

SPURIOUS CONDUCTED EMISSIONS

BAND 25



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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	Keysight	N9010A	AFM	19-Mar-19	19-Mar-20
Generator - Signal	Keysight	N5171B-506	TEW	2-May-18	2-May-21
Generator - Signal	Keysight	N5183A	TID	26-Apr-19	26-Apr-21

TEST DESCRIPTION

The antenna port spurious emissions were measured at the RF output terminal of the EUT through 4 different attenuation configurations which continues through to the RF input of the spectrum analyzer. Analyzer plots utilizing a resolution bandwidth called out by the client's test plan were made for each modulation type from 9 KHz to 22 GHz. The peak conducted power of spurious emissions, up to the 10th harmonic of the transmit frequency, were investigated to ensure they were less than the limits also called out by the client's test plan shown below.

The measurement methods are detailed in KDB971168 D01v03 section 6 and ANSI C63.26-2015.

Per FCC 2.1057(a)(1) and RSS Gen 6.13, the upper level of measurement is the 10th harmonic of the highest fundamental frequency.

These measurements are for frequency band after the first 1.0 MHz bands immediately outside and adjacent to the frequency block.

Per section FCC 24.238(a) and RSS 133 6.5 (ii), the power of any emission outside of the authorized operating frequency range cannot exceed -13 dBm for a 1 MHz measurement bandwidth. The limit is adjusted to -19 dBm [-13 dBm -10 log (4)] per FCC KDB 662911D01 v02r01 because the BTS may operate as a 4 port MIMO transmitter. .

The limit for the 9kHz to 150kHz frequency range was adjusted to -49dBm to correct for a spectrum analyzer RBW of 1kHz versus required RBW of 1MHz [i.e.: -49dBm = -19dBm -10log(1MHz/1kHz)]. The limit for the 150kHz to 20MHz frequency range was adjusted to -39dBm to correct for a spectrum analyzer RBW of 10kHz versus required RBW of 1MHz [i.e.: -39dBm = -19dBm -10log(1MHz/10kHz)]. The required limit of -19dBm with a RBW of > 1MHz was used for all other frequency ranges.

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EUT:	AHFIA	Work Order:	NOKI0008					
Serial Number:	K9174623559	Date:	20-Feb-20					
Customer:	Nokia of America Corporation	Temperature:	22.1 °C					
Attendees:	Mitch Hill, John Rattanavong	Humidity:	46.5% RH					
Project:	None	Barometric Pres.:	1015 mbar					
Tested by:	Brandon Hobbs	Power:	54VDC	Job Site: TX09				
TEST SPECIFICATIONS								
FCC 24E:2020	ANSI C63.26:2015							
RSS-133:2018, RSS-Gen:2019	RSS-133:2018, RSS-Gen:2019							
COMMENTS								
All measurement path losses were accounted for in the reference level offset including any attenuators, filters and DC blocks. All measurement path losses were accounted for in the reference level offset including any attenuators, filters and DC blocks. The data was taken on the mid channel in the band while using the highest output power port which was found in the original client provided test report. Ranges 1 and 2 used configuration 1. Range 3 used configuration 2. Ranges 4 and 5 used configuration 3. Range 6 used configuration 4.								
DEVIATIONS FROM TEST STANDARD								
None								
Configuration #	1,2,3,4	Signature						
			Value	Limit	Result			
5G Band 25, 1930 MHz - 1995 MHz								
(Single Carrier) Port 4, Mid Channel 1962.5 MHz								
5 MHz Bandwidth								
QPSK Modulation								
Range 1, 9 kHz - 150 kHz			-56.88	-49	Pass			
Range 2, 150 kHz - 20 MHz			-55.46	-39	Pass			
Range 3, 20 MHz - 3 GHz			-29.15	-19	Pass			
Range 4, 3 GHz - 6 GHz			-35.39	-19	Pass			
Range 5, 6 GHz - 18 GHz			-29.47	-19	Pass			
Range 6, 18 GHz - 22 GHz			-21.21	-19	Pass			
16-QAM Modulation								
Range 1, 9 kHz - 150 kHz			-58.05	-49	Pass			
Range 2, 150 kHz - 20 MHz			-55.23	-39	Pass			
Range 3, 20 MHz - 3 GHz			-29.45	-19	Pass			
Range 4, 3 GHz - 6 GHz			-35.57	-19	Pass			
Range 5, 6 GHz - 18 GHz			-29.89	-19	Pass			
Range 6, 18 GHz - 22 GHz			-21.29	-19	Pass			
64-QAM Modulation								
Range 1, 9 kHz - 150 kHz			-56.65	-49	Pass			
Range 2, 150 kHz - 20 MHz			-55.43	-39	Pass			
Range 3, 20 MHz - 3 GHz			-29.37	-19	Pass			
Range 4, 3 GHz - 6 GHz			-34.92	-19	Pass			
Range 5, 6 GHz - 18 GHz			-29.80	-19	Pass			
Range 6, 18 GHz - 22 GHz			-21.31	-19	Pass			
256-QAM Modulation								
Range 1, 9 kHz - 150 kHz			-57.71	-49	Pass			
Range 2, 150 kHz - 20 MHz			-55.37	-39	Pass			
Range 3, 20 MHz - 3 GHz			-29.61	-19	Pass			
Range 4, 3 GHz - 6 GHz			-34.95	-19	Pass			
Range 5, 6 GHz - 18 GHz			-29.15	-19	Pass			
Range 6, 18 GHz - 22 GHz			-21.09	-19	Pass			
10 MHz Bandwidth								
256-QAM Modulation								
Range 1, 9 kHz - 150 kHz			-56.93	-49	Pass			
Range 2, 150 kHz - 20 MHz			-54.69	-39	Pass			
Range 3, 20 MHz - 3 GHz			-29.09	-19	Pass			
Range 4, 3 GHz - 6 GHz			-35.46	-19	Pass			
Range 5, 6 GHz - 18 GHz			-30.11	-19	Pass			
Range 6, 18 GHz - 22 GHz			-21.09	-19	Pass			
15 MHz Bandwidth								
256-QAM Modulation								
Range 1, 9 kHz - 150 kHz			-55.94	-49	Pass			
Range 2, 150 kHz - 20 MHz			-55.11	-39	Pass			
Range 3, 20 MHz - 3 GHz			-29.08	-19	Pass			
Range 4, 3 GHz - 6 GHz			-35.52	-19	Pass			
Range 5, 6 GHz - 18 GHz			-29.58	-19	Pass			
Range 6, 18 GHz - 22 GHz			-20.47	-19	Pass			
20 MHz Bandwidth								
256-QAM Modulation								
Range 1, 9 kHz - 150 kHz			-57.02	-49	Pass			
Range 2, 150 kHz - 20 MHz			-55.73	-39	Pass			
Range 3, 20 MHz - 3 GHz			-29.09	-19	Pass			
Range 4, 3 GHz - 6 GHz			-35.79	-19	Pass			
Range 5, 6 GHz - 18 GHz			-30.12	-19	Pass			
Range 6, 18 GHz - 22 GHz			-21.01	-19	Pass			

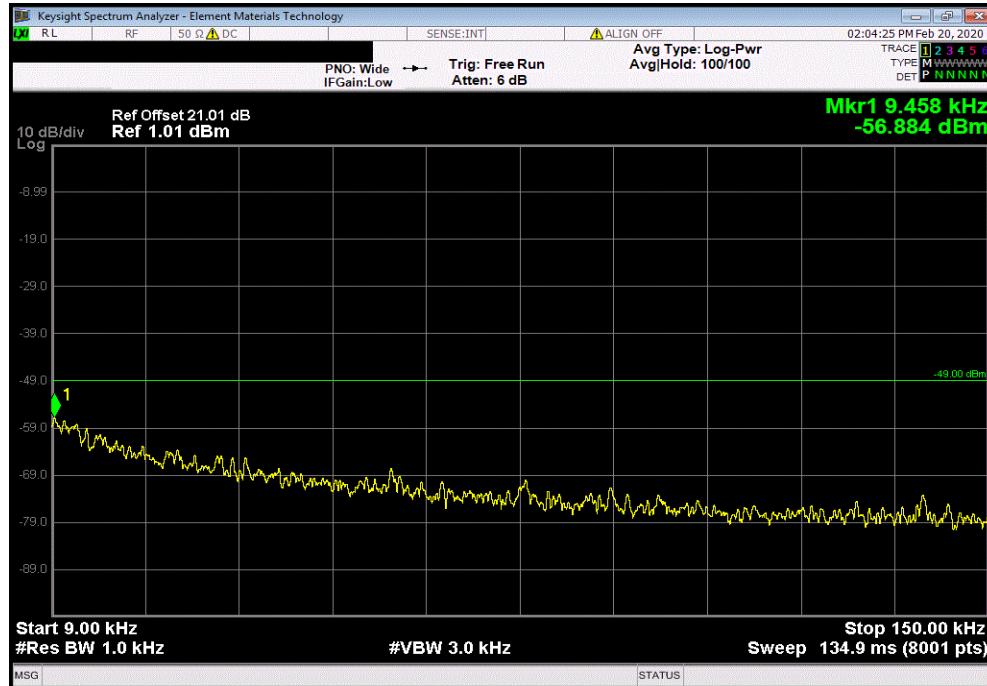
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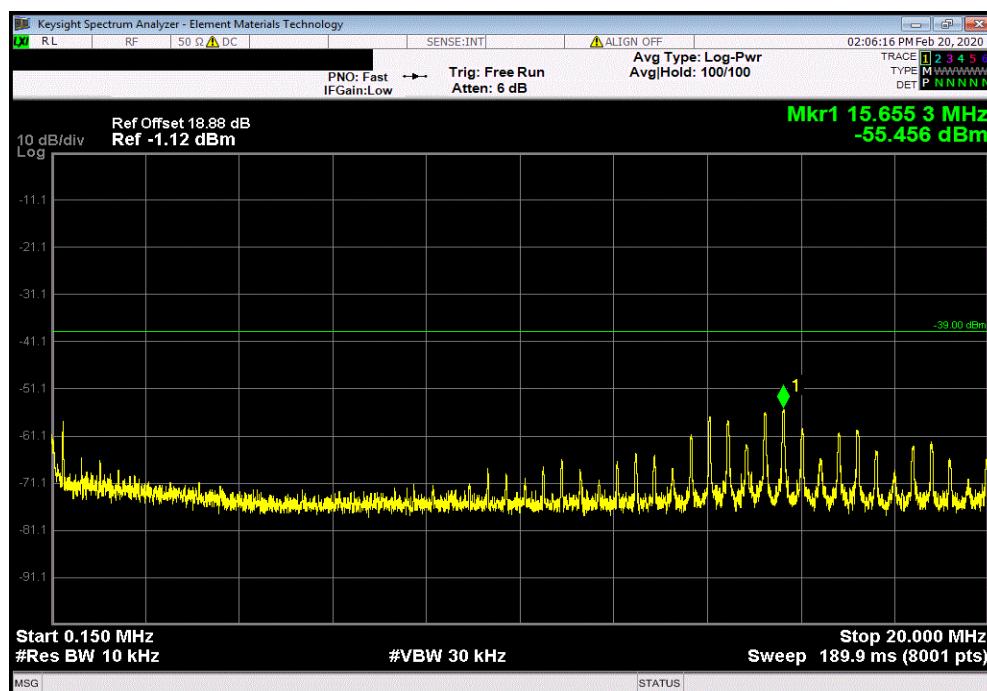
5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 5 MHz Bandwidth, QPSK Modulation , Range 1, 9 kHz - 150 kHz

	Value	Limit	Result
	-56.884	-49	Pass



5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 5 MHz Bandwidth, QPSK Modulation , Range 2, 150 kHz - 20 MHz

	Value	Limit	Result
	-55.456	-39	Pass



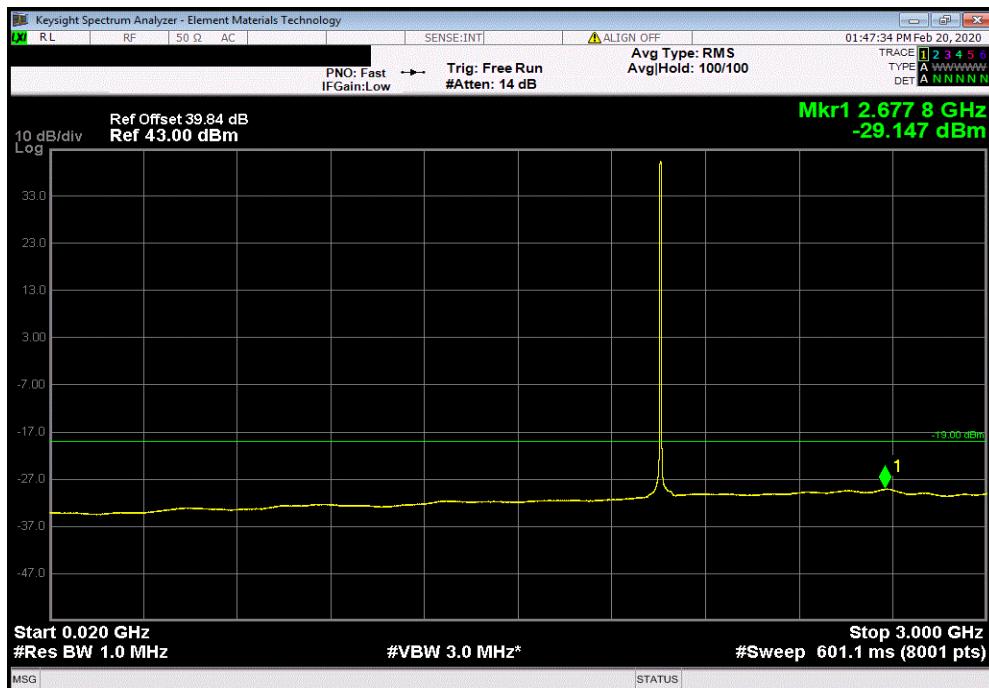
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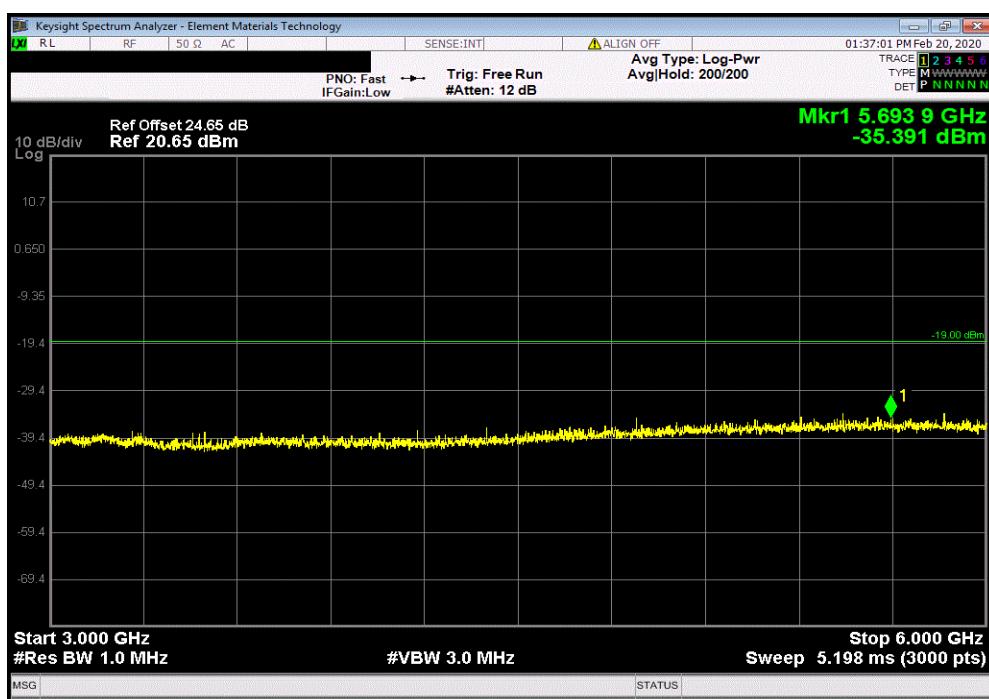
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	Value	Limit	Result
	-29.147	-19	Pass



5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 5 MHz Bandwidth, QPSK Modulation , Range 4, 3 GHz - 6 GHz

	Value	Limit	Result
	-35.391	-19	Pass



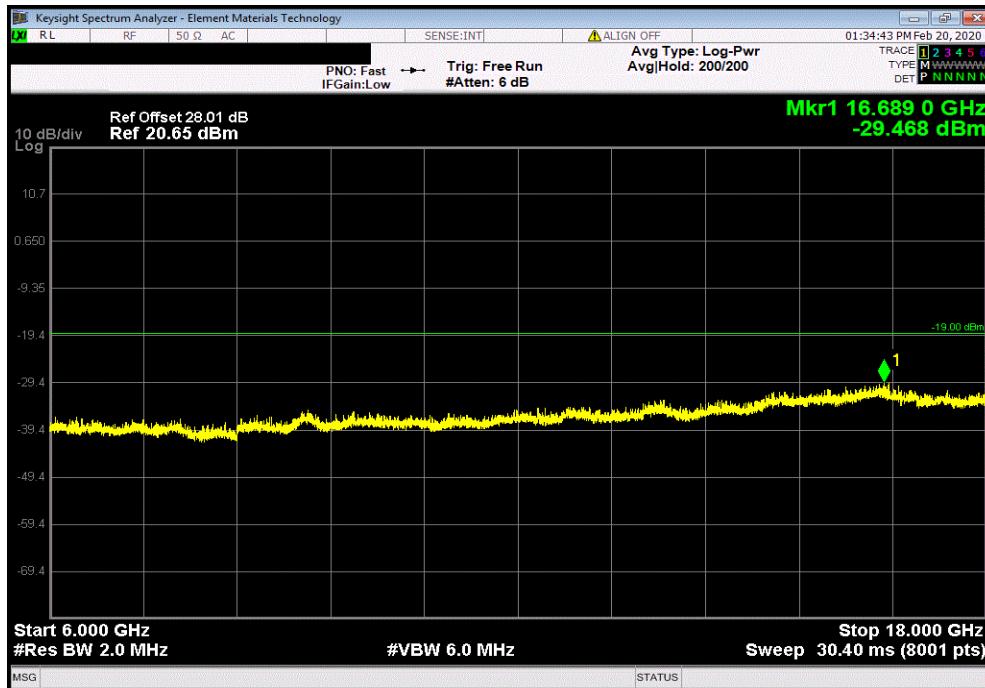
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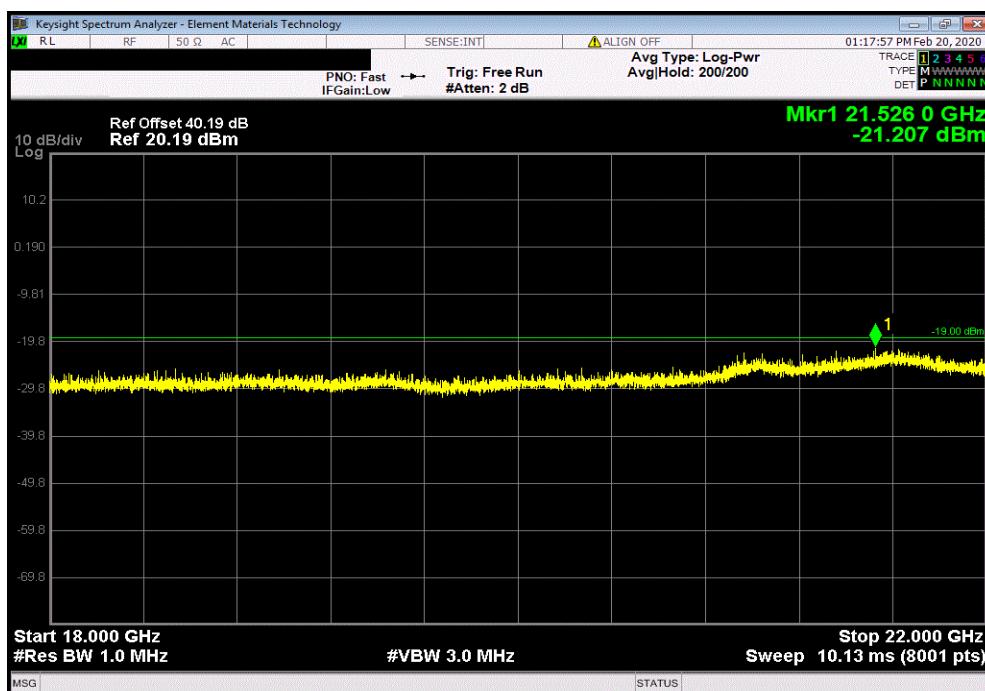
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	Value	Limit	Result
	-29.468	-19	Pass



5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 5 MHz Bandwidth, QPSK Modulation , Range 6, 18 GHz - 22 GHz

	Value	Limit	Result
	-21.207	-19	Pass



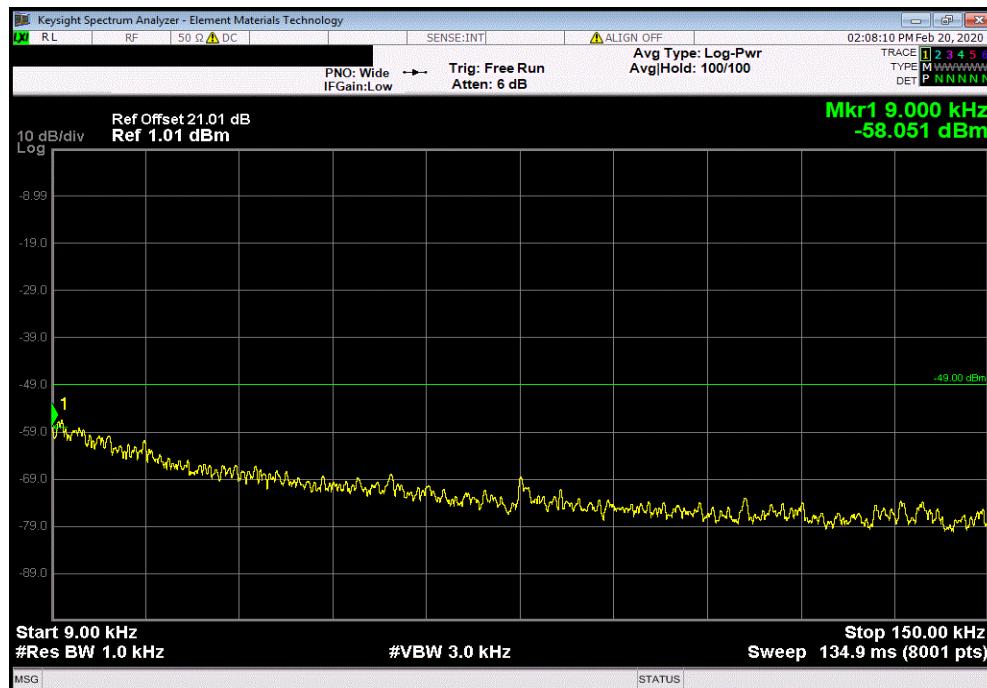
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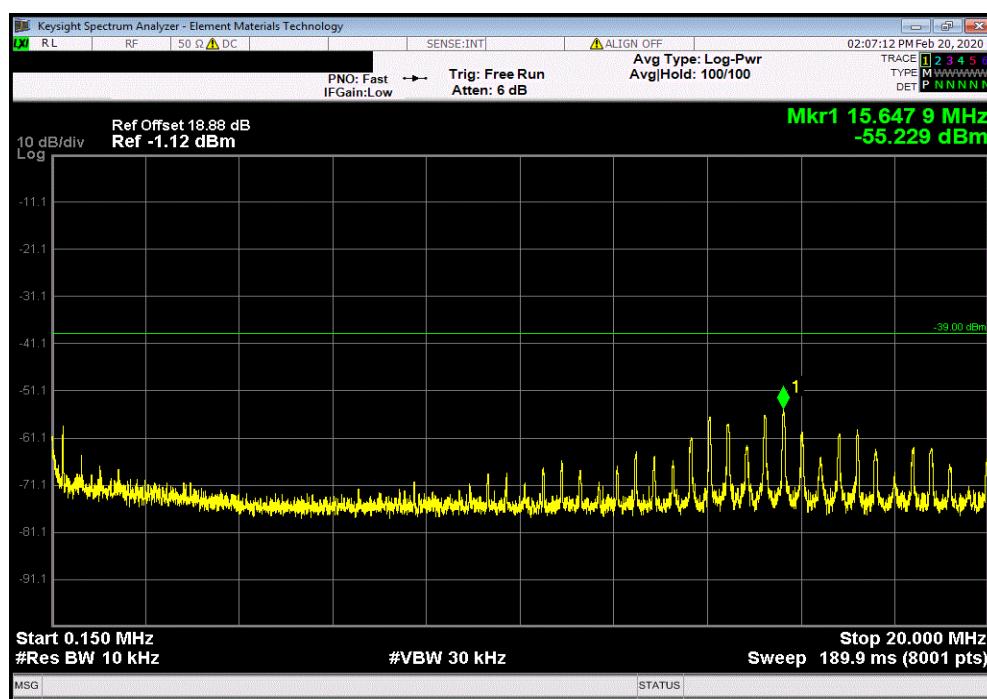
5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 5 MHz Bandwidth, 16-QAM Modulation, Range 1, 9 kHz - 150 kHz

	Value	Limit	Result
	-58.051	-49	Pass



5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 5 MHz Bandwidth, 16-QAM Modulation, Range 2, 150 kHz - 20 MHz

	Value	Limit	Result
	-55.229	-39	Pass



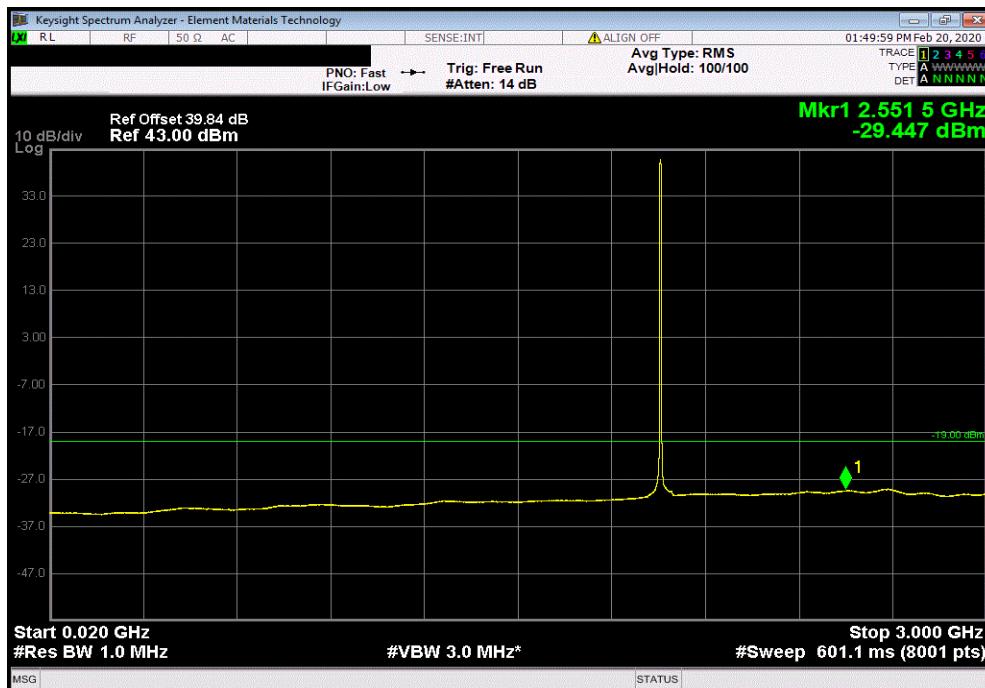
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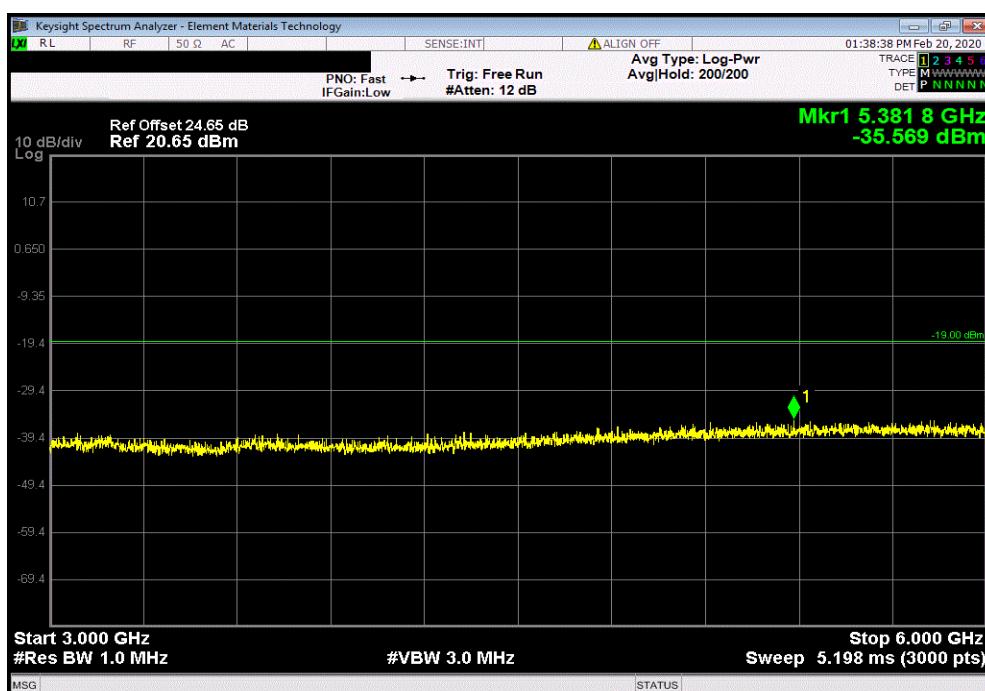
5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 5 MHz Bandwidth, 16-QAM Modulation, Range 3, 20 MHz - 3 GHz

				Value	Limit	Result
				-29 447	-19	Pass



5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 5 MHz Bandwidth, 16-QAM Modulation, Range 4, 3 GHz - 6 GHz

	Value	Limit	Result
	25.500	10	Pass



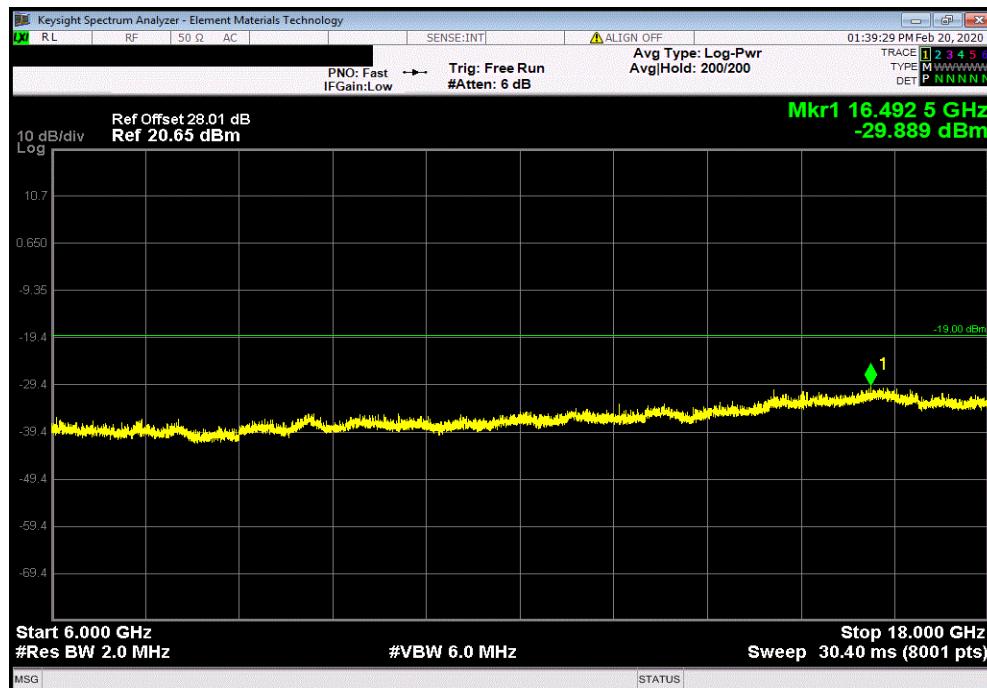
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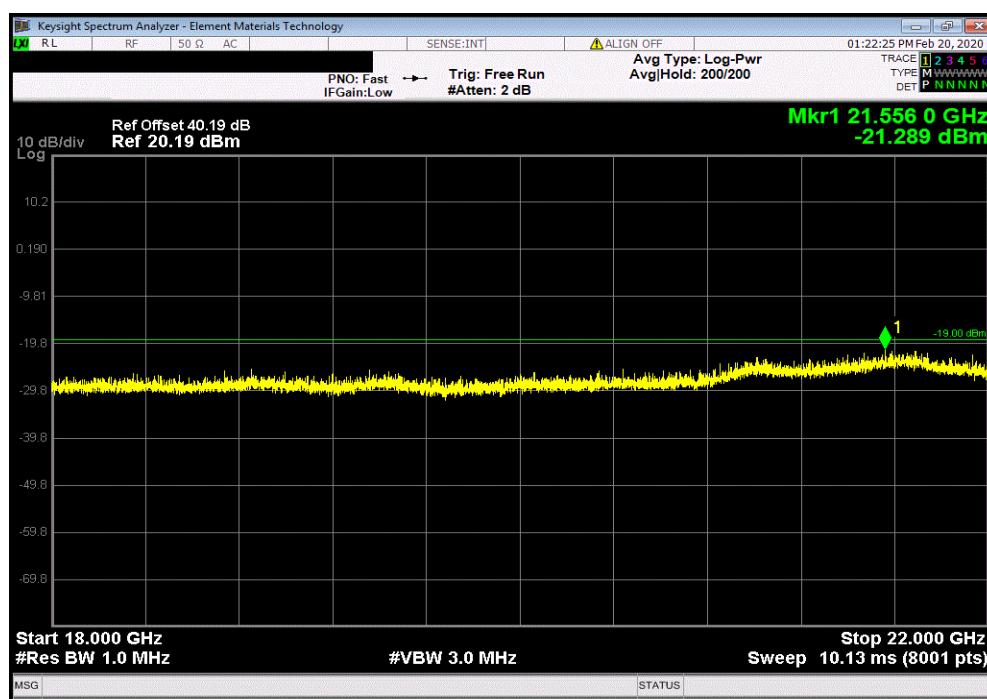
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	Value	Limit	Result
	-29.889	-19	Pass



5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 5 MHz Bandwidth, 16-QAM Modulation, Range 6, 18 GHz - 22 GHz

	Value	Limit	Result
	-21.289	-19	Pass



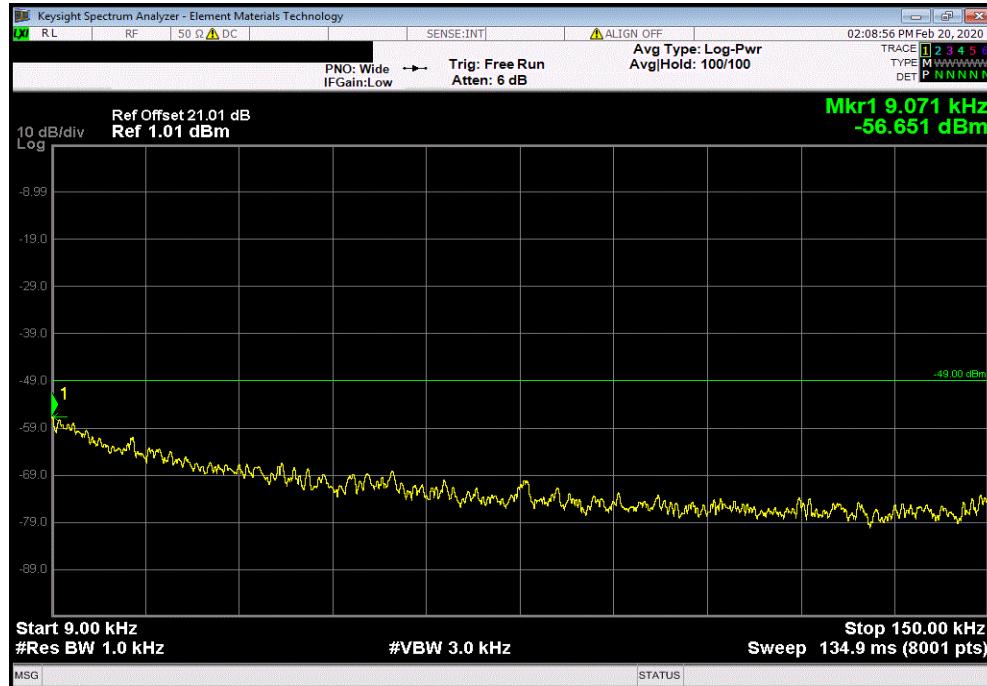
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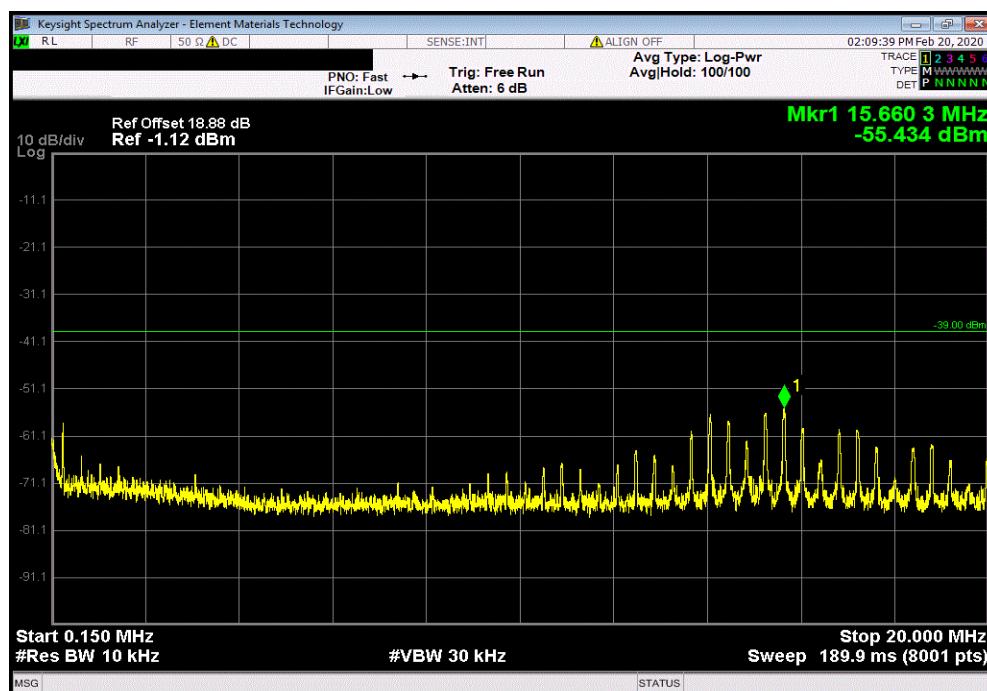
5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 5 MHz Bandwidth, 64-QAM Modulation, Range 1, 9 kHz - 150 kHz

	Value	Limit	Result
	-56.651	-49	Pass



5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 5 MHz Bandwidth, 64-QAM Modulation, Range 2, 150 kHz - 20 MHz

	Value	Limit	Result
	-55.434	-39	Pass



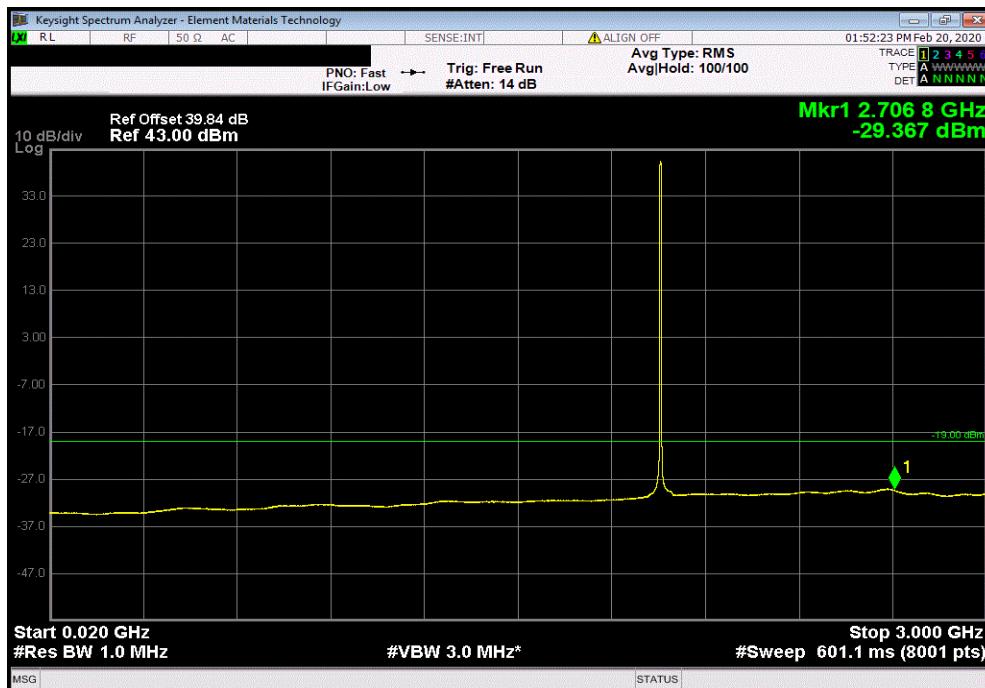
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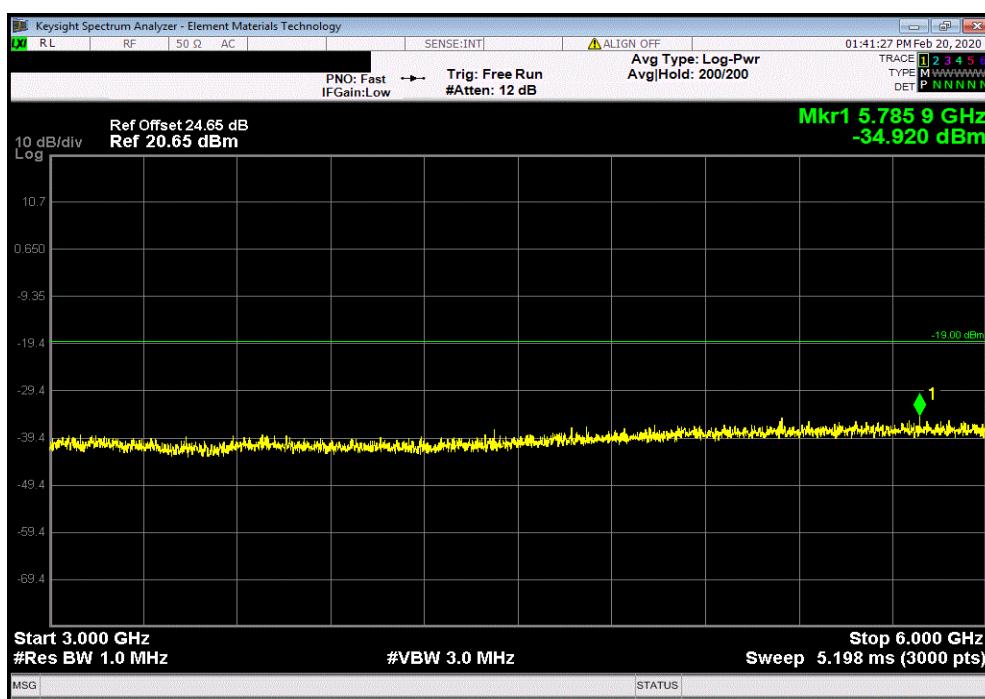
5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 5 MHz Bandwidth, 64-QAM Modulation, Range 3, 20 MHz - 3 GHz

				Value	Limit	Result
				-29.367	-19	Pass



5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 5 MHz Bandwidth, 64-QAM Modulation, Range 4, 3 GHz - 6 GHz

				Value	Limit	Result
				24.02	19	Pass



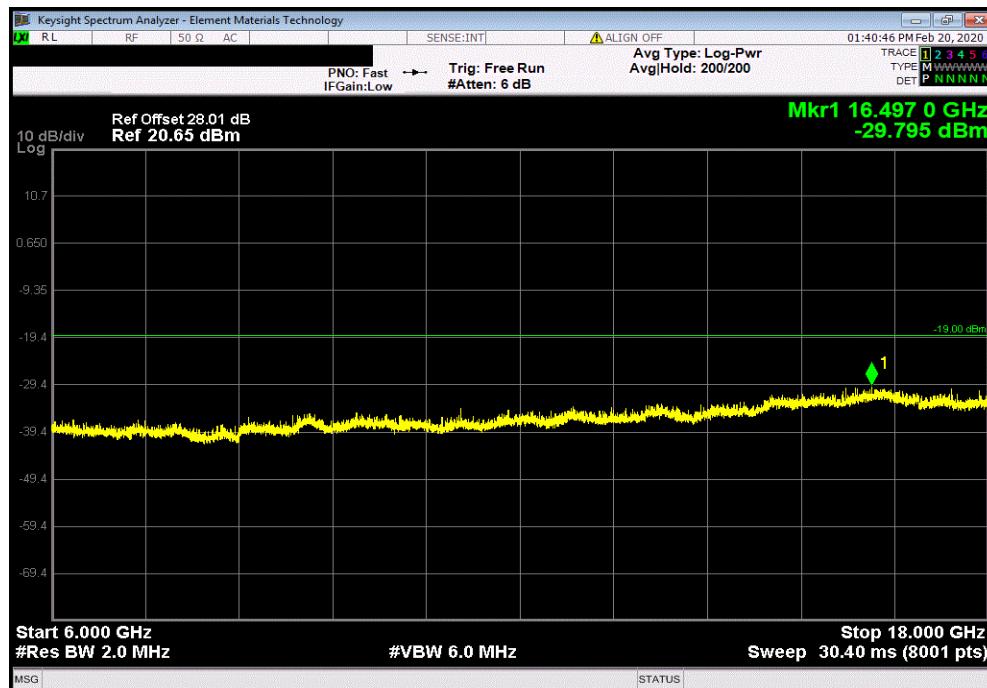
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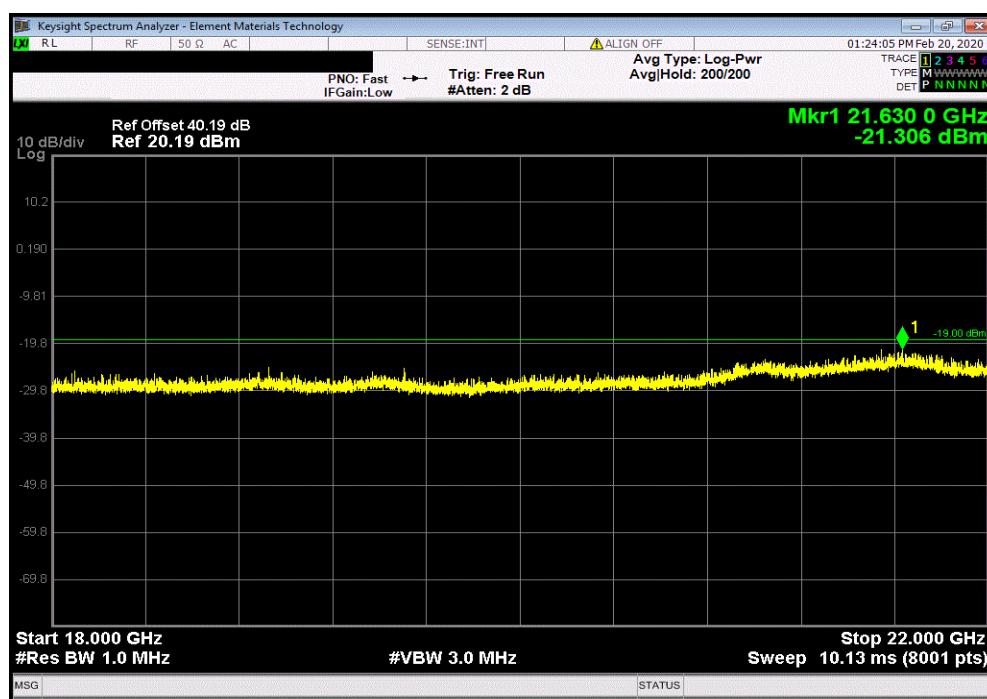
5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 5 MHz Bandwidth, 64-QAM Modulation, Range 5, 6 GHz - 18 GHz

	Value	Limit	Result
	-29.795	-19	Pass



5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 5 MHz Bandwidth, 64-QAM Modulation, Range 6, 18 GHz - 22 GHz

	Value	Limit	Result
	-21.306	-19	Pass



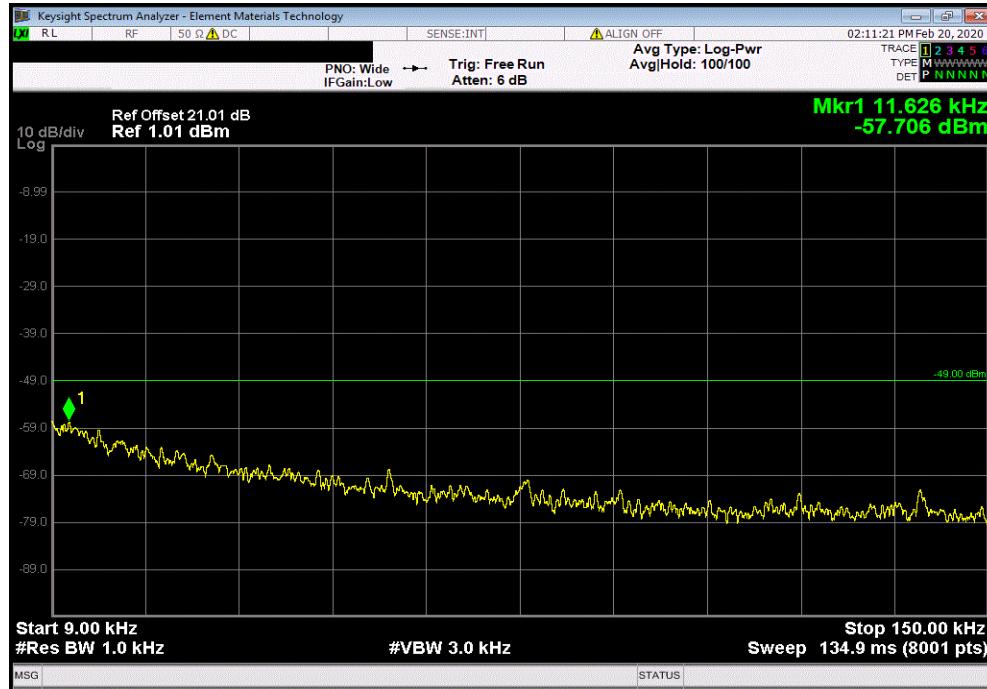
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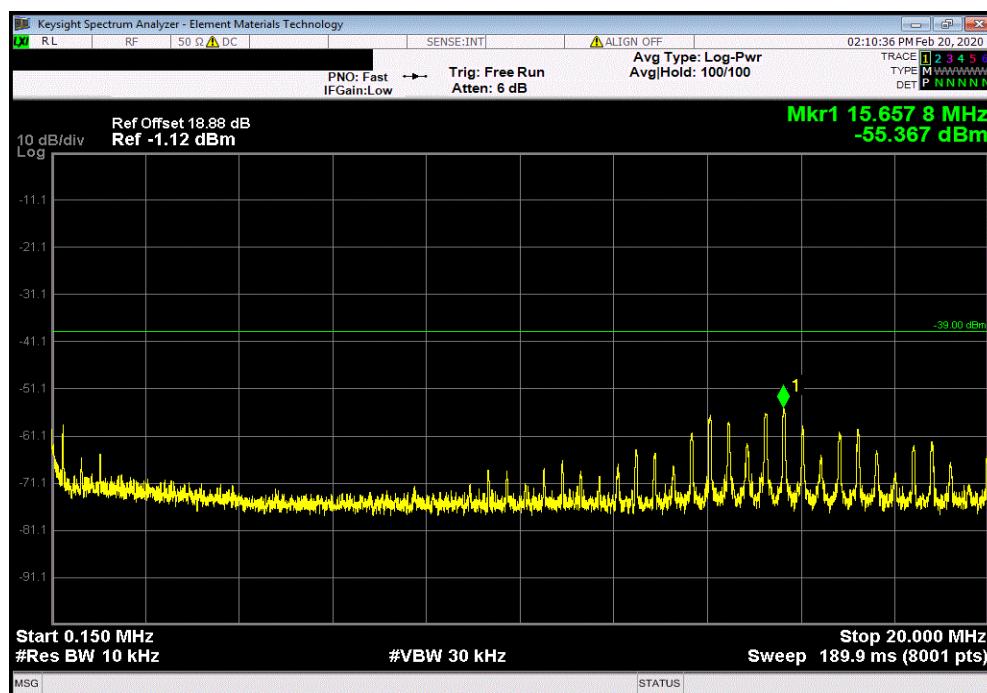
5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 5 MHz Bandwidth, 256-QAM Modulation, Range 1, 9 kHz - 150 kHz

	Value	Limit	Result
	-57.706	-49	Pass



5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 5 MHz Bandwidth, 256-QAM Modulation, Range 2, 150 kHz - 20 MHz

	Value	Limit	Result
	-55.367	-39	Pass



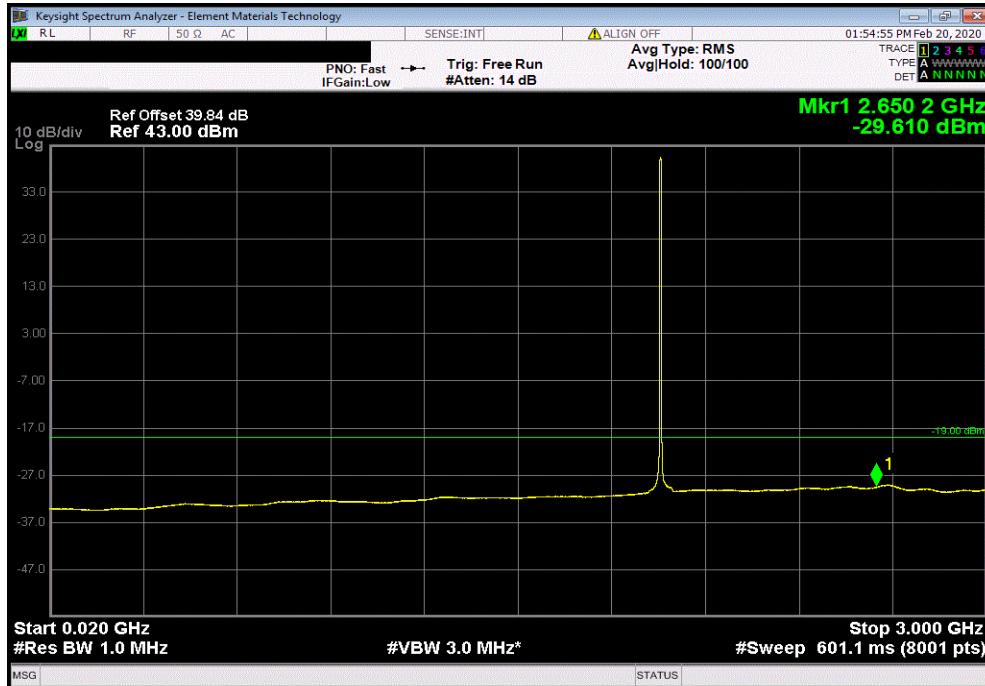
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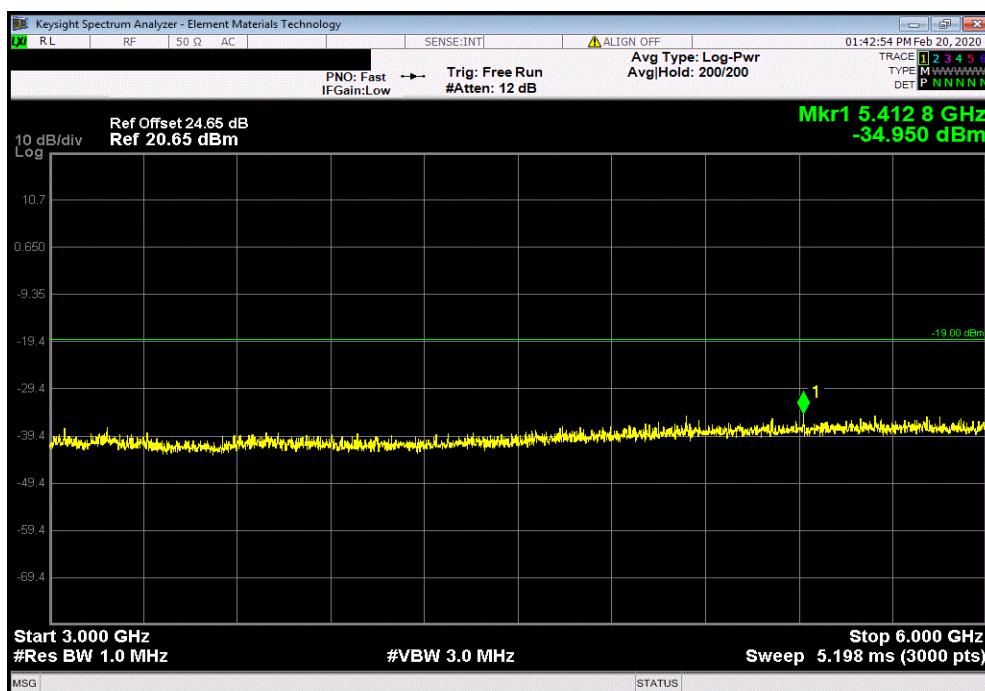
5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 5 MHz Bandwidth, 256-QAM Modulation, Range 3, 20 MHz - 3 GHz

	Value	Limit	Result
	-29.61	-19	Pass



5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 5 MHz Bandwidth, 256-QAM Modulation, Range 4, 3 GHz - 6 GHz

	Value	Limit	Result
	-34.95	-19	Pass



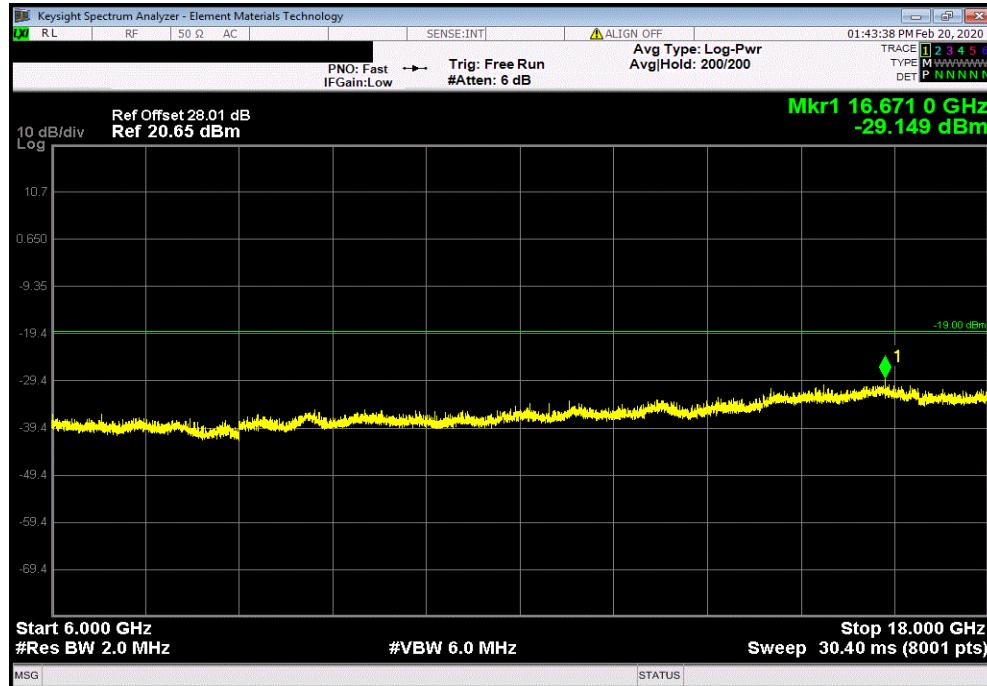
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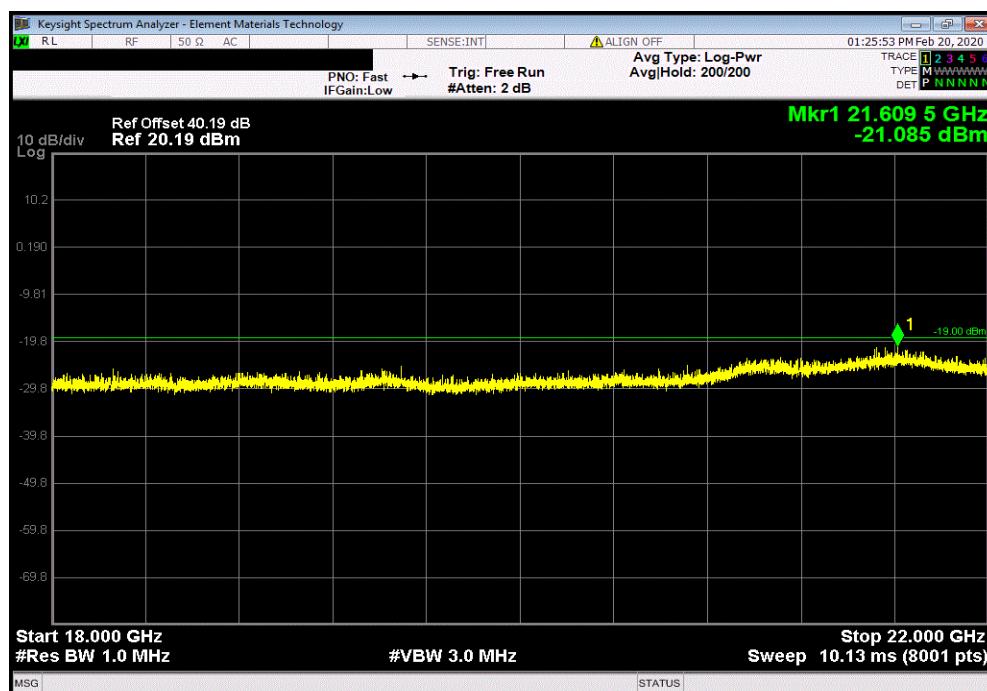
5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 5 MHz Bandwidth, 256-QAM Modulation, Range 5, 6 GHz - 18 GHz

	Value	Limit	Result
	-29.149	-19	Pass



5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 5 MHz Bandwidth, 256-QAM Modulation, Range 6, 18 GHz - 22 GHz

	Value	Limit	Result
	-21.085	-19	Pass



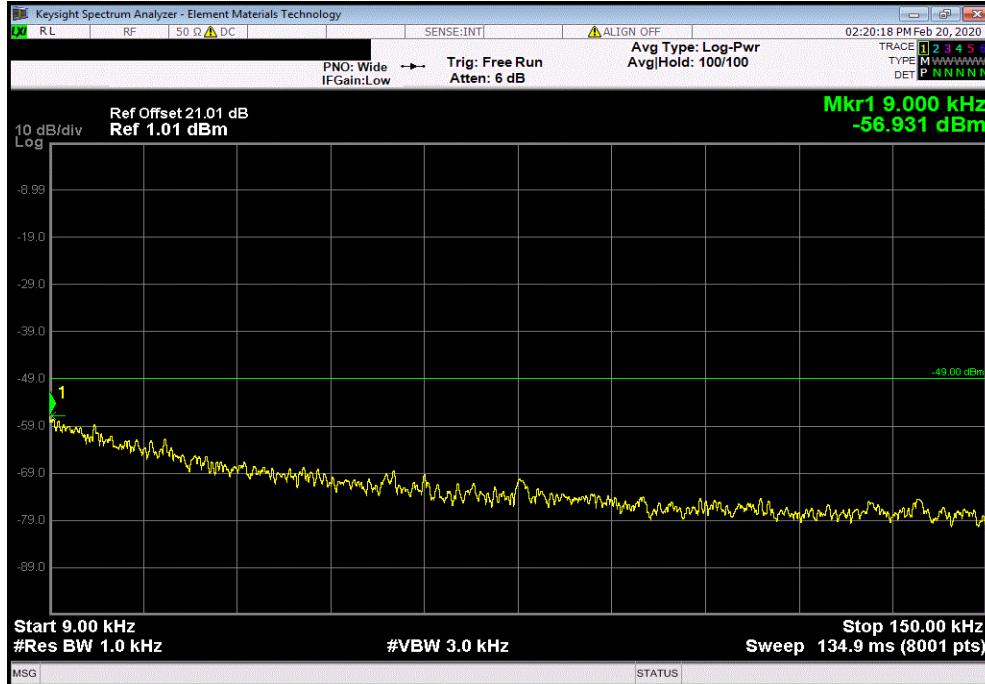
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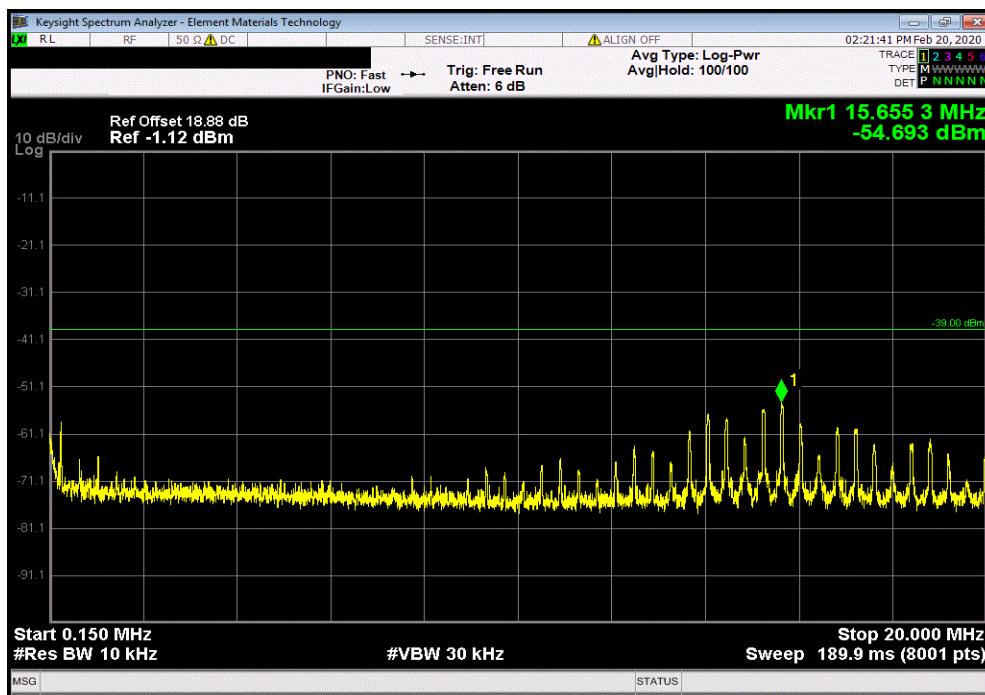
5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 10 MHz Bandwidth, 256-QAM Modulation, Range 1, 9 kHz - 150 kHz

Value	Limit	Result
-56.931	-49	Pass



5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 10 MHz Bandwidth, 256-QAM Modulation, Range 2, 150 kHz - 20 MHz

Value	Limit	Result
-54.693	-39	Pass



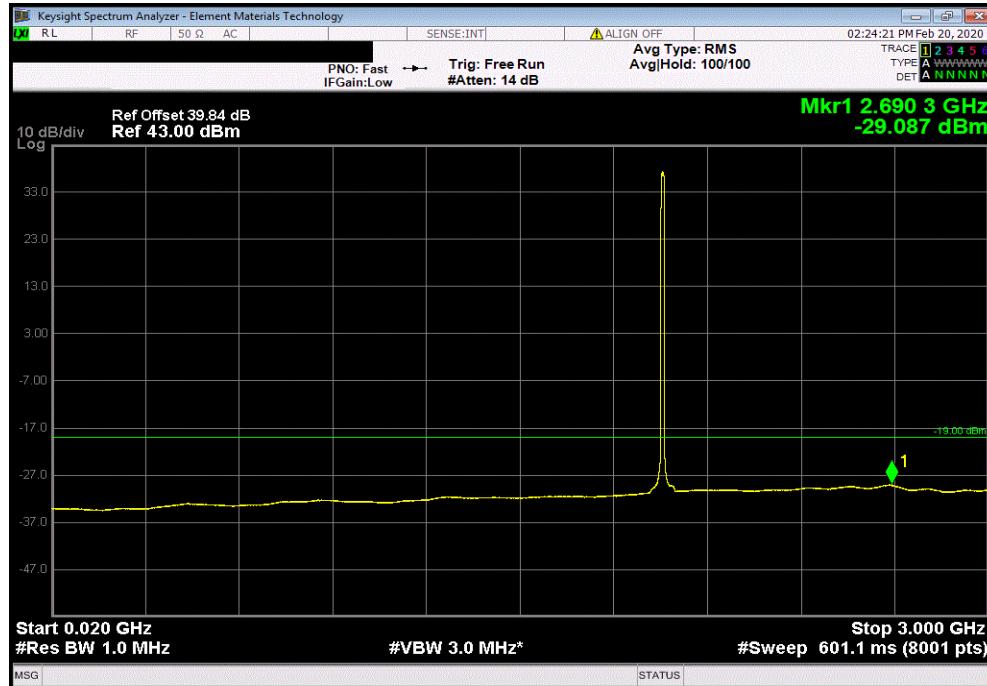
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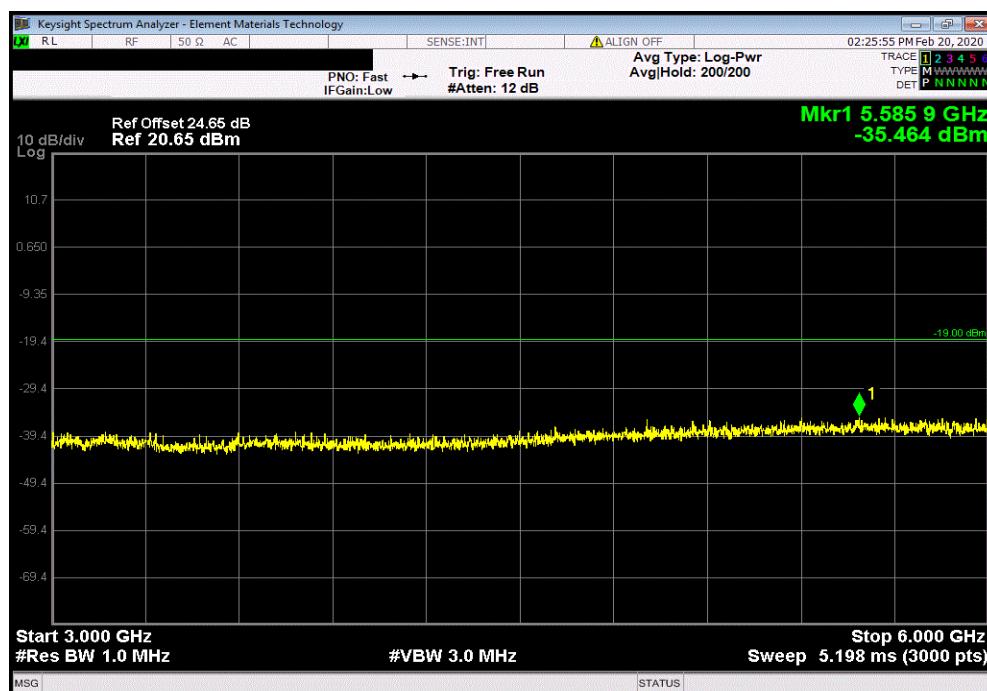
5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 10 MHz Bandwidth, 256-QAM Modulation, Range 3, 20 MHz - 3 GHz

Value	Limit	Result
-29.087	-19	Pass



5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 10 MHz Bandwidth, 256-QAM Modulation, Range 4, 3 GHz - 6 GHz

Value	Limit	Result
-35.464	-19	Pass



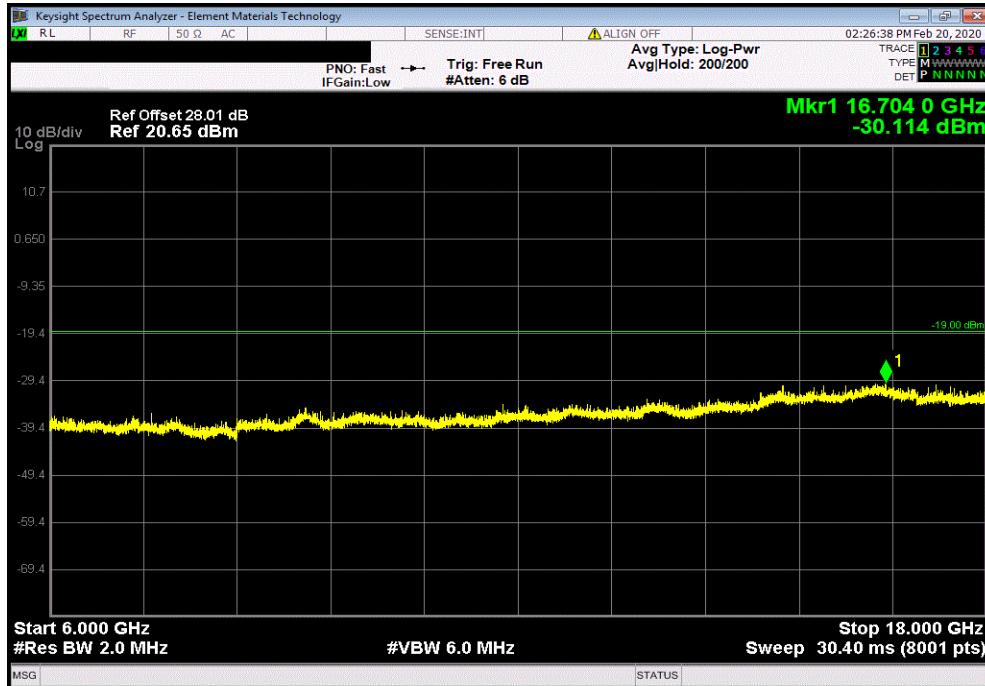
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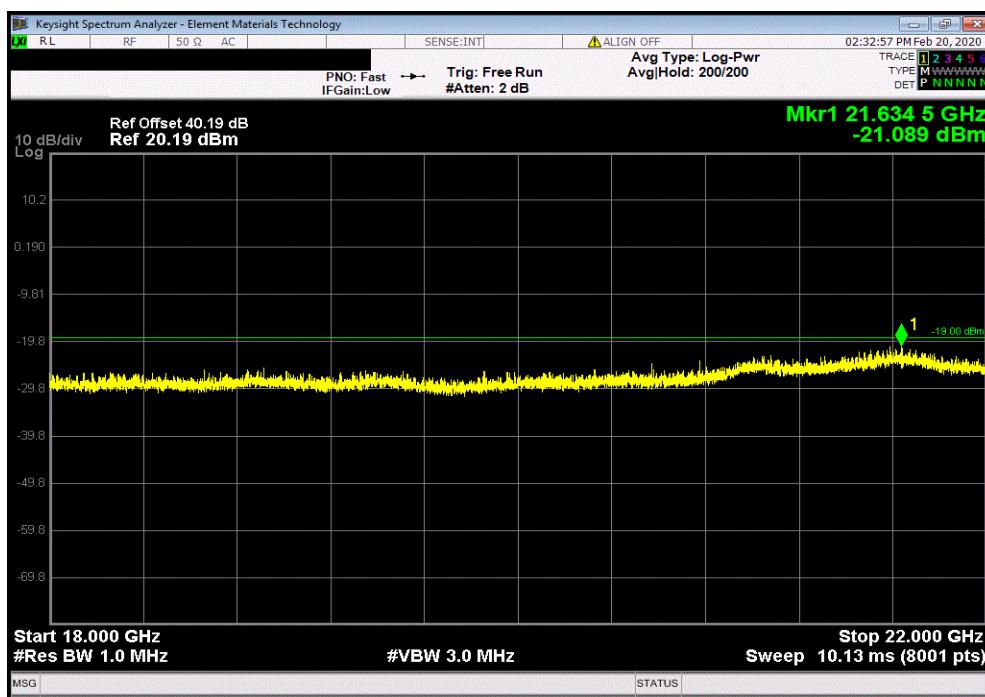
5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 10 MHz Bandwidth, 256-QAM Modulation, Range 5, 6 GHz - 18 GHz

Value	Limit	Result
-30.114	-19	Pass



5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 10 MHz Bandwidth, 256-QAM Modulation, Range 6, 18 GHz - 22 GHz

Value	Limit	Result
-21.089	-19	Pass



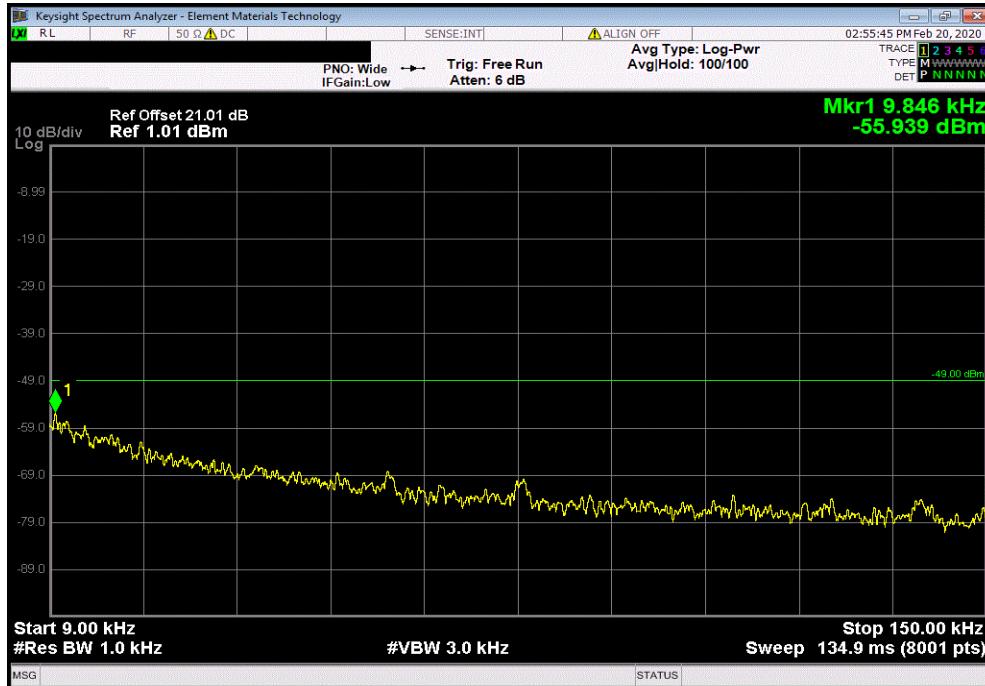
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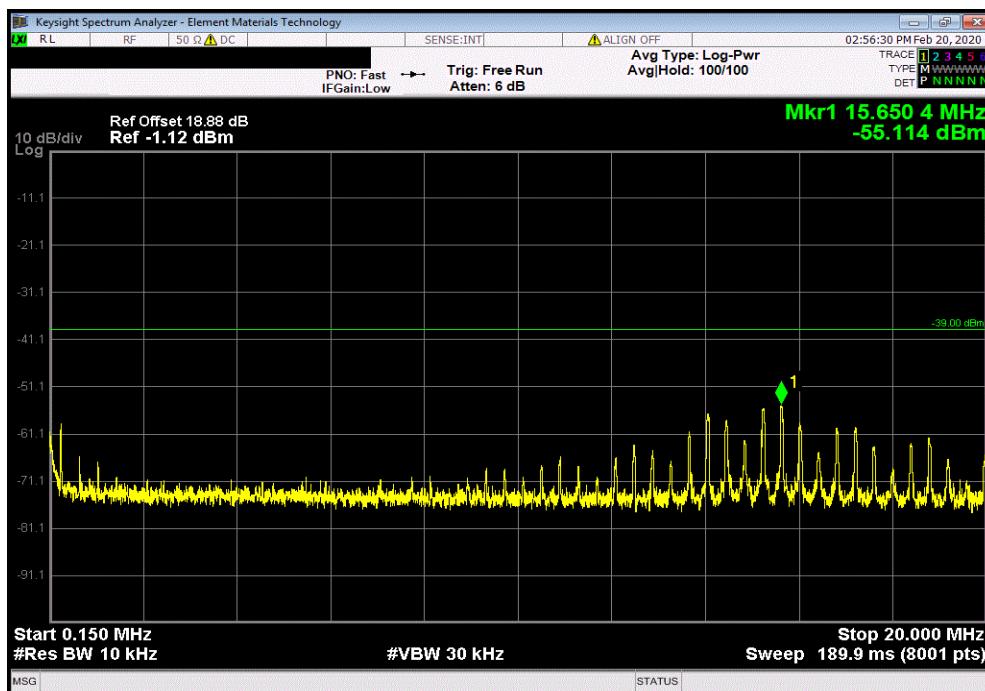
5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 15 MHz Bandwidth, 256-QAM Modulation, Range 1, 9 kHz - 150 kHz

Value	Limit	Result
-55.939	-49	Pass



5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 15 MHz Bandwidth, 256-QAM Modulation, Range 2, 150 kHz - 20 MHz

Value	Limit	Result
-55.114	-39	Pass



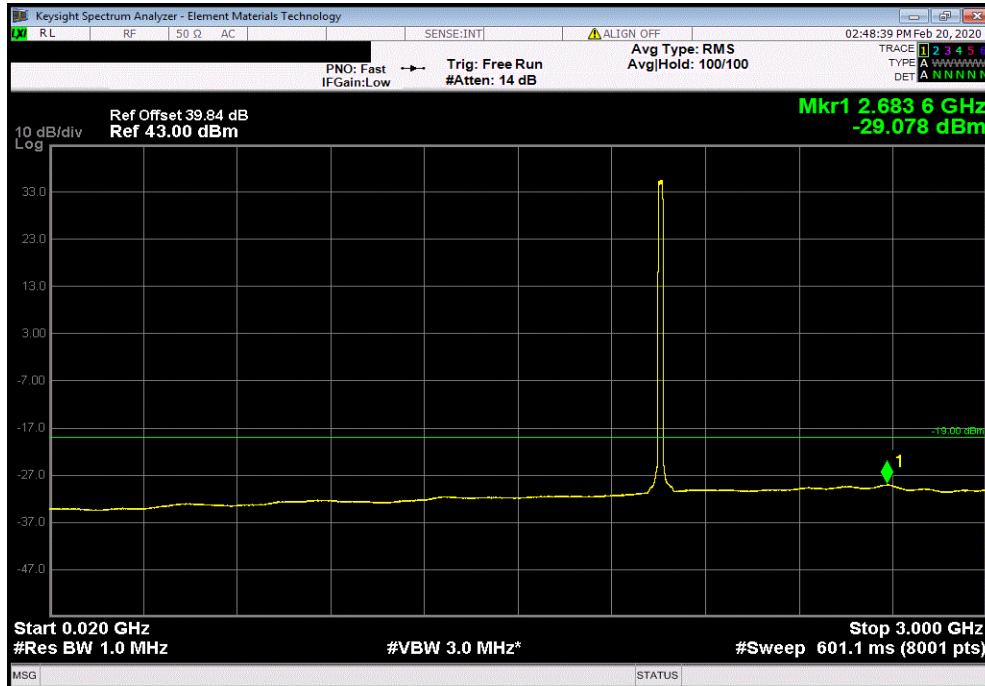
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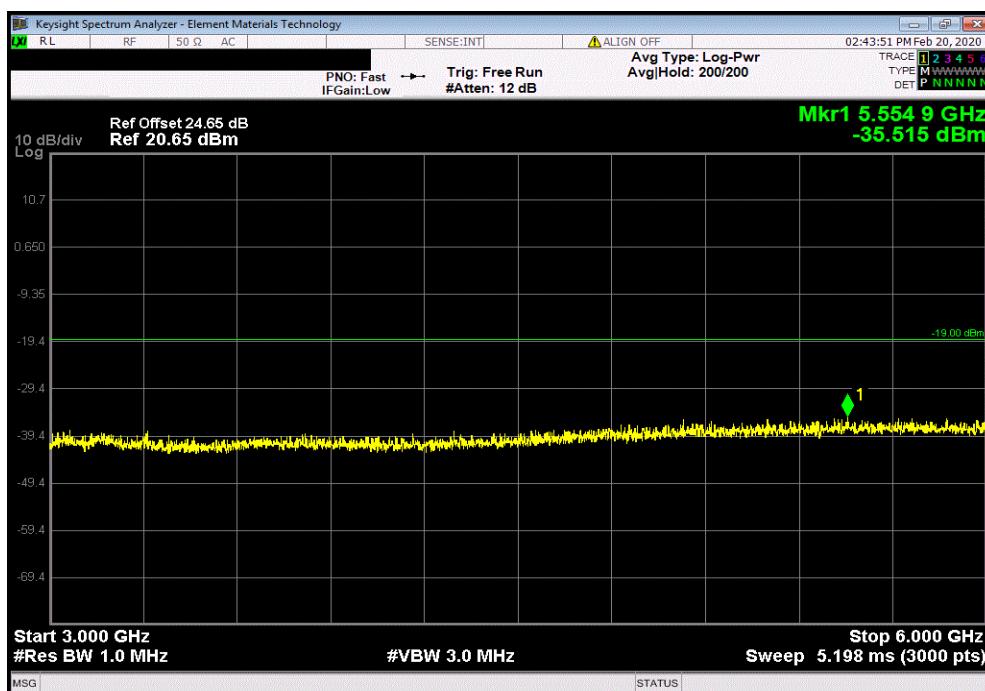
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Value	Limit	Result
-29.078	-19	Pass



5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 15 MHz Bandwidth, 256-QAM Modulation, Range 4, 3 GHz - 6 GHz

Value	Limit	Result
-35.515	-19	Pass



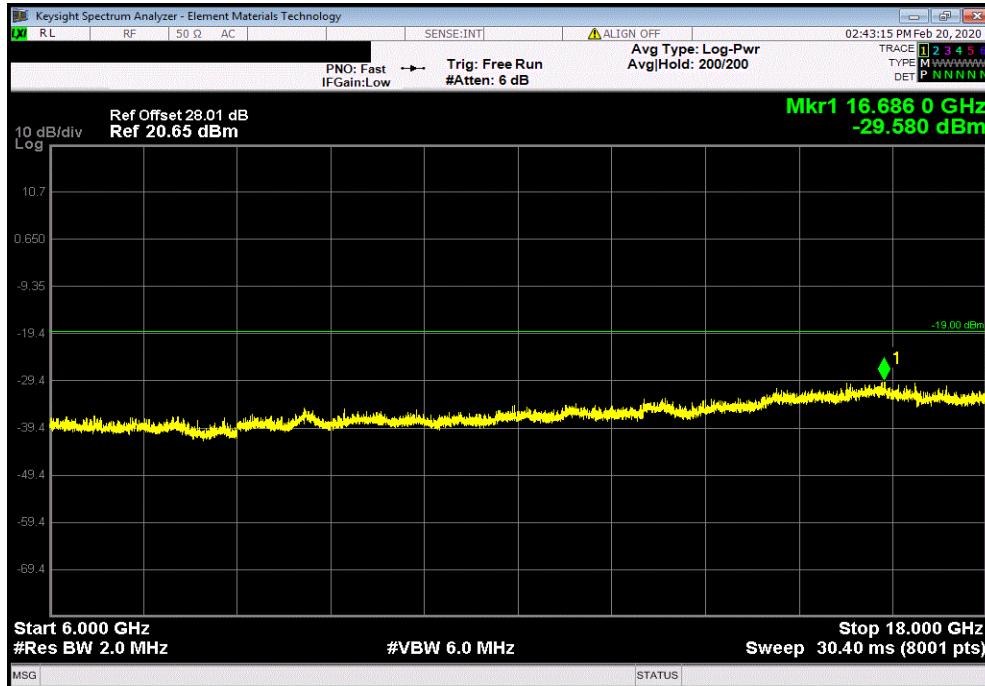
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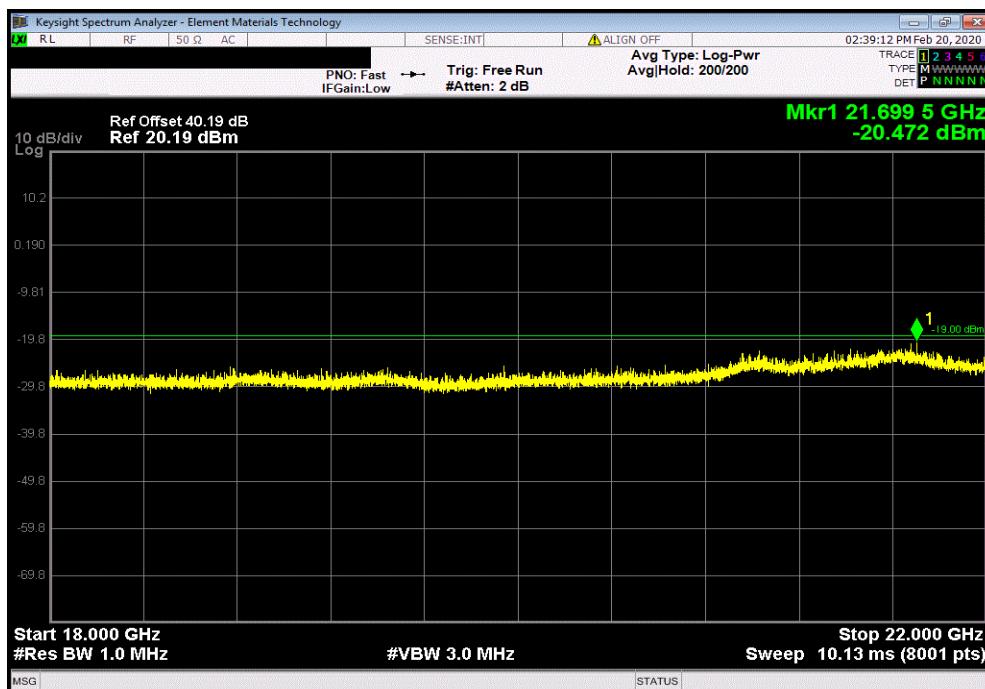
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	Value	Limit	Result
	-29.58	-19	Pass



5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 15 MHz Bandwidth, 256-QAM Modulation, Range 6, 18 GHz - 22 GHz

	Value	Limit	Result
	-20.472	-19	Pass



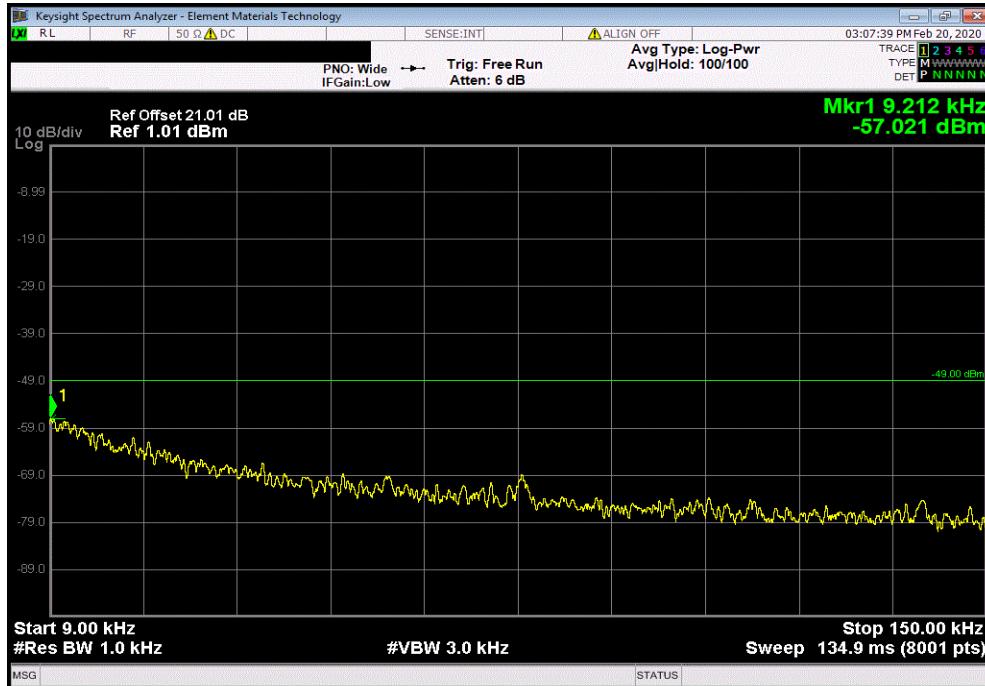
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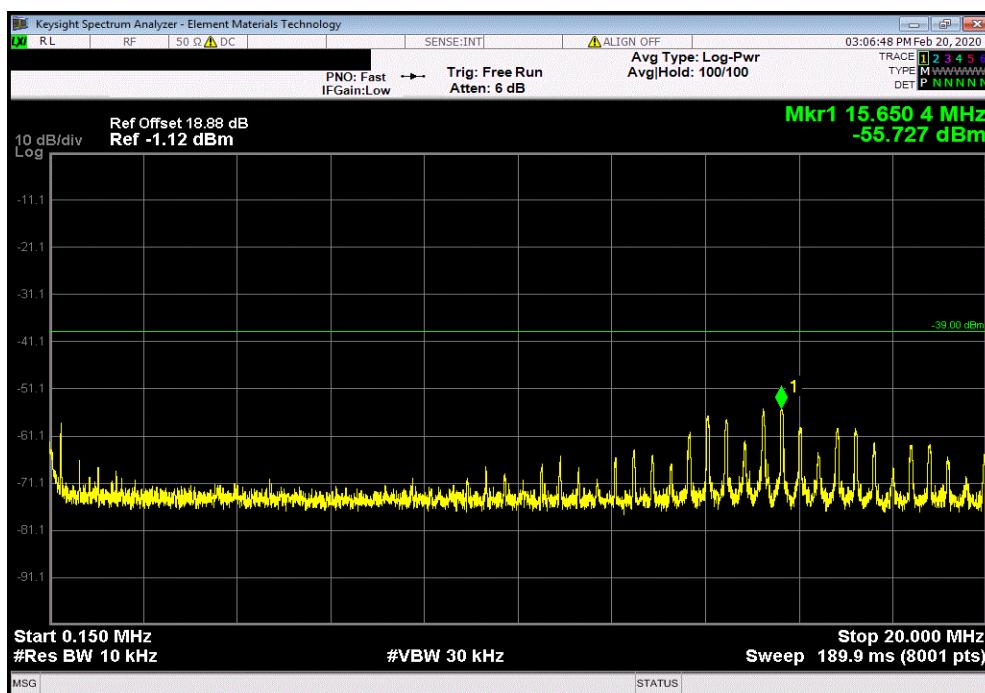
5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 20 MHz Bandwidth, 256-QAM Modulation, Range 1, 9 kHz - 150 kHz

Value	Limit	Result
-57.021	-49	Pass



5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 20 MHz Bandwidth, 256-QAM Modulation, Range 2, 150 kHz - 20 MHz

Value	Limit	Result
-55.727	-39	Pass



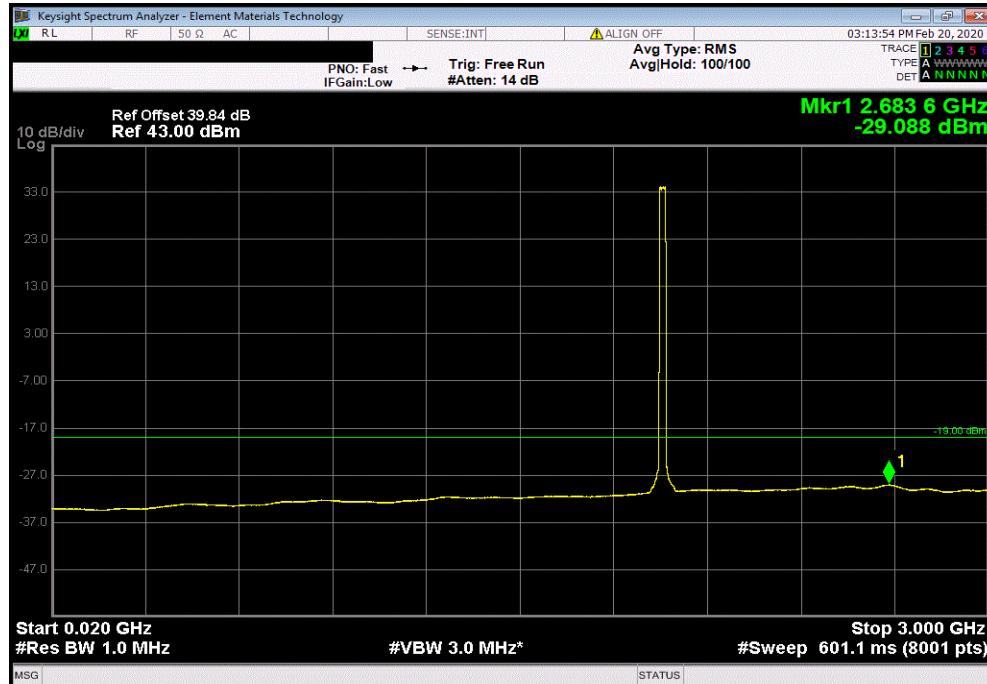
SPURIOUS CONDUCTED EMISSIONS BAND 25



XMT 2019.09.05

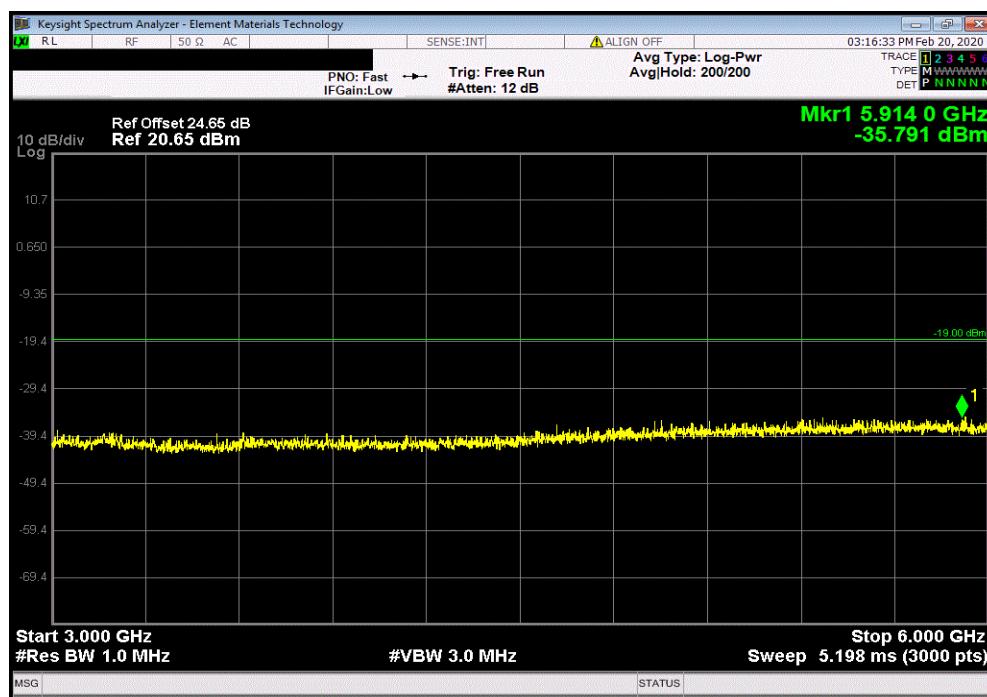
5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 20 MHz Bandwidth, 256-QAM Modulation, Range 3, 20 MHz - 3 GHz

Value	Limit	Result
-29.088	-19	Pass



5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 20 MHz Bandwidth, 256-QAM Modulation, Range 4, 3 GHz - 6 GHz

Value	Limit	Result
-35.791	-19	Pass



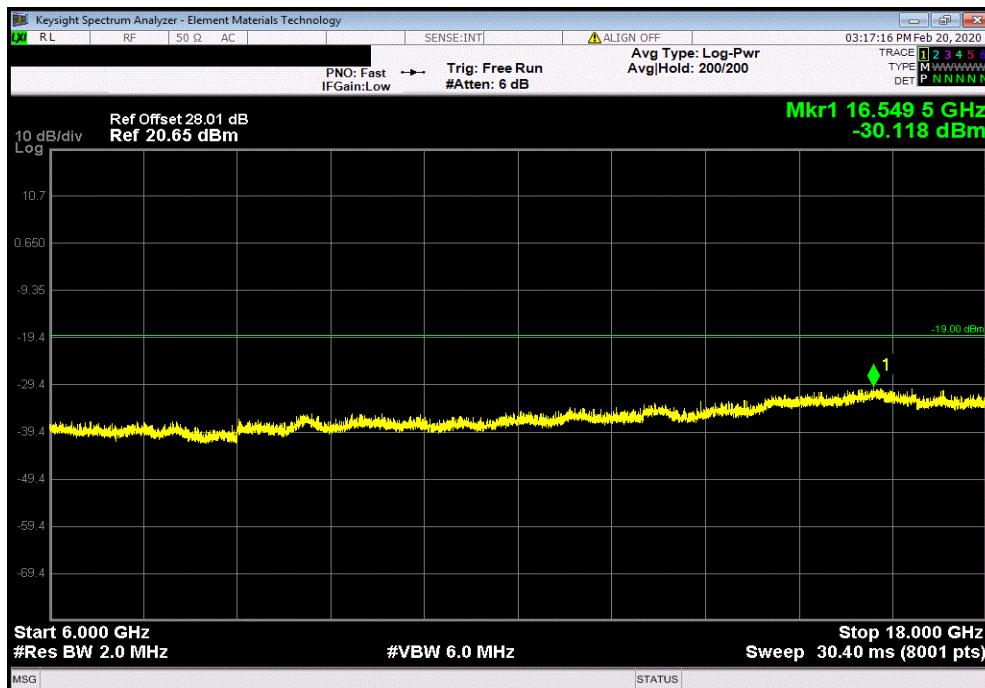
SPURIOUS CONDUCTED EMISSIONS BAND 25



XMT 2019.09.05

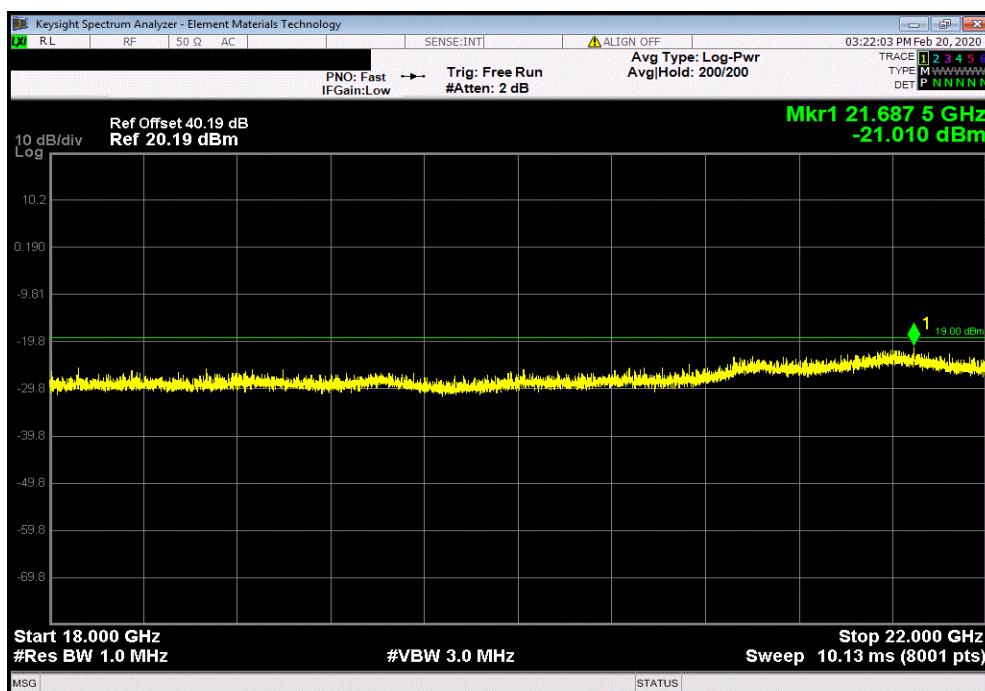
5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 20 MHz Bandwidth, 256-QAM Modulation, Range 5, 6 GHz - 18 GHz

	Value	Limit	Result
	-30.118	-19	Pass



5G Band 25, 1930 MHz - 1995 MHz, (Single Carrier) Port 4, Mid Channel 1962.5 MHz, 20 MHz Bandwidth, 256-QAM Modulation, Range 6, 18 GHz - 22 GHz

	Value	Limit	Result
	-21.01	-19	Pass



SPURIOUS CONDUCTED EMISSIONS

BAND 66a



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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	Keysight	N9010A	AFM	19-Mar-19	19-Mar-20
Generator - Signal	Keysight	N5171B-506	TEW	2-May-18	2-May-21
Analyzer - Spectrum Analyzer	Keysight	N5183A	TID	26-Apr-19	26-Apr-21

TEST DESCRIPTION

The antenna port spurious emissions were measured at the RF output terminal of the EUT through 4 different attenuation configurations which continues through to the RF input of the spectrum analyzer. Analyzer plots utilizing a resolution bandwidth called out by the client's test plan were made for each modulation type from 9 KHz to 22 GHz. The peak conducted power of spurious emissions, up to the 10th harmonic of the transmit frequency, were investigated to ensure they were less than the limits also called out by the client's test plan shown below.

The measurement methods are detailed in KDB971168 D01v03 section 6 and ANSI C63.26-2015.

Per FCC 2.1057(a)(1) and RSS Gen 6.13, the upper level of measurement is the 10th harmonic of the highest fundamental frequency.

These measurements are for frequency band after the first 1.0 MHz bands immediately outside and adjacent to the frequency block.

Per section FCC 27.53(h)(1) and RSS-139 6.6, the power of any emission outside of the authorized operating frequency range cannot exceed -13 dBm for a 1 MHz measurement bandwidth. The limit is adjusted to -19 dBm [-13 dBm -10 log (4)] per FCC KDB 662911D01 v02r01 because the BTS may operate as a 4 port MIMO transmitter. The requirements for FCC measurements are detailed in KDB971168 D01 v02r02.

The limit for the 9kHz to 150kHz frequency range was adjusted to -49dBm to correct for a spectrum analyzer RBW of 1kHz versus required RBW of 1MHz [i.e.: -49dBm = -19dBm -10log(1MHz/1kHz)]. The limit for the 150kHz to 20MHz frequency range was adjusted to -39dBm to correct for a spectrum analyzer RBW of 10kHz versus required RBW of 1MHz [i.e.: -39dBm = -19dBm -10log(1MHz/10kHz)]. The required limit of -19dBm with a RBW of > 1MHz was used for all other frequency ranges.

SPURIOUS CONDUCTED EMISSIONS BAND 66a



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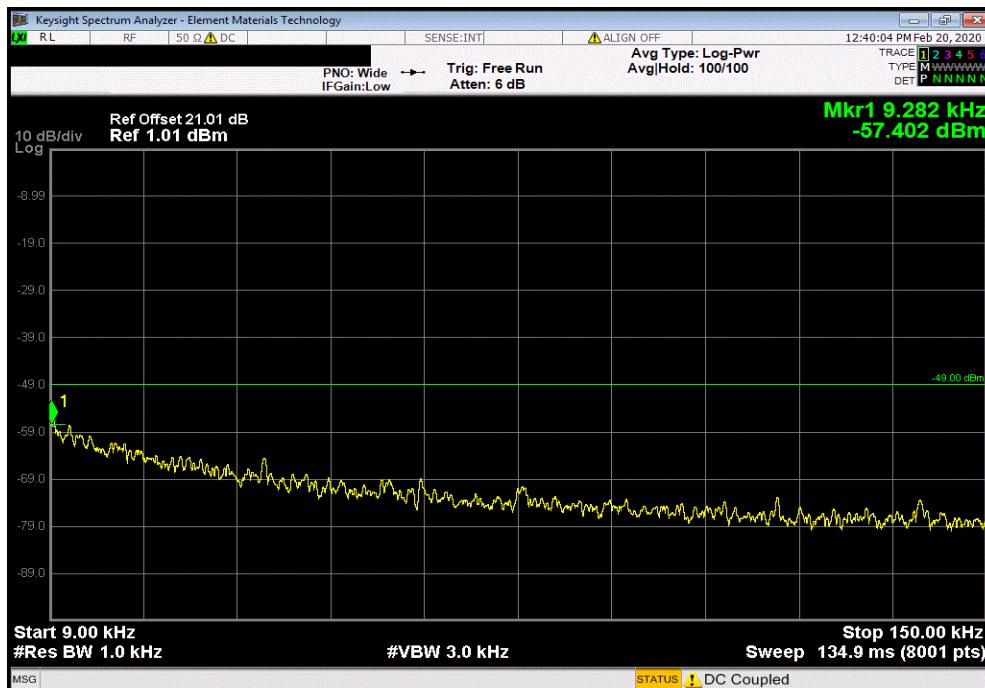
EUT:	AHFIA	Work Order:	NOKI0008	
Serial Number:	K9174623559	Date:	20-Feb-20	
Customer:	Nokia of America Corporation	Temperature:	23 °C	
Attendees:	Mitch Hill, John Rattanavong	Humidity:	44.4% RH	
Project:	None	Barometric Pres.:	1018 mbar	
Tested by:	Brandon Hobbs	Power:	54VDC	
TEST SPECIFICATIONS		Test Method		
FCC 27:2020		ANSI C63.26:2015		
RSS-139:2015, RSS-Gen:2019		RSS-139:2015, RSS-Gen:2019		
COMMENTS				
All measurement path losses were accounted for in the reference level offset including any attenuators, filters and DC blocks. All measurement path losses were accounted for in the reference level offset including any attenuators, filters and DC blocks. The data was taken on the mid channel in the band while using the highest output power port which was found in the original client provided test report. Ranges 1 and 2 used configuration 1, Range 3 used configuration 2, Ranges 4 and 5 used configuration 3, Range 6 used configuration 4.				
DEVIATIONS FROM TEST STANDARD				
None				
Configuration #	1,2,3,4	Signature		
		Value (dBm)	Limit (dBm)	Result
5G Band 66a 2110 MHz - 2180 MHz (Single Carrier) Port 4, Mid Channel 2145 MHz 5 MHz Bandwidth				
QPSK Modulation				
Range 1, 9 kHz - 150 kHz	-57.40	-49	Pass	
Range 2, 150 kHz - 20 MHz	-55.40	-39	Pass	
Range 3, 20 MHz - 3 GHz	-29.19	-19	Pass	
Range 4, 3 GHz - 6 GHz	-34.90	-19	Pass	
Range 5, 6 GHz - 18 GHz	-29.02	-19	Pass	
Range 6, 18 GHz - 22 GHz	-21.37	-19	Pass	
16-QAM Modulation				
Range 1, 9 kHz - 150 kHz	-56.79	-49	Pass	
Range 2, 150 kHz - 20 MHz	-55.36	-39	Pass	
Range 3, 20 MHz - 3 GHz	-29.10	-19	Pass	
Range 4, 3 GHz - 6 GHz	-35.75	-19	Pass	
Range 5, 6 GHz - 18 GHz	-28.68	-19	Pass	
Range 6, 18 GHz - 22 GHz	-21.02	-19	Pass	
64-QAM Modulation				
Range 1, 9 kHz - 150 kHz	-58.66	-49	Pass	
Range 2, 150 kHz - 20 MHz	-55.36	-39	Pass	
Range 3, 20 MHz - 3 GHz	-29.09	-19	Pass	
Range 4, 3 GHz - 6 GHz	-34.82	-19	Pass	
Range 5, 6 GHz - 18 GHz	-29.15	-19	Pass	
Range 6, 18 GHz - 22 GHz	-21.04	-19	Pass	
256-QAM Modulation				
Range 1, 9 kHz - 150 kHz	-57.59	-49	Pass	
Range 2, 150 kHz - 20 MHz	-55.70	-39	Pass	
Range 3, 20 MHz - 3 GHz	-29.44	-19	Pass	
Range 4, 3 GHz - 6 GHz	-34.86	-19	Pass	
Range 5, 6 GHz - 18 GHz	-29.65	-19	Pass	
Range 6, 18 GHz - 22 GHz	-21.12	-19	Pass	
10 MHz Bandwidth				
256-QAM Modulation				
Range 1, 9 kHz - 150 kHz	-58.35	-49	Pass	
Range 2, 150 kHz - 20 MHz	-55.63	-39	Pass	
Range 3, 20 MHz - 3 GHz	-29.06	-19	Pass	
Range 4, 3 GHz - 6 GHz	-35.70	-19	Pass	
Range 5, 6 GHz - 18 GHz	-30.17	-19	Pass	
Range 6, 18 GHz - 22 GHz	-20.96	-19	Pass	
15 MHz Bandwidth				
256-QAM Modulation				
Range 1, 9 kHz - 150 kHz	-56.95	-49	Pass	
Range 2, 150 kHz - 20 MHz	-54.95	-39	Pass	
Range 3, 20 MHz - 3 GHz	-29.05	-19	Pass	
Range 4, 3 GHz - 6 GHz	-34.75	-19	Pass	
Range 5, 6 GHz - 18 GHz	-29.65	-19	Pass	
Range 6, 18 GHz - 22 GHz	-21.22	-19	Pass	
20 MHz Bandwidth				
256-QAM Modulation				
Range 1, 9 kHz - 150 kHz	-55.50	-49	Pass	
Range 2, 150 kHz - 20 MHz	-55.14	-39	Pass	
Range 3, 20 MHz - 3 GHz	-29.19	-19	Pass	
Range 4, 3 GHz - 6 GHz	-34.89	-19	Pass	
Range 5, 6 GHz - 18 GHz	-29.44	-19	Pass	
Range 6, 18 GHz - 22 GHz	-21.72	-19	Pass	

SPURIOUS CONDUCTED EMISSIONS BAND 66a

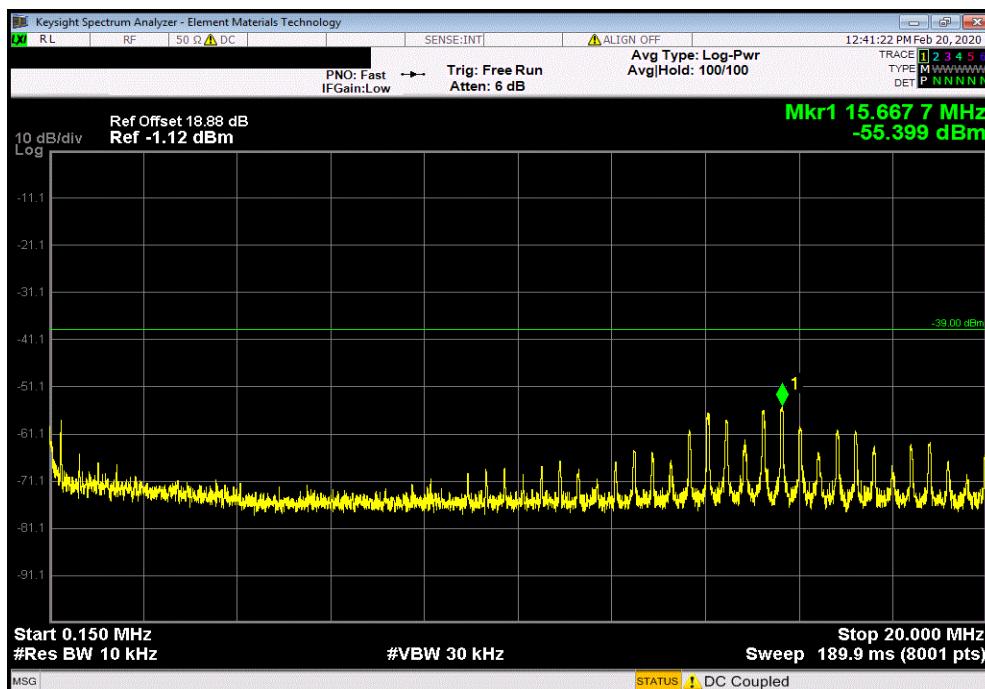


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5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, QPSK Modulation, Range 1, 9 kHz - 150 kHz						
	Value (dBm)	Limit (dBm)	Result			
	-57.402	-49	Pass			



5G Band 66a 2110 MHz - 2180 MHz , (Single Carrier) Port 4, Mid Channel 2145 MHz, QPSK Modulation , Range 2, 150 kHz - 20 MHz						
	Value (dBm)	Limit (dBm)	Result			
	-55.399	-39	Pass			

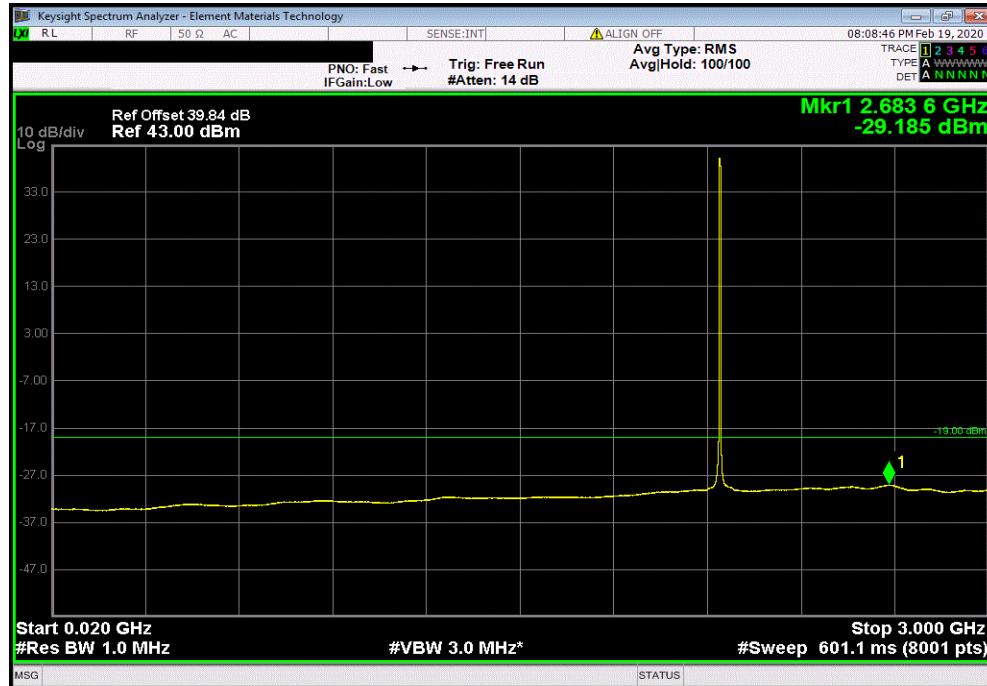


SPURIOUS CONDUCTED EMISSIONS BAND 66a

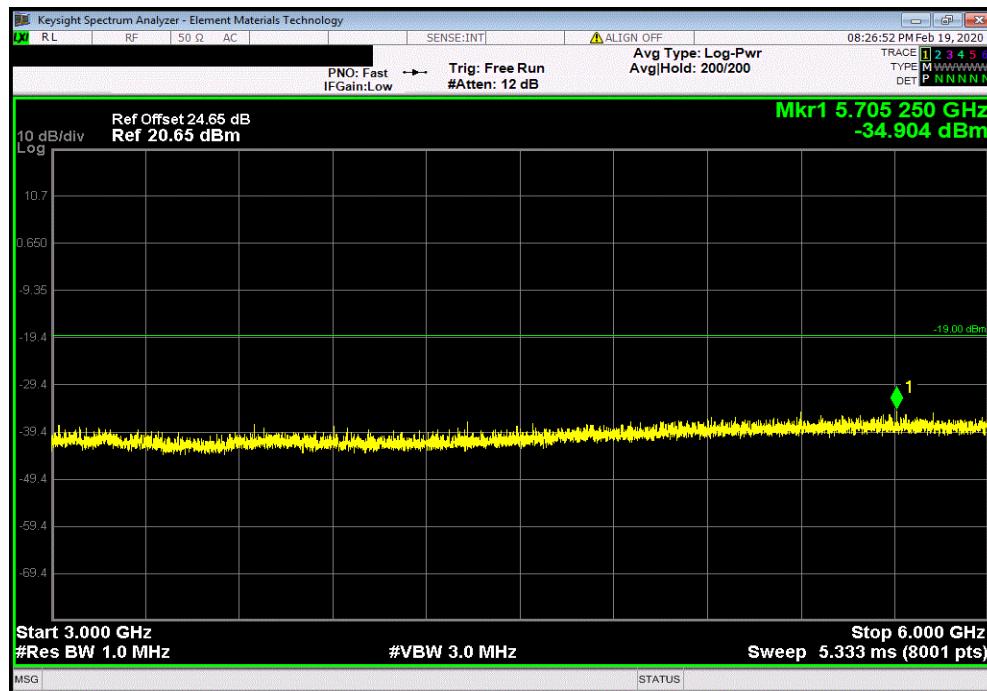


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5G Band 66a 2110 MHz - 2180 MHz , (Single Carrier) Port 4, Mid Channel 2145 MHz, 5 MHz Bandwidth, QPSK Modulation , Range 3, 20 MHz - 3 GHz		
Value (dBm)	Limit (dBm)	Result
-29.185	-19	Pass



5G Band 66a 2110 MHz - 2180 MHz , (Single Carrier) Port 4, Mid Channel 2145 MHz, 5 MHz Bandwidth, QPSK Modulation , Range 4, 3 GHz - 6 GHz		
Value (dBm)	Limit (dBm)	Result
-34.904	-19	Pass



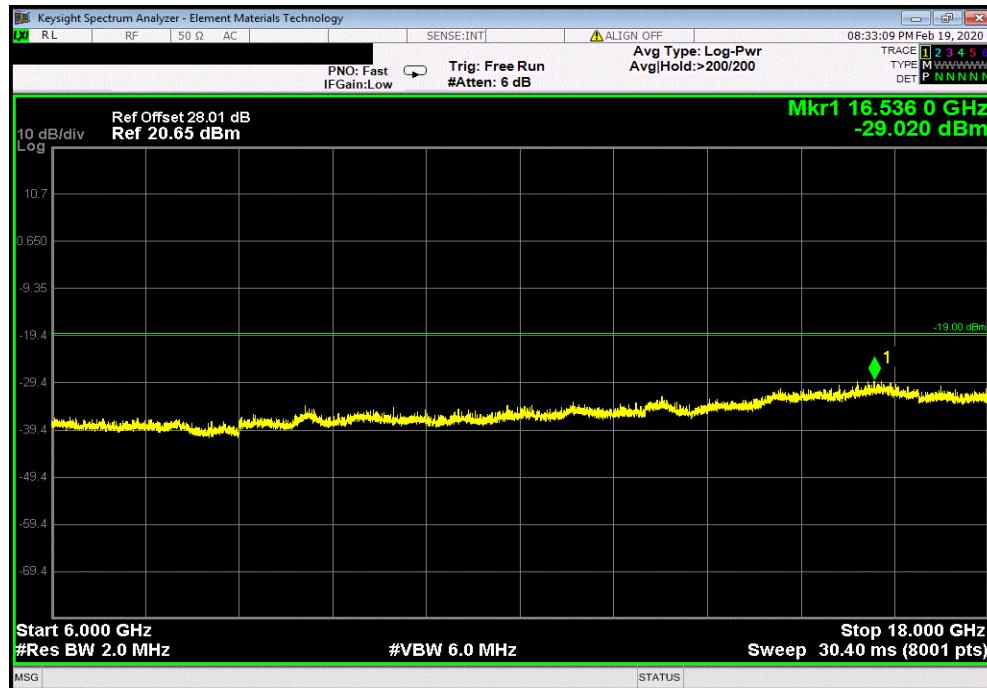
SPURIOUS CONDUCTED EMISSIONS BAND 66a



XMT 2019.09.05

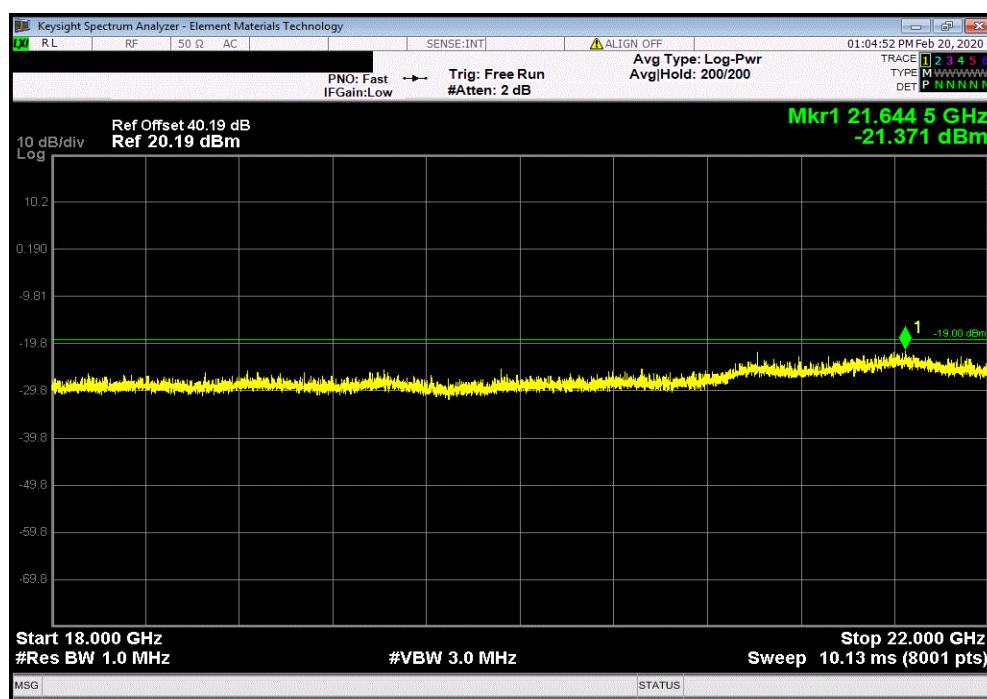
5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 5 MHz Bandwidth, QPSK Modulation, Range 5, 6 GHz - 18 GHz

	Value (dBm)	Limit (dBm)	Result
	-29.02	-19	Pass



5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 5 MHz Bandwidth, QPSK Modulation, Range 6, 18 GHz - 22 GHz

	Value (dBm)	Limit (dBm)	Result
	-21.371	-19	Pass

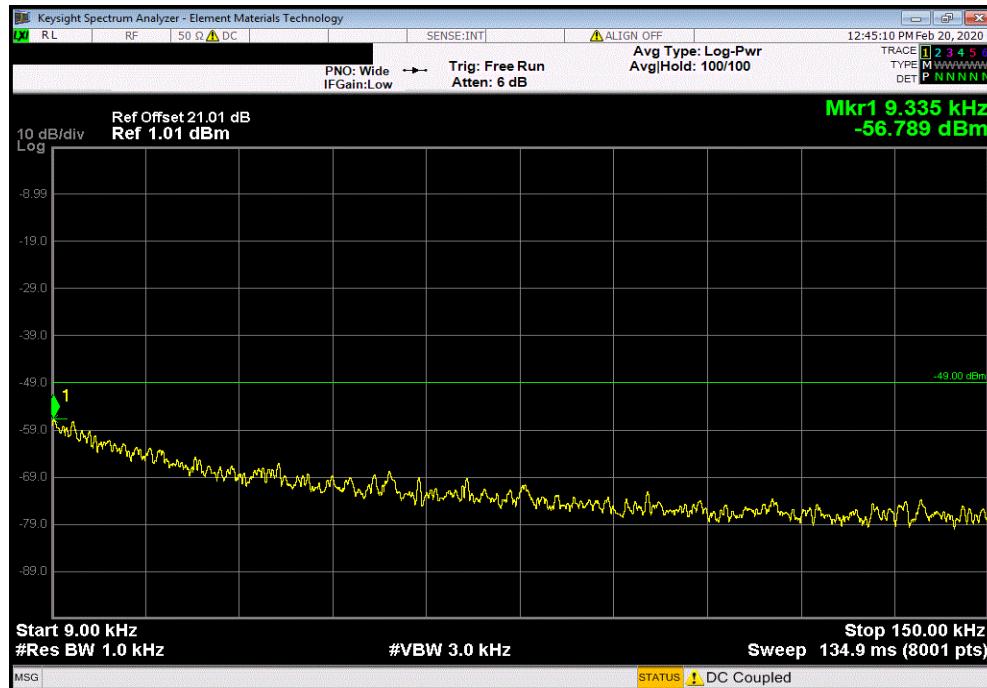


SPURIOUS CONDUCTED EMISSIONS BAND 66a

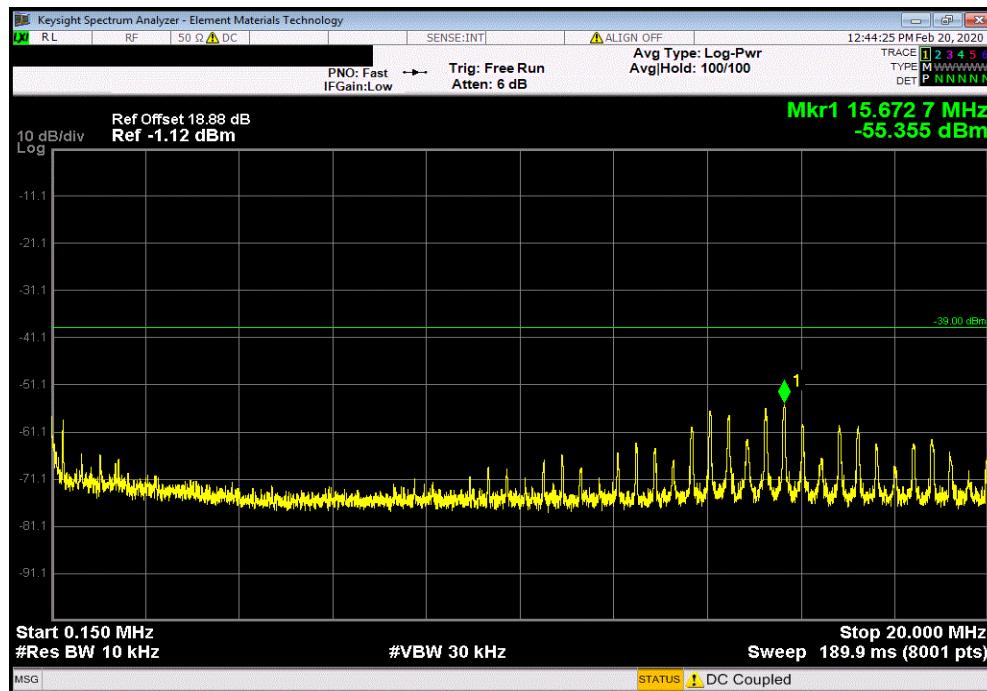


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5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 5 MHz Bandwidth, 16-QAM Modulation, Range 1, 9 kHz - 150 kHz		
Value (dBm)	Limit (dBm)	Result
-56.789	-49	Pass



5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 5 MHz Bandwidth, 16-QAM Modulation, Range 2, 150 kHz - 20 MHz		
Value (dBm)	Limit (dBm)	Result
-55.355	-39	Pass

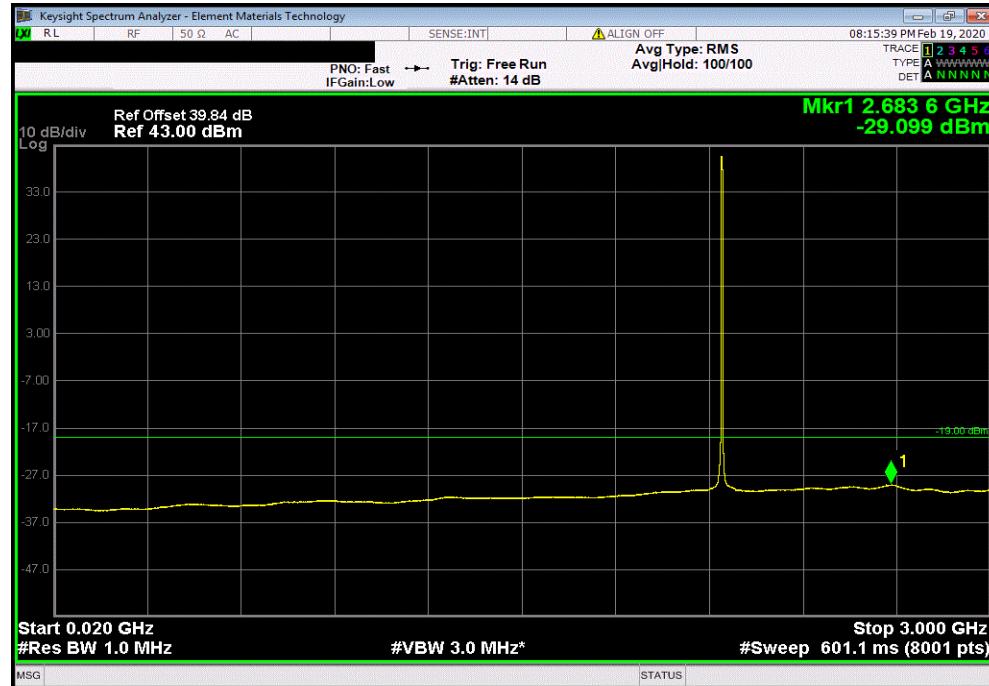


SPURIOUS CONDUCTED EMISSIONS BAND 66a

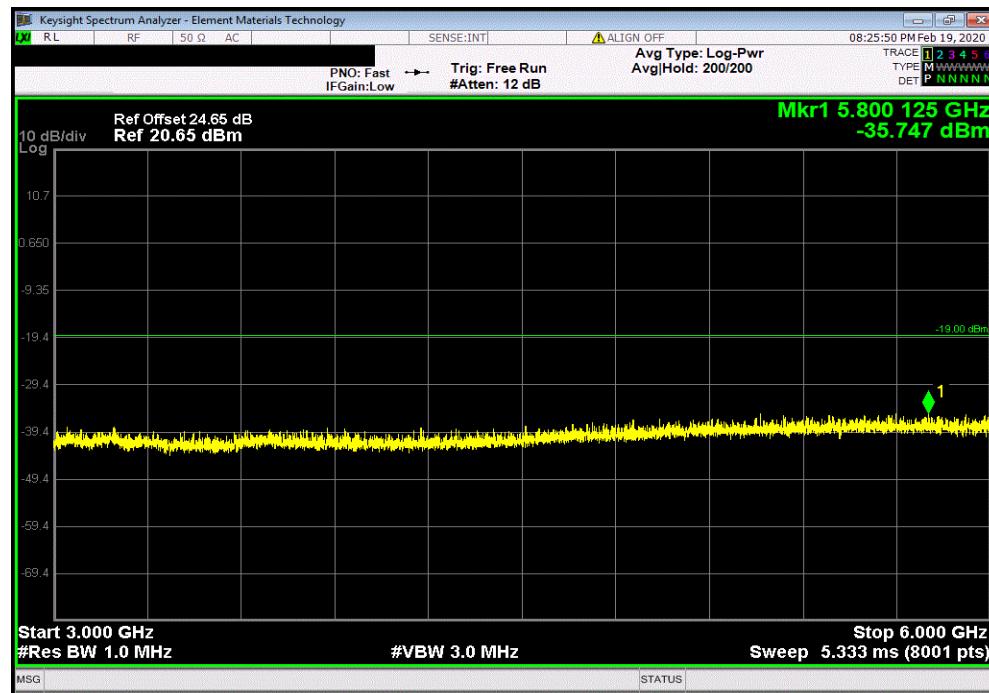


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5G Band 66a 2110 MHz - 2180 MHz , (Single Carrier) Port 4, Mid Channel 2145 MHz, 5 MHz Bandwidth, 16-QAM Modulation , Range 3, 20 MHz - 3 GHz		
Value (dBm)	Limit (dBm)	Result
-29.099	-19	Pass



5G Band 66a 2110 MHz - 2180 MHz , (Single Carrier) Port 4, Mid Channel 2145 MHz, 5 MHz Bandwidth, 16-QAM Modulation , Range 4, 3 GHz - 6 GHz		
Value (dBm)	Limit (dBm)	Result
-35.747	-19	Pass



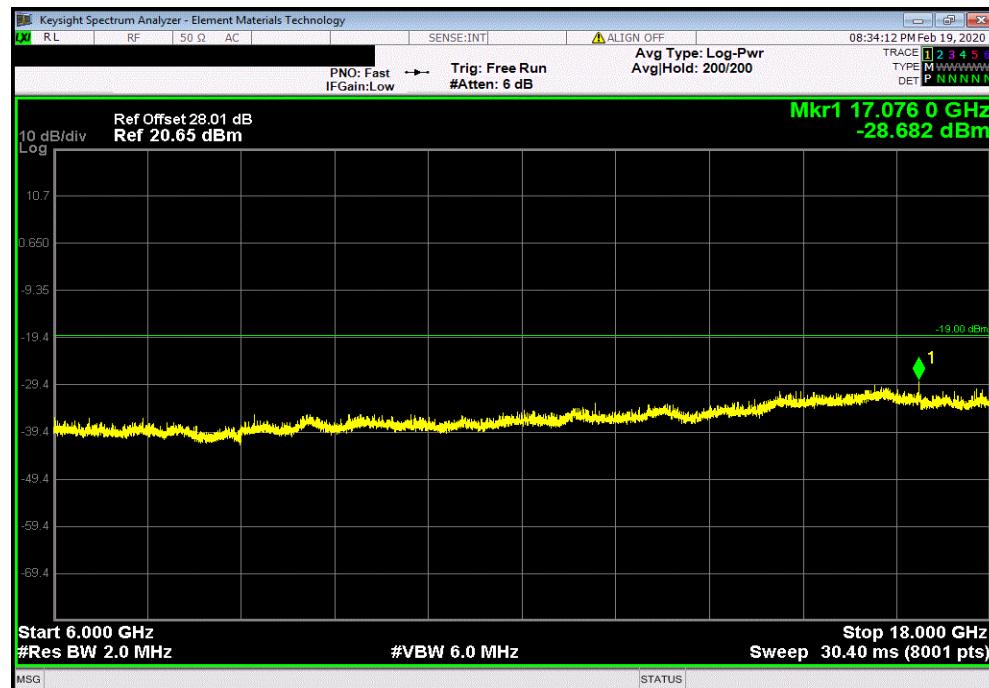
SPURIOUS CONDUCTED EMISSIONS BAND 66a



XMT 2019.09.05

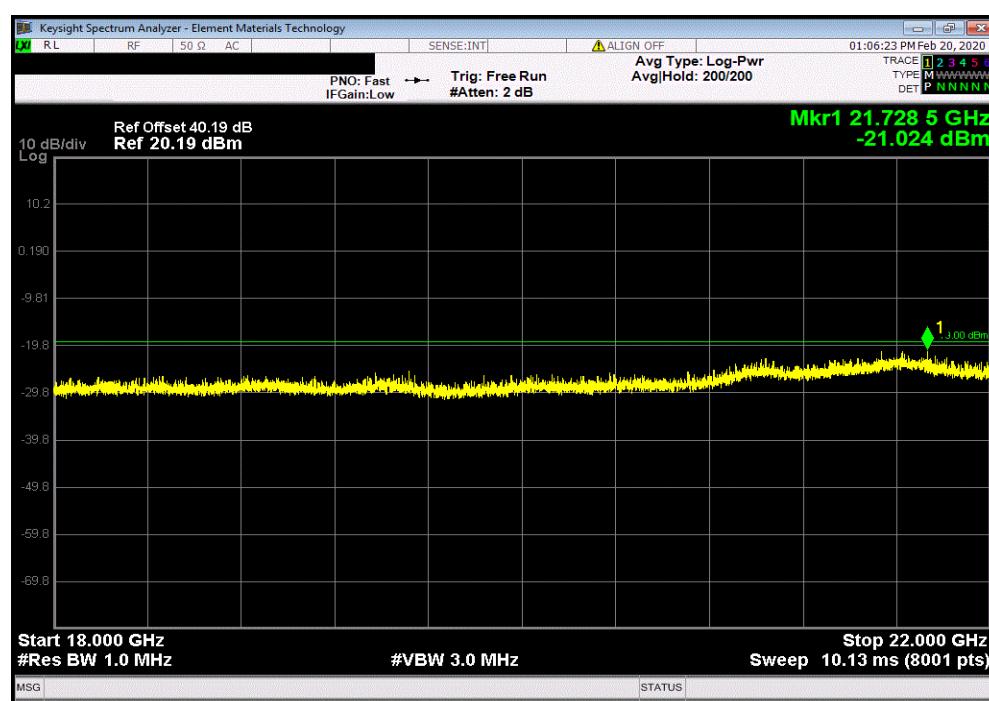
5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 5 MHz Bandwidth, 16-QAM Modulation, Range 5, 6 GHz - 18 GHz

	Value (dBm)	Limit (dBm)	Result
	-28.682	-19	Pass



5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 5 MHz Bandwidth, 16-QAM Modulation, Range 6, 18 GHz - 22 GHz

	Value (dBm)	Limit (dBm)	Result
	-21.024	-19	Pass

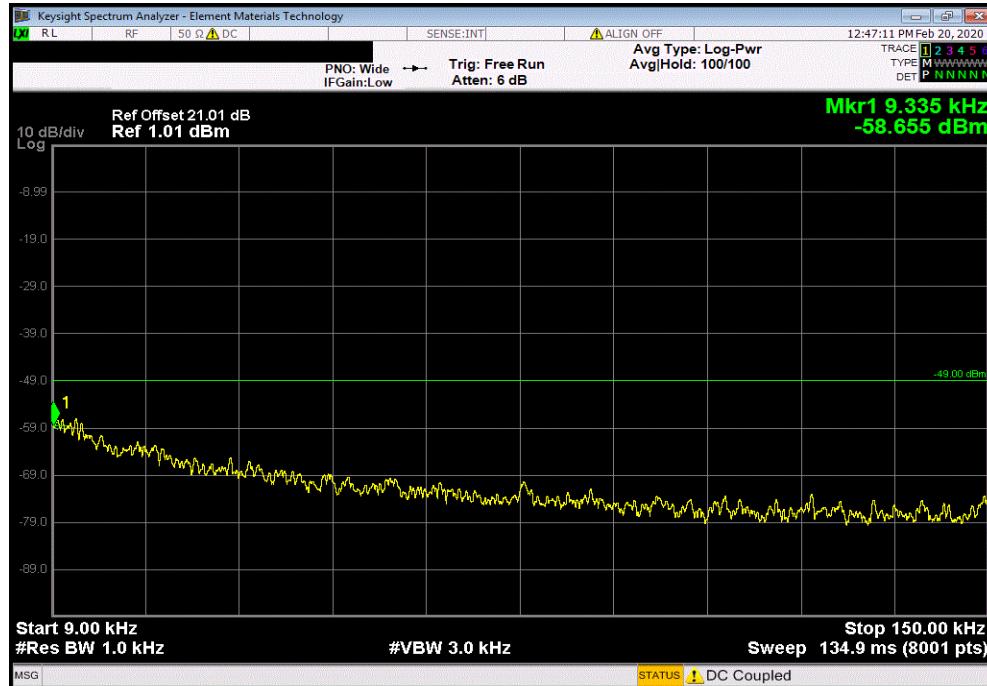


SPURIOUS CONDUCTED EMISSIONS BAND 66a

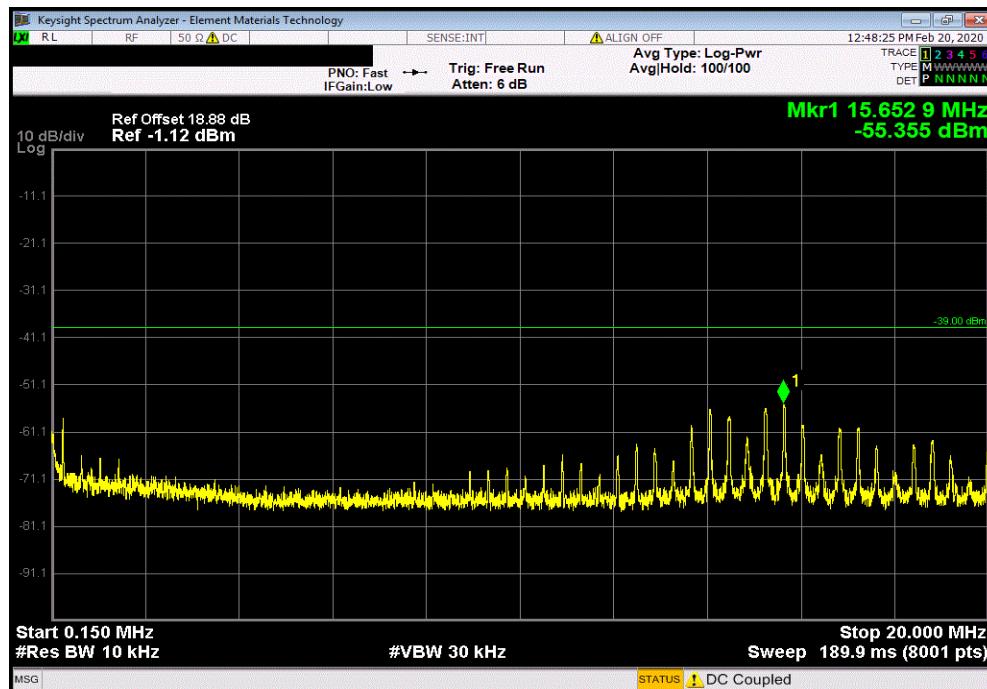


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5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 5 MHz Bandwidth, 64-QAM Modulation, Range 1, 9 kHz - 150 kHz		
Value (dBm)	Limit (dBm)	Result
-58.655	-49	Pass



5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 5 MHz Bandwidth, 64-QAM Modulation, Range 2, 150 kHz - 20 MHz		
Value (dBm)	Limit (dBm)	Result
-55.355	-39	Pass

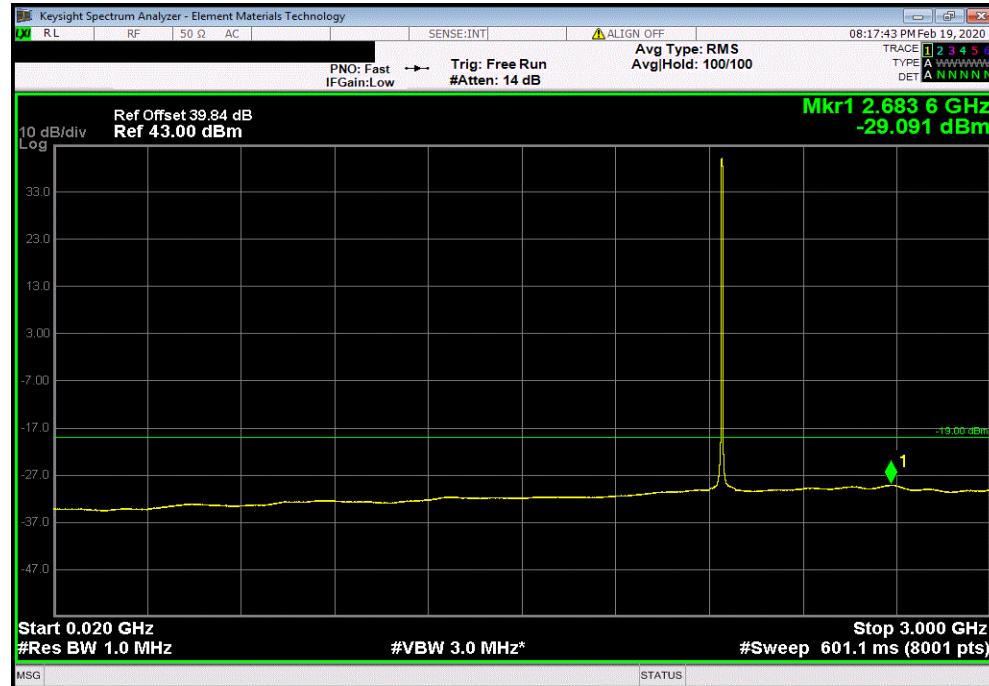


SPURIOUS CONDUCTED EMISSIONS BAND 66a

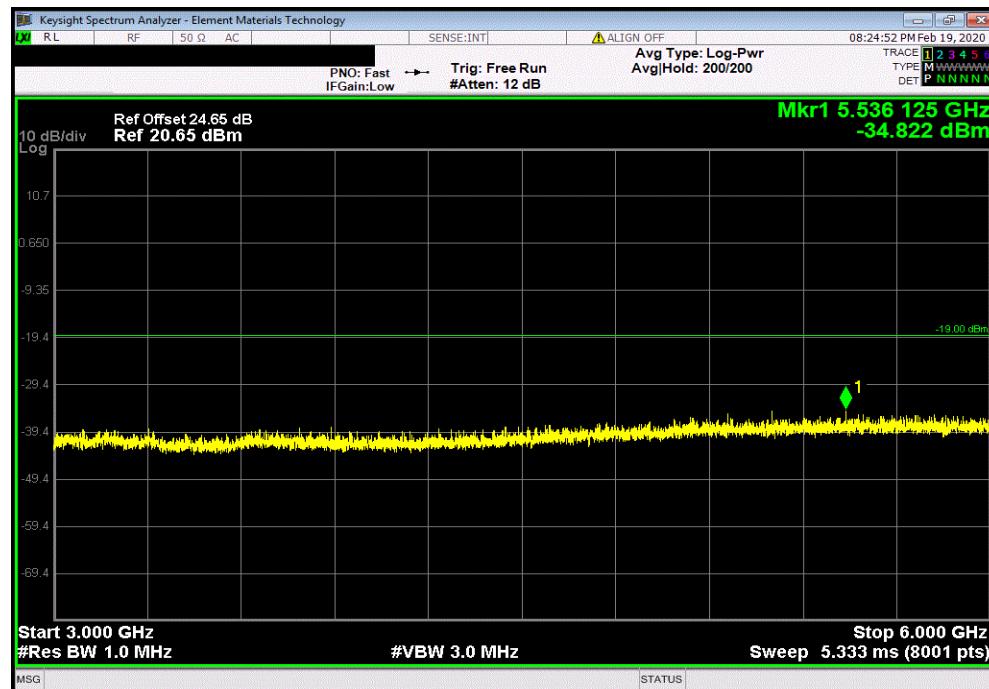


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5G Band 66a 2110 MHz - 2180 MHz , (Single Carrier) Port 4, Mid Channel 2145 MHz, 5 MHz Bandwidth, 64-QAM Modulation , Range 3, 20 MHz - 3 GHz		
Value (dBm)	Limit (dBm)	Result
-29.091	-19	Pass



5G Band 66a 2110 MHz - 2180 MHz , (Single Carrier) Port 4, Mid Channel 2145 MHz, 5 MHz Bandwidth, 64-QAM Modulation , Range 4, 3 GHz - 6 GHz		
Value (dBm)	Limit (dBm)	Result
-34.822	-19	Pass



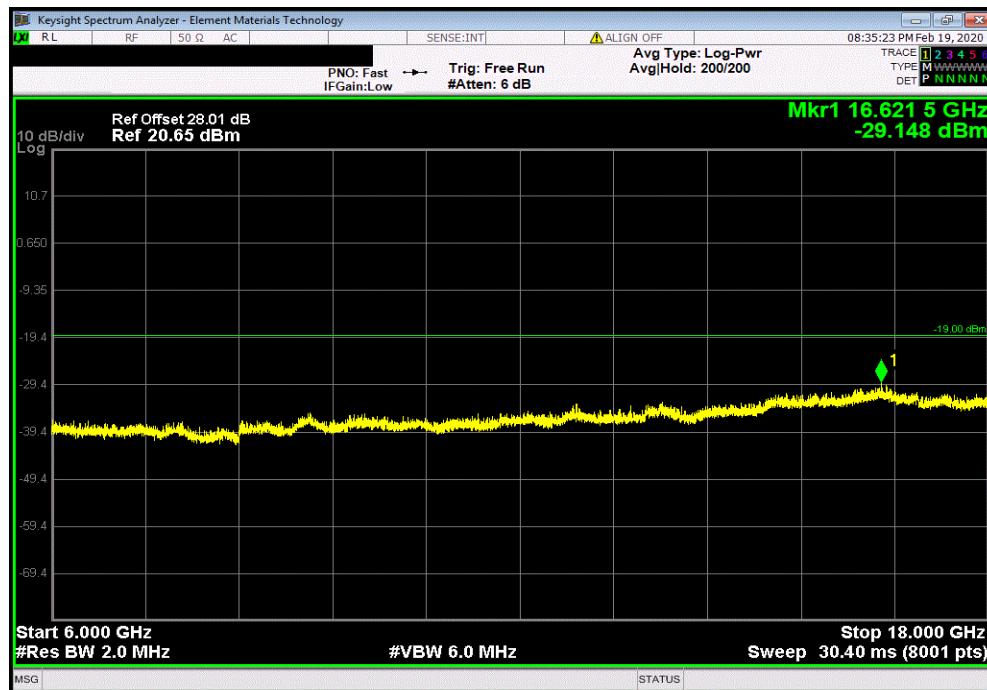
SPURIOUS CONDUCTED EMISSIONS BAND 66a



XMT 2019.09.05

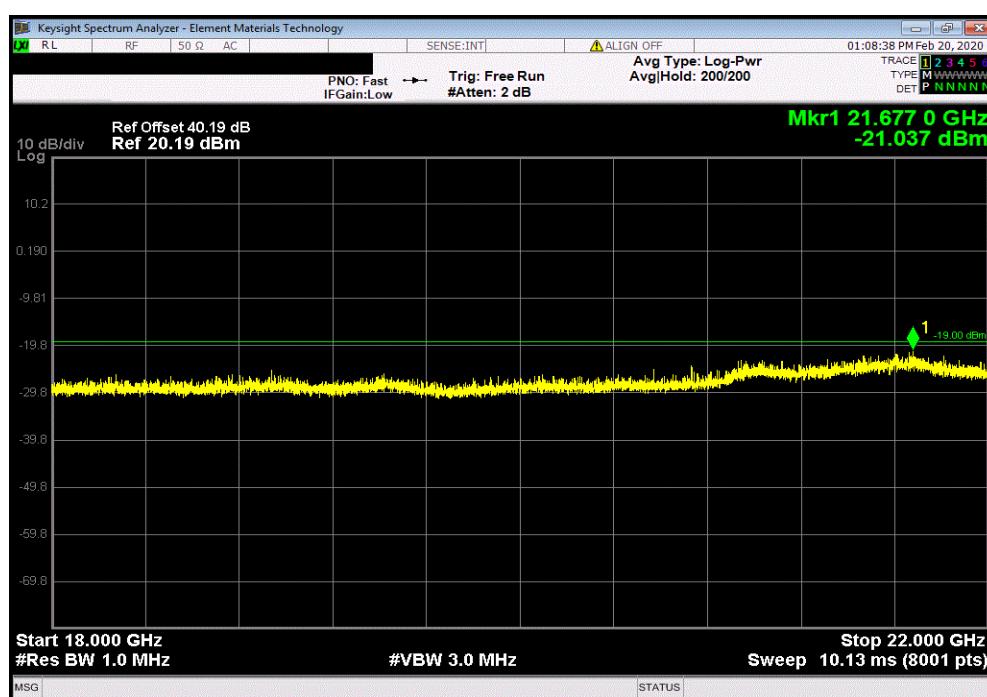
5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 5 MHz Bandwidth, 64-QAM Modulation, Range 5, 6 GHz - 18 GHz

	Value (dBm)	Limit (dBm)	Result
	-29.148	-19	Pass



5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 5 MHz Bandwidth, 64-QAM Modulation, Range 6, 18 GHz - 22 GHz

	Value (dBm)	Limit (dBm)	Result
	-21.037	-19	Pass

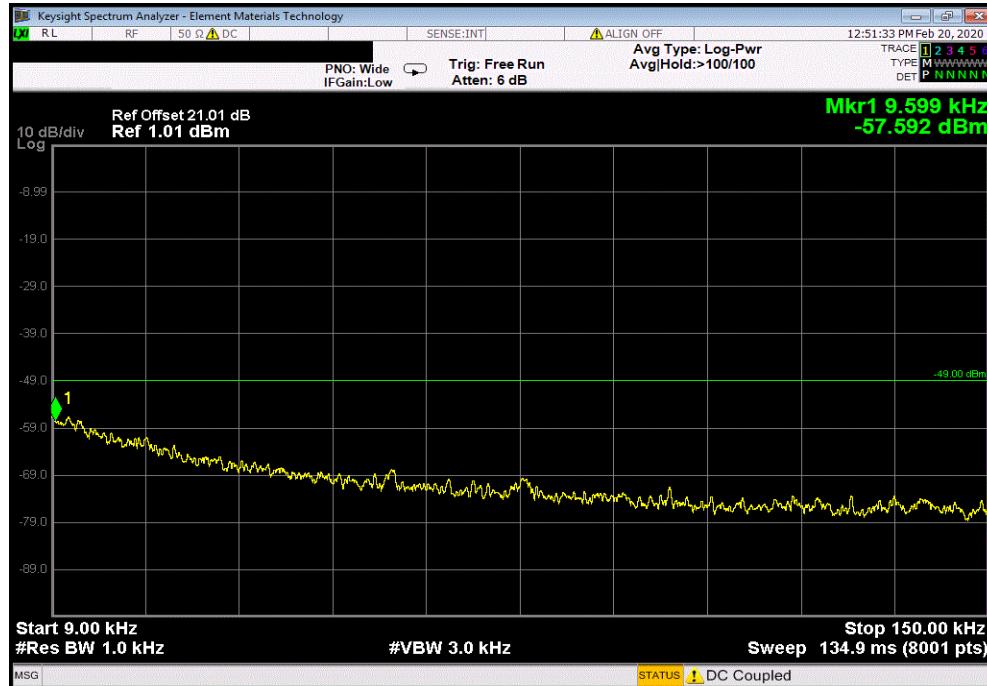


SPURIOUS CONDUCTED EMISSIONS BAND 66a

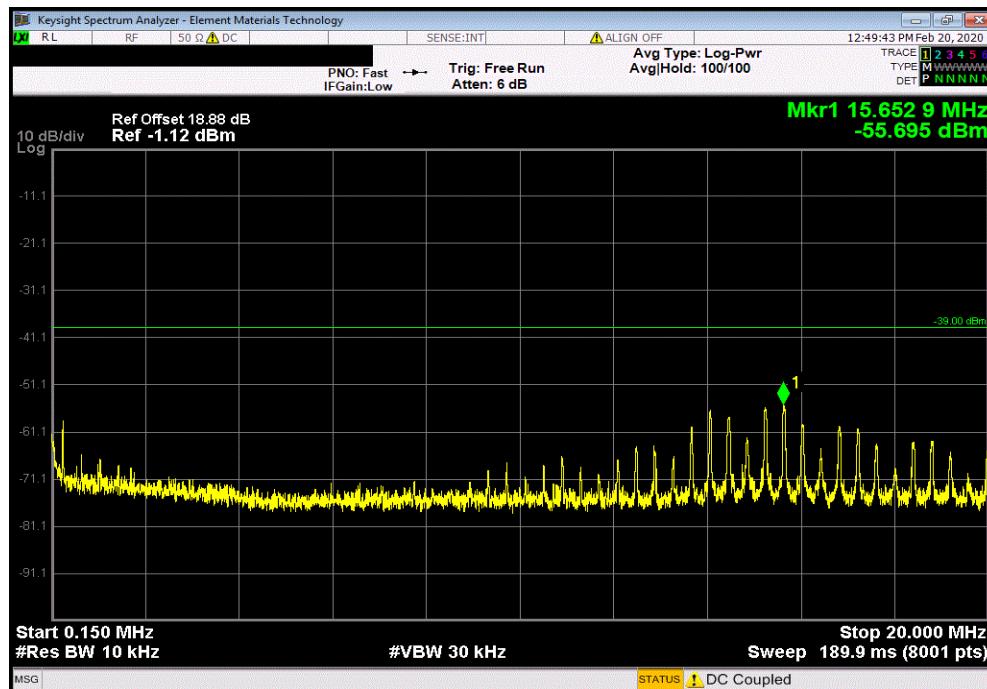


XMT 2019.09.05

5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 5 MHz Bandwidth, 256-QAM Modulation, Range 1, 9 kHz - 150 kHz			
	Value (dBm)	Limit (dBm)	Result
	-57.592	-49	Pass



5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 5 MHz Bandwidth, 256-QAM Modulation, Range 2, 150 kHz - 20 MHz			
	Value (dBm)	Limit (dBm)	Result
	-55.695	-39	Pass



SPURIOUS CONDUCTED EMISSIONS BAND 66a



XMT 2019.09.05

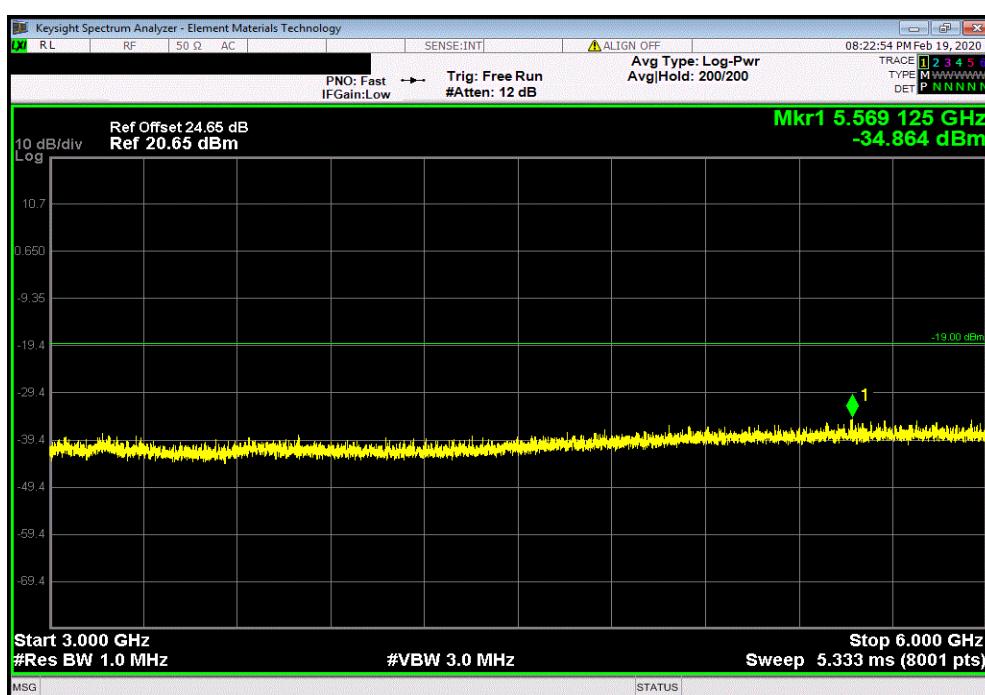
5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 5 MHz Bandwidth, 256-QAM Modulation, Range 3, 20 MHz - 3 GHz

	Value (dBm)	Limit (dBm)	Result
	-29.444	-19	Pass



5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 5 MHz Bandwidth, 256-QAM Modulation, Range 4, 3 GHz - 6 GHz

	Value (dBm)	Limit (dBm)	Result
	-34.864	-19	Pass



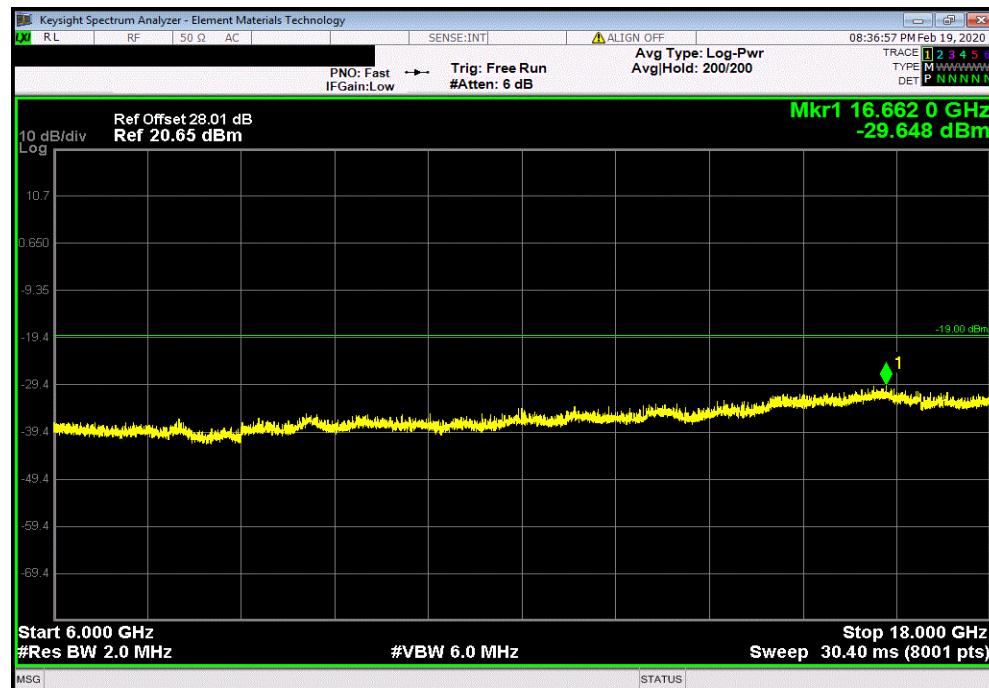
SPURIOUS CONDUCTED EMISSIONS BAND 66a



XMT 2019.09.05

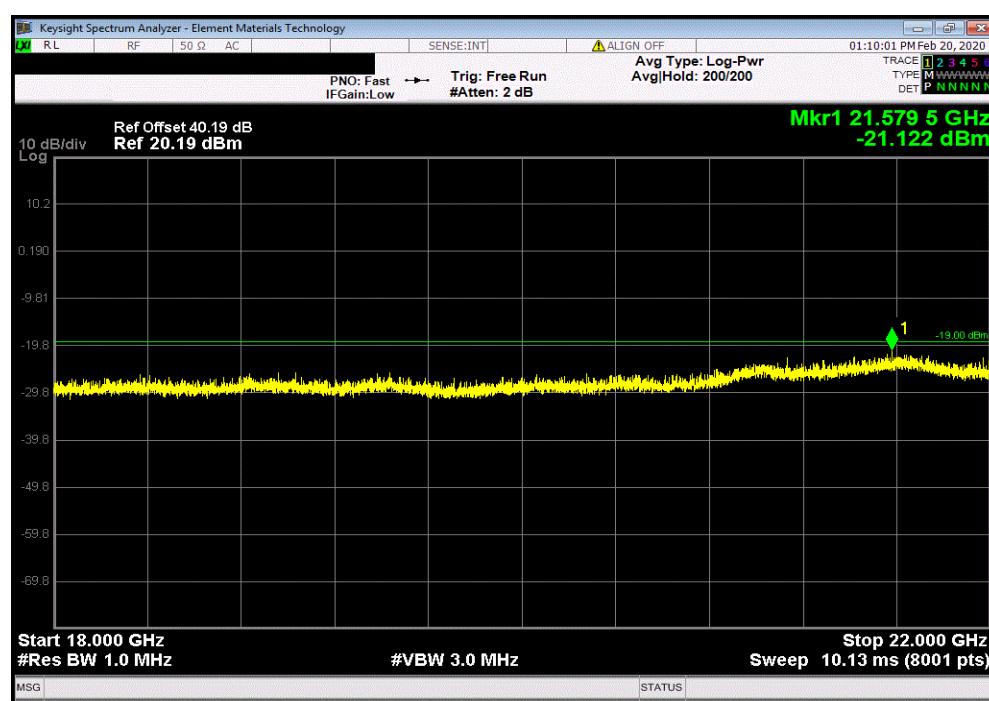
5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 5 MHz Bandwidth, 256-QAM Modulation, Range 5, 6 GHz - 18 GHz

	Value (dBm)	Limit (dBm)	Result
	-29.648	-19	Pass



5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 5 MHz Bandwidth, 256-QAM Modulation, Range 6, 18 GHz - 22 GHz

	Value (dBm)	Limit (dBm)	Result
	-21.122	-19	Pass

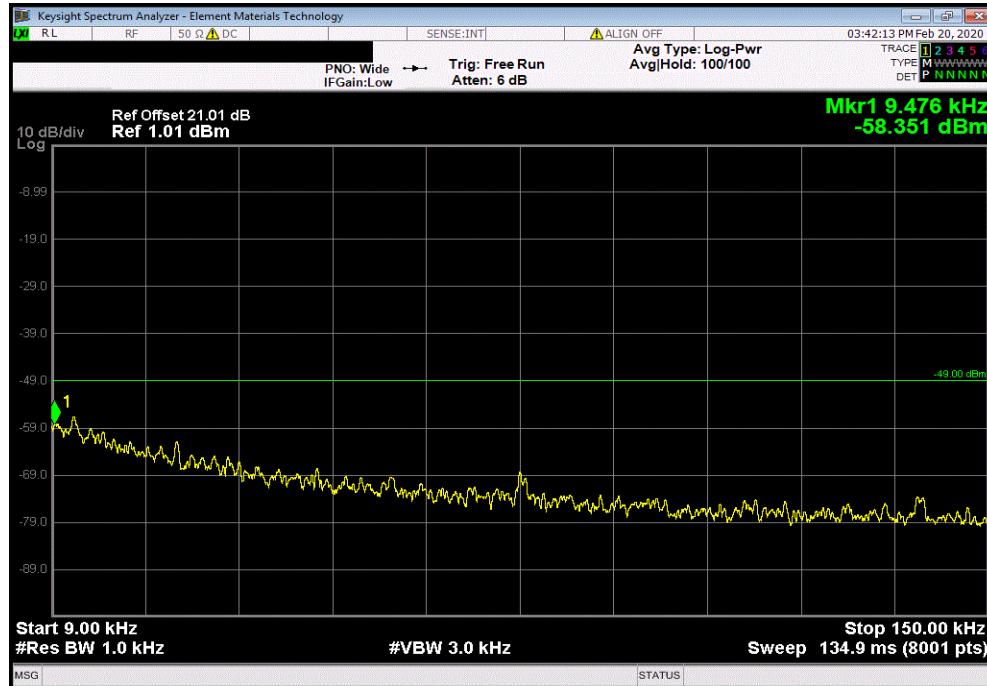


SPURIOUS CONDUCTED EMISSIONS BAND 66a

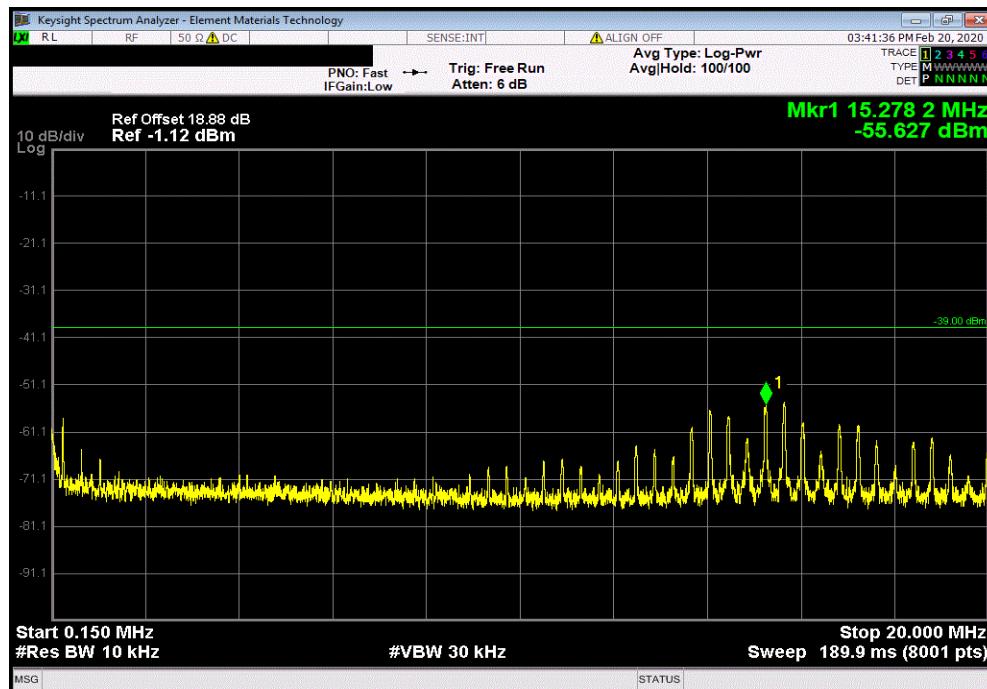


XMT 2019.09.05

5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 10 MHz Bandwidth, 256-QAM Modulation, Range 1, 9 kHz - 150 kHz			
	Value (dBm)	Limit (dBm)	Result
	-58.351	-49	Pass



5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 10 MHz Bandwidth, 256-QAM Modulation, Range 2, 150 kHz - 20 MHz			
	Value (dBm)	Limit (dBm)	Result
	-55.627	-39	Pass



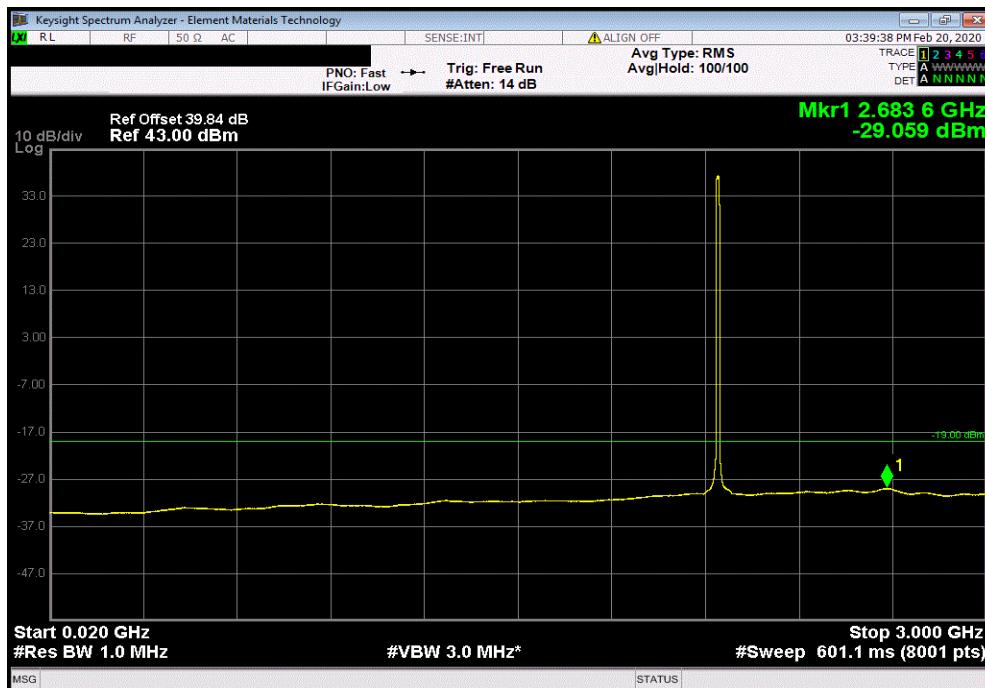
SPURIOUS CONDUCTED EMISSIONS BAND 66a



XMT 2019.09.05

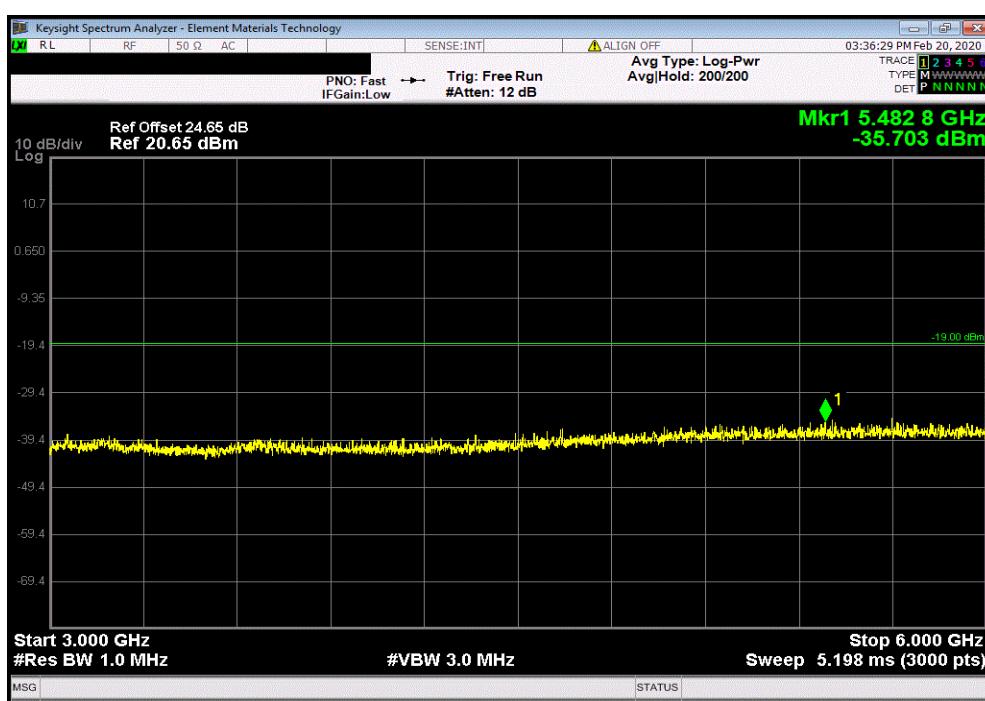
5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 10 MHz Bandwidth, 256-QAM Modulation, Range 3, 20 MHz - 3 GHz

	Value (dBm)	Limit (dBm)	Result
	-29.059	-19	Pass



5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 10 MHz Bandwidth, 256-QAM Modulation, Range 4, 3 GHz - 6 GHz

	Value (dBm)	Limit (dBm)	Result
	-35.703	-19	Pass



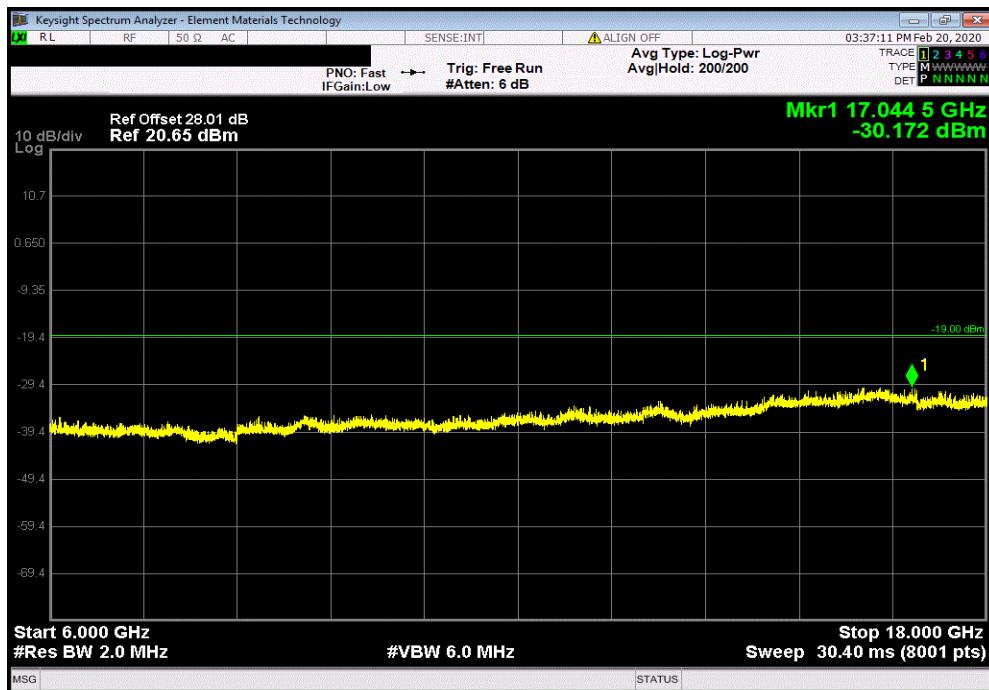
SPURIOUS CONDUCTED EMISSIONS BAND 66a



XMT 2019.09.05

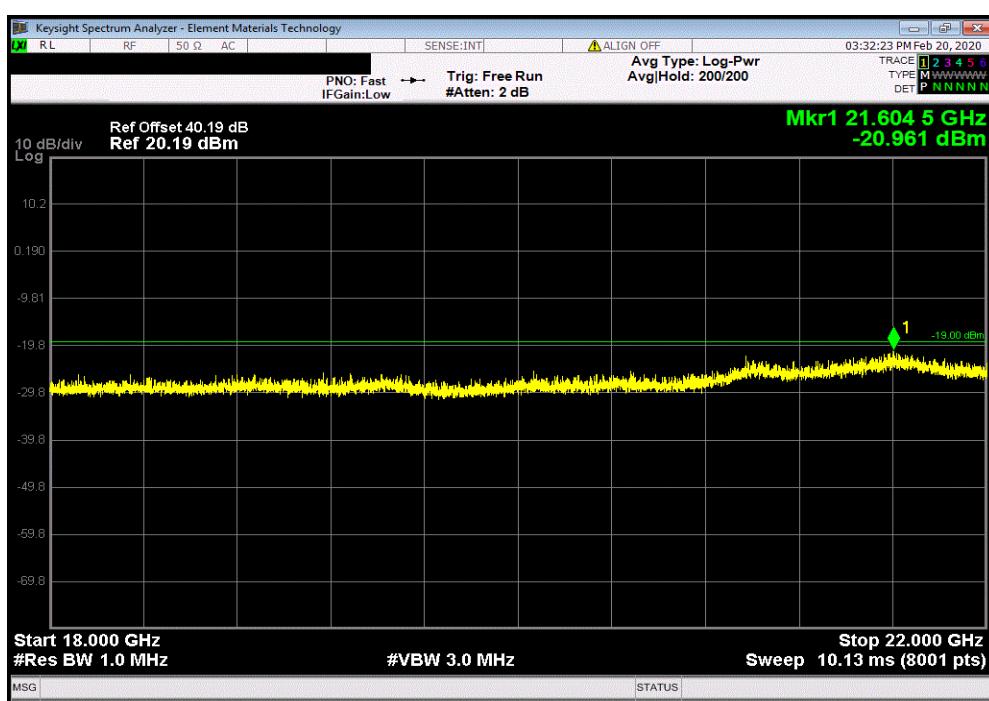
5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 10 MHz Bandwidth, 256-QAM Modulation, Range 5, 6 GHz - 18 GHz

	Value (dBm)	Limit (dBm)	Result
	-30.172	-19	Pass



5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 10 MHz Bandwidth, 256-QAM Modulation, Range 6, 18 GHz - 22 GHz

	Value (dBm)	Limit (dBm)	Result
	-20.961	-19	Pass

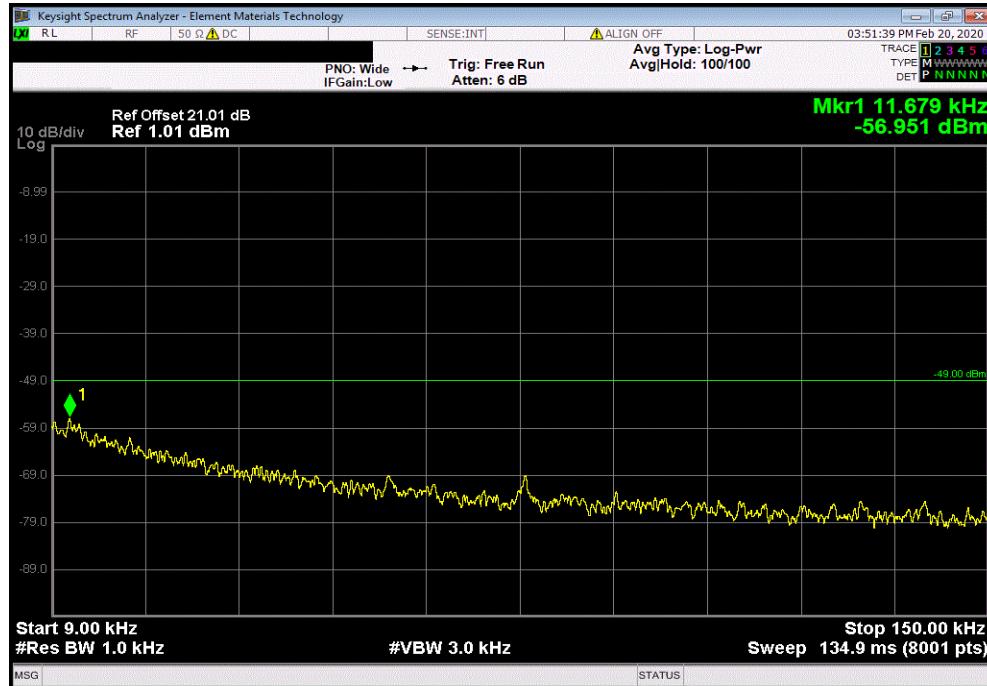


SPURIOUS CONDUCTED EMISSIONS BAND 66a

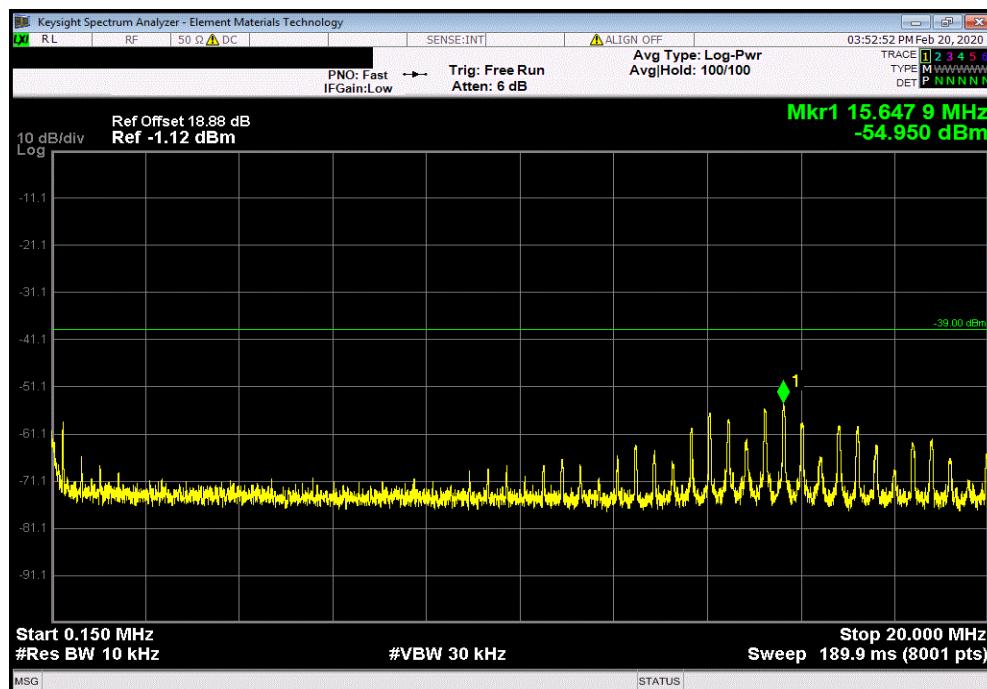


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5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 15 MHz Bandwidth, 256-QAM Modulation, Range 1, 9 kHz - 150 kHz			
	Value (dBm)	Limit (dBm)	Result
	-56.951	-49	Pass



5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 15 MHz Bandwidth, 256-QAM Modulation, Range 2, 150 kHz - 20 MHz			
	Value (dBm)	Limit (dBm)	Result
	-54.95	-39	Pass



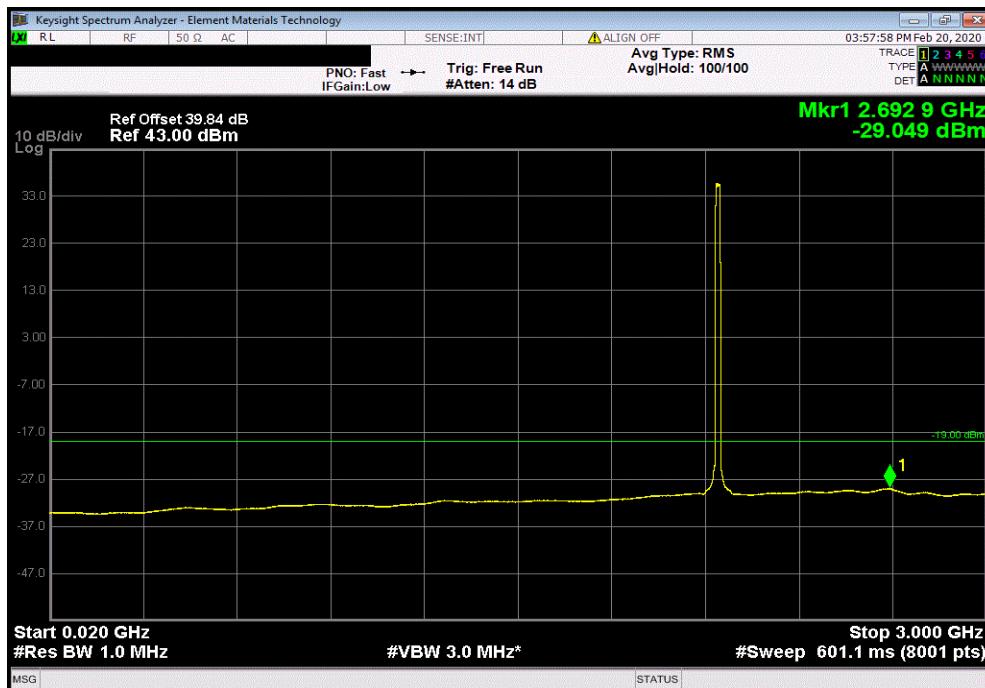
SPURIOUS CONDUCTED EMISSIONS BAND 66a



XMT 2019.09.05

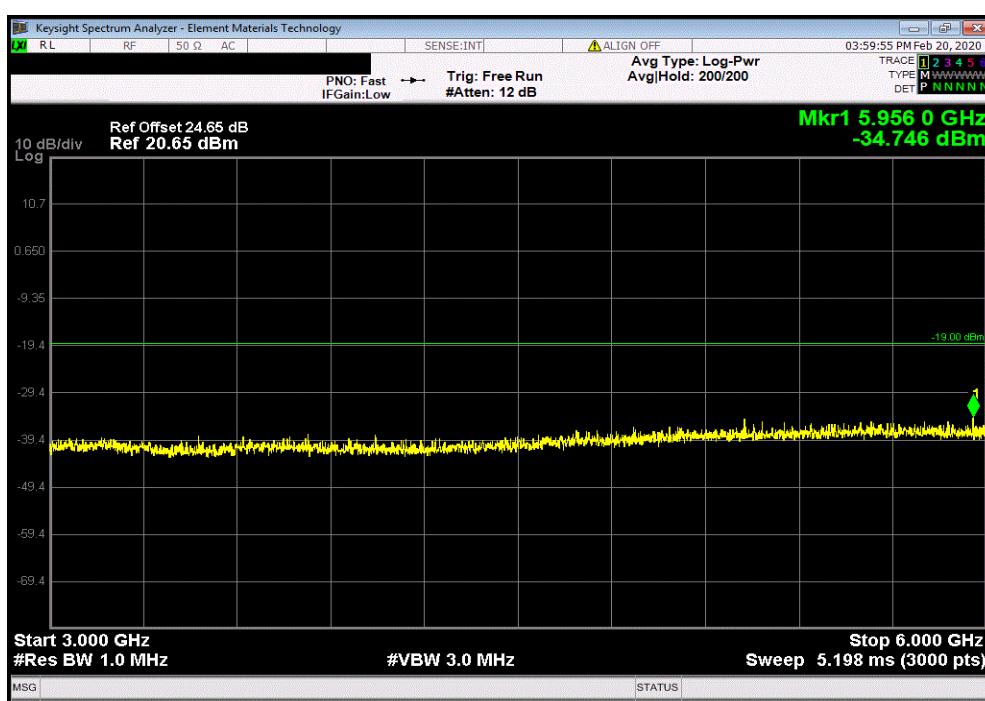
5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 15 MHz Bandwidth, 256-QAM Modulation, Range 3, 20 MHz - 3 GHz

	Value (dBm)	Limit (dBm)	Result
	-29.049	-19	Pass



5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 15 MHz Bandwidth, 256-QAM Modulation, Range 4, 3 GHz - 6 GHz

	Value (dBm)	Limit (dBm)	Result
	-34.746	-19	Pass



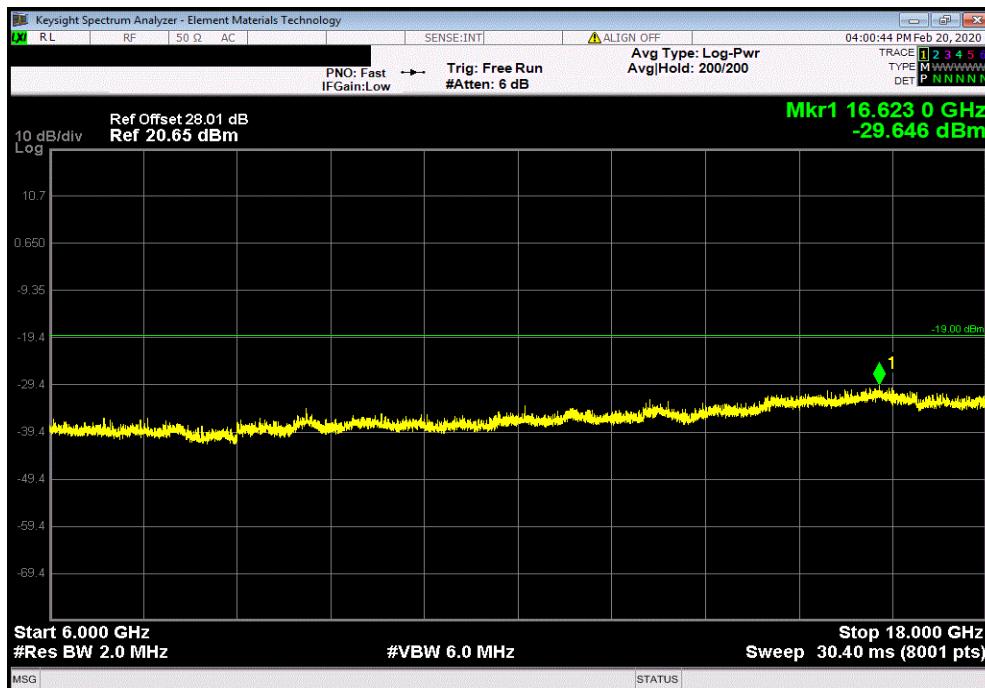
SPURIOUS CONDUCTED EMISSIONS BAND 66a



XMT 2019.09.05

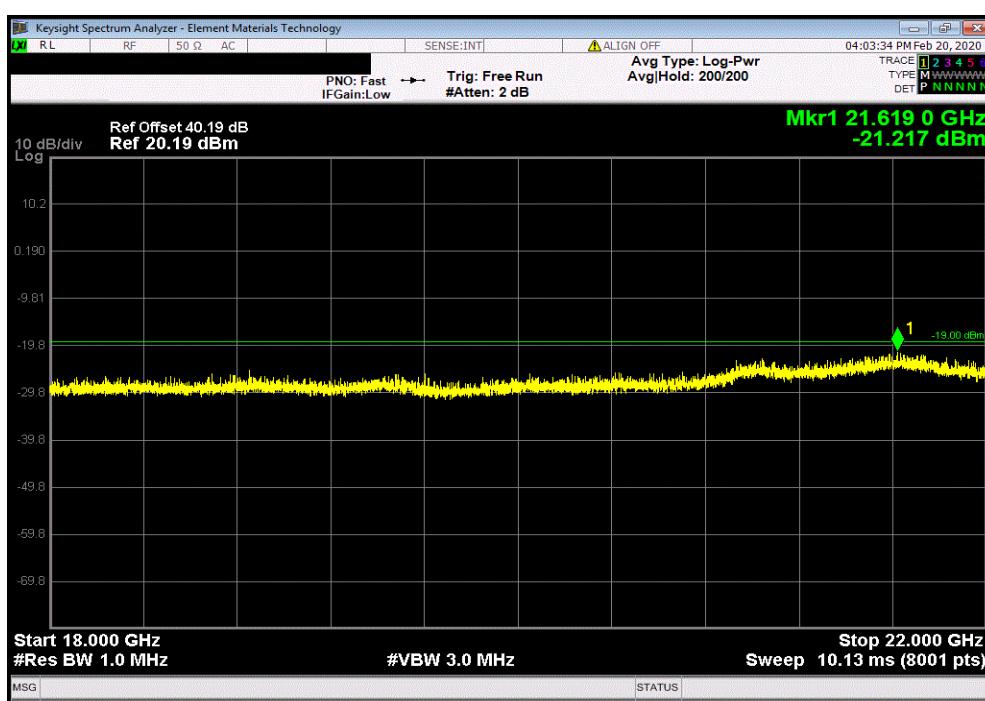
5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 15 MHz Bandwidth, 256-QAM Modulation, Range 5, 6 GHz - 18 GHz

	Value (dBm)	Limit (dBm)	Result
	-29.646	-19	Pass



5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 15 MHz Bandwidth, 256-QAM Modulation, Range 6, 18 GHz - 22 GHz

	Value (dBm)	Limit (dBm)	Result
	-21.217	-19	Pass

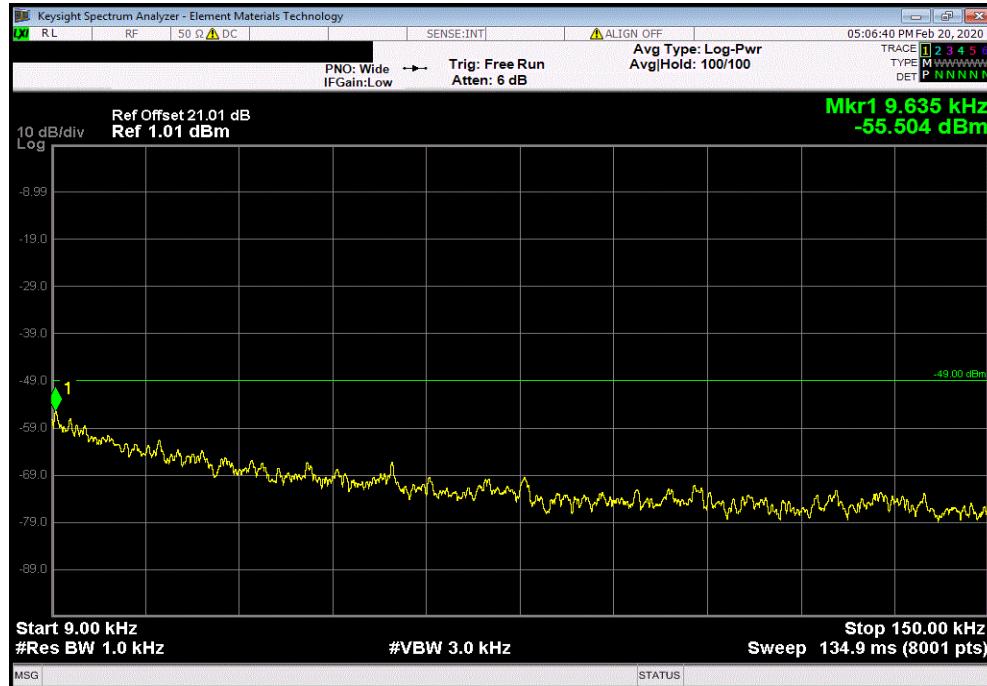


SPURIOUS CONDUCTED EMISSIONS BAND 66a

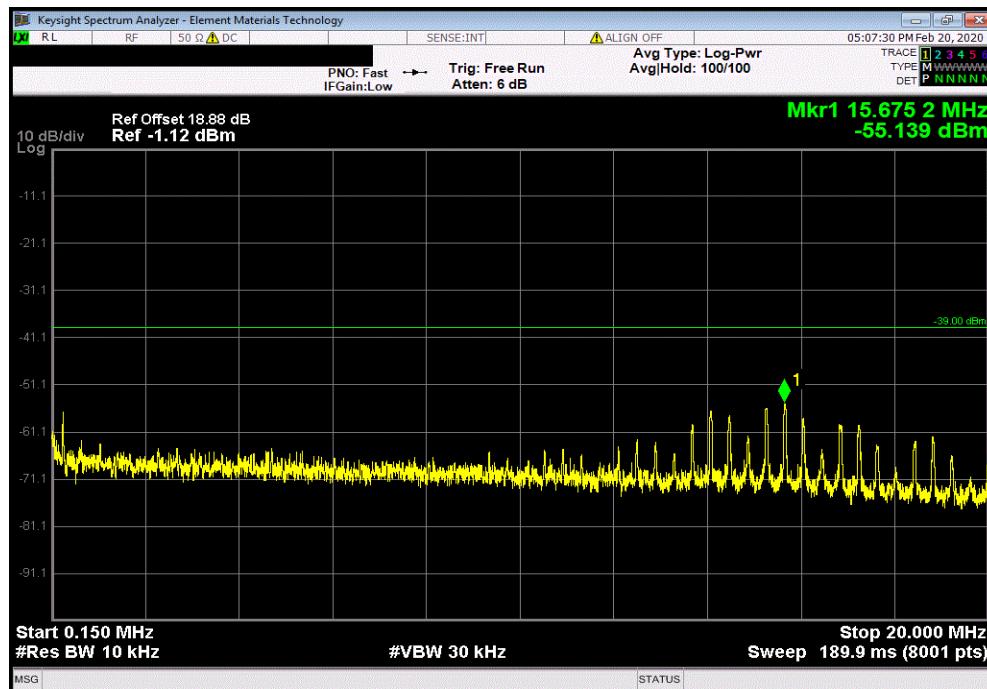


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5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 20 MHz Bandwidth, 256-QAM Modulation, Range 1, 9 kHz - 150 kHz			
Value (dBm)	Limit (dBm)	Result	
-55.504	-49	Pass	



5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 20 MHz Bandwidth, 256-QAM Modulation, Range 2, 150 kHz - 20 MHz			
Value (dBm)	Limit (dBm)	Result	
-55.139	-39	Pass	



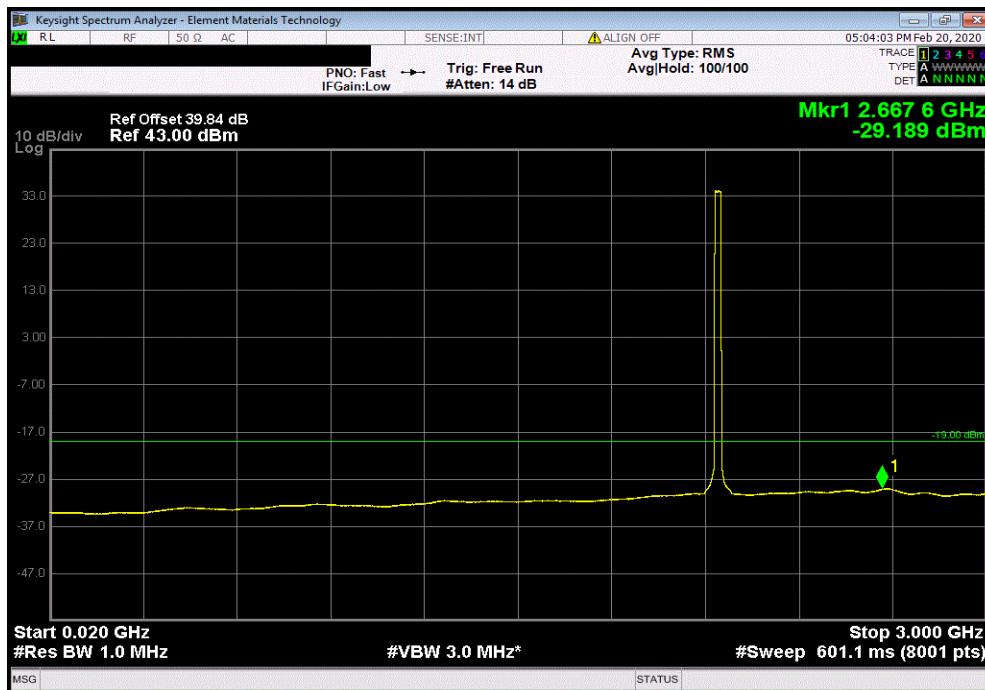
SPURIOUS CONDUCTED EMISSIONS BAND 66a



XMT 2019.09.05

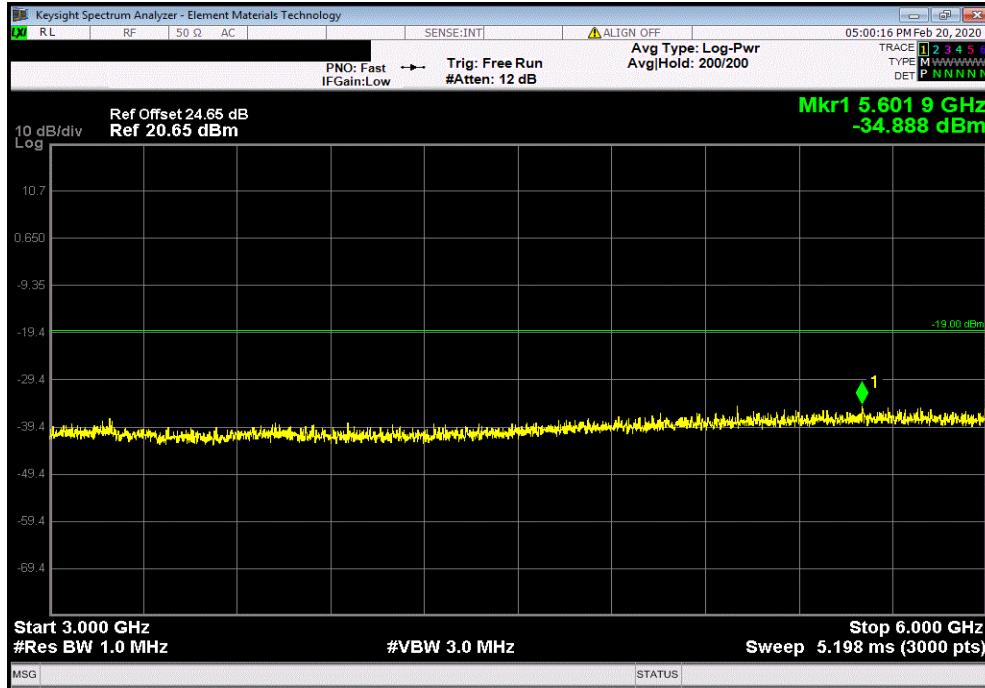
5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 20 MHz Bandwidth, 256-QAM Modulation, Range 3, 20 MHz - 3 GHz

	Value (dBm)	Limit (dBm)	Result
	-29.189	-19	Pass



5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 20 MHz Bandwidth, 256-QAM Modulation, Range 4, 3 GHz - 6 GHz

	Value (dBm)	Limit (dBm)	Result
	-34.888	-19	Pass



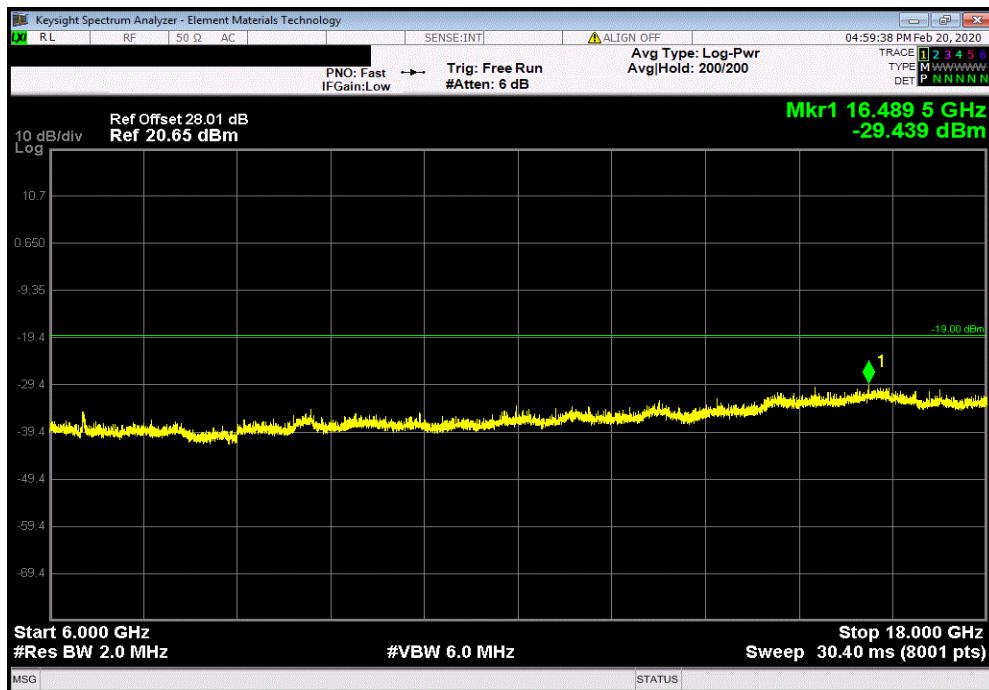
SPURIOUS CONDUCTED EMISSIONS BAND 66a



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5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 20 MHz Bandwidth, 256-QAM Modulation, Range 5, 6 GHz - 18 GHz

	Value (dBm)	Limit (dBm)	Result
	-29.439	-19	Pass



5G Band 66a 2110 MHz - 2180 MHz, (Single Carrier) Port 4, Mid Channel 2145 MHz, 20 MHz Bandwidth, 256-QAM Modulation, Range 6, 18 GHz - 22 GHz

	Value (dBm)	Limit (dBm)	Result
	-21.723	-19	Pass

