



Report No.: FR1N09011

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Page Number

FCC RADIO TEST REPORT

FCC ID : 2AFZZ123G Equipment : Mobile Phone

Brand Name : XIAOMI Model Name : 2201123G

Applicant : Xiaomi Communications Co., Ltd.

#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

Manufacturer : Xiaomi Communications Co., Ltd.

#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

Standard : FCC Part 15 Subpart E §15.407

The product was received on Nov. 15, 2021 and testing was performed from Nov. 22, 2021 to Dec. 18, 2021. We, Sporton International Inc. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval from Sporton International Inc. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Louis Wu

TEL: 886-3-327-3456

Louis Win

Sporton International Inc. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)

FAX: 886-3-328-4978 Issue Date : Jan. 04, 2022 Report Template No.: BU5-FR15EWL AC MA Version 2.4 Report Version : 02

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Report Template No.: BU5-FR15EWLAC MA Version 2.4

History of this test report

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Report No.	Version	Description	Issue Date
FR1N0901I	01	Initial issue of report	Dec. 21, 2021
FR1N0901I	02	Add table and remark in Product Feature of Equipment Under Test Add PSD plot for each bandwidth.	Jan. 04, 2022

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Summary of Test Result

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Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.403(i) 15.407(a)(10)	26dB Emission Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Reporting only	-
3.2	15.407(a)(8)	Maximum Conducted Output Power	Reporting only	-
3.2	15.407(a)(8)	Fundamental Maximum EIRP	Pass	-
3.3	15.407(a)(8)	Fundamental Power Spectral Density	Pass	-
3.4	15.407(b)(6)	In-Band Emissions (Channel Mask)	Pass	-
3.5	15.407(d)(6)	Contention Based Protocol	Pass	
3.6	15.407(b)	Unwanted Emissions	Pass	3.16 dB under the limit at 7125.020 MHz
3.7	15.207	AC Conducted Emission	Pass	15.94 dB under the limit at 2.427 MHz
3.8	15.203 15.407(a)	Antenna Requirement	Pass	-

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The product specifications of the EUT presented in the report are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Lewis Ho Report Producer: Celery Wei

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1 General Description

1.1 Product Feature of Equipment Under Test

GSM/WCDMA/LTE/5G NR, Bluetooth, Wi-Fi 2.4GHz 802.11b/g/n/ax, Wi-Fi 5GHz 802.11a/n/ac/ax, Wi-Fi 6GHz 802.11ax, NFC, WPT/WPC, and GNSS.

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EUT support CDD Mode

Pı	Product Specification subjective to this standard						
Sample 1	8+256G						
Sample 2	12+256G						
Sample 3	8+128G						
	WWAN						
	<main>: PIFA Antenna</main>						
	<aux.>: PIFA Antenna</aux.>						
	WLAN 2.4GHz						
	<ant. 16="">: PIFA Antenna</ant.>						
	<ant. 18="">: PIFA Antenna</ant.>						
	WLAN 5GHz						
	<ant. 17="">: PIFA Antenna</ant.>						
Antonno Timo	<ant. 18="">: PIFA Antenna</ant.>						
Antenna Type	WLAN 6GHz						
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	<ant. 18="">: PIFA Antenna</ant.>						
	Bluetooth:						
	<ant. 16="">: PIFA Antenna</ant.>						
	<ant. 18="">: PIFA Antenna</ant.>						
	GPS/Glonass/BDS/Galileo/SBAS/QZSS/NavIC: PIFA Antenna						
	NFC: Planar Antenna						
	WPT/WPC: Coil Antenna						

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	Antenna information								
5925 MHz ~ 6425 MHz	Peak Gain (dBi)	Ant. 17: -0.4 Ant. 18: -5.0							
6425 MHz ~ 6525 MHz	Peak Gain (dBi)	Ant. 17: -1.6 Ant. 18: -5.7							
6525 MHz ~ 6875 MHz	Peak Gain (dBi)	Ant. 17: -2.0							
6875 MHz ~ 7125 MHz	Peak Gain (dBi)	Ant. 18: -6.0 Ant. 17: -2.9							
	\ /	Ant. 18: -6.8 Ant. 17	Ant. 18]					
Antenna Function Description	802.11ax MIMO	V	V						

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Remark:

- **1.** MIMO Ant. 17+18 Directional Gain is a calculated result from MIMO Ant.17 and MIMO Ant.18. The formula used in calculation is documented in section 3.8.
- 2. Power of MIMO Ant.17 + Ant.18 is a calculated result from sum of the power MIMO Ant.17 and MIMO Ant.18.
- **3.** The above EUT's information was declared by manufacturer. Please refer to Comments and Explanations in report summary.

1.2 Modification of EUT

No modifications made to the EUT during the testing.

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1.3 Testing Location

Test Site	Sporton International Inc. EMC & Wireless Communications Laboratory
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) TEL: +886-3-327-3456
	FAX: +886-3-328-4978
Test Site No.	Sporton Site No.
rest site No.	CO05-HY, DF02-HY

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Note: The test site complies with ANSI C63.4 2014 requirement.

Test Site	Sporton International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868
	FAX: +886-3-327-0855
Test Site No.	Sporton Site No.
rest site No.	TH05-HY; 03CH20-HY
Demank	The Conducted and Radiation Spurious Emission test items subcontracted to
Remark	Sporton International Inc. Wensan Laboratory.

Note: The test site complies with ANSI C63.4 2014 requirement.

FCC designation No.: TW1190 and TW3786

1.4 Applicable Standards

According to the specifications declared by the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part 15 Subpart E
- FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- FCC KDB 987594 D02 U-NII 6 GHz EMC Measurement v01
- FCC KDB 414788 D01 Radiated Test Site v01r01.
- FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ANSI C63.10-2013

Remark:

- 1. All the test items were validated and recorded in accordance with the standards without any modification during the testing.
- 2. The TAF code is not including all the FCC KDB listed without accreditation.

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2 Test Configuration of Equipment Under Test

a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in three orthogonal axis (X: flat, Y: portrait, Z: landscape), and adjusting the measurement antenna orientation, following C63.10 exploratory test procedures and find X plane and WPC Charging Mode as worst plane.

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b. AC power line Conducted Emission was tested under maximum output power.

2.1 Carrier Frequency and Channel

BW 20M	Channel	1	5	9	13	17	21	25	29
DVV ZUIVI	Freq. (MHz)	5955	5975	5995	6015	6035	6055	6075	6095
DW 40M	Channel	3		11		19		27	
BW 40M	Freq. (MHz)	5965		6005		6045		6085	
BW 80M	Channel		7	7		23			
DAA OOIAI	Freq. (MHz)		59	85		6065			
BW 160M	Channel	15							
DAA LOOIAI	Freq. (MHz)		6025						

BW 20M	Channel	33	37	41	45	49	53	57	61	
	Freq. (MHz)	6115	6135	6155	6175	6195	6215	6235	6255	
BW 40M	Channel	35		43		51		59		
DVV 40IVI	Freq. (MHz)	6125		6165		6205		6245		
BW 80M	Channel		3	9		55				
DAA OOIAI	Freq. (MHz)		61	45		6225				
BW 160M	Channel	47								
DVV TOUIVI	Freq. (MHz)		6185							

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Channel

Freq. (MHz)

BW 160M

BW 20M	Channel	65	69	73	77	81	85	89	93		
	Freq. (MHz)	6275	6295	6315	6335	6355	6375	6395	6415		
BW 40M	Channel	6	7	7	75		83		91		
DIV TOM	Freq. (MHz)	62	85	63	25	636	65	6405			
BW 80M	Channel		7	1			8	7			
DVV GOIVI	Freq. (MHz)		63	05			63	85			
BW 160M	Channel				7	9					
DAA LOOM	Freq. (MHz)				63	45					
	Channel	97	101	105	109	113	117	121	125		
BW 20M	Freq. (MHz)	6435	6455	6475	6495	6515	6535	6555	6575		
	Channel		9		0433 07	11		12			
BW 40M	Freq. (MHz)		45	6485		65		6565			
	Channel			03		00					
BW 80M	Freq. (MHz)			.65		6545					
	Channel		111								
BW 160M	Freq. (MHz)	6505									
	1 104. (11112)	0000									
BW 20M	Channel	129	133	137	141	145	149	153	157		
D11 20111	Freq. (MHz)	6595	6615	6635	6655	6675	6695	6715	6735		
						147		155			
BW 40M	Channel	10	31	13	39	14	.7	15	5		
BW 40M	Channel Freq. (MHz)		31 05	13 66		668		15 672			
			05					672			
BW 40M	Freq. (MHz)		05	66 35			35	672			
BW 80M	Freq. (MHz) Channel		05 13	66 35	45		35 15	672			
	Freq. (MHz) Channel Freq. (MHz)		05 13	66 35	45	668	35 15	672			
BW 80M	Freq. (MHz) Channel Freq. (MHz) Channel		05 13	66 35	45	668	35 15	672			
BW 80M	Freq. (MHz) Channel Freq. (MHz) Channel Freq. (MHz)	66	05 13 66	66 35 25	45 14 66	668 43 65	35 15 67	672 61 005	25		
BW 80M BW 160M BW 20M	Freq. (MHz) Channel Freq. (MHz) Channel Freq. (MHz) Channel	161 6755	05 13 66 165	66 35 25 169 6795	14 66 173	668 43 65	15 67 181 6855	672 61 05 185	189 6895		
BW 80M	Freq. (MHz) Channel Freq. (MHz) Channel Freq. (MHz) Channel Freq. (MHz)	161 6755	05 13 66 165 6775	169 6795	45 14 66 173 6815	668 43 65 177 6835	15 67 181 6855	673 61 05 185 6875	189 6895		
BW 80M BW 160M BW 20M BW 40M	Freq. (MHz) Channel Freq. (MHz) Channel Freq. (MHz) Channel Freq. (MHz) Channel	161 6755	05 66 165 6775 63	169 6795	45 14 66 173 6815	668 43 65 177 6835	15 67 181 6855	67: 61 05 185 6875 18	189 6895		
BW 80M BW 160M BW 20M	Freq. (MHz) Channel Freq. (MHz) Channel Freq. (MHz) Channel Freq. (MHz) Channel Freq. (MHz)	161 6755	05 66 165 6775 63 65	66 35 25 169 6795 1' 68	45 14 66 173 6815	668 43 65 177 6835	181 6855 79	673 61 005 185 6875 18 68	189 6895		

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6825

BW 20M	Channel	193	197	201	205	209	213	217	221	
DVV ZUIVI	Freq. (MHz)	6915	6935	6955	6975	6995	7015	7035	7055	
BW 40M	Channel	19	95	20	203		11	219		
DVV 4UIVI	Freq. (MHz)	69	25	69	65	7005		7045		
BW 80M	Channel		19	99			2′	15		
DAA OOIAI	Freq. (MHz)		69	45			70	25		
BW 160M	Channel		207							
DAA LOOM	Freq. (MHz)		6985							
DW/ 20M	Channel		22	25		229				
BW 20M	Freq. (MHz)		70	75		7095				
BW 40M	Channel	227								
DVV 4UIVI	Freq. (MHz)	7085								
	Channel				23	33	·	·		
BW 20M	Freq. (MHz)				71	15				

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2.2 Test Mode

The final test modes consider the modulation and the worst data rates as shown in the table below.

MIMO Mode

Modulation	Data Rate
802.11ax HE20	MCS0
802.11ax HE40	MCS0
802.11ax HE80	MCS0
802.11ax HE160	MCS0

Note:

- 1. Since the verify power, the smaller power can be covered by the higher power. The SISO Mode are covered by MIMO Mode.
- 2. For 802.11ax, since the verify power & PSD, the smaller power can be covered by the higher power. The Partial RU are covered by Full RU.

Test Cases				
AC Conducted Mode 1 : WLAN (6GHz) Link + Bluetooth Link + MPEG 4 + U				
Emission	(Charging from AC Adapter) + Battery for Sample 1			
Remark: For Radiated Test Cases, the tests were performed with USB Cable 1 and Sample 1.				

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Ch. #		UNII-5 (5925-6425 MHz)	UNII-6 (6425-6525 MHz)	UNII-7 (6525-6875 MHz)	UNII-8 (6875-7125 MHz)
		802.11ax HE20	802.11ax HE20	802.11ax HE20	802.11ax HE20
L	Low	001	-	-	-
M	Middle	-	-	-	-
Н	High	-	-	-	233
	Straddle	-	-	-	-

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Ch. #		UNII-5 (5925-6425 MHz)	UNII-6 (6425-6525 MHz)	UNII-7 (6525-6875 MHz)	UNII-8 (6875-7125 MHz)
		802.11ax HE40	802.11ax HE40	802.11ax HE40	802.11ax HE40
L	Low	003	-	-	-
M Middle		-	-	-	-
Н	High	-	-	-	227
5	Straddle	-	-	-	-

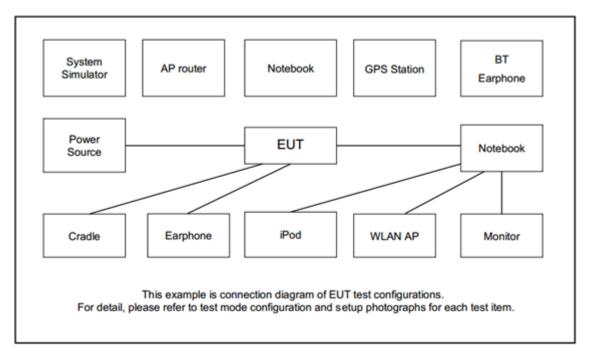
Ch. #		UNII-5 (5925-6425 MHz)	UNII-6 (6425-6525 MHz)	UNII-7 (6525-6875 MHz)	UNII-8 (6875-7125 MHz)
		802.11ax HE80	802.11ax HE80	802.11ax HE80	802.11ax HE80
L	Low	007		-	-
M	Middle	-	-	-	-
Н	High	-		-	215
Straddle		-	-	-	-

Ch. #		UNII-5 (5925-6425 MHz)	UNII-6 (6425-6525 MHz)	UNII-7 (6525-6875 MHz)	UNII-8 (6875-7125 MHz)
		802.11ax HE160	802.11ax HE160	802.11ax HE160	802.11ax HE160
L	Low	015			
M	Middle	047	-	143	207
Н	High	079			
5	Straddle	-	111	175	-

Remark: For radiation spurious emission, the modulation and the data rate picked for testing are determined by the Max. RF conducted power.

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2.3 Connection Diagram of Test System



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2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Bluetooth Earphone	Sony Ericsson	MW600	PY7DDA-2029	N/A	N/A
2.	WLAN AP	ASUS	GT-AXE11000	MSQ-RTAXJF00	N/A	Unshielded, 1.8 m
3.	Notebook	DELL	Latitude 3400	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
4.	Notebook	DELL	Latitude5310	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
5.	Wireless Charger	YU-live	K8	N/A	N/A	N/A

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2.5 EUT Operation Test Setup

For WLAN Tx test items, EUT (SW: MIUI13) get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

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For Partial RU test items, utility "QSPR Version 5.0-00188" was installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

2.6 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example:

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 4.2 dB and 10dB attenuator.

Offset(dB) = RF cable loss(dB) + attenuator factor(dB). = 4.2 + 10 = 14.2 (dB)

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3 Test Result

3.1 26dB & 99% Occupied Bandwidth Measurement

3.1.1 Limit of 26dB & 99% Occupied Bandwidth

<FCC 14-30 CFR 15.407>

(a)(10) The maximum transmitter channel bandwidth for U-NII devices in the 5.925-7.125 GHz band is 320 megahertz.

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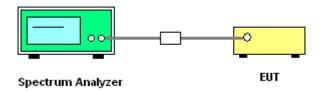
3.1.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.1.3 Test Procedures

- The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
 Section C) Emission bandwidth
- 2. Set RBW = approximately 1% of the emission bandwidth.
- 3. Set the VBW > RBW.
- 4. Detector = Peak.
- Trace mode = max hold
- 6. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.
- 7. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1-5% of the emission bandwidth and set the Video bandwidth (VBW) \geq 3 * RBW.
- 8. Measure and record the results in the test report.

3.1.4 Test Setup

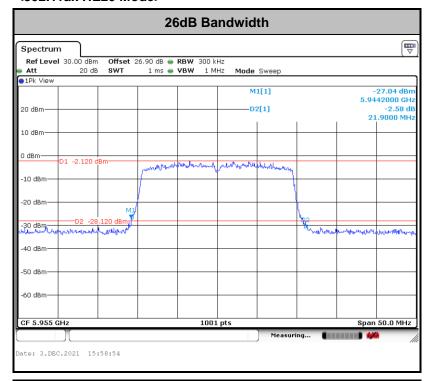


3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

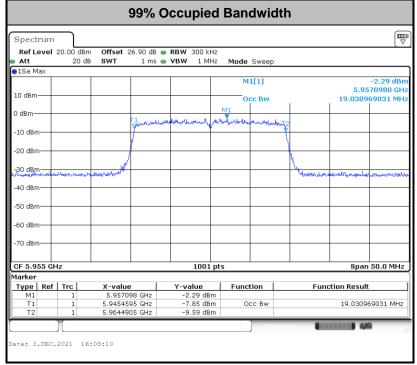
Please refer to Appendix A.

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<802.11ax HE20 Mode>



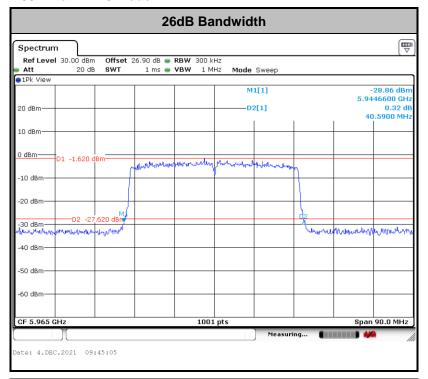
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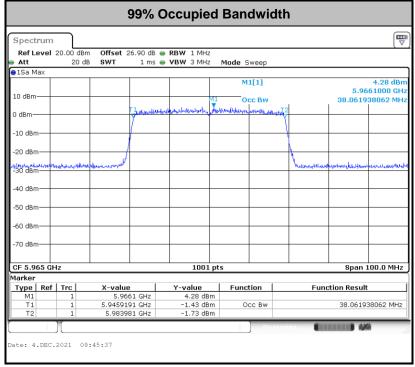
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

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<802.11ax HE40 Mode>



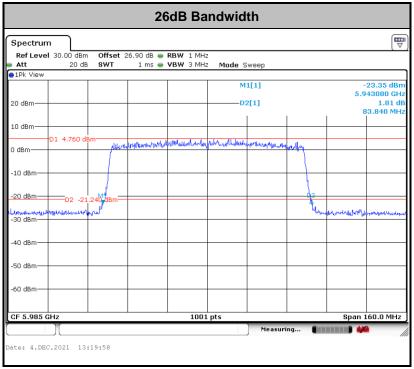
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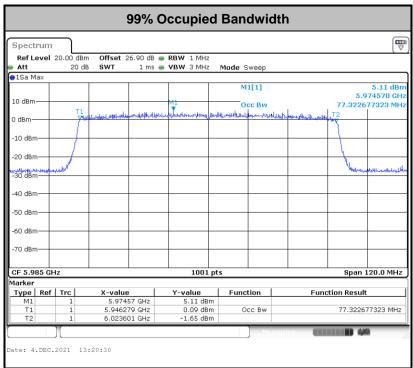
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

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<802.11ax HE80 Mode>



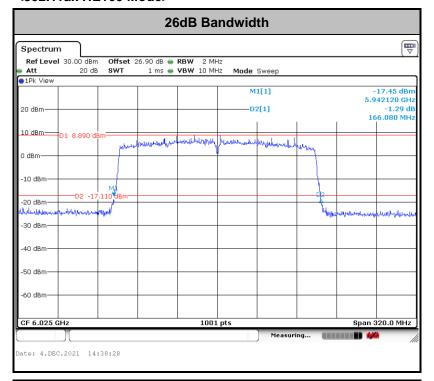
Report No.: FR1N0901I



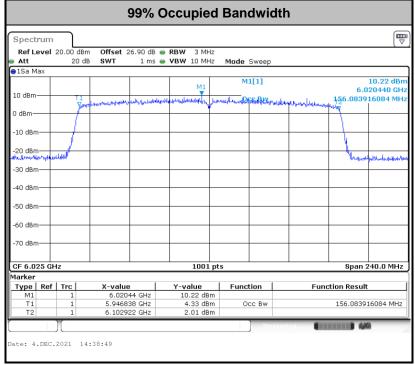
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

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<802.11ax HE160 Mode>



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Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

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3.2 Maximum conducted Output Power and Fundamental Maximum EIRP Measurement

3.2.1 Limit of Fundamental Maximum EIRP

<FCC 14-30 CFR 15.407>

(a)(8) For client devices operating under the control of an indoor access point in the 5.925-7.125 GHz bands, the maximum e.i.r.p. over the frequency band of operation must not exceed 24 dBm.

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3.2.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

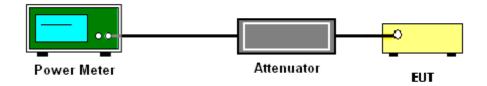
3.2.3 Test Procedures

The testing follows Method PM of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Method PM (Measurement using an RF average power meter):

- 1. Measurement is performed using a wideband RF power meter.
- 2. The EUT is configured to transmit continuously with a consistent duty cycle at its maximum power control level.
- 3. Measure the average power of the transmitter, and the average power is corrected with duty factor, 10 log(1/x), where x is the duty cycle.
- 4. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

3.2.4 Test Setup



3.2.5 Test Result of Fundamental Maximum EIRP

Please refer to Appendix A.

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3.3 Fundamental Power Spectral Density Measurement

3.3.1 Limit of Fundamental Power Spectral Density

<FCC 14-30 CFR 15.407>

(a)(8) For client devices operating under the control of an indoor access point in the 5.925-7.125 GHz bands, the maximum power spectral density must not exceed −1 dBm e.i.r.p. in any 1-megahertz band.

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3.3.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.3.3 Test Procedures

The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section F) Maximum power spectral density.

Method SA-3

(power averaging (rms) detection with max hold):

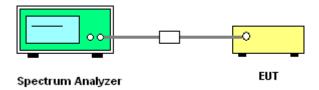
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz.
- Set VBW ≥ 3 MHz.
- Number of points in sweep ≥ 2 Span / RBW.
- Sweep time ≤ (number of points in sweep) × T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
 Detector = power averaging (rms).
- Trace mode = max hold.
- Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.
- 1. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
- 2. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.
- 3. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

Method (a): Measure and sum the spectra across the outputs.

The total final Power Spectral Density is from a device with 2 transmitter outputs. The spectrum measurements of the individual outputs are all performed with the same span and number of points; the spectrum value in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 to obtain the value for the first frequency bin of the summed spectrum.

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3.3.4 Test Setup



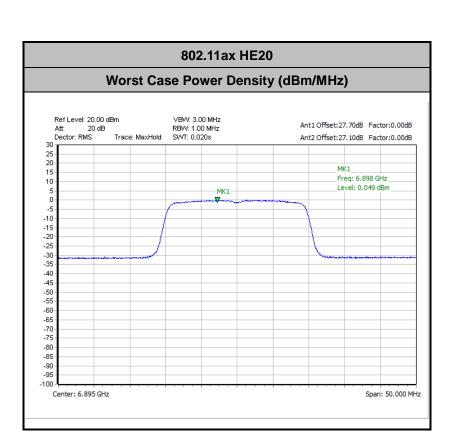
Report No.: FR1N0901I

3.3.5 Test Result of Power Spectral Density

Please refer to Appendix A.

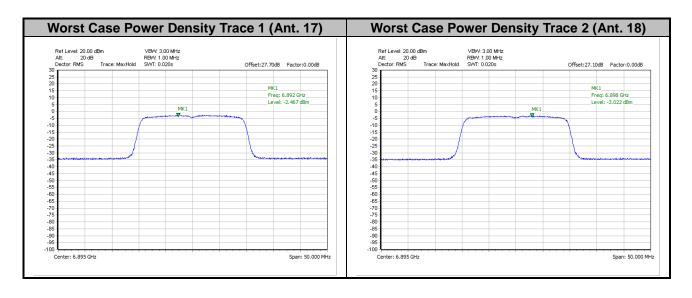
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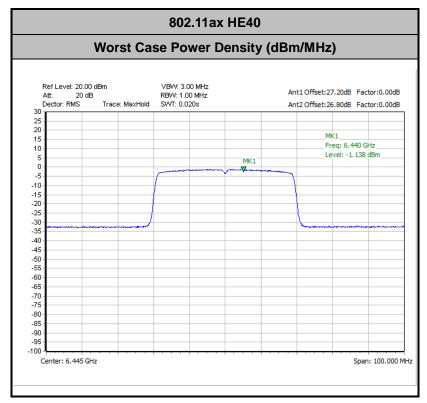
Report No.: FR1N0901I

Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

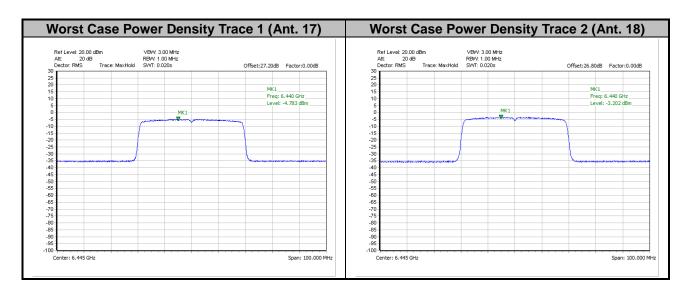


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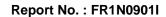


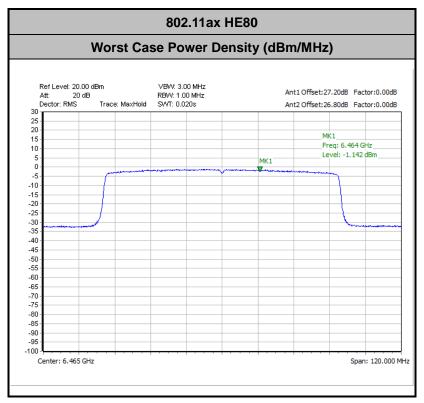


Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

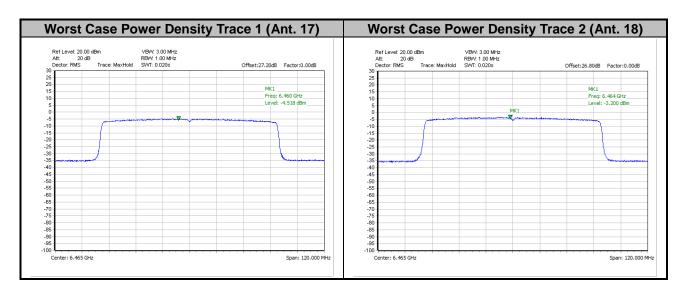


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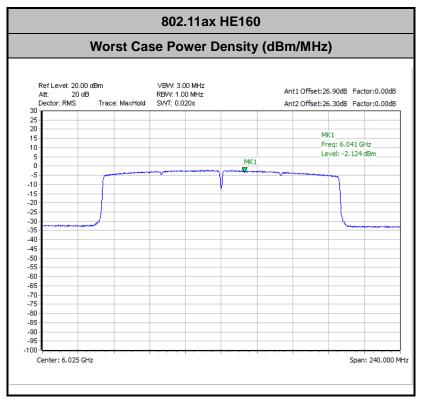


Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.



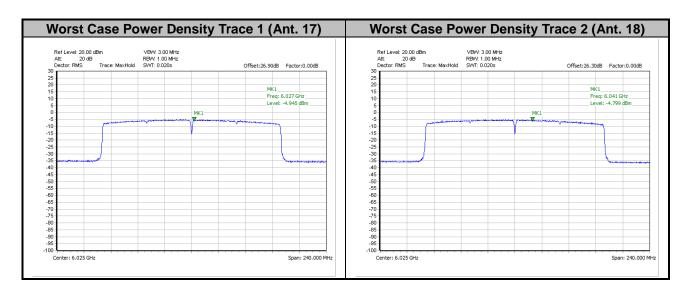
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Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.



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3.4 In-Band Emissions (Channel Mask)

3.4.1 Limit of Unwanted Emissions

<FCC 14-30 CFR 15.407>

(a)(6) For transmitters operating within the 5.925-7.125 GHz bands: Power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel center, and by 40 dB at one- and one-half times the channel bandwidth away from channel center. At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel center by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB.

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3.4.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.4.3 Test Procedures

The testing follows FCC KDB 987594 D02 U-NII 6GHz EMC Measurement v01.

Section J) In-Band Emissions.

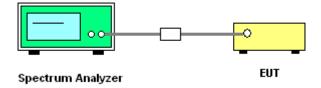
- Take nominal bandwidth as reference channel bandwidth provided that 26 dB emission bandwidth is always larger than nominal bandwidth
- 2. Measure the power spectral density (which will be used for emissions mask reference) using the following procedure:
 - a) Set the span to encompass the entire 26 dB EBW of the signal.
 - b) Set RBW = same RBW used for 26 dB EBW measurement.
 - c) Set VBW ≥ 3 X RBW
 - d) Number of points in sweep ≥ [2 X span / RBW].
 - e) Sweep time = auto.
 - f) Detector = RMS (i.e., power averaging)
 - g) Trace average at least 100 traces in power averaging (rms) mode.
 - h) Use the peak search function on the instrument to find the peak of the spectrum.
- 3. Using the measuring equipment limit line function, develop the emissions mask based on the following requirements. The emissions power spectral density must be reduced below the peak power spectral density (in dB) as follows:
 - a. Suppressed by 20 dB at 1 MHz outside of the channel edge.
 - b. Suppressed by 28 dB at one channel bandwidth from the channel center.
 - c. Suppressed by 40 dB at one- and one-half times the channel bandwidth from the channel center.

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- 4. Adjust the span to encompass the entire mask as necessary.
- 5. Clear trace.
- 6. Trace average at least 100 traces in power averaging (rms) mode.
- 7. Adjust the reference level as necessary so that the crest of the channel touches the top of the emission mask.

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3.4.4 Test Setup



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3.4.5 Test Result

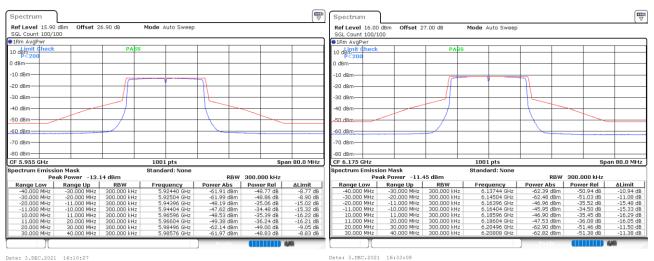
MIMO <Ant. 17+18(17)>

EUT Mode: 802.11ax HE20

Plot on Channel 5955MHz

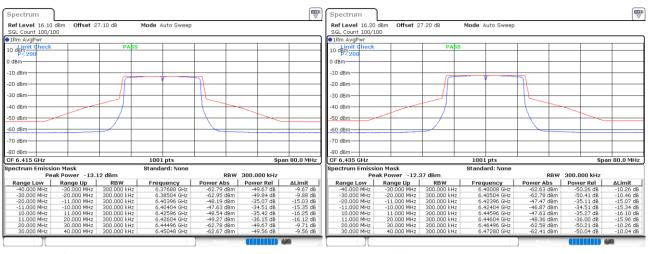
Plot on Channel 6175MHz

Report No.: FR1N0901I



Plot on Channel 6415MHz

Plot on Channel 6435MHz

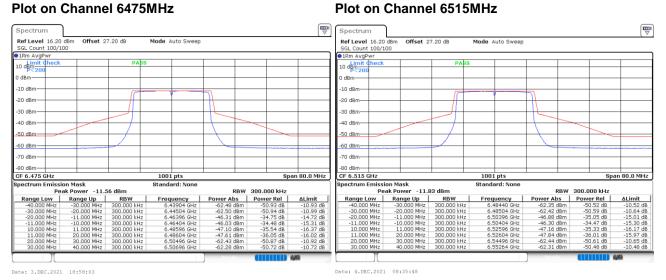


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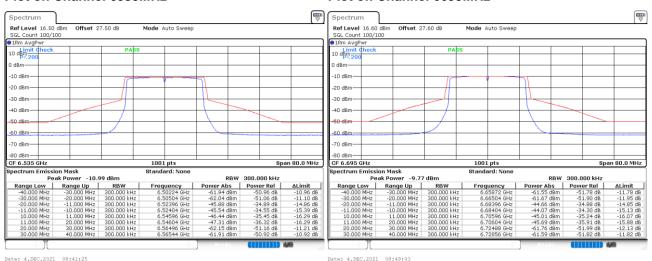
Plot on Channel 6515MHz

Report No.: FR1N0901I



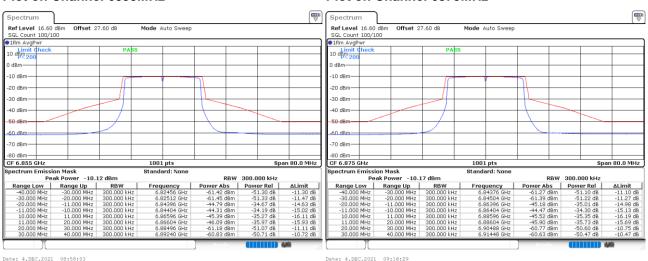
Plot on Channel 6535MHz

Plot on Channel 6695MHz



Plot on Channel 6855MHz

Plot on Channel 6875MHz

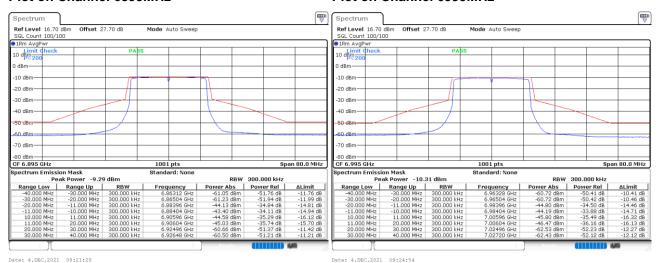


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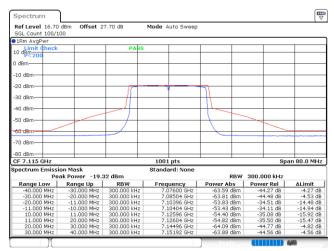
Plot on Channel 6895MHz

Plot on Channel 6995MHz

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Plot on Channel 7115MHz



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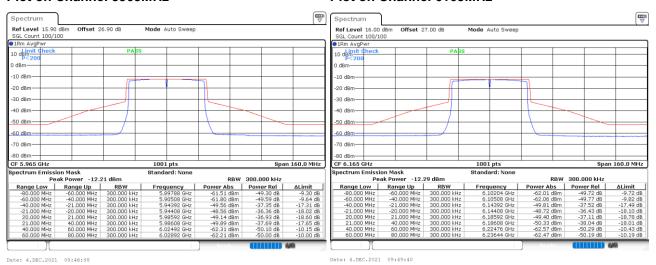
802.11ax HE40

Plot on Channel 5965MHz

EUT Mode:

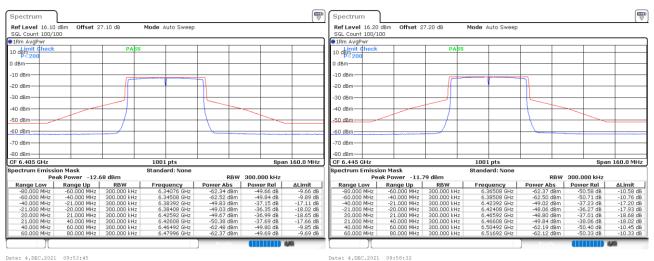
Plot on Channel 6165MHz

Report No.: FR1N0901I



Plot on Channel 6405MHz

Plot on Channel 6445MHz

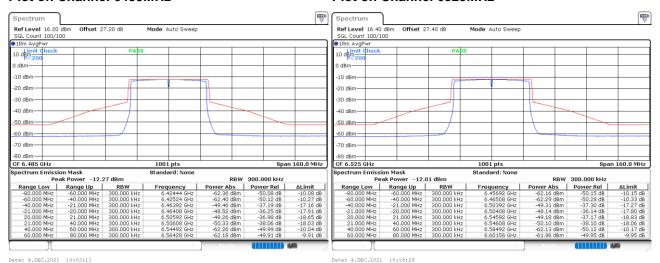


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Plot on Channel 6485MHz

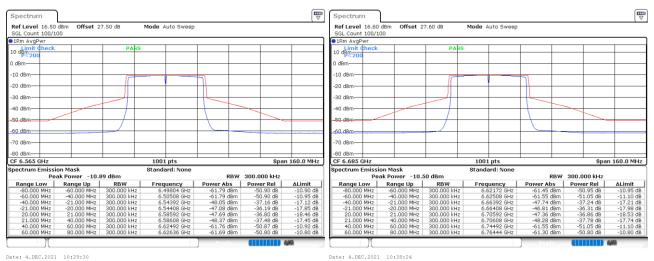
Plot on Channel 6525MHz

Report No.: FR1N0901I



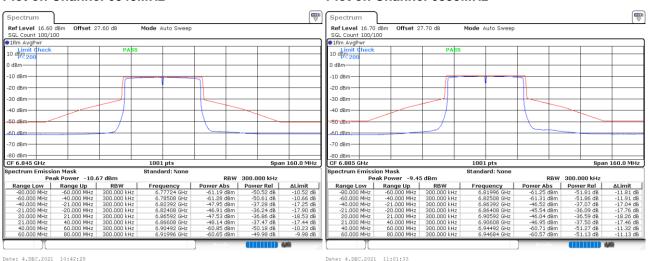
Plot on Channel 6565MHz

Plot on Channel 6685MHz



Plot on Channel 6845MHz

Plot on Channel 6885MHz

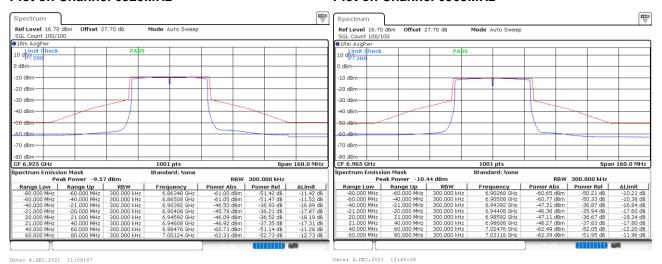


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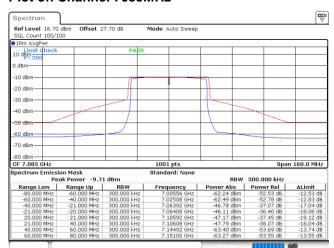
Plot on Channel 6925MHz

Plot on Channel 6965MHz

Report No.: FR1N0901I



Plot on Channel 7085MHz



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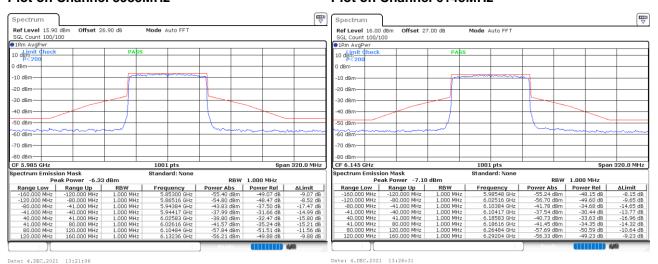
802.11ax HE80

Plot on Channel 5985MHz

EUT Mode:

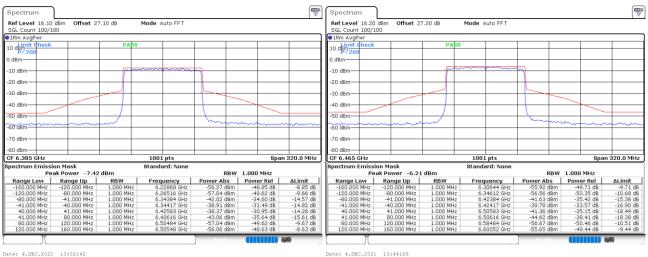
Plot on Channel 6145MHz

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Plot on Channel 6385MHz

Plot on Channel 6465MHz



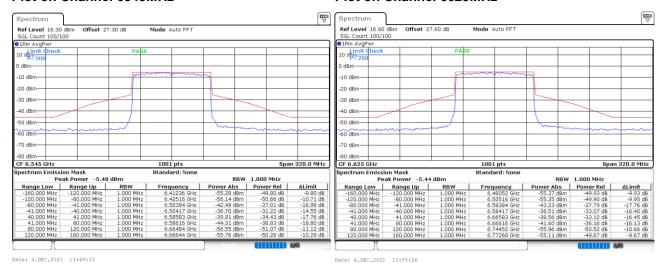
te: 4.DEC.2021 13:32:42 Date: 4.DEC.2021 13:44

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Plot on Channel 6545MHz

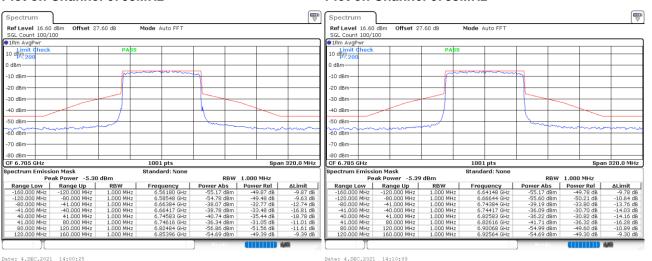
Plot on Channel 6625MHz

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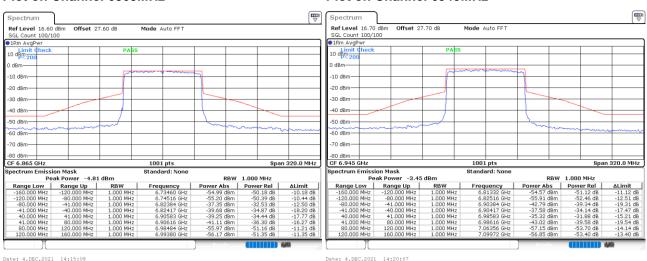
Plot on Channel 6705MHz

Plot on Channel 6785MHz



Plot on Channel 6865MHz

Plot on Channel 6945MHz



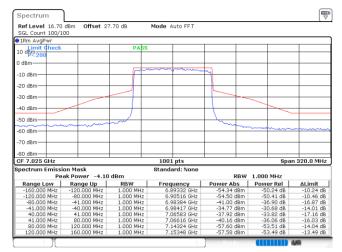
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Plot on Channel 7025MHz



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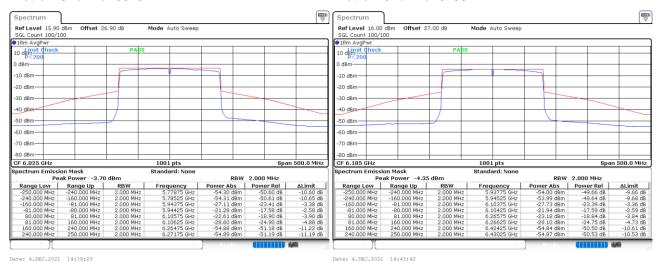
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EUT Mode: 802.11ax HE160

Plot on Channel 6025MHz

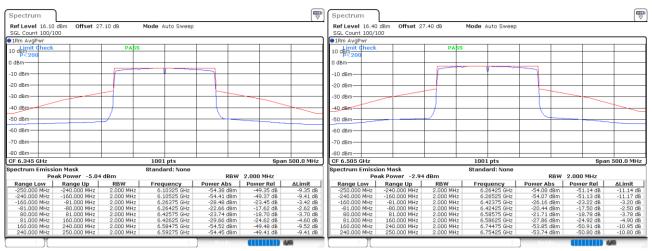
Plot on Channel 6185MHz

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Plot on Channel 6345MHz

Plot on Channel 6505MHz



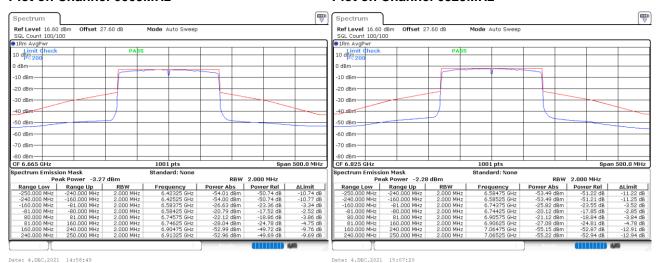
Date: 4.DEC.2021 14:47:04 Date: 4.DEC.2021 14:52:59

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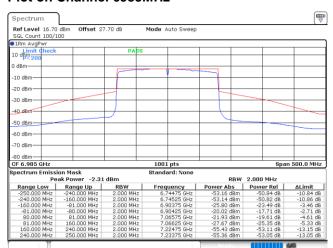
Plot on Channel 6665MHz

Plot on Channel 6825MHz

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Plot on Channel 6985MHz



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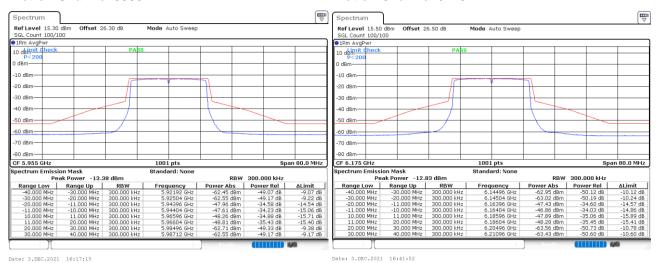
MIMO <Ant. 17+18(18)>

EUT Mode: 802.11ax HE20

Plot on Channel 5955MHz

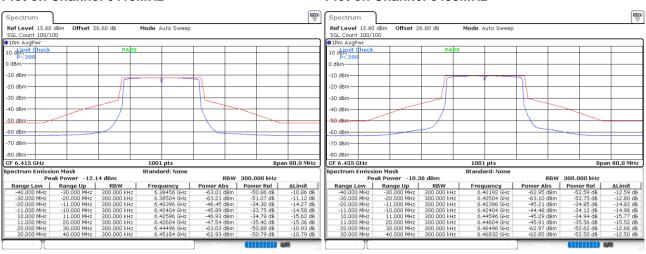
Plot on Channel 6175MHz

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Plot on Channel 6415MHz

Plot on Channel 6435MHz



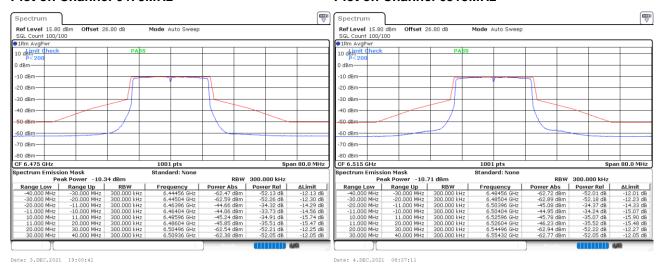
Date: 3.DEC.2021 18:01:24 Date: 3.DEC.2021 18:55:19

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Plot on Channel 6475MHz

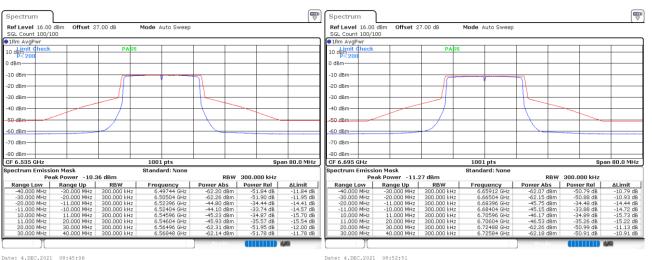
Plot on Channel 6515MHz

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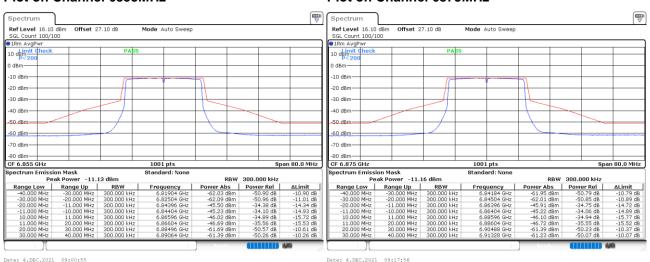
Plot on Channel 6535MHz

Plot on Channel 6695MHz



Plot on Channel 6855MHz

Plot on Channel 6875MHz

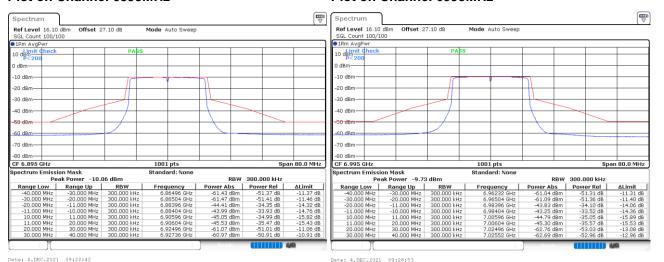


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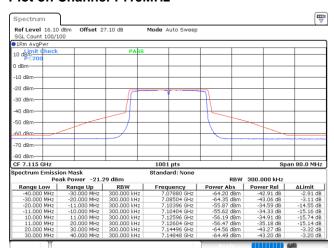
Plot on Channel 6895MHz

Plot on Channel 6995MHz

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Plot on Channel 7115MHz



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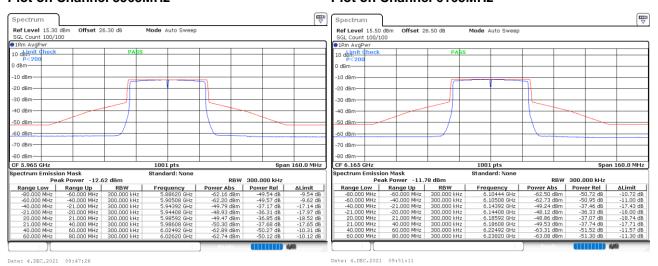
802.11ax HE40

Plot on Channel 5965MHz

EUT Mode:

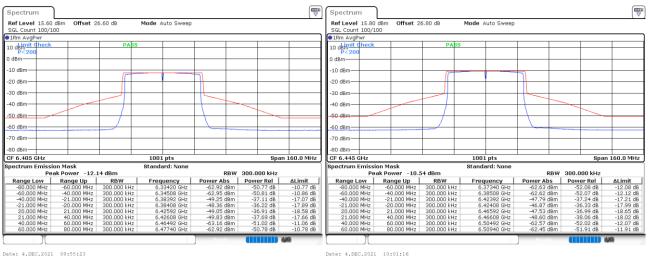
Plot on Channel 6165MHz

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Plot on Channel 6405MHz

Plot on Channel 6445MHz



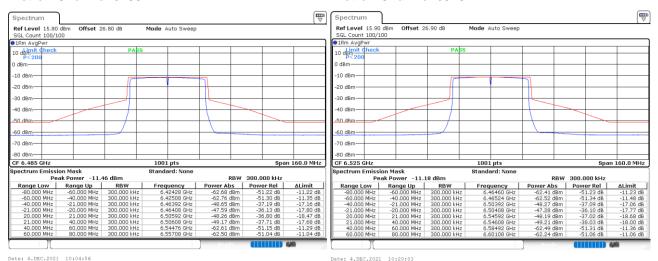
ate: 4.DEC.2021 09:55:23 Date: 4.DEC.2021 10:01:

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Plot on Channel 6485MHz

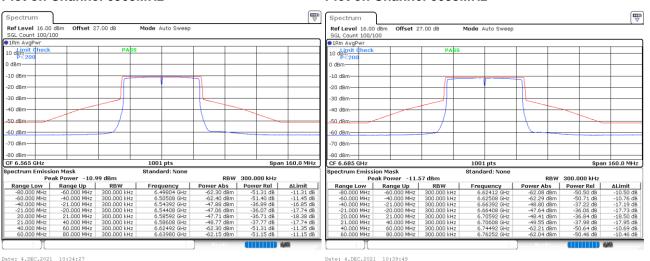
Plot on Channel 6525MHz

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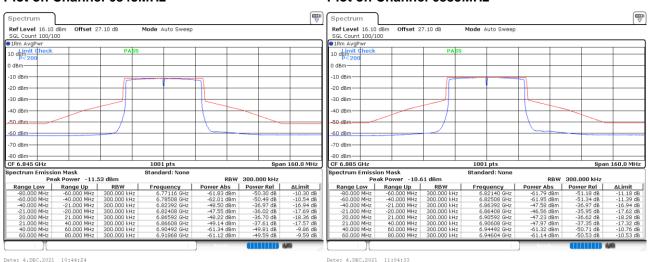
Plot on Channel 6565MHz

Plot on Channel 6685MHz



Plot on Channel 6845MHz

Plot on Channel 6885MHz

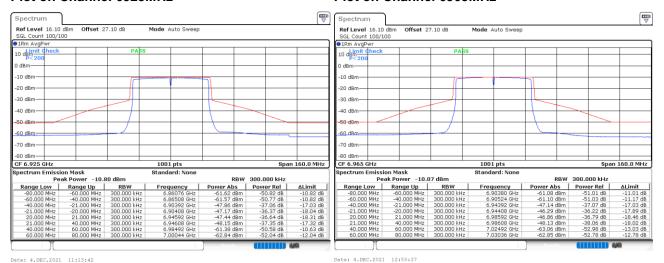


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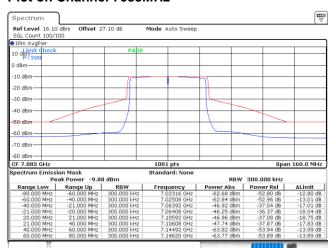
Plot on Channel 6925MHz

Plot on Channel 6965MHz

Report No.: FR1N0901I



Plot on Channel 7085MHz



Date: 4.DEC.2021 12:55:54

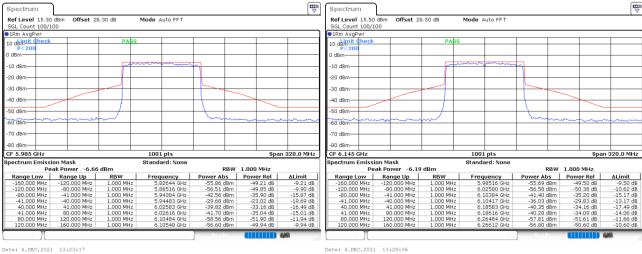
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EUT Mode: 802.11ax HE80

Plot on Channel 5985MHz

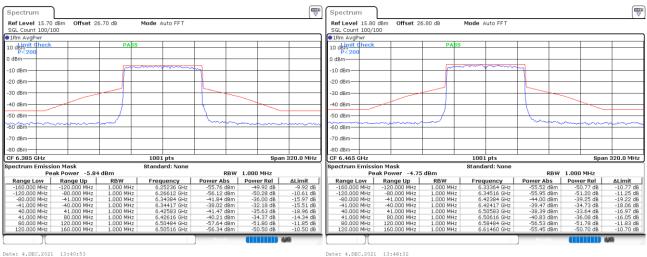
Plot on Channel 6145MHz

Report No.: FR1N0901I



Plot on Channel 6385MHz

Plot on Channel 6465MHz



ate: 4.DEC.2021 13:40:53 Date: 4.DEC.2021 13:46:

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