

OUTPUT POWER



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	Agilent	N5173B	TIW	5-Jul-17	5-Jul-20
Generator - Signal	Keysight	N5171B-506	TEW	2-May-18	2-May-21

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. The fundamental emission output power (maximum average conducted output power) was measured using the channels and modes as called out on the following data sheets. The transmit power was set to its default maximum.

The method in section 5.2.4.4 of ANSI C63.26 was used to make the measurement. This method uses trace averaging across ON and OFF times of the EUT transmissions in the spectrum analyzer channel power function using an RMS detector. Following the measurement a duty cycle correction was applied by adding $[10 \log (1 / D)]$, where D is the duty cycle, to the measured power to compute the average power during the actual transmission times.

Per 27.50(c)(3) the Effective Radiated Power (ERP) of the transceiver cannot exceed 1000 W/MHz. ERP as defined by the FCC is the total power output from the cell site antenna.

Per RSS-130 section 4.6 the EIRP limits are defined in SRSP-518 5.1 are the Equivalent Isotropically Radiated Power EIRP limits of 1640 W/MHz.

RF conducted emissions testing was performed only on one port. The testing was performed on the same version of hardware (AHBOA) as the original certification test. The AHBOA 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 1 was selected to perform the testing under this effort as allowed by ANSI C63.26-2015 paragraph 5.7.2i.

OUTPUT POWER



TW1x 2020.06.08.0 BETA XMM 2020.03.25.0

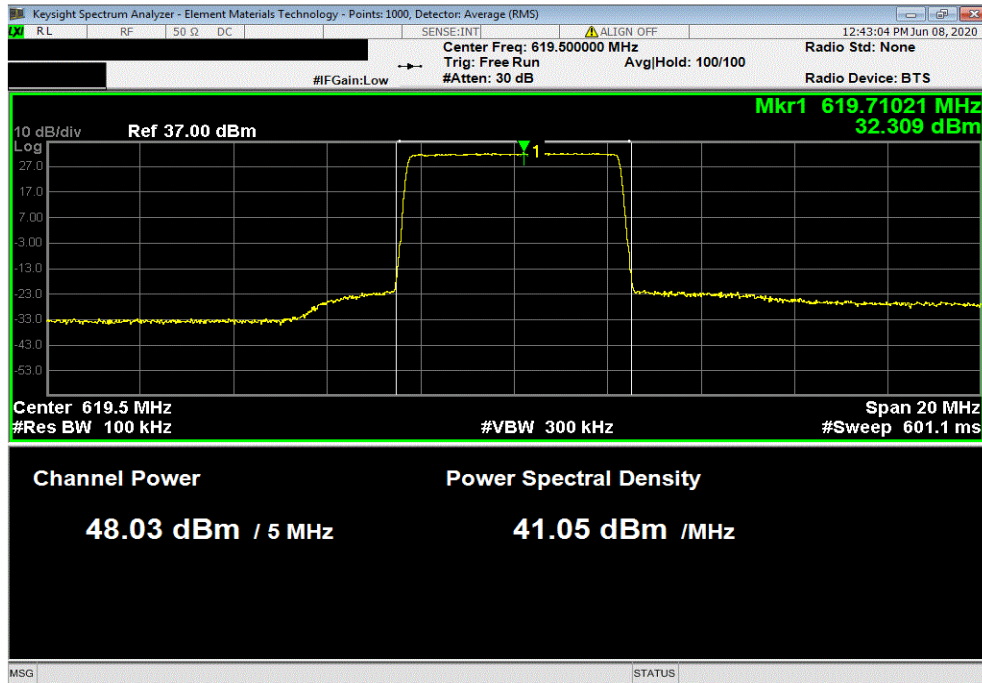
EUT:	Aircscale Base Transceiver Station Remote Radio Head Model AHBOA			Work Order: NOKI0017			
Serial Number:	BL1943X1001			Date: 10-Jun-20			
Customer:	Nokia Solutions and Networks			Temperature: 22.5 °C			
Attendees:	Mitchell Hill, John Rattanavong			Humidity: 38.6% RH			
Project:	None			Barometric Pres.: 1023 mbar			
Tested by:	Brandon Hobbs	Power:	54 VDC	Job Site: TX05			
TEST SPECIFICATIONS				Test Method			
FCC 27-2020			ANSI C63.26:2015				
RSS-130:2019, SRSP-518			RSS-130:2019, SRSP-518				
COMMENTS							
All measurement path losses were accounted for in the reference level offset including any attenuators, filters and DC blocks. The carrier power was set to maximum for all testing.							
DEVIATIONS FROM TEST STANDARD							
None							
Configuration #	2	Signature 					
		Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results
Port 1, Band 71, 617 MHz - 652 MHz							
5 MHz Bandwidth							
QPSK Modulation							
	Low Channel, 619.5 MHz	48.035	0	Not Provided	48.0	60 / 62.15	N/A
	Mid Channel, 634.5 MHz	48.078	0	Not Provided	48.1	60 / 62.15	N/A
	High Channel, 649.5 MHz	48.022	0	Not Provided	48.0	60 / 62.15	N/A
16-QAM Modulation							
	Low Channel, 619.5 MHz	47.854	0	Not Provided	47.9	60 / 62.15	N/A
	Mid Channel, 634.5 MHz	47.832	0	Not Provided	47.8	60 / 62.15	N/A
	High Channel, 649.5 MHz	47.771	0	Not Provided	47.8	60 / 62.15	N/A
64-QAM Modulation							
	Low Channel, 619.5 MHz	48.046	0	Not Provided	48.0	60 / 62.15	N/A
	Mid Channel, 634.5 MHz	48.051	0	Not Provided	48.1	60 / 62.15	N/A
	High Channel, 649.5 MHz	47.986	0	Not Provided	48.0	60 / 62.15	N/A
256-QAM Modulation							
	Low Channel, 619.5 MHz	47.957	0	Not Provided	48.0	60 / 62.15	N/A
	Mid Channel, 634.5 MHz	47.99	0	Not Provided	48.0	60 / 62.15	N/A
	High Channel, 649.5 MHz	47.833	0	Not Provided	47.8	60 / 62.15	N/A
10 MHz Bandwidth							
QPSK Modulation							
	Low Channel, 622 MHz	48.065	0	Not Provided	48.1	60 / 62.15	N/A
	Mid Channel, 634.5 MHz	48.005	0	Not Provided	48.0	60 / 62.15	N/A
	High Channel, 647 MHz	48.064	0	Not Provided	48.1	60 / 62.15	N/A
16-QAM Modulation							
	Low Channel, 622 MHz	47.863	0	Not Provided	47.9	60 / 62.15	N/A
	Mid Channel, 634.5 MHz	47.837	0	Not Provided	47.8	60 / 62.15	N/A
	High Channel, 647 MHz	47.899	0	Not Provided	47.9	60 / 62.15	N/A
64-QAM Modulation							
	Low Channel, 622 MHz	48.029	0	Not Provided	48.0	60 / 62.15	N/A
	Mid Channel, 634.5 MHz	47.994	0	Not Provided	48.0	60 / 62.15	N/A
	High Channel, 647 MHz	48.042	0	Not Provided	48.0	60 / 62.15	N/A
256-QAM Modulation							
	Low Channel, 622 MHz	47.954	0	Not Provided	48.0	60 / 62.15	N/A
	Mid Channel, 634.5 MHz	47.922	0	Not Provided	47.9	60 / 62.15	N/A
	High Channel, 647 MHz	47.974	0	Not Provided	48.0	60 / 62.15	N/A
15 MHz Bandwidth							
QPSK Modulation							
	Low Channel, 624.5 MHz	48.057	0	Not Provided	48.1	60 / 62.15	N/A
	Mid Channel, 634.5 MHz	48.036	0	Not Provided	48.0	60 / 62.15	N/A
	High Channel, 644.5 MHz	48.068	0	Not Provided	48.1	60 / 62.15	N/A
16-QAM Modulation							
	Low Channel, 624.5 MHz	47.963	0	Not Provided	48.0	60 / 62.15	N/A
	Mid Channel, 634.5 MHz	47.915	0	Not Provided	47.9	60 / 62.15	N/A
	High Channel, 644.5 MHz	47.99	0	Not Provided	48.0	60 / 62.15	N/A
64-QAM Modulation							
	Low Channel, 624.5 MHz	48.077	0	Not Provided	48.1	60 / 62.15	N/A
	Mid Channel, 634.5 MHz	48.006	0	Not Provided	48.0	60 / 62.15	N/A
	High Channel, 644.5 MHz	48.098	0	Not Provided	48.1	60 / 62.15	N/A
256-QAM Modulation							
	Low Channel, 624.5 MHz	48.06	0	Not Provided	48.1	60 / 62.15	N/A
	Mid Channel, 634.5 MHz	48.01	0	Not Provided	48.0	60 / 62.15	N/A
	High Channel, 644.5 MHz	48.08	0	Not Provided	48.1	60 / 62.15	N/A
20 MHz Bandwidth							
QPSK Modulation							
	Low Channel, 627 MHz	48.092	0	Not Provided	48.1	60 / 62.15	N/A
	Mid Channel, 634.5 MHz	48.078	0	Not Provided	48.1	60 / 62.15	N/A
	High Channel, 642 MHz	48.184	0	Not Provided	48.2	60 / 62.15	N/A
16-QAM Modulation							
	Low Channel, 627 MHz	48.033	0	Not Provided	48.0	60 / 62.15	N/A
	Mid Channel, 634.5 MHz	47.982	0	Not Provided	48.0	60 / 62.15	N/A
	High Channel, 642 MHz	48.096	0	Not Provided	48.1	60 / 62.15	N/A
64-QAM Modulation							
	Low Channel, 627 MHz	48.115	0	Not Provided	48.1	60 / 62.15	N/A
	Mid Channel, 634.5 MHz	48.059	0	Not Provided	48.1	60 / 62.15	N/A
	High Channel, 642 MHz	48.133	0	Not Provided	48.1	60 / 62.15	N/A
256-QAM Modulation							
	Low Channel, 627 MHz	48.129	0	Not Provided	48.1	60 / 62.15	N/A
	Mid Channel, 634.5 MHz	48.078	0	Not Provided	48.1	60 / 62.15	N/A
	High Channel, 642 MHz	48.121	0	Not Provided	48.1	60 / 62.15	N/A

OUTPUT POWER

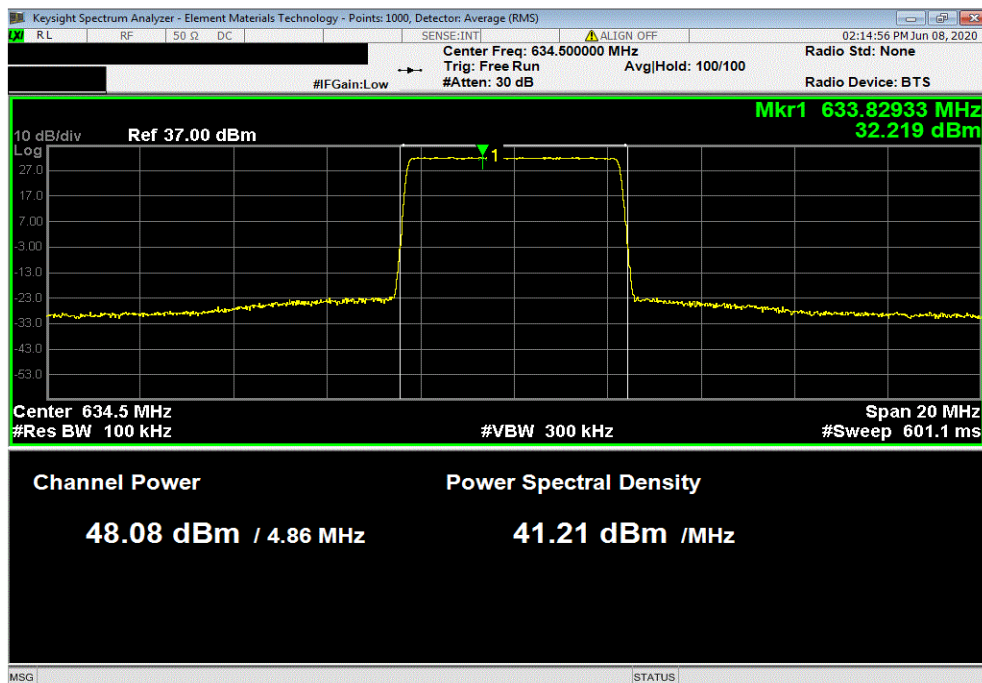


TSTx 2020.06.08.0 BETA XMM 2020.03.25.0

Port 1, Band 71, 617 MHz - 652 MHz, 5 MHz Bandwidth, QPSK Modulation, Low Channel, 619.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.035	0	Not Provided	48.04	60 / 62.15	N/A	



Port 1, Band 71, 617 MHz - 652 MHz, 5 MHz Bandwidth, QPSK Modulation, Mid Channel, 634.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.078	0	Not Provided	48.08	60 / 62.15	N/A	

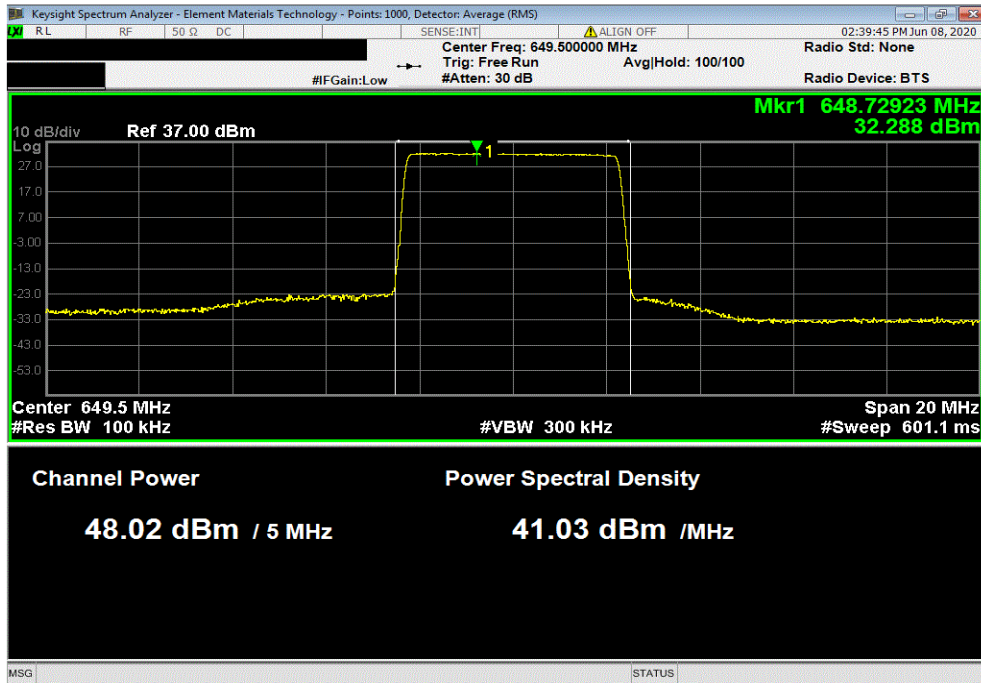


OUTPUT POWER

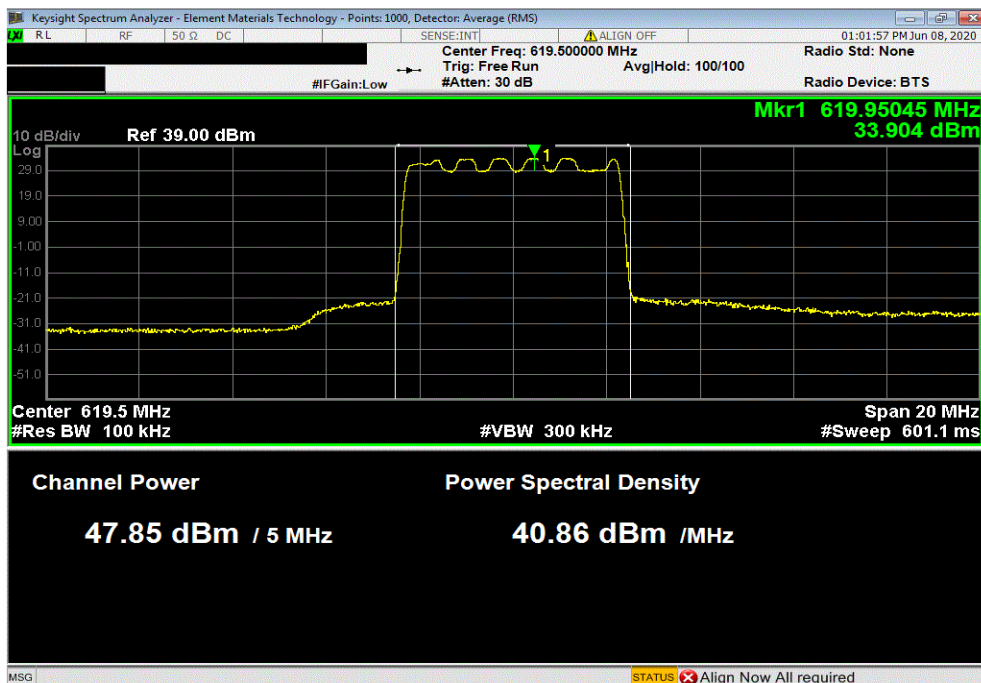


TSTx 2020.06.08.0 BETA XMM 2020.03.25.0

Port 1, Band 71, 617 MHz - 652 MHz, 5 MHz Bandwidth, QPSK Modulation, High Channel, 649.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.022	0	Not Provided	48.02	60 / 62.15	N/A	



Port 1, Band 71, 617 MHz - 652 MHz, 5 MHz Bandwidth, 16-QAM Modulation, Low Channel, 619.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
47.854	0	Not Provided	47.85	60 / 62.15	N/A	

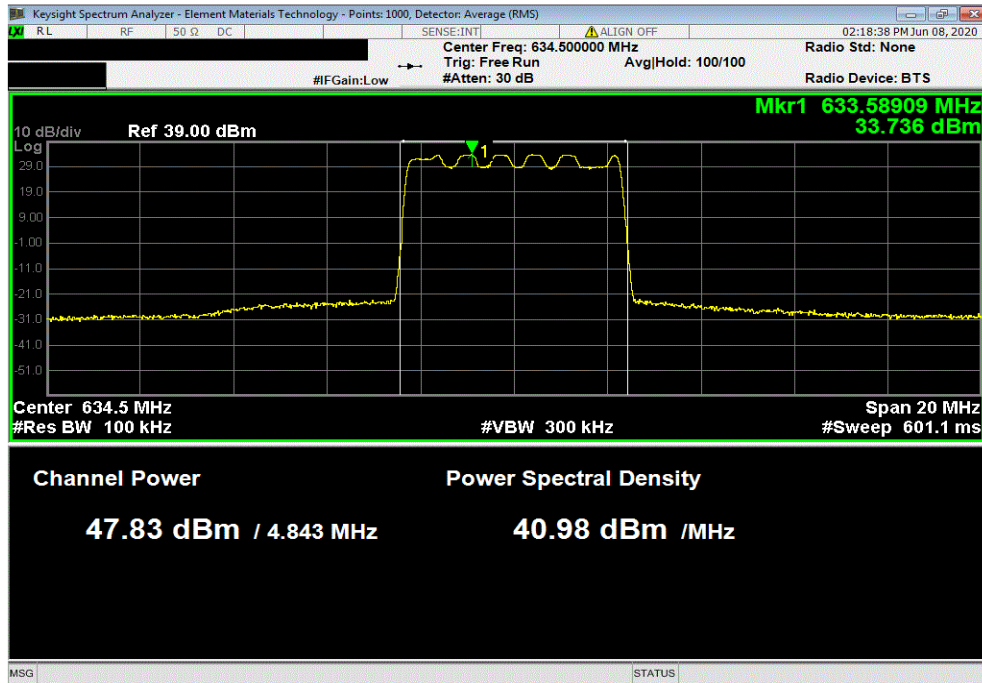


OUTPUT POWER

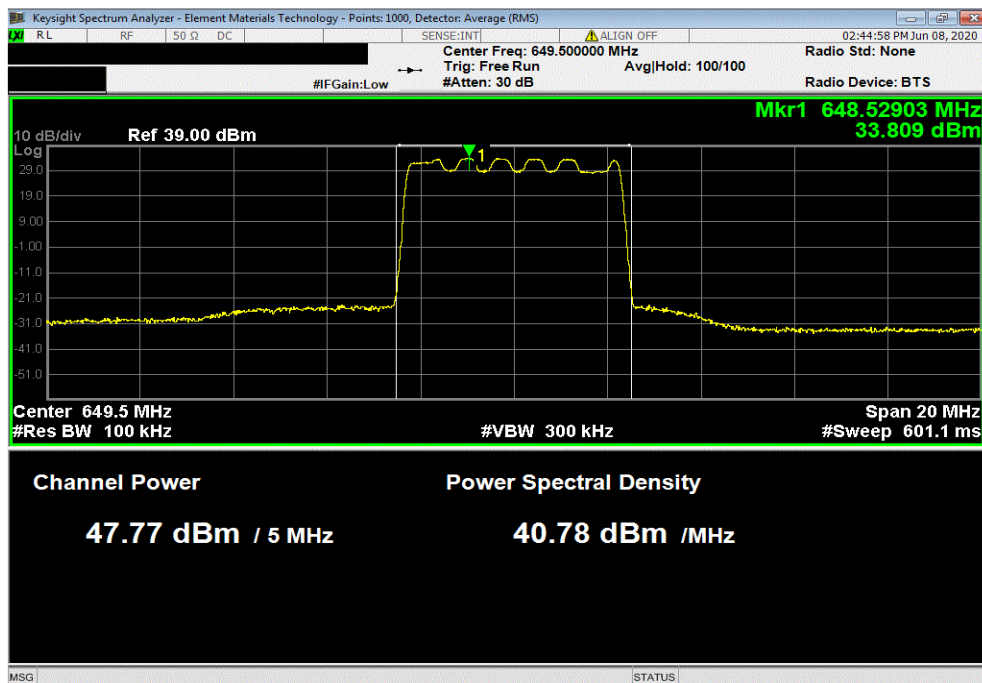


TSTx 2020.06.08.0 BETA XMM 2020.03.25.0

Port 1, Band 71, 617 MHz - 652 MHz, 5 MHz Bandwidth, 16-QAM Modulation, Mid Channel, 634.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
47.832	0	Not Provided	47.83	60 / 62.15	N/A	



Port 1, Band 71, 617 MHz - 652 MHz, 5 MHz Bandwidth, 16-QAM Modulation, High Channel, 649.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
47.771	0	Not Provided	47.77	60 / 62.15	N/A	

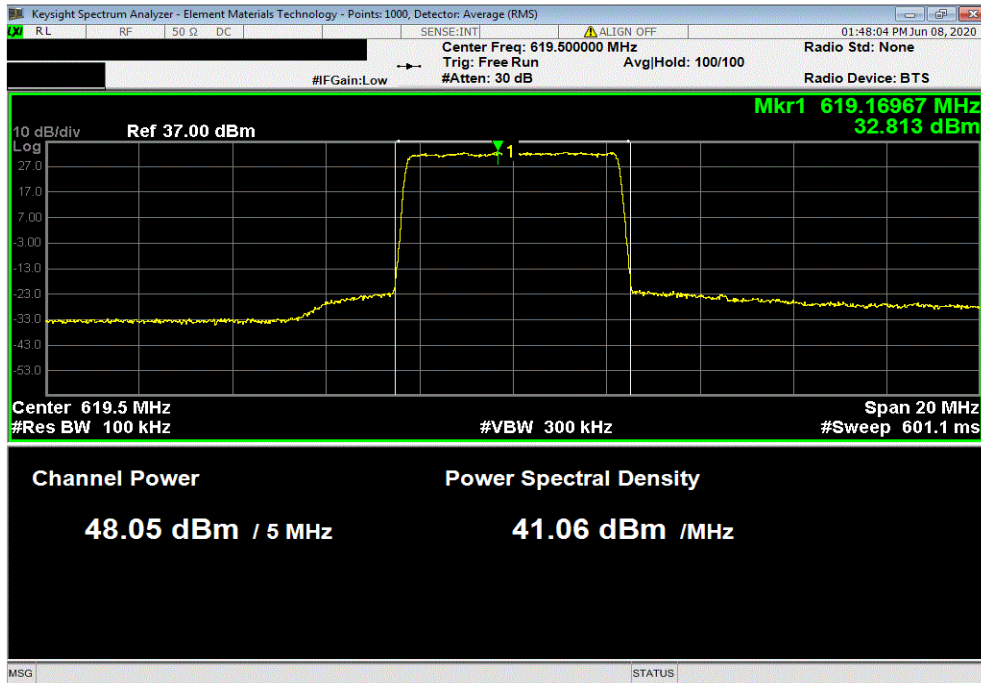


OUTPUT POWER

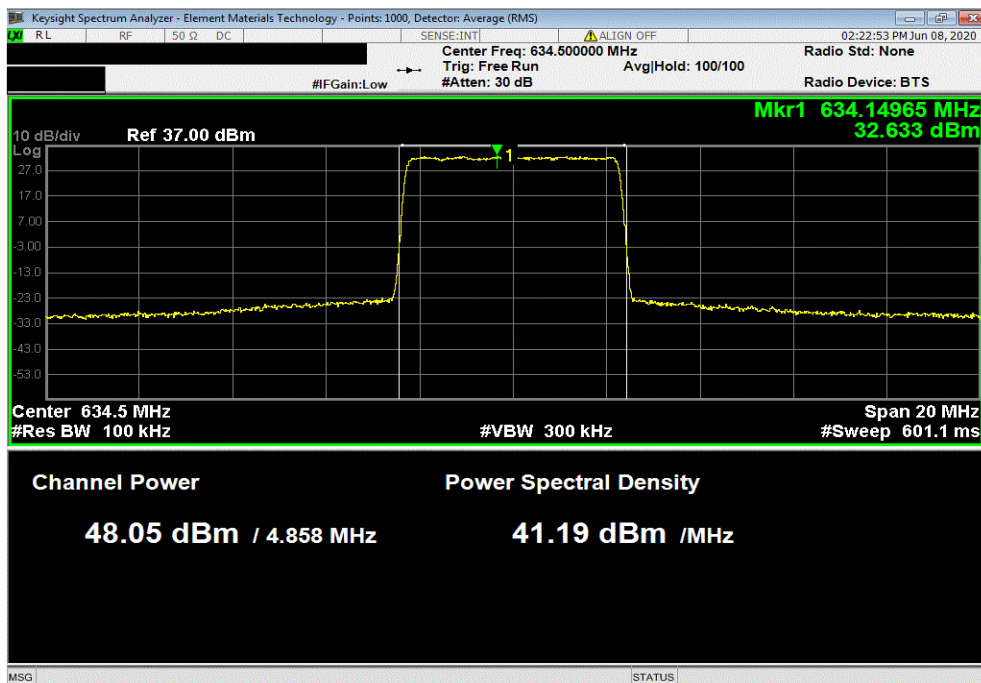


TSTx 2020.06.08.0 BETA XMM 2020.03.25.0

Port 1, Band 71, 617 MHz - 652 MHz, 5 MHz Bandwidth, 64-QAM Modulation, Low Channel, 619.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.046	0	Not Provided	48.05	60 / 62.15	N/A	



Port 1, Band 71, 617 MHz - 652 MHz, 5 MHz Bandwidth, 64-QAM Modulation, Mid Channel, 634.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.051	0	Not Provided	48.05	60 / 62.15	N/A	

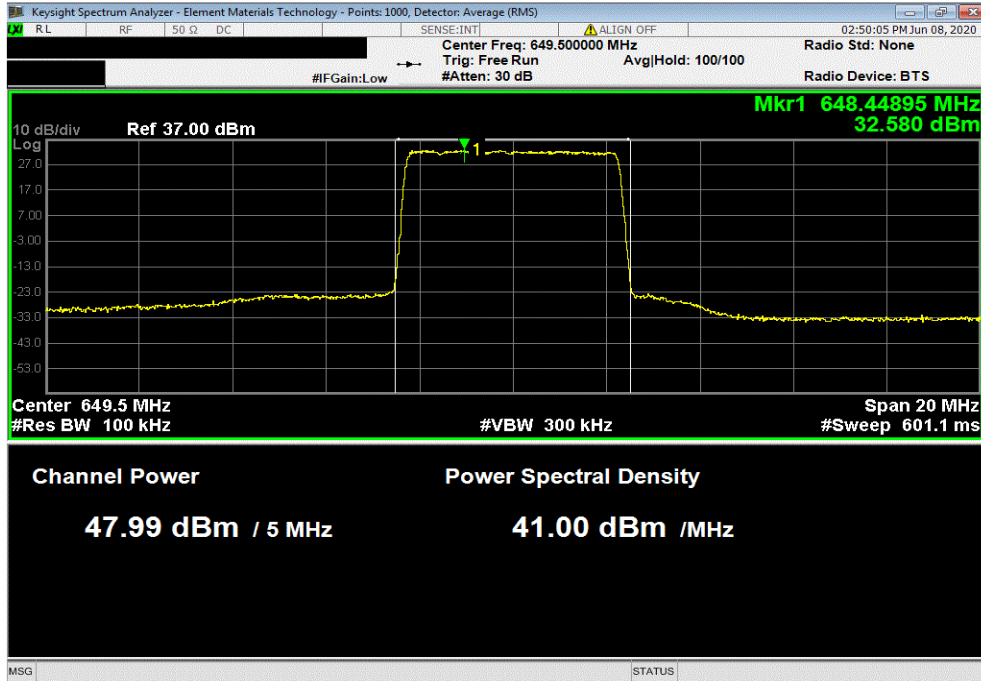


OUTPUT POWER

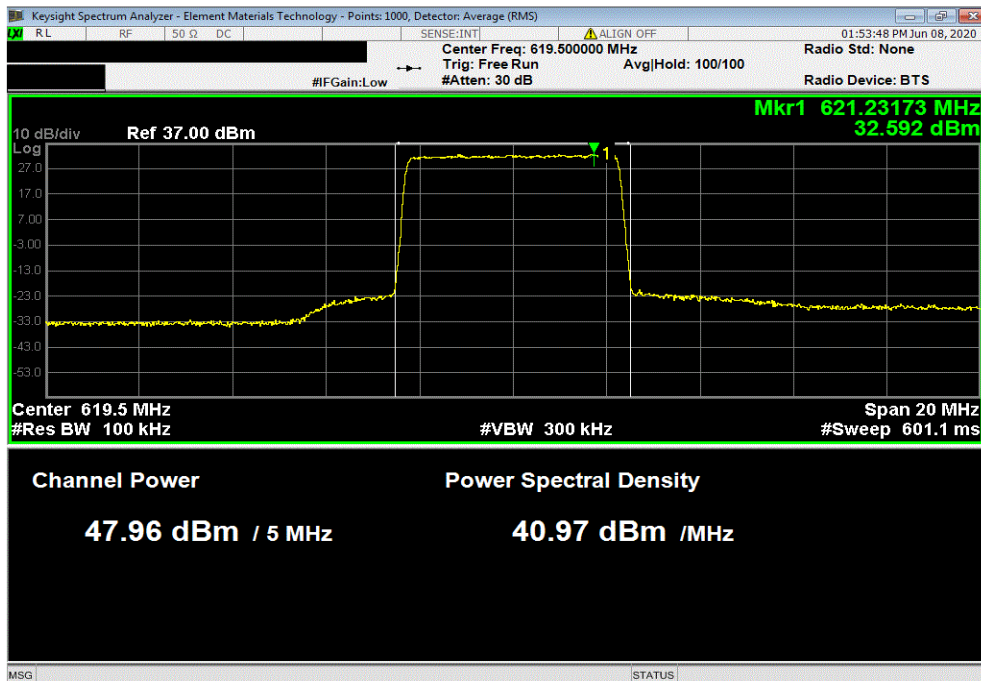


TSTx 2020.06.08.0 BETA XMM 2020.03.25.0

Port 1, Band 71, 617 MHz - 652 MHz, 5 MHz Bandwidth, 64-QAM Modulation, High Channel, 649.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
47.986	0	Not Provided	47.99	60 / 62.15	N/A	



Port 1, Band 71, 617 MHz - 652 MHz, 5 MHz Bandwidth, 256-QAM Modulation, Low Channel, 619.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
47.957	0	Not Provided	47.96	60 / 62.15	N/A	

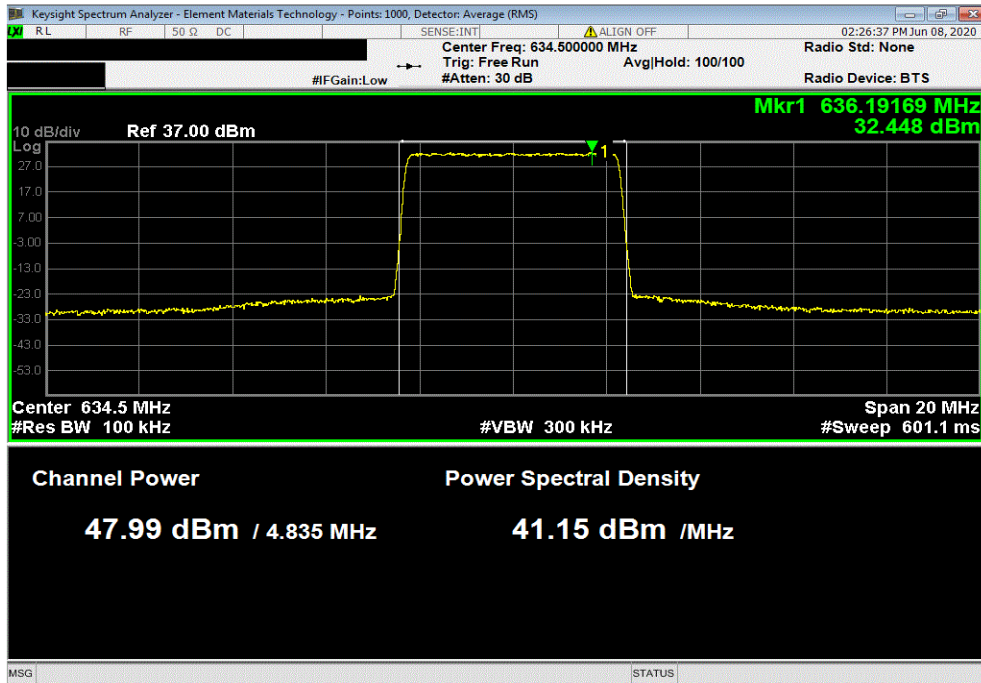


OUTPUT POWER

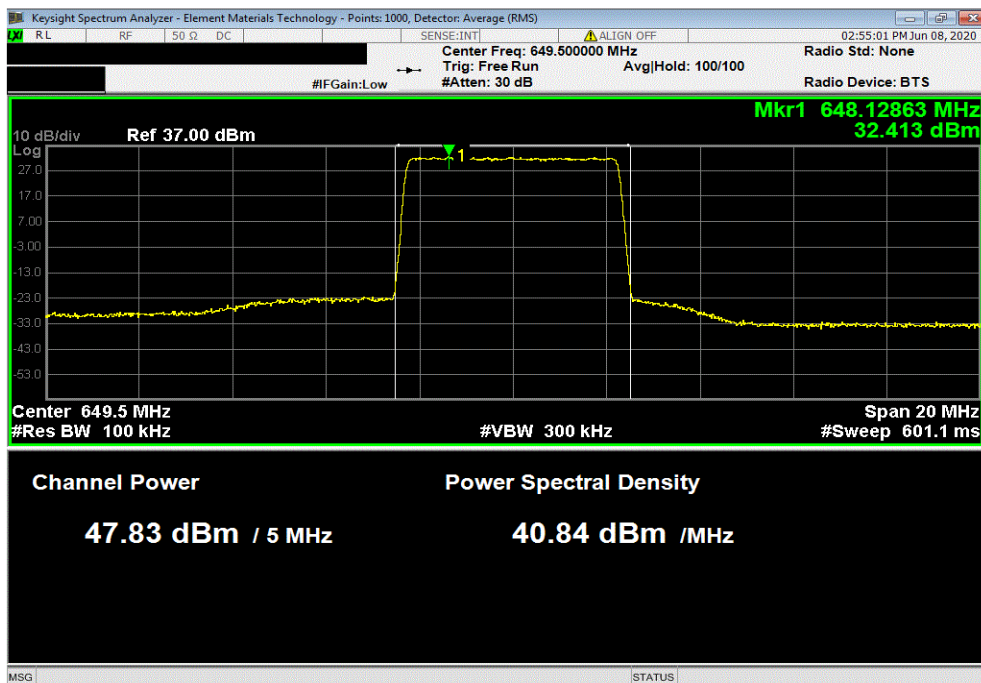


TSTx 2020.06.08.0 BETA XMM 2020.03.25.0

Port 1, Band 71, 617 MHz - 652 MHz, 5 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 634.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
47.99	0	Not Provided	47.99	60 / 62.15	N/A	



Port 1, Band 71, 617 MHz - 652 MHz, 5 MHz Bandwidth, 256-QAM Modulation, High Channel, 649.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
47.833	0	Not Provided	47.83	60 / 62.15	N/A	

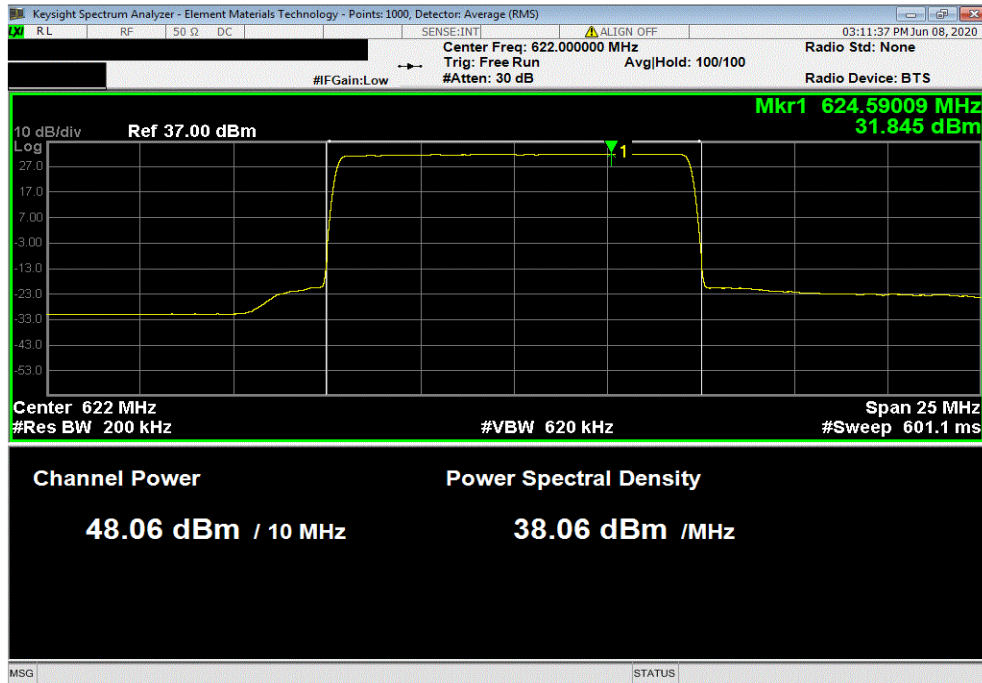


OUTPUT POWER

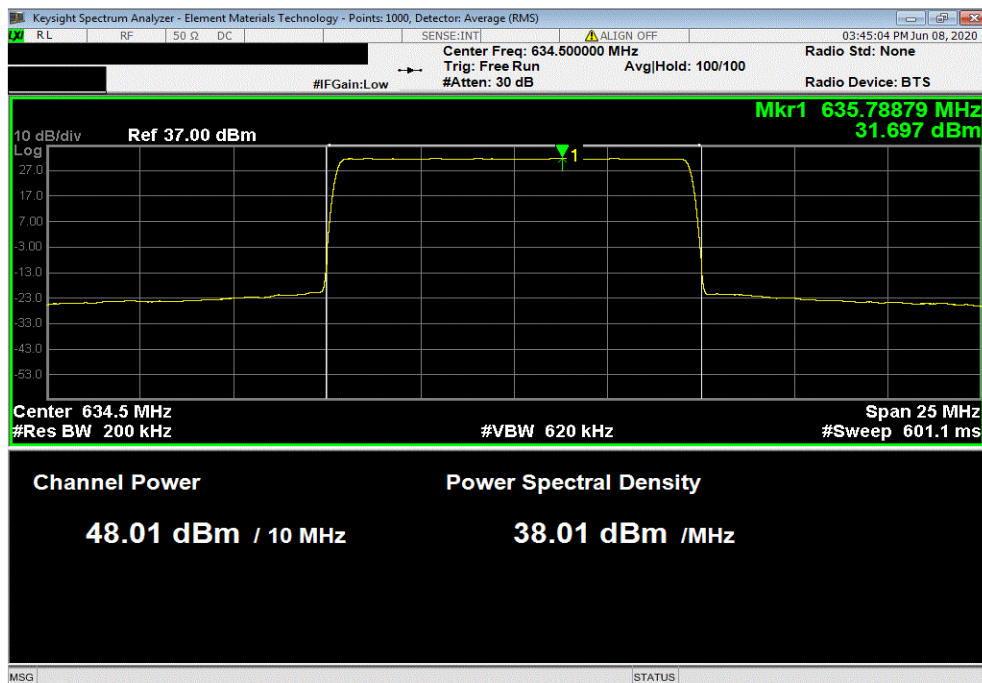


TSTx 2020.06.08.0 BETA XMM 2020.03.25.0

Port 1, Band 71, 617 MHz - 652 MHz, 10 MHz Bandwidth, QPSK Modulation, Low Channel, 622 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.065	0	Not Provided	48.07	60 / 62.15	N/A	



Port 1, Band 71, 617 MHz - 652 MHz, 10 MHz Bandwidth, QPSK Modulation, Mid Channel, 634.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.005	0	Not Provided	48.01	60 / 62.15	N/A	

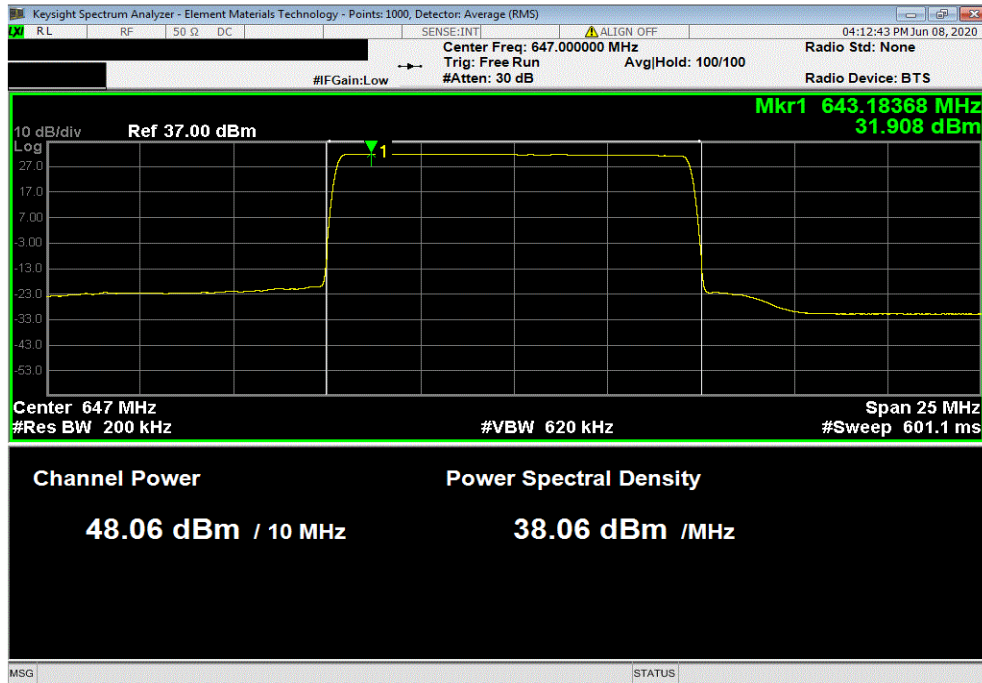


OUTPUT POWER

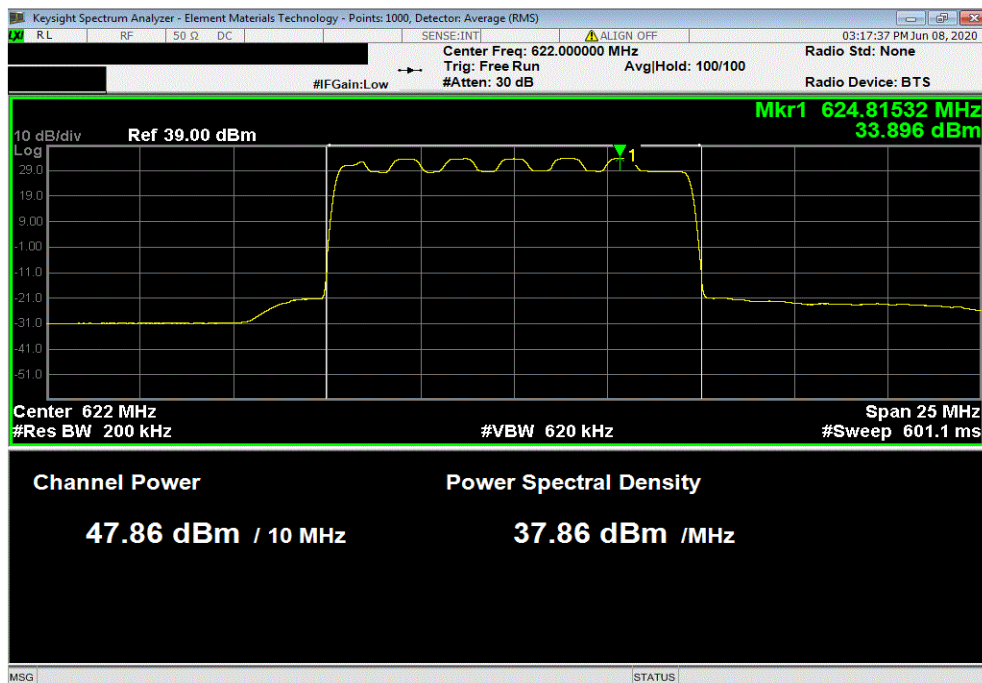


TSTx 2020.06.08.0 BETA XMM 2020.03.25.0

Port 1, Band 71, 617 MHz - 652 MHz, 10 MHz Bandwidth, QPSK Modulation, High Channel, 647 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.064	0	Not Provided	48.06	60 / 62.15	N/A	



Port 1, Band 71, 617 MHz - 652 MHz, 10 MHz Bandwidth, 16-QAM Modulation, Low Channel, 622 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
47.863	0	Not Provided	47.86	60 / 62.15	N/A	

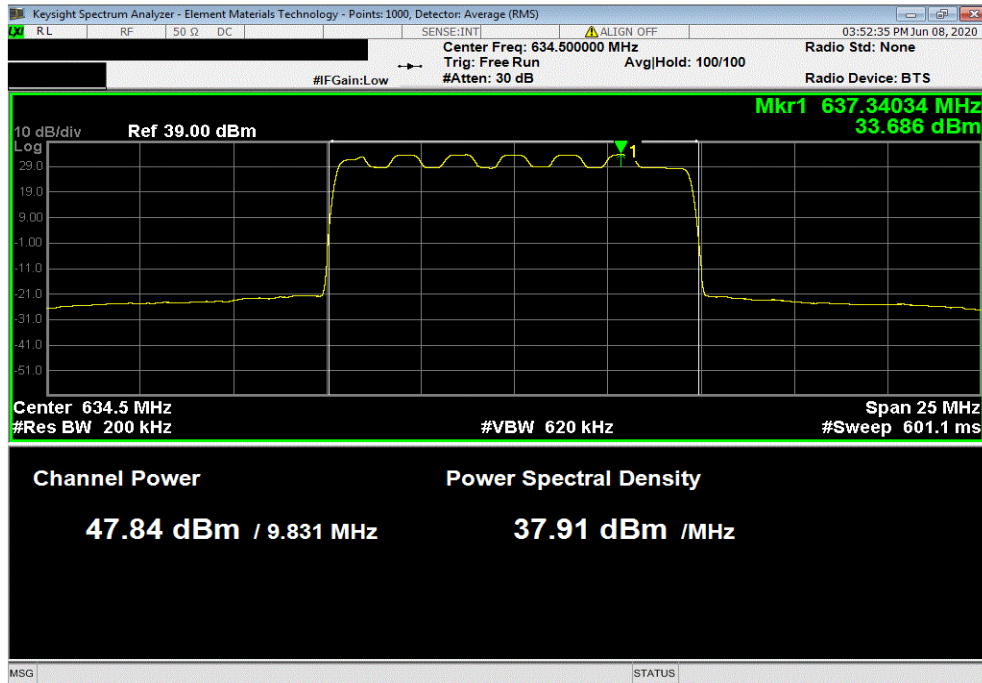


OUTPUT POWER

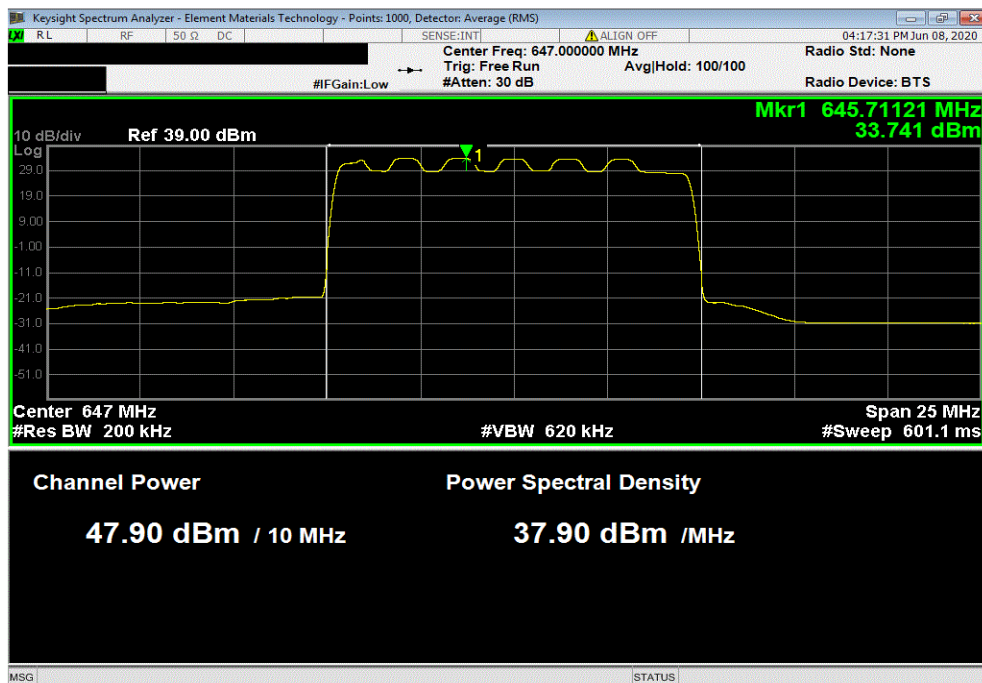


TSTx 2020.06.08.0 BETA XMM 2020.03.25.0

Port 1, Band 71, 617 MHz - 652 MHz, 10 MHz Bandwidth, 16-QAM Modulation, Mid Channel, 634.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
47.837	0	Not Provided	47.84	60 / 62.15	N/A	



Port 1, Band 71, 617 MHz - 652 MHz, 10 MHz Bandwidth, 16-QAM Modulation, High Channel, 647 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
47.899	0	Not Provided	47.90	60 / 62.15	N/A	

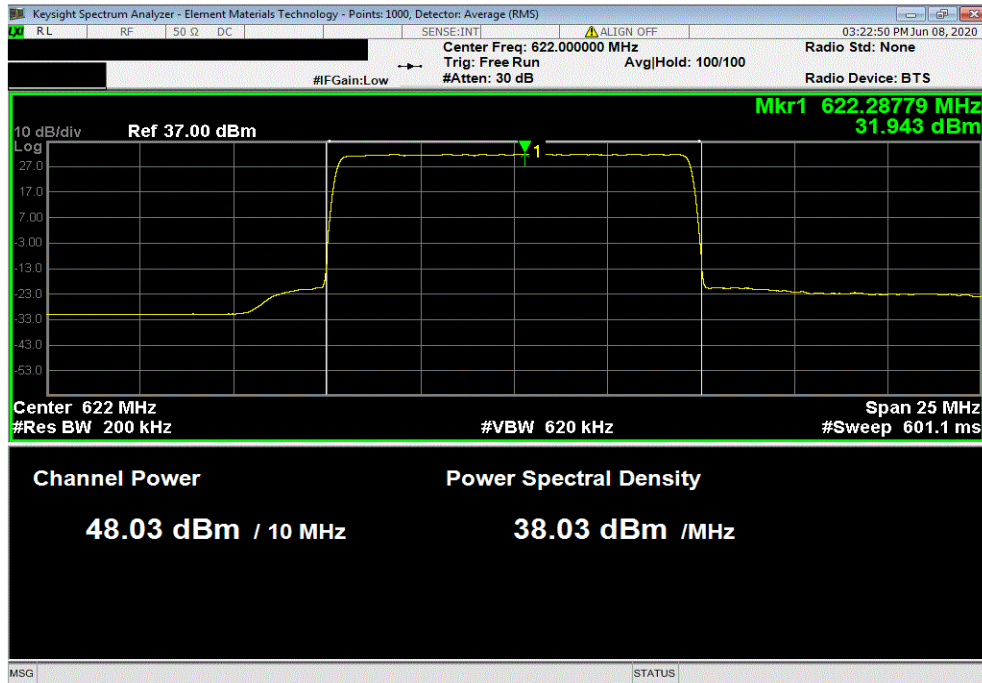


OUTPUT POWER

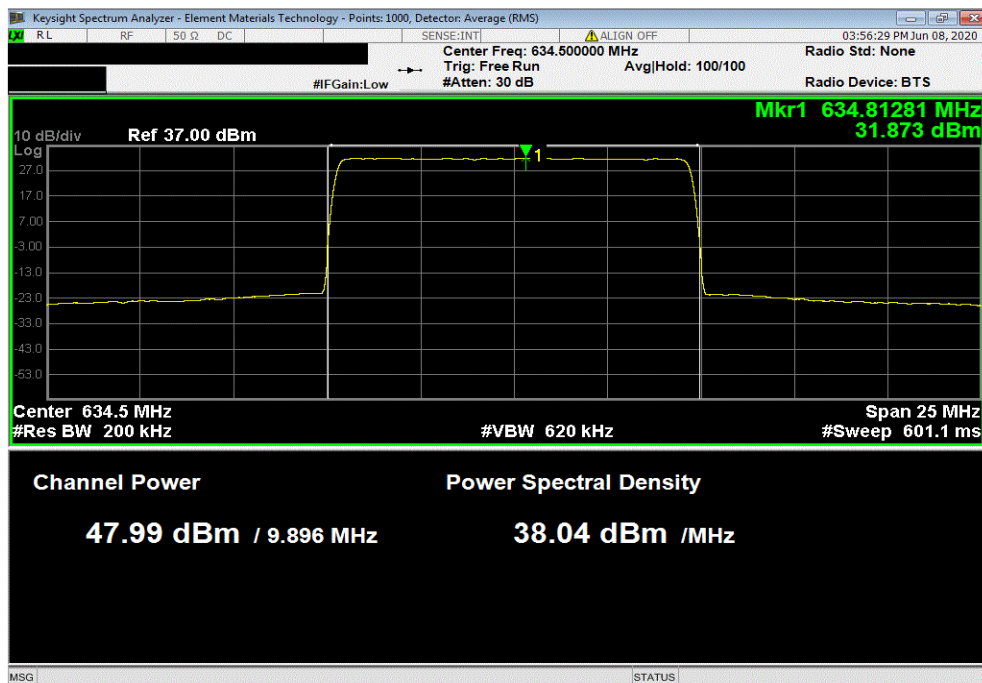


TSTx 2020.06.08.0 BETA XMM 2020.03.25.0

Port 1, Band 71, 617 MHz - 652 MHz, 10 MHz Bandwidth, 64-QAM Modulation, Low Channel, 622 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.029	0	Not Provided	48.03	60 / 62.15	N/A	



Port 1, Band 71, 617 MHz - 652 MHz, 10 MHz Bandwidth, 64-QAM Modulation, Mid Channel, 634.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
47.994	0	Not Provided	47.99	60 / 62.15	N/A	

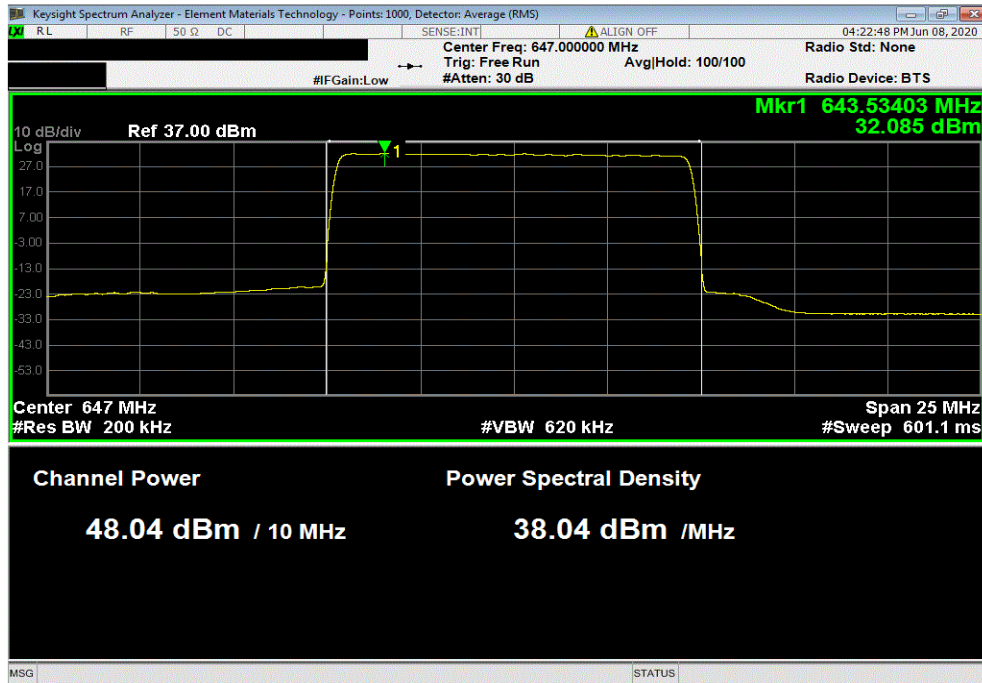


OUTPUT POWER

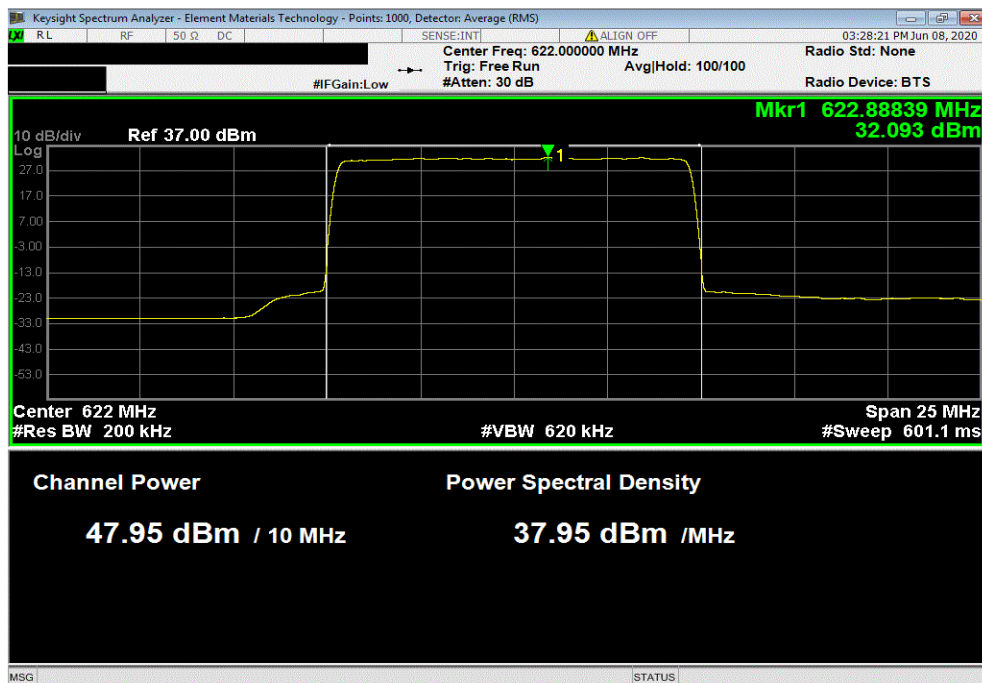


TSTx 2020.06.08.0 BETA XMM 2020.03.25.0

Port 1, Band 71, 617 MHz - 652 MHz, 10 MHz Bandwidth, 64-QAM Modulation, High Channel, 647 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.042	0	Not Provided	48.04	60 / 62.15	N/A	



Port 1, Band 71, 617 MHz - 652 MHz, 10 MHz Bandwidth, 256-QAM Modulation, Low Channel, 622 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
47.954	0	Not Provided	47.95	60 / 62.15	N/A	

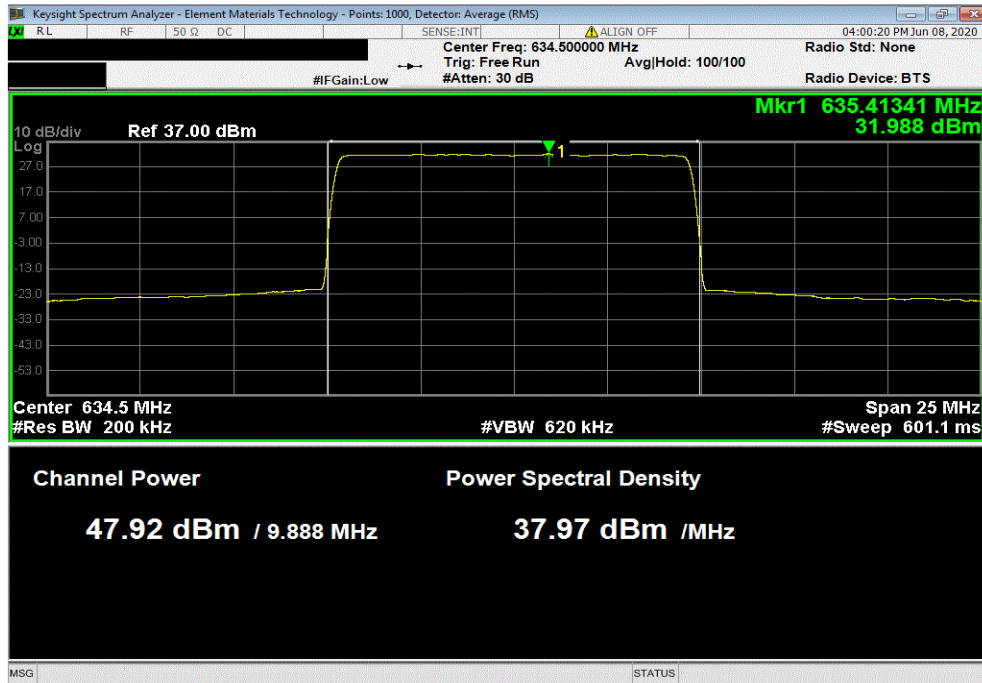


OUTPUT POWER

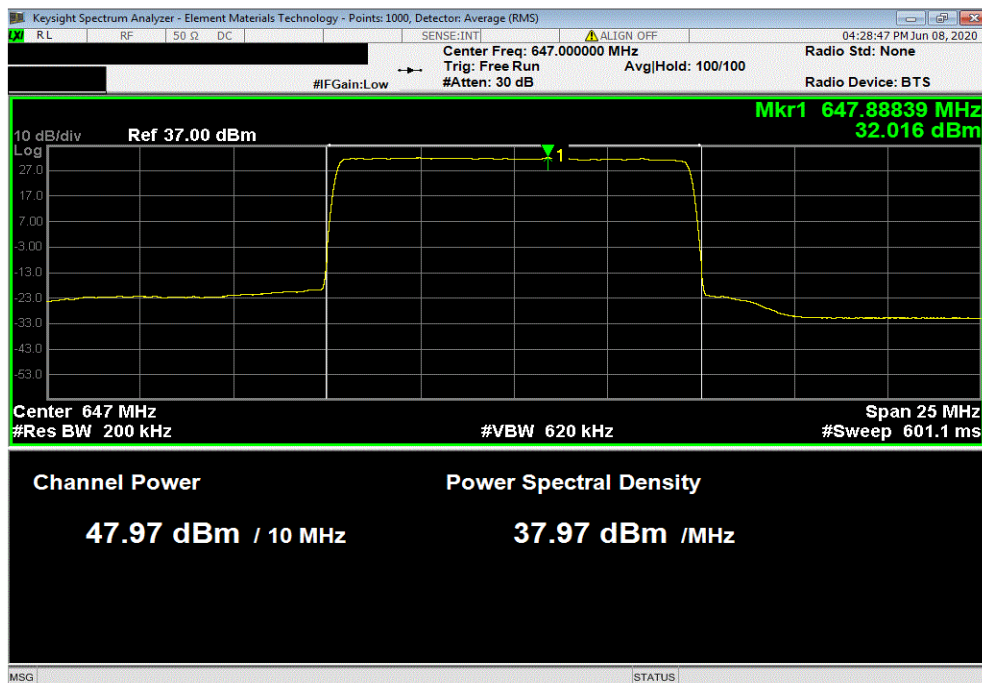


TSTx 2020.06.08.0 BETA XMM 2020.03.25.0

Port 1, Band 71, 617 MHz - 652 MHz, 10 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 634.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
47.922	0	Not Provided	47.92	60 / 62.15	N/A	



Port 1, Band 71, 617 MHz - 652 MHz, 10 MHz Bandwidth, 256-QAM Modulation, High Channel, 647 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
47.974	0	Not Provided	47.97	60 / 62.15	N/A	

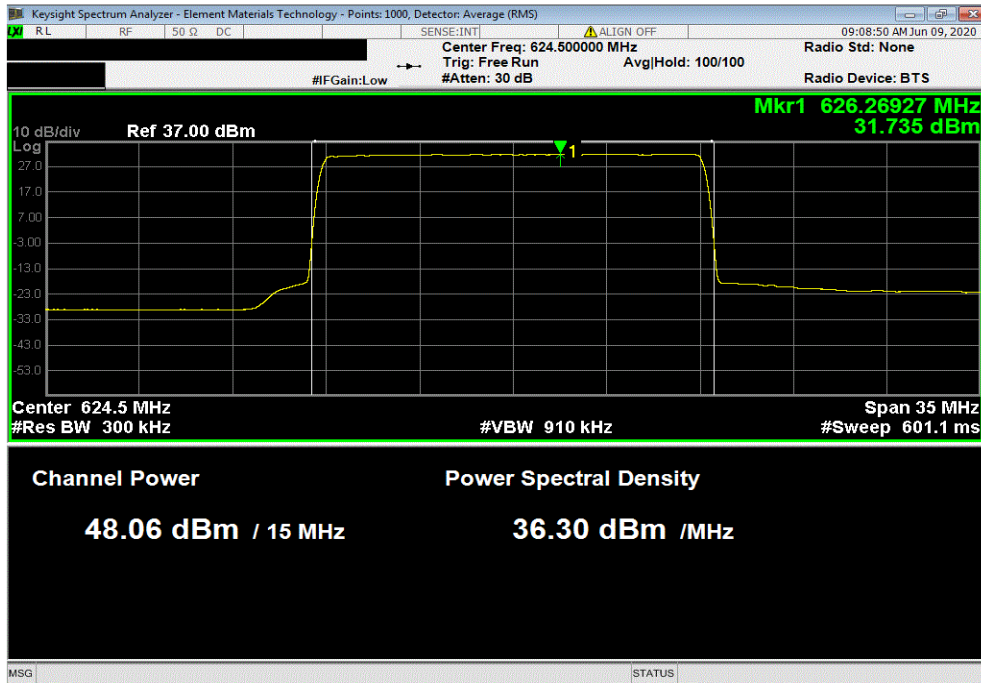


OUTPUT POWER

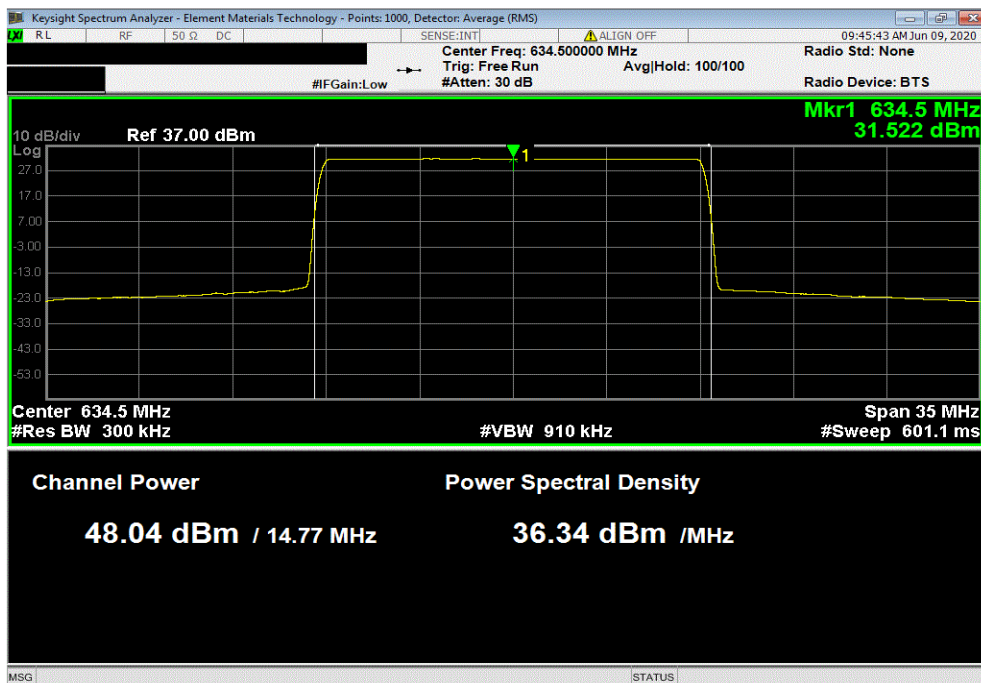


TXTx 2020.06.08.0 BETA XMM 2020.03.25.0

Port 1, Band 71, 617 MHz - 652 MHz, 15 MHz Bandwidth, QPSK Modulation, Low Channel, 624.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.057	0	Not Provided	48.06	60 / 62.15	N/A	



Port 1, Band 71, 617 MHz - 652 MHz, 15 MHz Bandwidth, QPSK Modulation, Mid Channel, 634.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.036	0	Not Provided	48.04	60 / 62.15	N/A	

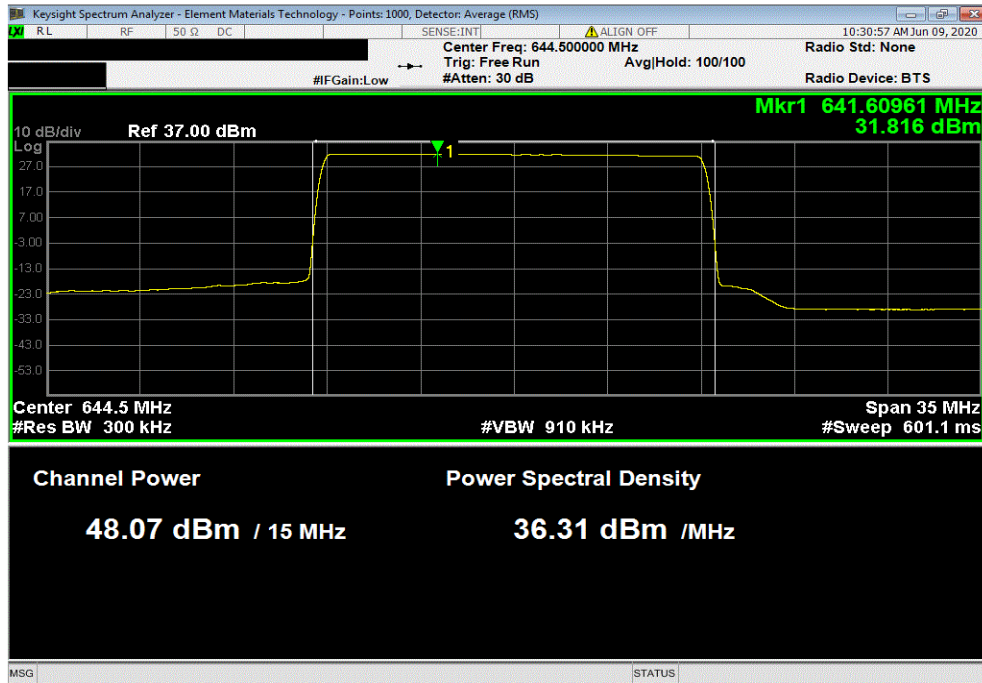


OUTPUT POWER

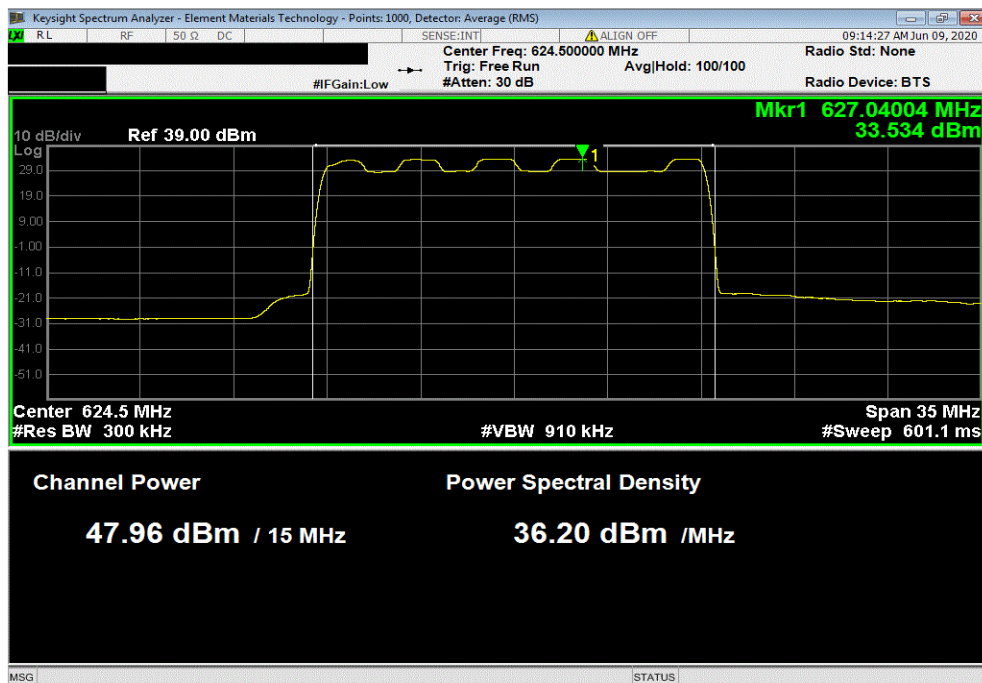


TSTx 2020.06.08.0 BETA XMM 2020.03.25.0

Port 1, Band 71, 617 MHz - 652 MHz, 15 MHz Bandwidth, QPSK Modulation, High Channel, 644.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.068	0	Not Provided	48.07	60 / 62.15	N/A	



Port 1, Band 71, 617 MHz - 652 MHz, 15 MHz Bandwidth, 16-QAM Modulation, Low Channel, 624.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
47.963	0	Not Provided	47.96	60 / 62.15	N/A	

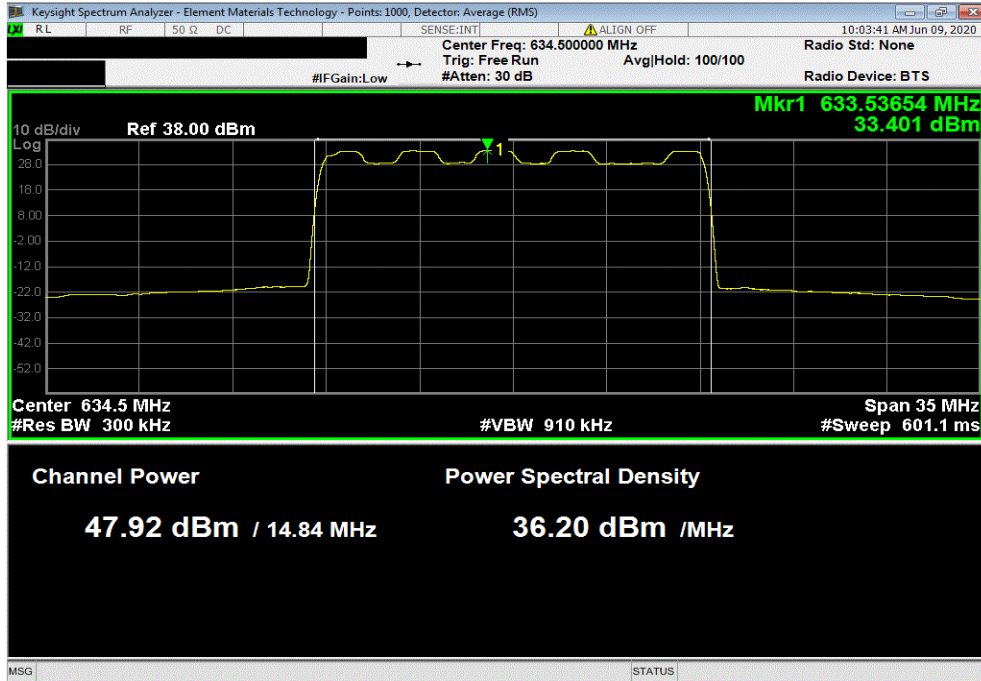


OUTPUT POWER

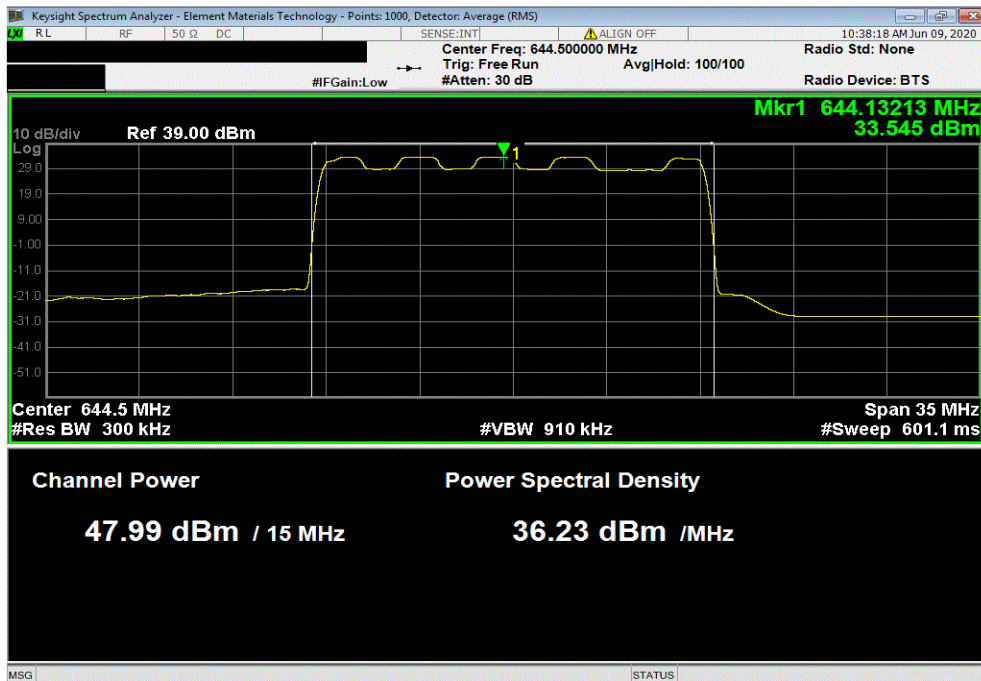


TSTx 2020.06.08.0 BETA XMM 2020.03.25.0

Port 1, Band 71, 617 MHz - 652 MHz, 15 MHz Bandwidth, 16-QAM Modulation, Mid Channel, 634.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
47.915	0	Not Provided	47.92	60 / 62.15	N/A	



Port 1, Band 71, 617 MHz - 652 MHz, 15 MHz Bandwidth, 16-QAM Modulation, High Channel, 644.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
47.99	0	Not Provided	47.99	60 / 62.15	N/A	

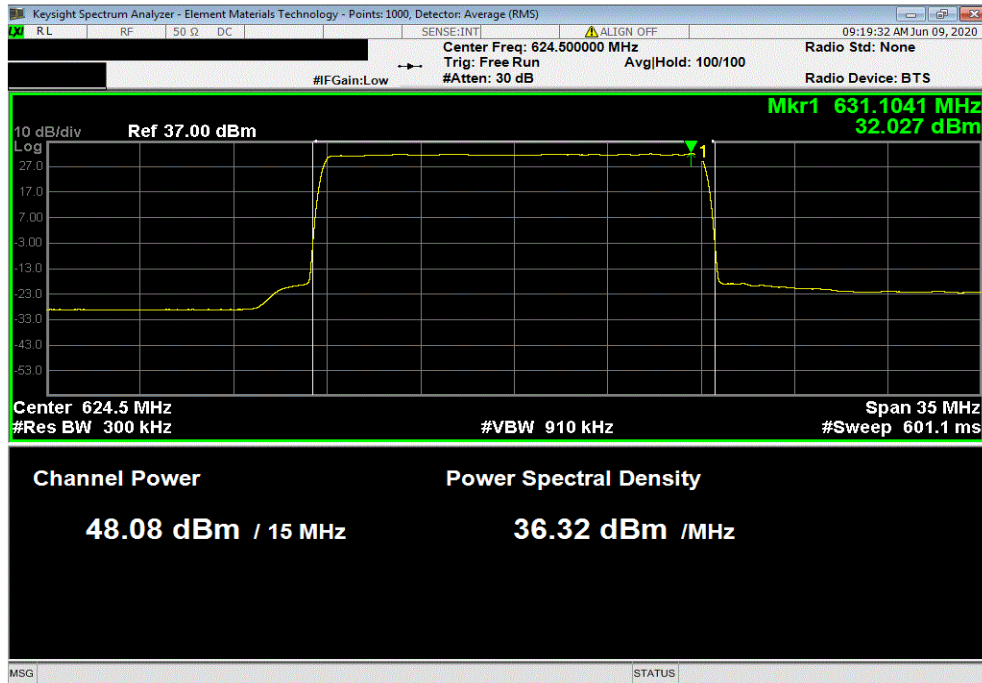


OUTPUT POWER

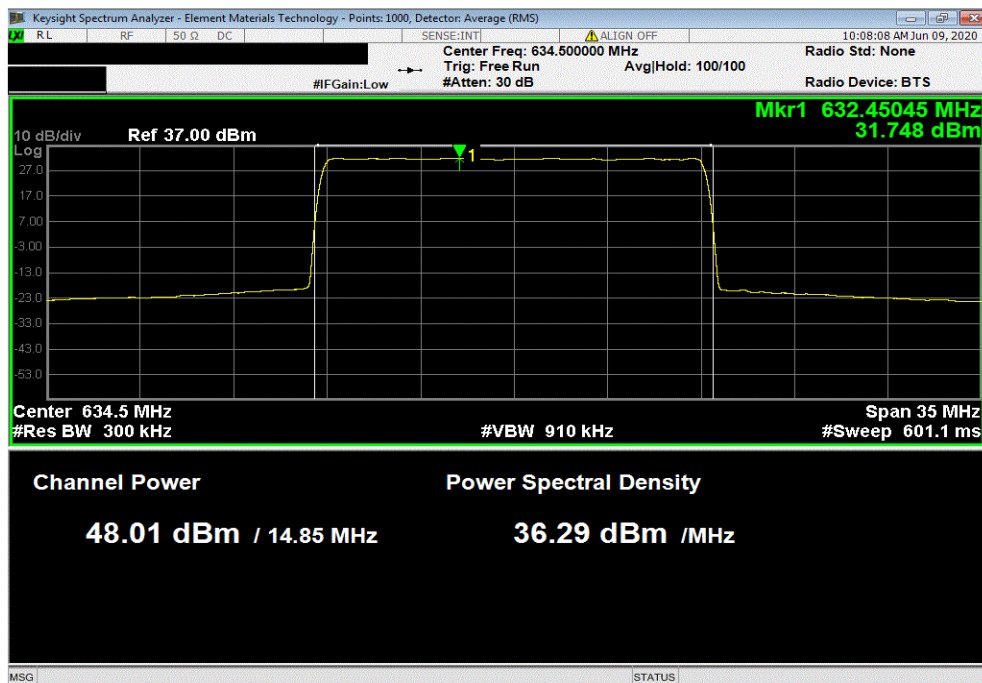


TSTx 2020.06.08.0 BETA XMM 2020.03.25.0

Port 1, Band 71, 617 MHz - 652 MHz, 15 MHz Bandwidth, 64-QAM Modulation, Low Channel, 624.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.077	0	Not Provided	48.08	60 / 62.15	N/A	



Port 1, Band 71, 617 MHz - 652 MHz, 15 MHz Bandwidth, 64-QAM Modulation, Mid Channel, 634.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.006	0	Not Provided	48.01	60 / 62.15	N/A	

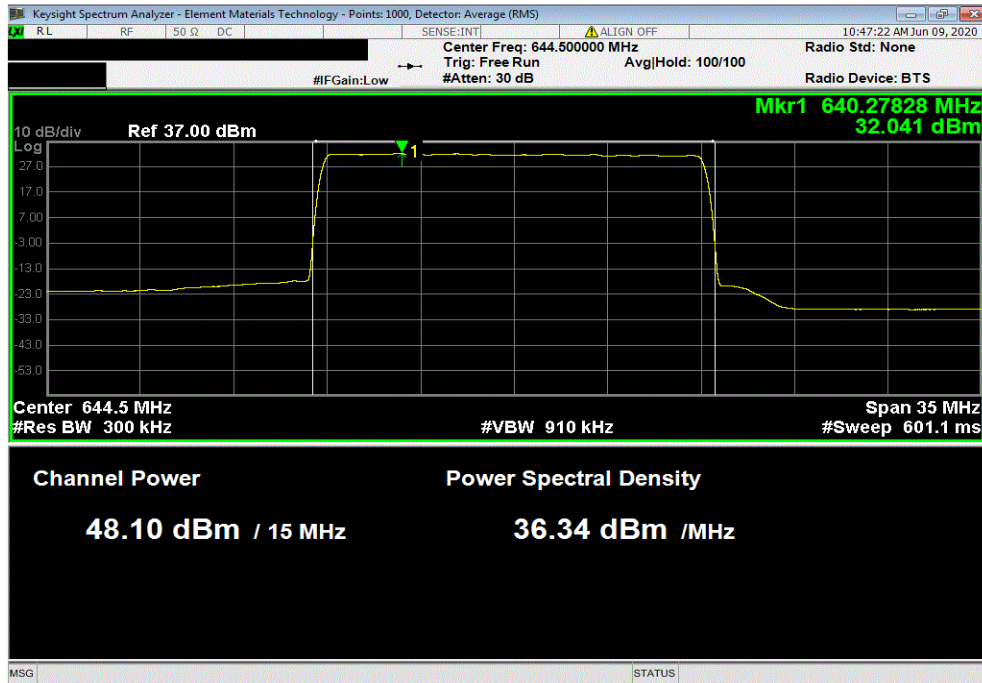


OUTPUT POWER

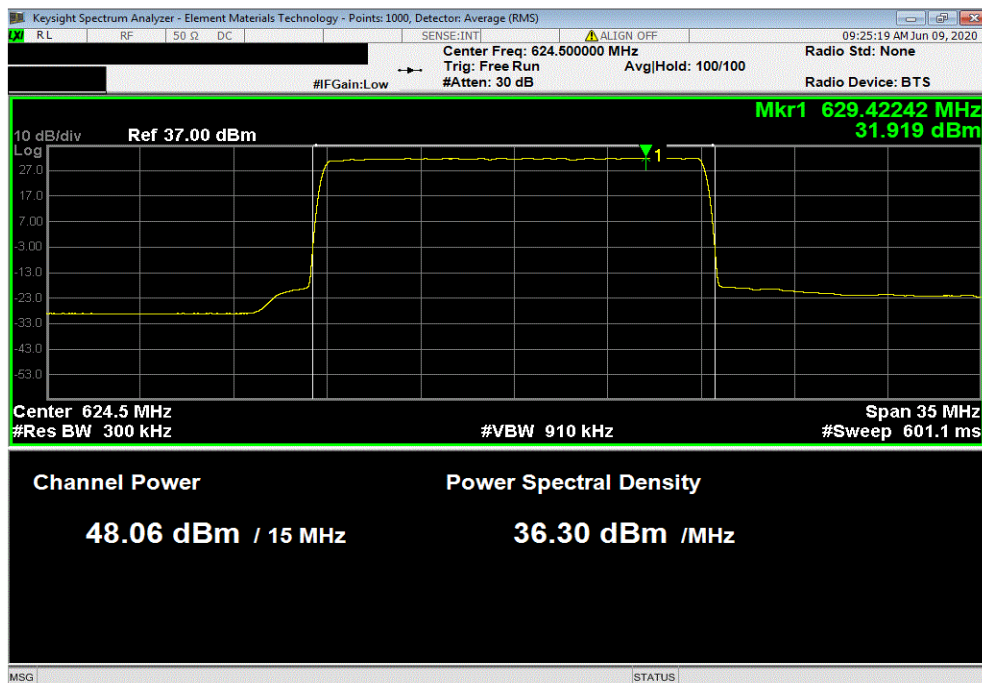


TSTx 2020.06.08.0 BETA XMM 2020.03.25.0

Port 1, Band 71, 617 MHz - 652 MHz, 15 MHz Bandwidth, 64-QAM Modulation, High Channel, 644.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.098	0	Not Provided	48.10	60 / 62.15	N/A	



Port 1, Band 71, 617 MHz - 652 MHz, 15 MHz Bandwidth, 256-QAM Modulation, Low Channel, 624.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.06	0	Not Provided	48.06	60 / 62.15	N/A	

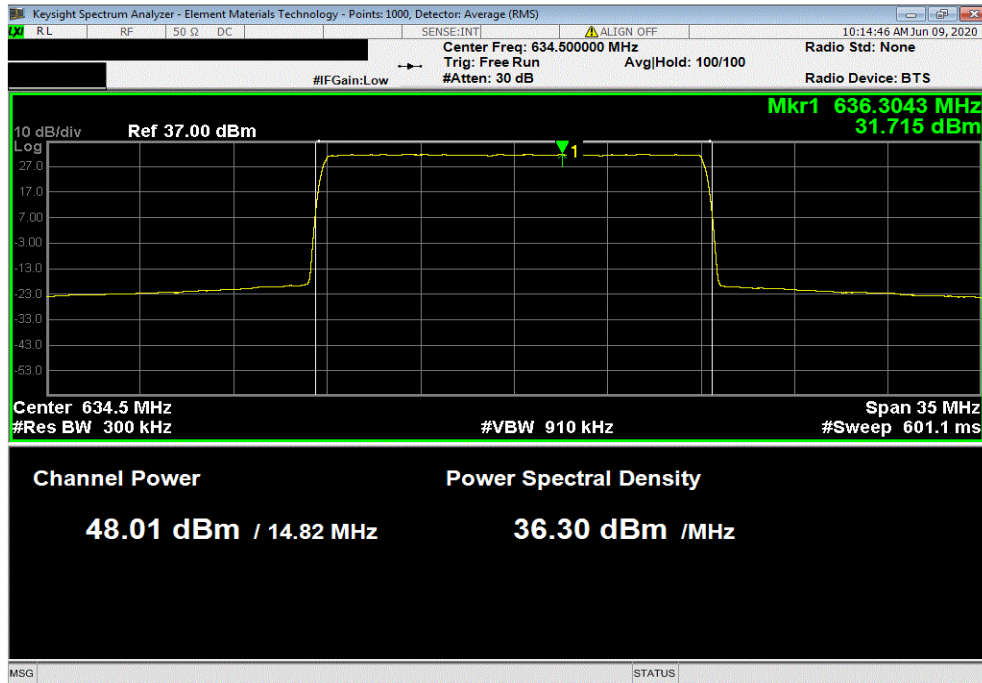


OUTPUT POWER

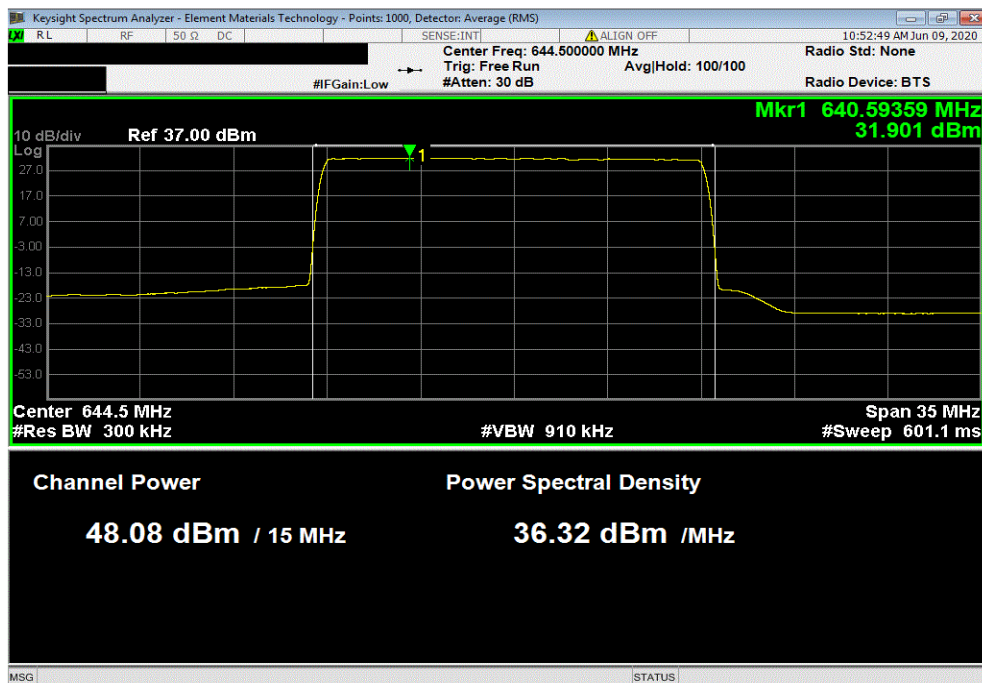


TSTx 2020.06.08.0 BETA XMM 2020.03.25.0

Port 1, Band 71, 617 MHz - 652 MHz, 15 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 634.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.01	0	Not Provided	48.01	60 / 62.15	N/A	



Port 1, Band 71, 617 MHz - 652 MHz, 15 MHz Bandwidth, 256-QAM Modulation, High Channel, 644.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.08	0	Not Provided	48.08	60 / 62.15	N/A	

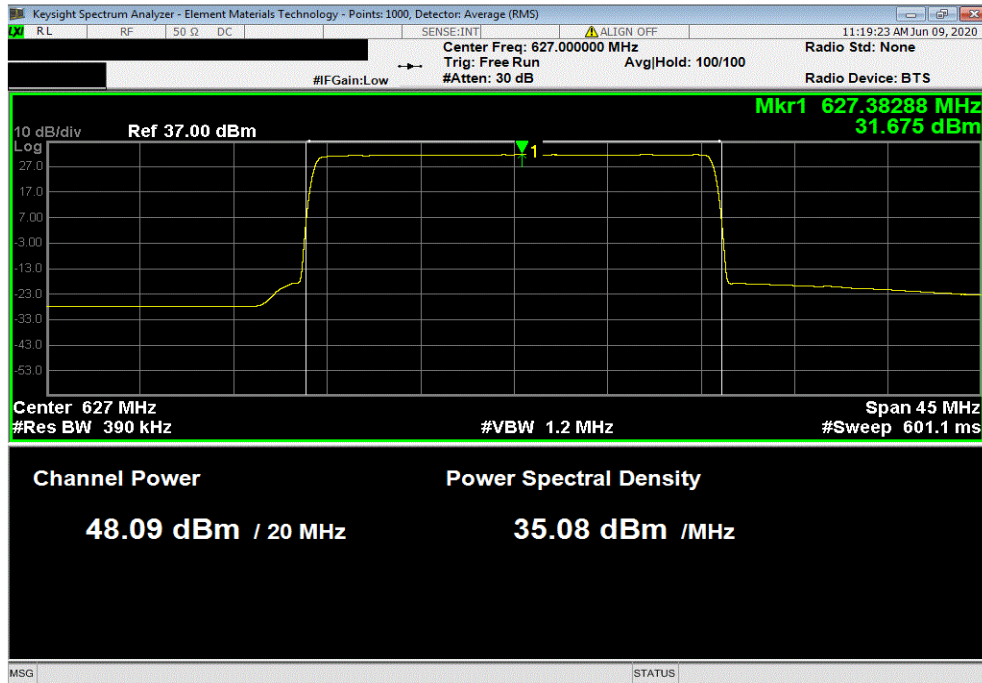


OUTPUT POWER

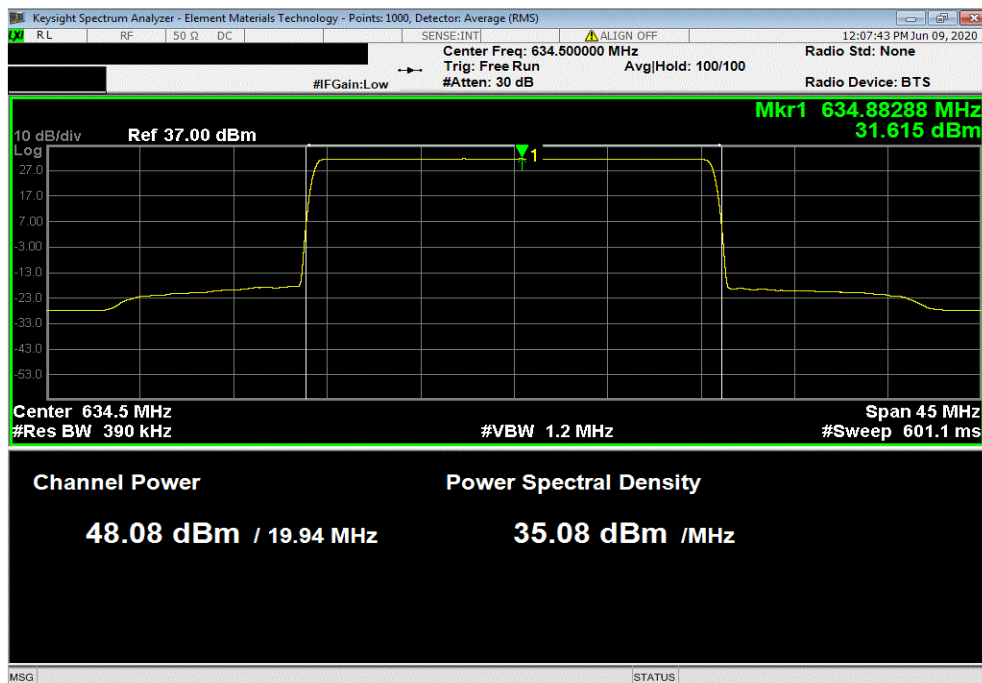


TSTx 2020.06.08.0 BETA XMM 2020.03.25.0

Port 1, Band 71, 617 MHz - 652 MHz, 20 MHz Bandwidth, QPSK Modulation, Low Channel, 627 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.092	0	Not Provided	48.09	60 / 62.15	N/A	



Port 1, Band 71, 617 MHz - 652 MHz, 20 MHz Bandwidth, QPSK Modulation, Mid Channel, 634.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.078	0	Not Provided	48.08	60 / 62.15	N/A	

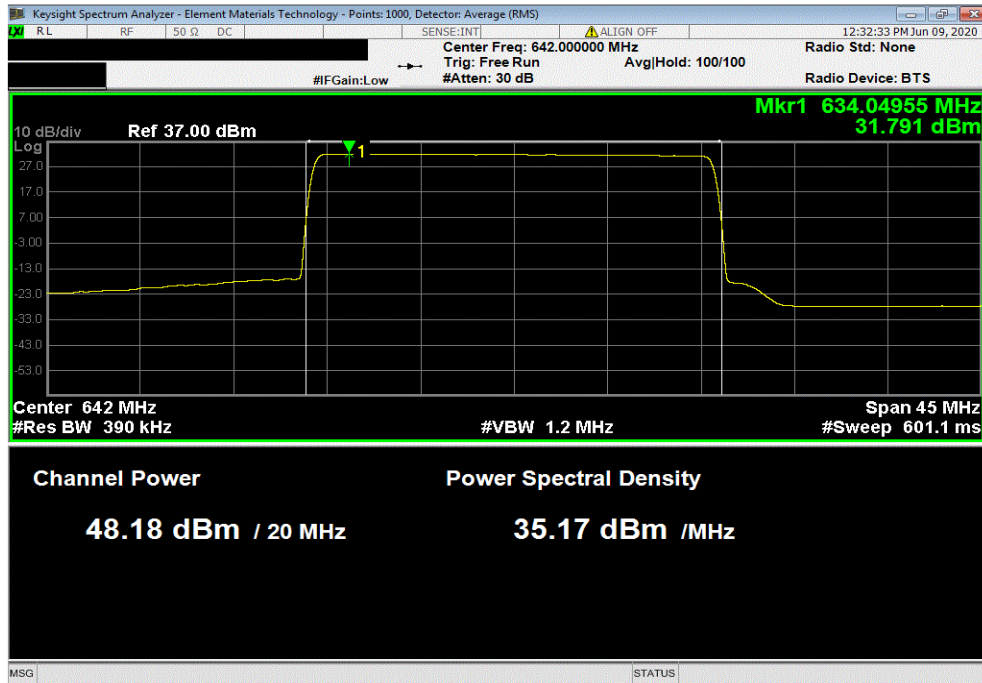


OUTPUT POWER

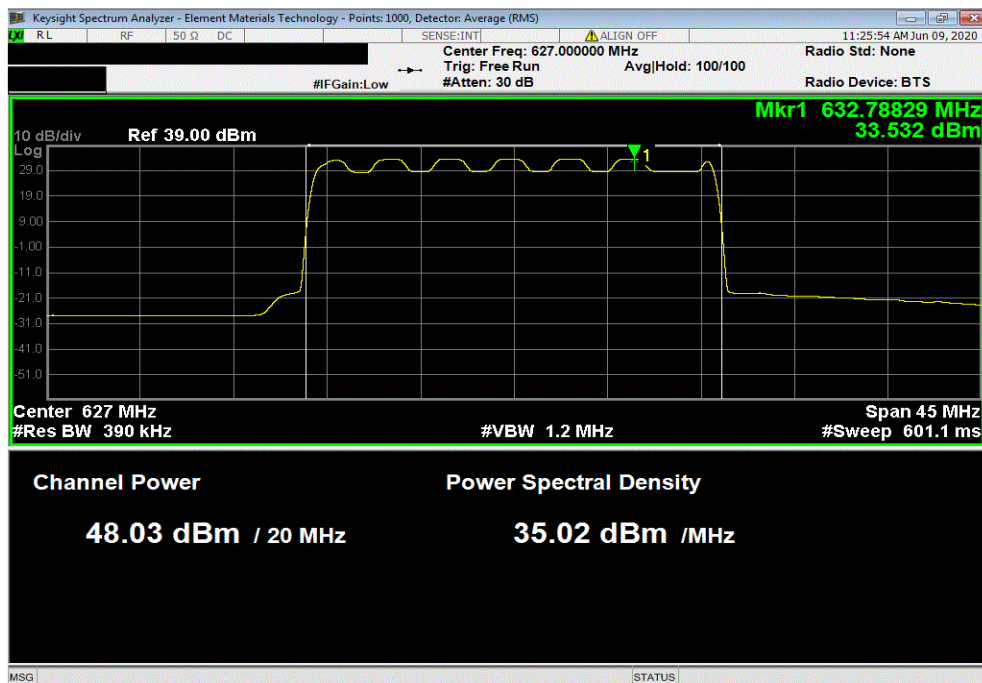


TSTx 2020.06.08.0 BETA XMM 2020.03.25.0

Port 1, Band 71, 617 MHz - 652 MHz, 20 MHz Bandwidth, QPSK Modulation, High Channel, 642 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.184	0	Not Provided	48.18	60 / 62.15	N/A	



Port 1, Band 71, 617 MHz - 652 MHz, 20 MHz Bandwidth, 16-QAM Modulation, Low Channel, 627 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.033	0	Not Provided	48.03	60 / 62.15	N/A	

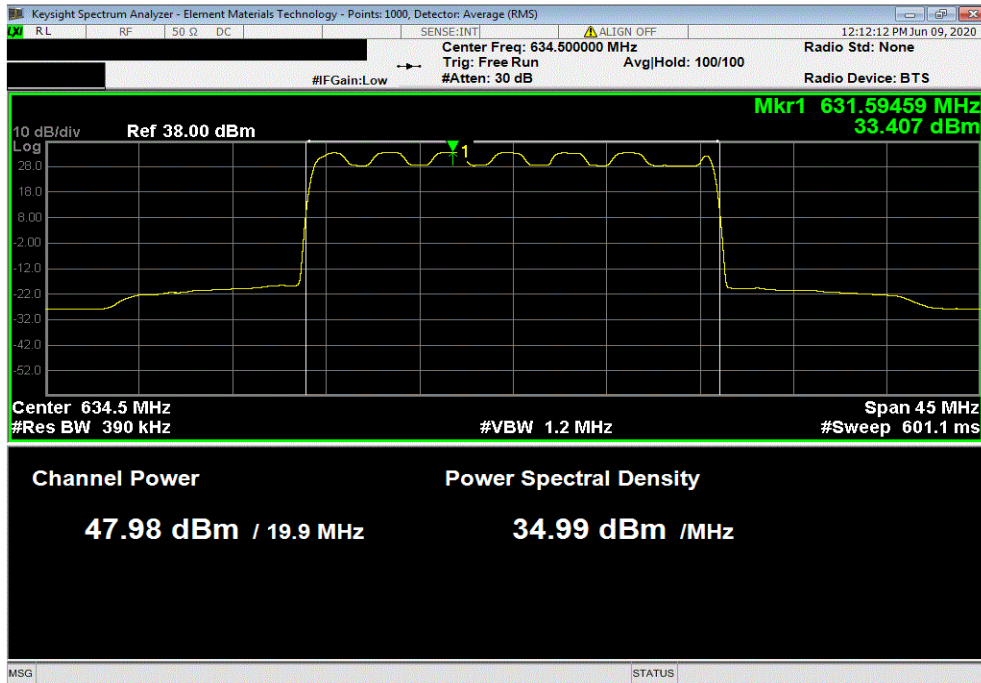


OUTPUT POWER

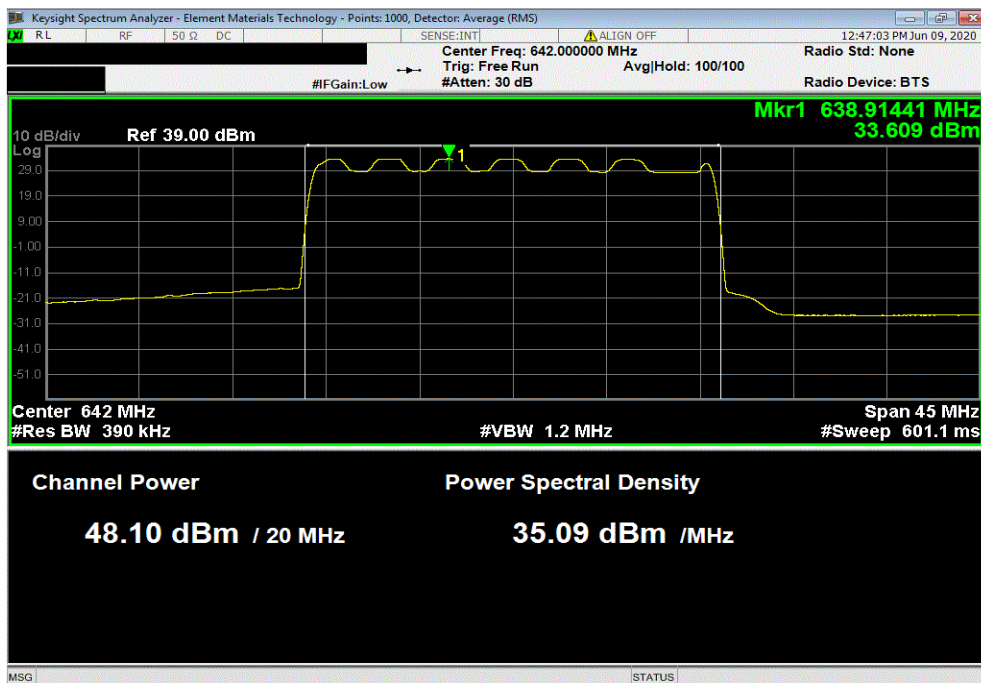


TSTx 2020.06.08.0 BETA XMM 2020.03.25.0

Port 1, Band 71, 617 MHz - 652 MHz, 20 MHz Bandwidth, 16-QAM Modulation, Mid Channel, 634.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
47.982	0	Not Provided	47.98	60 / 62.15	N/A	



Port 1, Band 71, 617 MHz - 652 MHz, 20 MHz Bandwidth, 16-QAM Modulation, High Channel, 642 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.096	0	Not Provided	48.10	60 / 62.15	N/A	

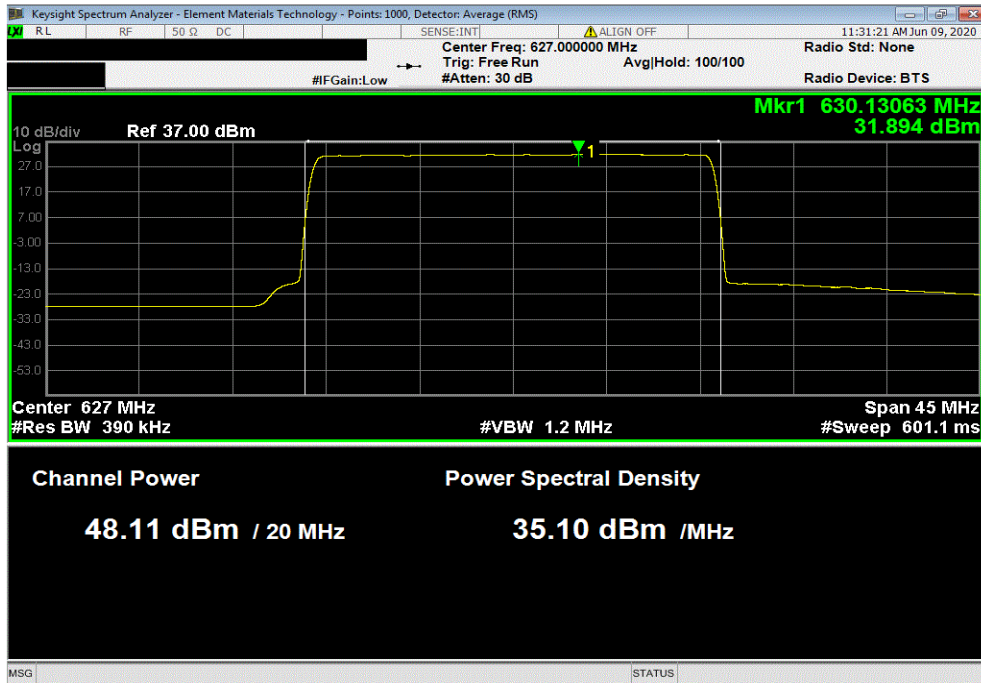


OUTPUT POWER

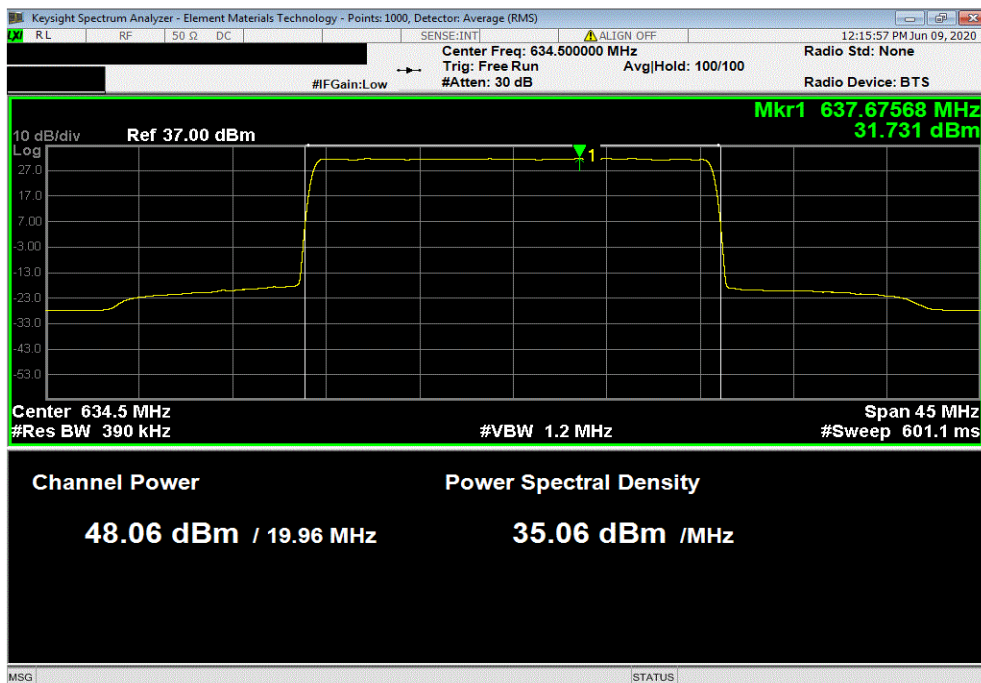


TSTx 2020.06.08.0 BETA XMM 2020.03.25.0

Port 1, Band 71, 617 MHz - 652 MHz, 20 MHz Bandwidth, 64-QAM Modulation, Low Channel, 627 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.115	0	Not Provided	48.12	60 / 62.15	N/A	



Port 1, Band 71, 617 MHz - 652 MHz, 20 MHz Bandwidth, 64-QAM Modulation, Mid Channel, 634.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.059	0	Not Provided	48.06	60 / 62.15	N/A	

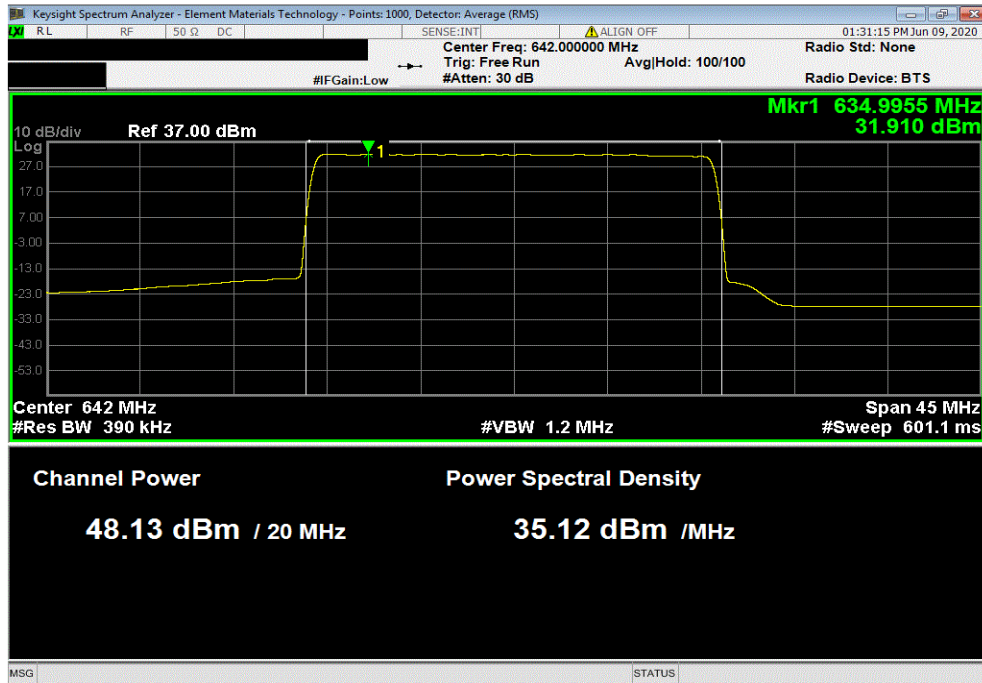


OUTPUT POWER

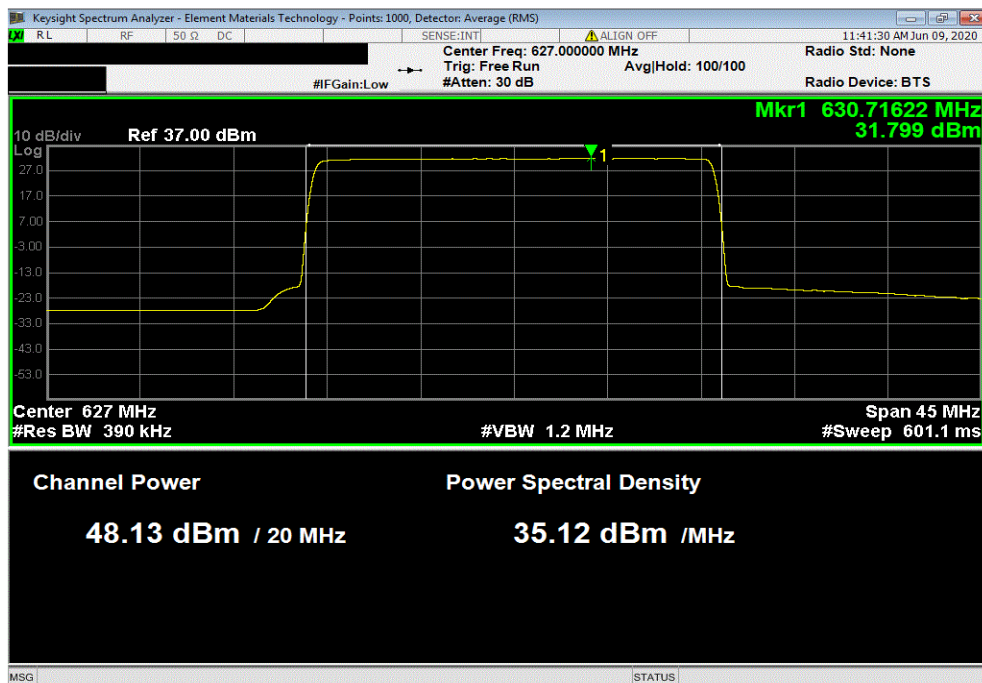


TSTx 2020.06.08.0 BETA XMM 2020.03.25.0

Port 1, Band 71, 617 MHz - 652 MHz, 20 MHz Bandwidth, 64-QAM Modulation, High Channel, 642 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.133	0	Not Provided	48.13	60 / 62.15	N/A	



Port 1, Band 71, 617 MHz - 652 MHz, 20 MHz Bandwidth, 256-QAM Modulation, Low Channel, 627 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.129	0	Not Provided	48.13	60 / 62.15	N/A	

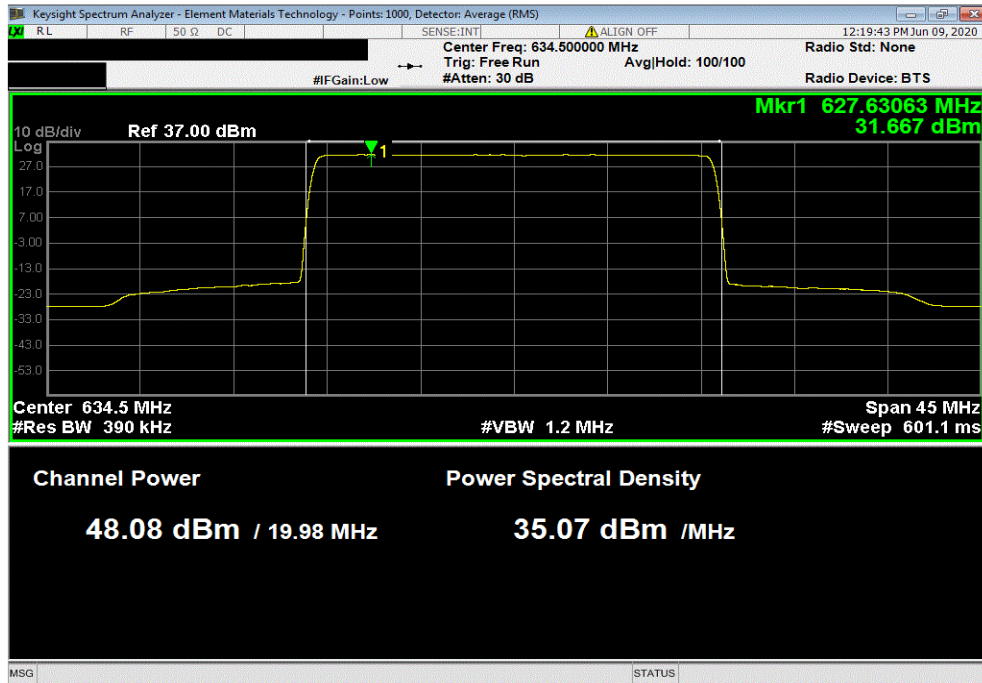


OUTPUT POWER



TSTx 2020.06.08.0 BETA XMM 2020.03.25.0

Port 1, Band 71, 617 MHz - 652 MHz, 20 MHz Bandwidth, 256-QAM Modulation, Mid Channel, 634.5 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.078	0	Not Provided	48.08	60 / 62.15	N/A	



Port 1, Band 71, 617 MHz - 652 MHz, 20 MHz Bandwidth, 256-QAM Modulation, High Channel, 642 MHz						
Initial Power (dBm/OBW)	Duty Cycle Factor (dB)	Antenna Gain (dBd)+2.15=(dBi)	Final w/o Ant Gain Value (dBm/OBW)	FCC ERP / RSS EIRP Limits (dBm/OBW)	Results	
48.121	0	Not Provided	48.12	60 / 62.15	N/A	

