

BAND EDGE COMPLIANCE



XMIT 2019.09.05

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

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 FCC section 27.53(g), 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.

FCC 27.53(g) requires a >100 kHz measurement bandwidth for emissions 100 kHz outside of the RRH operating frequency range. FCC 27.53(g) requires a >30 kHz measurement bandwidth for emissions between 100 kHz outside of the RRH operating frequency range and band edge of the operating frequency range.

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EUT: AHBOA Remote Radio Head (RRH)		Work Order: NOKI0003
Serial Number: BL1934X1001		Date: 28-Oct-19
Customer: Nokia Solutions and Networks		Temperature: 22.1 °C
Attendees: John Rattanaovong, Mitchell Hill		Humidity: 49.2% RH
Project: None		Barometric Pres.: 1019 mbar
Tested by: Jonathan Kiefer	Power: 48VDC	Job Site: TX03
TEST SPECIFICATIONS		Test Method
FCC 27:2019		ANSI C63.26:2015
COMMENTS		
Tested on highest power antenna port (Port 1). EUT is operated at 100% duty cycle.		
DEVIATIONS FROM TEST STANDARD		
None		
Configuration #	1	Signature <i>Jonathan Kiefer</i>
		Value (dBm) Limit (dBm) Result
Band 71		
QPSK Modulation		
LTE5 Bandwidth		
Lower Band Edge		
	Measurement 1	-23.064 -19 Pass
	Measurement 2	-26.217 -19 Pass
Upper Band Edge		
	Measurement 1	-26.294 -19 Pass
	Measurement 2	-22.712 -19 Pass
LTE10 Bandwidth		
Lower Band Edge		
	Measurement 1	-24.714 -19 Pass
	Measurement 2	-28.6 -19 Pass
Upper Band Edge		
	Measurement 1	-28.472 -19 Pass
	Measurement 2	-25.084 -19 Pass
LTE15 Bandwidth		
Lower Band Edge		
	Measurement 1	-24.221 -19 Pass
	Measurement 2	-28.073 -19 Pass
Upper Band Edge		
	Measurement 1	-27.345 -19 Pass
	Measurement 2	-23.882 -19 Pass
LTE20 Bandwidth		
Lower Band Edge		
	Measurement 1	-25.205 -19 Pass
	Measurement 2	-29.917 -19 Pass
Upper Band Edge		
	Measurement 1	-29.014 -19 Pass
	Measurement 2	-23.842 -19 Pass
16QAM Modulation		
LTE5 Bandwidth		
Lower Band Edge		
	Measurement 1	-22.986 -19 Pass
	Measurement 2	-26.011 -19 Pass
Upper Band Edge		
	Measurement 1	-27.01 -19 Pass
	Measurement 2	-23.078 -19 Pass
LTE10 Bandwidth		
Lower Band Edge		
	Measurement 1	-24.577 -19 Pass
	Measurement 2	-29.036 -19 Pass
Upper Band Edge		
	Measurement 1	-29.38 -19 Pass
	Measurement 2	-25.472 -19 Pass
LTE15 Bandwidth		
Lower Band Edge		
	Measurement 1	-24.168 -19 Pass
	Measurement 2	-28.507 -19 Pass
Upper Band Edge		
	Measurement 1	-27.329 -19 Pass
	Measurement 2	-25.069 -19 Pass
LTE20 Bandwidth		
Lower Band Edge		
	Measurement 1	-25.349 -19 Pass
	Measurement 2	-30.247 -19 Pass
Upper Band Edge		
	Measurement 1	-28.978 -19 Pass
	Measurement 2	-24.416 -19 Pass
64QAM Modulation		
LTE5 Bandwidth		
Lower Band Edge		
	Measurement 1	-23.079 -19 Pass
	Measurement 2	-25.852 -19 Pass
Upper Band Edge		
	Measurement 1	-26.077 -19 Pass
	Measurement 2	-22.902 -19 Pass
LTE10 Bandwidth		
Lower Band Edge		
	Measurement 1	-24.498 -19 Pass
	Measurement 2	-28.744 -19 Pass
Upper Band Edge		
	Measurement 1	-28.178 -19 Pass
	Measurement 2	-25.366 -19 Pass
LTE15 Bandwidth		
Lower Band Edge		

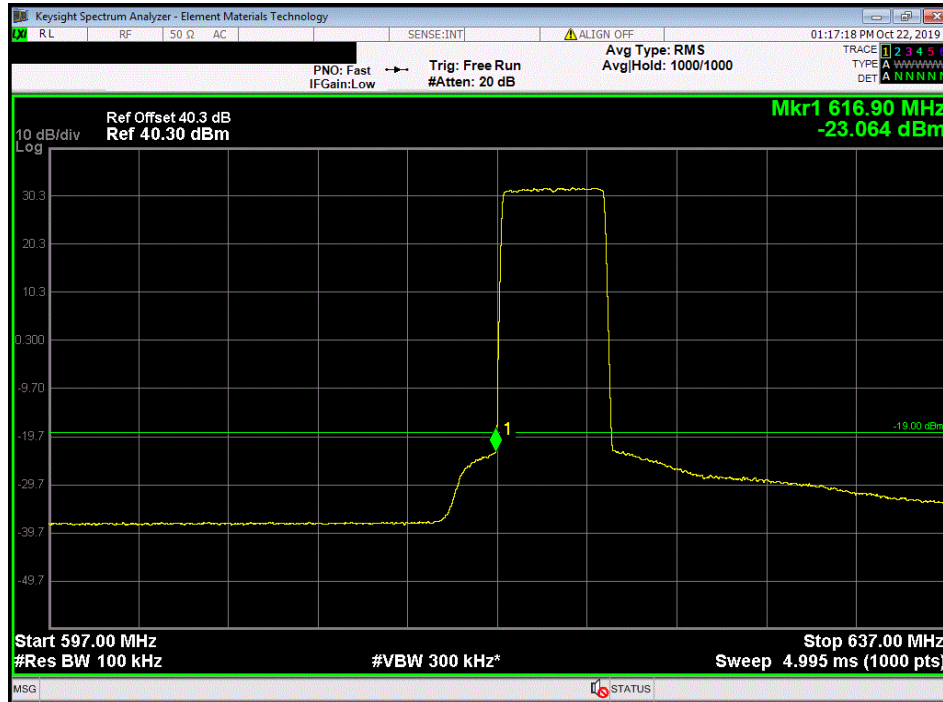
	Measurement 1	-24.102	-19	Pass
	Measurement 2	-28.234	-19	Pass
Upper Band Edge				
	Measurement 1	-27.241	-19	Pass
	Measurement 2	-24.049	-19	Pass
LTE20 Bandwidth				
Lower Band Edge				
	Measurement 1	-25.084	-19	Pass
	Measurement 2	-29.875	-19	Pass
Upper Band Edge				
	Measurement 1	-29.271	-19	Pass
	Measurement 2	-24.326	-19	Pass
256QAM Modulation				
LTE5 Bandwidth				
Lower Band Edge				
	Measurement 1	-23.058	-19	Pass
	Measurement 2	-26.294	-19	Pass
Upper Band Edge				
	Measurement 1	-26.196	-19	Pass
	Measurement 2	-22.737	-19	Pass
LTE10 Bandwidth				
Lower Band Edge				
	Measurement 1	-24.736	-19	Pass
	Measurement 2	-28.53	-19	Pass
Upper Band Edge				
	Measurement 1	-28.243	-19	Pass
	Measurement 2	-24.942	-19	Pass
LTE15 Bandwidth				
Lower Band Edge				
	Measurement 1	-24.119	-19	Pass
	Measurement 2	-28.017	-19	Pass
Upper Band Edge				
	Measurement 1	-27.703	-19	Pass
	Measurement 2	-24.003	-19	Pass
LTE20 Bandwidth				
Lower Band Edge				
	Measurement 1	-25.214	-19	Pass
	Measurement 2	-29.988	-19	Pass
Upper Band Edge				
	Measurement 1	-29.113	-19	Pass
	Measurement 2	-24.372	-19	Pass

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Band 71, QPSK Modulation, LTE5 Bandwidth, Lower Band Edge, Measurement 1						
				Value (dBm)	Limit (dBm)	Result
				-23.064	-19	Pass



Band 71, QPSK Modulation, LTE5 Bandwidth, Lower Band Edge, Measurement 2						
				Value (dBm)	Limit (dBm)	Result
				-26.217	-19	Pass



BAND EDGE COMPLIANCE

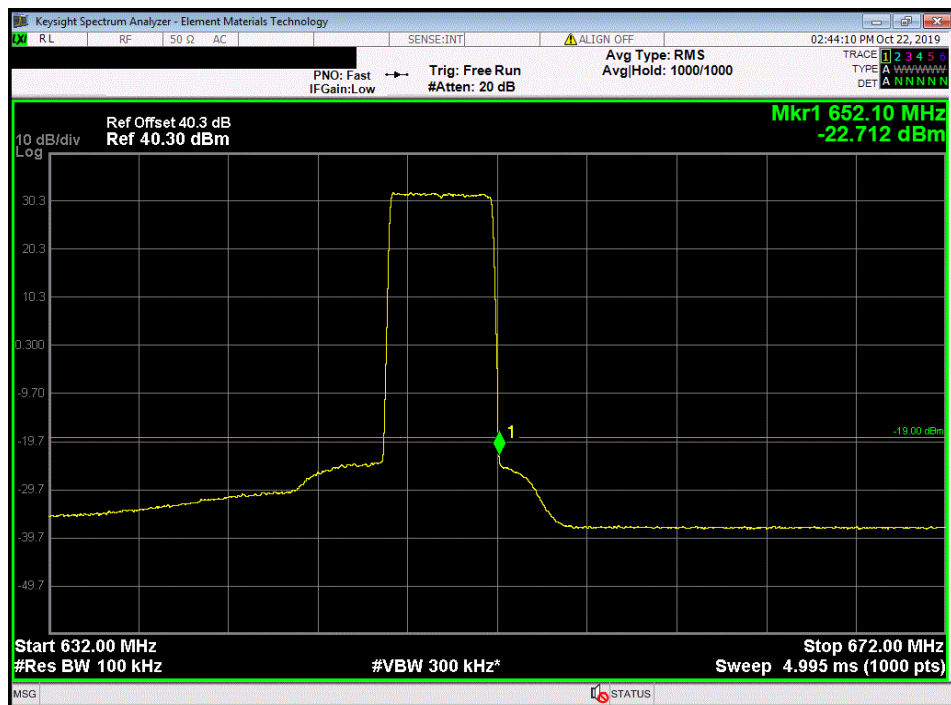


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Band 71, QPSK Modulation, LTE5 Bandwidth, Upper Band Edge, Measurement 1						
				Value (dBm)	Limit (dBm)	Result
				-26.294	-19	Pass



Band 71, QPSK Modulation, LTE5 Bandwidth, Upper Band Edge, Measurement 2						
				Value (dBm)	Limit (dBm)	Result
				-22.712	-19	Pass

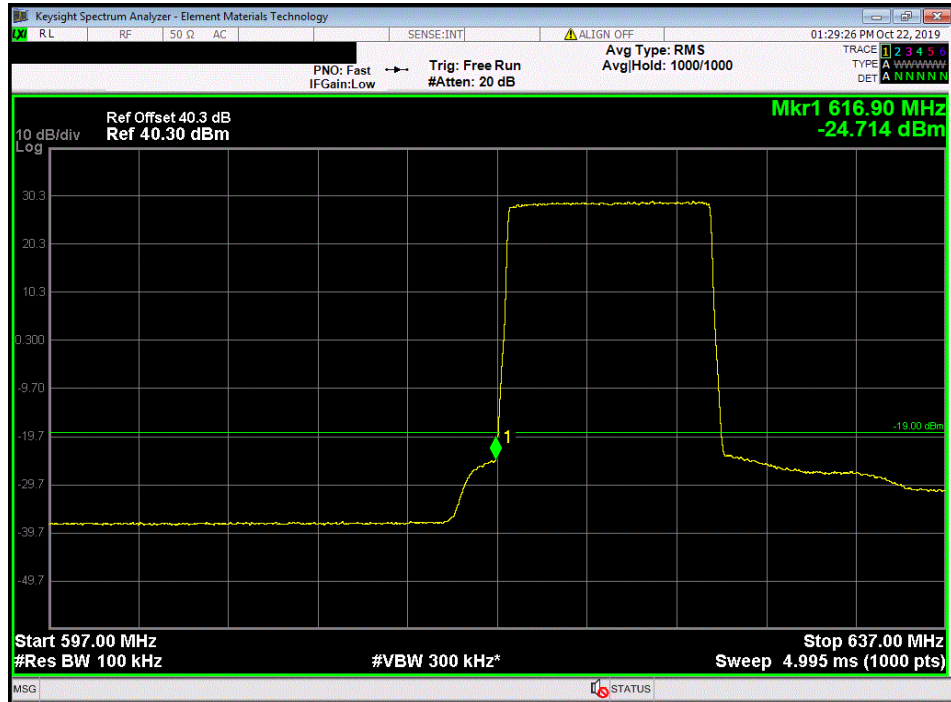


BAND EDGE COMPLIANCE



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Band 71, QPSK Modulation, LTE10 Bandwidth, Lower Band Edge, Measurement 1						
				Value (dBm)	Limit (dBm)	Result
				-24.714	-19	Pass



Band 71, QPSK Modulation, LTE10 Bandwidth, Lower Band Edge, Measurement 2						
				Value (dBm)	Limit (dBm)	Result
				-28.6	-19	Pass



BAND EDGE COMPLIANCE

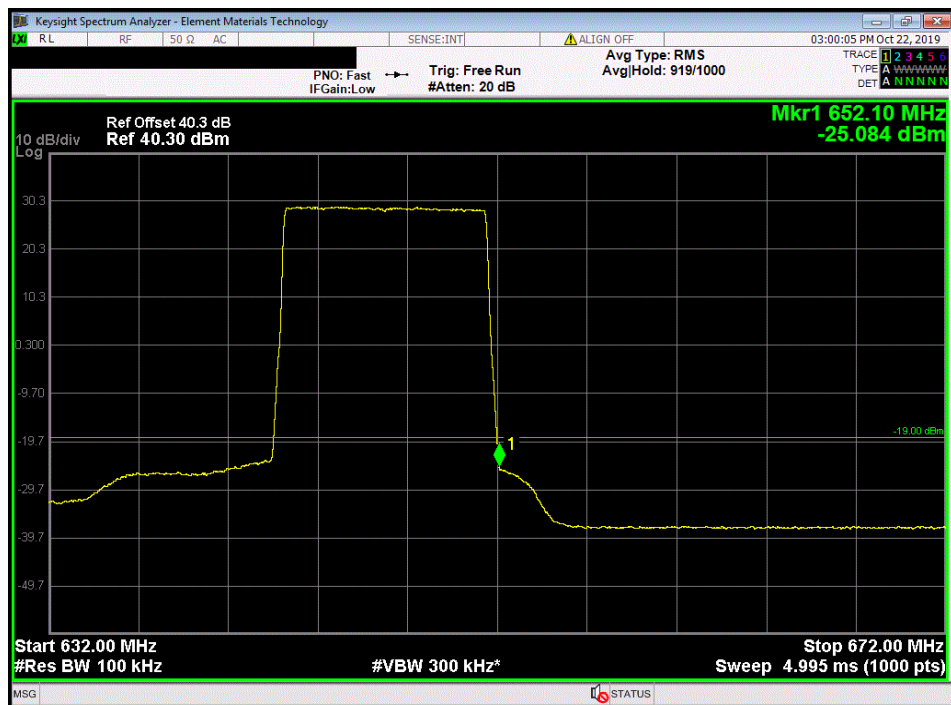


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Band 71, QPSK Modulation, LTE10 Bandwidth, Upper Band Edge, Measurement 1						
	Value	Limit	Result			
	(dBm)	(dBm)				
	-28.472	-19	Pass			



Band 71, QPSK Modulation, LTE10 Bandwidth, Upper Band Edge, Measurement 2						
	Value	Limit	Result			
	(dBm)	(dBm)				
	-25.084	-19	Pass			

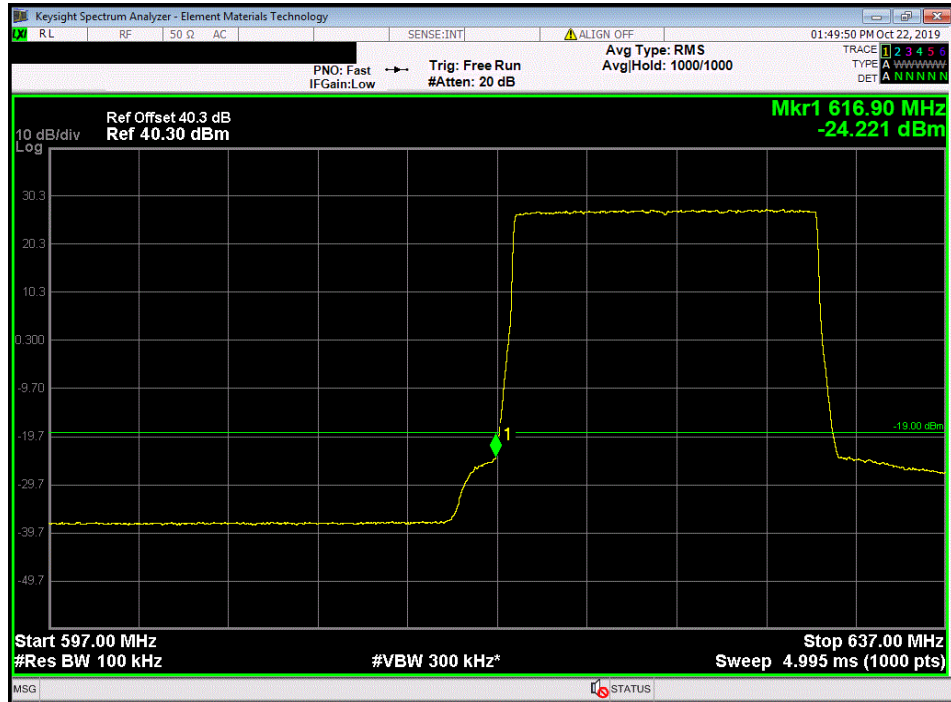


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Band 71, QPSK Modulation, LTE15 Bandwidth, Lower Band Edge, Measurement 1						
	Value	Limit	Result			
	(dBm)	(dBm)				
	-24.221	-19	Pass			



Band 71, QPSK Modulation, LTE15 Bandwidth, Lower Band Edge, Measurement 2						
	Value	Limit	Result			
	(dBm)	(dBm)				
	-28.073	-19	Pass			

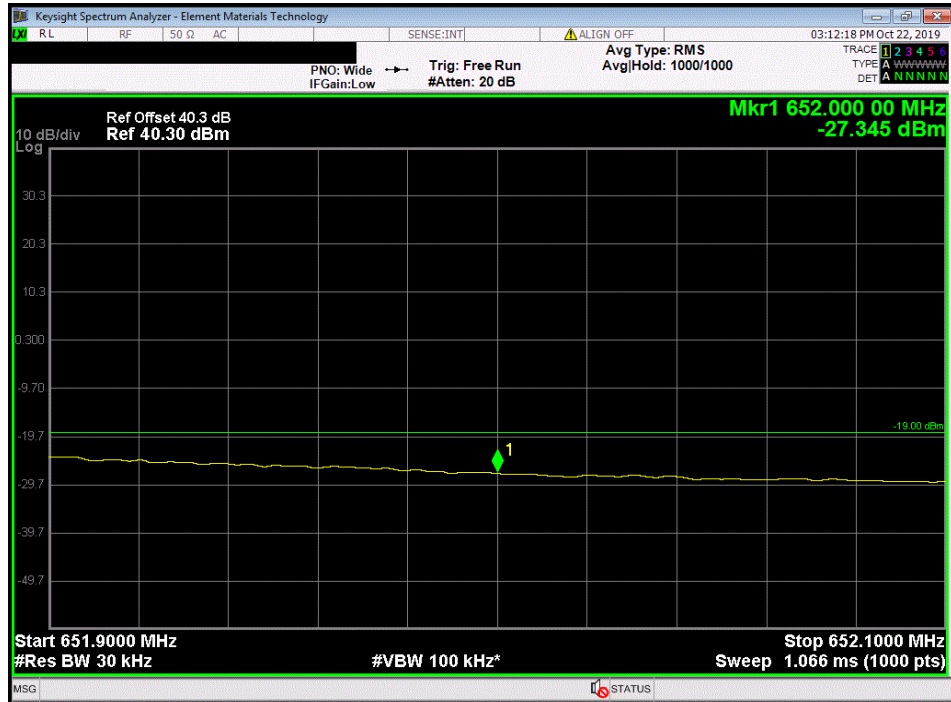


BAND EDGE COMPLIANCE

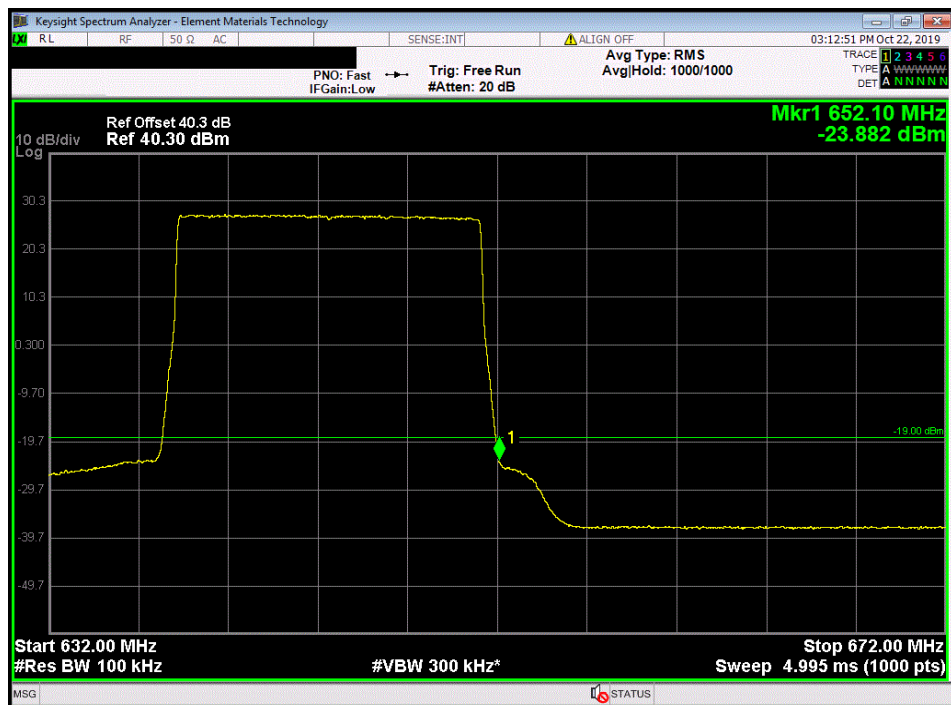


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Band 71, QPSK Modulation, LTE15 Bandwidth, Upper Band Edge, Measurement 1						
	Value	Limit	Result			
	(dBm)	(dBm)				
	-27.345	-19	Pass			



Band 71, QPSK Modulation, LTE15 Bandwidth, Upper Band Edge, Measurement 2						
	Value	Limit	Result			
	(dBm)	(dBm)				
	-23.882	-19	Pass			

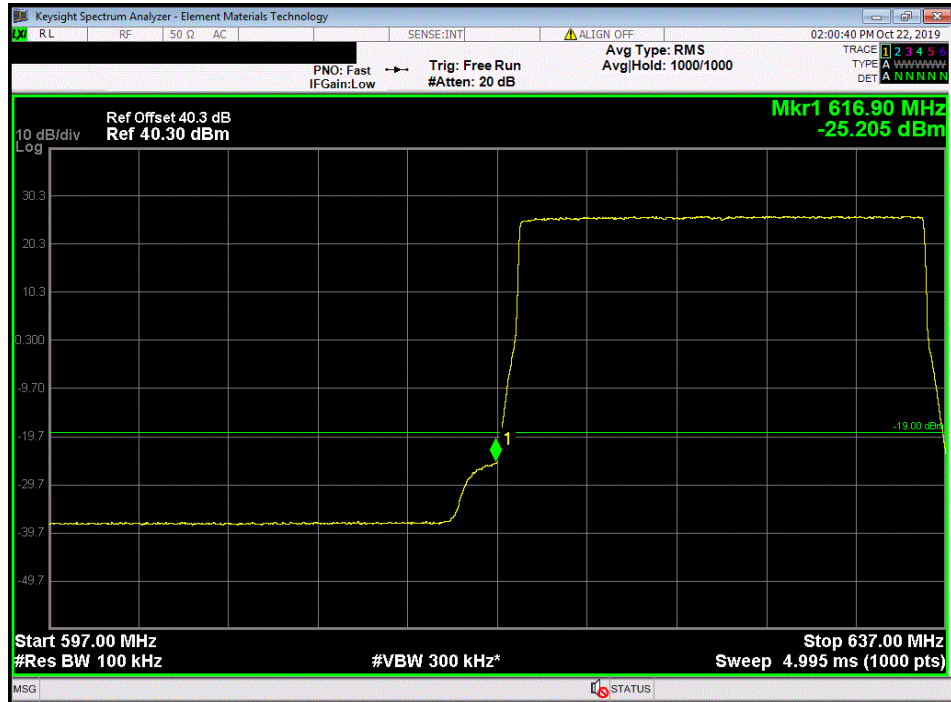


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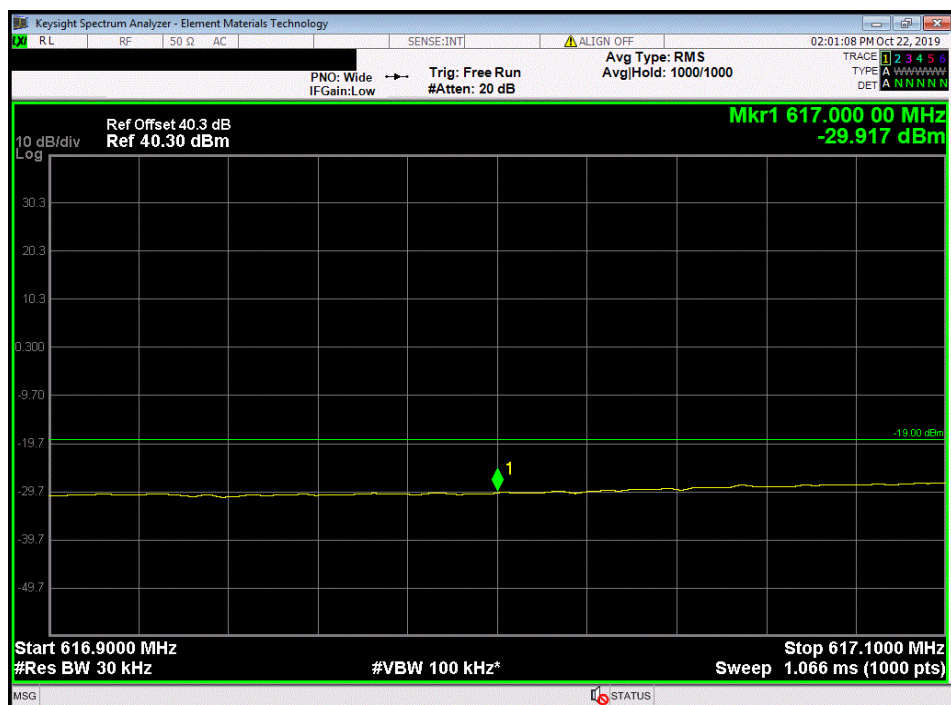


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Band 71, QPSK Modulation, LTE20 Bandwidth, Lower Band Edge, Measurement 1						
				Value (dBm)	Limit (dBm)	Result
				-25.205	-19	Pass



Band 71, QPSK Modulation, LTE20 Bandwidth, Lower Band Edge, Measurement 2						
				Value (dBm)	Limit (dBm)	Result
				-29.917	-19	Pass



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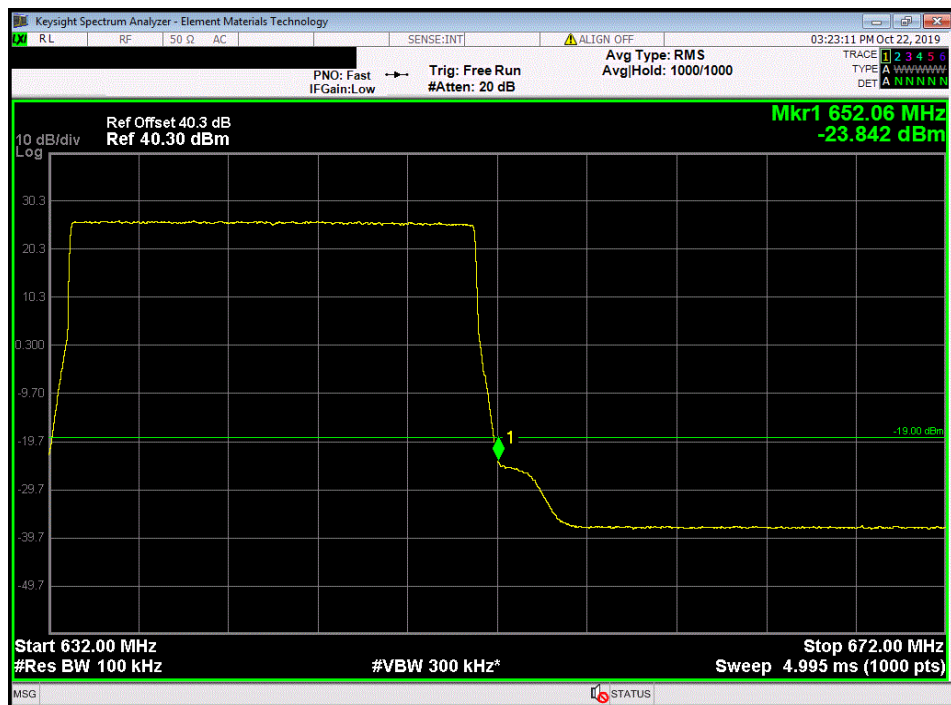


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Band 71, QPSK Modulation, LTE20 Bandwidth, Upper Band Edge, Measurement 1						
	Value	Limit	Result			
	(dBm)	(dBm)				
	-29.014	-19	Pass			



Band 71, QPSK Modulation, LTE20 Bandwidth, Upper Band Edge, Measurement 2						
	Value	Limit	Result			
	(dBm)	(dBm)				
	-23.842	-19	Pass			

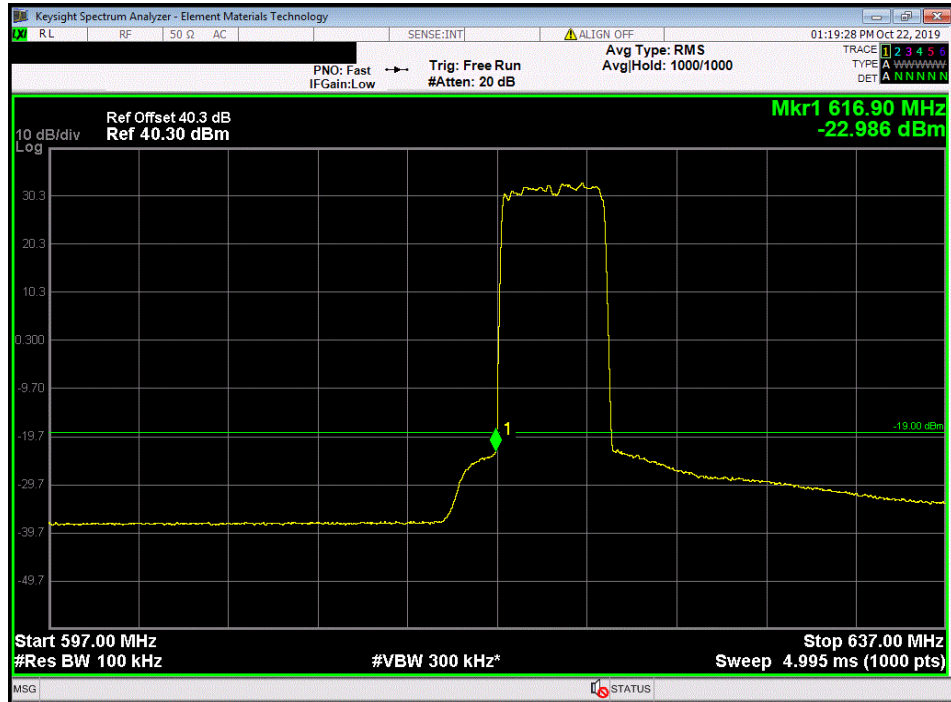


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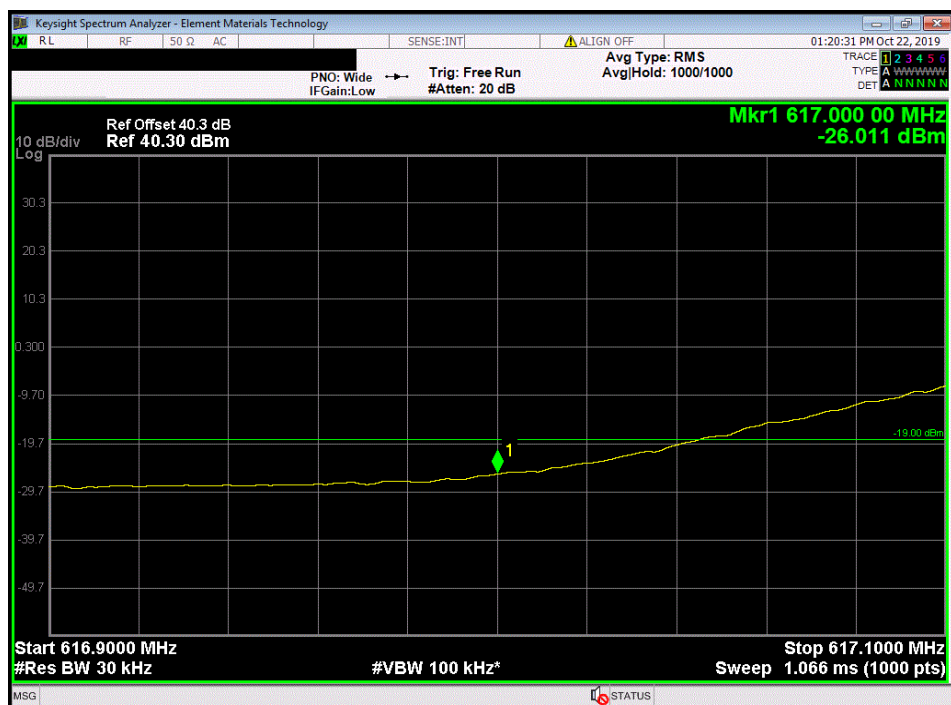


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Band 71, 16QAM Modulation, LTE5 Bandwidth, Lower Band Edge, Measurement 1						
				Value (dBm)	Limit (dBm)	Result
				-22.986	-19	Pass



Band 71, 16QAM Modulation, LTE5 Bandwidth, Lower Band Edge, Measurement 2						
				Value (dBm)	Limit (dBm)	Result
				-26.011	-19	Pass

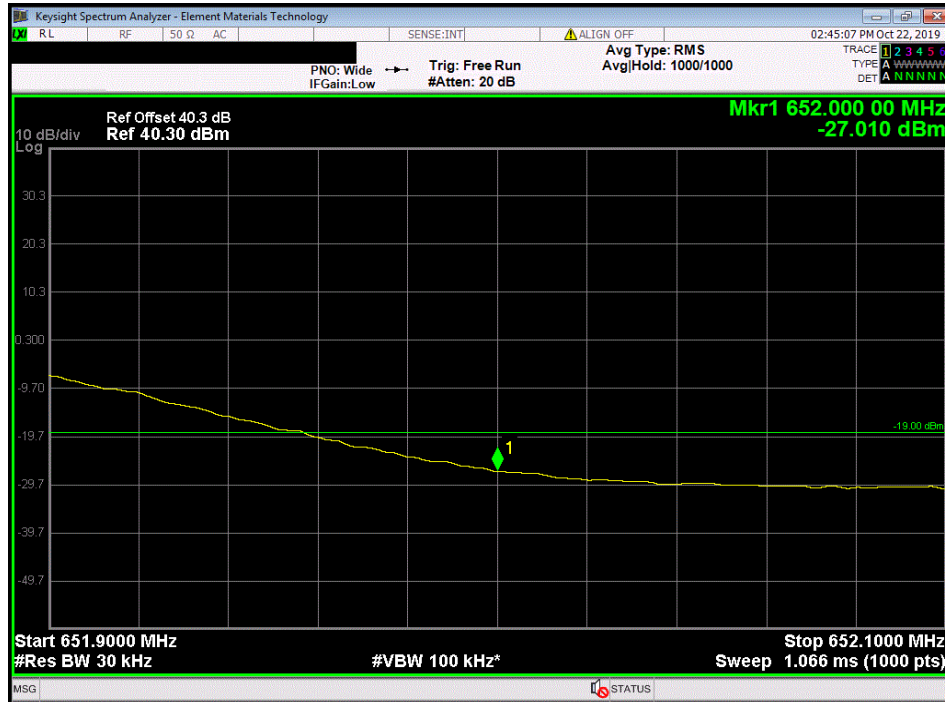


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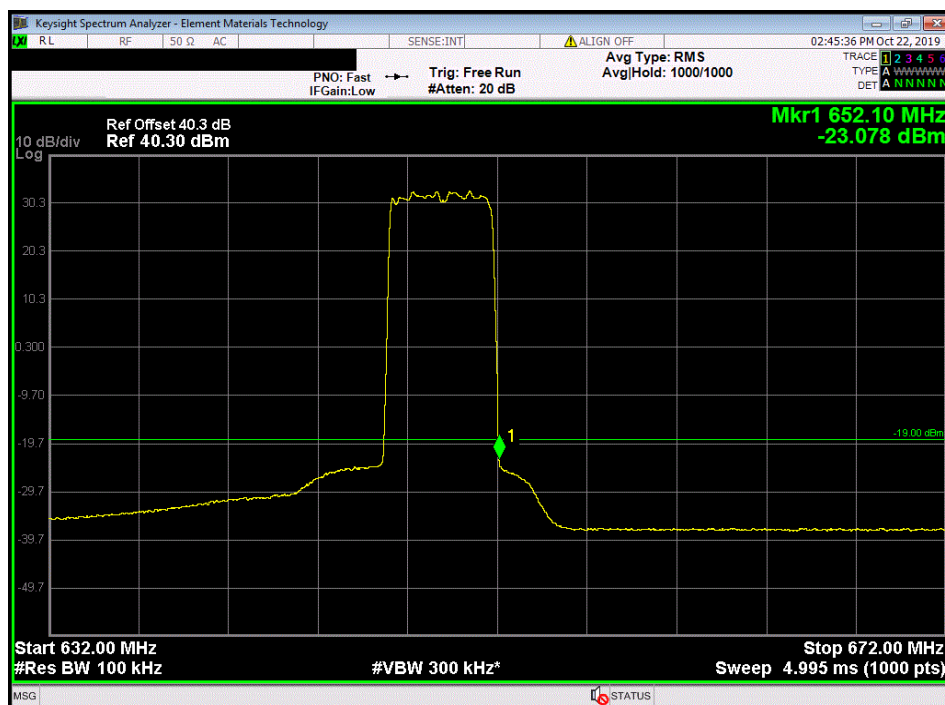


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Band 71, 16QAM Modulation, LTE5 Bandwidth, Upper Band Edge, Measurement 1						
	Value (dBm)	Limit (dBm)	Result			
	-27.01	-19	Pass			



Band 71, 16QAM Modulation, LTE5 Bandwidth, Upper Band Edge, Measurement 2						
	Value (dBm)	Limit (dBm)	Result			
	-23.078	-19	Pass			

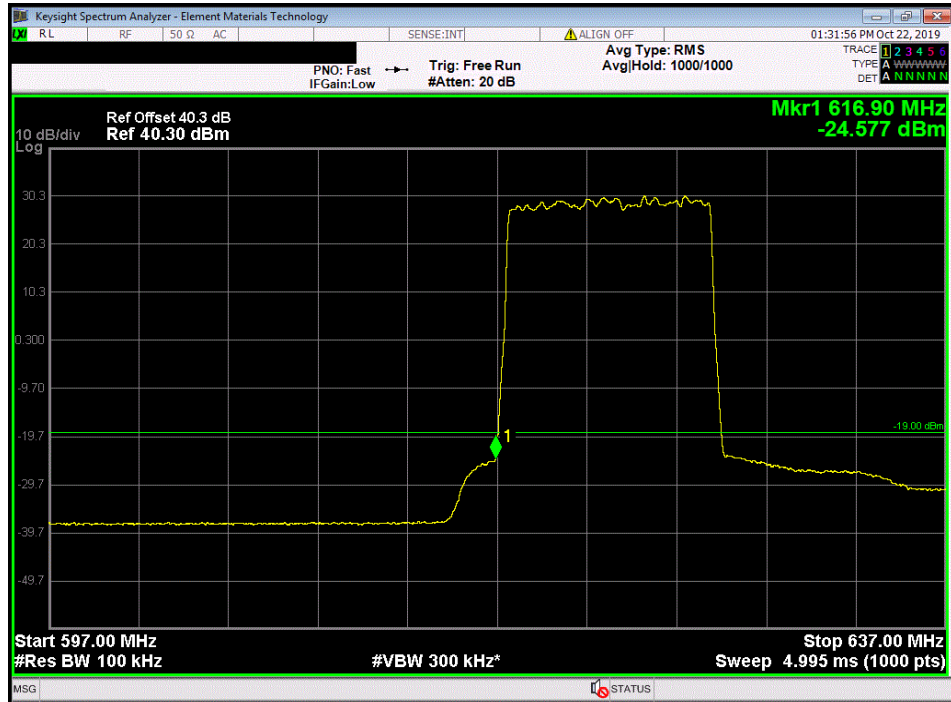


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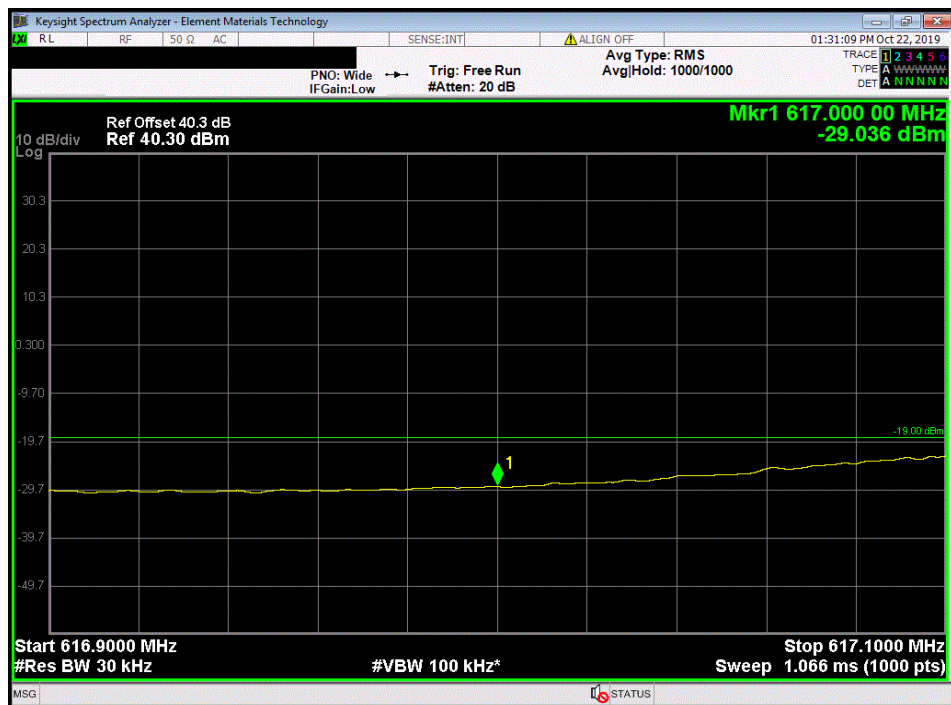


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Band 71, 16QAM Modulation, LTE10 Bandwidth, Lower Band Edge, Measurement 1						
				Value (dBm)	Limit (dBm)	Result
				-24.577	-19	Pass



Band 71, 16QAM Modulation, LTE10 Bandwidth, Lower Band Edge, Measurement 2						
				Value (dBm)	Limit (dBm)	Result
				-29.036	-19	Pass



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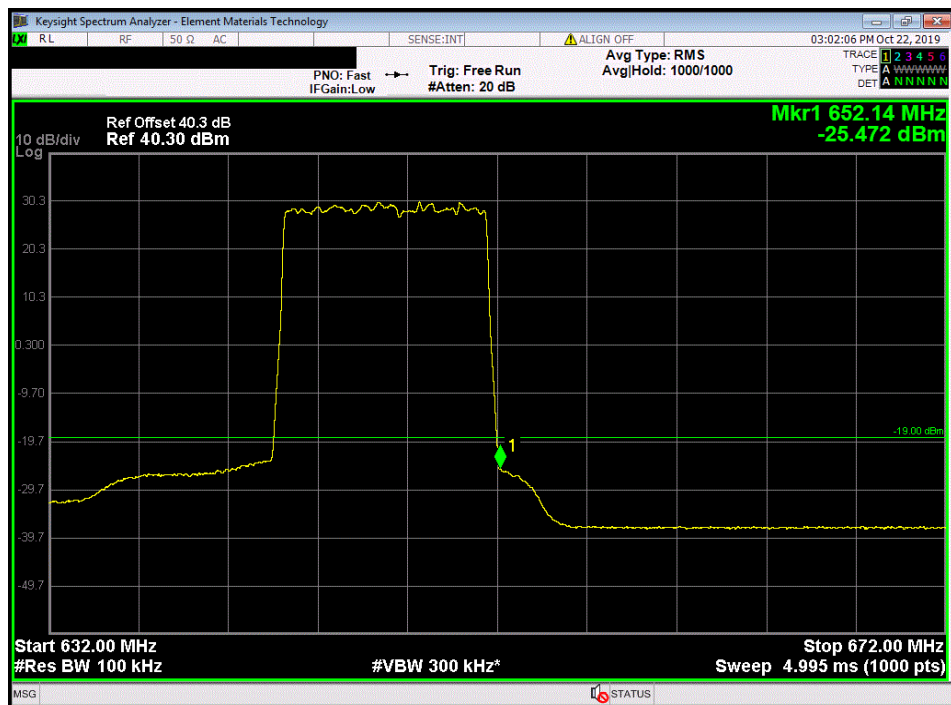


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Band 71, 16QAM Modulation, LTE10 Bandwidth, Upper Band Edge, Measurement 1						
	Value	Limit	Result			
	(dBm)	(dBm)				
	-29.38	-19	Pass			



Band 71, 16QAM Modulation, LTE10 Bandwidth, Upper Band Edge, Measurement 2						
	Value	Limit	Result			
	(dBm)	(dBm)				
	-25.472	-19	Pass			

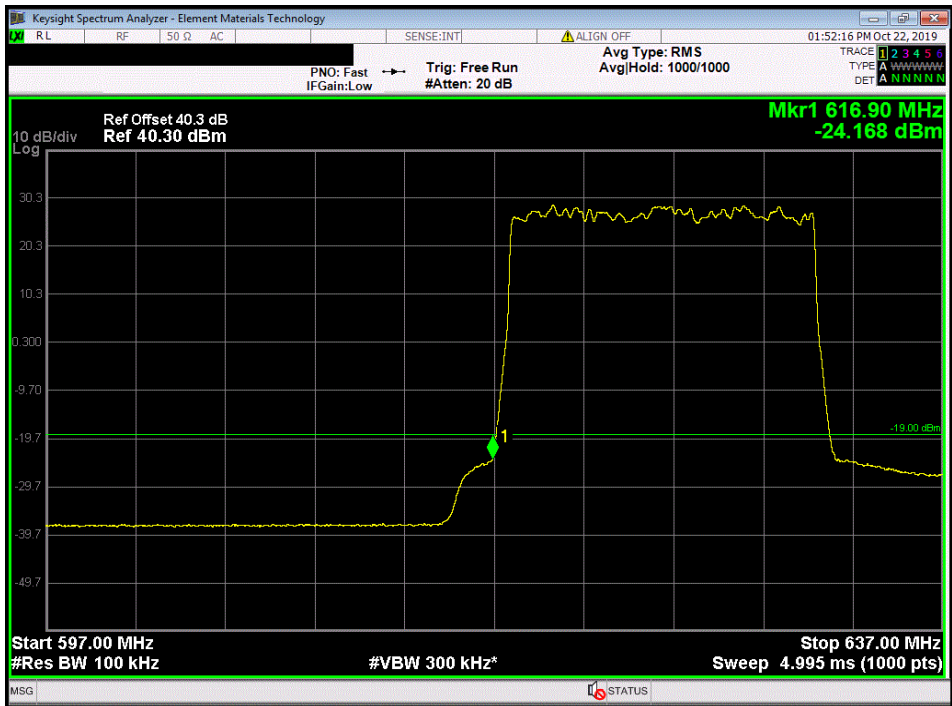


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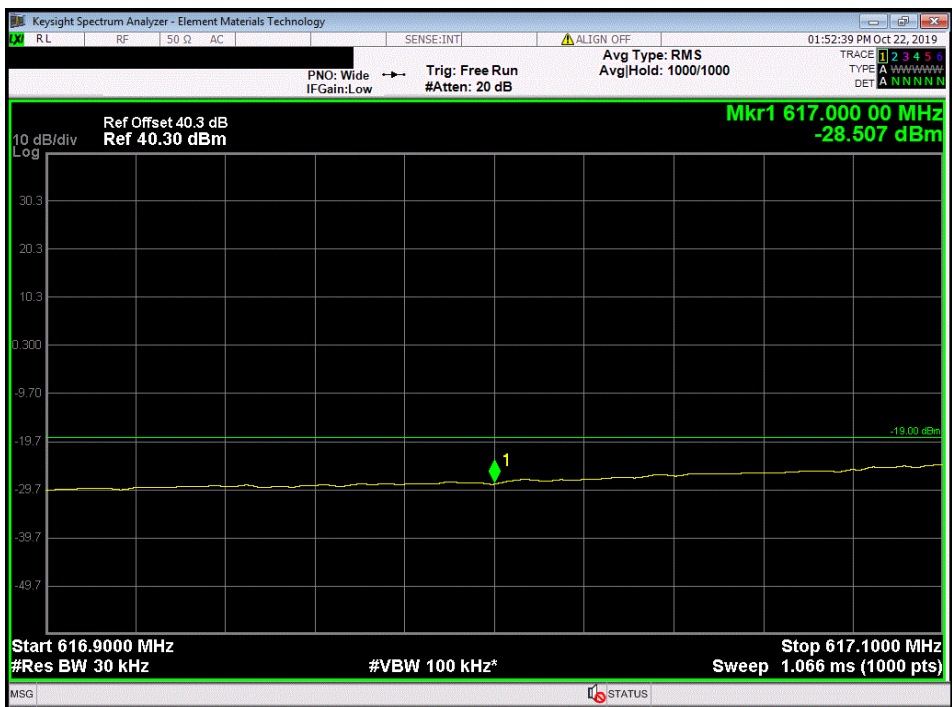


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Band 71, 16QAM Modulation, LTE15 Bandwidth, Lower Band Edge, Measurement 1						
	Value	Limit	Result			
	(dBm)	(dBm)				
	-24.168	-19	Pass			



Band 71, 16QAM Modulation, LTE15 Bandwidth, Lower Band Edge, Measurement 2						
	Value	Limit	Result			
	(dBm)	(dBm)				
	-28.507	-19	Pass			



BAND EDGE COMPLIANCE

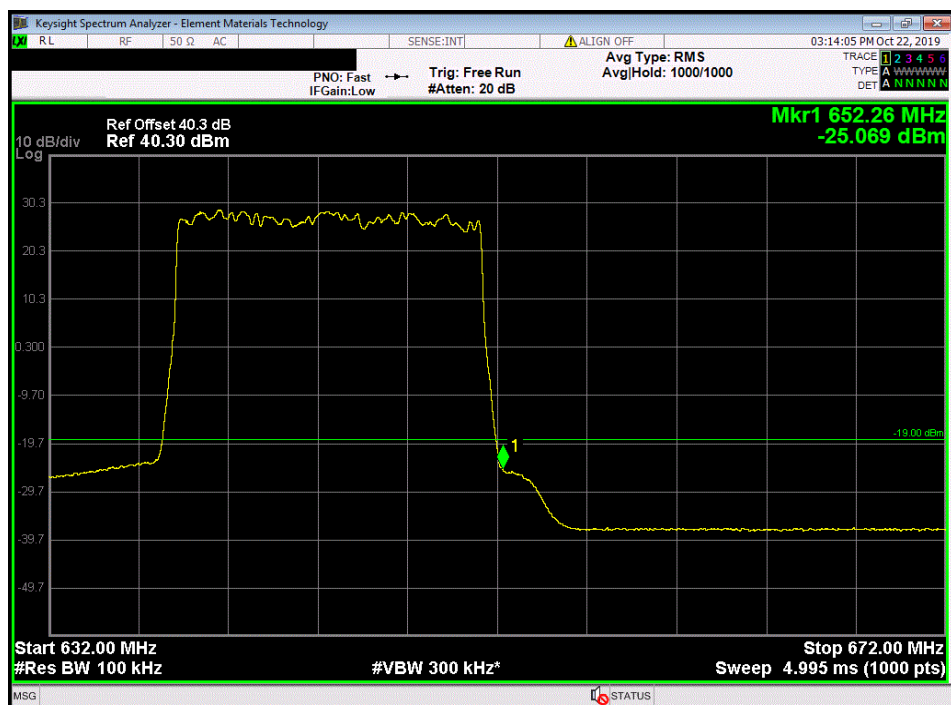


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Band 71, 16QAM Modulation, LTE15 Bandwidth, Upper Band Edge, Measurement 1						
	Value	Limit	Result			
	(dBm)	(dBm)				
	-27.329	-19	Pass			



Band 71, 16QAM Modulation, LTE15 Bandwidth, Upper Band Edge, Measurement 2						
	Value	Limit	Result			
	(dBm)	(dBm)				
	-25.069	-19	Pass			

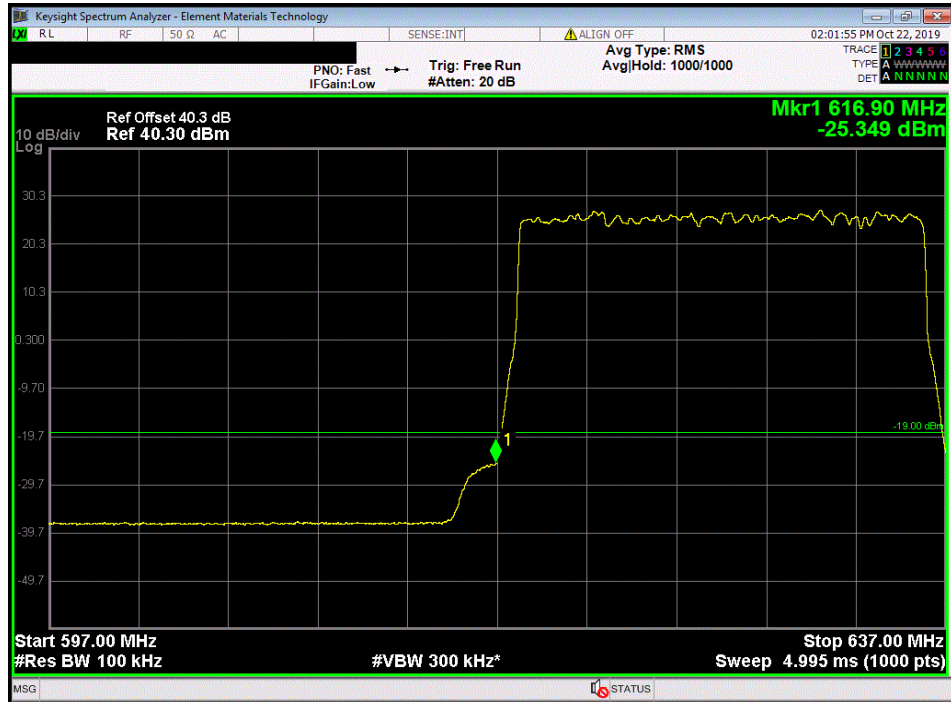


BAND EDGE COMPLIANCE

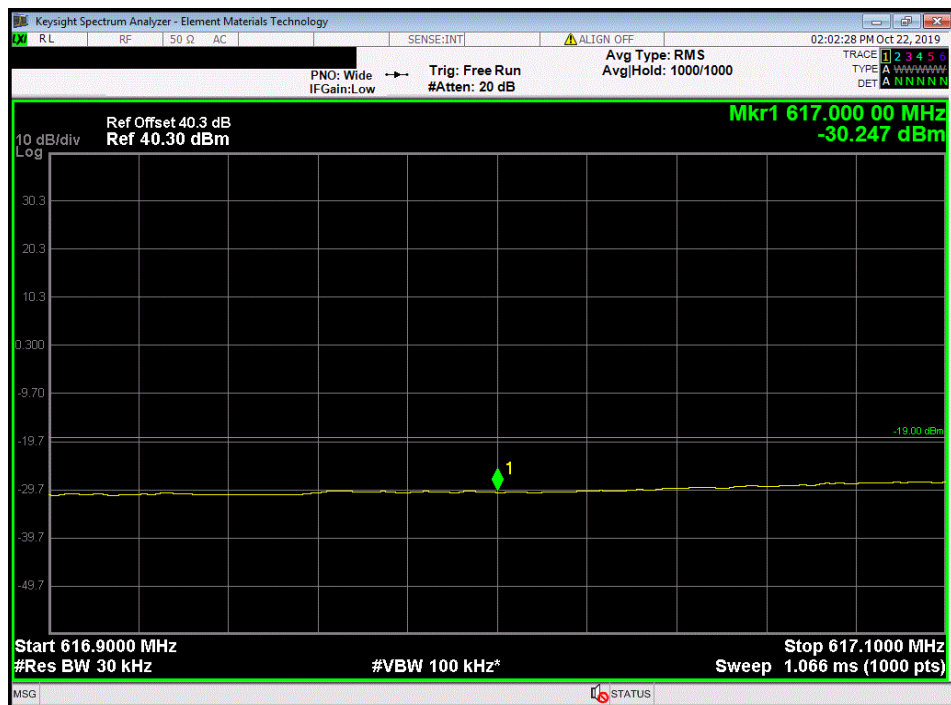


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Band 71, 16QAM Modulation, LTE20 Bandwidth, Lower Band Edge, Measurement 1						
				Value (dBm)	Limit (dBm)	Result
				-25.349	-19	Pass



Band 71, 16QAM Modulation, LTE20 Bandwidth, Lower Band Edge, Measurement 2						
				Value (dBm)	Limit (dBm)	Result
				-30.247	-19	Pass



BAND EDGE COMPLIANCE

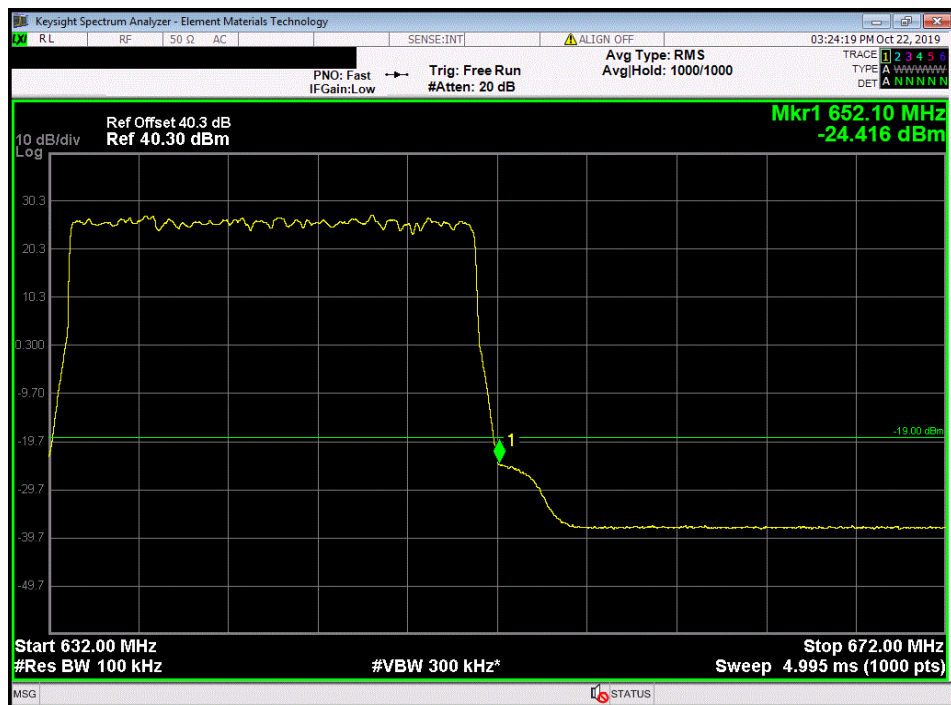


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Band 71, 16QAM Modulation, LTE20 Bandwidth, Upper Band Edge, Measurement 1						
	Value (dBm)	Limit (dBm)	Result			
	-28.978	-19	Pass			



Band 71, 16QAM Modulation, LTE20 Bandwidth, Upper Band Edge, Measurement 2						
	Value (dBm)	Limit (dBm)	Result			
	-24.416	-19	Pass			

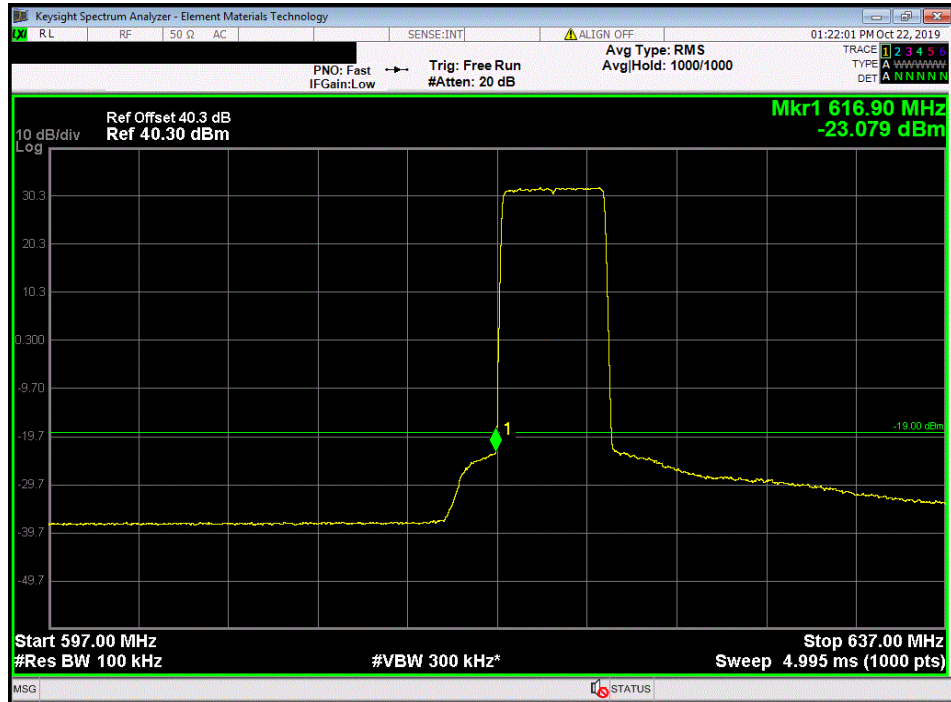


BAND EDGE COMPLIANCE

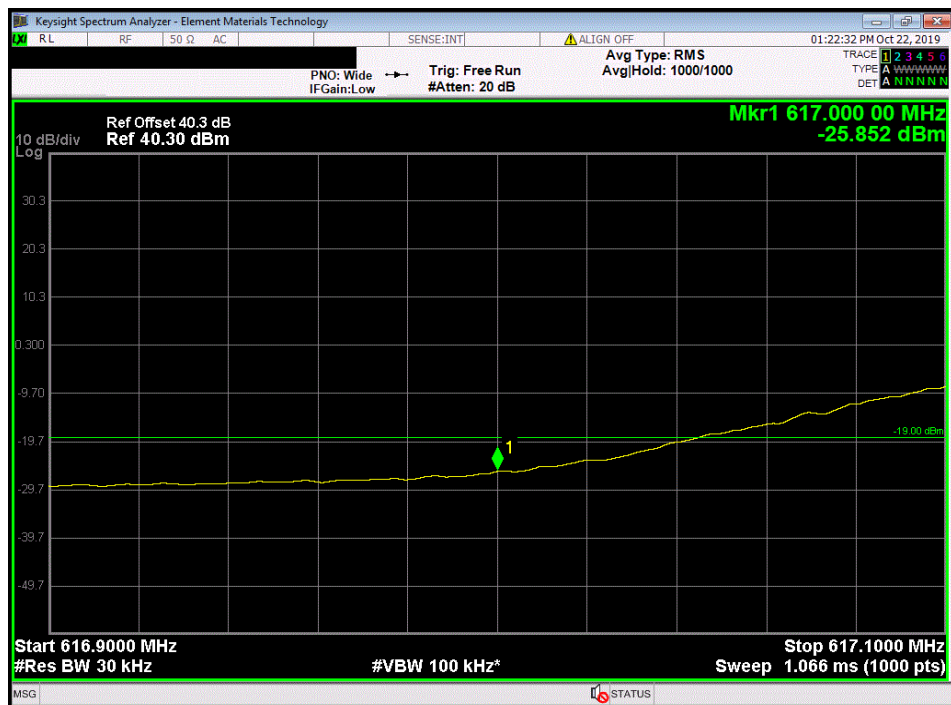


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Band 71, 64QAM Modulation, LTE5 Bandwidth, Lower Band Edge, Measurement 1						
				Value (dBm)	Limit (dBm)	Result
				-23.079	-19	Pass



Band 71, 64QAM Modulation, LTE5 Bandwidth, Lower Band Edge, Measurement 2						
				Value (dBm)	Limit (dBm)	Result
				-25.852	-19	Pass



BAND EDGE COMPLIANCE

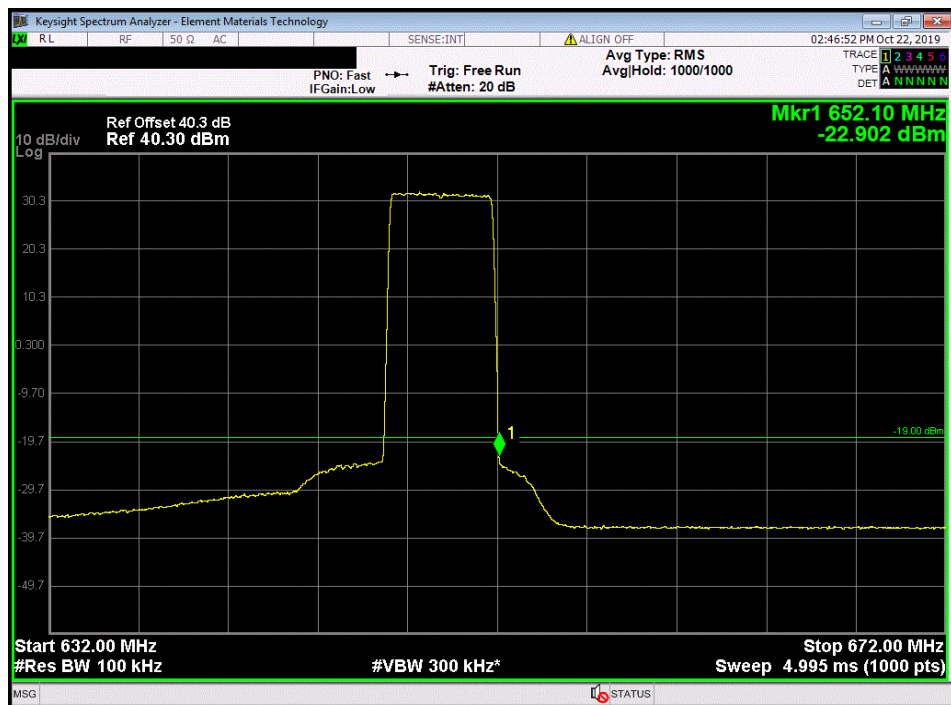


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Band 71, 64QAM Modulation, LTE5 Bandwidth, Upper Band Edge, Measurement 1						
				Value (dBm)	Limit (dBm)	Result
				-26.077	-19	Pass



Band 71, 64QAM Modulation, LTE5 Bandwidth, Upper Band Edge, Measurement 2						
				Value (dBm)	Limit (dBm)	Result
				-22.902	-19	Pass

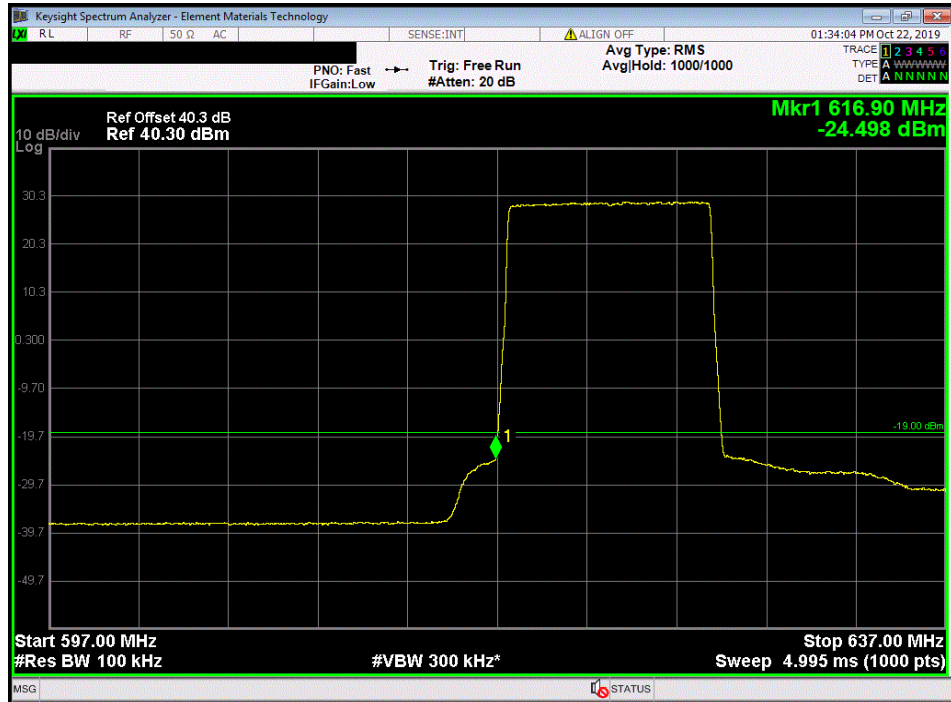


BAND EDGE COMPLIANCE

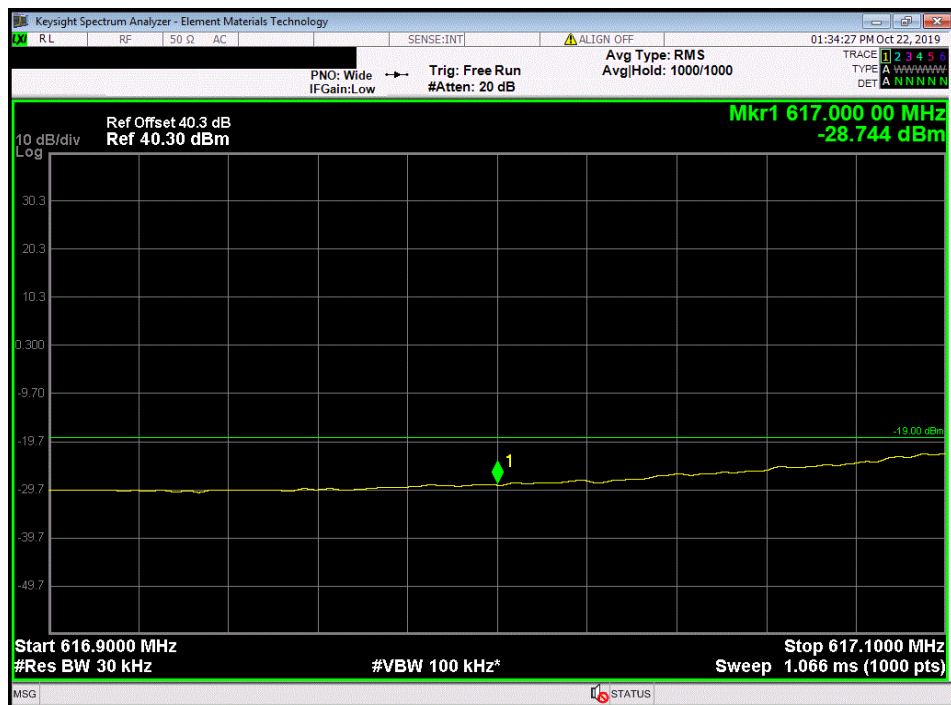


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Band 71, 64QAM Modulation, LTE10 Bandwidth, Lower Band Edge, Measurement 1						
				Value (dBm)	Limit (dBm)	Result
				-24.498	-19	Pass



Band 71, 64QAM Modulation, LTE10 Bandwidth, Lower Band Edge, Measurement 2						
				Value (dBm)	Limit (dBm)	Result
				-28.744	-19	Pass



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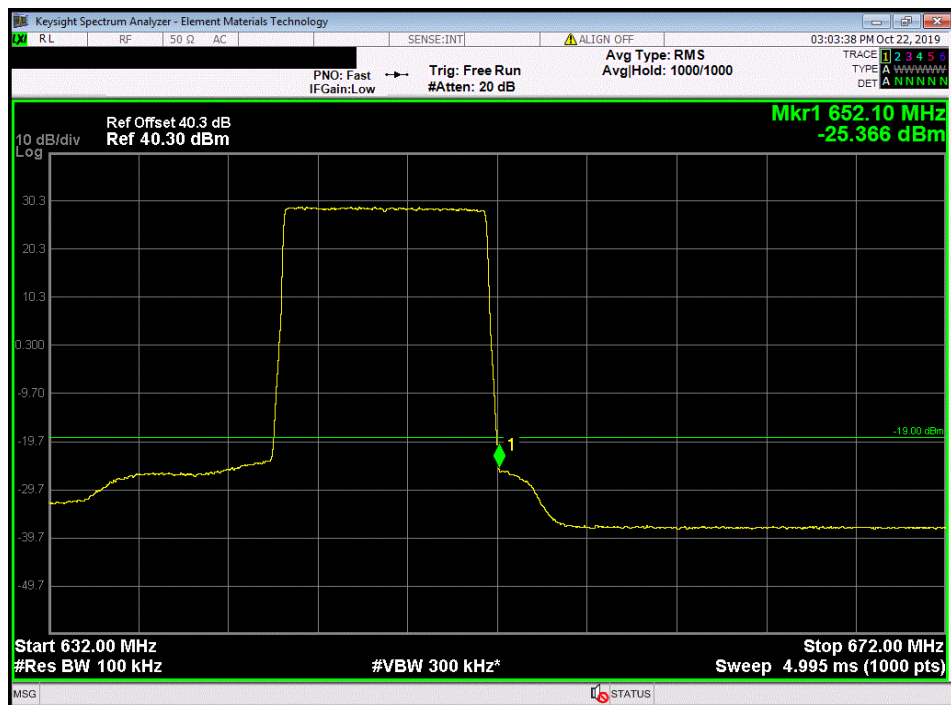


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Band 71, 64QAM Modulation, LTE10 Bandwidth, Upper Band Edge, Measurement 1						
	Value (dBm)	Limit (dBm)	Result			
	-28.178	-19	Pass			



Band 71, 64QAM Modulation, LTE10 Bandwidth, Upper Band Edge, Measurement 2						
	Value (dBm)	Limit (dBm)	Result			
	-25.366	-19	Pass			

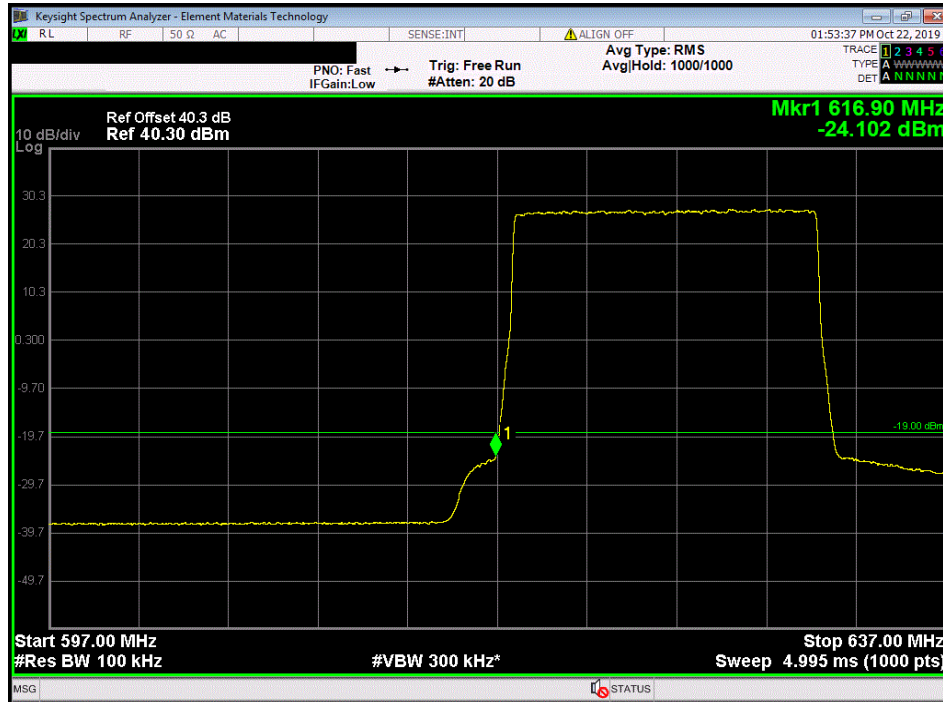


BAND EDGE COMPLIANCE

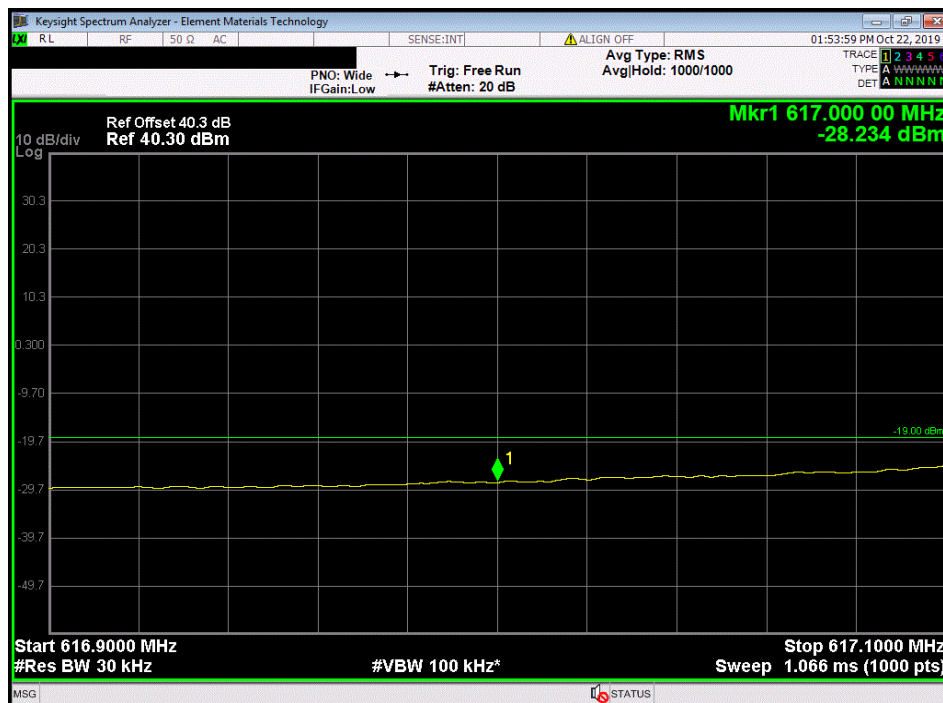


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Band 71, 64QAM Modulation, LTE15 Bandwidth, Lower Band Edge, Measurement 1						
				Value (dBm)	Limit (dBm)	Result
				-24.102	-19	Pass



Band 71, 64QAM Modulation, LTE15 Bandwidth, Lower Band Edge, Measurement 2						
				Value (dBm)	Limit (dBm)	Result
				-28.234	-19	Pass

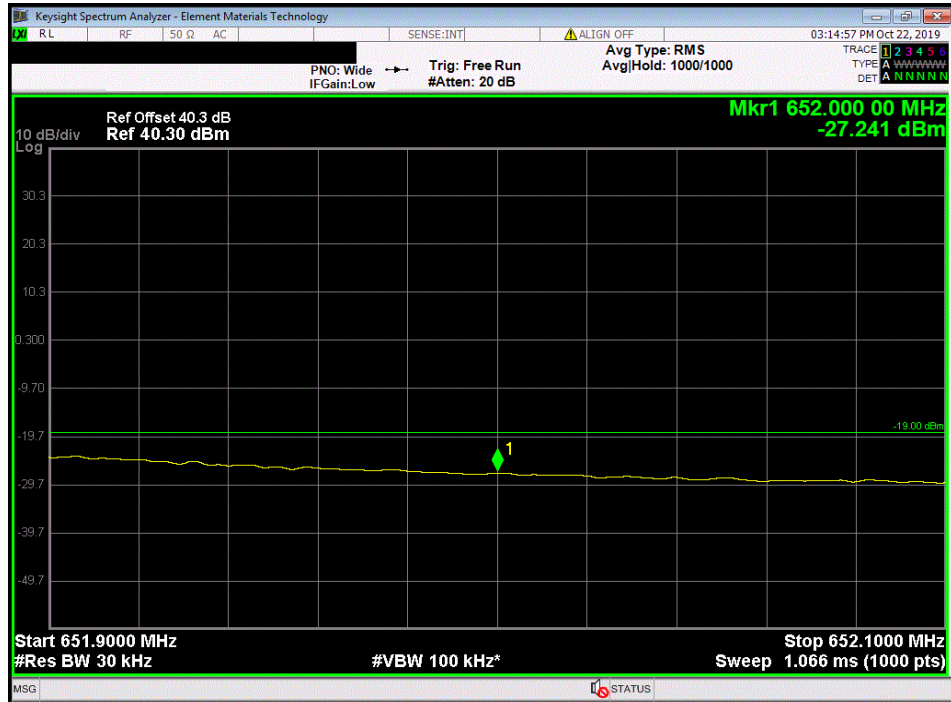


BAND EDGE COMPLIANCE



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Band 71, 64QAM Modulation, LTE15 Bandwidth, Upper Band Edge, Measurement 1						
	Value (dBm)	Limit (dBm)	Result			
	-27.241	-19	Pass			



Band 71, 64QAM Modulation, LTE15 Bandwidth, Upper Band Edge, Measurement 2						
	Value (dBm)	Limit (dBm)	Result			
	-24.049	-19	Pass			

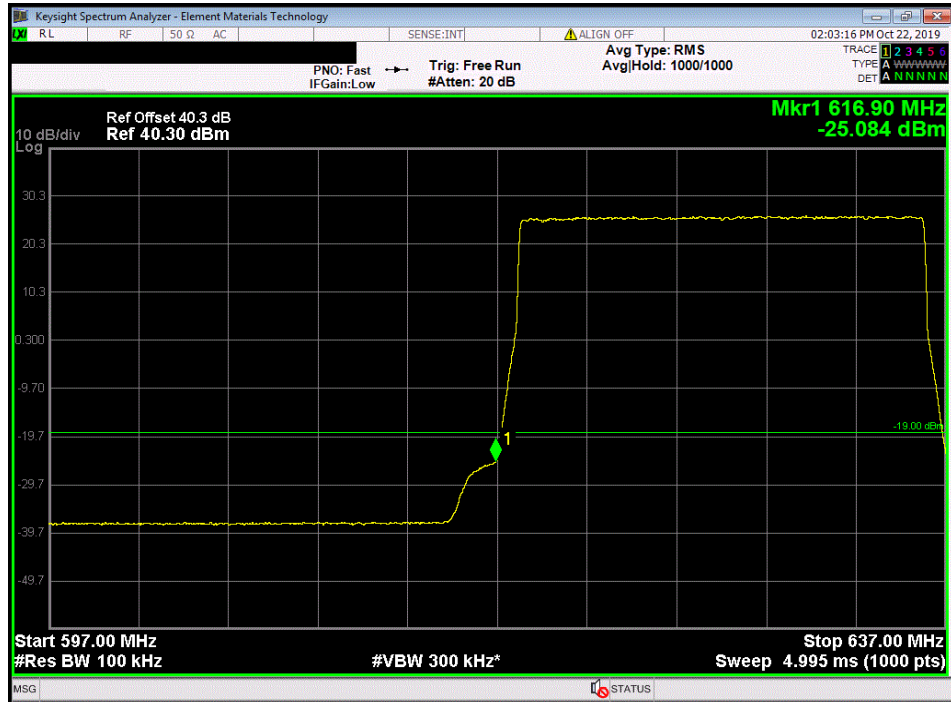


BAND EDGE COMPLIANCE

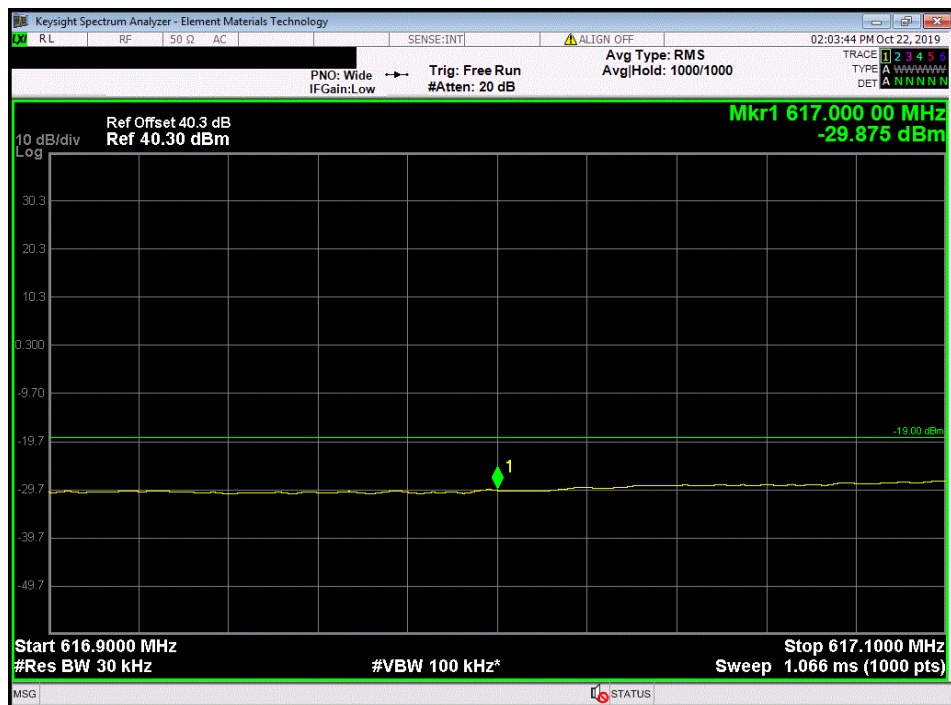


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Band 71, 64QAM Modulation, LTE20 Bandwidth, Lower Band Edge, Measurement 1						
				Value (dBm)	Limit (dBm)	Result
				-25.084	-19	Pass



Band 71, 64QAM Modulation, LTE20 Bandwidth, Lower Band Edge, Measurement 2						
				Value (dBm)	Limit (dBm)	Result
				-29.875	-19	Pass



BAND EDGE COMPLIANCE

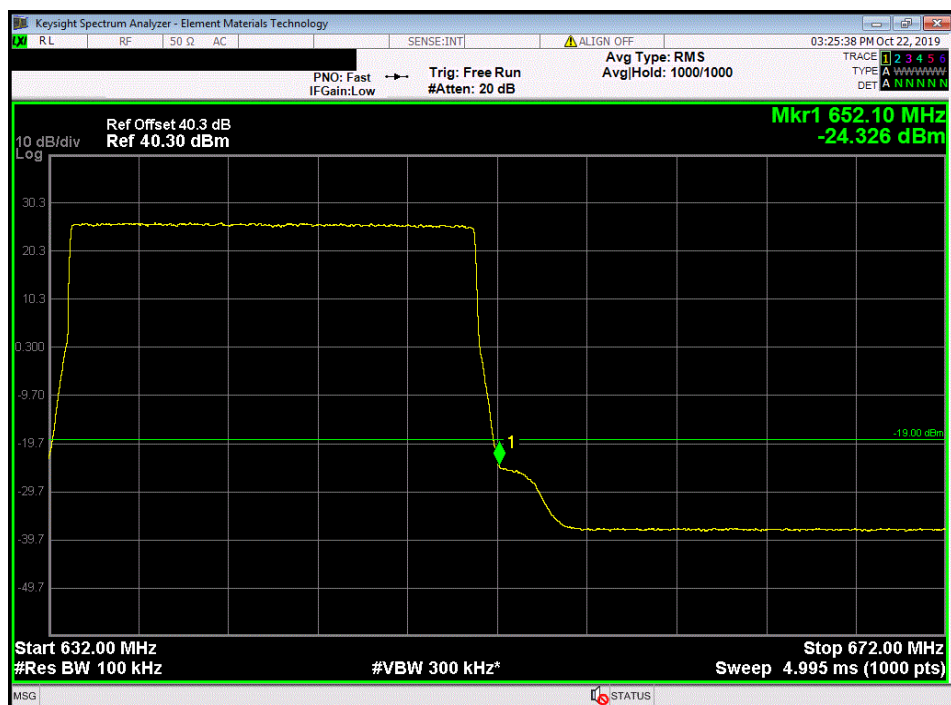


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Band 71, 64QAM Modulation, LTE20 Bandwidth, Upper Band Edge, Measurement 1						
	Value	Limit	Result			
	(dBm)	(dBm)				
	-29.271	-19	Pass			



Band 71, 64QAM Modulation, LTE20 Bandwidth, Upper Band Edge, Measurement 2						
	Value	Limit	Result			
	(dBm)	(dBm)				
	-24.326	-19	Pass			

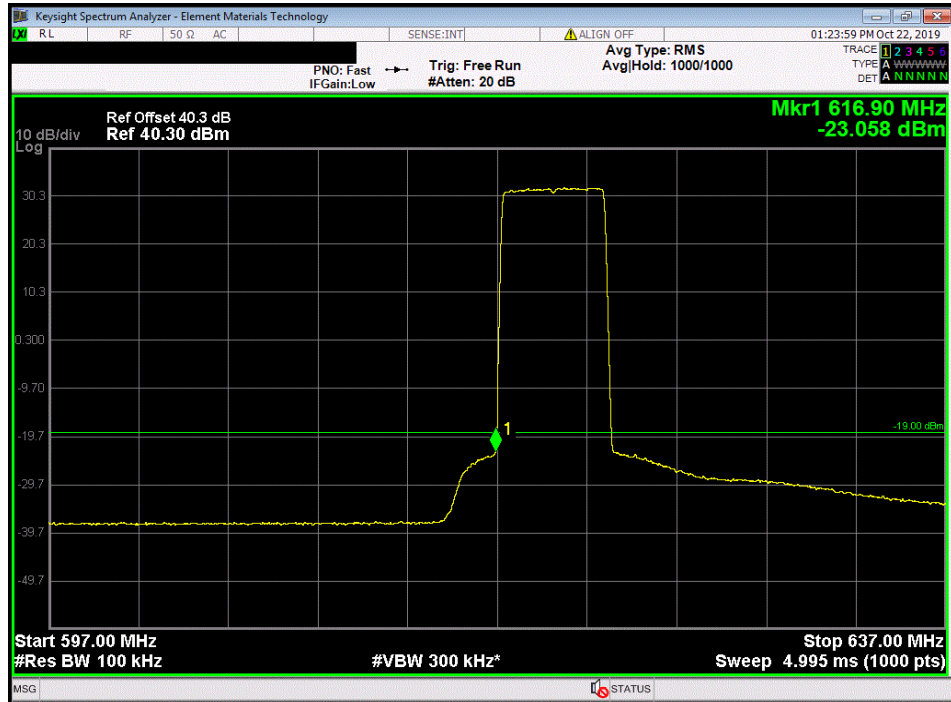


BAND EDGE COMPLIANCE

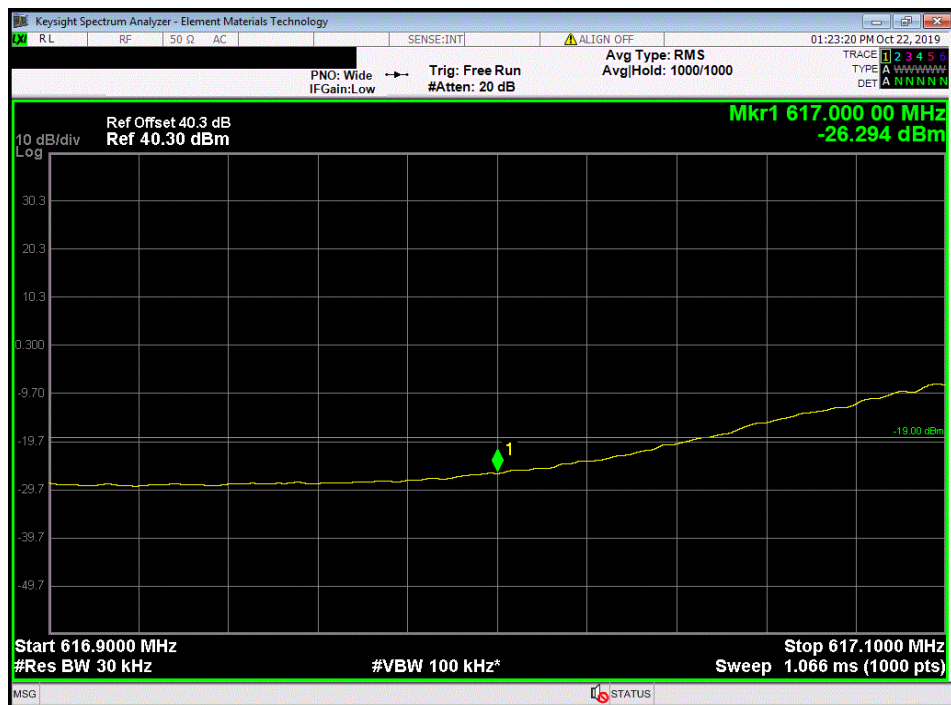


XMM 2019.09.05

Band 71, 256QAM Modulation, LTE5 Bandwidth, Lower Band Edge, Measurement 1						
				Value (dBm)	Limit (dBm)	Result
				-23.058	-19	Pass



Band 71, 256QAM Modulation, LTE5 Bandwidth, Lower Band Edge, Measurement 2						
				Value (dBm)	Limit (dBm)	Result
				-26.294	-19	Pass



BAND EDGE COMPLIANCE

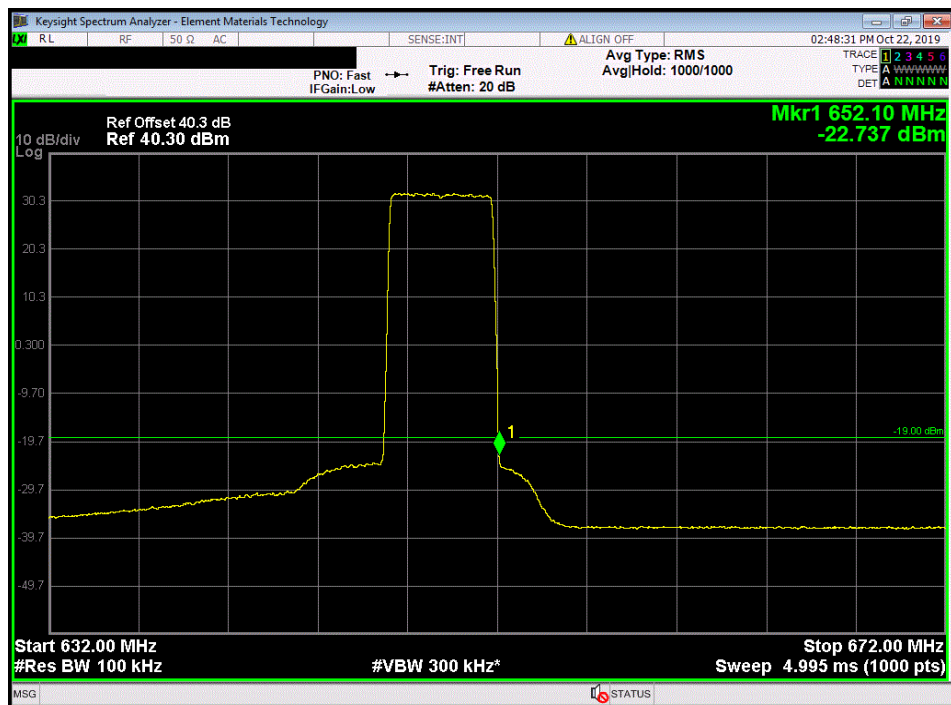


XMM 2019.09.05

Band 71, 256QAM Modulation, LTE5 Bandwidth, Upper Band Edge, Measurement 1						
				Value (dBm)	Limit (dBm)	Result
				-26.196	-19	Pass



Band 71, 256QAM Modulation, LTE5 Bandwidth, Upper Band Edge, Measurement 2						
				Value (dBm)	Limit (dBm)	Result
				-22.737	-19	Pass

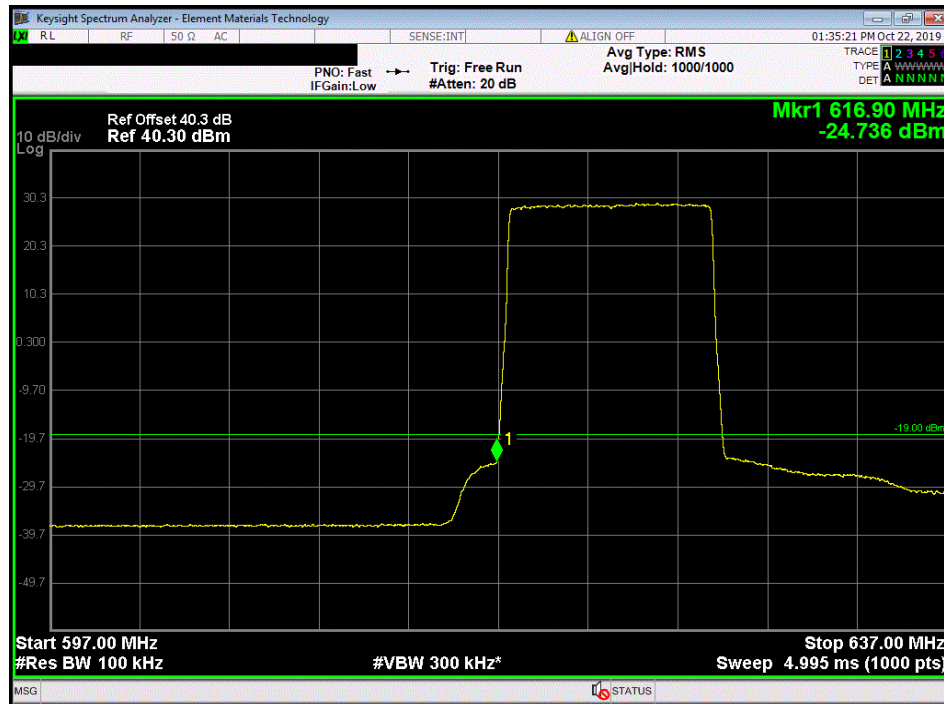


BAND EDGE COMPLIANCE

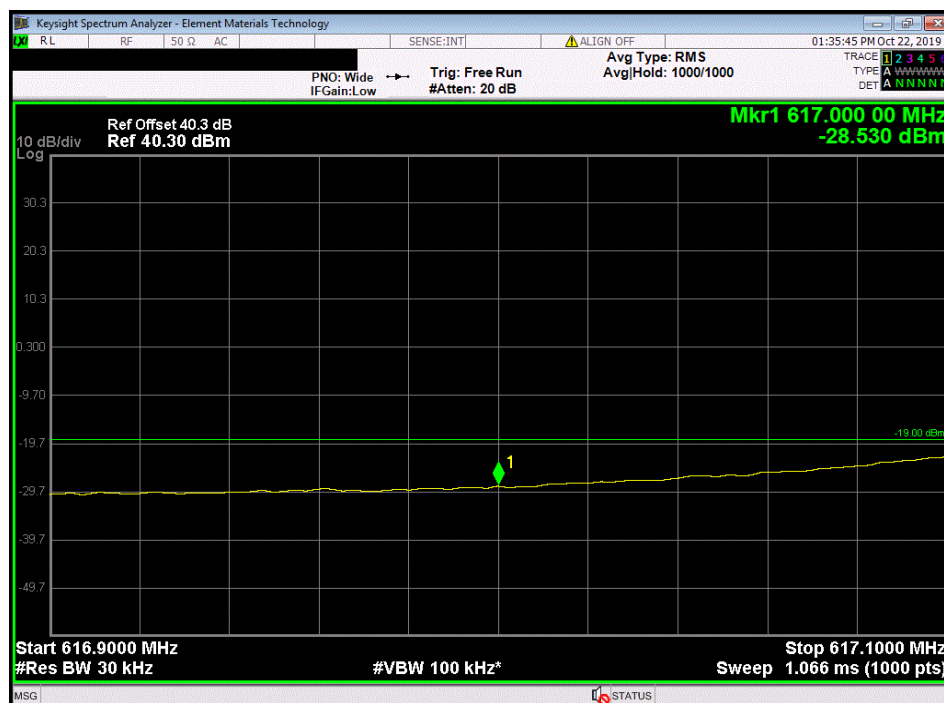


XMM 2019.09.05

Band 71, 256QAM Modulation, LTE10 Bandwidth, Lower Band Edge, Measurement 1						
				Value (dBm)	Limit (dBm)	Result
				-24.736	-19	Pass



Band 71, 256QAM Modulation, LTE10 Bandwidth, Lower Band Edge, Measurement 2						
				Value (dBm)	Limit (dBm)	Result
				-28.53	-19	Pass



BAND EDGE COMPLIANCE

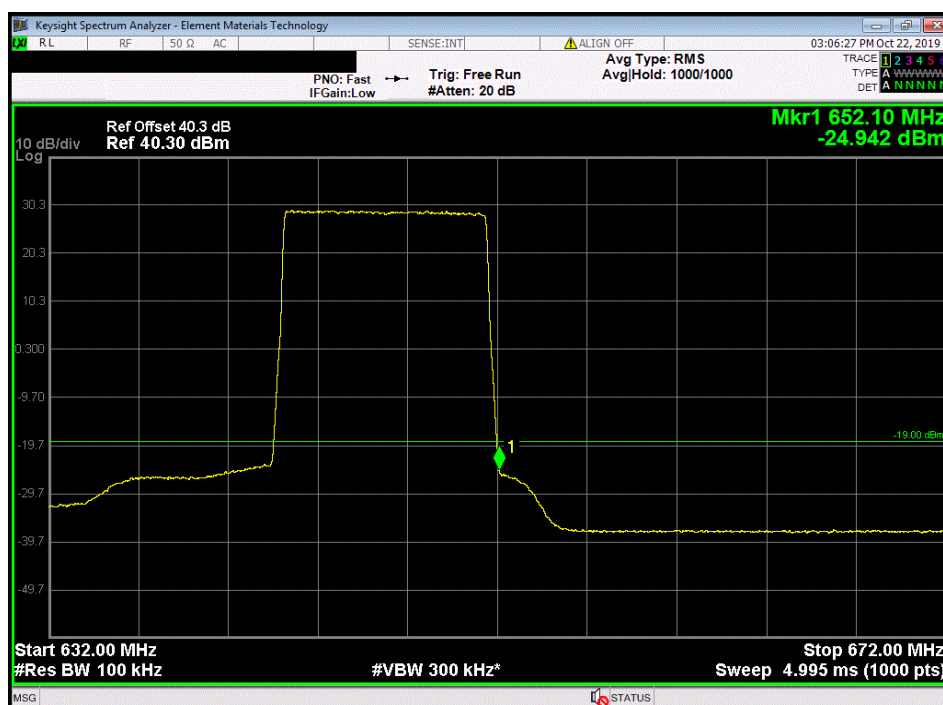


XMM 2019.09.05

Band 71, 256QAM Modulation, LTE10 Bandwidth, Upper Band Edge, Measurement 1						
	Value	Limit	Result			
	(dBm)	(dBm)				
	-28.243	-19	Pass			



Band 71, 256QAM Modulation, LTE10 Bandwidth, Upper Band Edge, Measurement 2						
	Value	Limit	Result			
	(dBm)	(dBm)				
	-24.942	-19	Pass			

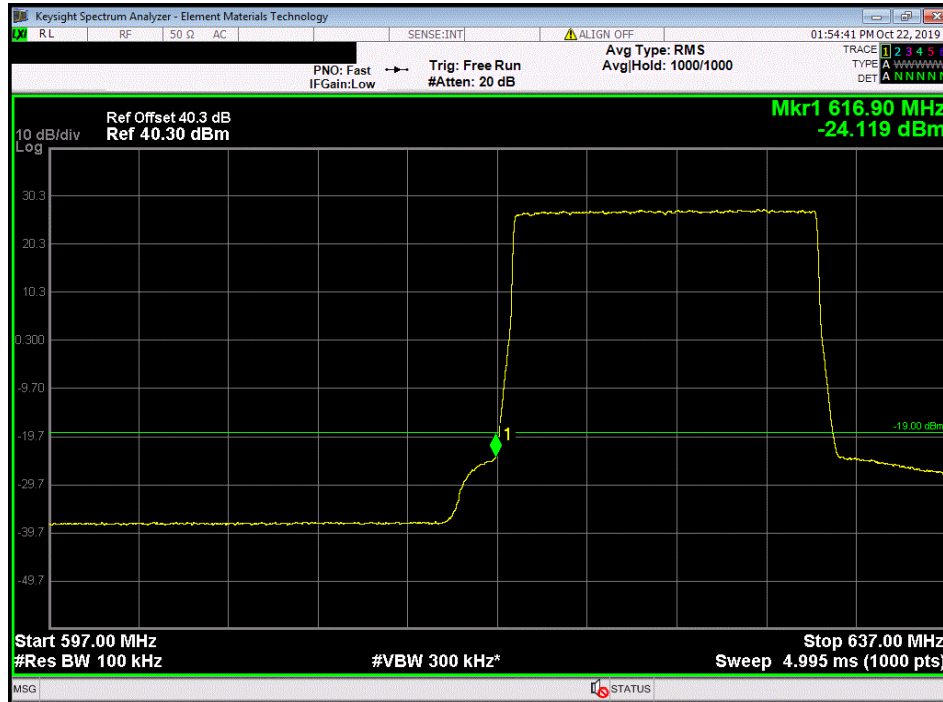


BAND EDGE COMPLIANCE

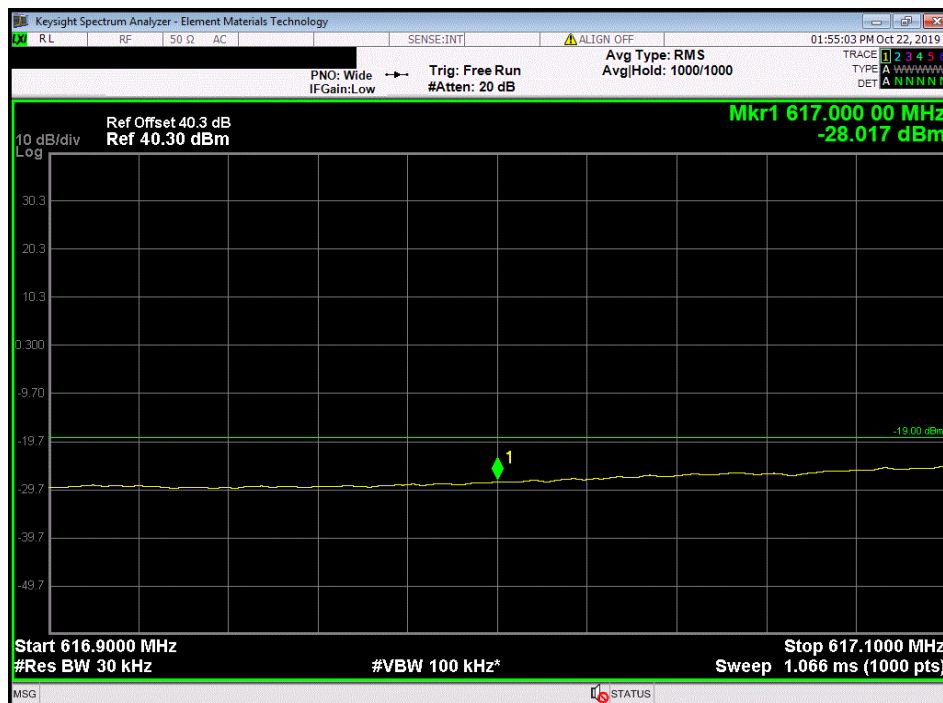


XMM 2019.09.05

Band 71, 256QAM Modulation, LTE15 Bandwidth, Lower Band Edge, Measurement 1						
	Value	Limit	Result			
	(dBm)	(dBm)				
	-24.119	-19	Pass			



Band 71, 256QAM Modulation, LTE15 Bandwidth, Lower Band Edge, Measurement 2						
	Value	Limit	Result			
	(dBm)	(dBm)				
	-28.017	-19	Pass			

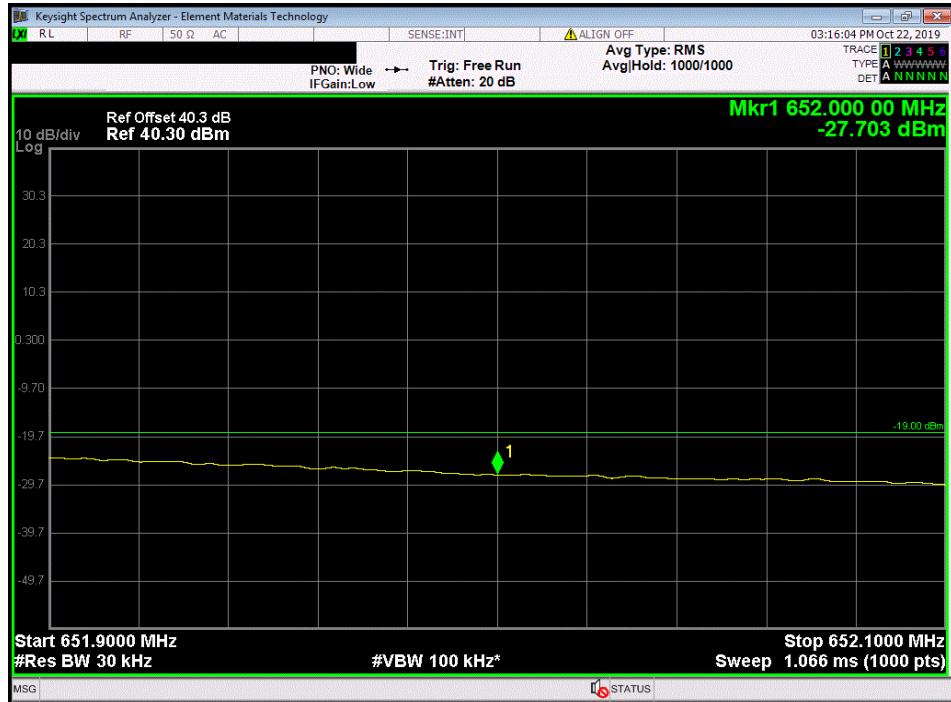


BAND EDGE COMPLIANCE

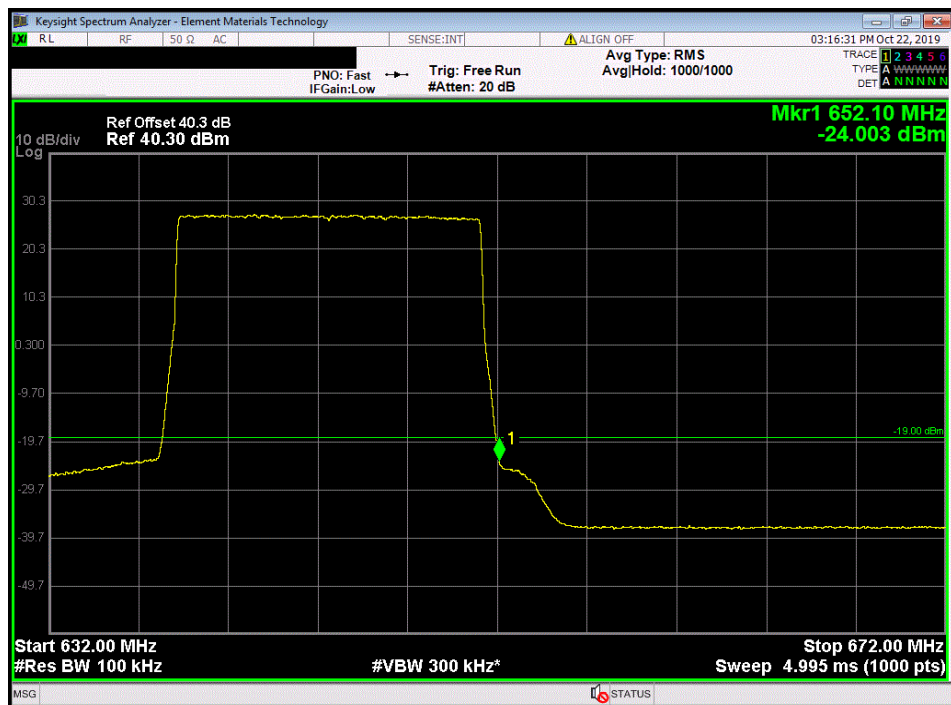


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Band 71, 256QAM Modulation, LTE15 Bandwidth, Upper Band Edge, Measurement 1						
	Value	Limit	Result			
	(dBm)	(dBm)				
	-27.703	-19	Pass			



Band 71, 256QAM Modulation, LTE15 Bandwidth, Upper Band Edge, Measurement 2						
	Value	Limit	Result			
	(dBm)	(dBm)				
	-24.003	-19	Pass			



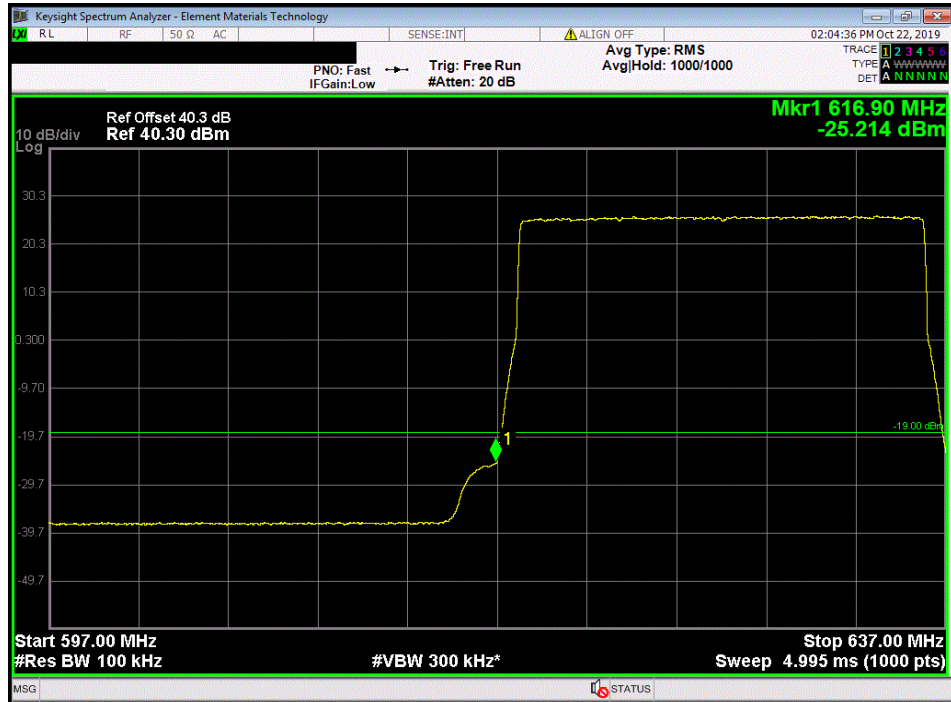
BAND EDGE COMPLIANCE



XMM 2019.09.05

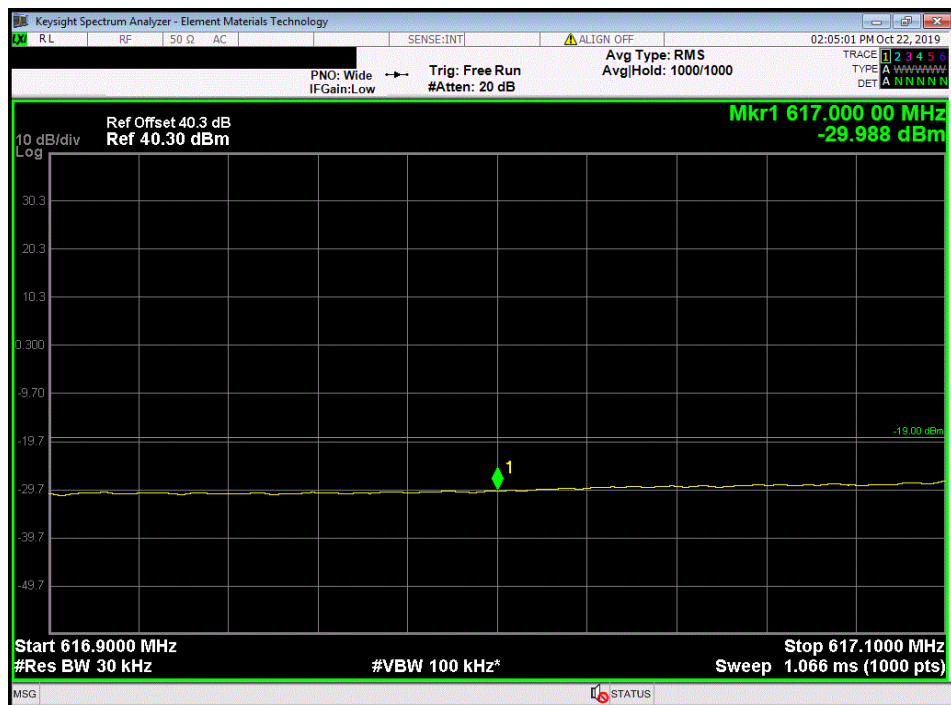
Band 71, 256QAM Modulation, LTE20 Bandwidth, Lower Band Edge, Measurement 1

				Value (dBm)	Limit (dBm)	Result
				-25.214	-19	Pass



Band 71, 256QAM Modulation, LTE20 Bandwidth, Lower Band Edge, Measurement 2

				Value (dBm)	Limit (dBm)	Result
				-29.988	-19	Pass

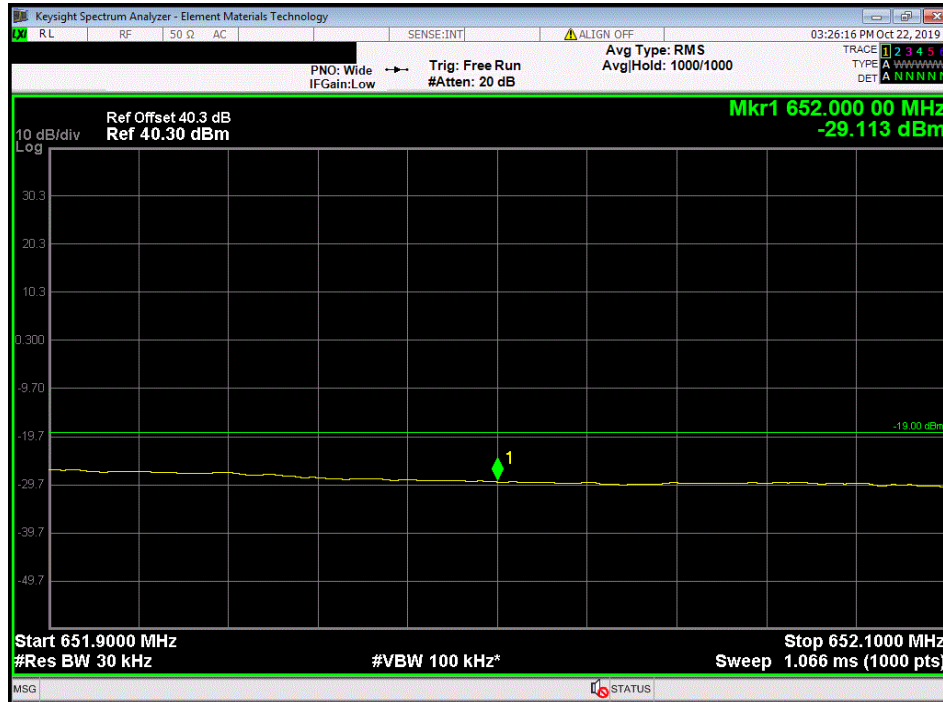


BAND EDGE COMPLIANCE

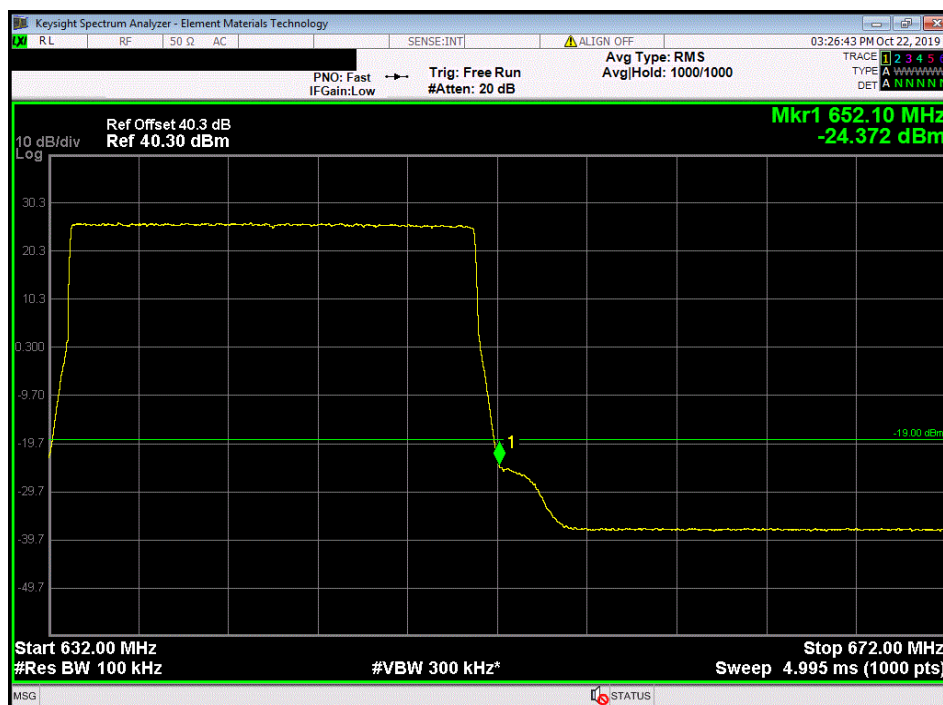


XMM 2019.09.05

Band 71, 256QAM Modulation, LTE20 Bandwidth, Upper Band Edge, Measurement 1						
	Value	Limit	Result			
	(dBm)	(dBm)				
	-29.113	-19	Pass			



Band 71, 256QAM Modulation, LTE20 Bandwidth, Upper Band Edge, Measurement 2						
	Value	Limit	Result			
	(dBm)	(dBm)				
	-24.372	-19	Pass			



BAND EDGE COMPLIANCE



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

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.

BAND EDGE COMPLIANCE



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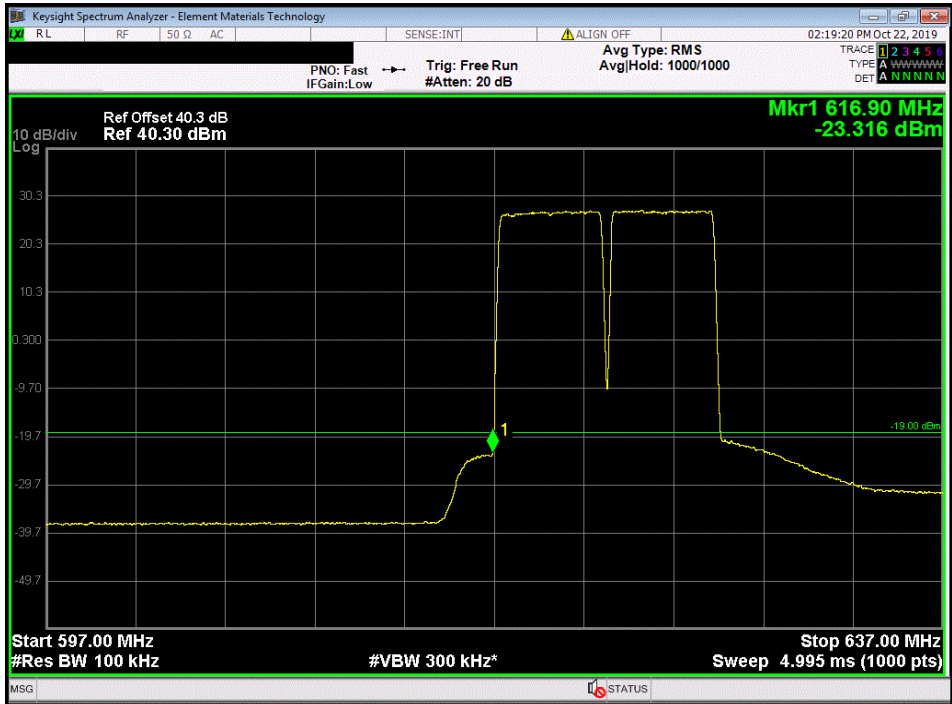
EUT: AHBOA Remote Radio Head (RRH)		Work Order: NOKI0003	
Serial Number: BL1934X1001		Date: 28-Oct-19	
Customer: Nokia Solutions and Networks		Temperature: 22.8 °C	
Attendees: John Rattanaovong, Mitchell Hill		Humidity: 49.8% RH	
Project: None		Barometric Pres.: 1019 mbar	
Tested by: Jonathan Kiefer		Power: 48VDC	Job Site: TX03
TEST SPECIFICATIONS		Test Method	
FCC 27:2019		ANSI C63.26:2015	
COMMENTS			
Tested on highest power antenna port (Port 1). EUT is operated at 100% duty cycle. Band Edge measurements were made for a Band 71 multicarrier test case on four modulation types (QPSK, 16QAM, 64QAM, 256QAM). Three Band 71 LTE5 carriers (based upon KDB 971168 D03v01) were enabled using two carriers (with minimum spacing between carrier frequencies) at the Band 71 lower band edge [619.5MHz and 624.5MHz] and a third carrier with maximum spacing between the other two carrier frequencies [649.5MHz] at the Band 71 upper band edge.			
DEVIATIONS FROM TEST STANDARD			
None			
Configuration #	1	Signature <i>Jonathan Kiefer</i>	
		Value (dBm)	Limit (dBm) Result
Band 71			
QPSK Modulation			
Band 71 Multicarrier			
Lower Band Edge			
	Measurement 1	-23.316	-19 Pass
	Measurement 2	-26.487	-19 Pass
Upper Band Edge			
	Measurement 1	-26.769	-19 Pass
	Measurement 2	-23.895	-19 Pass
16QAM Modulation			
Band 71 Multicarrier			
Lower Band Edge			
	Measurement 1	-23.474	-19 Pass
	Measurement 2	-26.647	-19 Pass
Upper Band Edge			
	Measurement 1	-26.753	-19 Pass
	Measurement 2	-23.934	-19 Pass
64QAM Modulation			
Band 71 Multicarrier			
Lower Band Edge			
	Measurement 1	-23.296	-19 Pass
	Measurement 2	-26.674	-19 Pass
Upper Band Edge			
	Measurement 1	-26.818	-19 Pass
	Measurement 2	-23.92	-19 Pass
256QAM Modulation			
Band 71 Multicarrier			
Lower Band Edge			
	Measurement 1	-23.673	-19 Pass
	Measurement 2	-26.82	-19 Pass
Upper Band Edge			
	Measurement 1	-26.843	-19 Pass
	Measurement 2	-24.022	-19 Pass

BAND EDGE COMPLIANCE

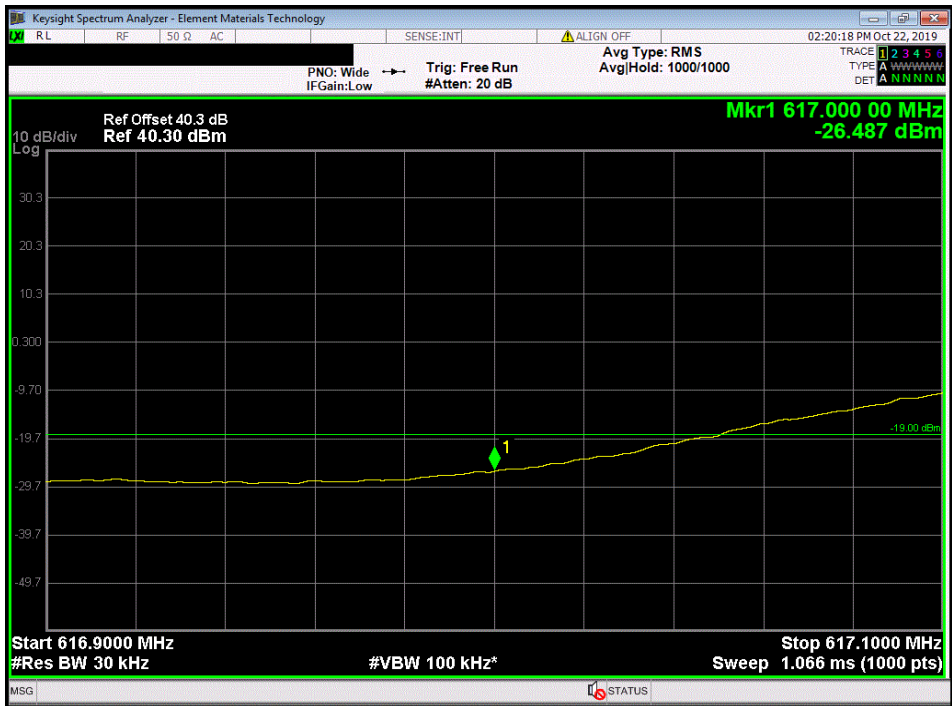


XMM 2019.09.05

Band 71, QPSK Modulation, Band 71 Multicarrier, Lower Band Edge, Measurement 1						
				Value (dBm)	Limit (dBm)	Result
				-23.316	-19	Pass



Band 71, QPSK Modulation, Band 71 Multicarrier, Lower Band Edge, Measurement 2						
				Value (dBm)	Limit (dBm)	Result
				-26.487	-19	Pass

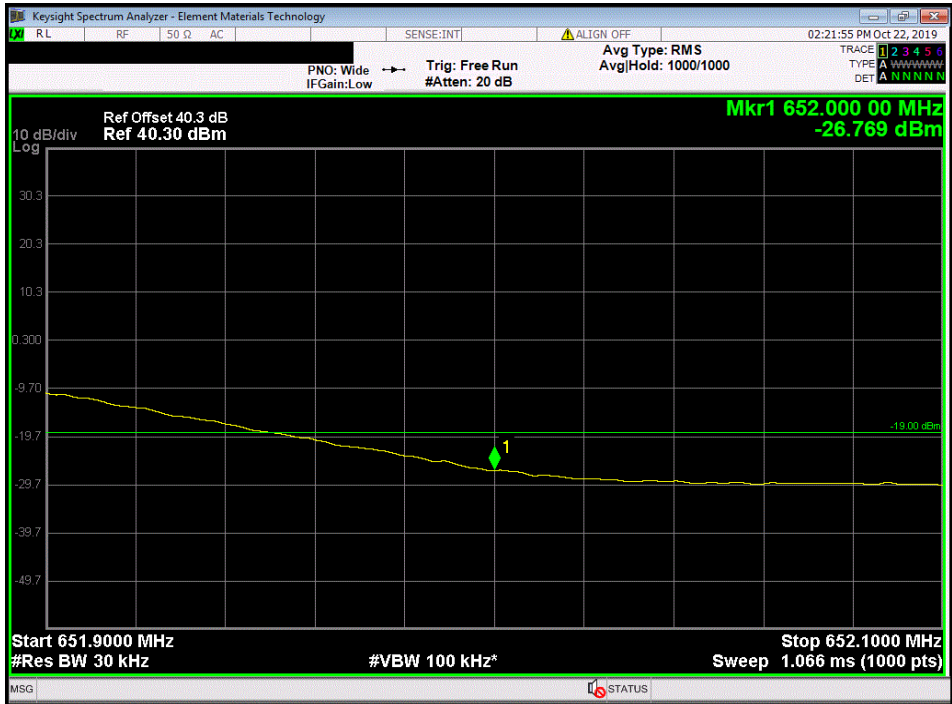


BAND EDGE COMPLIANCE



XMM 2019.09.05

Band 71, QPSK Modulation, Band 71 Multicarrier, Upper Band Edge, Measurement 1						
	Value	Limit	Result			
	(dBm)	(dBm)				
	-26.769	-19	Pass			



Band 71, QPSK Modulation, Band 71 Multicarrier, Upper Band Edge, Measurement 2						
	Value	Limit	Result			
	(dBm)	(dBm)				
	-23.895	-19	Pass			



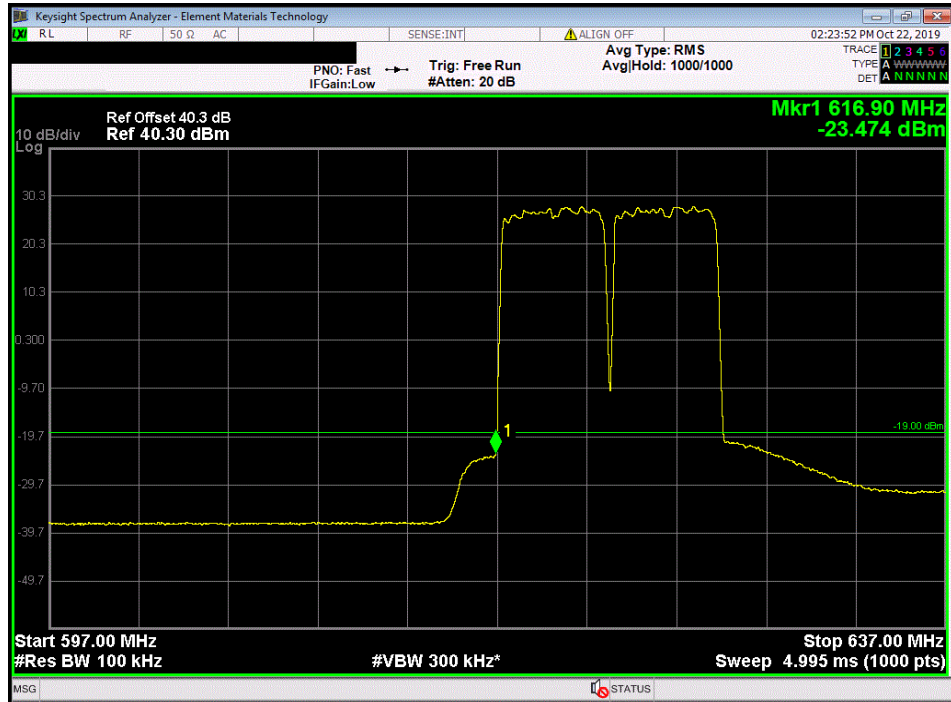
BAND EDGE COMPLIANCE



XMM 2019.09.05

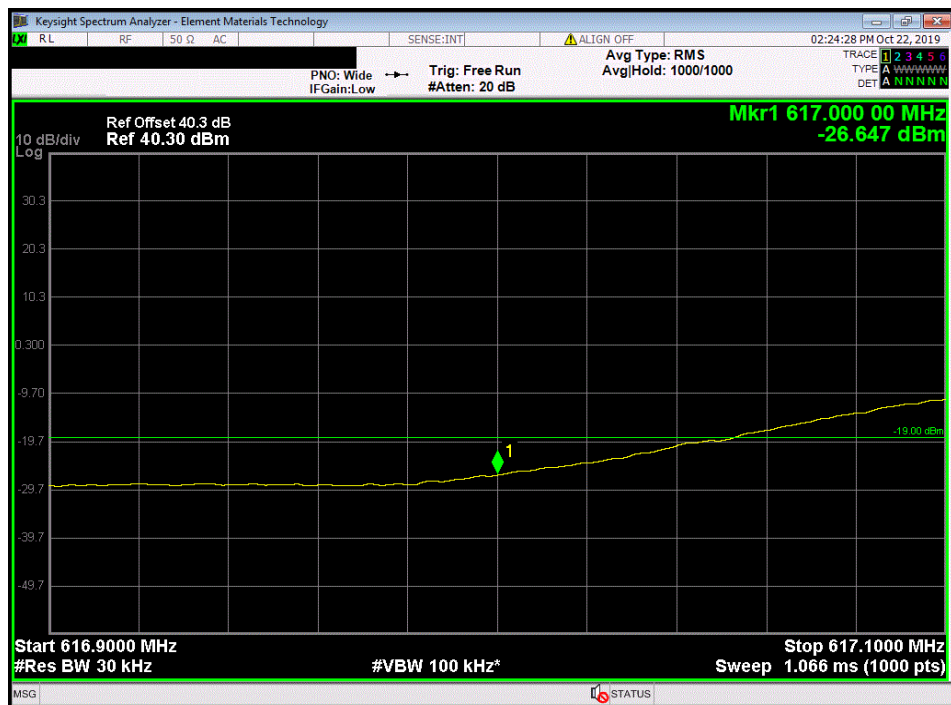
Band 71, 16QAM Modulation, Band 71 Multicarrier, Lower Band Edge, Measurement 1

				Value (dBm)	Limit (dBm)	Result
				-23.474	-19	Pass



Band 71, 16QAM Modulation, Band 71 Multicarrier, Lower Band Edge, Measurement 2

				Value (dBm)	Limit (dBm)	Result
				-26.647	-19	Pass



BAND EDGE COMPLIANCE



XMM 2019.09.05

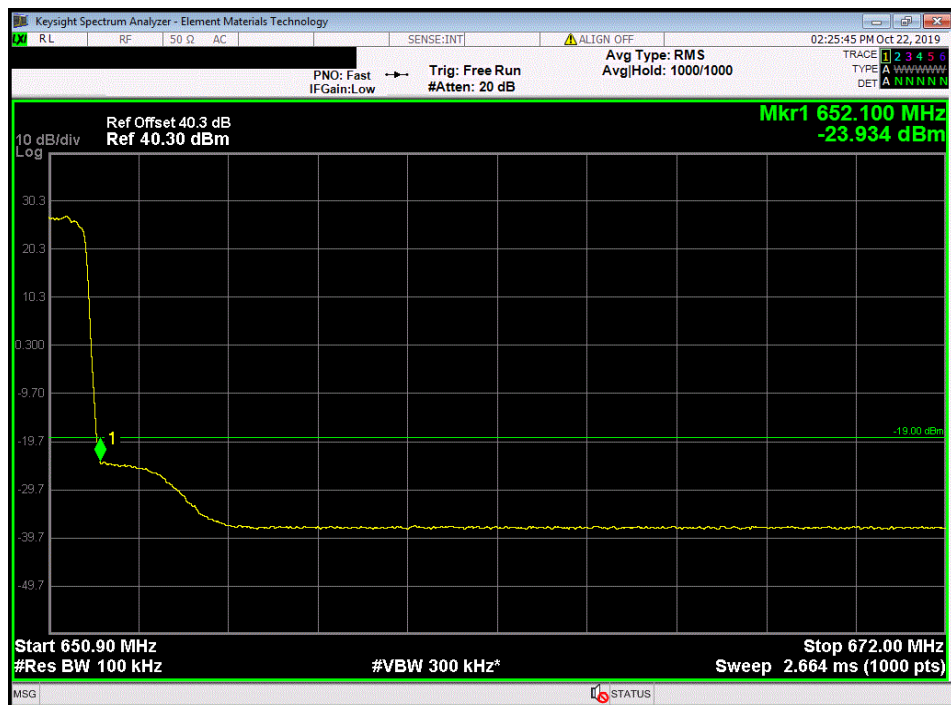
Band 71, 16QAM Modulation, Band 71 Multicarrier, Upper Band Edge, Measurement 1

				Value (dBm)	Limit (dBm)	Result
				-26.753	-19	Pass



Band 71, 16QAM Modulation, Band 71 Multicarrier, Upper Band Edge, Measurement 2

				Value (dBm)	Limit (dBm)	Result
				-23.934	-19	Pass



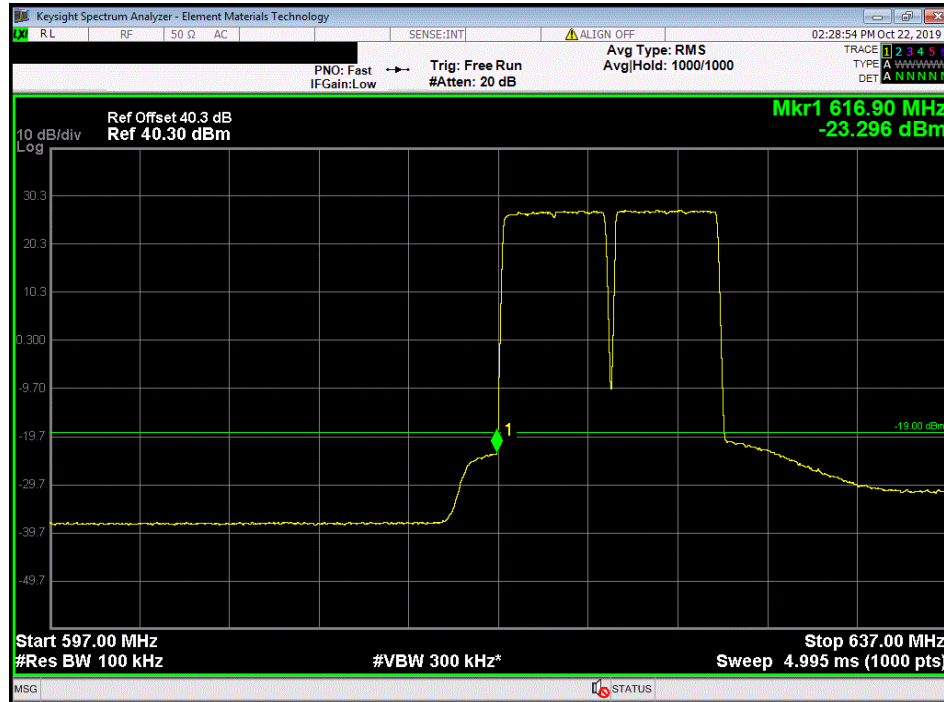
BAND EDGE COMPLIANCE



XMM 2019.09.05

Band 71, 64QAM Modulation, Band 71 Multicarrier, Lower Band Edge, Measurement 1

				Value (dBm)	Limit (dBm)	Result
				-23.296	-19	Pass



Band 71, 64QAM Modulation, Band 71 Multicarrier, Lower Band Edge, Measurement 2

				Value (dBm)	Limit (dBm)	Result
				-26.674	-19	Pass



BAND EDGE COMPLIANCE



XMM 2019.09.05

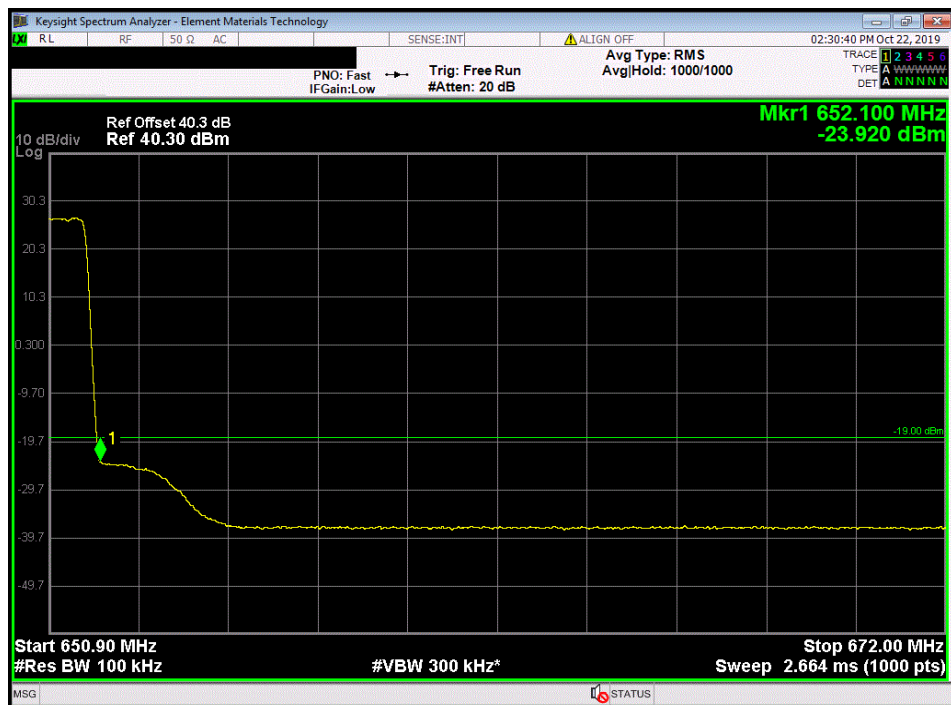
Band 71, 64QAM Modulation, Band 71 Multicarrier, Upper Band Edge, Measurement 1

	Value (dBm)	Limit (dBm)	Result
	-26.818	-19	Pass



Band 71, 64QAM Modulation, Band 71 Multicarrier, Upper Band Edge, Measurement 2

	Value (dBm)	Limit (dBm)	Result
	-23.92	-19	Pass



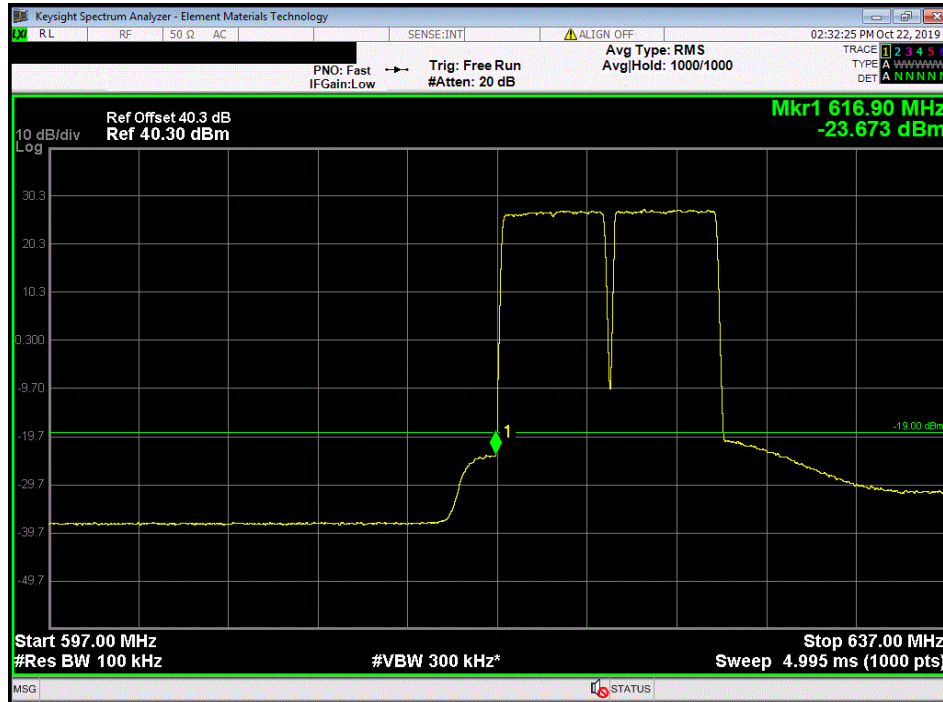
BAND EDGE COMPLIANCE



XMM 2019.09.05

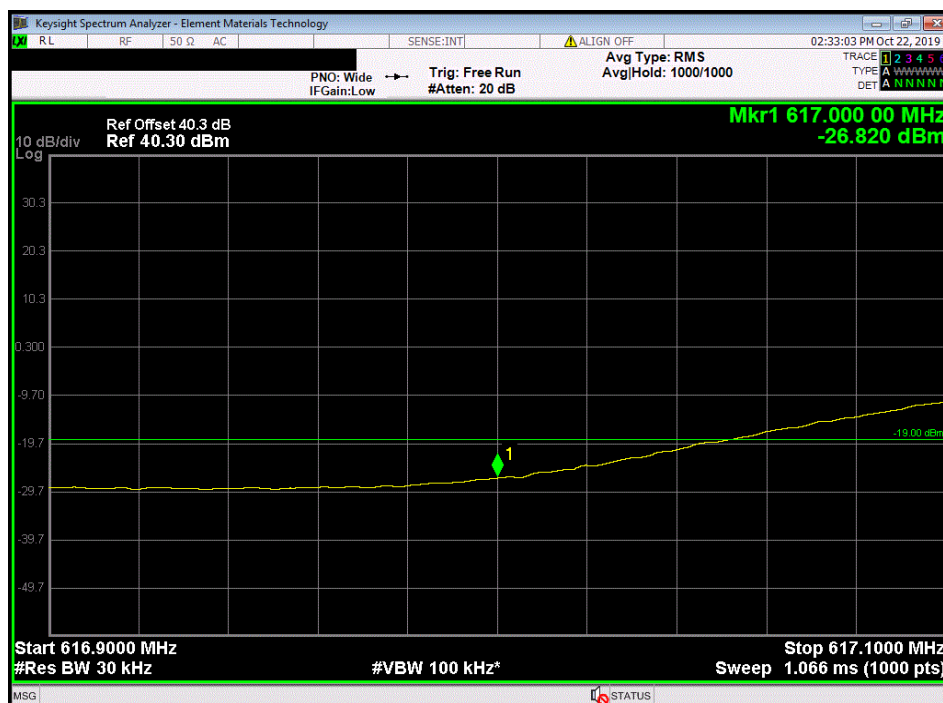
Band 71, 256QAM Modulation, Band 71 Multicarrier, Lower Band Edge, Measurement 1

	Value (dBm)	Limit (dBm)	Result
	-23.673	-19	Pass



Band 71, 256QAM Modulation, Band 71 Multicarrier, Lower Band Edge, Measurement 2

	Value (dBm)	Limit (dBm)	Result
	-26.82	-19	Pass



BAND EDGE COMPLIANCE



XMM 2019.09.05

Band 71, 256QAM Modulation, Band 71 Multicarrier, Upper Band Edge, Measurement 1

	Value (dBm)	Limit (dBm)	Result
	-26.843	-19	Pass



Band 71, 256QAM Modulation, Band 71 Multicarrier, Upper Band Edge, Measurement 2

	Value (dBm)	Limit (dBm)	Result
	-24.022	-19	Pass

