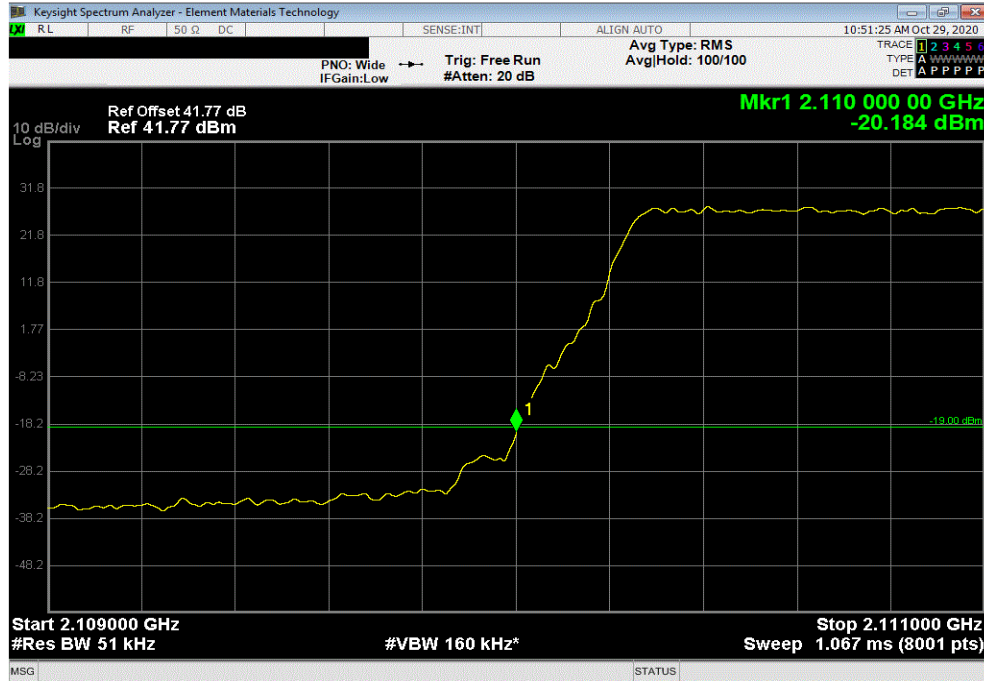
20 MHz Bandwidth					
QPSK Modulation					
Low Channel 2120 MHz	1	-20.33	-19	Pass	
Low Channel 2120 MHz	2	-24.24	-19	Pass	
Low Channel 2120 MHz	3	-22.32	-19	Pass	
High Channel 2190 MHz	1	-22.19	-19	Pass	
High Channel 2190 MHz	2	-25.14	-19	Pass	
High Channel 2190 MHz	3	-23.92	-19	Pass	
16-QAM Modulation					
Low Channel 2120 MHz	1	-22.01	-19	Pass	
Low Channel 2120 MHz	2	-24.72	-19	Pass	
Low Channel 2120 MHz	3	-23.75	-19	Pass	
High Channel 2190 MHz	1	-22.78	-19	Pass	
High Channel 2190 MHz	2	-25.24	-19	Pass	
High Channel 2190 MHz	3	-23.59	-19	Pass	
64-QAM Modulation					
Low Channel 2120 MHz	1	-20.92	-19	Pass	
Low Channel 2120 MHz	2	-24.39	-19	Pass	
Low Channel 2120 MHz	3	-23.14	-19	Pass	
High Channel 2190 MHz	1	-21.43	-19	Pass	
High Channel 2190 MHz	2	-24.79	-19	Pass	
High Channel 2190 MHz	3	-23.31	-19	Pass	
256-QAM Modulation					
Low Channel 2120 MHz	1	-22.29	-19	Pass	
Low Channel 2120 MHz	2	-24.55	-19	Pass	
Low Channel 2120 MHz	3	-22.96	-19	Pass	
High Channel 2190 MHz	1	-22.03	-19	Pass	
High Channel 2190 MHz	2	-25.02	-19	Pass	
High Channel 2190 MHz	3	-23.63	-19	Pass	

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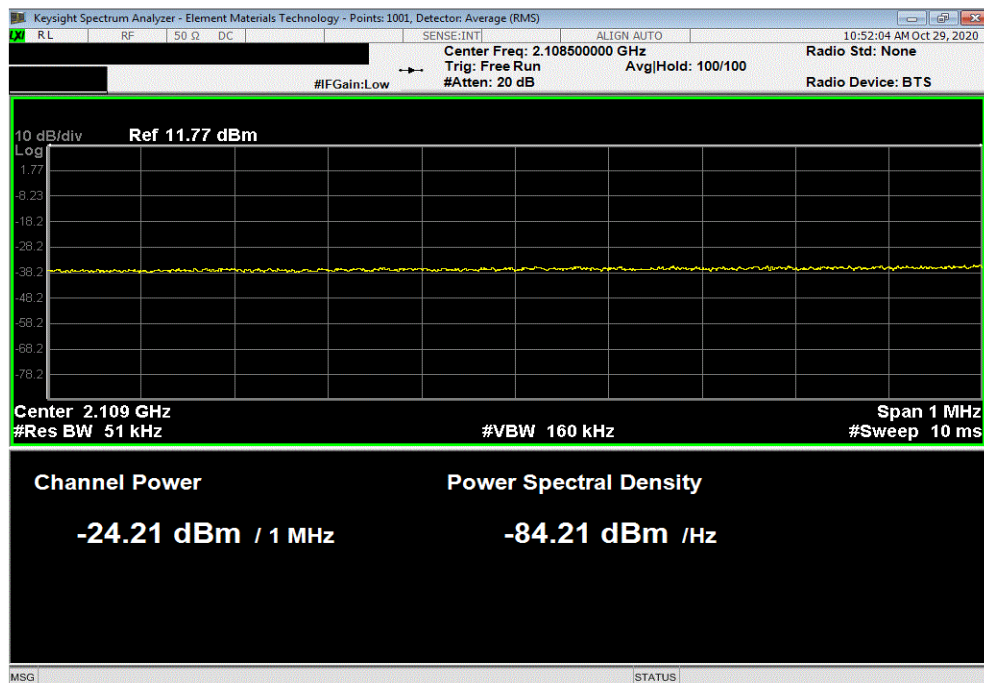


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Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth, QPSK Modulation, Low Channel 2112.5 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
1				-20.18	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth, QPSK Modulation, Low Channel 2112.5 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
2				-24.21	-19	Pass



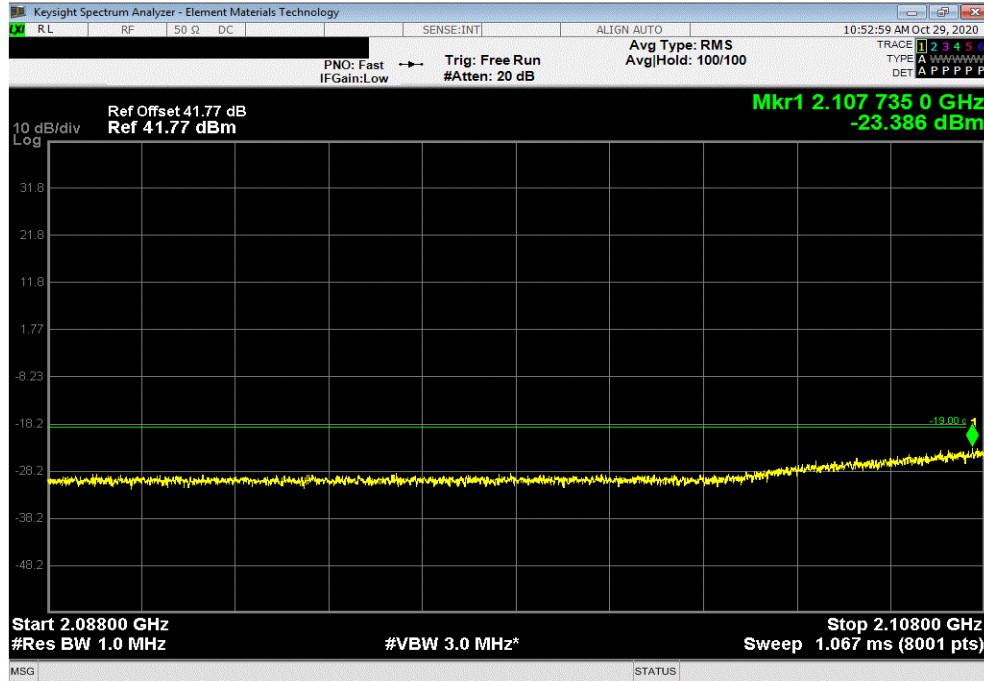
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Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth, QPSK Modulation, Low Channel 2112.5 MHz

Frequency				Value (dBm)	Limit (dBm)	Result
Range						
			3	-23.39	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth, QPSK Modulation, High Channel 2197.5 MHz

Frequency				Value (dBm)	Limit (dBm)	Result
Range						
			1	-20.72	-19	Pass

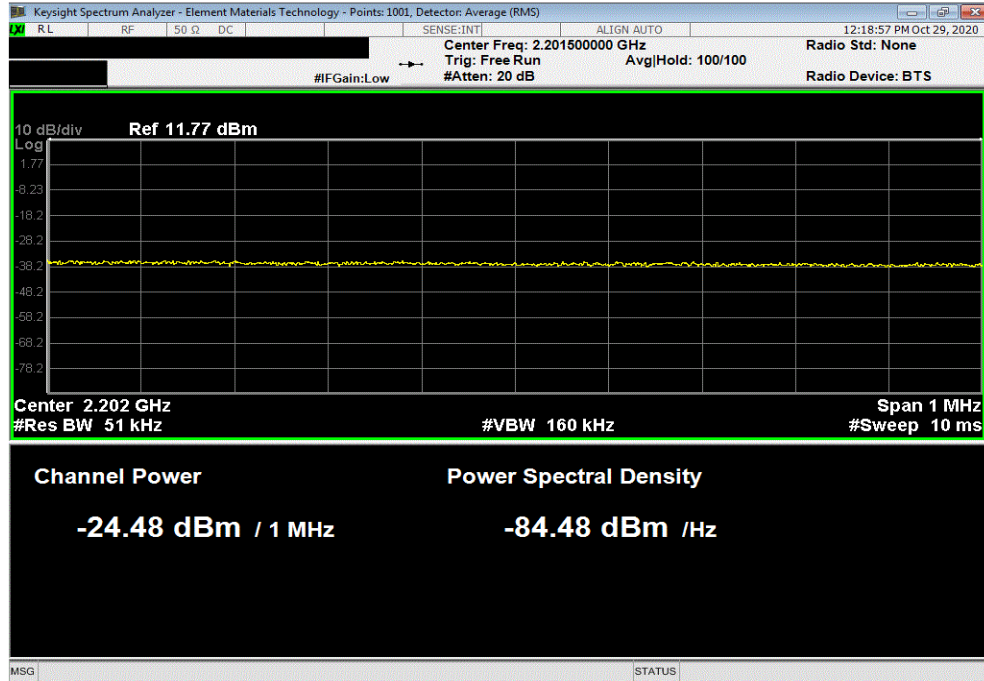


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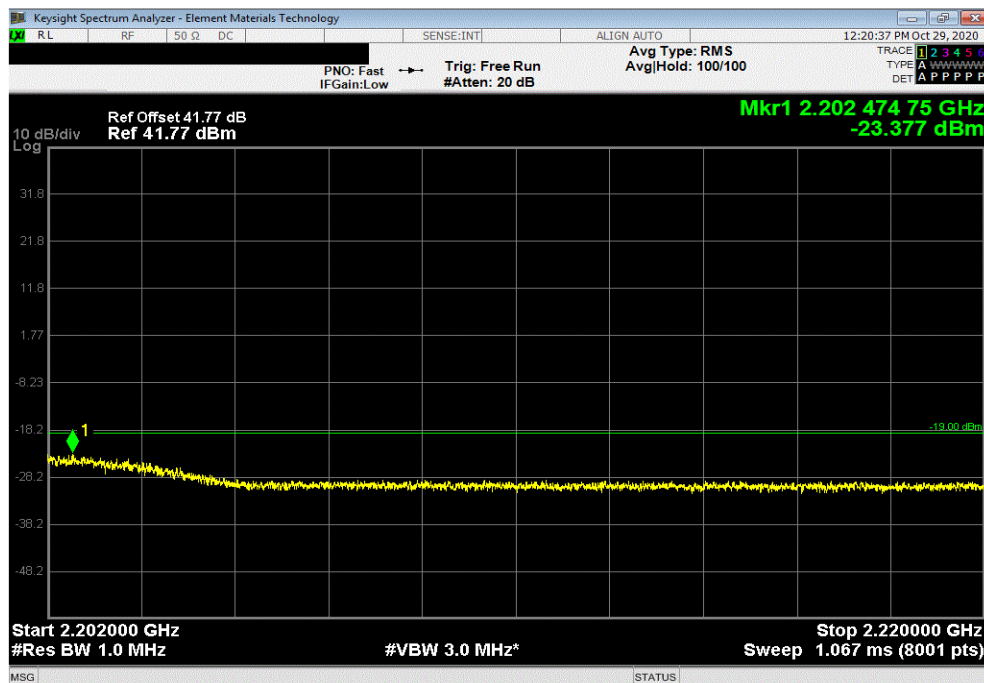


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Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth, QPSK Modulation, High Channel 2197.5 MHz						
Frequency		Value (dBm)		Limit (dBm)	Result	
Range						
2		-24.48		-19	Pass	



Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth, QPSK Modulation, High Channel 2197.5 MHz						
Frequency		Value (dBm)		Limit (dBm)	Result	
Range						
3		-23.38		-19	Pass	

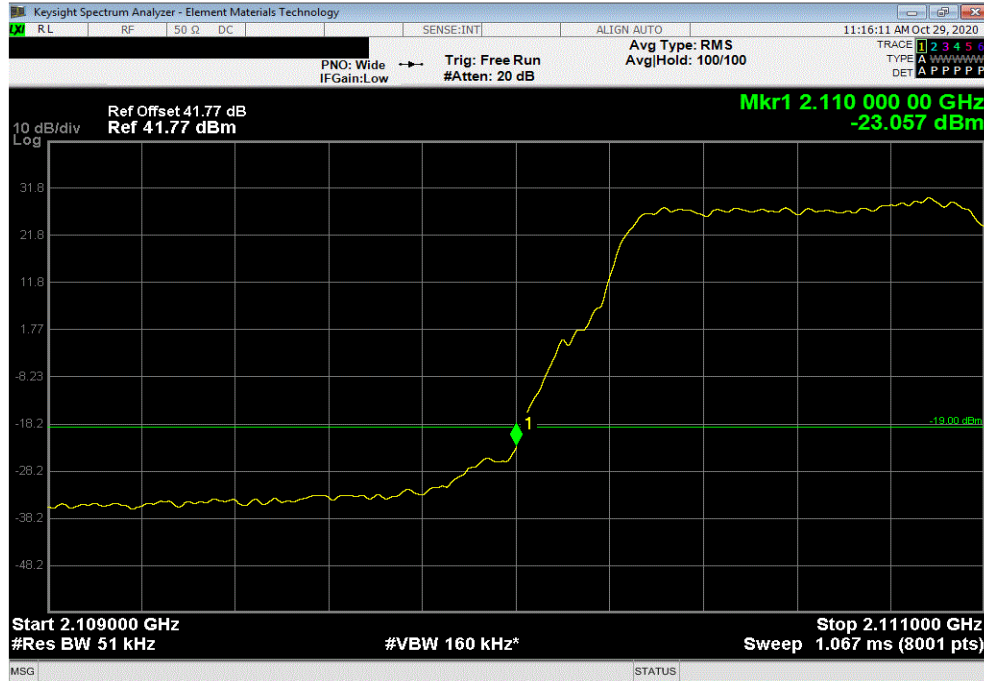


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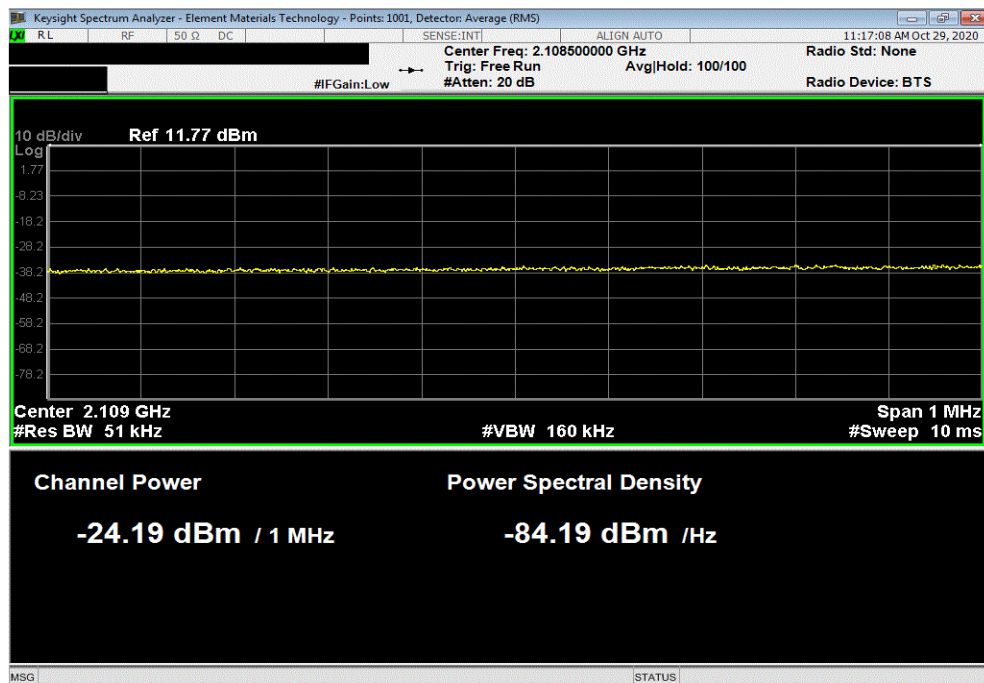


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Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth, 16-QAM Modulation, Low Channel 2112.5 MHz						
Frequency Range				Value (dBm)	Limit (dBm)	Result
1				-23.06	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth, 16-QAM Modulation, Low Channel 2112.5 MHz						
Frequency Range				Value (dBm)	Limit (dBm)	Result
2				-24.19	-19	Pass

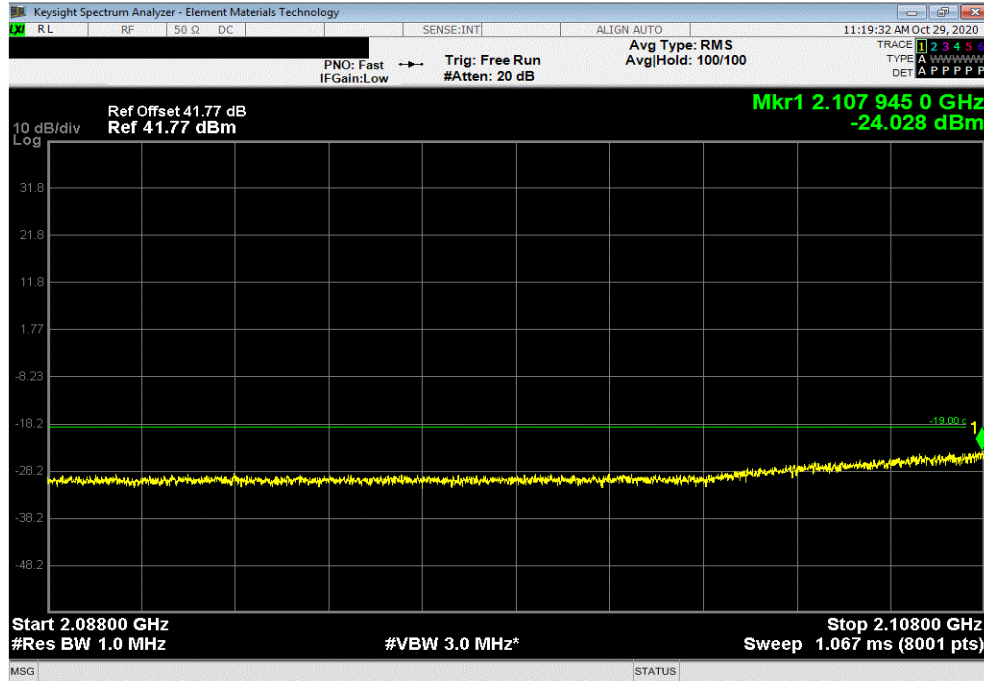


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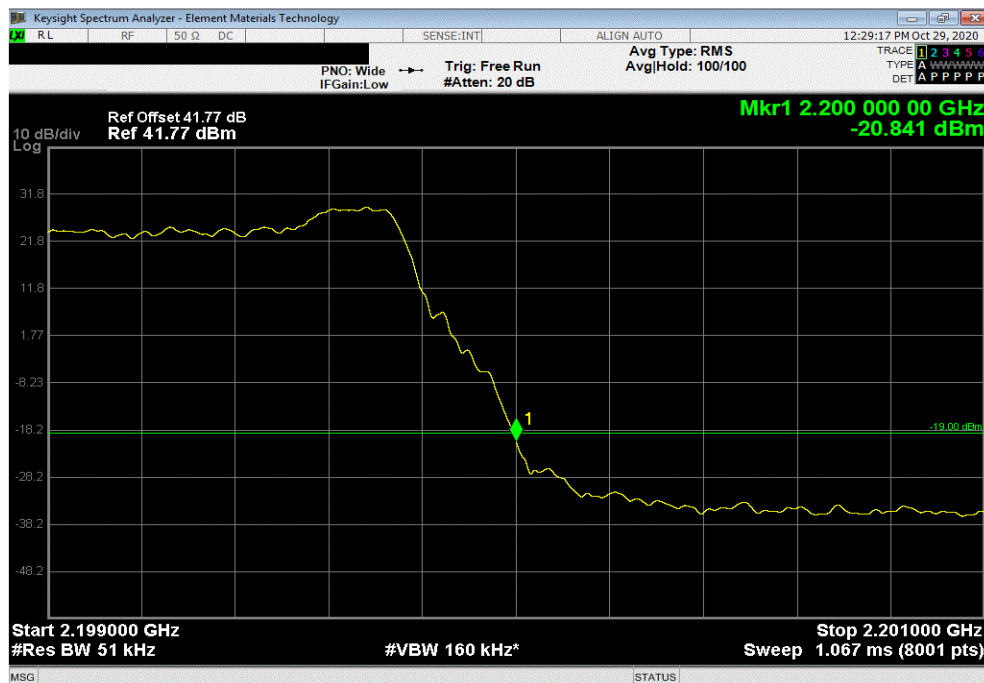


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Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth, 16-QAM Modulation, Low Channel 2112.5 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
			3	-24.03	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth, 16-QAM Modulation, High Channel 2197.5 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
			1	-20.84	-19	Pass

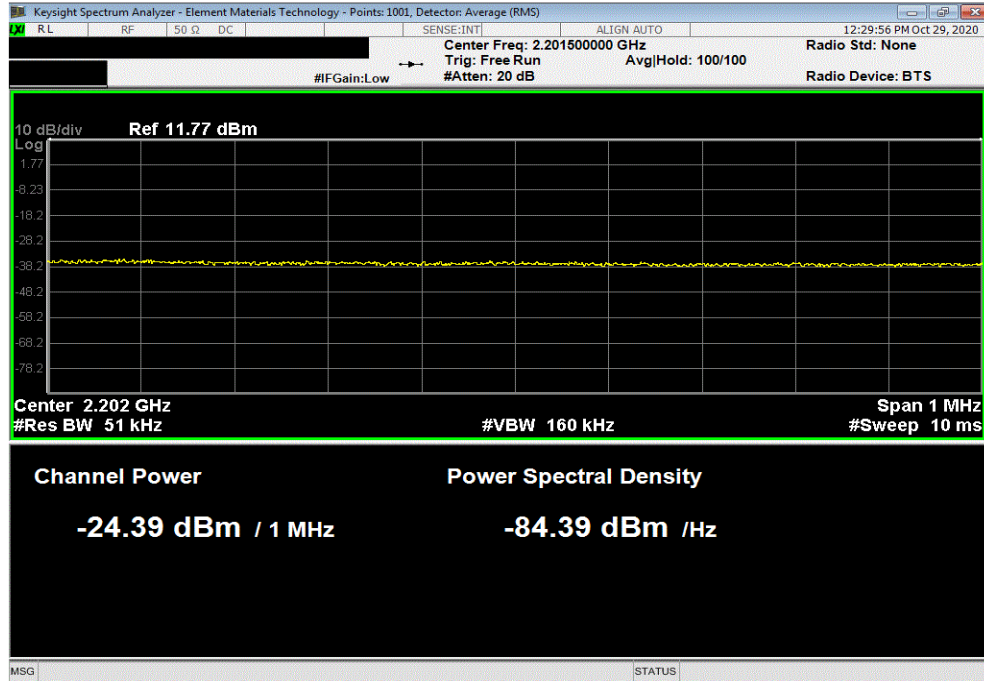


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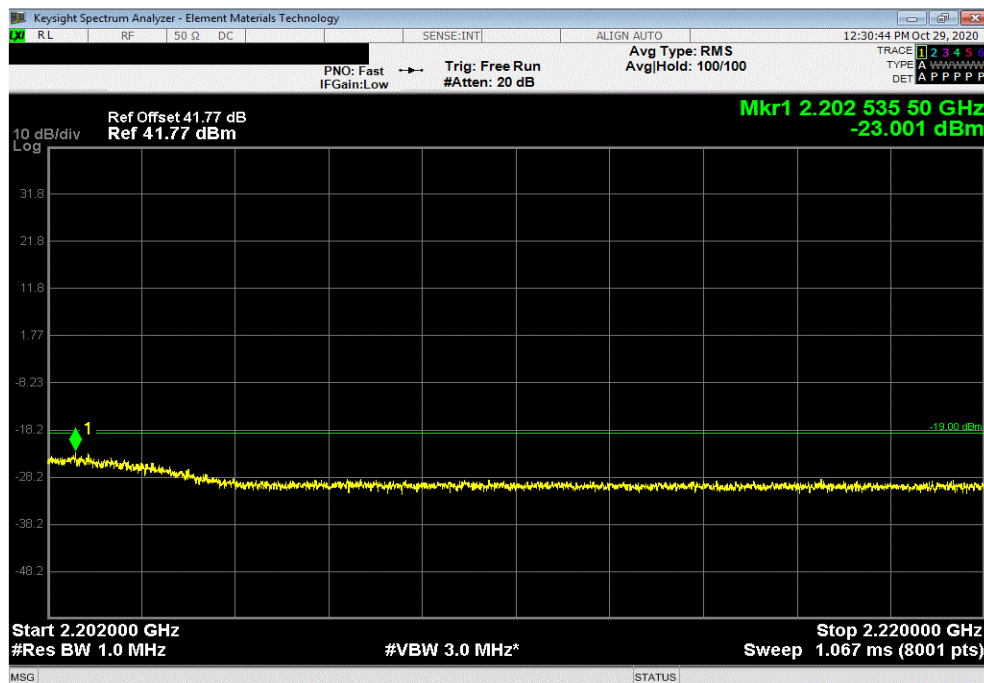


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Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth, 16-QAM Modulation, High Channel 2197.5 MHz						
Frequency		Value (dBm)		Limit (dBm)	Result	
Range						
2		-24.39		-19	Pass	



Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth, 16-QAM Modulation, High Channel 2197.5 MHz						
Frequency		Value (dBm)		Limit (dBm)	Result	
Range						
3		-23.00		-19	Pass	

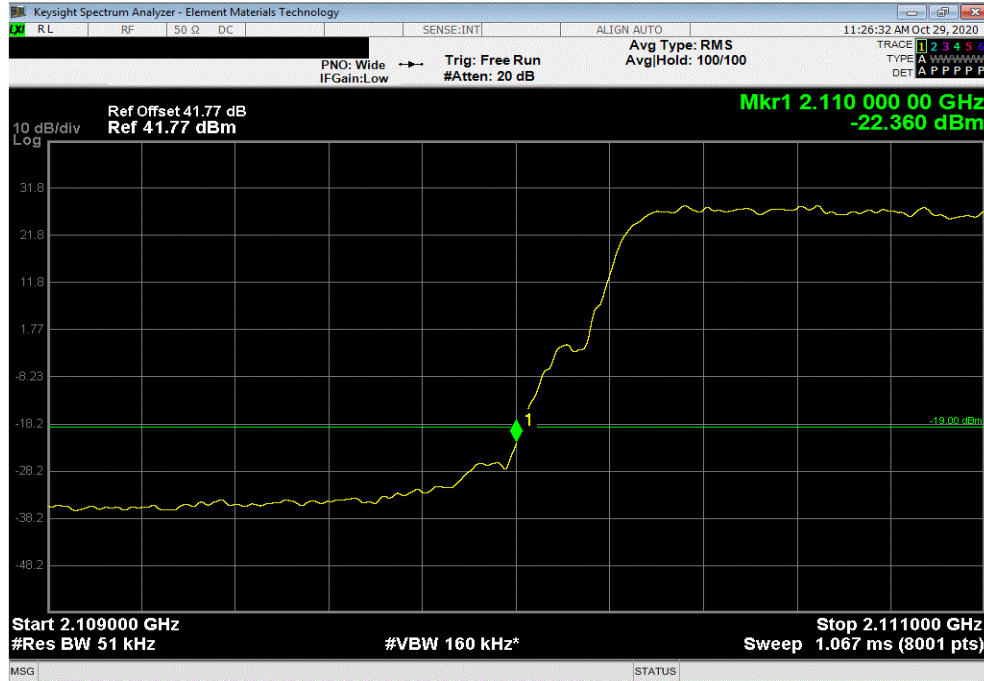


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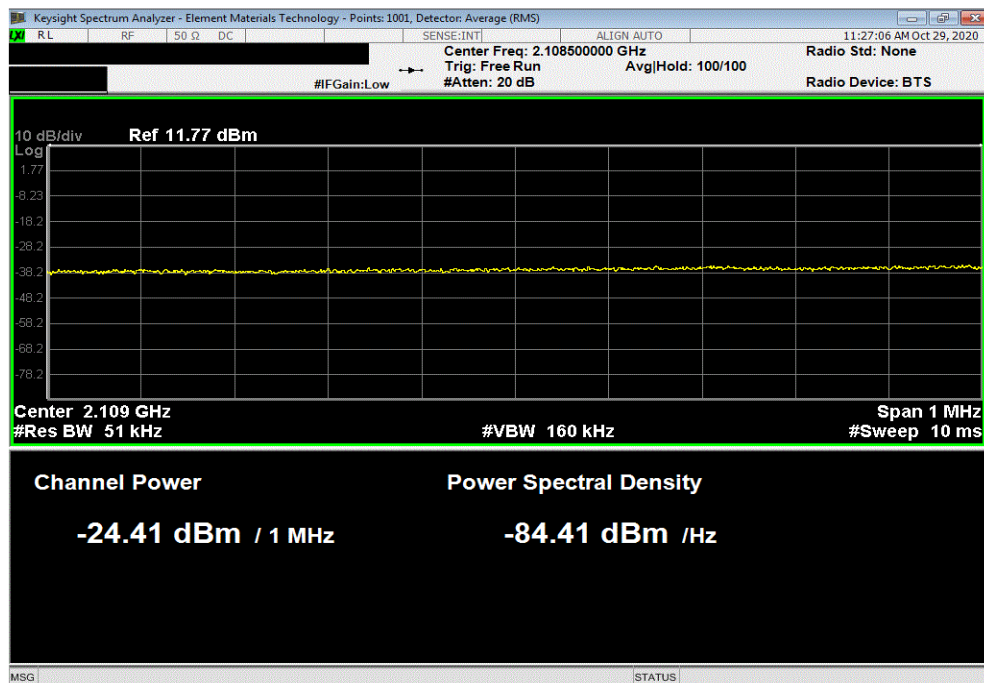


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Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth, 64-QAM Modulation, Low Channel 2112.5 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
1				-22.36	-19	Pass

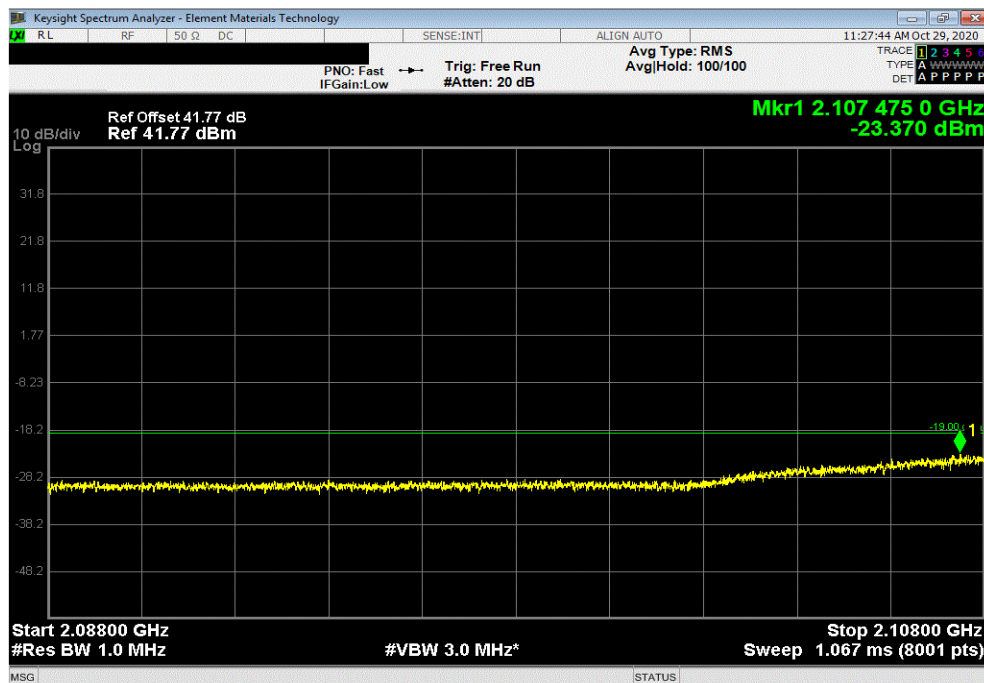


Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth, 64-QAM Modulation, Low Channel 2112.5 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
2				-24.41	-19	Pass

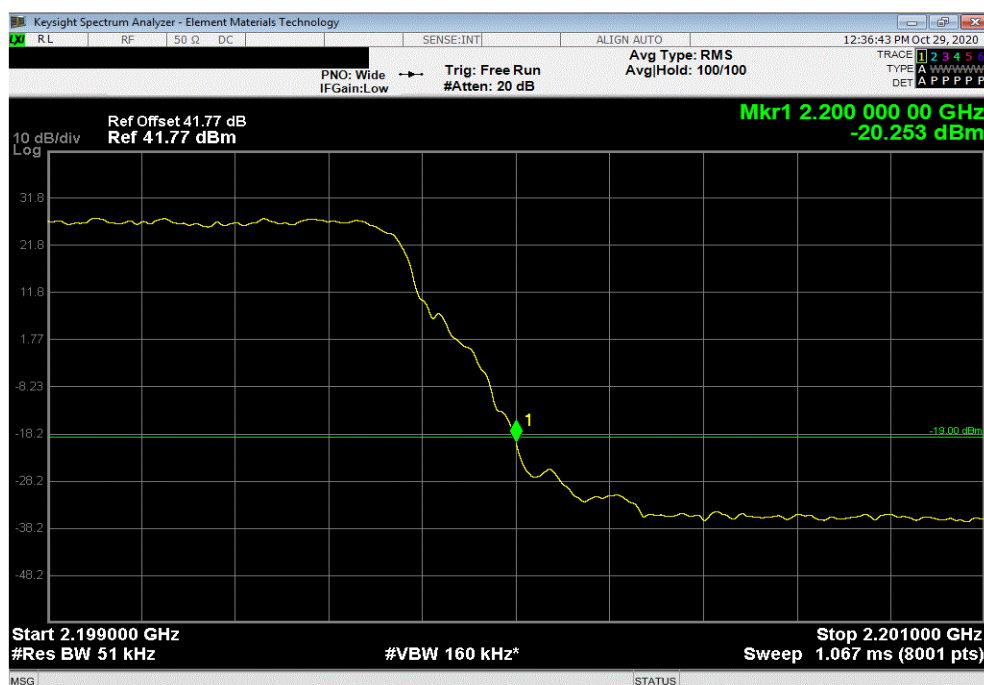


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Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth , 64-QAM Modulation, Low Channel 2112.5 MHz						
Frequency Range				Value (dBm)	Limit (dBm)	Result
	3			-23.37	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth , 64-QAM Modulation, High Channel 2197.5 MHz						
Frequency Range				Value (dBm)	Limit (dBm)	Result
	1			-20.25	-19	Pass

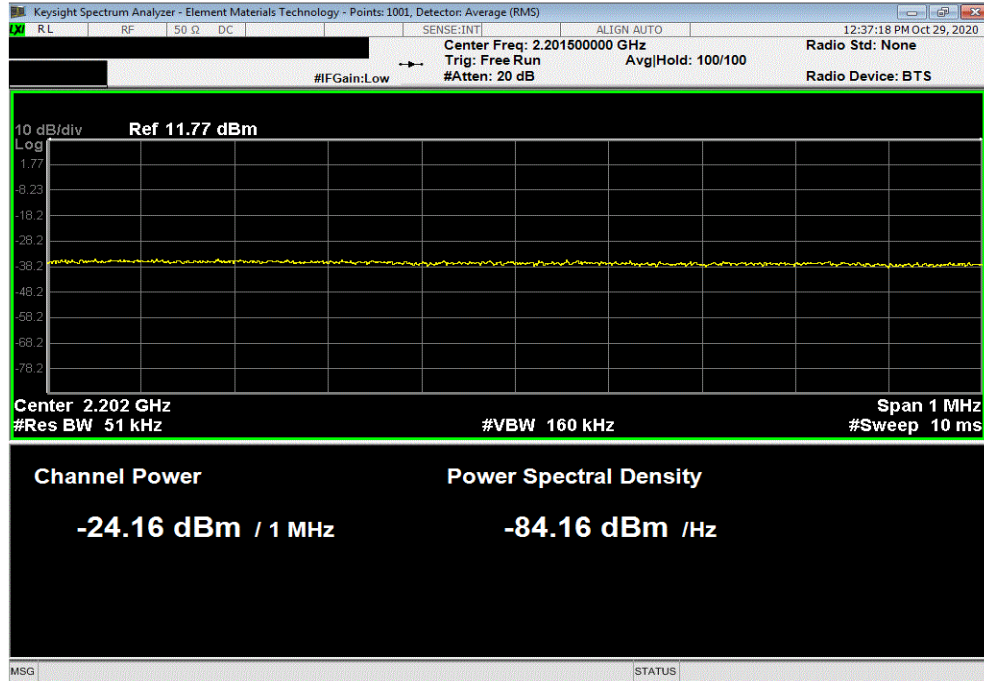


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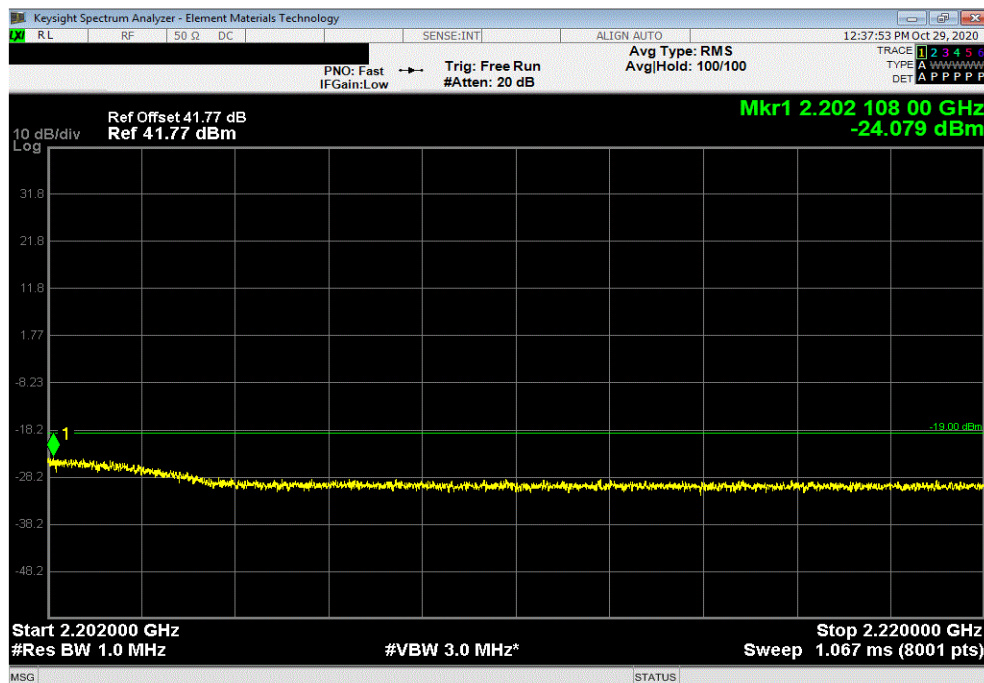


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Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth, 64-QAM Modulation, High Channel 2197.5 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
		2		-24.16	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth, 64-QAM Modulation, High Channel 2197.5 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
		3		-24.08	-19	Pass

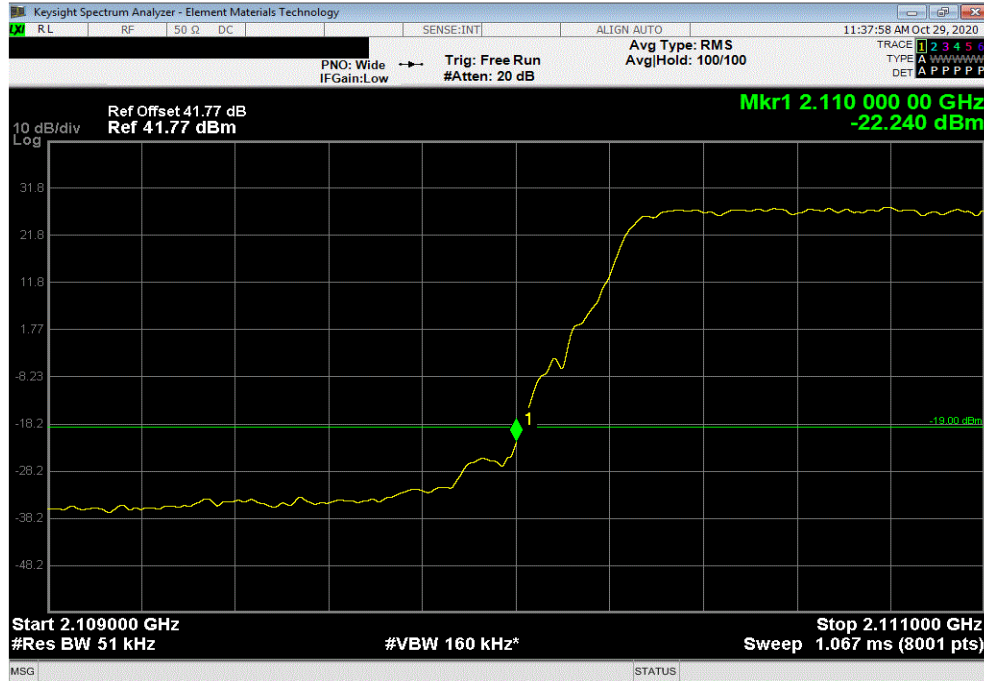


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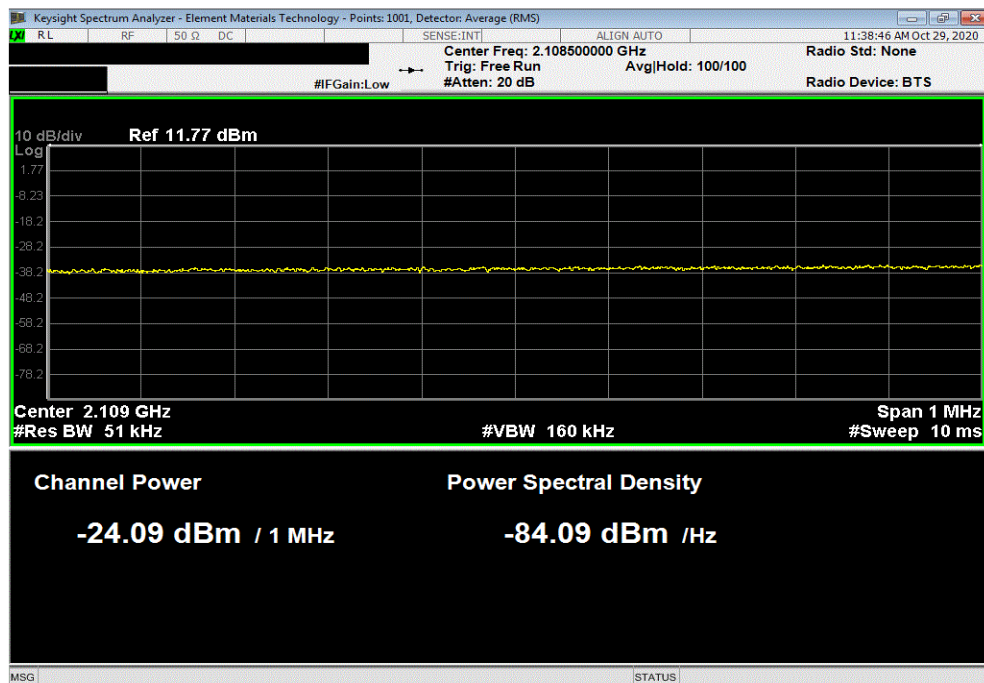


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Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth, 256-QAM Modulation, Low Channel 2112.5 MHz						
Frequency Range				Value (dBm)	Limit (dBm)	Result
1				-22.24	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth, 256-QAM Modulation, Low Channel 2112.5 MHz						
Frequency Range				Value (dBm)	Limit (dBm)	Result
2				-24.09	-19	Pass



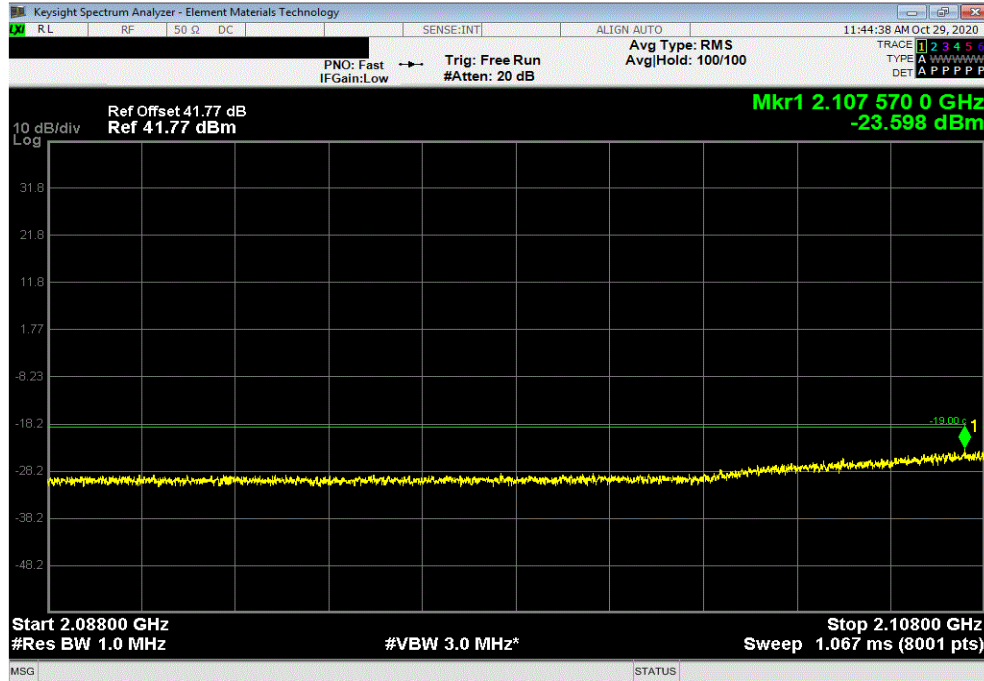
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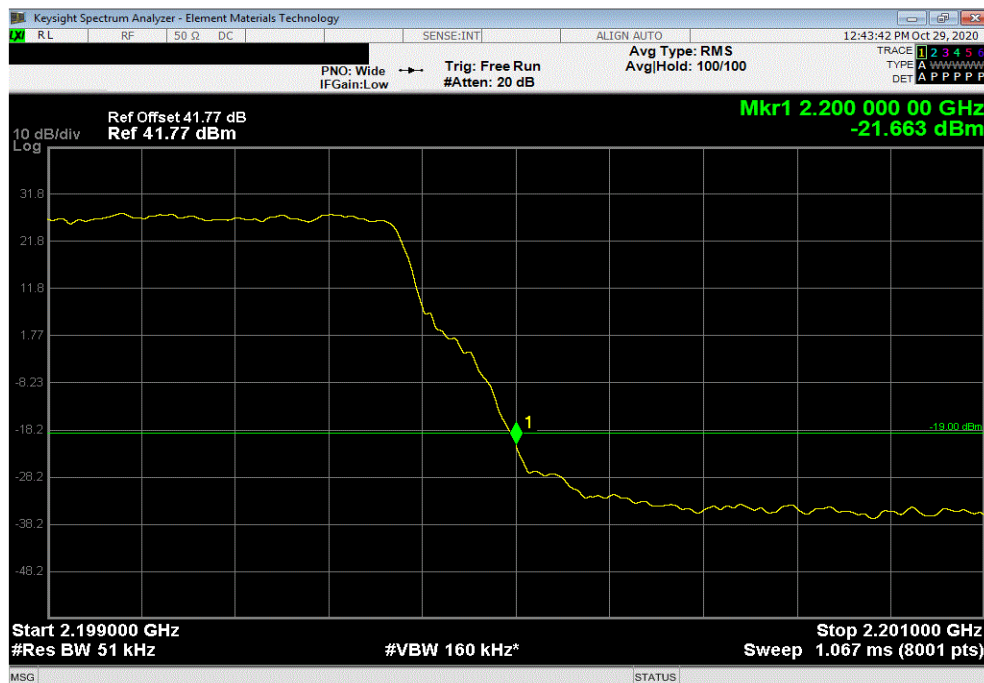
Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth, 256-QAM Modulation, Low Channel 2112.5 MHz

Frequency				Value (dBm)	Limit (dBm)	Result
Range						
			3	-23.60	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth, 256-QAM Modulation, High Channel 2197.5 MHz

Frequency				Value (dBm)	Limit (dBm)	Result
Range						
			1	-21.66	-19	Pass

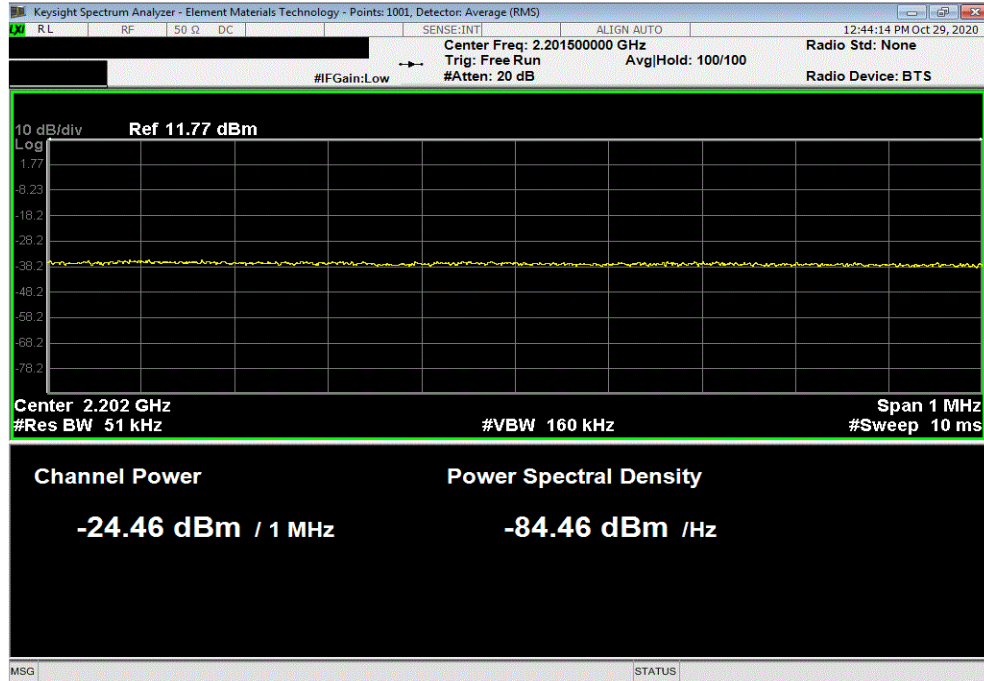


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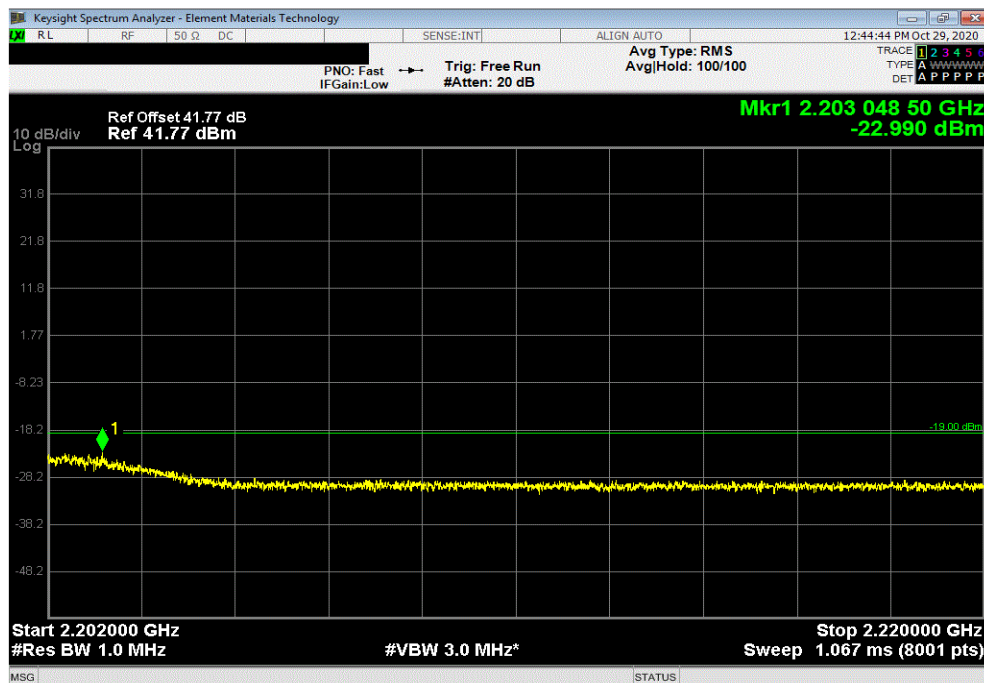


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Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth, 256-QAM Modulation, High Channel 2197.5 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
		2		-24.46	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 5 MHz Bandwidth, 256-QAM Modulation, High Channel 2197.5 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
		3		-22.99	-19	Pass

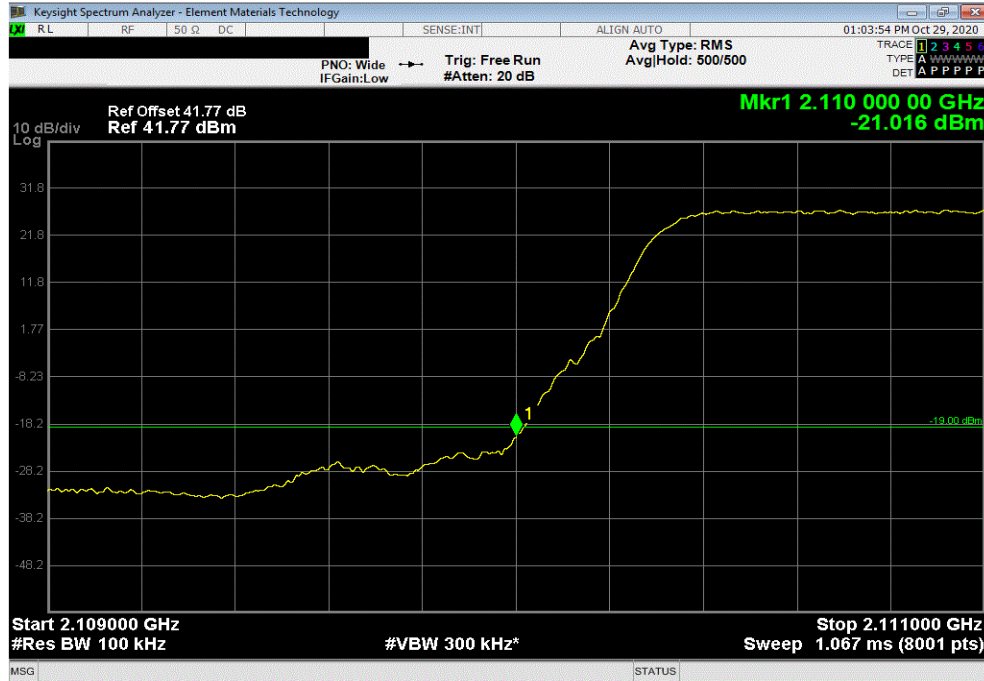


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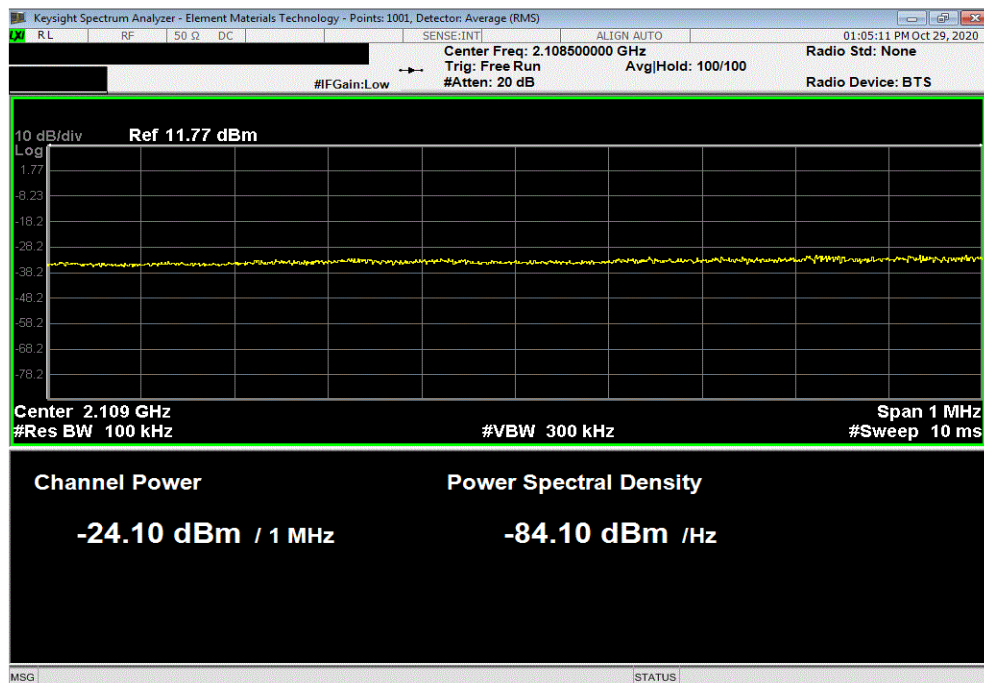


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Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth, QPSK Modulation, Low Channel 2115 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
1				-21.02	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth, QPSK Modulation, Low Channel 2115 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
2				-24.10	-19	Pass



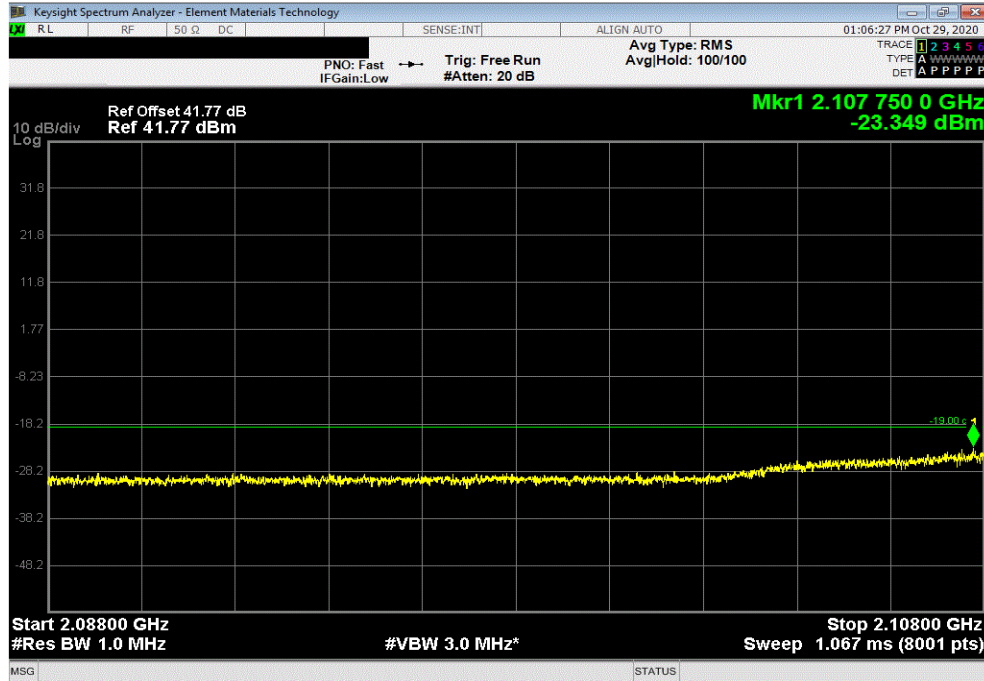
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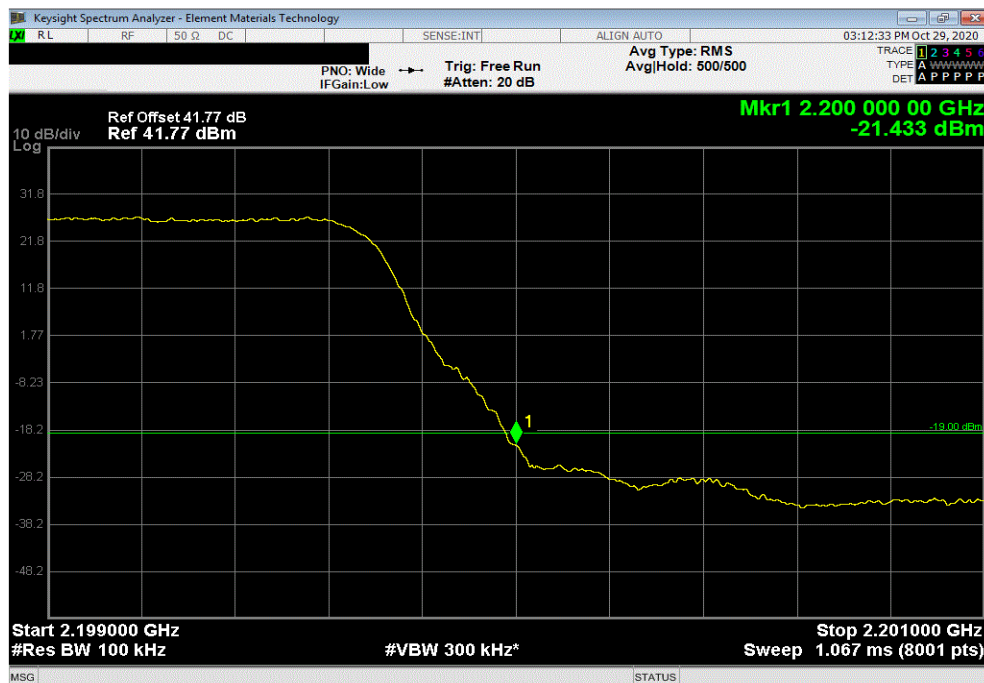
Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth, QPSK Modulation, Low Channel 2115 MHz

Frequency				Value (dBm)	Limit (dBm)	Result
Range						
			3	-23.35	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth, QPSK Modulation, High Channel 2195 MHz

Frequency				Value (dBm)	Limit (dBm)	Result
Range						
			1	-21.43	-19	Pass

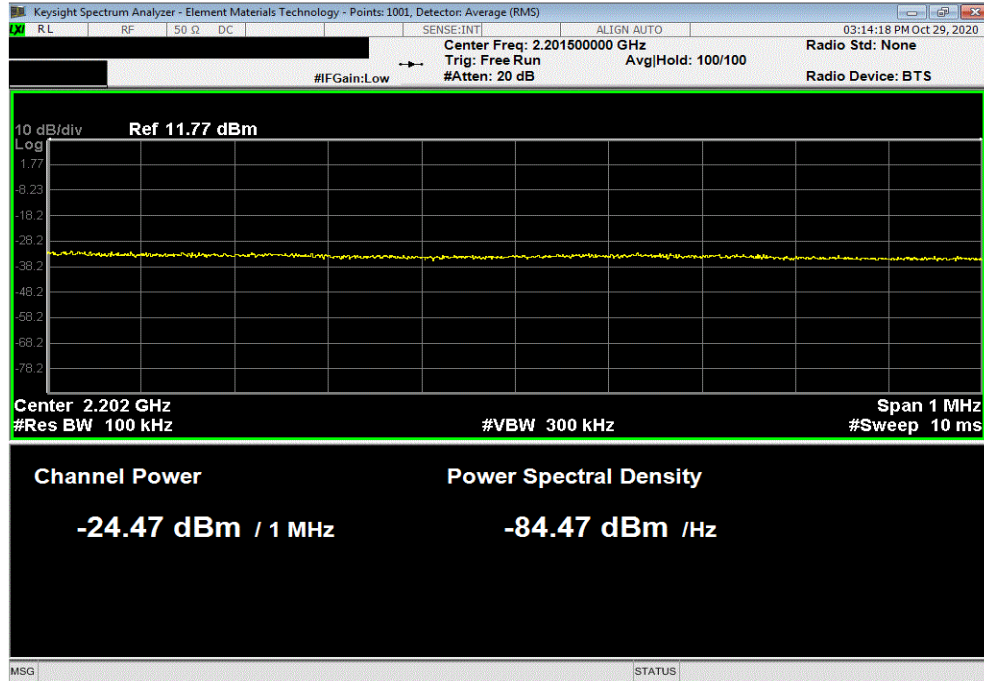


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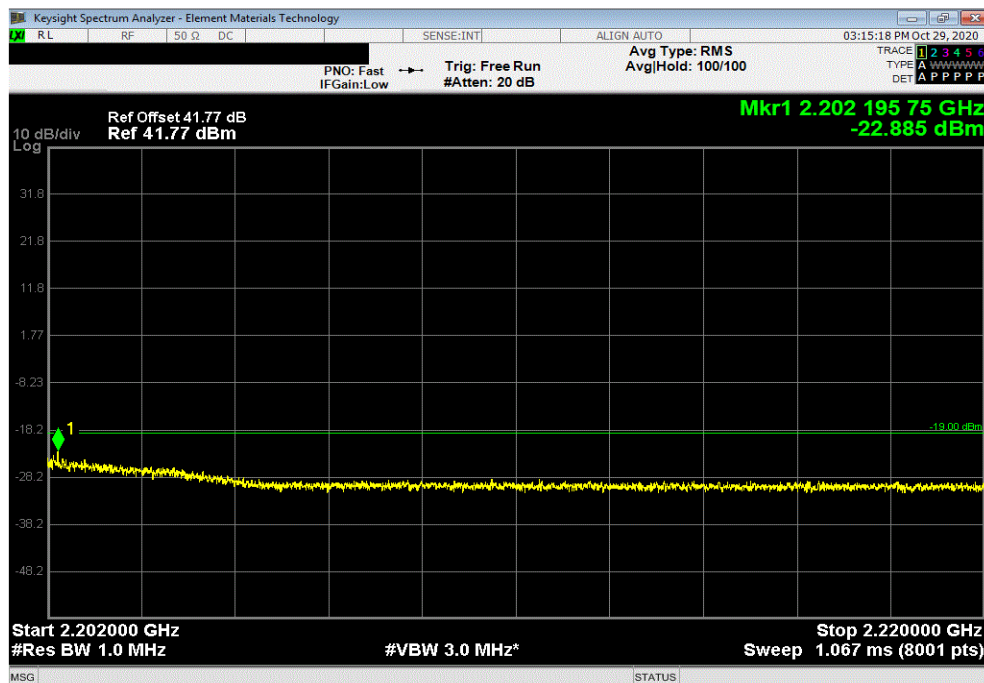


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Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth, QPSK Modulation, High Channel 2195 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
		2		-24.47	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth, QPSK Modulation, High Channel 2195 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
		3		-22.89	-19	Pass

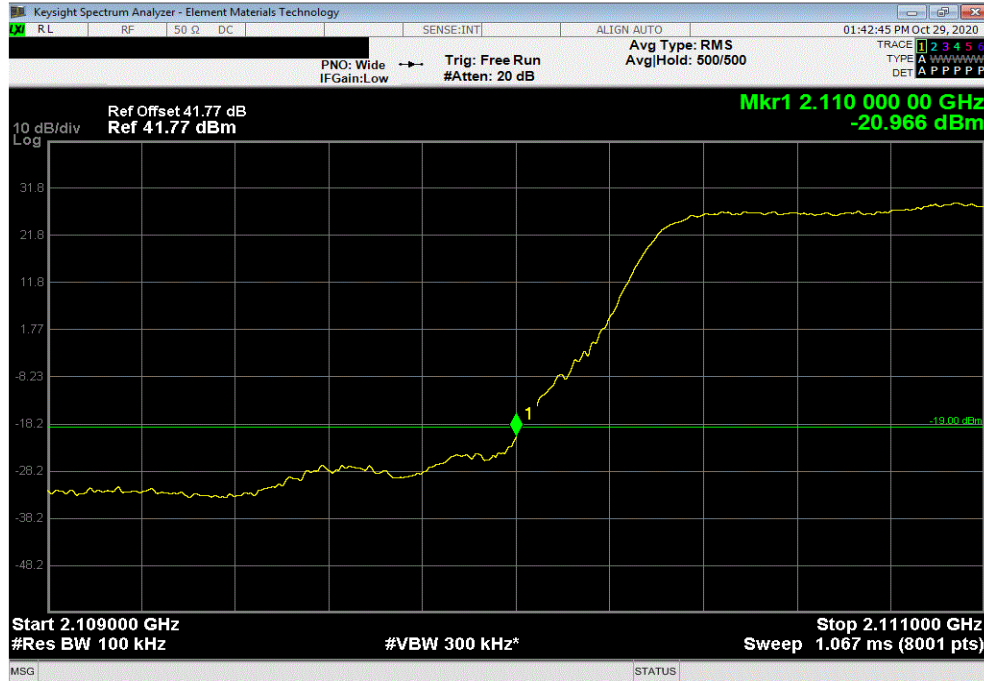


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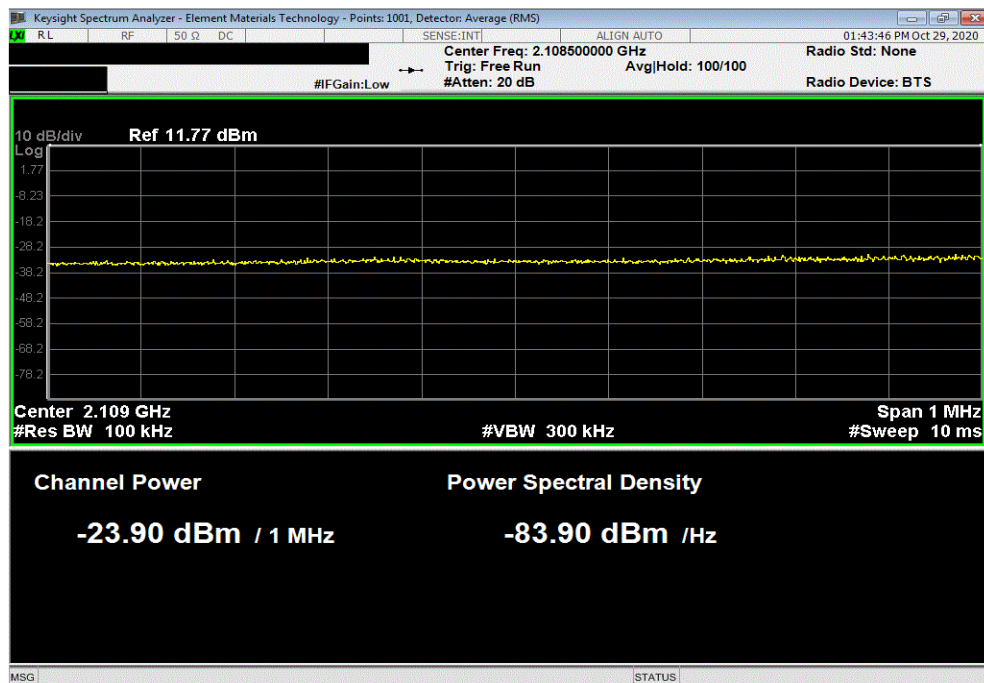


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth, 16-QAM Modulation, Low Channel 2115 MHz						
Frequency Range				Value (dBm)	Limit (dBm)	Result
1				-20.97	-19	Pass

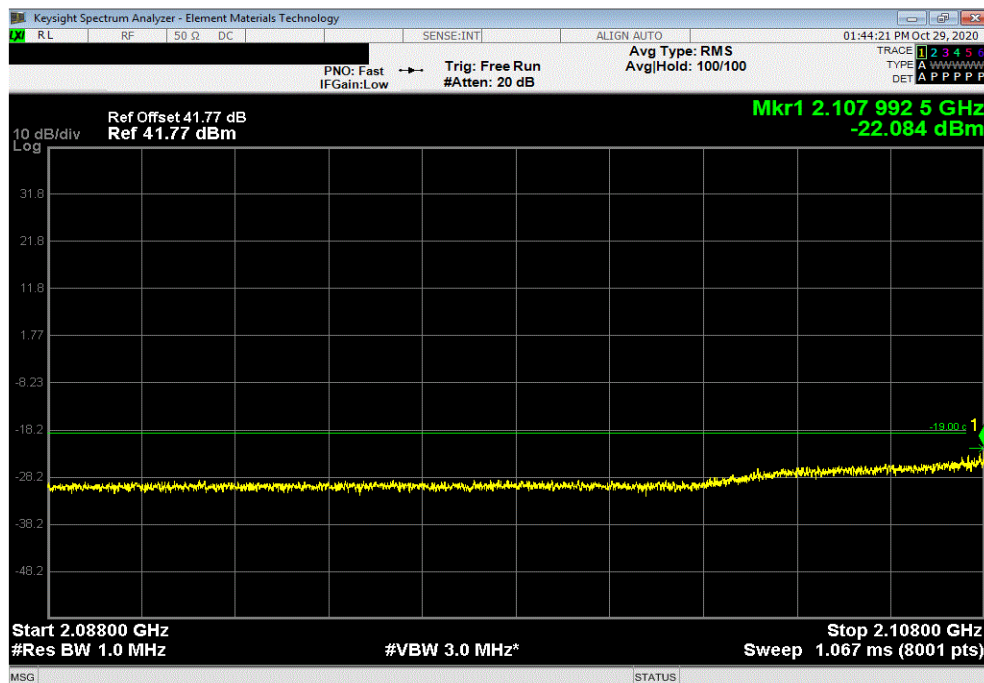


Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth, 16-QAM Modulation, Low Channel 2115 MHz						
Frequency Range				Value (dBm)	Limit (dBm)	Result
2				-23.90	-19	Pass



TbtTx 2020.10.20.0 BETA XMit 2020.03.25.1

Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth , 16-QAM Modulation, Low Channel 2115 MHz						
Frequency Range				Value (dBm)	Limit (dBm)	Result
	3			-22.08	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth , 16-QAM Modulation, High Channel 2195 MHz						
Frequency Range				Value (dBm)	Limit (dBm)	Result
	1			-23.14	-19	Pass

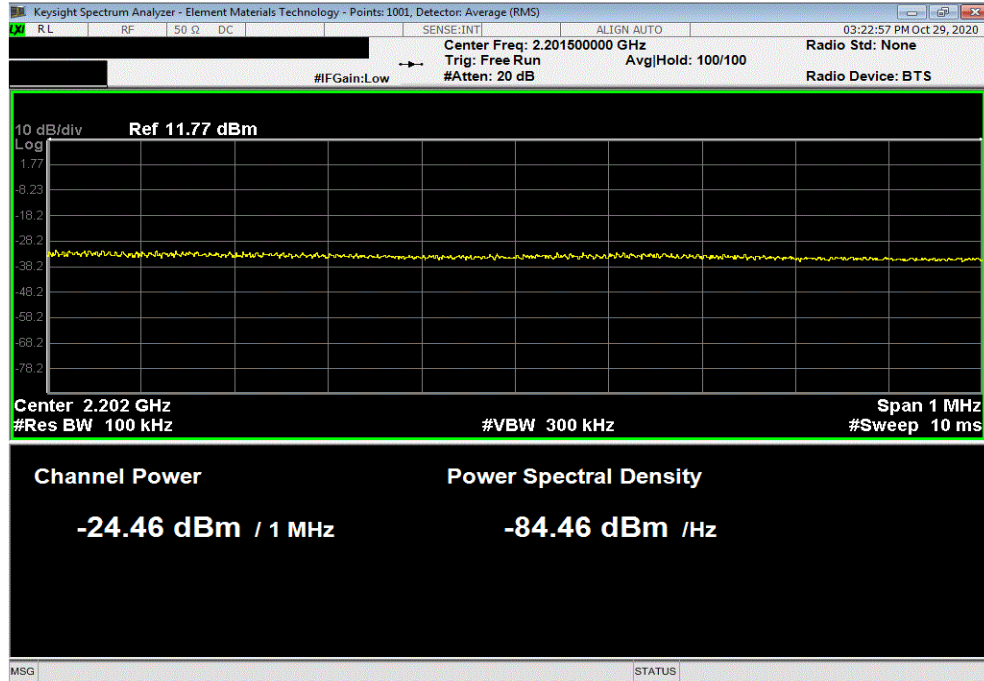


BAND EDGE COMPLIANCE PART 1

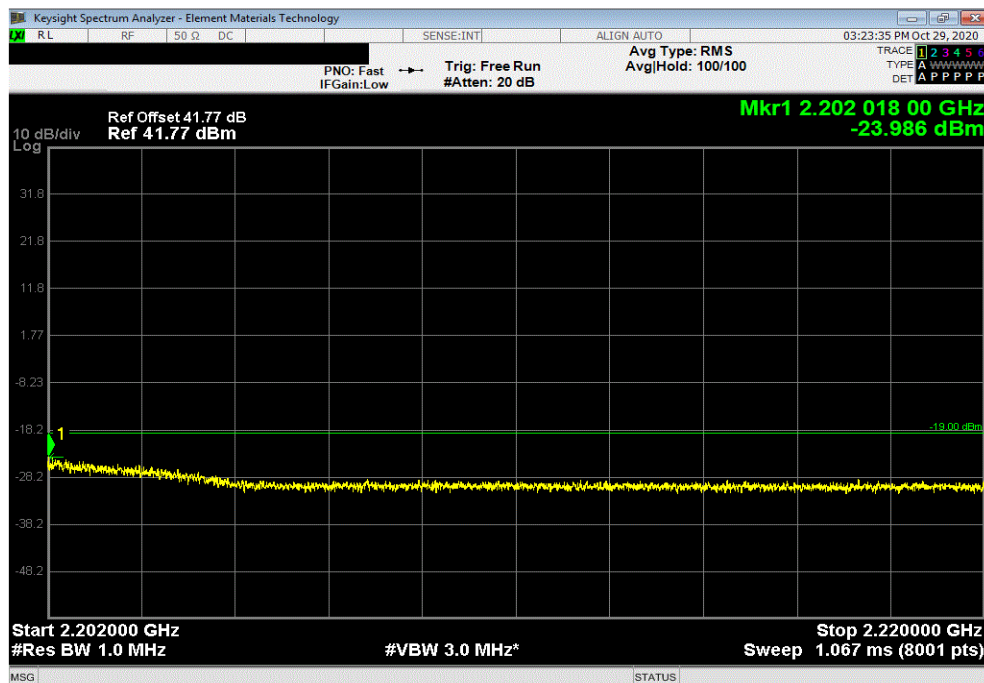


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth , 16-QAM Modulation, High Channel 2195 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
		2		-24.46	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth , 16-QAM Modulation, High Channel 2195 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
		3		-23.99	-19	Pass

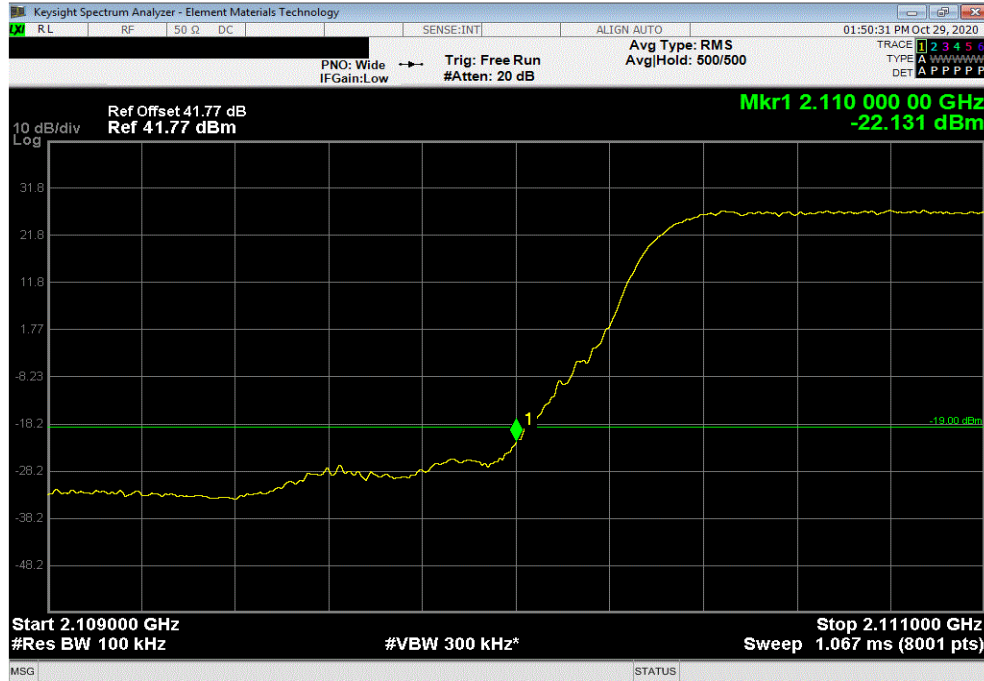


BAND EDGE COMPLIANCE PART 1

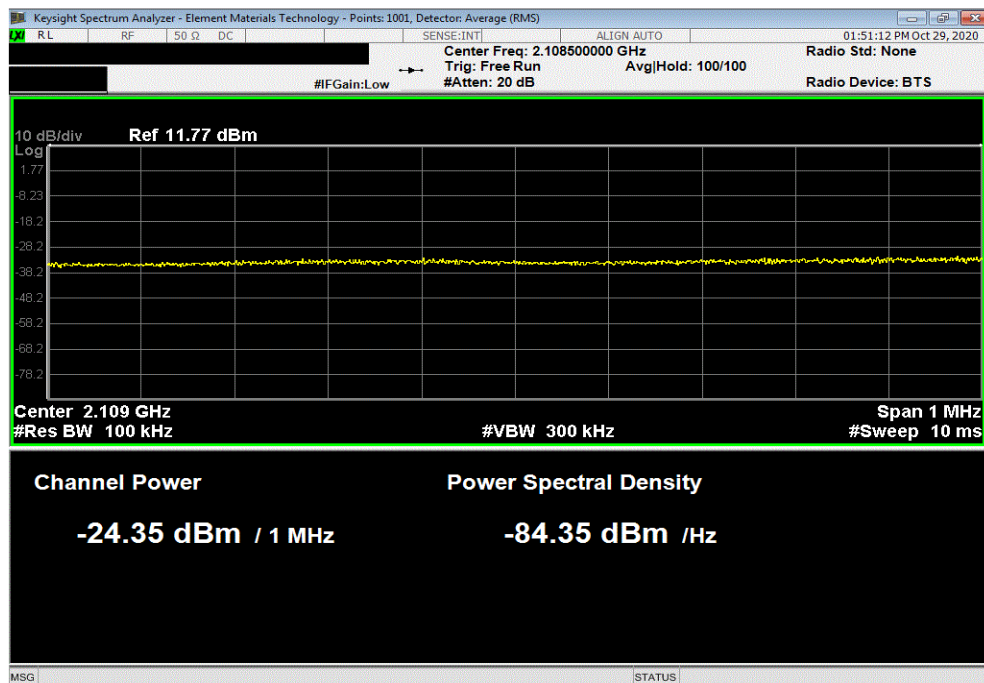


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth, 64-QAM Modulation, Low Channel 2115 MHz						
Frequency Range				Value (dBm)	Limit (dBm)	Result
	1			-22.13	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth, 64-QAM Modulation, Low Channel 2115 MHz						
Frequency Range				Value (dBm)	Limit (dBm)	Result
	2			-24.35	-19	Pass



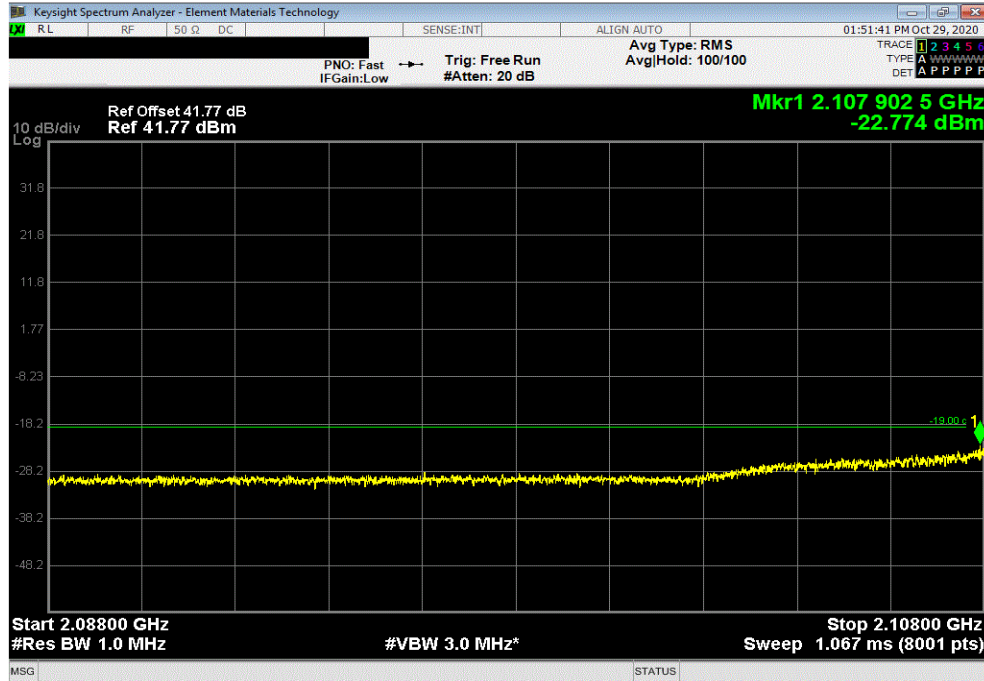
BAND EDGE COMPLIANCE PART 1



TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

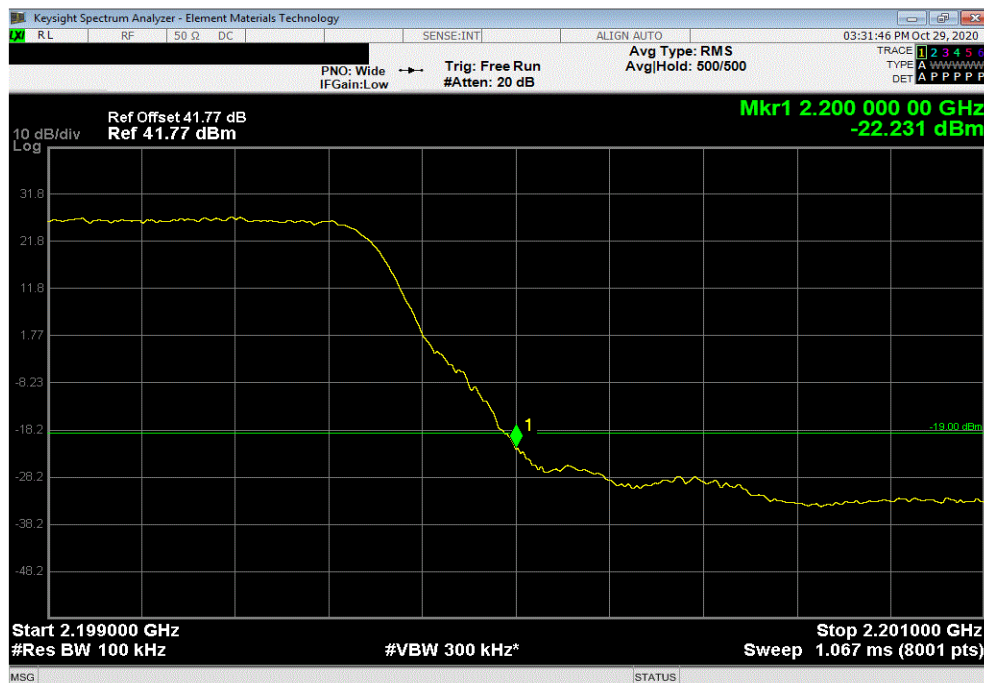
Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth, 64-QAM Modulation, Low Channel 2115 MHz

Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth , 64-QAM Modulation, Low Channel 2115 MHz							
Frequency				Value (dBm)	Limit (dBm)	Result	
Range							
		3		-22.77	-19	Pass	



Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth, 64-QAM Modulation, High Channel 2195 MHz

Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth , 64-QAM Modulation, High Channel 2195 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
		1		-22.23	-19	Pass

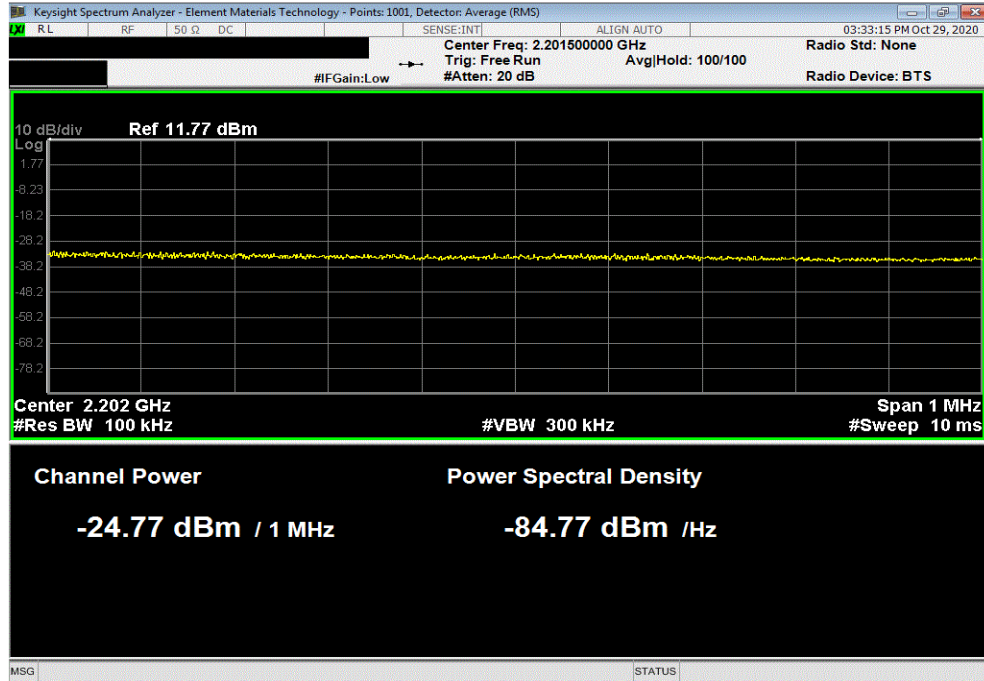


BAND EDGE COMPLIANCE PART 1

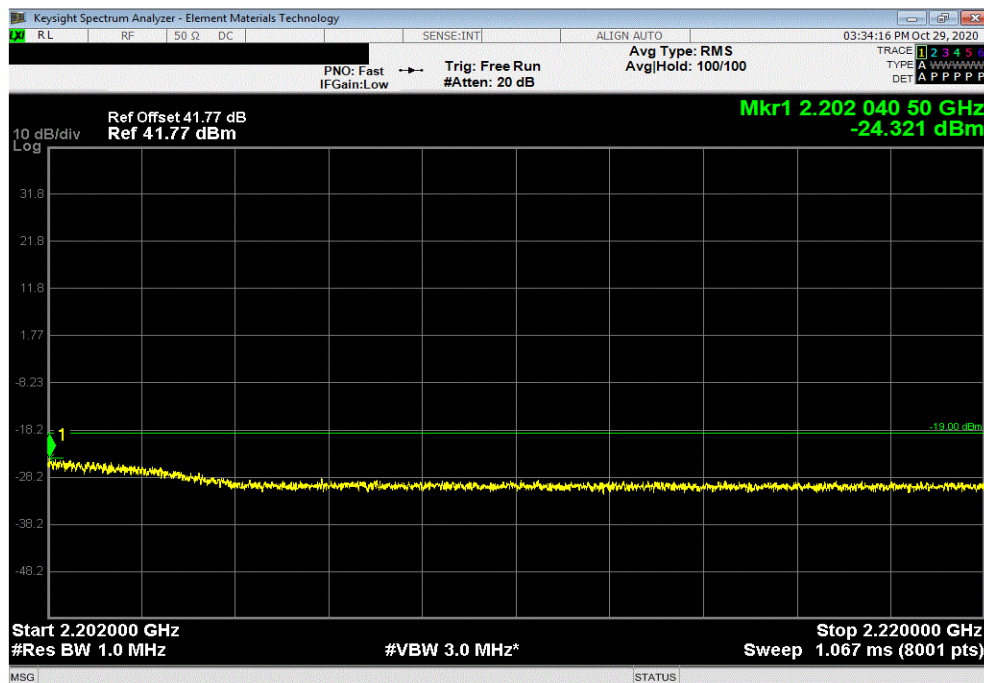


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth , 64-QAM Modulation, High Channel 2195 MHz						
Frequency Range		Value (dBm)		Limit (dBm)	Result	
2		-24.77		-19	Pass	



Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth , 64-QAM Modulation, High Channel 2195 MHz						
Frequency Range		Value (dBm)		Limit (dBm)	Result	
3		-24.32		-19	Pass	

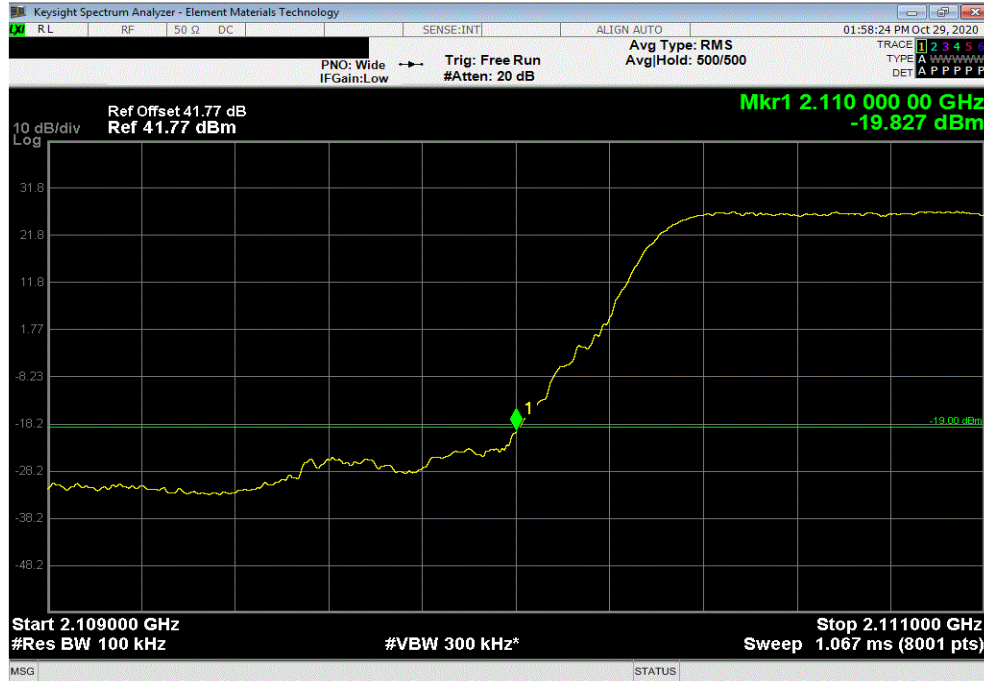


BAND EDGE COMPLIANCE PART 1

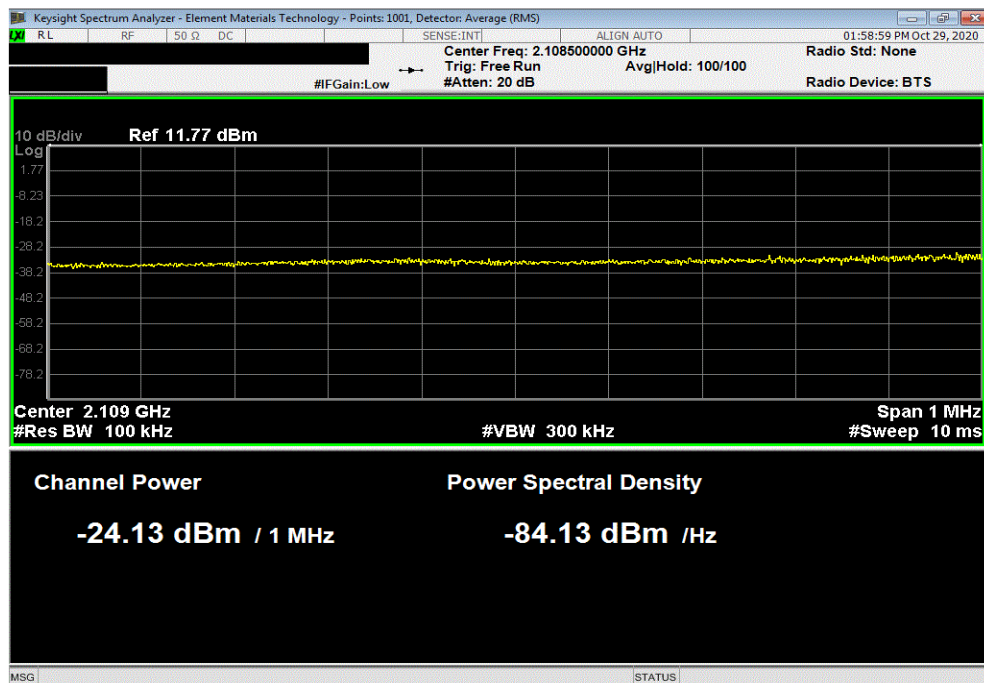


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth, 256-QAM Modulation, Low Channel 2115 MHz						
Frequency Range				Value (dBm)	Limit (dBm)	Result
	1			-19.83	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth, 256-QAM Modulation, Low Channel 2115 MHz						
Frequency Range				Value (dBm)	Limit (dBm)	Result
	2			-24.13	-19	Pass

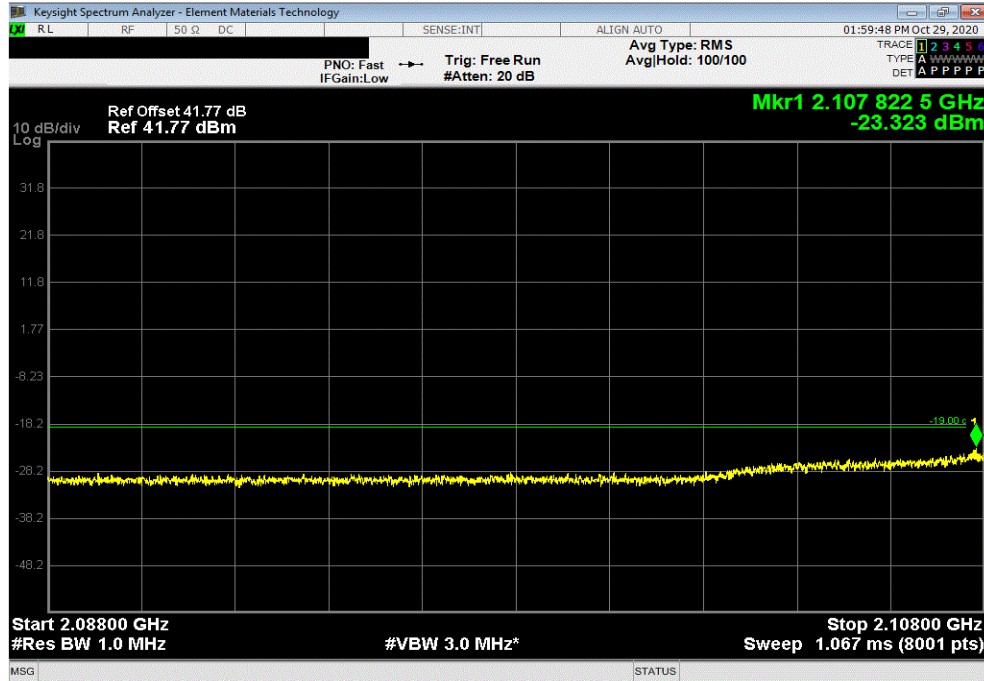


BAND EDGE COMPLIANCE PART 1

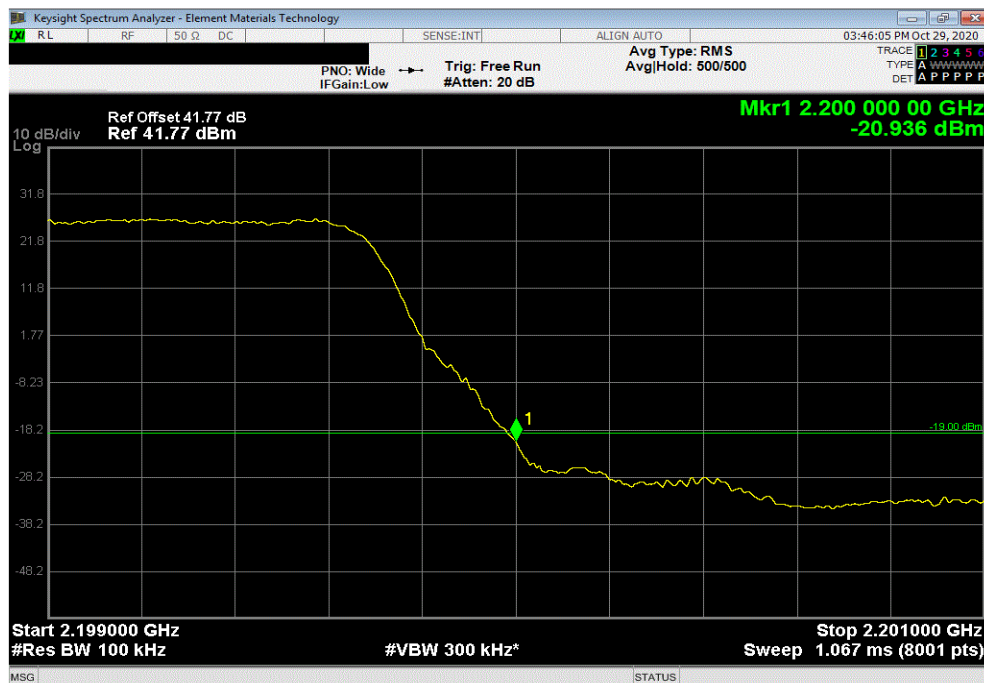


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth, 256-QAM Modulation, Low Channel 2115 MHz						
Frequency			Value (dBm)		Limit (dBm)	Result
Range						
3			-23.32		-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth, 256-QAM Modulation, High Channel 2195 MHz						
Frequency			Value (dBm)		Limit (dBm)	Result
Range						
1			-20.94		-19	Pass

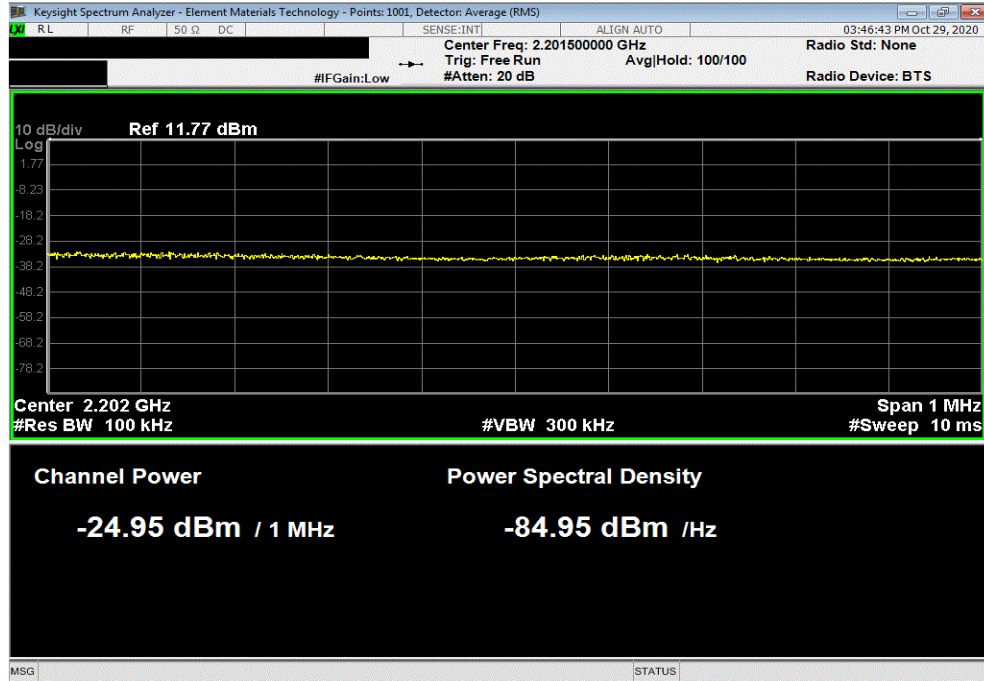


BAND EDGE COMPLIANCE PART 1

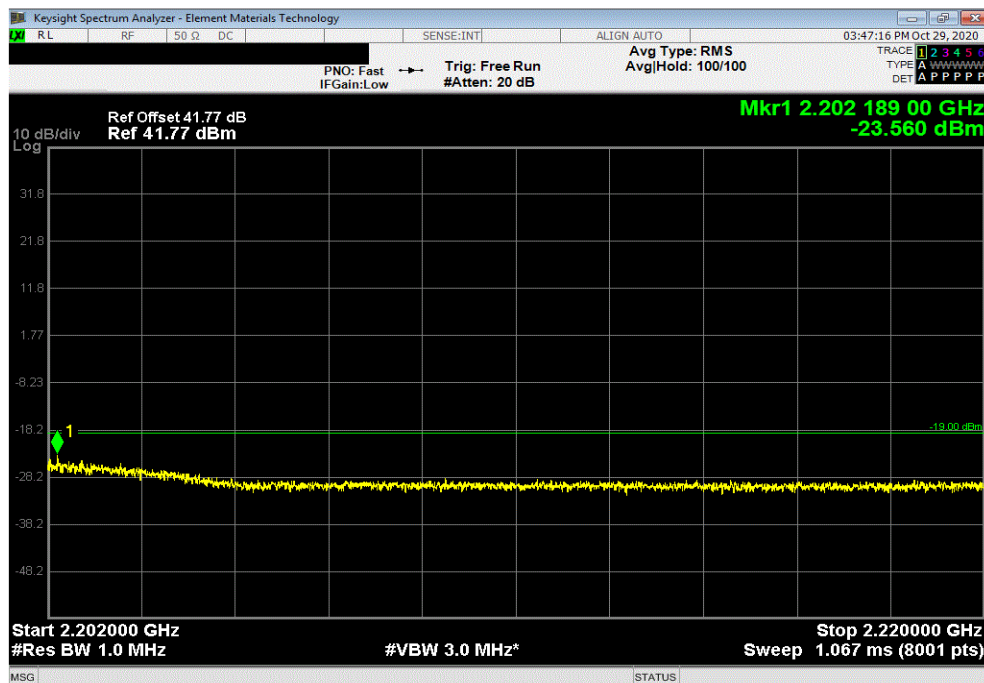


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth , 256-QAM Modulation, High Channel 2195 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
		2		-24.95	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 10 MHz Bandwidth , 256-QAM Modulation, High Channel 2195 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
		3		-23.56	-19	Pass

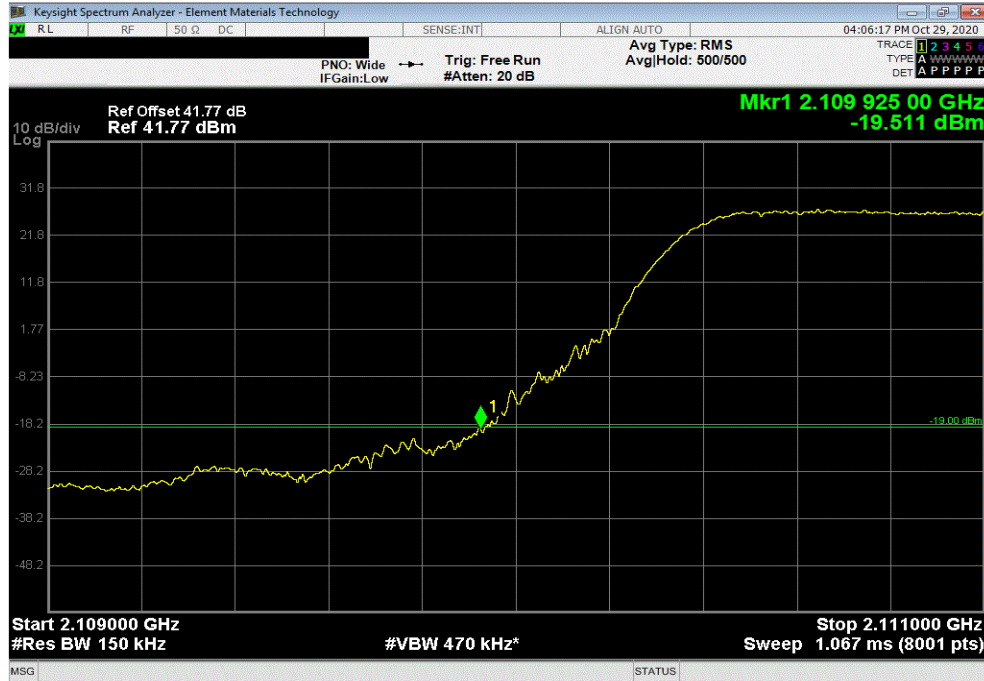


BAND EDGE COMPLIANCE PART 1

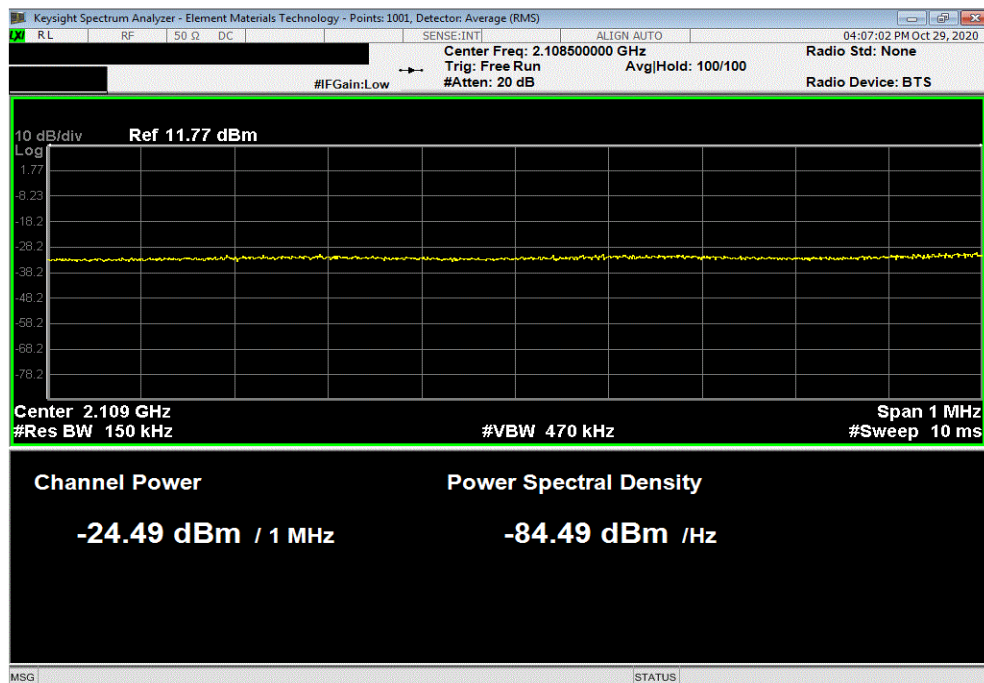


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

Port 4, Band n66, 2110 MHz - 2200 MHz, 15 MHz Bandwidth, QPSK Modulation, Low Channel 2117.5 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
1				-19.51	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 15 MHz Bandwidth, QPSK Modulation, Low Channel 2117.5 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
2				-24.49	-19	Pass

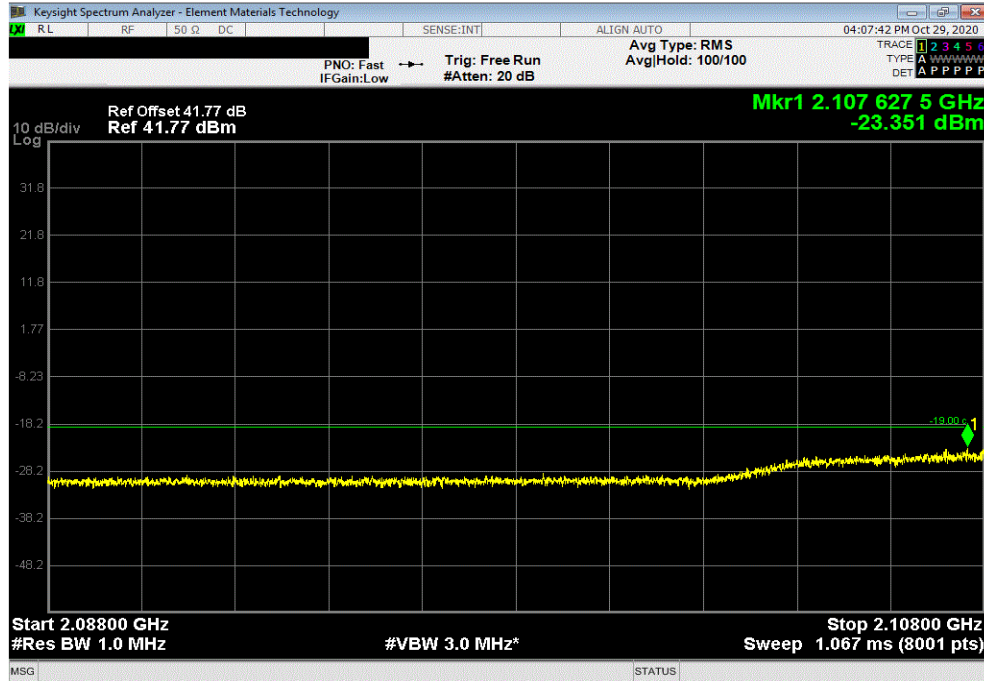


BAND EDGE COMPLIANCE PART 1

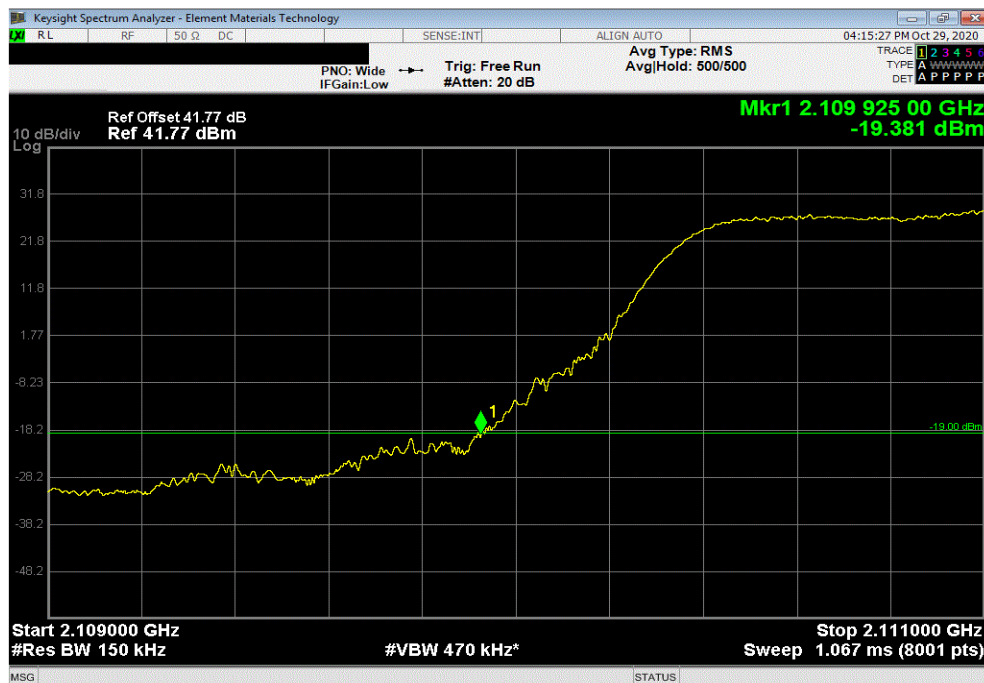


TMTx 2020.10.20.0 BETA XMt 2020.03.25.0

Port 4, Band n66, 2110 MHz - 2200 MHz, 15 MHz Bandwidth, QPSK Modulation, Low Channel 2117.5 MHz						
Frequency			Value (dBm)		Limit (dBm)	Result
Range						
3			-23.35		-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 15 MHz Bandwidth, 16-QAM Modulation, Low Channel 2117.5 MHz						
Frequency			Value (dBm)		Limit (dBm)	Result
Range						
1			-19.38		-19	Pass

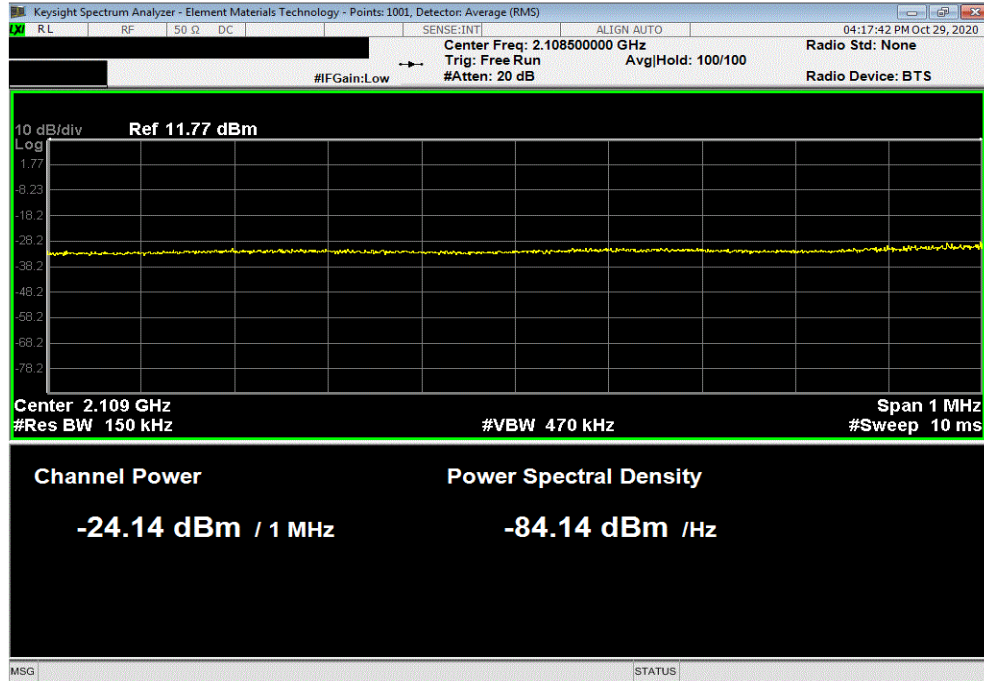


BAND EDGE COMPLIANCE PART 1

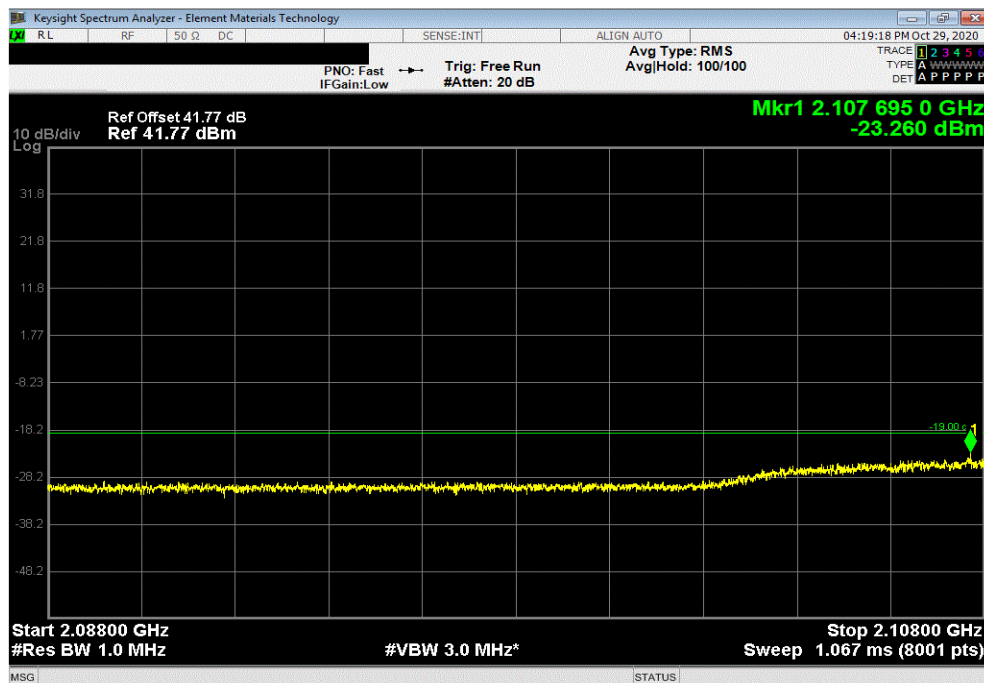


TMTx 2020.10.20.0 BETA XMt 2020.03.25.0

Port 4, Band n66, 2110 MHz - 2200 MHz, 15 MHz Bandwidth , 16-QAM Modulation, Low Channel 2117.5 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
		2		-24.14	-19	Pass

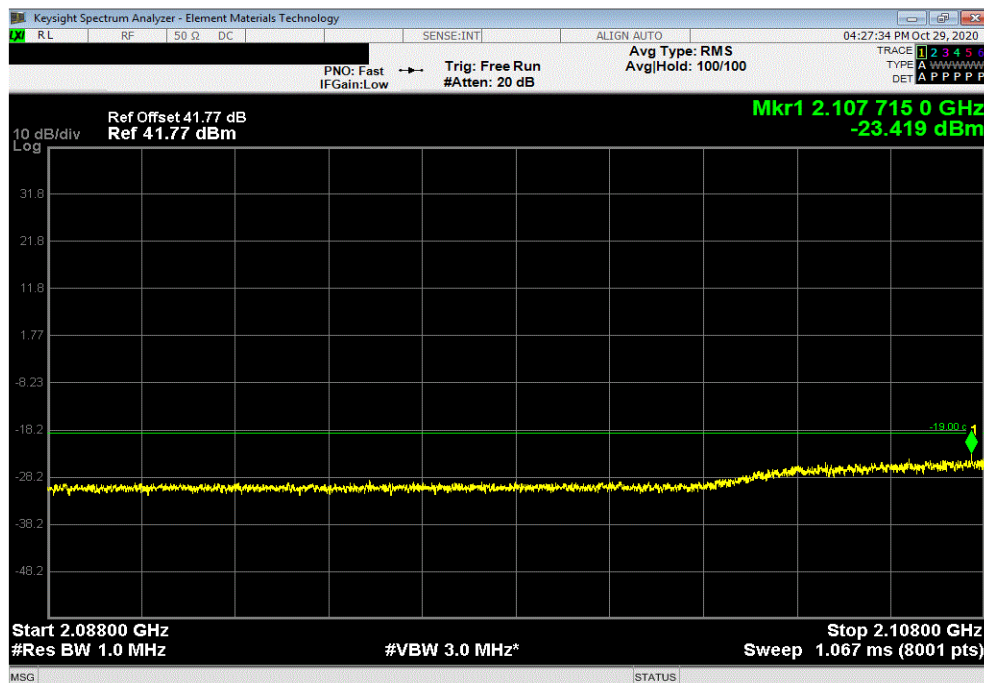


Port 4, Band n66, 2110 MHz - 2200 MHz, 15 MHz Bandwidth , 16-QAM Modulation, Low Channel 2117.5 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
		3		-23.26	-19	Pass

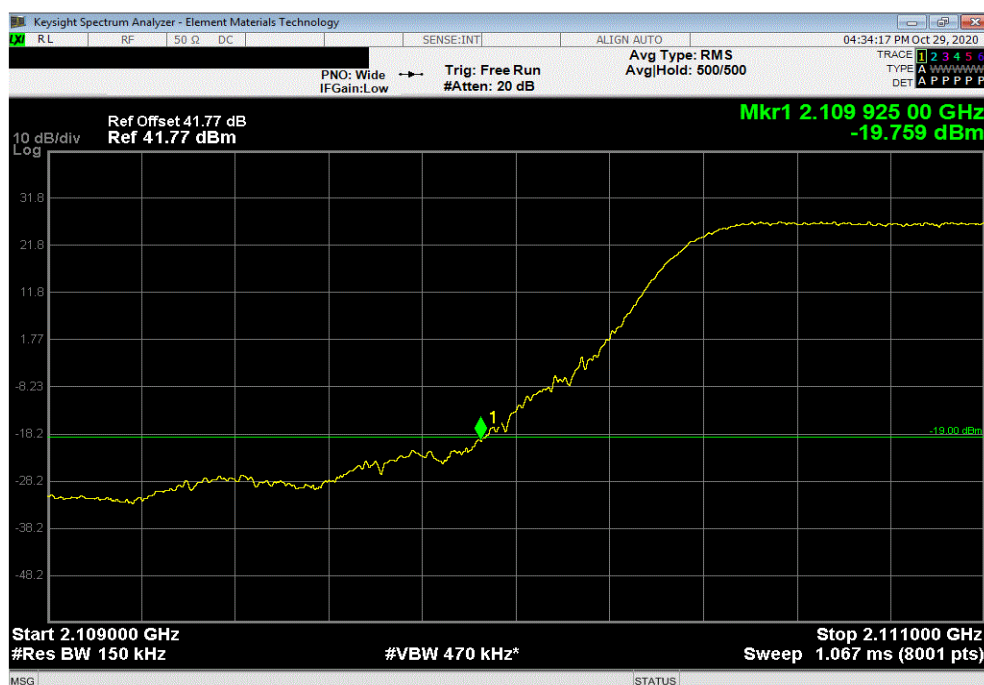


TbtTx 2020.10.20.0 BETA XMit 2020.03.25.1

Port 4, Band n66, 2110 MHz - 2200 MHz, 15 MHz Bandwidth , 64-QAM Modulation, Low Channel 2117.5 MHz						
Frequency Range				Value (dBm)	Limit (dBm)	Result
	3			-23.42	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 15 MHz Bandwidth , 256-QAM Modulation, Low Channel 2117.5 MHz						
Frequency Range				Value (dBm)	Limit (dBm)	Result
	1			-19.76	-19	Pass

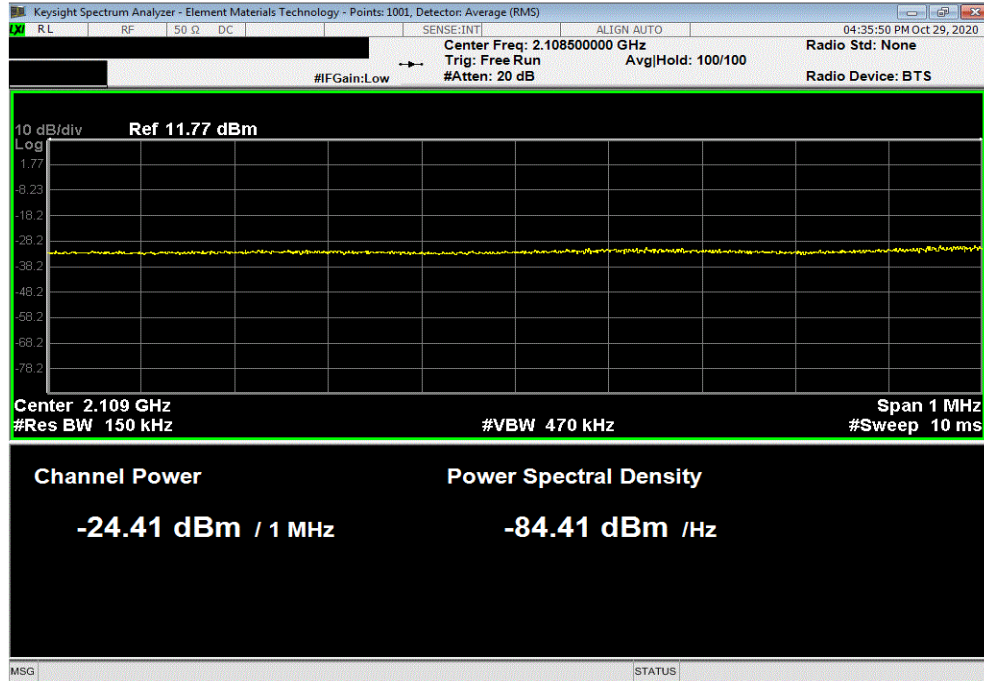


BAND EDGE COMPLIANCE PART 1

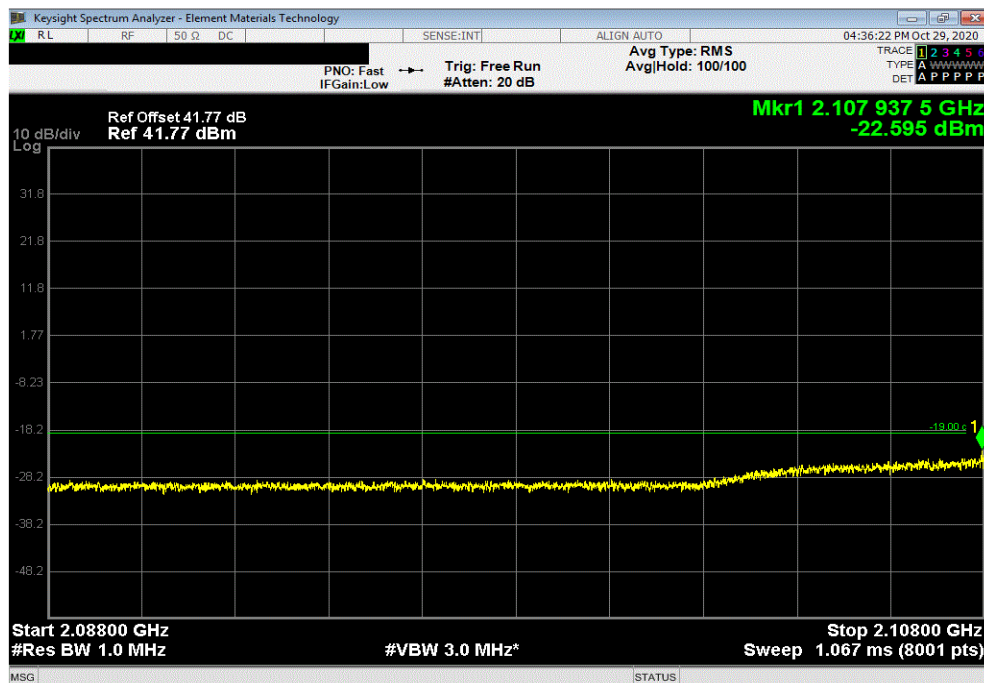


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

Port 4, Band n66, 2110 MHz - 2200 MHz, 15 MHz Bandwidth , 256-QAM Modulation, Low Channel 2117.5 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
		2		-24.41	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 15 MHz Bandwidth , 256-QAM Modulation, Low Channel 2117.5 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
		3		-22.60	-19	Pass



BAND EDGE COMPLIANCE PART 1

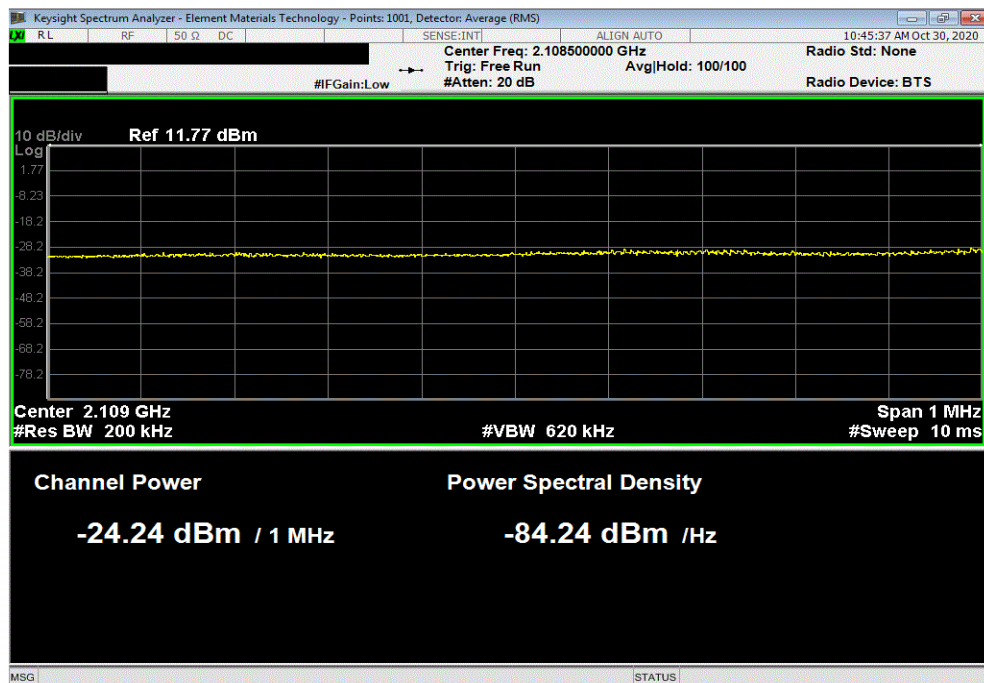


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, QPSK Modulation, Low Channel 2120 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
1				-20.33	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, QPSK Modulation, Low Channel 2120 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
2				-24.24	-19	Pass



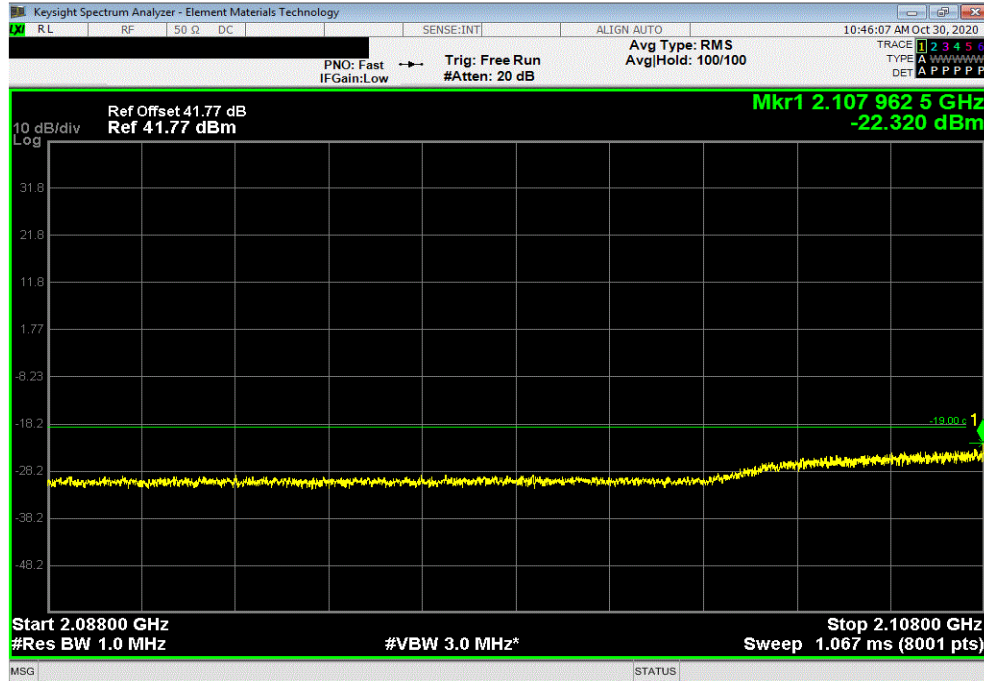
BAND EDGE COMPLIANCE PART 1



TMTx 2020.10.20.0 BETA XMt 2020.03.25.0

Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, QPSK Modulation, Low Channel 2120 MHz

Frequency				Value (dBm)	Limit (dBm)	Result
Range						
			3	-22.32	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, QPSK Modulation, High Channel 2190 MHz

Frequency				Value (dBm)	Limit (dBm)	Result
Range						
			1	-22.19	-19	Pass

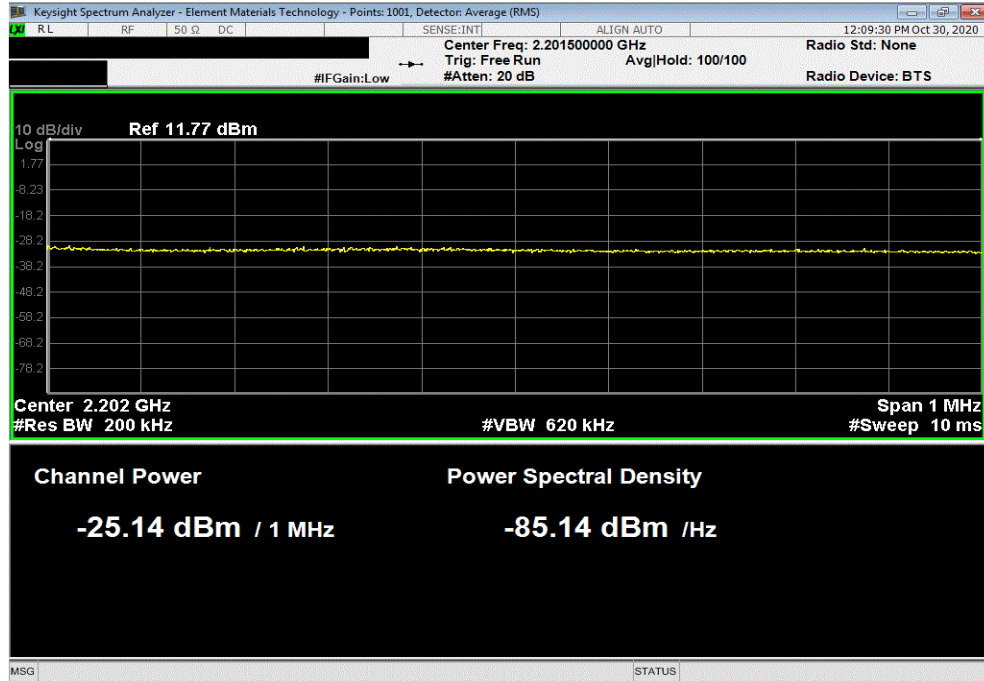


BAND EDGE COMPLIANCE PART 1

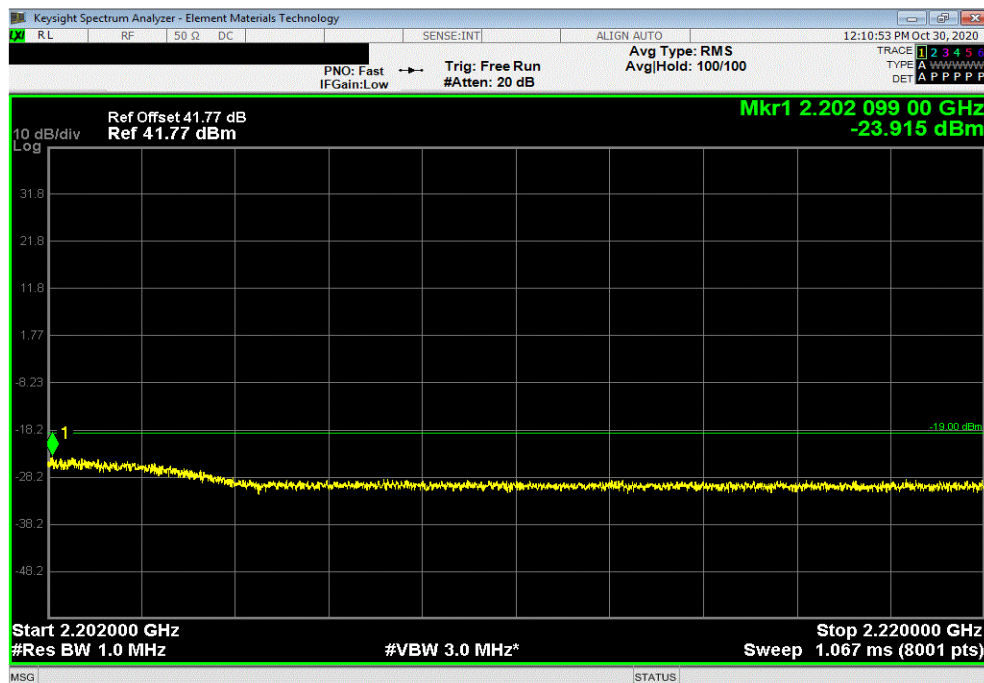


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, QPSK Modulation, High Channel 2190 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
		2		-25.14	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, QPSK Modulation, High Channel 2190 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
		3		-23.92	-19	Pass

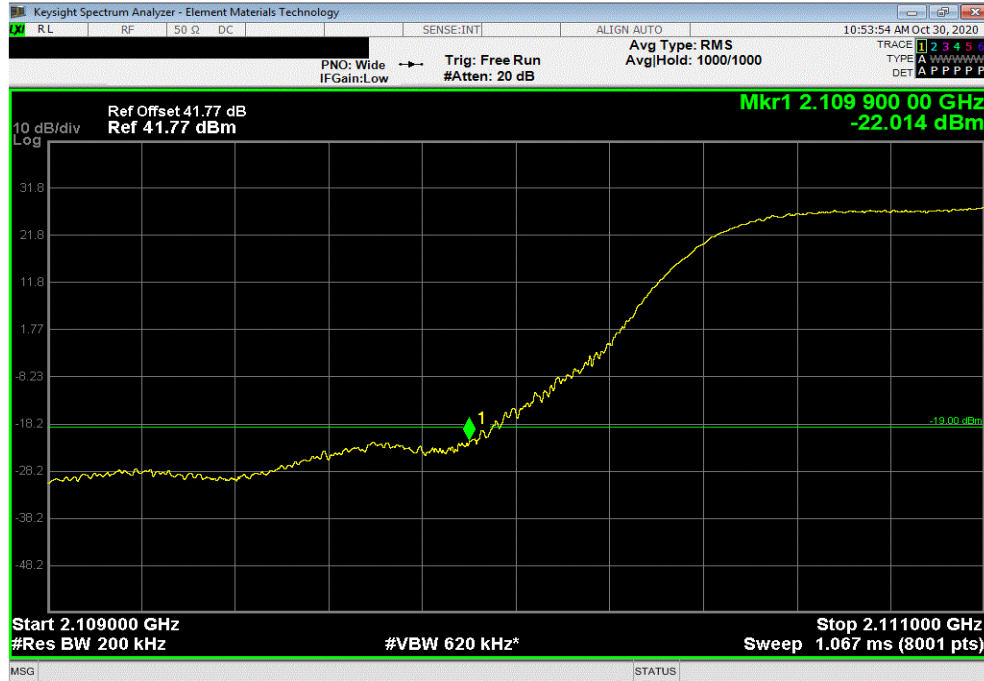


BAND EDGE COMPLIANCE PART 1

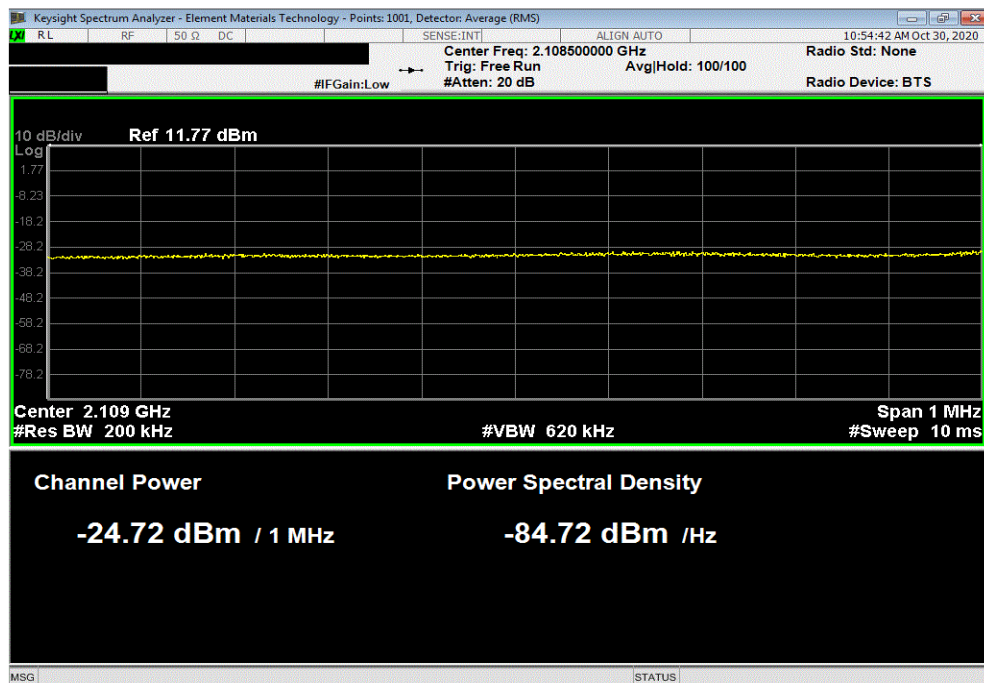


TMTx 2020.10.20.0 BETA XMt 2020.03.25.0

Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, 16-QAM Modulation, Low Channel 2120 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
1				-22.01	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, 16-QAM Modulation, Low Channel 2120 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
2				-24.72	-19	Pass



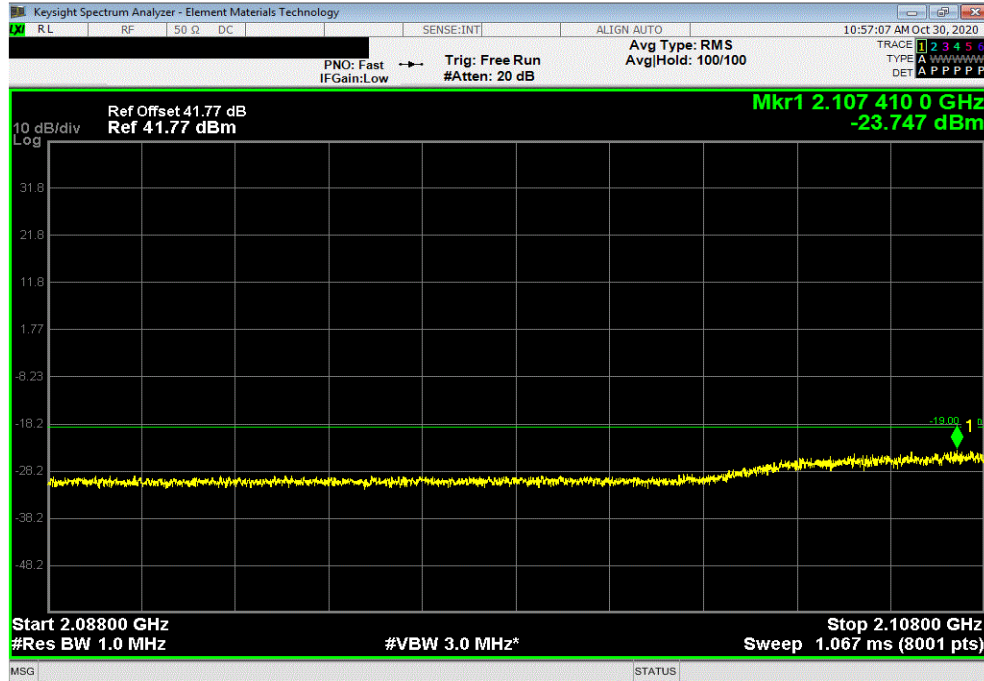
BAND EDGE COMPLIANCE PART 1



TMTx 2020.10.20.0 BETA XMt 2020.03.25.0

Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, 16-QAM Modulation, Low Channel 2120 MHz

Frequency				Value (dBm)	Limit (dBm)	Result
Range						
			3	-23.75	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, 16-QAM Modulation, High Channel 2190 MHz

Frequency				Value (dBm)	Limit (dBm)	Result
Range						
			1	-22.78	-19	Pass

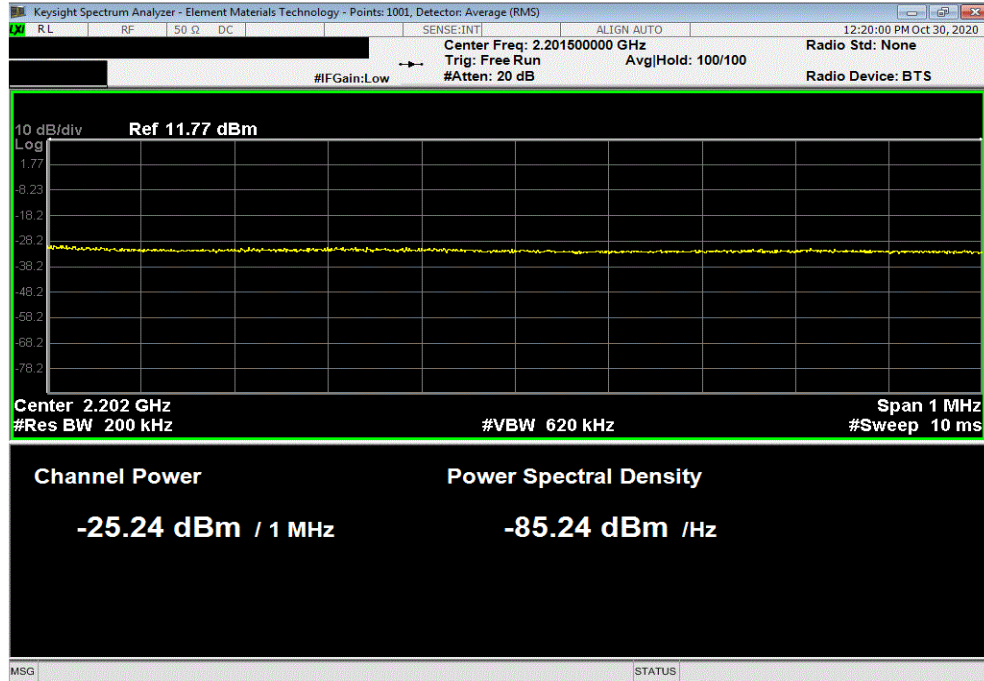


BAND EDGE COMPLIANCE PART 1

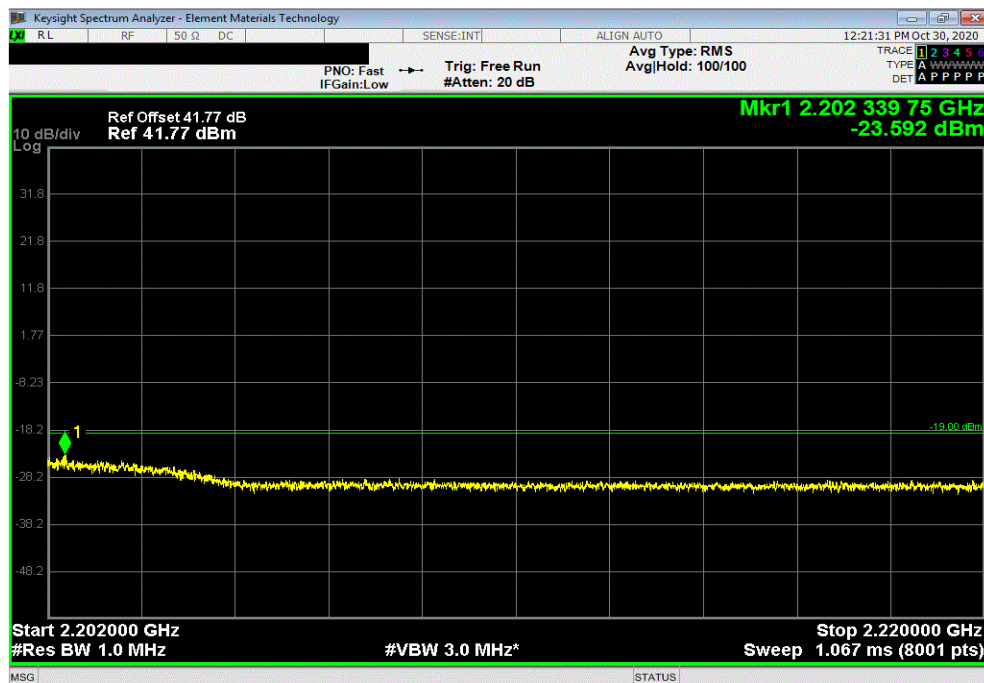


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, 16-QAM Modulation, High Channel 2190 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
		2		-25.24	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, 16-QAM Modulation, High Channel 2190 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
		3		-23.59	-19	Pass



BAND EDGE COMPLIANCE PART 1

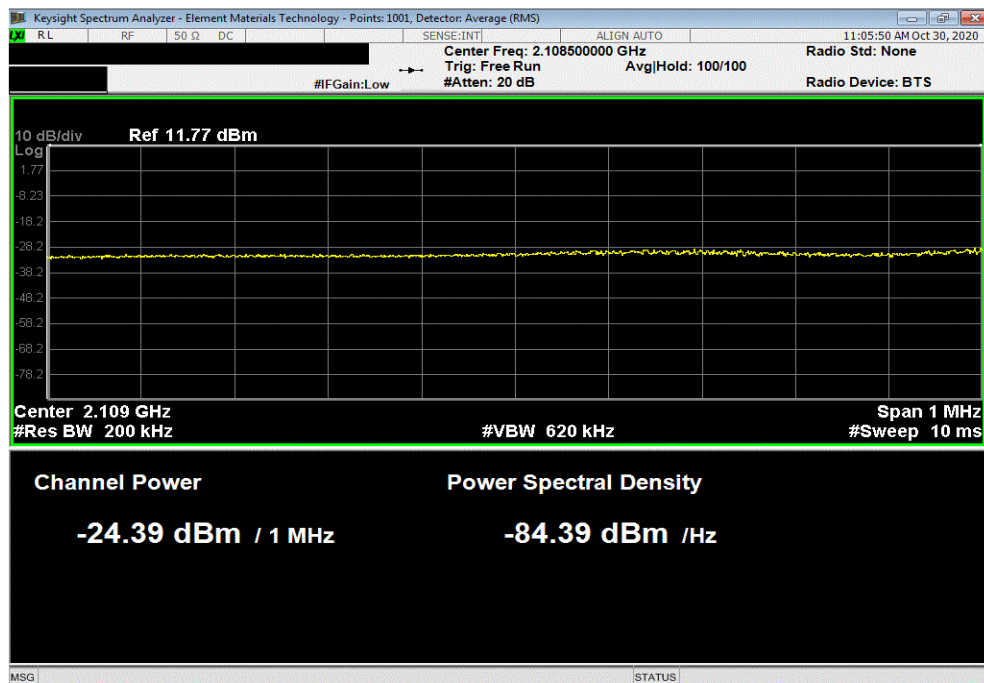


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, 64-QAM Modulation, Low Channel 2120 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
	1			-20.92	-19	Pass

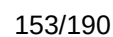
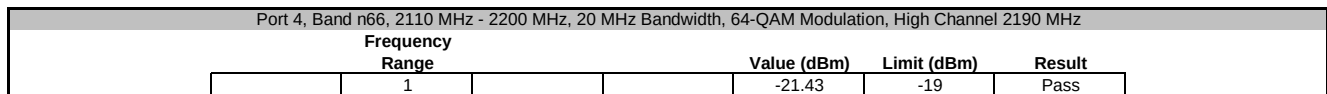


Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, 64-QAM Modulation, Low Channel 2120 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
	2			-24.39	-19	Pass



TbtTx 2020.10.20.0 BETA XMit 2020.03.25.1

Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, 64-QAM Modulation, Low Channel 2120 MHz						
Frequency Range				Value (dBm)	Limit (dBm)	Result
	3			-23.14	-19	Pass

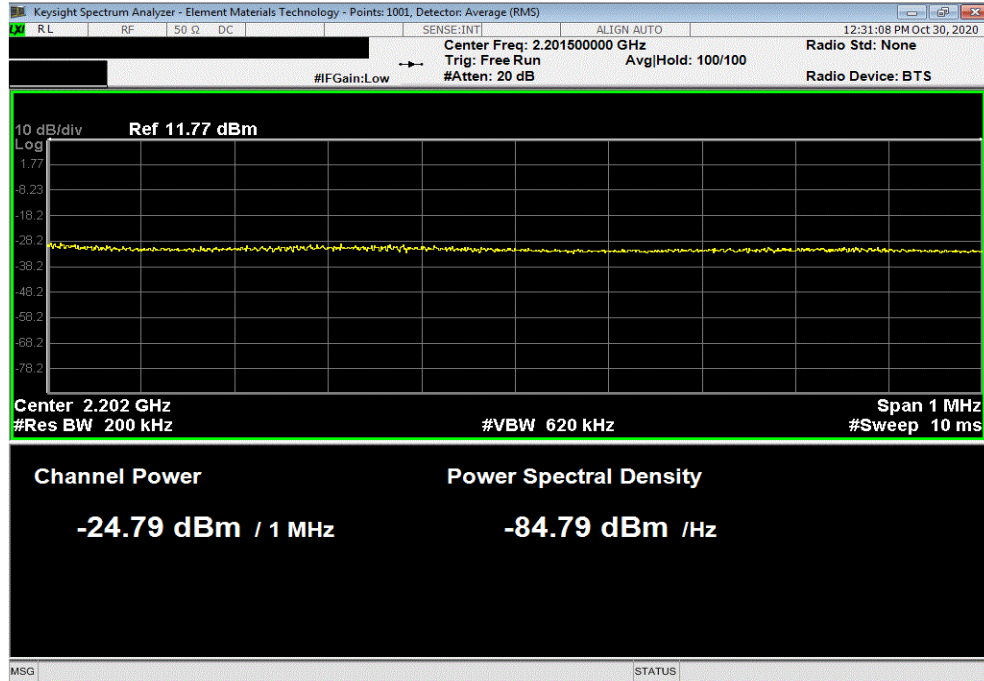


BAND EDGE COMPLIANCE PART 1

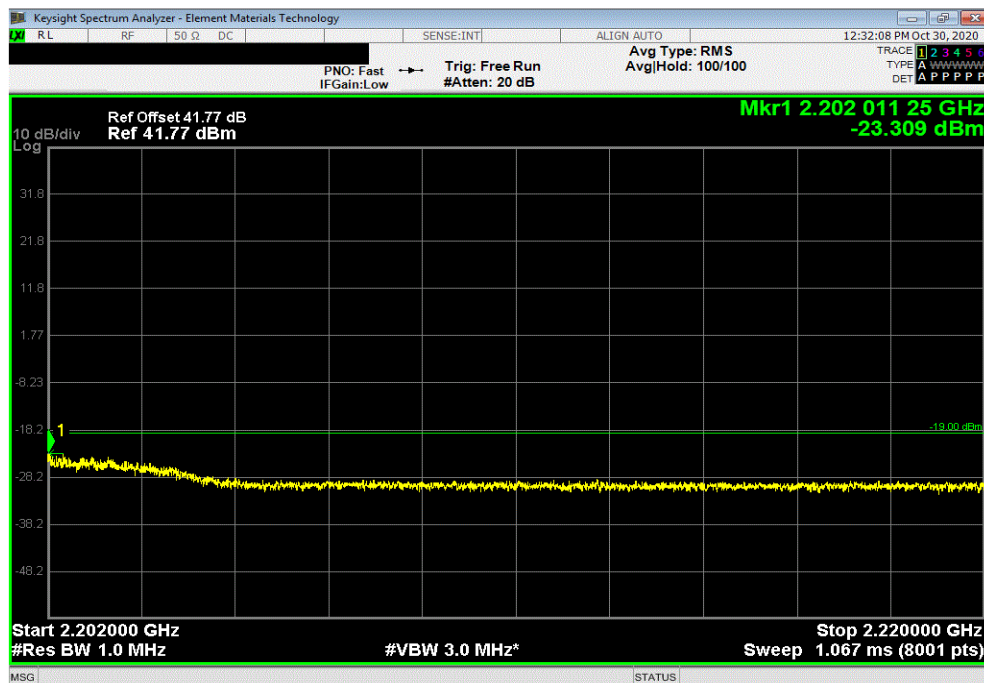


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, 64-QAM Modulation, High Channel 2190 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
		2		-24.79	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, 64-QAM Modulation, High Channel 2190 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
		3		-23.31	-19	Pass



BAND EDGE COMPLIANCE PART 1

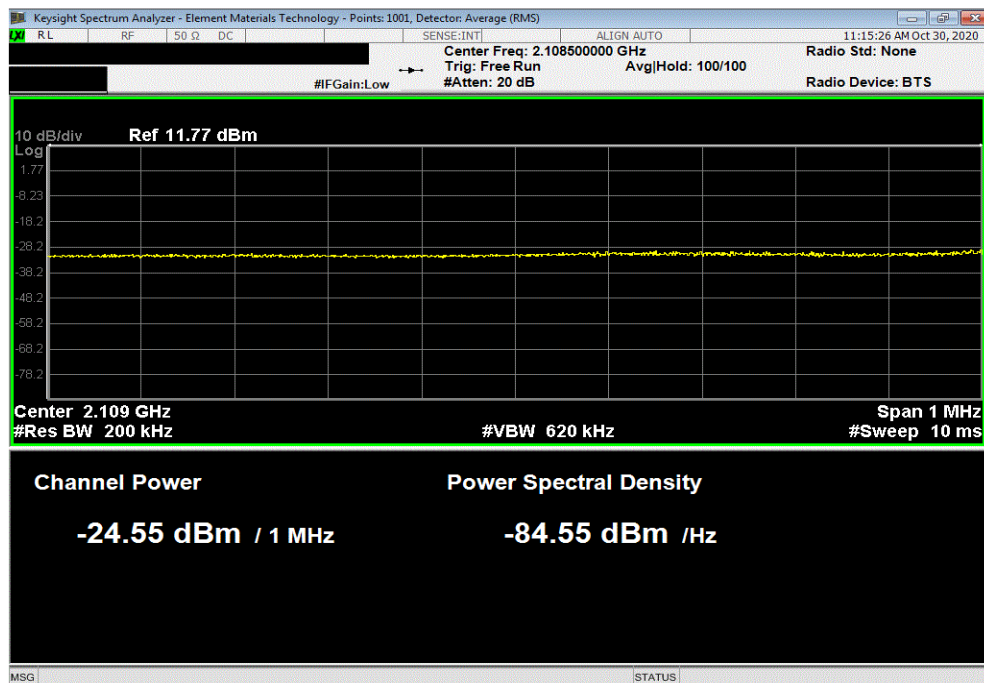


TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, 256-QAM Modulation, Low Channel 2120 MHz						
Frequency Range				Value (dBm)	Limit (dBm)	Result
1				-22.29	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, 256-QAM Modulation, Low Channel 2120 MHz						
Frequency Range				Value (dBm)	Limit (dBm)	Result
2				-24.55	-19	Pass



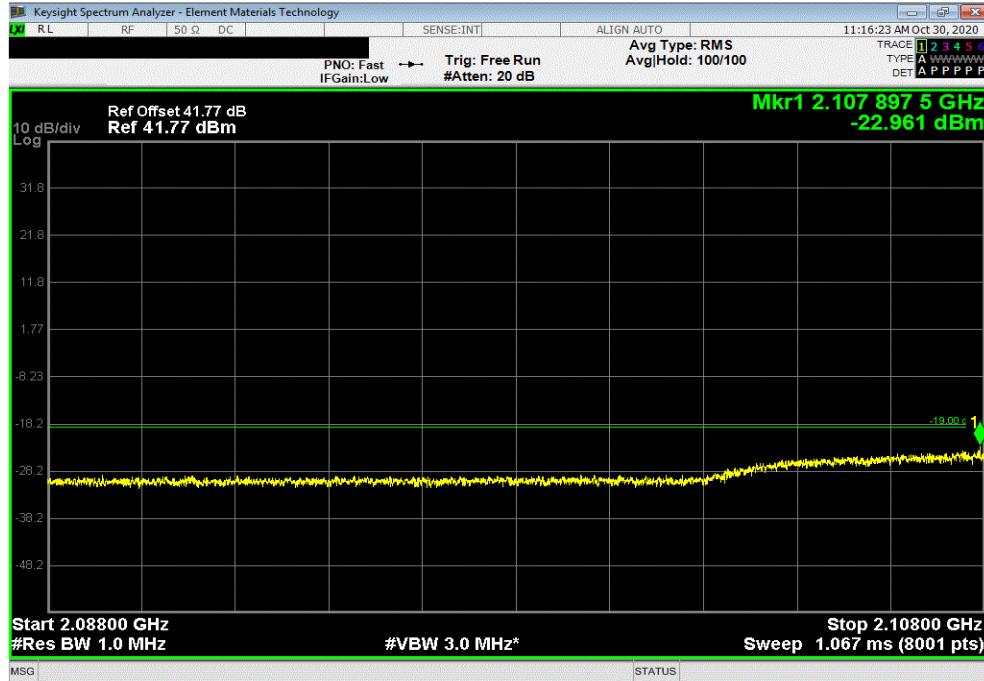
BAND EDGE COMPLIANCE PART 1



TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, 256-QAM Modulation, Low Channel 2120 MHz

Frequency				Value (dBm)	Limit (dBm)	Result
Range						
			3	-22.96	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, 256-QAM Modulation, High Channel 2190 MHz

Frequency				Value (dBm)	Limit (dBm)	Result
Range						
			1	-22.03	-19	Pass

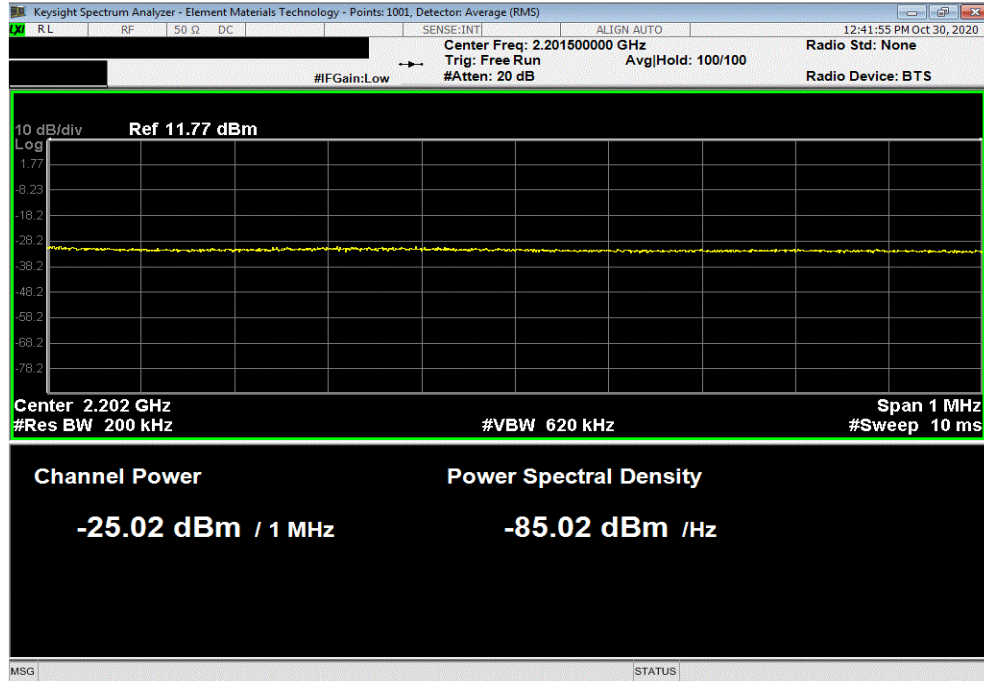


BAND EDGE COMPLIANCE PART 1



TMTx 2020.10.20.0 BETA XMR 2020.03.25.0

Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, 256-QAM Modulation, High Channel 2190 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
		2		-25.02	-19	Pass



Port 4, Band n66, 2110 MHz - 2200 MHz, 20 MHz Bandwidth, 256-QAM Modulation, High Channel 2190 MHz						
Frequency				Value (dBm)	Limit (dBm)	Result
Range						
		3		-23.63	-19	Pass

