

MAXIMUM CONDUCTED OUTPUT POWER - 5.8 GHz BAND



XMIT 2022.02.07.0

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
Generator - Signal	Keysight	N5182B	TFU	2020-11-20	2022-11-20
Cable	Micro-Coax	UFD150A-1-0720-200200	EVK	2021-03-14	2022-03-14
Attenuator	S.M. Electronics	SA26B-20	AUY	2021-03-14	2022-03-14
Block - DC	Fairview Microwave	SD3379	AMW	2021-03-14	2022-03-14
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFO	2021-07-06	2022-07-06

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer.

The transmit frequency was set to the required channels in each band. The transmit power was set to its default maximum. The radio was operated in the modes as shown in the following data sheets.

Prior to measuring maximum transmit power; the emission bandwidth (B) and the transmission pulse duration (T) were measured. The method of measuring the emission bandwidth and the associated data are found elsewhere in this test report. The transmission pulse duration (T) was measured using a zero span on the spectrum analyzer to see the pulses in the time domain.

The maximum conducted output power was measured using ANSI C63.10:2013, Clause 12.3.2.4, Method SA-2 (RMS detection and trace averaging across the on and off times of the EUT transmission and use of a duty cycle correction factor).

The spectrum analyzer settings were set per the guidance as well as the following specifics:

- RMS Detector
- Trace average 100 traces in power averaging mode.
- Power was integrated across "B", by using the channel power function of the analyzer.

A duty cycle correction factor was added to the measurement using the results of the formula of $10 \cdot \log(1/D)$ where D is the duty cycle.

MAXIMUM CONDUCTED OUTPUT POWER - 5.8 GHz BAND



TSTx 2021.03.19.1 XMR 2022.02.07.0

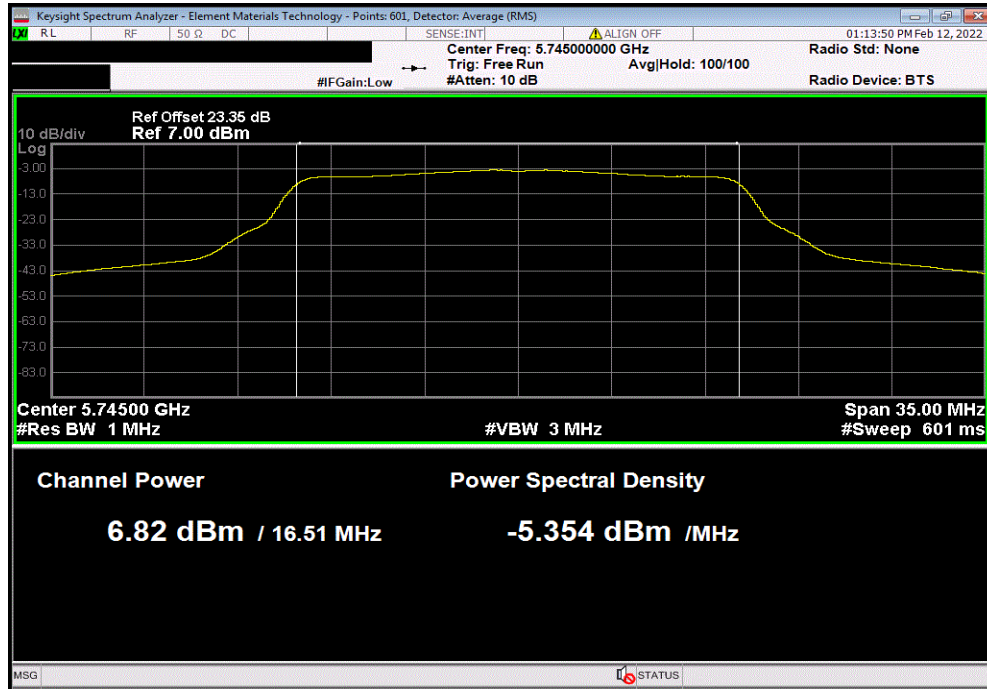
EUT: 43.0536.00		Work Order: A-DE0170	
Serial Number: SN001 00001		Date: 19-Feb-22	
Customer: A-dec, Inc.		Temperature: 18.9 °C	
Attendees: None		Humidity: 30.1% RH	
Project: None		Barometric Pres.: 1033 mbar	
Tested by: Jeff Alcoke		Power: 3.3 VDC via 110VAC/60Hz	
TEST SPECIFICATIONS		Job Site: EV06	
FCC 15.407:2022		Test Method	
		ANSI C63.10:2013	
COMMENTS			
Reference level offset includes: DC Block, 20 dB attenuator, and measurement cable.			
DEVIATIONS FROM TEST STANDARD			
None			
Configuration #	3	Signature 	
		Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)
		Out Pwr (dBm)	Limit (dBm)
			Result
5725 - 5785 MHz Band			
802.11(a) No HT			
Low Channel, Ch 149 - 5745 MHz			
	6 Mbps	6.824	0.1
	36 Mbps	5.518	0.3
	54 Mbps	6.514	0.5
Mid Channel, Ch 157 - 5785 MHz			
	6 Mbps	6.926	0.1
	36 Mbps	6.496	0.3
	54 Mbps	6.413	0.5
High Channel, Ch 165 - 5825 MHz			
	6 Mbps	6.865	0.1
	36 Mbps	6.621	0.3
	54 Mbps	6.56	0.5
802.11(n/ac) VHT20			
Low Channel, Ch 149 - 5745 MHz			
	MCS0	5.761	0.1
	MCS7	6.112	0.5
	MCS8 (256-QAM)	6.042	0.5
Mid Channel, Ch 157 - 5785 MHz			
	MCS0	6.555	0.1
	MCS7	5.168	0.5
	MCS8 (256-QAM)	6.032	0.5
High Channel, Ch 165 - 5825 MHz			
	MCS0	6.644	0.1
	MCS7	6.433	0.5
	MCS8 (256-QAM)	6.338	0.5
802.11(n/ac) VHT40			
Low Channel, Ch 149/153 - 5755 MHz			
	MCS0	6.581	0.1
	MCS7	5.255	0.7
	MCS9 (256-QAM)	6.814	0.8
High Channel, Ch 157/161 - 5795 MHz			
	MCS0	5.718	0.1
	MCS7	5.747	0.7
	MCS9 (256-QAM)	5.826	0.8
802.11(n/ac) VHT80			
Low Channel, Ch 149-161 - 5775 MHz			
	MCS0	4.558	0.2
	MCS9 (256-QAM)	3.539	1.1

MAXIMUM CONDUCTED OUTPUT POWER - 5.8 GHz BAND

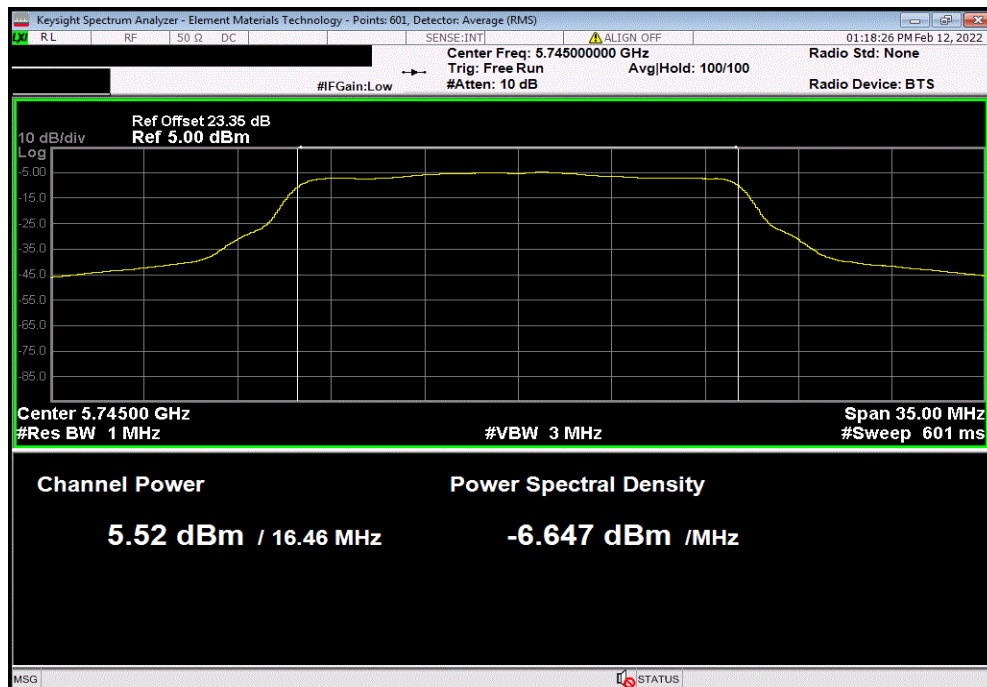


TbTx 2021.03.19.1 XMt 2022.02.07.0

5725 - 5785 MHz Band, 802.11(a) No HT, Low Channel, Ch 149 - 5745 MHz, 6 Mbps						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result	
	6.824	0.1	6.9	30	Pass	



5725 - 5785 MHz Band, 802.11(a) No HT, Low Channel, Ch 149 - 5745 MHz, 36 Mbps						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result	
	5.518	0.3	5.8	30	Pass	

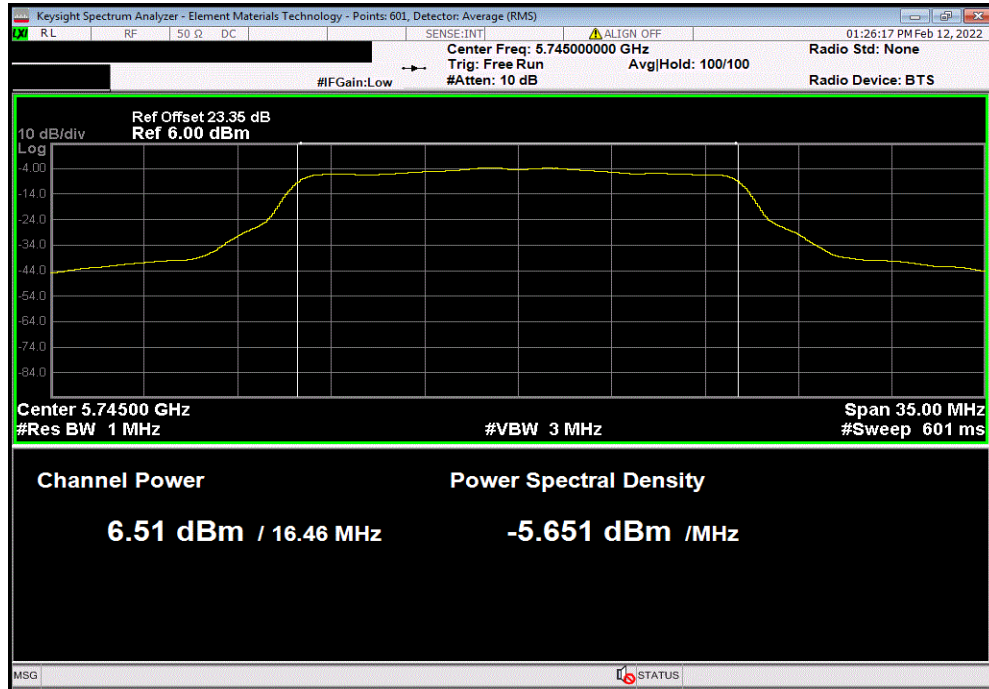


MAXIMUM CONDUCTED OUTPUT POWER - 5.8 GHz BAND

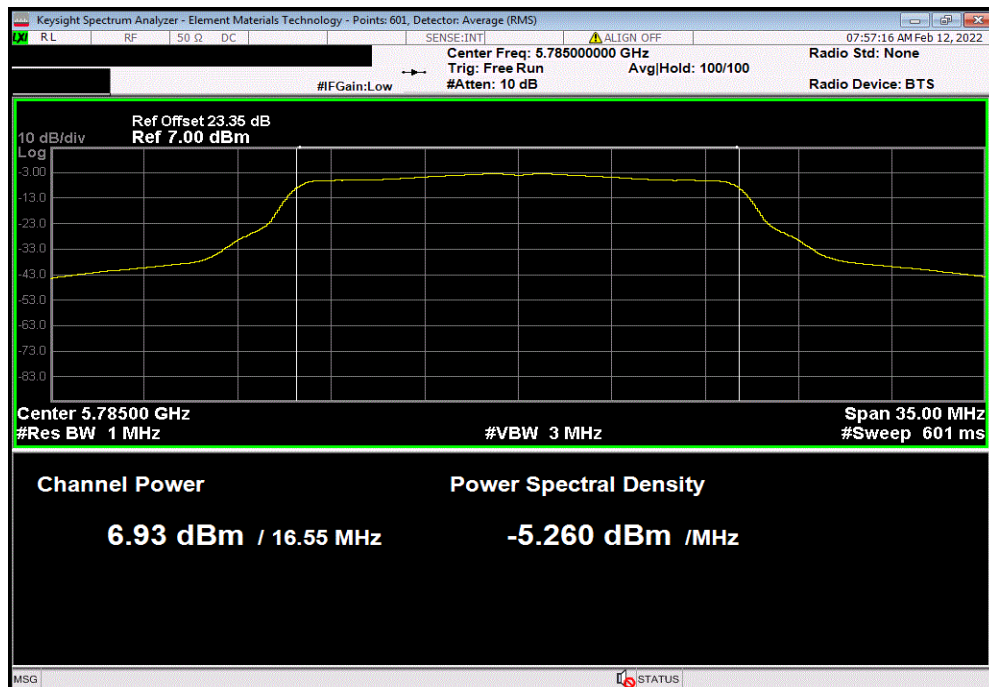


TbTx 2021.03.19.1 XMt 2022.02.07.0

5725 - 5785 MHz Band, 802.11(a) No HT, Low Channel, Ch 149 - 5745 MHz, 54 Mbps						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result	
	6.514	0.5	7	30	Pass	



5725 - 5785 MHz Band, 802.11(a) No HT, Mid Channel, Ch 157 - 5785 MHz, 6 Mbps						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result	
	6.926	0.1	7	30	Pass	

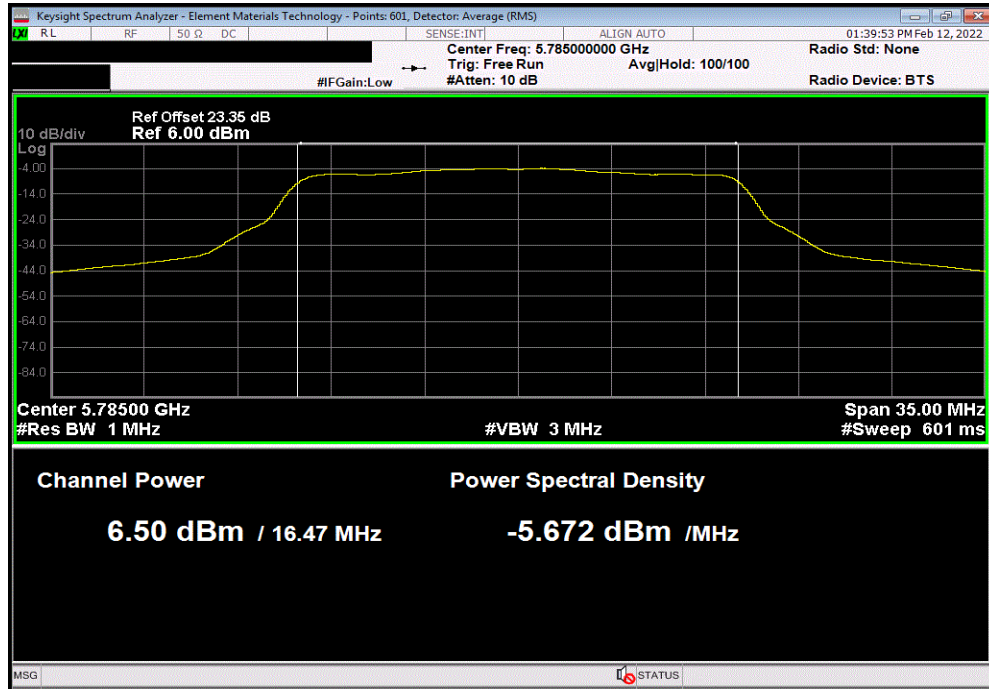


MAXIMUM CONDUCTED OUTPUT POWER - 5.8 GHz BAND

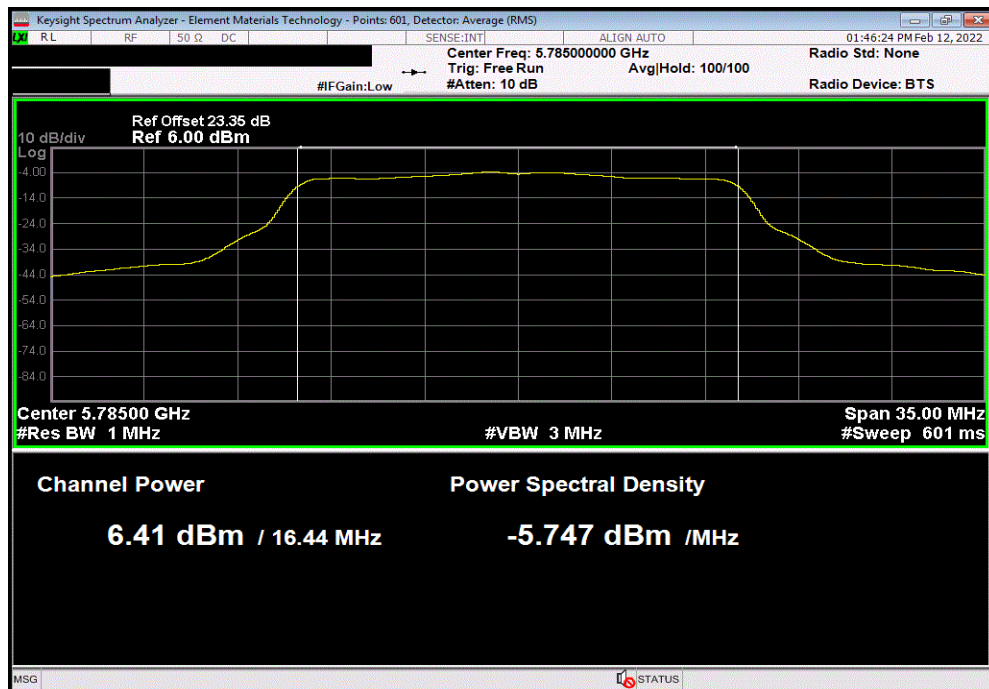


TbTx 2021.03.19.1 XMt 2022.02.07.0

5725 - 5785 MHz Band, 802.11(a) No HT, Mid Channel, Ch 157 - 5785 MHz, 36 Mbps						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result	
	6.496	0.3	6.8	30	Pass	



5725 - 5785 MHz Band, 802.11(a) No HT, Mid Channel, Ch 157 - 5785 MHz, 54 Mbps						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result	
	6.413	0.5	6.9	30	Pass	

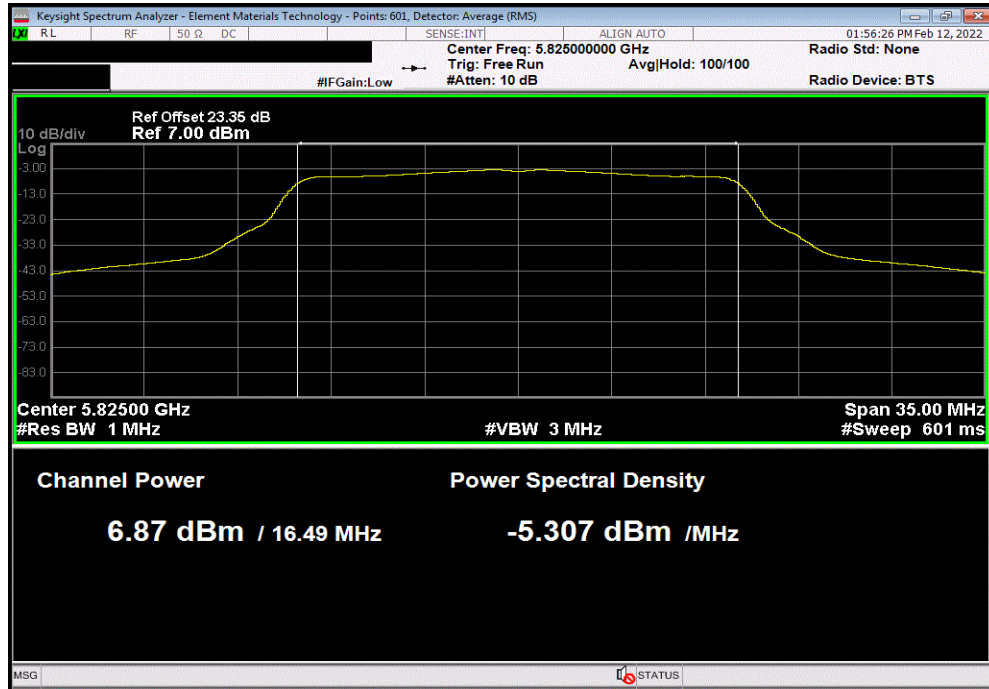


MAXIMUM CONDUCTED OUTPUT POWER - 5.8 GHz BAND

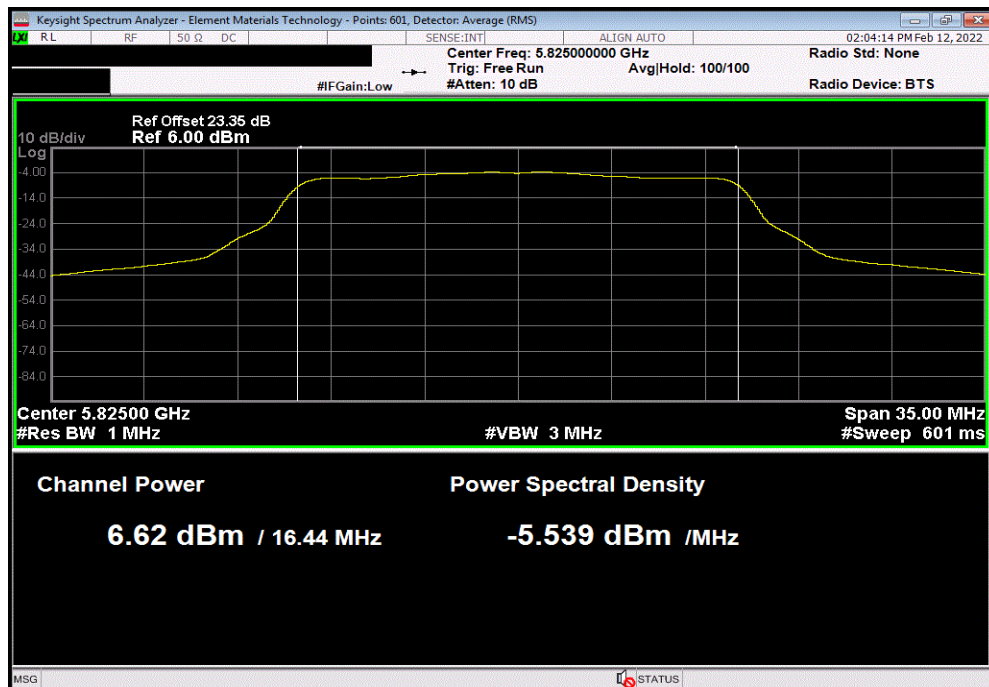


TbTx 2021.03.19.1 XMt 2022.02.07.0

5725 - 5785 MHz Band, 802.11(a) No HT, High Channel, Ch 165 - 5825 MHz, 6 Mbps						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result	
	6.865	0.1	7	30	Pass	



5725 - 5785 MHz Band, 802.11(a) No HT, High Channel, Ch 165 - 5825 MHz, 36 Mbps						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result	
	6.621	0.3	6.9	30	Pass	

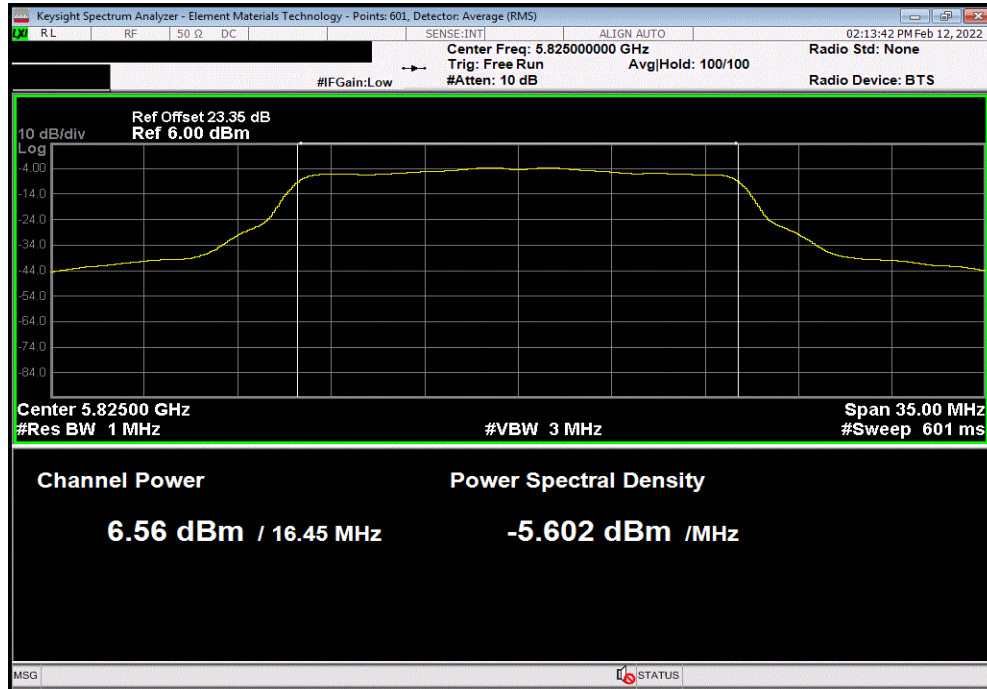


MAXIMUM CONDUCTED OUTPUT POWER - 5.8 GHz BAND

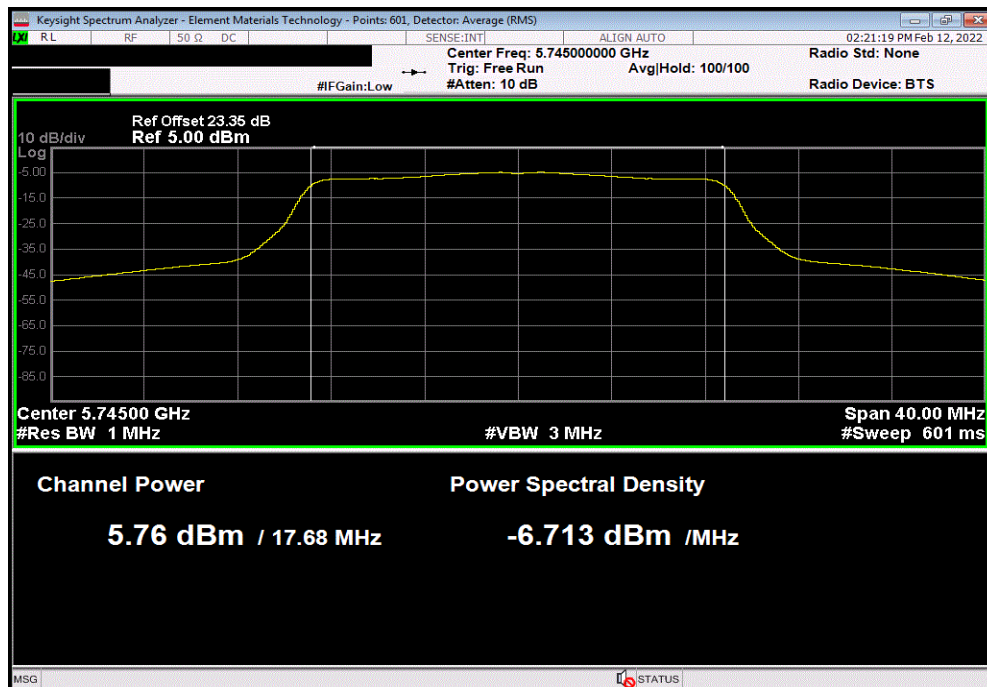


TbTx 2021.03.19.1 XMt 2022.02.07.0

5725 - 5785 MHz Band, 802.11(a) No HT, High Channel, Ch 165 - 5825 MHz, 54 Mbps						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result	
	6.56	0.5	7.1	30	Pass	



5725 - 5785 MHz Band, 802.11(n/ac) VHT20, Low Channel, Ch 149 - 5745 MHz, MCS0						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result	
	5.761	0.1	5.9	30	Pass	

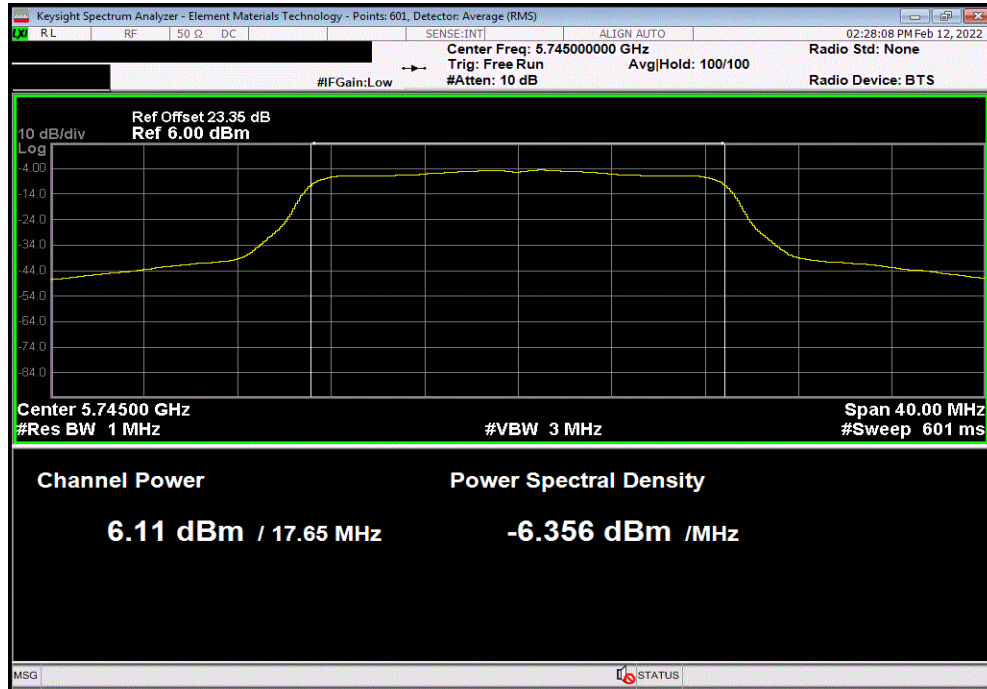


MAXIMUM CONDUCTED OUTPUT POWER - 5.8 GHz BAND

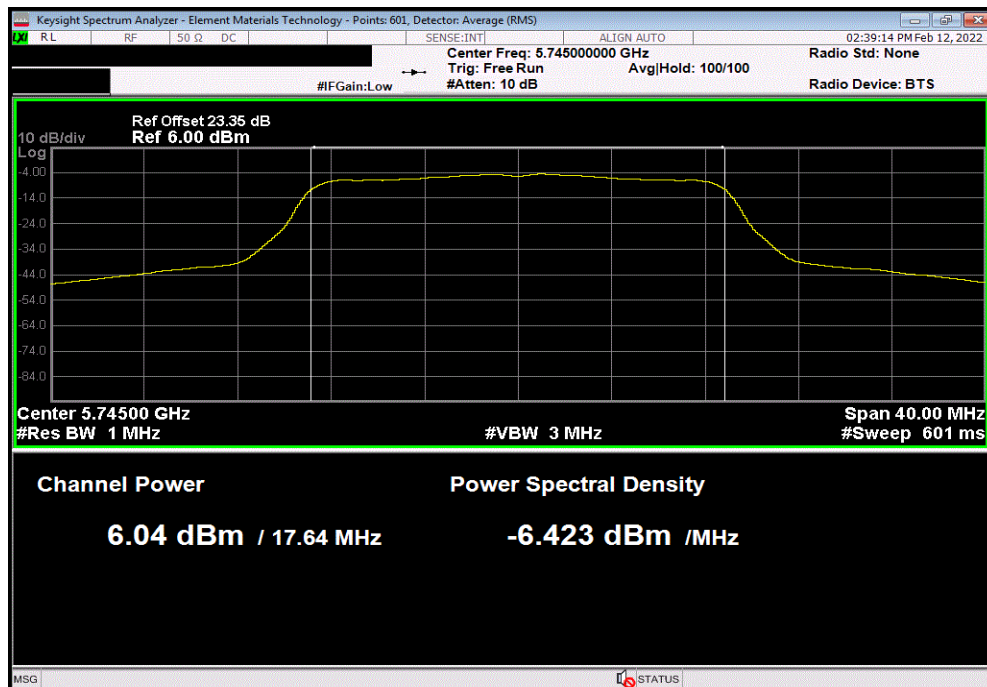


TbTx 2021.03.19.1 XMt 2022.02.07.0

5725 - 5785 MHz Band, 802.11(n/ac) VHT20, Low Channel, Ch 149 - 5745 MHz, MCS7						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result	
	6.112	0.5	6.6	30	Pass	



5725 - 5785 MHz Band, 802.11(n/ac) VHT20, Low Channel, Ch 149 - 5745 MHz, MCS8 (256-QAM)						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result	
	6.042	0.5	6.5	30	Pass	

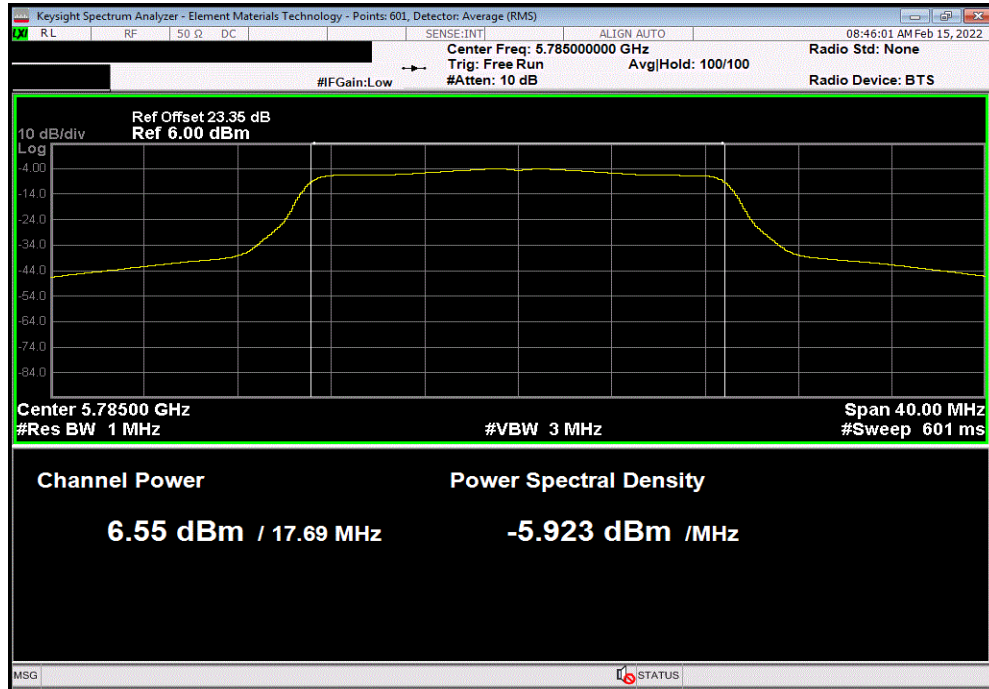


MAXIMUM CONDUCTED OUTPUT POWER - 5.8 GHz BAND

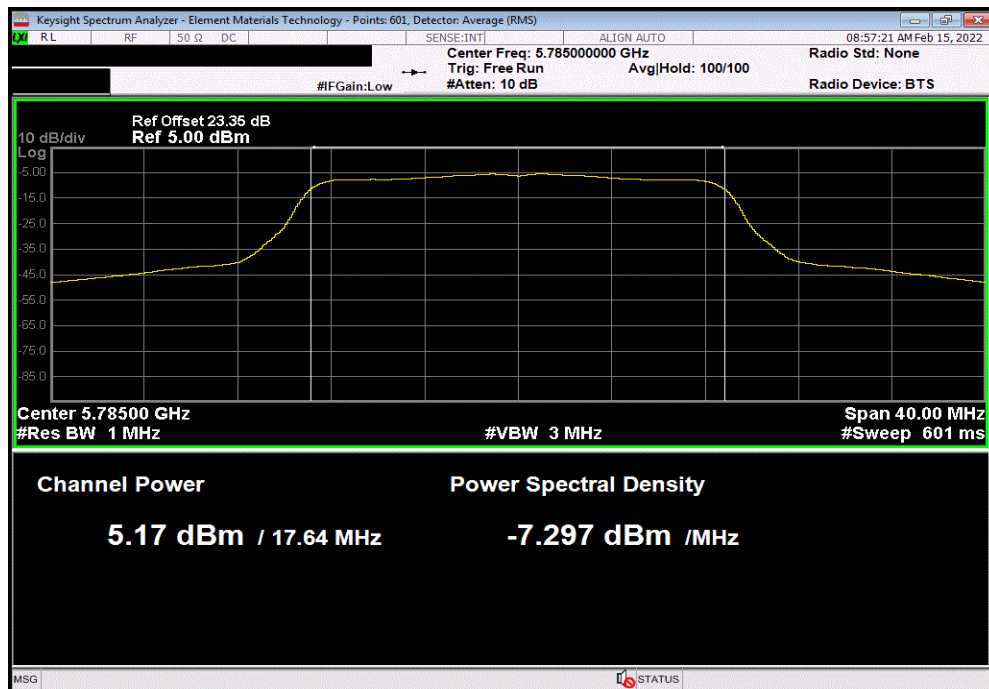


TbTx 2021.03.19.1 XMt 2022.02.07.0

5725 - 5785 MHz Band, 802.11(n/ac) VHT20, Mid Channel, Ch 157 - 5785 MHz, MCS0						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result	
	6.555	0.1	6.7	30	Pass	



5725 - 5785 MHz Band, 802.11(n/ac) VHT20, Mid Channel, Ch 157 - 5785 MHz, MCS7						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result	
	5.168	0.5	5.7	30	Pass	

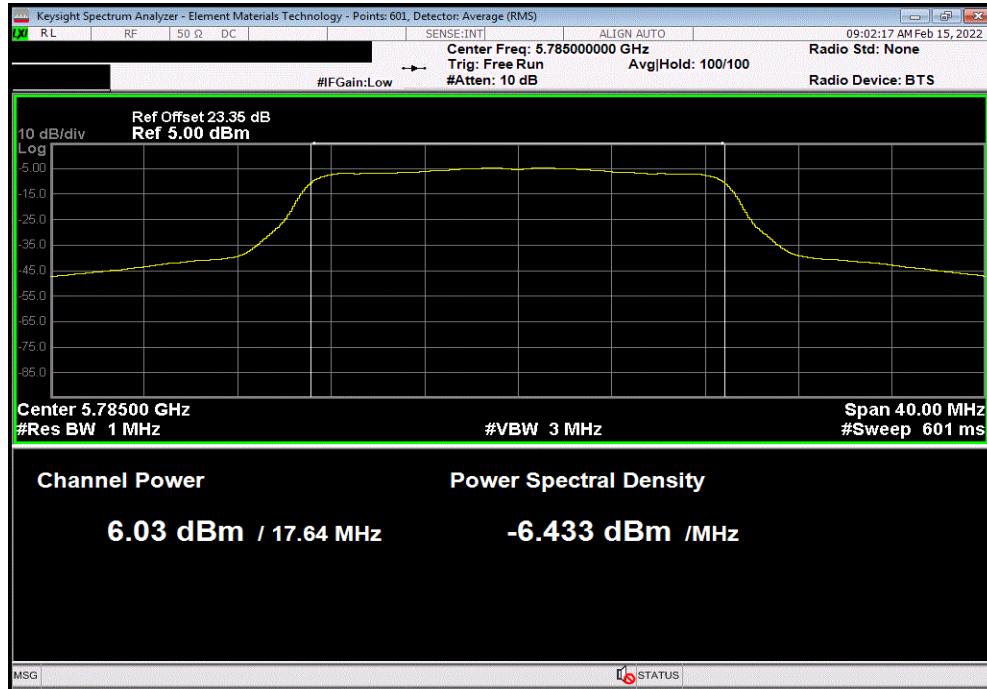


MAXIMUM CONDUCTED OUTPUT POWER - 5.8 GHz BAND

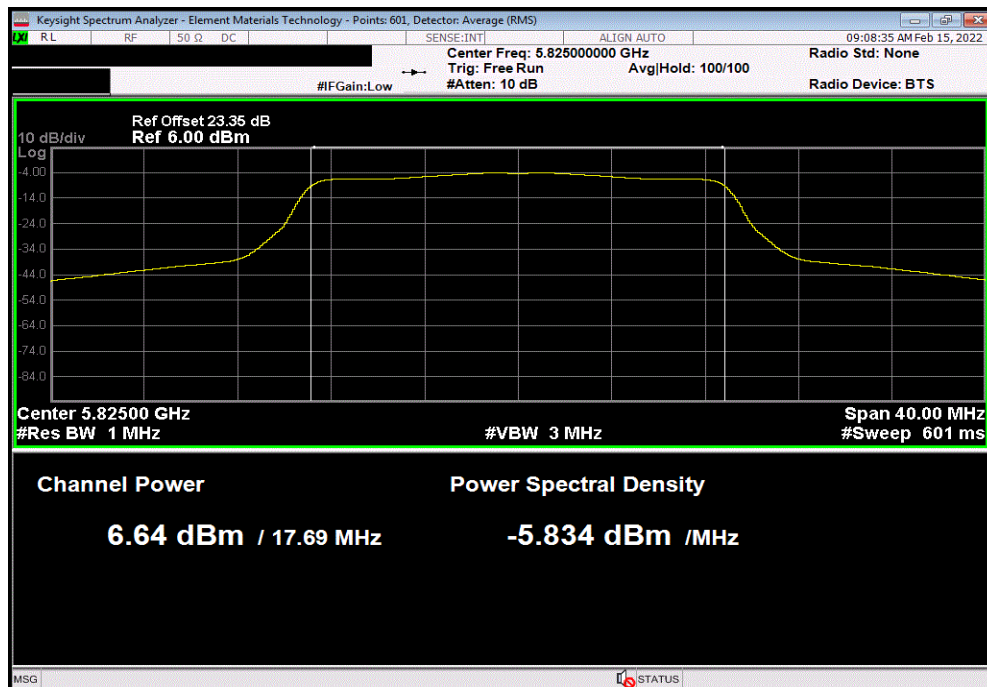


TbTx 2021.03.19.1 XMt 2022.02.07.0

5725 - 5785 MHz Band, 802.11(n/ac) VHT20, Mid Channel, Ch 157 - 5785 MHz, MCS8 (256-QAM)						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result	
	6.032	0.5	6.5	30	Pass	



5725 - 5785 MHz Band, 802.11(n/ac) VHT20, High Channel, Ch 165 - 5825 MHz, MCS0						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result	
	6.644	0.1	6.7	30	Pass	

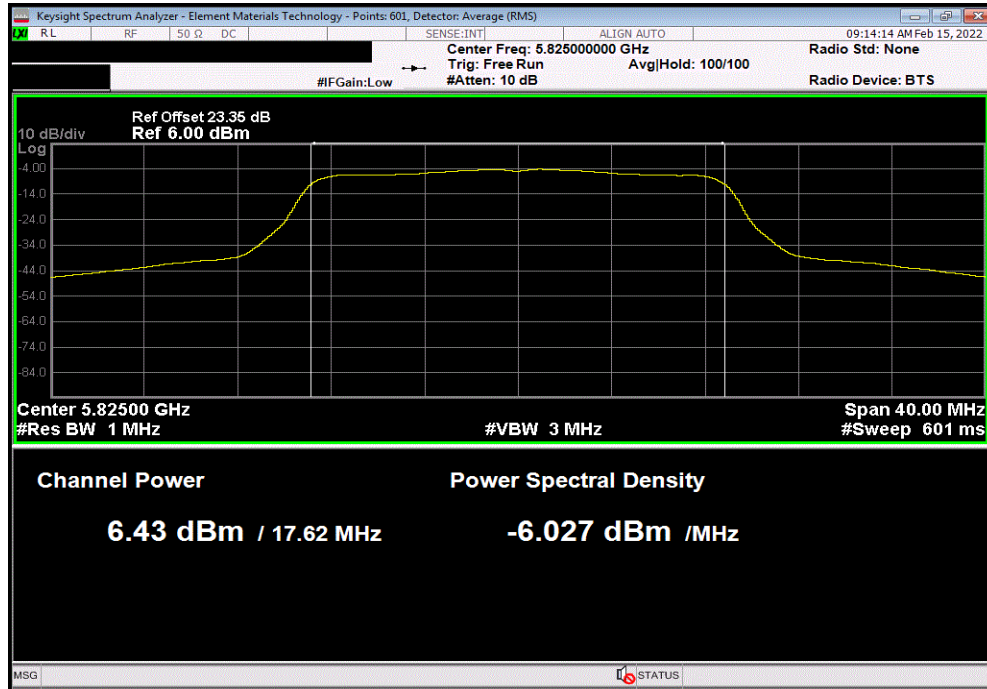


MAXIMUM CONDUCTED OUTPUT POWER - 5.8 GHz BAND

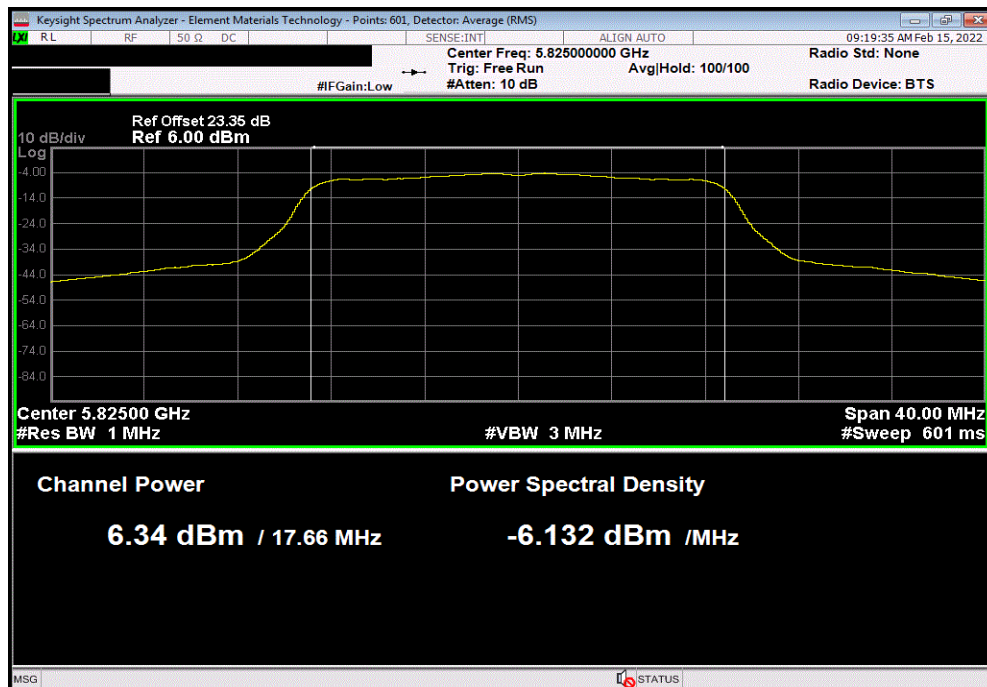


TbTx 2021.03.19.1 XMt 2022.02.07.0

5725 - 5785 MHz Band, 802.11(n/ac) VHT20, High Channel, Ch 165 - 5825 MHz, MCS7						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result	
	6.433	0.5	6.9	30	Pass	



5725 - 5785 MHz Band, 802.11(n/ac) VHT20, High Channel, Ch 165 - 5825 MHz, MCS8 (256-QAM)						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result	
	6.338	0.5	6.8	30	Pass	

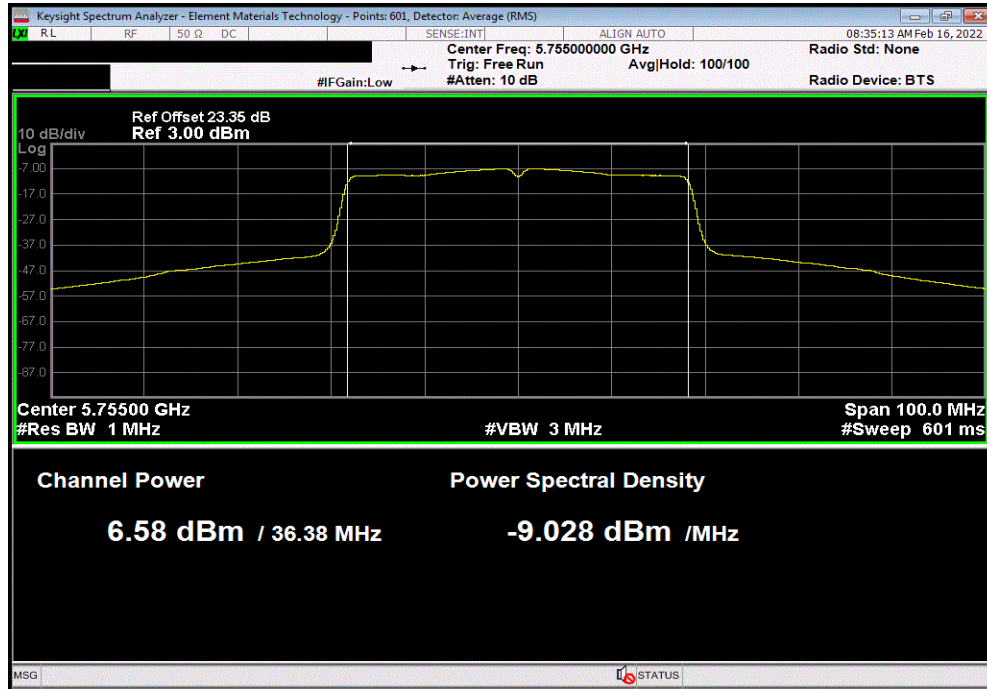


MAXIMUM CONDUCTED OUTPUT POWER - 5.8 GHz BAND

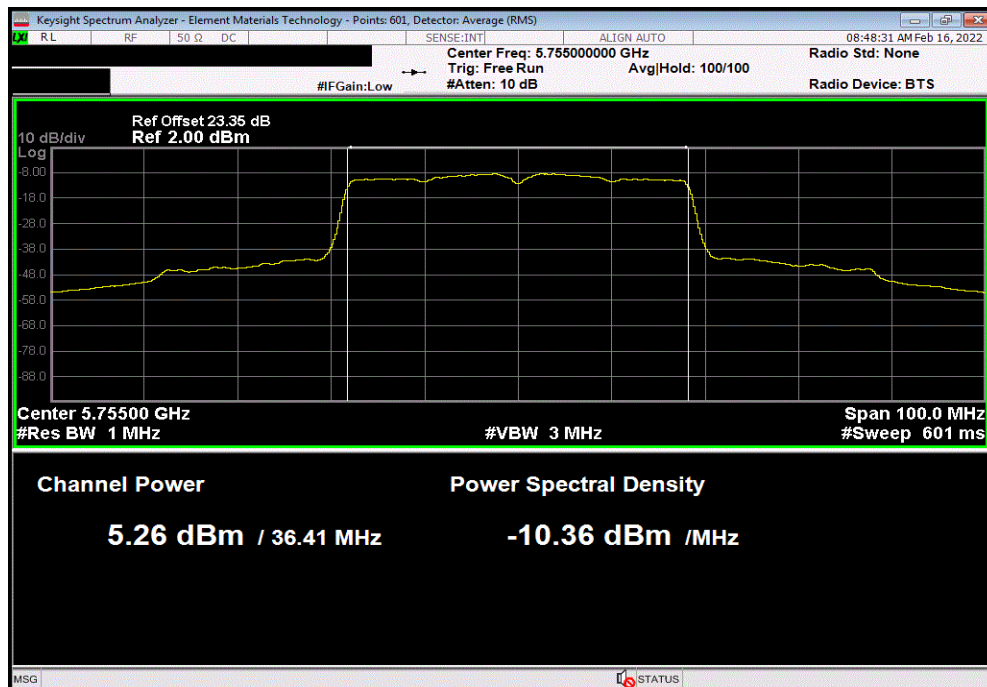


TbTx 2021.03.19.1 XMt 2022.02.07.0

5725 - 5785 MHz Band, 802.11(n/ac) VHT40, Low Channel, Ch 149/153 - 5755 MHz, MCS0						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result	
	6.581	0.1	6.7	30	Pass	



5725 - 5785 MHz Band, 802.11(n/ac) VHT40, Low Channel, Ch 149/153 - 5755 MHz, MCS7						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result	
	5.255	0.7	6	30	Pass	

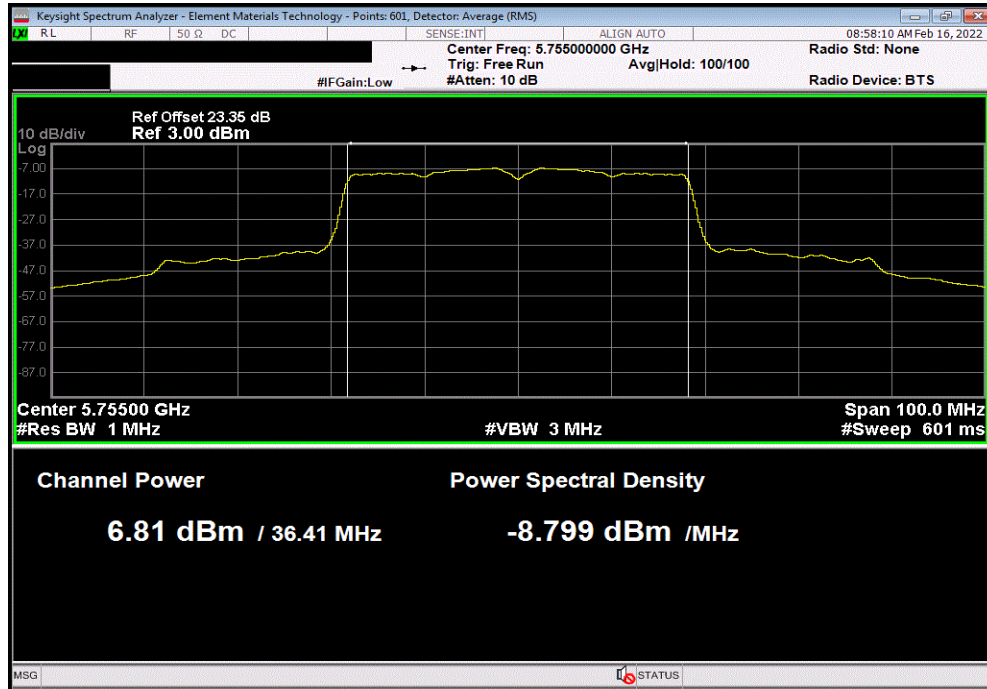


MAXIMUM CONDUCTED OUTPUT POWER - 5.8 GHz BAND

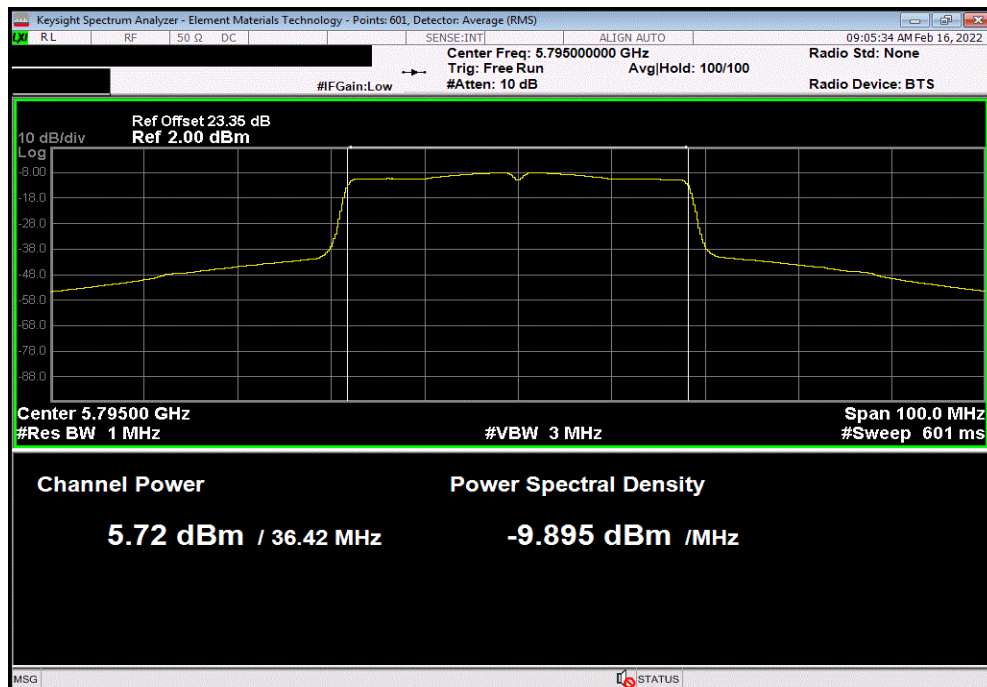


TbTx 2021.03.19.1 XMt 2022.02.07.0

5725 - 5785 MHz Band, 802.11(n/ac) VHT40, Low Channel, Ch 149/153 - 5755 MHz, MCS9 (256-QAM)						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result	
	6.814	0.8	7.6	30	Pass	



5725 - 5785 MHz Band, 802.11(n/ac) VHT40, High Channel, Ch 157/161 - 5795 MHz, MCS9						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result	
	5.718	0.1	5.8	30	Pass	

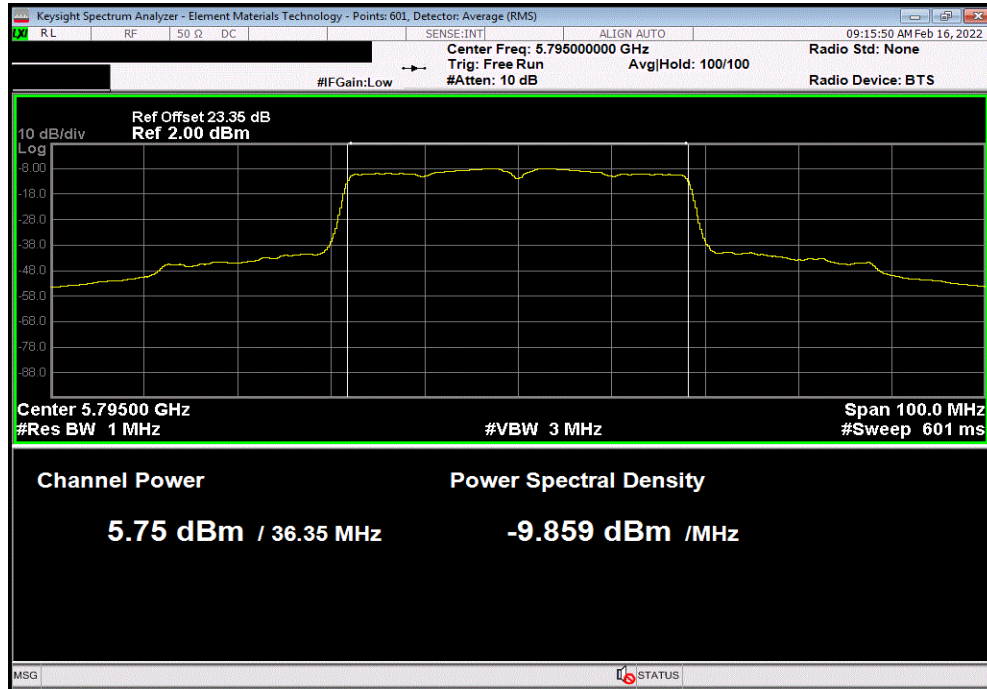


MAXIMUM CONDUCTED OUTPUT POWER - 5.8 GHz BAND

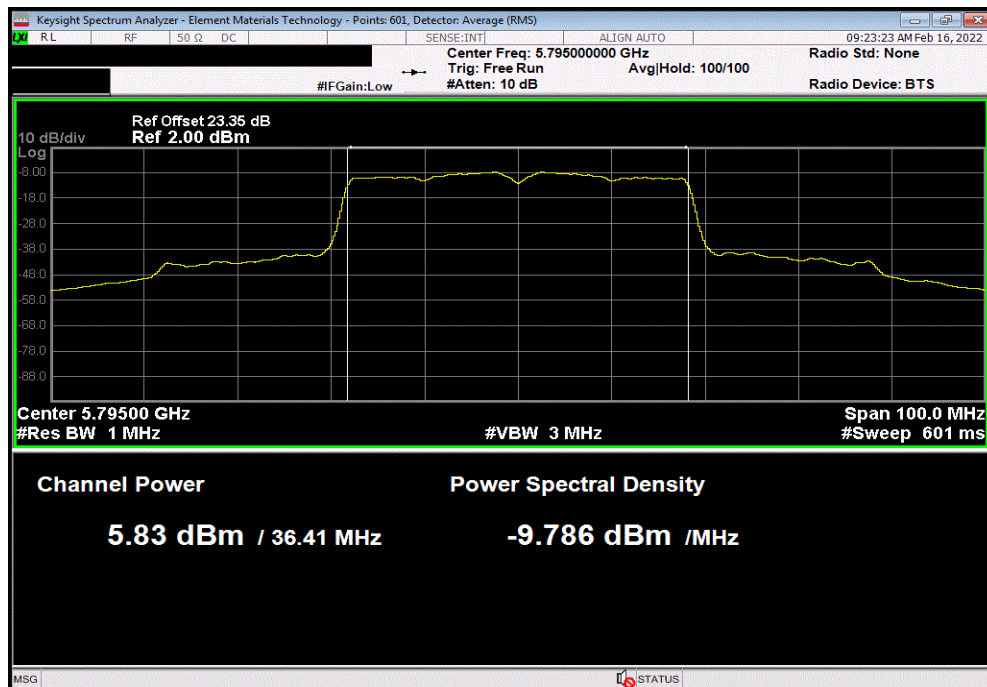


TbTx 2021.03.19.1 XMt 2022.02.07.0

5725 - 5785 MHz Band, 802.11(n/ac) VHT40, High Channel, Ch 157/161 - 5795 MHz, MCS7						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result	
	5.747	0.7	6.4	30	Pass	



5725 - 5785 MHz Band, 802.11(n/ac) VHT40, High Channel, Ch 157/161 - 5795 MHz, MCS9 (256-QAM)						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result	
	5.826	0.8	6.6	30	Pass	

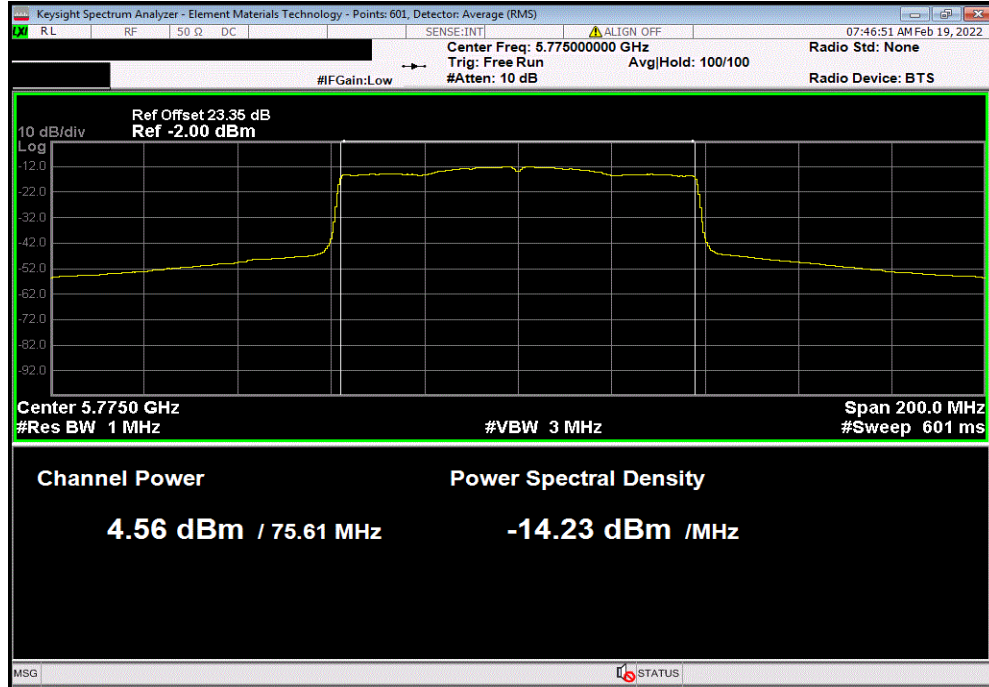


MAXIMUM CONDUCTED OUTPUT POWER - 5.8 GHz BAND

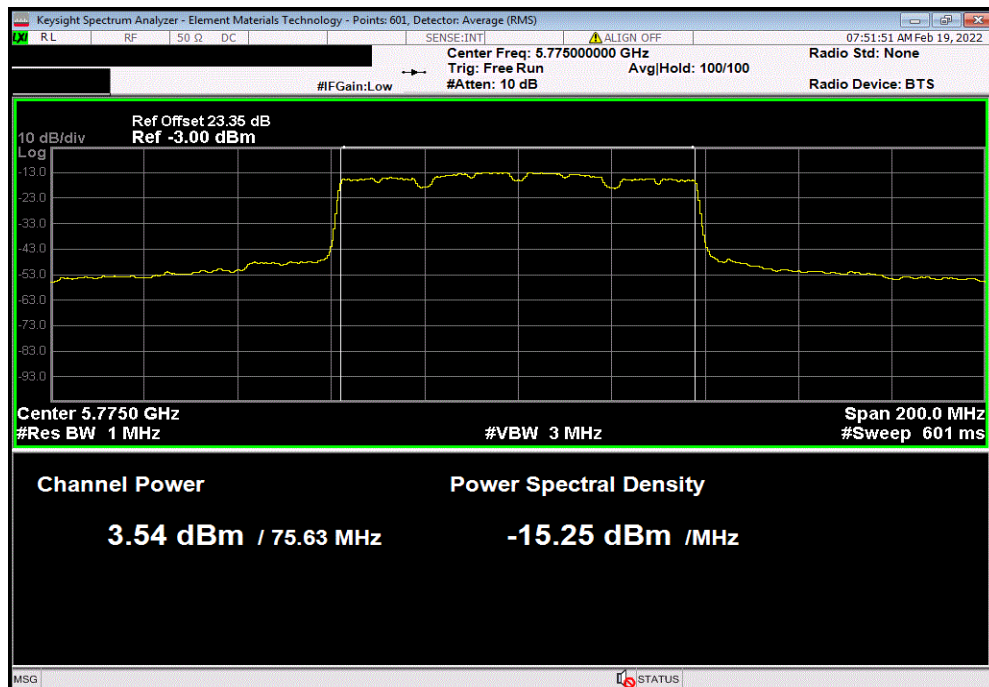


TbTx 2021.03.19.1 XMt 2022.02.07.0

5725 - 5785 MHz Band, 802.11(n/ac) VHT80, Low Channel, Ch 149-161 - 5775 MHz, MCS0						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result	
	4.558	0.2	4.8	30	Pass	



5725 - 5785 MHz Band, 802.11(n/ac) VHT80, Low Channel, Ch 149-161 - 5775 MHz, MCS9 (256-QAM)						
	Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Limit (dBm)	Result	
	3.539	1.1	4.6	30	Pass	



EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.2 GHz BAND



XMIT 2020.12.30.0

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
Generator - Signal	Keysight	N5182B	TFU	2020-11-20	2022-11-20
Cable	Micro-Coax	UFD150A-1-0720-200200	EVH	2021-03-14	2022-03-14
Attenuator	S.M. Electronics	SA26B-20	AUY	2021-03-14	2022-03-14
Block - DC	Fairview Microwave	SD3379	AMW	2021-03-14	2022-03-14
Analyzer - Spectrum Analyzer	Agilent	E4440A	AFE	2021-04-08	2022-04-08

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer.

The transmit frequency was set to the required channels in each band. The transmit power was set to its default maximum. The radio was operated in the modes as shown in the following data sheets.

Prior to measuring maximum transmit power; the emission bandwidth (B) and the transmission pulse duration (T) were measured. The method of measuring the emission bandwidth and the associated data are found elsewhere in this test report. The transmission pulse duration (T) was measured using a zero span on the spectrum analyzer to see the pulses in the time domain.

The maximum conducted output power was measured using ANSI C63.10:2013, Clause 12.3.2.4, Method SA-2 (RMS detection and trace averaging across the on and off times of the EUT transmission and use of a duty cycle correction factor).

The spectrum analyzer settings were set per the guidance as well as the following specifics:

- RMS Detector
- Trace average 100 traces in power averaging mode.
- Power was integrated across "B", by using the channel power function of the analyzer.

A duty cycle correction factor was added to the measurement using the results of the formula of $10 \cdot \log(1/D)$ where D is the duty cycle.

Equivalent Isotropic Radiated Power (EIRP) = Max Measured Power + Antenna gain (dBi).

EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.2 GHz BAND



TWtTx 2021.03.19.1 XMR 2020.12.30.0

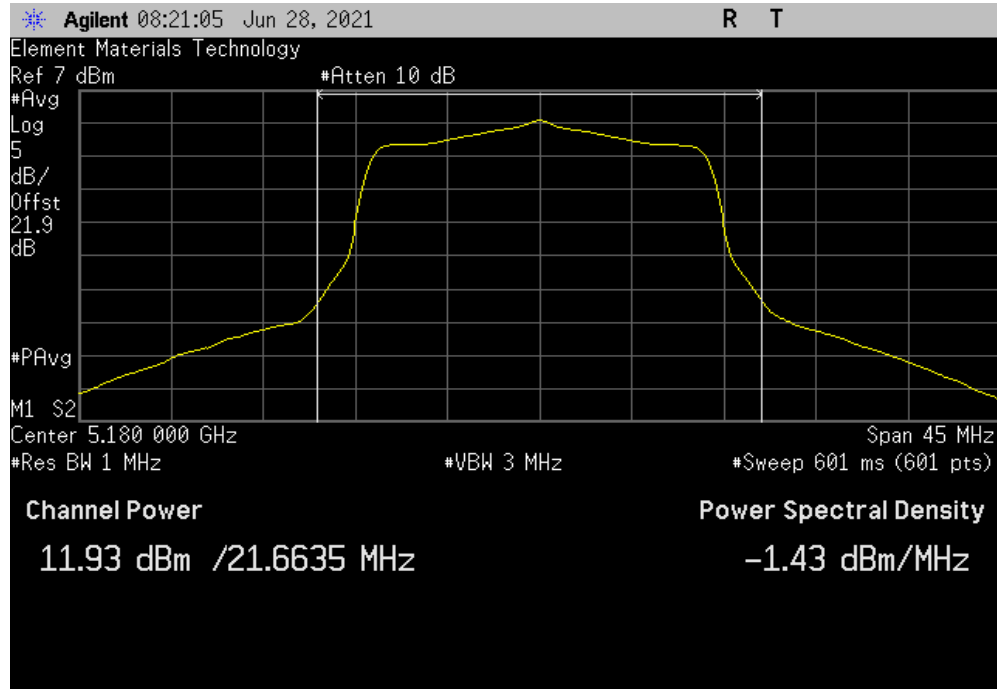
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Serial Number: SN001 00003				Date: 28-Jun-21				
Customer: A-dec, Inc.				Temperature: 24.9 °C				
Attendees: Zach Lyda				Humidity: 49.1% RH				
Project: None				Barometric Pres.: 1006 mbar				
Tested by: Jeff Alcoke		Power: 3.3 VDC via 110VAC/60Hz		Job Site: EV06				
TEST SPECIFICATIONS			Test Method					
FCC 15.407:2021			ANSI C63.10:2013					
COMMENTS								
Reference level offset: DC Block, 20 dB attenuator, and measurement cable.								
DEVIATIONS FROM TEST STANDARD								
None								
Configuration #	1	Signature 						
		Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
20 MHz								
802.11(a) 6 Mbps								
Ch 36, Low Channel 5180 MHz		11.928	0.1	12	5.2	29.2	30	Pass
Ch 40, Mid Channel 5200 MHz		11.897	0.1	12	5.2	29.2	30	Pass
Ch 48, High Channel 5240 MHz		11.972	0.1	12	5.2	29.3	30	Pass
802.11(a) 36 Mbps								
Ch 36, Low Channel 5180 MHz		11.722	0.3	12	5.2	29.2	30	Pass
Ch 40, Mid Channel 5200 MHz		11.694	0.3	12	5.2	29.2	30	Pass
Ch 48, High Channel 5240 MHz		11.588	0.3	11.9	5.2	29.0	30	Pass
802.11(a) 54 Mbps								
Ch 36, Low Channel 5180 MHz		11.77	0.5	12.2	5.2	29.7	30	Pass
Ch 40, Mid Channel 5200 MHz		11.631	0.5	12.1	5.2	29.4	30	Pass
Ch 48, High Channel 5240 MHz		11.548	0.5	12	5.2	29.2	30	Pass
802.11(n) MCS0								
Ch 36, Low Channel 5180 MHz		11.743	0.1	11.8	5.2	28.8	30	Pass
Ch 40, Mid Channel 5200 MHz		11.694	0.1	11.8	5.2	28.8	30	Pass
Ch 48, High Channel 5240 MHz		11.781	0.1	11.9	5.2	29.0	30	Pass
802.11(n) MCS7								
Ch 36, Low Channel 5180 MHz		11.494	0.5	12	5.2	29.2	30	Pass
Ch 40, Mid Channel 5200 MHz		11.455	0.5	11.9	5.2	29.1	30	Pass
Ch 48, High Channel 5240 MHz		11.261	0.5	11.7	5.2	28.7	30	Pass
802.11(ac) MCS8 (256-QAM)								
Ch 36, Low Channel 5180 MHz		9.065	0.5	9.6	5.2	24.4	30	Pass
Ch 40, Mid Channel 5200 MHz		8.748	0.5	9.3	5.2	23.7	30	Pass
Ch 48, High Channel 5240 MHz		8.794	0.5	9.3	5.2	23.8	30	Pass
40 MHz								
802.11(n) MCS0								
Ch 36/40, Low Channel 5190 MHz		7.962	0.1	8.1	5.2	21.4	30	Pass
Ch 44/48, High Channel 5230 MHz		7.88	0.1	8	5.2	21.2	30	Pass
802.11(n) MCS7								
Ch 36/40, Low Channel 5190 MHz		7.266	0.7	8	5.2	21.2	30	Pass
Ch 44/48, High Channel 5230 MHz		7.169	0.7	7.9	5.2	21.0	30	Pass
802.11(ac) MCS9 (256-QAM)								
Ch 36/40, Low Channel 5190 MHz		8.206	0.8	9	5.2	23.2	30	Pass
Ch 44/48, High Channel 5230 MHz		8.033	0.8	8.8	5.2	22.8	30	Pass
80 MHz								
802.11(ac) MCS0								
Ch 36-48, Low Channel 5210 MHz		6.912	0.2	7.1	5.2	19.4	30	Pass
802.11(ac) MCS9 (256-QAM)								
Ch 36-48, Low Channel 5210 MHz		6.014	1.1	7.1	5.2	19.4	30	Pass

EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.2 GHz BAND

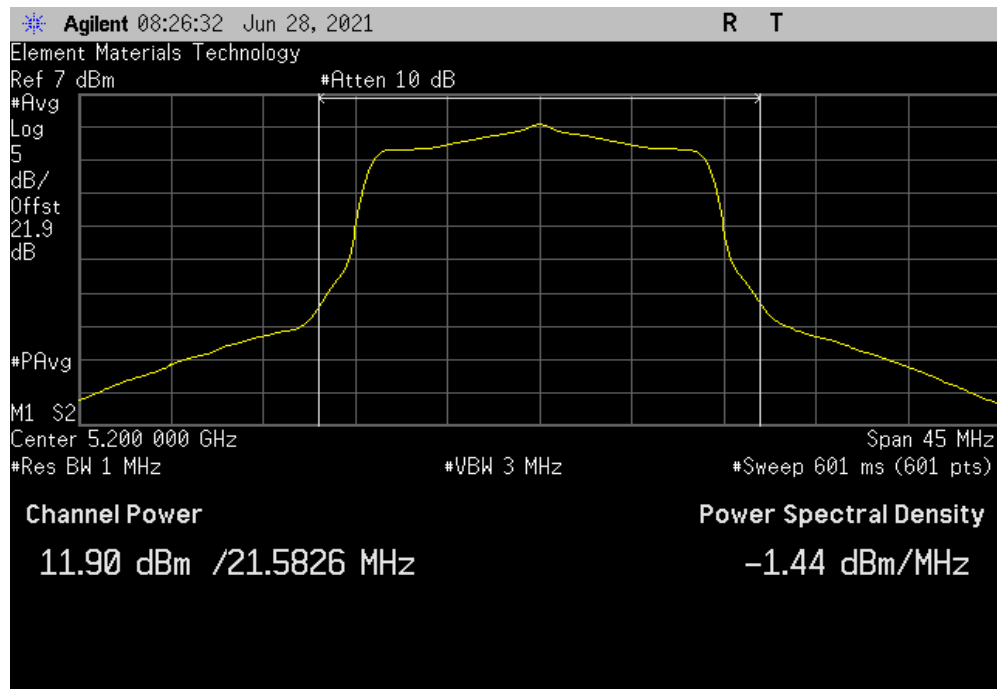


TUTx 2021.03.19.1 XM8 2020.12.30.0

20 MHz, 802.11(a) 6 Mbps, Ch 36, Low Channel 5180 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
11.928	0.1	12	5.2	29.2	30	Pass



20 MHz, 802.11(a) 6 Mbps, Ch 40, Mid Channel 5200 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
11.897	0.1	12	5.2	29.2	30	Pass

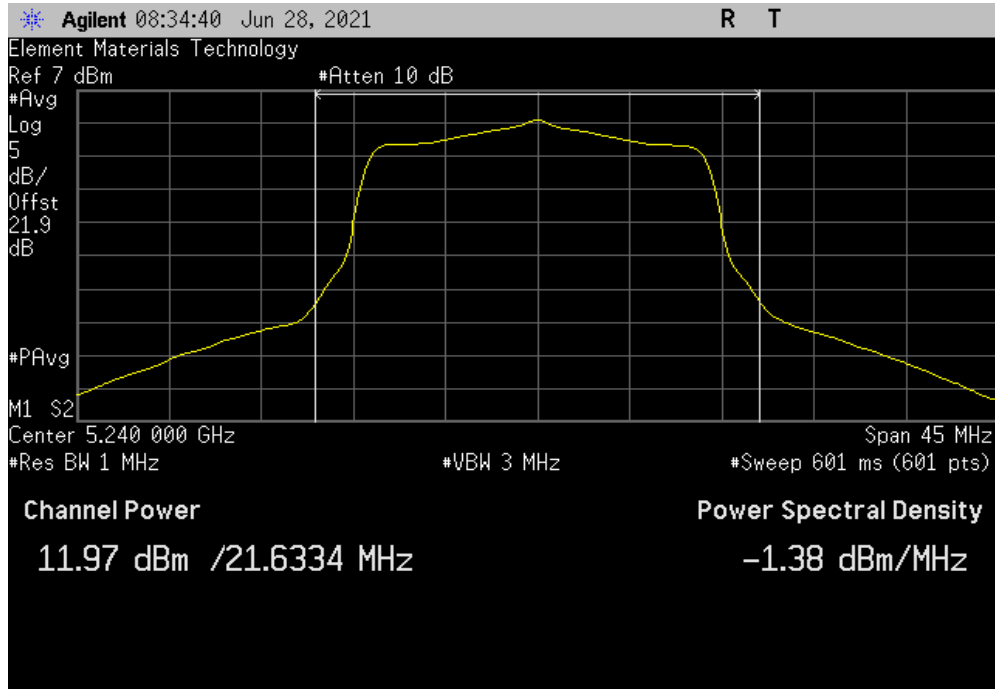


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.2 GHz BAND

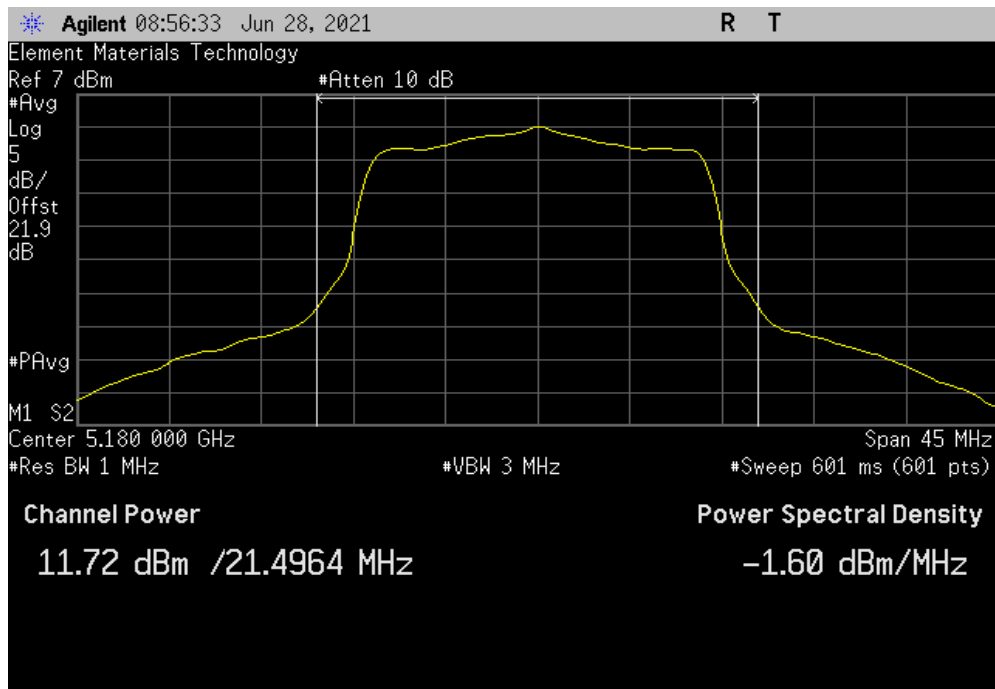


TUTTx 2021.03.19.1 XM8 2020.12.30.0

20 MHz, 802.11(a) 6 Mbps, Ch 48, High Channel 5240 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
11.972	0.1	12	5.2	29.3	30	Pass



20 MHz, 802.11(a) 36 Mbps, Ch 36, Low Channel 5180 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
11.722	0.3	12	5.2	29.2	30	Pass

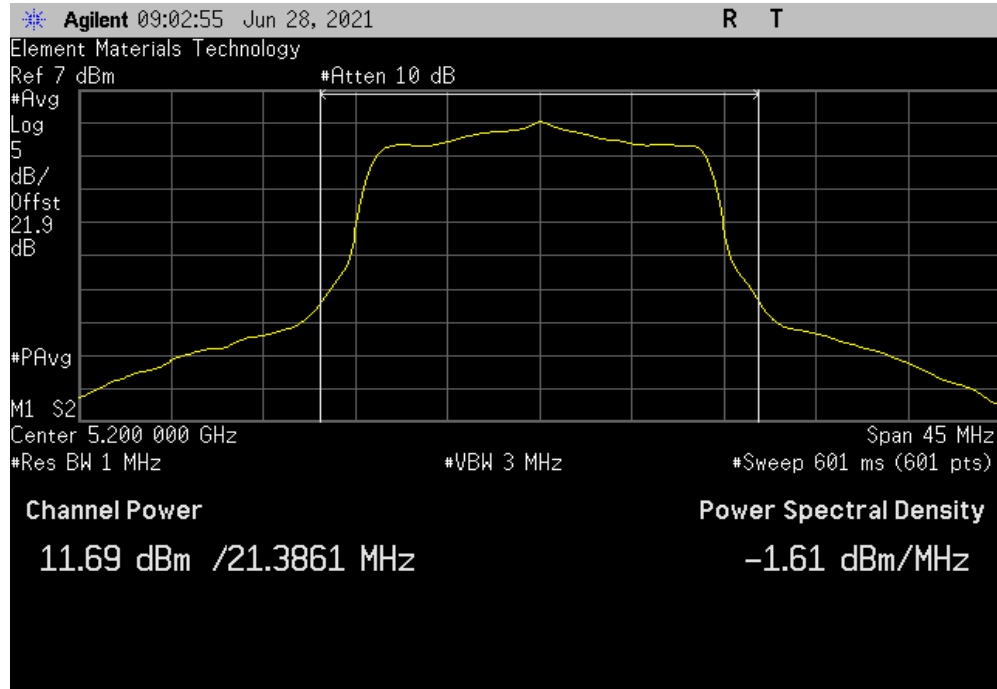


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.2 GHz BAND

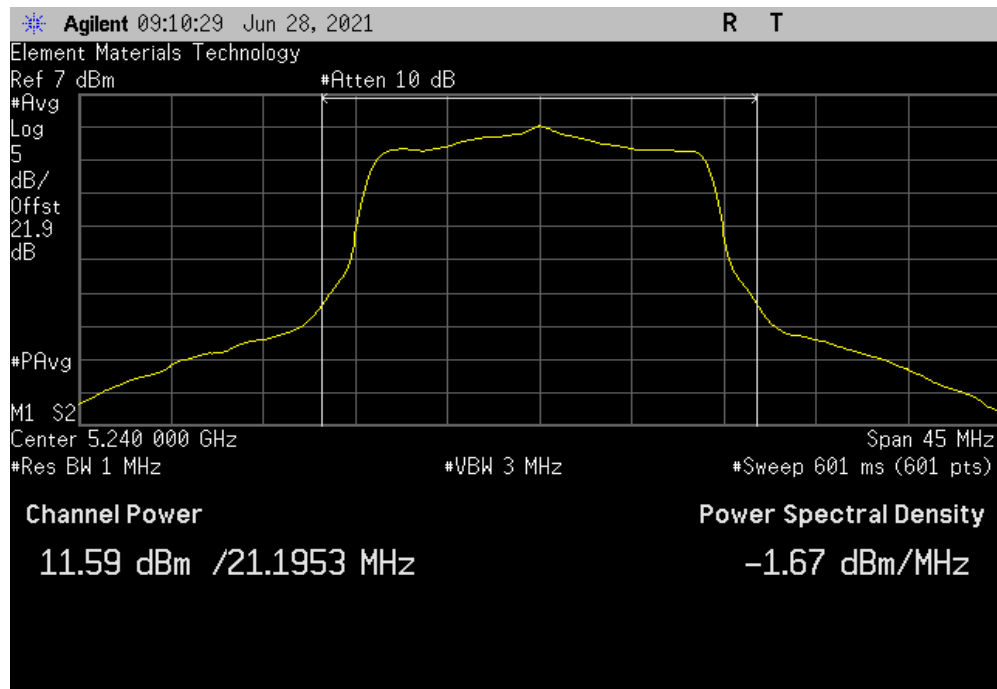


TUTx 2021.03.19.1 XM8 2020.12.30.0

20 MHz, 802.11(a) 36 Mbps, Ch 40, Mid Channel 5200 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
11.694	0.3	12	5.2	29.2	30	Pass



20 MHz, 802.11(a) 36 Mbps, Ch 48, High Channel 5240 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
11.588	0.3	11.9	5.2	29.0	30	Pass

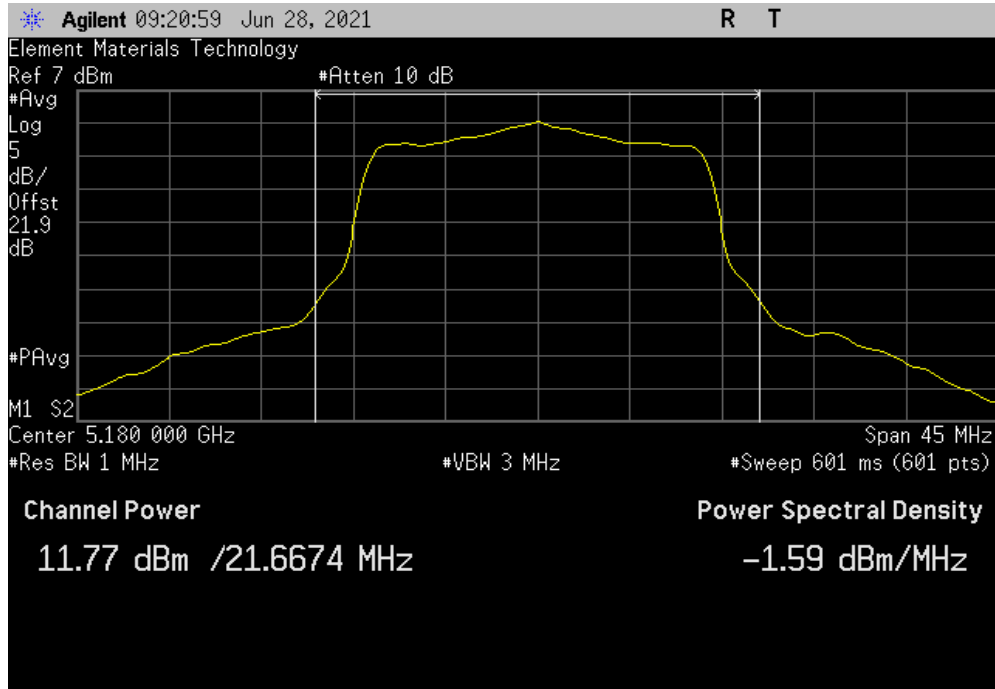


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.2 GHz BAND

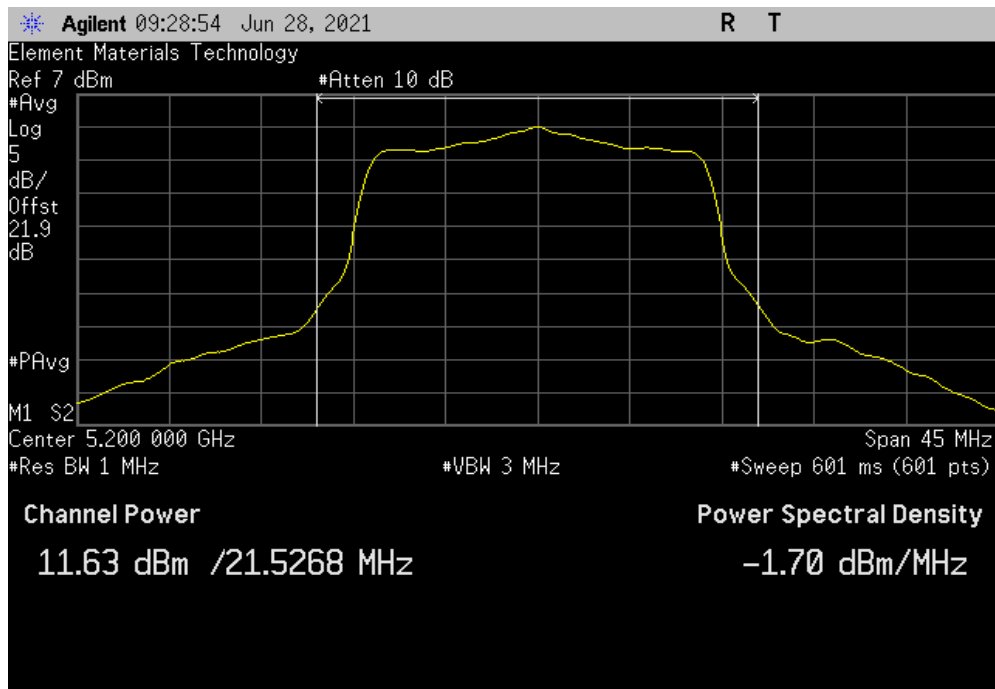


TUTTx 2021.03.19.1 XM8 2020.12.30.0

20 MHz, 802.11(a) 54 Mbps, Ch 36, Low Channel 5180 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
11.77	0.5	12.2	5.2	29.7	30	Pass



20 MHz, 802.11(a) 54 Mbps, Ch 40, Mid Channel 5200 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
11.631	0.5	12.1	5.2	29.4	30	Pass

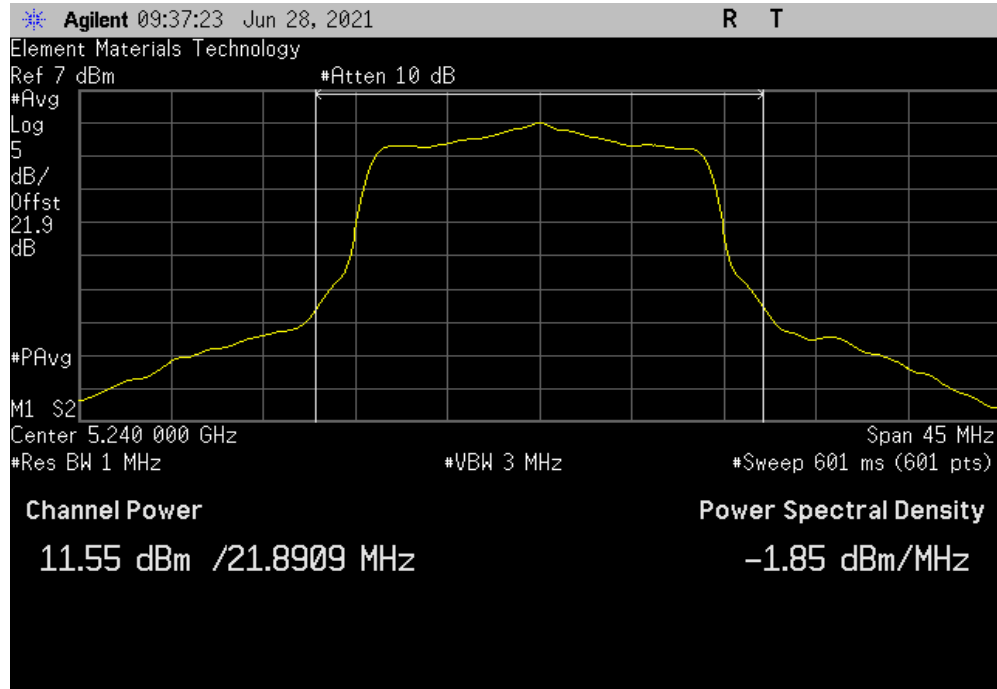


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.2 GHz BAND

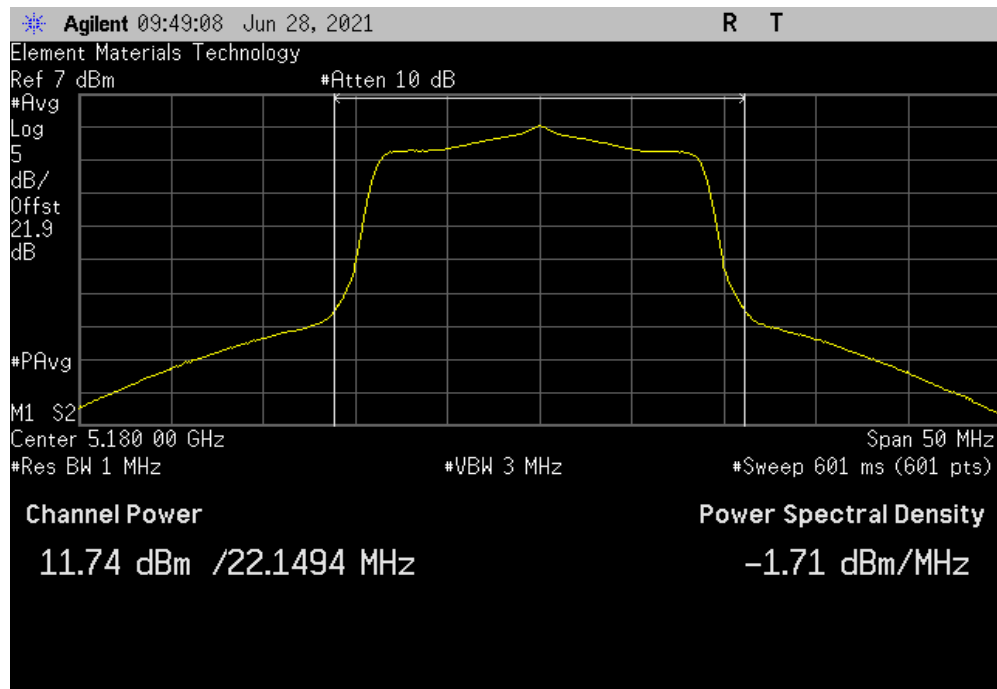


TUTx 2021.03.19.1 XM8 2020.12.30.0

20 MHz, 802.11(a) 54 Mbps, Ch 48, High Channel 5240 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
11.548	0.5	12	5.2	29.2	30	Pass



20 MHz, 802.11(n) MCS0, Ch 36, Low Channel 5180 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
11.743	0.1	11.8	5.2	28.8	30	Pass

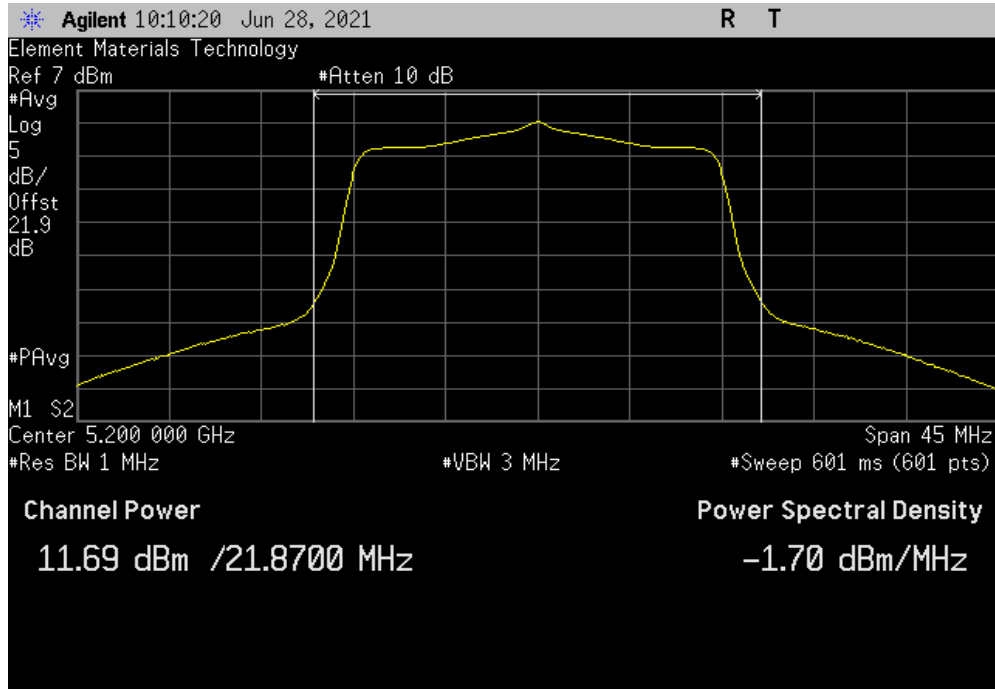


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.2 GHz BAND

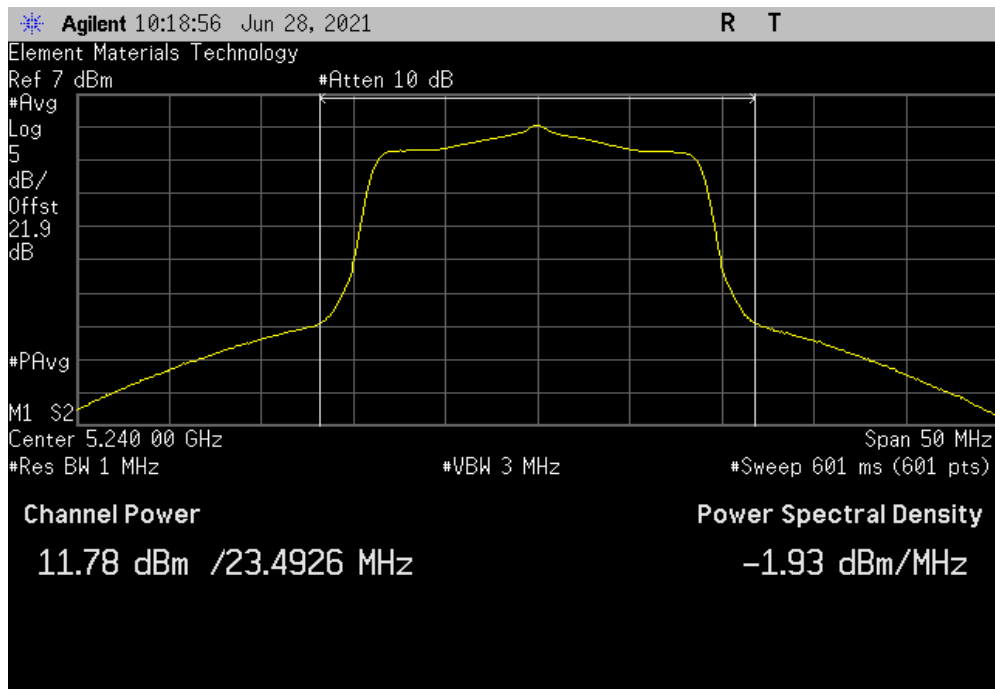


TUTx 2021.03.19.1 XM8 2020.12.30.0

20 MHz, 802.11(n) MCS0, Ch 40, Mid Channel 5200 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
11.694	0.1	11.8	5.2	28.8	30	Pass



20 MHz, 802.11(n) MCS0, Ch 48, High Channel 5240 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
11.781	0.1	11.9	5.2	29.0	30	Pass

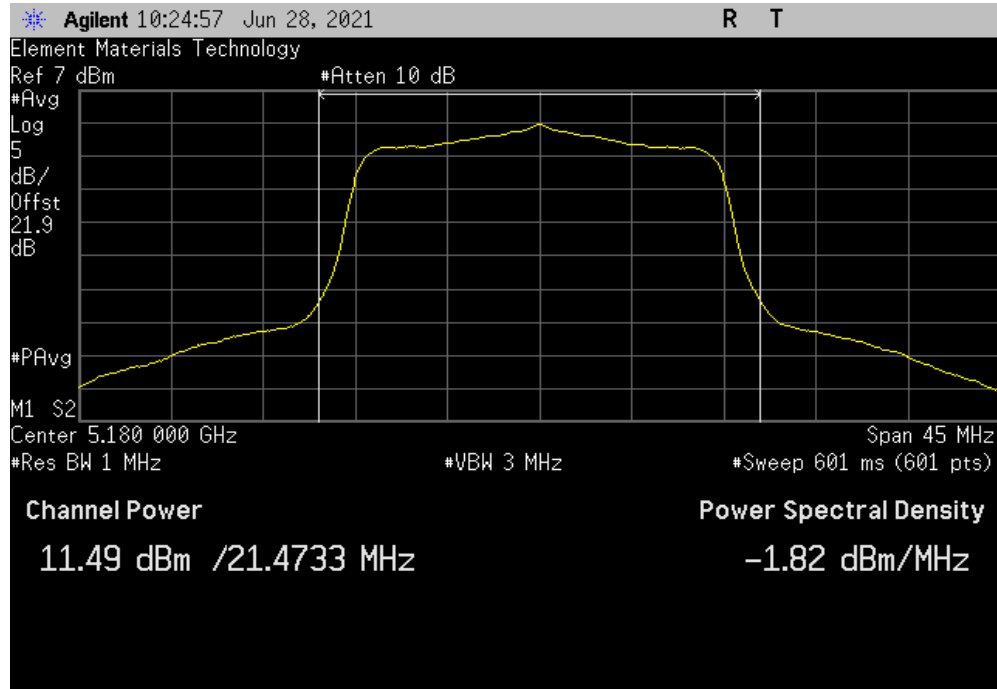


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.2 GHz BAND

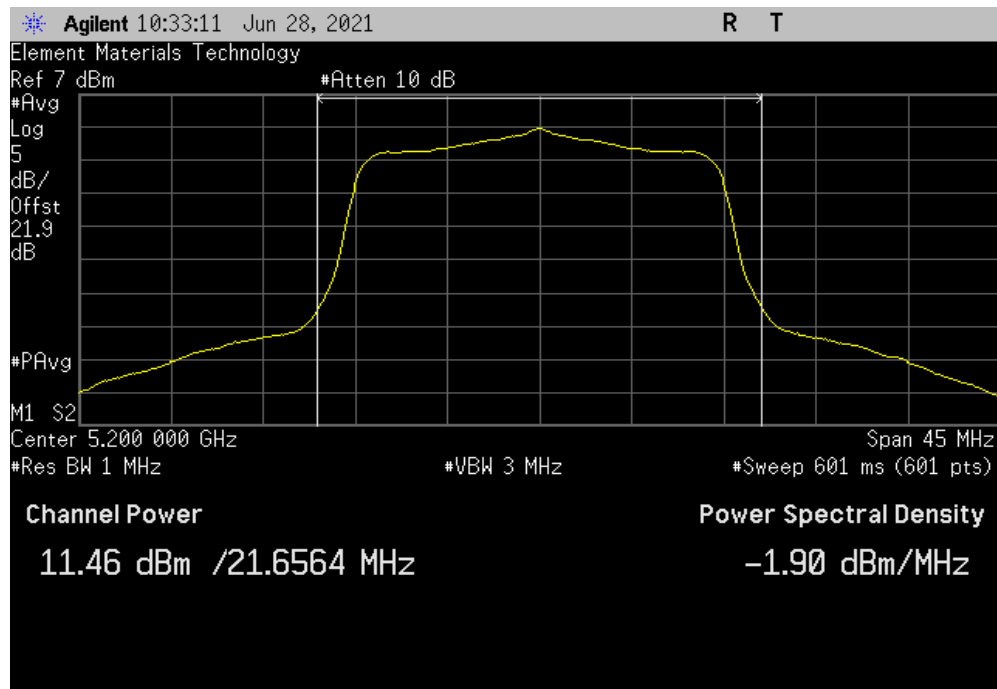


TUTx 2021.03.19.1 XM8 2020.12.30.0

20 MHz, 802.11(n) MCS7, Ch 36, Low Channel 5180 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
11.494	0.5	12	5.2	29.2	30	Pass



20 MHz, 802.11(n) MCS7, Ch 40, Mid Channel 5200 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
11.455	0.5	11.9	5.2	29.1	30	Pass

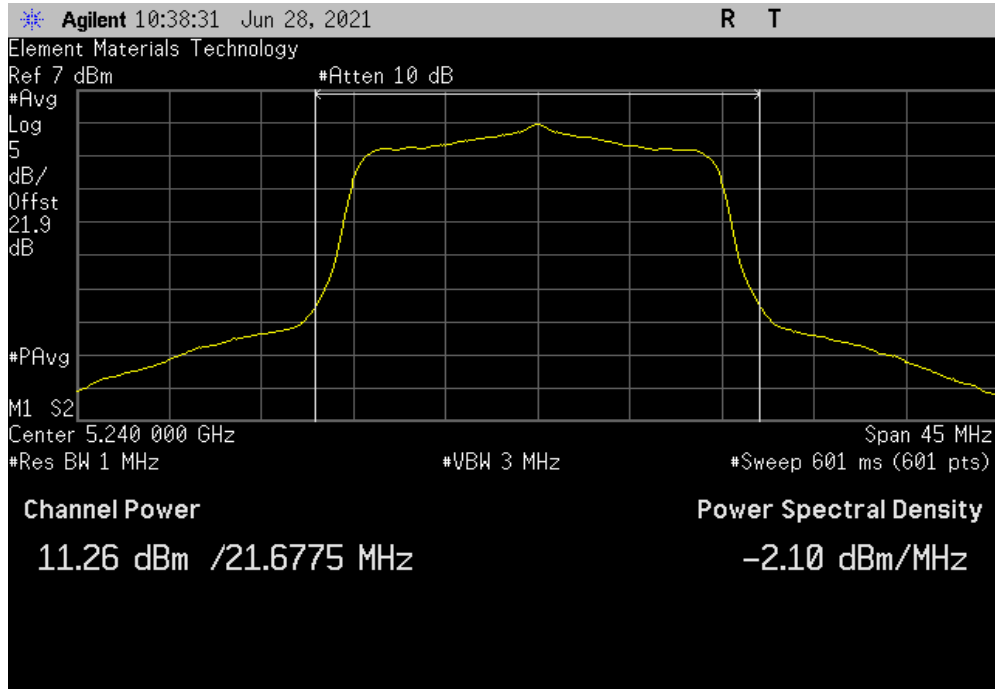


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.2 GHz BAND

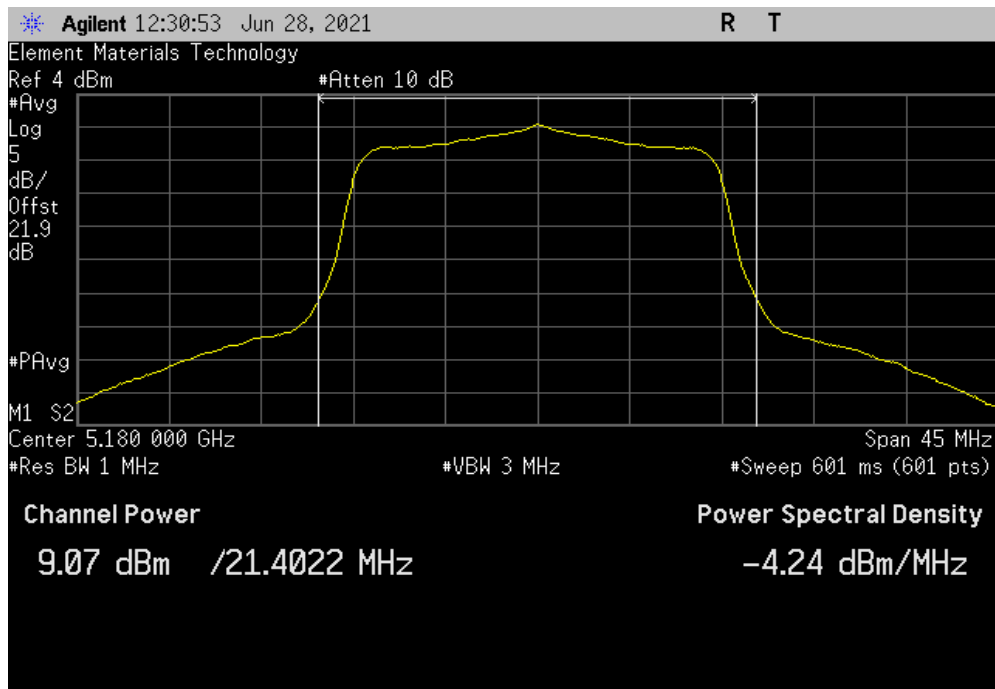


TUTTx 2021.03.10.1 XM8 2020.12.30.0

20 MHz, 802.11(n) MCS7, Ch 48, High Channel 5240 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
11.261	0.5	11.7	5.2	28.7	30	Pass



20 MHz, 802.11(ac) MCS8 (256-QAM), Ch 36, Low Channel 5180 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
9.065	0.5	9.6	5.2	24.4	30	Pass

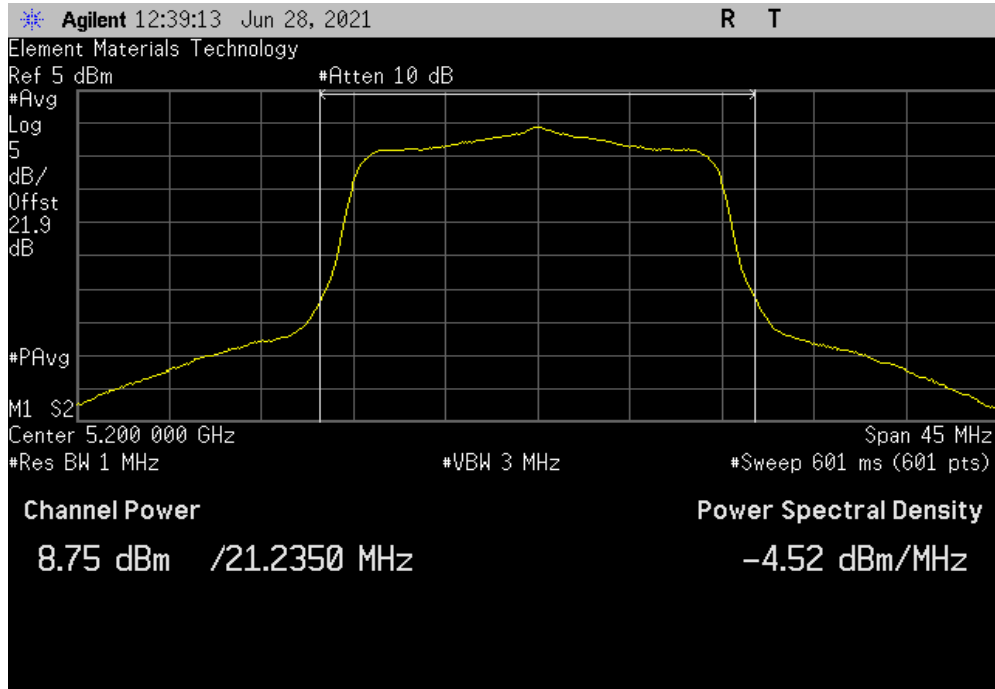


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.2 GHz BAND

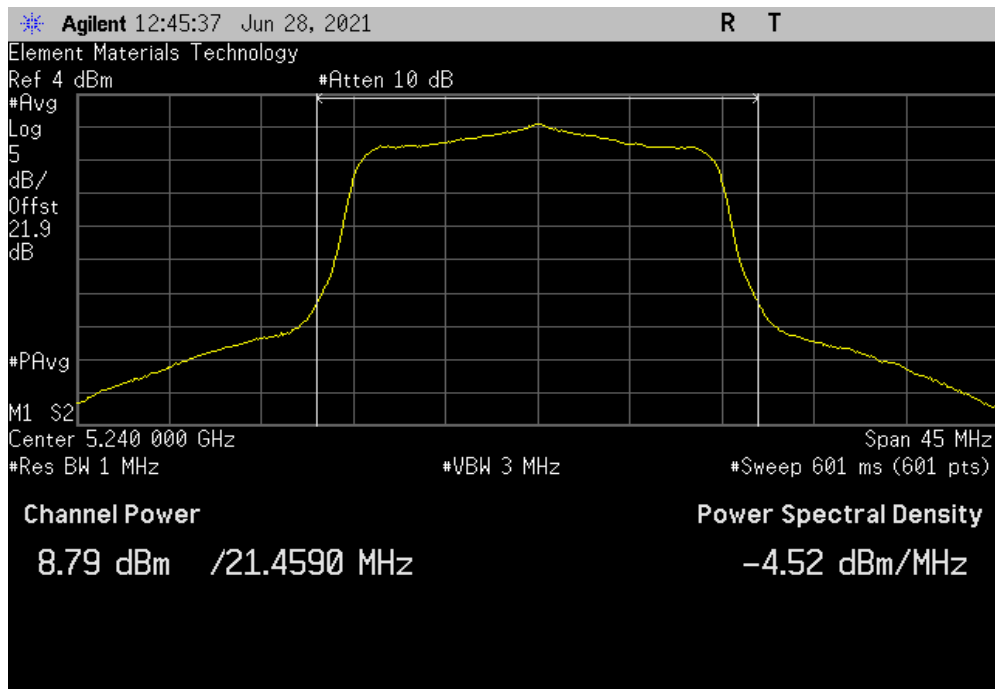


TUTx 2021.03.19.1 XMt 2020.12.30.0

20 MHz, 802.11(ac) MCS8 (256-QAM), Ch 40, Mid Channel 5200 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
8.748	0.5	9.3	5.2	23.7	30	Pass



20 MHz, 802.11(ac) MCS8 (256-QAM), Ch 48, High Channel 5240 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
8.794	0.5	9.3	5.2	23.8	30	Pass

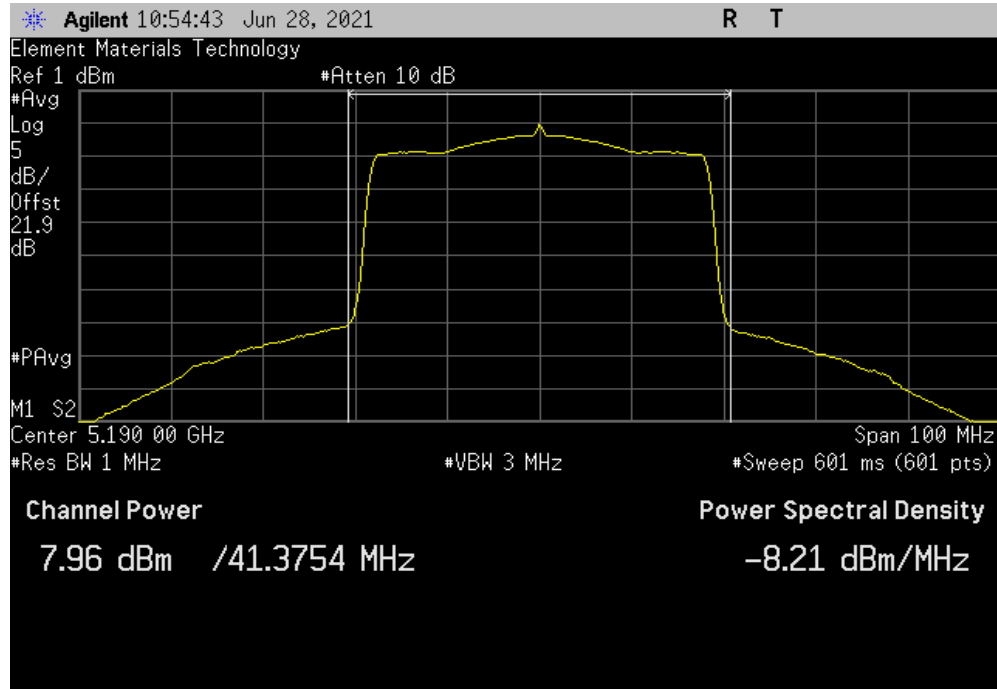


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.2 GHz BAND

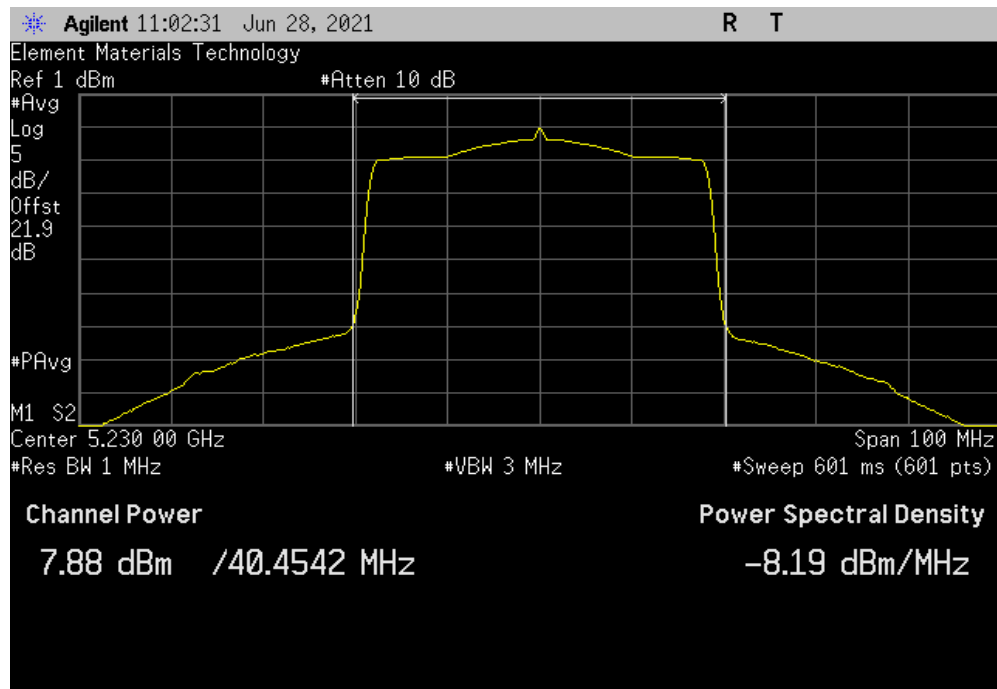


TUTx 2021.03.10.1 XMR 2020.12.30.0

40 MHz, 802.11(n) MCS0, Ch 36/40, Low Channel 5190 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
7.962	0.1	8.1	5.2	21.4	30	Pass



40 MHz, 802.11(n) MCS0, Ch 44/48, High Channel 5230 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
7.88	0.1	8	5.2	21.2	30	Pass

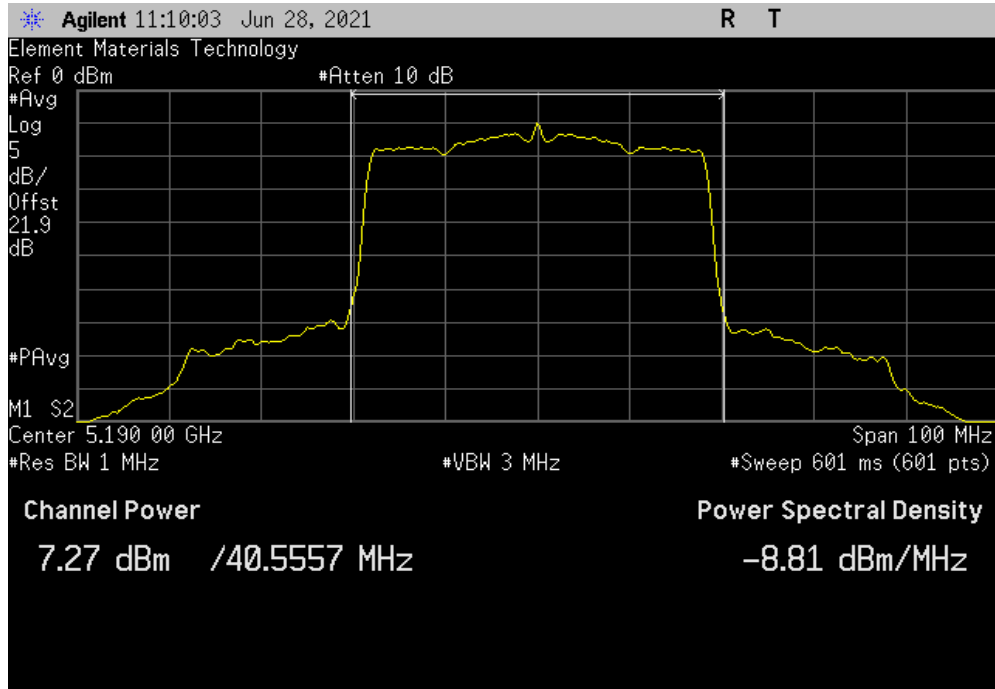


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.2 GHz BAND

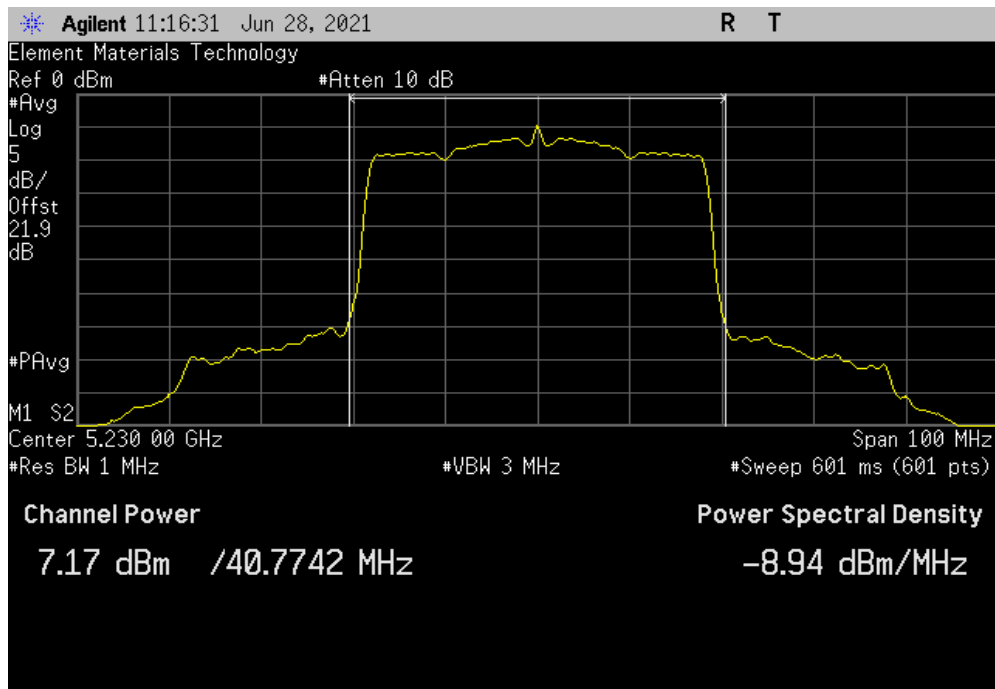


TUTx 2021.03.19.1 XM8 2020.12.30.0

40 MHz, 802.11(n) MCS7, Ch 36/40, Low Channel 5190 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
7.266	0.7	8	5.2	21.2	30	Pass



40 MHz, 802.11(n) MCS7, Ch 44/48, High Channel 5230 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
7.169	0.7	7.9	5.2	21.0	30	Pass

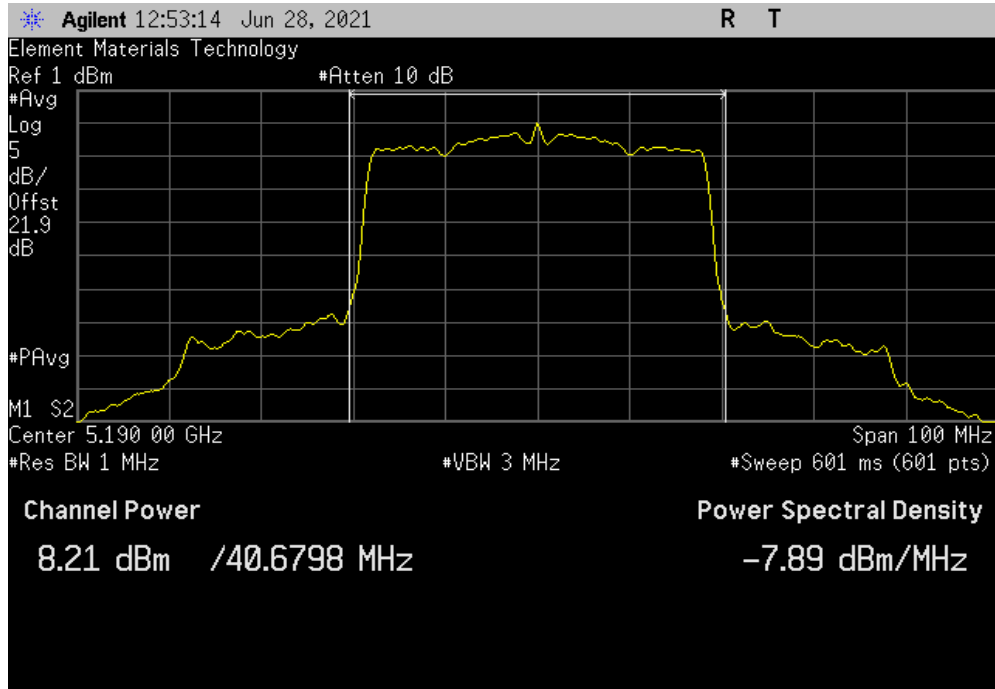


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.2 GHz BAND

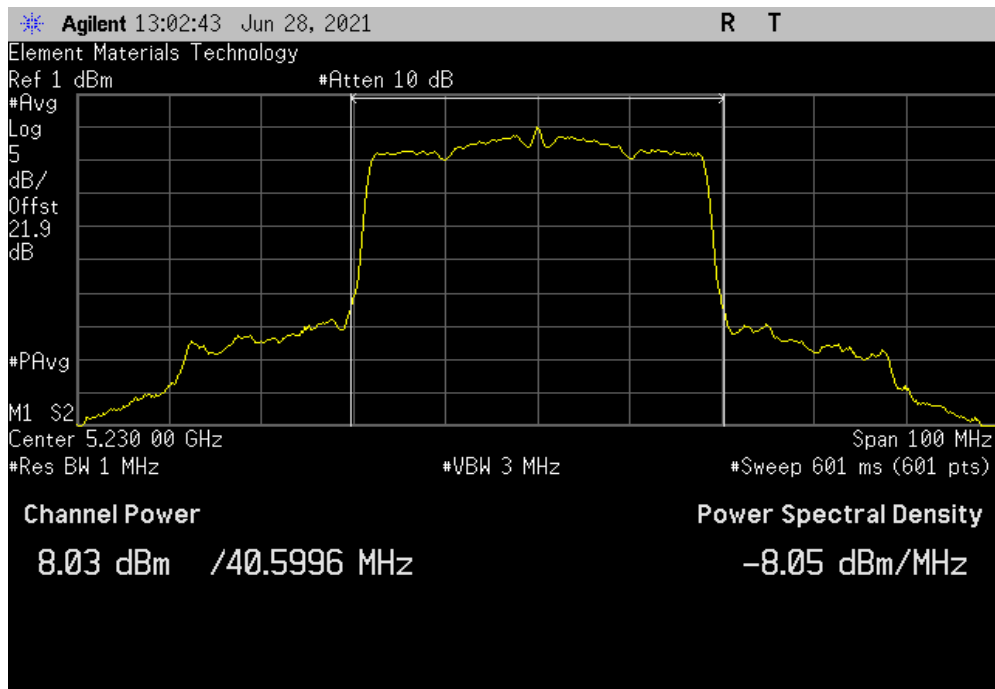


TUTx 2021.03.19.1 XMt 2020.12.30.0

40 MHz, 802.11(ac) MCS9 (256-QAM), Ch 36/40, Low Channel 5190 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
8.206	0.8	9	5.2	23.2	30	Pass



40 MHz, 802.11(ac) MCS9 (256-QAM), Ch 44/48, High Channel 5230 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
8.033	0.8	8.8	5.2	22.8	30	Pass

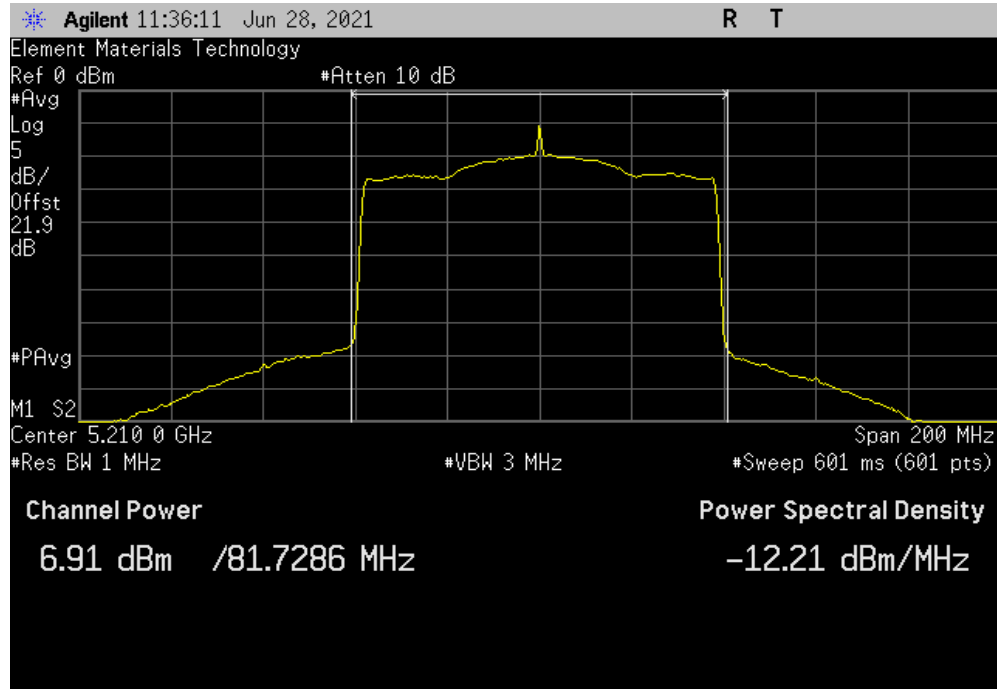


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.2 GHz BAND

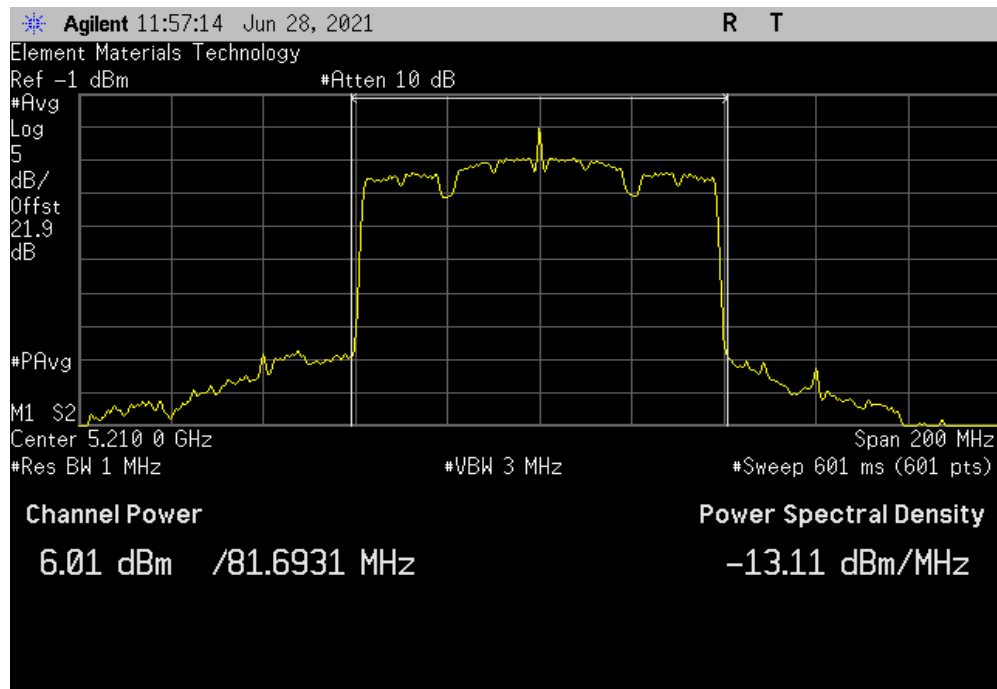


TUTx 2021.03.19.1 XMR 2020.12.30.0

80 MHz, 802.11(ac) MCS0, Ch 36-48, Low Channel 5210 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
6.912	0.2	7.1	5.2	19.4	30	Pass



80 MHz, 802.11(ac) MCS9 (256-QAM), Ch 36-48, Low Channel 5210 MHz						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
6.014	1.1	7.1	5.2	19.4	30	Pass



EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.3 GHz BAND



XM# 2020.12.30.0

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
Power Supply - DC	Topward	TPS-2000	TPD	NCR	NCR
Generator - Signal	Keysight	N5182B	TFU	2020-11-20	2022-11-20
Cable	Micro-Coax	UFD150A-1-0720-200200	EVK	2021-03-14	2022-03-14
Attenuator	S.M. Electronics	SA26B-20	AUY	2021-03-14	2022-03-14
Block - DC	Fairview Microwave	SD3379	AMW	2021-03-14	2022-03-14
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFO	2021-07-06	2022-07-06

TEST DESCRIPTION

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer.

The transmit frequency was set to the required channels in each band. The transmit power was set to its default maximum. The radio was operated in the modes as shown in the following data sheets.

Prior to measuring maximum transmit power; the emission bandwidth (B) and the transmission pulse duration (T) were measured. The method of measuring the emission bandwidth and the associated data are found elsewhere in this test report. The transmission pulse duration (T) was measured using a zero span on the spectrum analyzer to see the pulses in the time domain.

The maximum conducted output power was measured using ANSI C63.10:2013, Clause 12.3.2.4, Method SA-2 (RMS detection and trace averaging across the on and off times of the EUT transmission and use of a duty cycle correction factor).

The spectrum analyzer settings were set per the guidance as well as the following specifics:

- RMS Detector
- Trace average 100 traces in power averaging mode.
- Power was integrated across "B", by using the channel power function of the analyzer.

A duty cycle correction factor was added to the measurement using the results of the formula of $10 \cdot \log(1/D)$ where D is the duty cycle.

Equivalent Isotropic Radiated Power (EIRP) = Max Measured Power + Antenna gain (dBi).

EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.3 GHz BAND



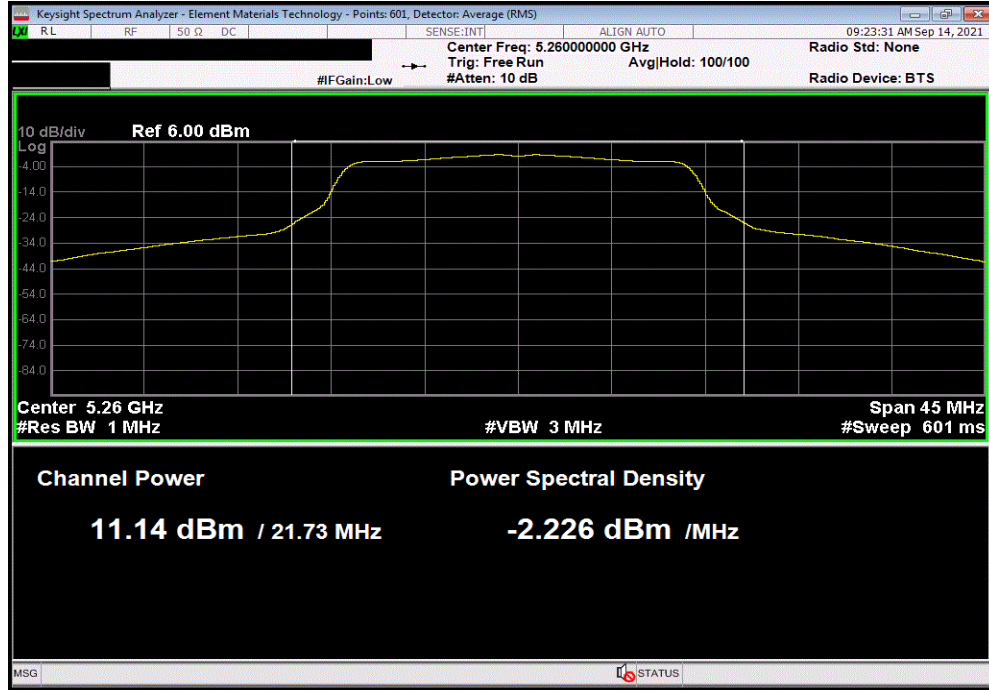
EUT: 43.0536.00				Work Order: A-DE0170				
Serial Number: SN001 00001				Date: 14-Sep-21				
Customer: A-dec, Inc.				Temperature: 22.7 °C				
Attendees: Ben Meadows				Humidity: 42.3% RH				
Project: None				Barometric Pres.: 1021 mbar				
Tested by: Jeff Alcock		Power: 3.3 VDC		Job Site: EV06				
TEST SPECIFICATIONS				Test Method				
FCC 15.407:2021				ANSI C63.10:2013				
COMMENTS								
Reference level offset includes; DC block, 20 dB attenuator, and measurement cable.								
DEVIATIONS FROM TEST STANDARD								
None								
Configuration #	3	Signature 						
		Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
5250 - 5350 MHz Band								
802.11(a) No HT								
Low Channel, Ch 52 - 5260 MHz								
	6 Mbps	11.144	0.1	11.2	5.2	27.6	30	Pass
	36 Mbps	10.816	0.3	11.1	5.2	27.4	30	Pass
	54 Mbps	10.695	0.5	11.2	5.2	27.6	30	Pass
Mid Channel, Ch 60 - 5300 MHz								
	6 Mbps	11.158	0.1	11.2	5.2	27.7	30	Pass
	36 Mbps	10.703	0.3	11	5.2	27.2	30	Pass
	54 Mbps	10.583	0.5	11	5.2	27.3	30	Pass
High Channel, Ch 64 - 5320 MHz								
	6 Mbps	10.764	0.1	10.8	5.2	26.9	30	Pass
	36 Mbps	10.474	0.3	10.8	5.2	26.8	30	Pass
	54 Mbps	10.415	0.5	10.9	5.2	27.0	30	Pass
802.11(n/ac) VHT20								
Low Channel, Ch 52 - 5260 MHz								
	MCS0	10.904	0.1	11	5.2	27.2	30	Pass
	MCS7	10.416	0.5	10.9	5.2	27.0	30	Pass
	MCS8 (256-QAM)	7.647	0.6	8.2	5.2	21.6	30	Pass
Mid Channel, Ch 60 - 5300 MHz								
	MCS0	10.778	0.1	10.8	5.2	26.9	30	Pass
	MCS7	10.411	0.5	10.9	5.2	27.0	30	Pass
	MCS8 (256-QAM)	7.688	0.6	8.2	5.2	21.7	30	Pass
High Channel, Ch 64 - 5320 MHz								
	MCS0	10.513	0.1	10.6	5.2	26.4	30	Pass
	MCS7	10.172	0.5	10.7	5.2	26.6	30	Pass
	MCS8 (256-QAM)	7.297	0.6	7.9	5.2	21.0	30	Pass
802.11(n/ac) VHT40								
Low Channel, Ch 52/56 - 5270 MHz								
	MCS0	6.787	0.1	6.9	5.2	19.0	30	Pass
	MCS7	6.18	0.7	6.9	5.2	19.0	30	Pass
	MCS9 (256-QAM)	6.827	0.8	7.6	5.2	20.4	30	Pass
High Channel, Ch 60/64 - 5310 MHz								
	MCS0	6.673	0.1	6.8	5.2	18.8	30	Pass
	MCS7	5.982	0.7	6.7	5.2	18.6	30	Pass
	MCS9 (256-QAM)	6.698	0.8	7.5	5.2	20.2	30	Pass
802.11(n/ac) VHT80								
Low Channel, Ch 52-64 - 5290 MHz								
	MCS0	5.709	0.2	5.9	5.2	17.0	30	Pass
	MCS9 (256-QAM)	4.671	1.1	5.7	5.2	16.7	30	Pass

EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.3 GHz BAND

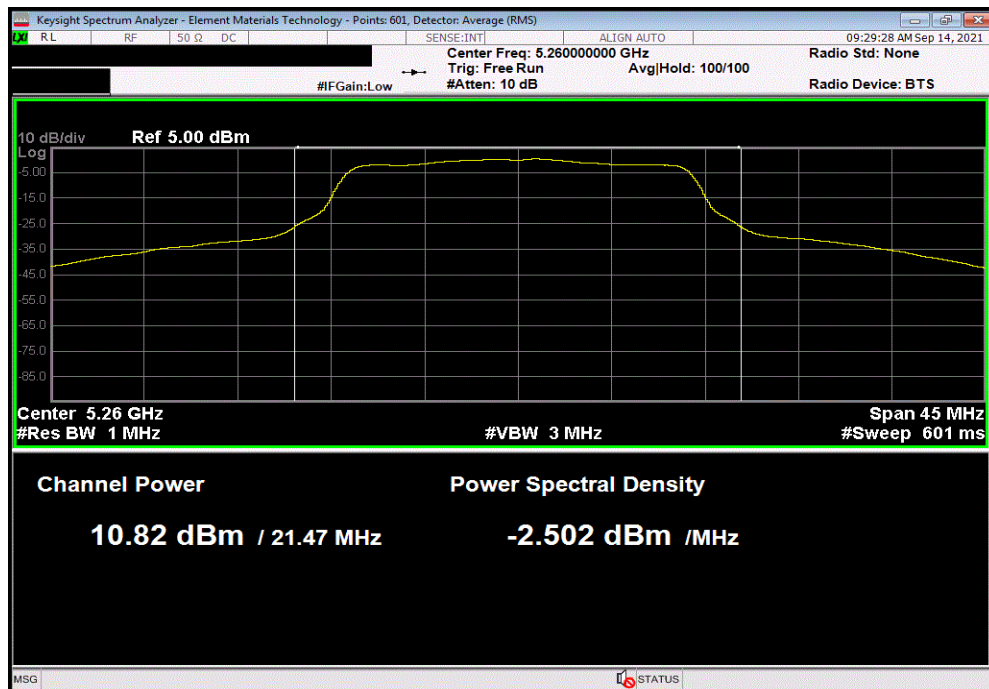


TbTx 2021.03.19.1 XMt 2020.12.30.0

5250 - 5350 MHz Band, 802.11(a) No HT, Low Channel, Ch 52 - 5260 MHz, 6 Mbps						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
11.144	0.1	11.2	5.2	27.6	30	Pass



5250 - 5350 MHz Band, 802.11(a) No HT, Low Channel, Ch 52 - 5260 MHz, 36 Mbps						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
10.816	0.3	11.1	5.2	27.4	30	Pass

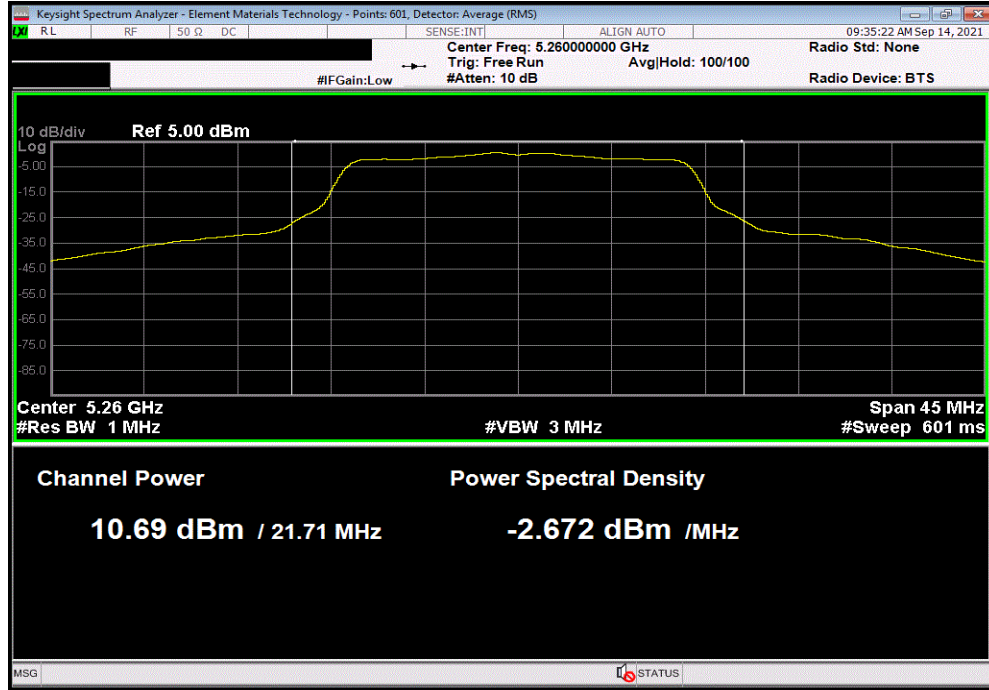


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.3 GHz BAND

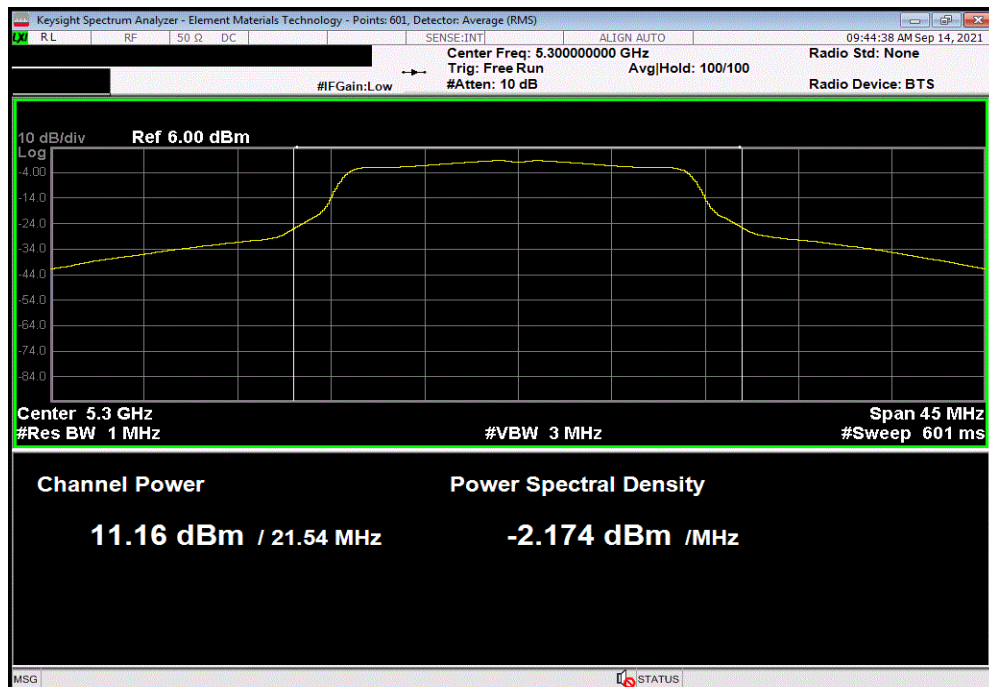


TbTx 2021.03.19.1 XMt 2020.12.30.0

5250 - 5350 MHz Band, 802.11(a) No HT, Low Channel, Ch 52 - 5260 MHz, 54 Mbps						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
10.695	0.5	11.2	5.2	27.6	30	Pass



5250 - 5350 MHz Band, 802.11(a) No HT, Mid Channel, Ch 60 - 5300 MHz, 6 Mbps						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
11.158	0.1	11.2	5.2	27.7	30	Pass

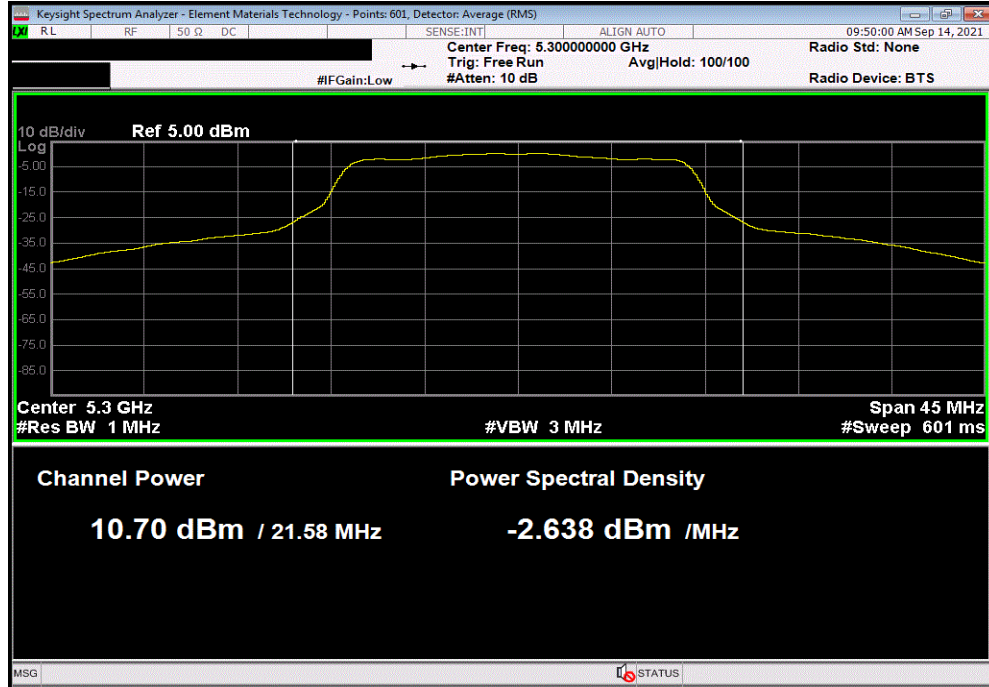


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.3 GHz BAND

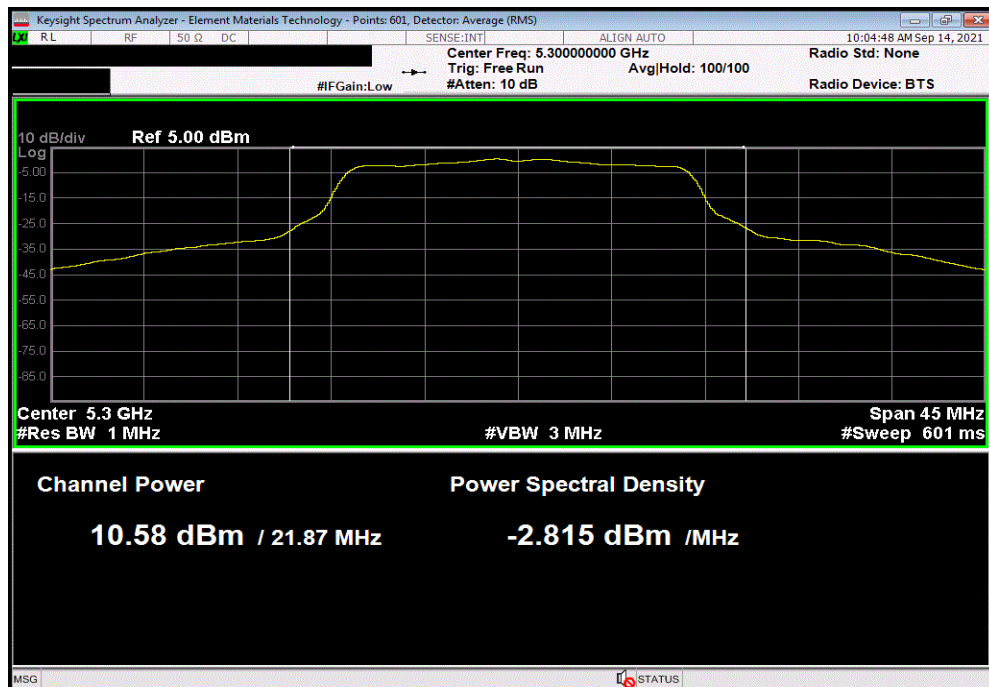


TbTx 2021.03.19.1 XMt 2020.12.30.0

5250 - 5350 MHz Band, 802.11(a) No HT, Mid Channel, Ch 60 - 5300 MHz, 36 Mbps						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
10.703	0.3	11	5.2	27.2	30	Pass



5250 - 5350 MHz Band, 802.11(a) No HT, Mid Channel, Ch 60 - 5300 MHz, 54 Mbps						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
10.583	0.5	11	5.2	27.3	30	Pass

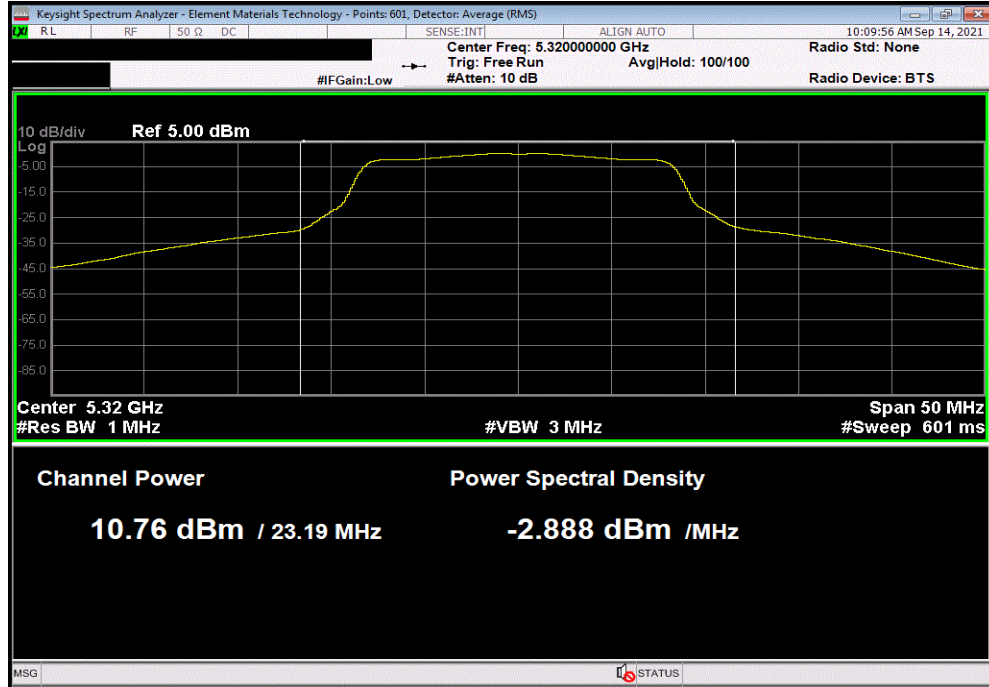


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.3 GHz BAND

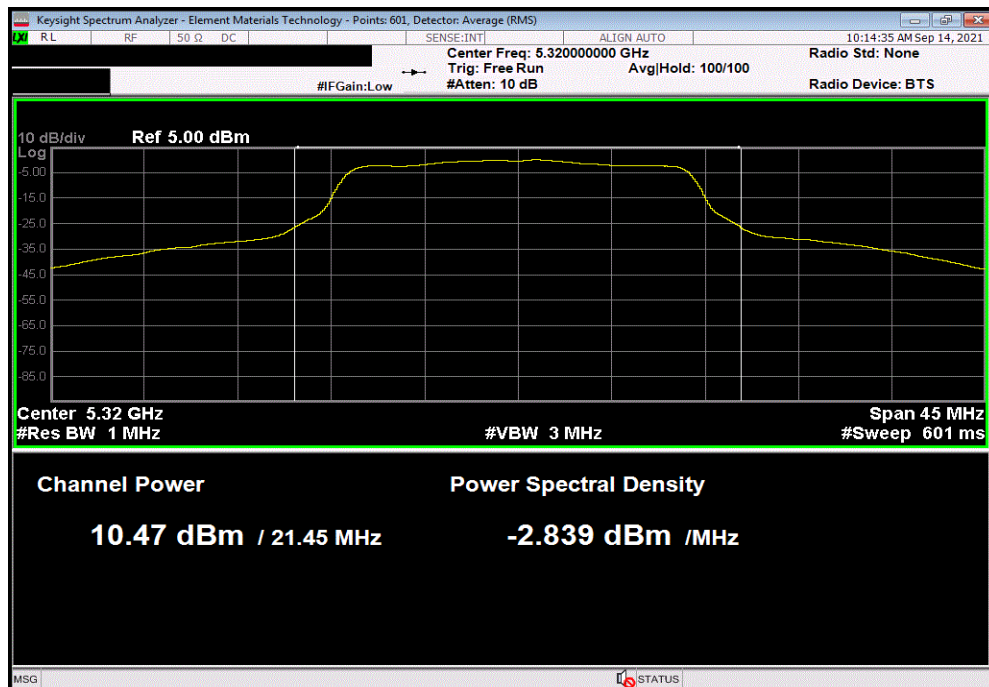


TbTx 2021.03.19.1 XMt 2020.12.30.0

5250 - 5350 MHz Band, 802.11(a) No HT, High Channel, Ch 64 - 5320 MHz, 6 Mbps						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
10.764	0.1	10.8	5.2	26.9	30	Pass



5250 - 5350 MHz Band, 802.11(a) No HT, High Channel, Ch 64 - 5320 MHz, 36 Mbps						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
10.474	0.3	10.8	5.2	26.8	30	Pass

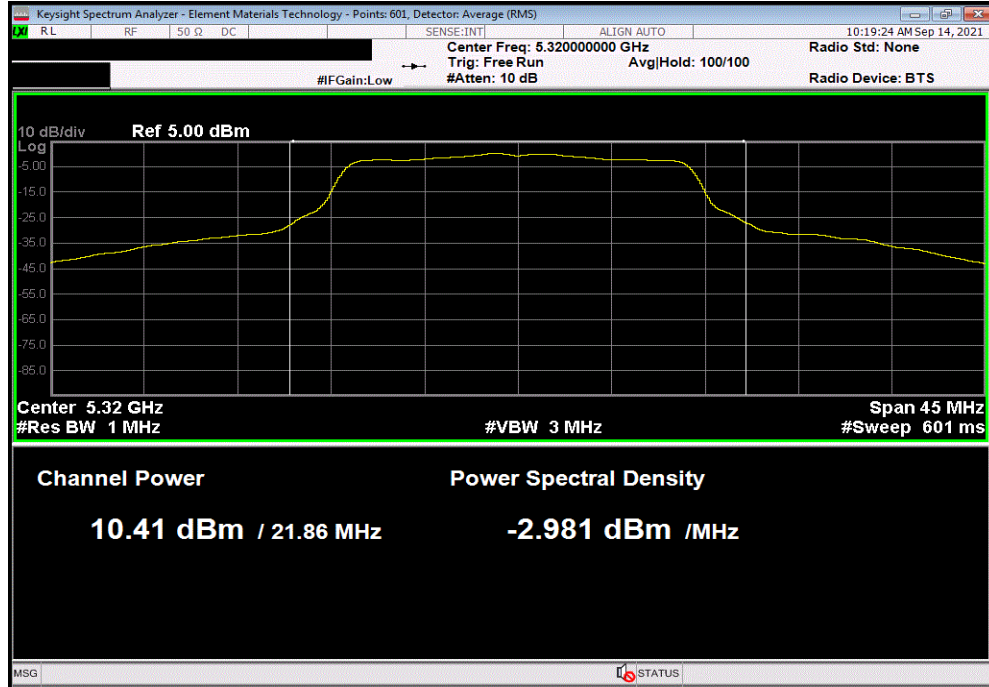


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.3 GHz BAND

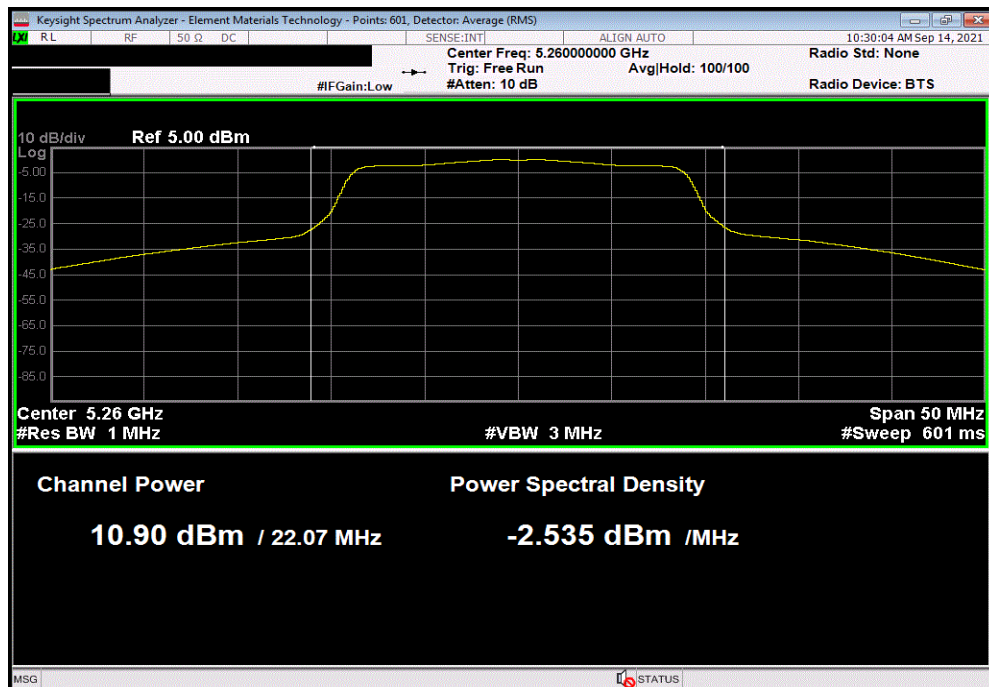


TbTx 2021.03.19.1 XMt 2020.12.30.0

5250 - 5350 MHz Band, 802.11(a) No HT, High Channel, Ch 64 - 5320 MHz, 54 Mbps						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
10.415	0.5	10.9	5.2	27.0	30	Pass



5250 - 5350 MHz Band, 802.11(n/ac) VHT20, Low Channel, Ch 52 - 5260 MHz, MCS0						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
10.904	0.1	11	5.2	27.2	30	Pass

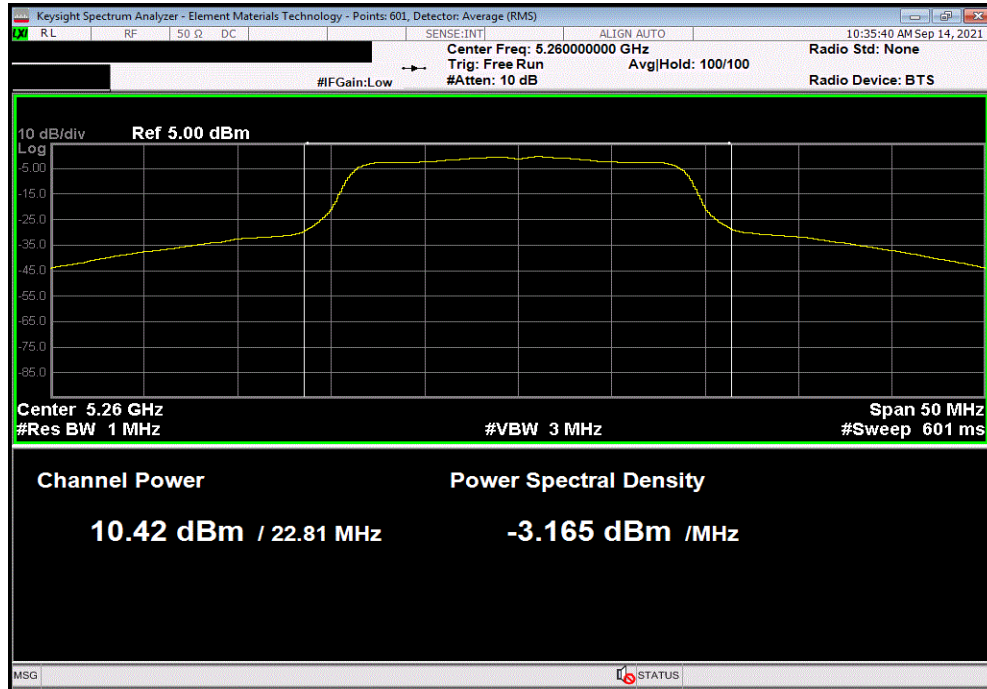


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.3 GHz BAND

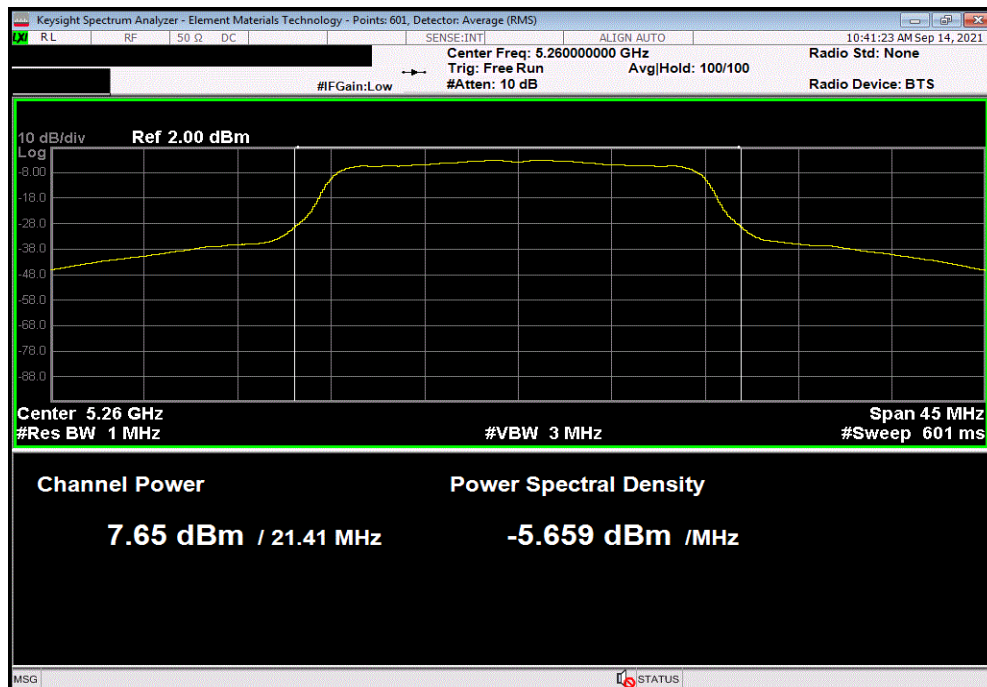


TbTx 2021.03.19.1 XMt 2020.12.30.0

5250 - 5350 MHz Band, 802.11(n/ac) VHT20, Low Channel, Ch 52 - 5260 MHz, MCS7						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
10.416	0.5	10.9	5.2	27.0	30	Pass



5250 - 5350 MHz Band, 802.11(n/ac) VHT20, Low Channel, Ch 52 - 5260 MHz, MCS8 (256-QAM)						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
7.647	0.6	8.2	5.2	21.6	30	Pass

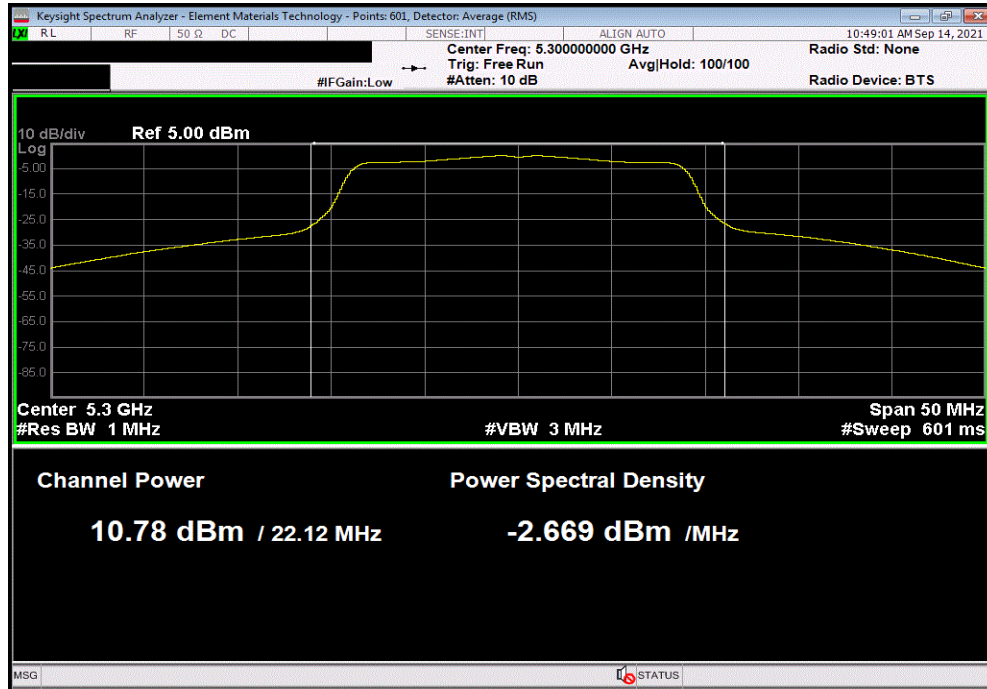


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.3 GHz BAND

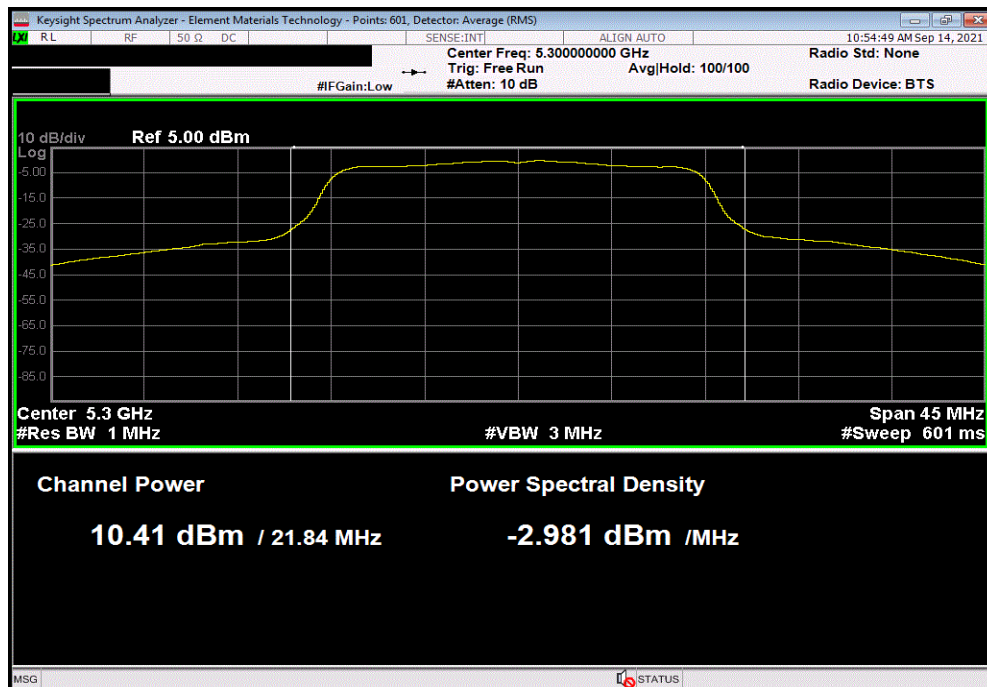


TbTx 2021.03.19.1 XMt 2020.12.30.0

5250 - 5350 MHz Band, 802.11(n/ac) VHT20, Mid Channel, Ch 60 - 5300 MHz, MCS0						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
10.778	0.1	10.8	5.2	26.9	30	Pass



5250 - 5350 MHz Band, 802.11(n/ac) VHT20, Mid Channel, Ch 60 - 5300 MHz, MCS7						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
10.411	0.5	10.9	5.2	27.0	30	Pass

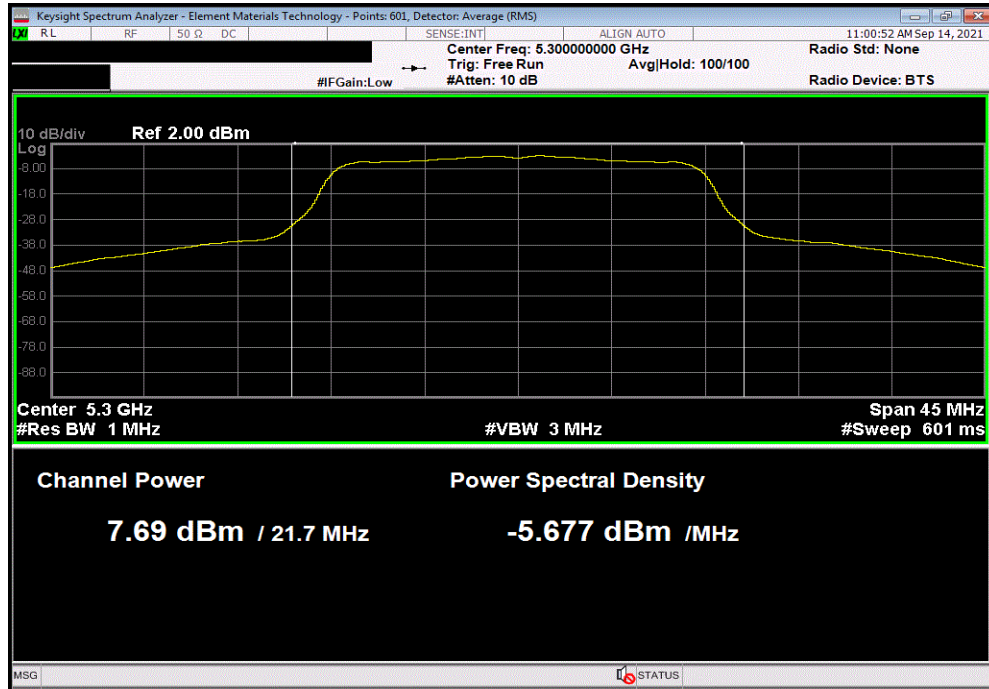


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.3 GHz BAND

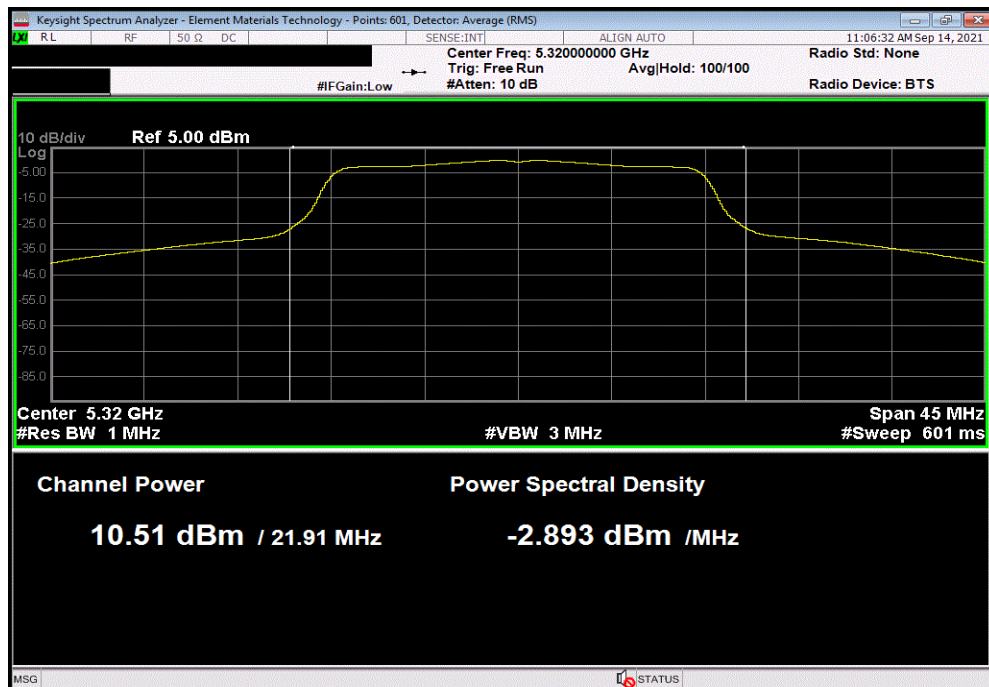


TbTx 2021.03.19.1 XMt 2020.12.30.0

5250 - 5350 MHz Band, 802.11(n/ac) VHT20, Mid Channel, Ch 60 - 5300 MHz, MCS8 (256-QAM)						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
7.688	0.6	8.2	5.2	21.7	30	Pass



5250 - 5350 MHz Band, 802.11(n/ac) VHT20, High Channel, Ch 64 - 5320 MHz, MCS0						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
10.513	0.1	10.6	5.2	26.4	30	Pass

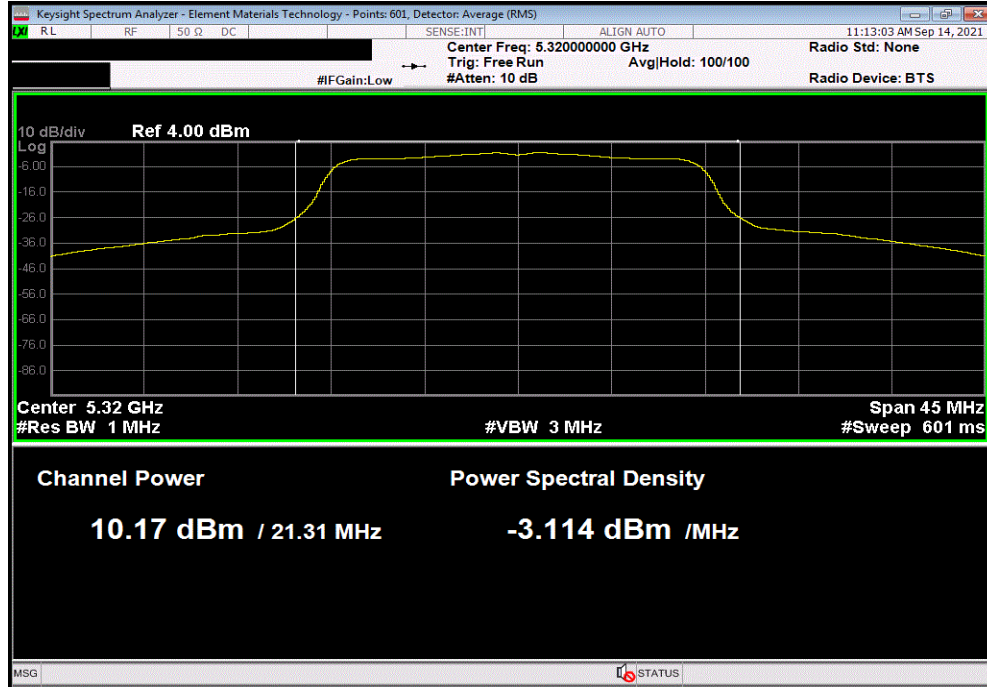


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.3 GHz BAND

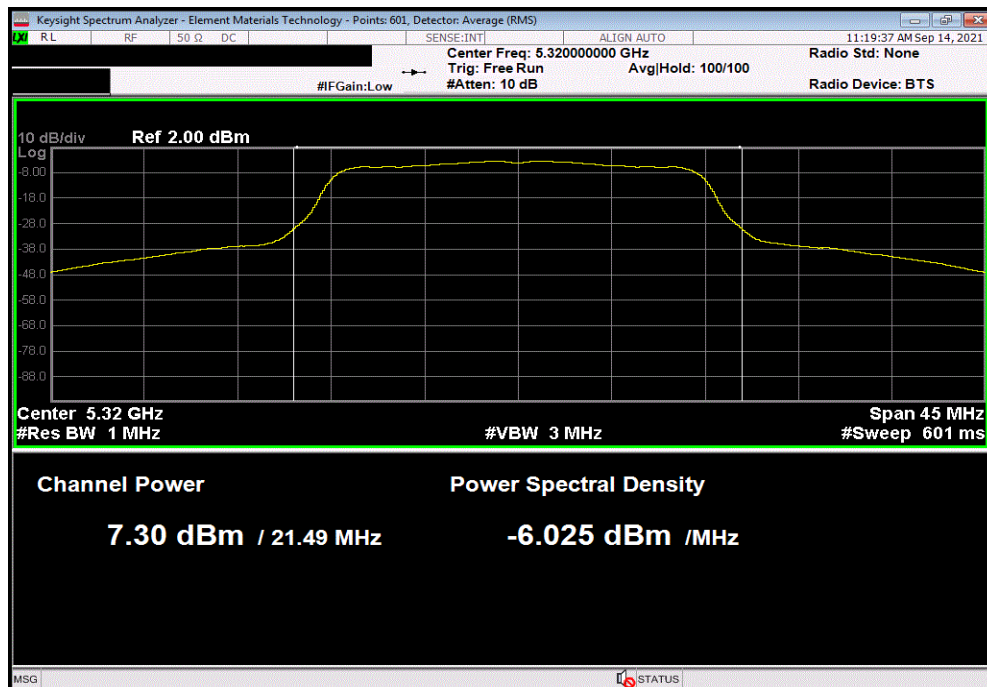


TbTx 2021.03.19.1 XMt 2020.12.30.0

5250 - 5350 MHz Band, 802.11(n/ac) VHT20, High Channel, Ch 64 - 5320 MHz, MCS7						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
10.172	0.5	10.7	5.2	26.6	30	Pass



5250 - 5350 MHz Band, 802.11(n/ac) VHT20, High Channel, Ch 64 - 5320 MHz, MCS8 (256-QAM)						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
7.297	0.6	7.9	5.2	21.0	30	Pass

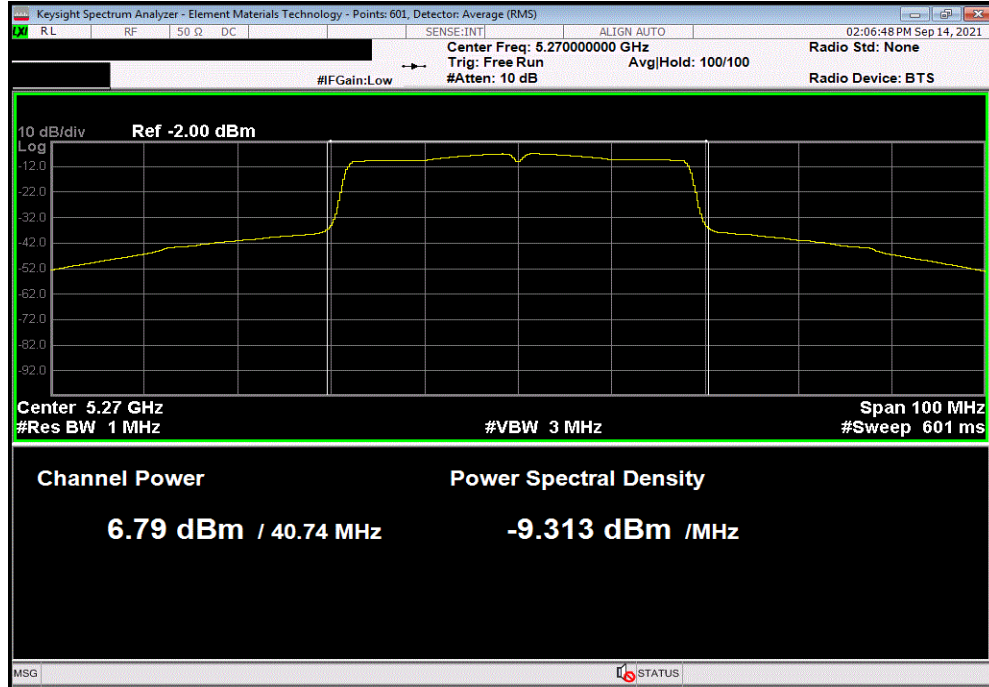


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.3 GHz BAND

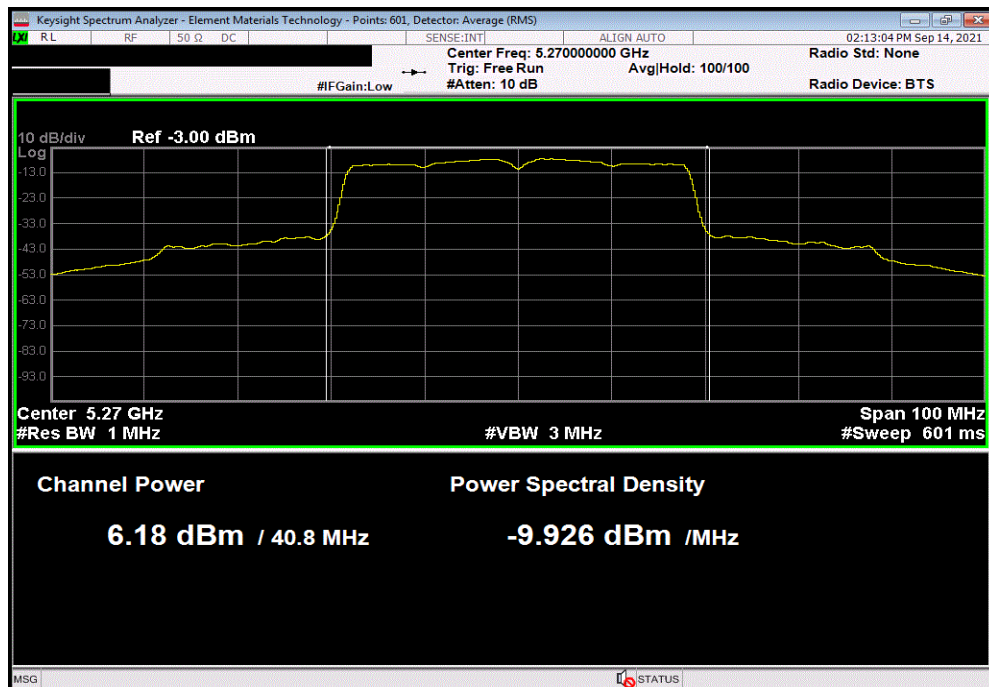


TbTx 2021.03.19.1 XMt 2020.12.30.0

5250 - 5350 MHz Band, 802.11(n/ac) VHT40, Low Channel, Ch 52/56 - 5270 MHz, MCS0						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
6.787	0.1	6.9	5.2	19.0	30	Pass



5250 - 5350 MHz Band, 802.11(n/ac) VHT40, Low Channel, Ch 52/56 - 5270 MHz, MCS7						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
6.18	0.7	6.9	5.2	19.0	30	Pass

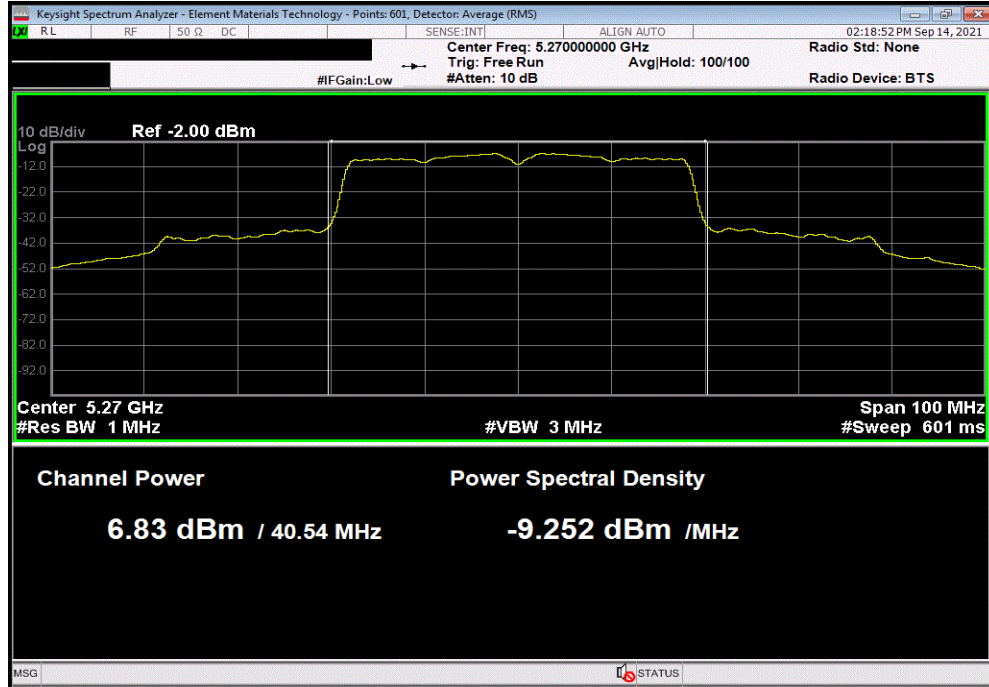


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.3 GHz BAND

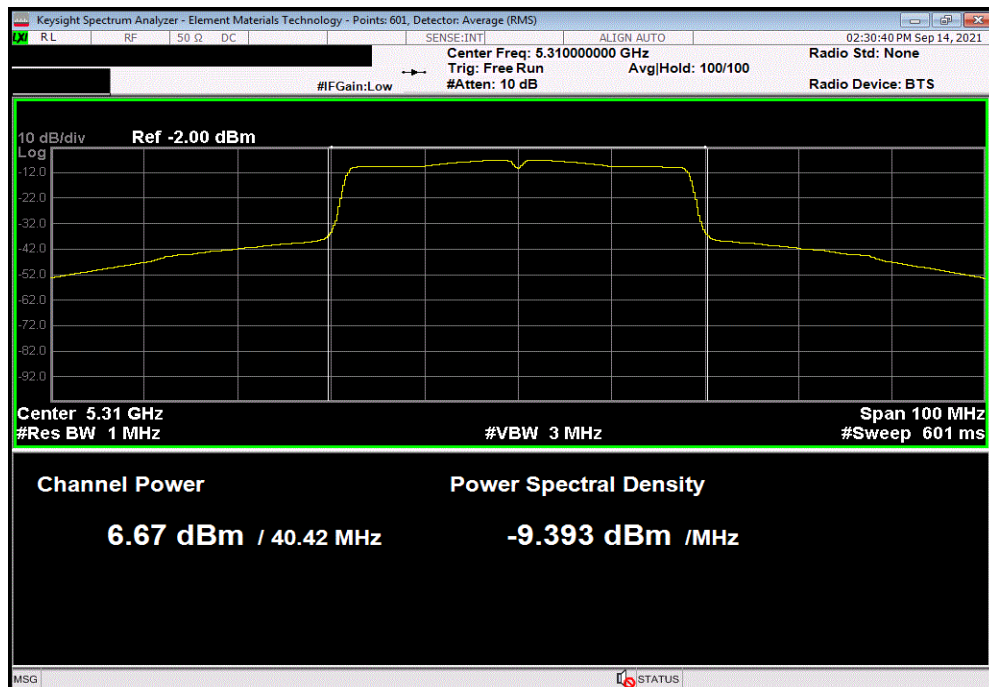


TbTx 2021.03.19.1 XMt 2020.12.30.0

5250 - 5350 MHz Band, 802.11(n/ac) VHT40, Low Channel, Ch 52/56 - 5270 MHz, MCS9 (256-QAM)						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
6.827	0.8	7.6	5.2	20.4	30	Pass



5250 - 5350 MHz Band, 802.11(n/ac) VHT40, High Channel, Ch 60/64 - 5310 MHz, MCS0						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
6.673	0.1	6.8	5.2	18.8	30	Pass

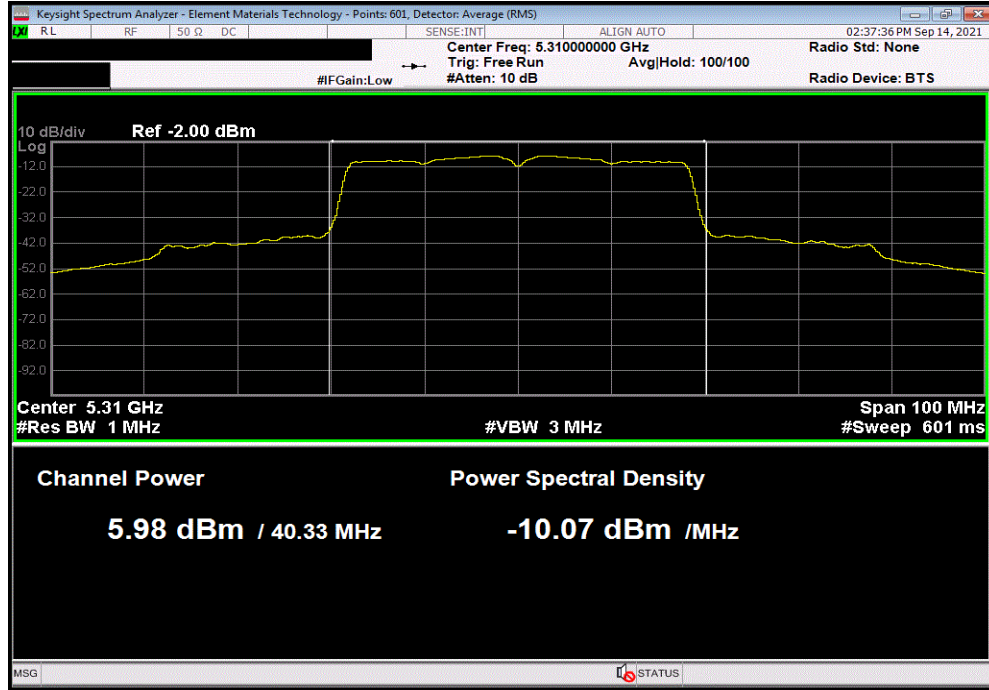


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.3 GHz BAND

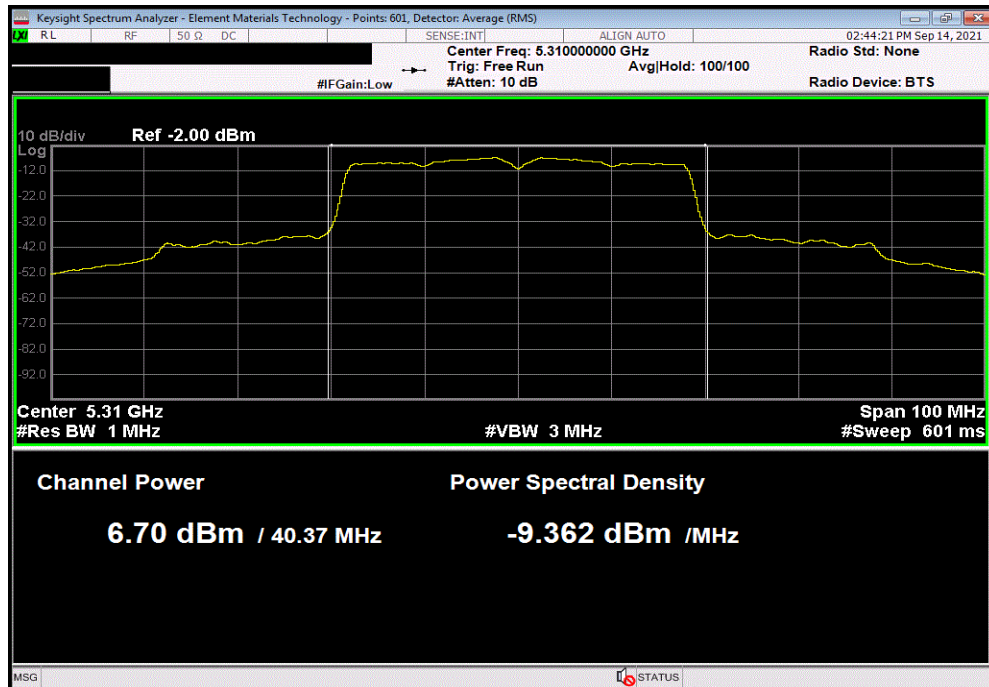


TbTx 2021.03.19.1 XM8 2020.12.30.0

5250 - 5350 MHz Band, 802.11(n/ac) VHT40, High Channel, Ch 60/64 - 5310 MHz, MCS7						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
5.982	0.7	6.7	5.2	18.6	30	Pass



5250 - 5350 MHz Band, 802.11(n/ac) VHT40, High Channel, Ch 60/64 - 5310 MHz, MCS9 (256-QAM)						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
6.698	0.8	7.5	5.2	20.2	30	Pass

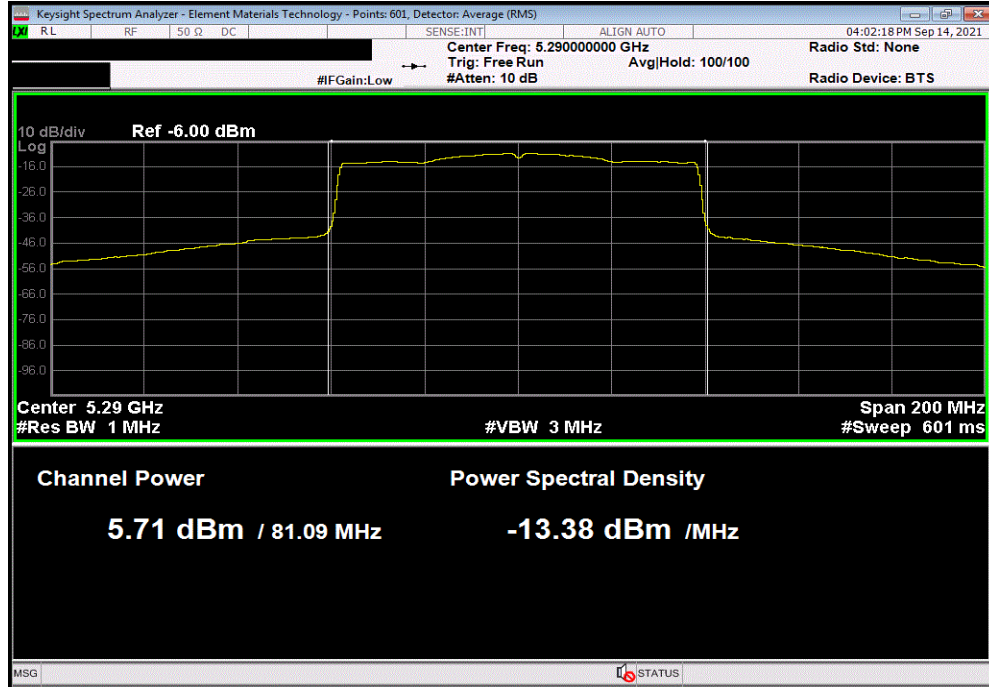


EQUIVALENT ISOTROPIC RADIATED POWER (EIRP) - 5.3 GHz BAND



TbTx 2021.03.19.1 XMt 2020.12.30.0

5250 - 5350 MHz Band, 802.11(n/ac) VHT80, Low Channel, Ch 52-64 - 5290 MHz, MCS0						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
5.709	0.2	5.9	5.2	17.0	30	Pass



5250 - 5350 MHz Band, 802.11(n/ac) VHT80, Low Channel, Ch 52-64 - 5290 MHz, MCS9 (256-QAM)						
Avg Cond Pwr (dBm)	Duty Cycle Factor (dB)	Out Pwr (dBm)	Antenna Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Result
4.671	1.1	5.7	5.2	16.7	30	Pass

