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MEASUREMENT REPORT

FCC Part 15.407 802.11a/ax/be WiFi 6GHz (OFDM)

Applicant Name:
Samsung Electronics Co., Ltd.
129, Samsung-ro,
Yeongtong-gu, Suwon-si
Gyeonggi-do, 16677, Korea

Date of Testing:
09/03/2024 – 11/06/2024
Test Report Issue Date:
11/15/2024
Test Site/Location:
Element Lab., Columbia, MD, USA
Element Lab., Morgan Hill, CA, USA
Test Report Serial No.:
1M2408260066-19.A3L

FCC ID:	**A3LSMS936B**
APPLICANT:	**Samsung Electronics Co., Ltd.**

Application Type:	Certification
Model:	SM-S936B/DS
Additional Model(s):	SM-S936B
EUT Type:	Portable Handset
Frequency Range:	5935 – 7115MHz
Modulation Type:	OFDM
FCC Classification:	15E 6GHz Low Power Dual Client (6CD)
FCC Rule Part(s):	Part 15 Subpart E (15.407)
Test Procedure(s):	ANSI C63.10-2013, KDB 987594 D02 v03 KDB 648474 D03 v01r04

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.10-2013. Test results reported herein relate only to the item(s) tested.

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

RJ Ortanez
Executive Vice President

ACCREDITED
CERT #2041.01

TABLE OF CONTENTS

1.0 INTRODUCTION 5
1.1 Scope 5
1.2 Element Test Location 5
1.3 Test Facility / Accreditations 5
2.0 PRODUCT INFORMATION 6
2.1 Equipment Description 6
2.2 Device Capabilities 6
2.3 Antenna Description 9
2.4 Test Configuration 9
2.5 Software and Firmware 10
2.6 EMI Suppression Device(s) / Modifications 10
3.0 DESCRIPTION OF TESTS 11
3.1 Evaluation Procedure 11
3.2 AC Line Conducted Emissions 11
3.3 Radiated Emissions 12
3.4 Environmental Conditions 12
4.0 ANTENNA REQUIREMENTS 13
5.0 MEASUREMENT UNCERTAINTY 14
6.0 TEST EQUIPMENT CALIBRATION DATA 15
7.0 TEST RESULTS 16
7.1 Summary 16
7.2 Data Reference Spot Check Results 18
7.3 26dB Bandwidth Measurement 24
7.3.1 MIMO Antenna-1 26 dB Bandwidth Measurements - (UNII Band 5) 28
7.3.2 MIMO Antenna-2 26 dB Bandwidth Measurements - (UNII Band 5) 38
7.4 UNII Output Power Measurement 48
7.5 Maximum Power Spectral Density 69
7.5.1 MIMO Antenna-1 Power Spectral Density Measurement - (UNII Band 5) 72
7.5.2 MIMO Antenna-2 Power Spectral Density Measurement - (UNII Band 5) 82
7.6 In-Band Emissions 92
7.6.1 MIMO Antenna-1 In-Band Emission Plot Measurement - (UNII Band 5) 97
7.6.2 MIMO Antenna-2 In-Band Emission Plot Measurement - (UNII Band 5) 107
7.7 Contention Based Protocol 117
7.7.1 AWGN Plots 121
7.7.2 CBP Timing Plots 122
7.7.3 Channel Move Plots 130
7.8 Radiated Emission Measurements 132
7.8.1 MIMO Radiated Spurious Emission Measurements 136
7.8.2 MIMO Radiated Band Edge Measurements (20MHz BW) 140
7.8.3 MIMO Radiated Band Edge Measurements (40MHz BW) 141

7.8.4 MIMO Radiated Band Edge Measurements (80MHz BW) 142
7.8.5 MIMO Radiated Band Edge Measurements (80MHz BW - Punctured) 143
7.8.6 MIMO Radiated Band Edge Measurements (160MHz BW) 144
7.8.7 MIMO Radiated Band Edge Measurements (160MHz BW - Punctured) 145
7.8.8 MIMO Radiated Band Edge Measurements (320MHz BW) 146
7.8.9 MIMO Radiated Band Edge Measurements (320MHz BW – Punctured)..... 147
7.9 Line Conducted Test Data..... 148
8.0 CONCLUSION..... 158

Channel Bandwidth [MHz]	UNII Band	Tx Frequency [MHz]	Ant1		Ant2		MIMO	
			Max. Power [mW]	Max. Power [dBm]	Max. Power [mW]	Max. Power [dBm]	Max. Power [mW]	Max. Power [dBm]
20	5	5955 - 6415	10.94	10.39	11.17	10.48	46.24	16.65
	6	6435 - 6515	2.72	4.35	3.23	5.09	12.13	10.84
	7	6535 - 6875	11.69	10.68	11.72	10.69	50.00	16.99
	8	6895 - 7115	2.24	3.50	3.16	5.00	12.27	10.89
40	5	5965 - 6405	9.25	9.66	14.96	11.75	47.53	16.77
	6	6445 - 6525	2.65	4.24	3.24	5.11	12.71	11.04
	7	6565 - 6845	11.30	10.53	10.12	10.05	41.69	16.20
	8	6885 - 7085	2.40	3.80	3.42	5.34	12.39	10.93
80	5	5985 - 6385	10.38	10.16	14.86	11.72	48.31	16.84
	6	6465	2.79	4.45	3.56	5.52	12.25	10.88
	7	6545 - 6865	10.62	10.26	10.12	10.05	40.83	16.11
	8	6945 - 7025	2.49	3.96	3.61	5.58	11.84	10.73
160	5	6025 - 6345	9.40	9.73	13.52	11.31	12.25	10.88
	6	6505	2.77	4.42	3.29	5.17	12.08	10.82
	7	6665 - 6825	10.52	10.22	9.14	9.61	11.67	10.67
	8	6985	2.77	4.42	3.61	5.58	11.44	10.58
320	5	6105 - 6265	9.27	9.67	12.76	11.06	11.95	10.77
	6	6425	2.74	4.37	3.23	5.09	12.22	10.87
	7	6585 - 6745	10.74	10.31	8.47	9.28	10.80	10.34
	8	6905	2.31	3.64	3.52	5.47	12.30	10.90

EUT Overview – EIRP

1.0 INTRODUCTION

1.1 Scope

Measurement and determination of electromagnetic emissions (EMC) of radio frequency devices including intentional and\\or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission and the Innovation, Science and Economic Development Canada.

1.2 Element Test Location

Measurements were conducted at the Element laboratory(ies) indicated in Section 1.3 below. All measurement facilities are compliant with the test site requirements specified in ANSI C63.4-2014 and KDB 414788 D01 v01r01.

1.3 Test Facility / Accreditations

Measurements were performed at Element lab located in Columbia, MD 21046, U.S.A. ("MD")

- Element Washington DC LLC is an ISO 17025-2017 accredited test facility under the American Association for Laboratory Accreditation (A2LA) with Certificate number 2041.01 for Specific Absorption Rate (SAR), Hearing Aid Compatibility (HAC) testing, where applicable, and Electromagnetic Compatibility (EMC) testing for FCC and Innovation, Science, and Economic Development Canada rules.

- Element Washington DC LLC TCB is a Telecommunication Certification Body (TCB) accredited to ISO/IEC 17065-2012 by A2LA (Certificate number 2041.03) in all scopes of FCC Rules and ISED Standards (RSS).

- Element Washington DC LLC facility is a registered (2451B) test laboratory with the site description on file with ISED.

- Element Washington DC LLC is a Recognized U.S. Certification Assessment Body (CAB # US0110) for ISED Canada as designated by NIST under the U.S. and Canada Mutual Recognition Agreements (MRAs).

Measurements were performed at Element located in Morgan Hill, CA 95037, U.S.A. ("CA")

- Element is an ISO 17025-2017 accredited test facility under the American Association for Laboratory Accreditation (A2LA) with Certificate number 2041.02 for Specific Absorption Rate (SAR), Hearing Aid Compatibility (HAC) testing, where applicable, and Electromagnetic Compatibility (EMC) testing for FCC and Innovation, Science, and Economic Development Canada rules.

- Element facility is a registered (22831) test laboratory with the site description on file with ISED.

2.0 PRODUCT INFORMATION

2.1 Equipment Description

The Equipment Under Test (EUT) is the **Samsung Electronics Co., Ltd. Portable Handset FCC: A3LSMS936B**. The test data contained in this report pertains only to the emissions due to the EUT's UNII transmitter while operating in the 6GHz band in dual client (LPI+SP) mode.

Test Device Serial No.: *0568M, 0304M, 0298M, 0073M, 0076M, 0111M, 0108M, 0131M, 0079M, 0066M, 0123M, 0165M, 0010M*

2.2 Device Capabilities

This device contains the following capabilities:

850/1900 GSM/GPRS/EDGE, 850/1700/1900 WCDMA/HSPA, Multi-band LTE, Multi-band 5G NR (FR1), 802.11b/g/n/ax/be WLAN, 802.11a/n/ac/ax/be UNII (5GHz and 6GHz), Bluetooth (1x, EDR, LE), NFC, UWB, Wireless Power Transfer

Band 5		Band 6		Band 7		Band 8	
Ch.	**Frequency (MHz)**	**Ch.**	**Frequency (MHz)**	**Ch.**	**Frequency (MHz)**	**Ch.**	**Frequency (MHz)**
2	5935	97	6435	117	6535	189	6895
:	:	:	:	:	:	:	:
45	6175	105	6475	149	6695	209	6995
:	:	:	:	:	:	:	:
93	6415	113	6515	185	6875	233	7115

Table 2-1. 802.11a/ax/be (20MHz) Frequency / Channel Operations

Band 5		Band 6		Band 7		Band 8	
Ch.	**Frequency (MHz)**	**Ch.**	**Frequency (MHz)**	**Ch.**	**Frequency (MHz)**	**Ch.**	**Frequency (MHz)**
3	5965	99	6445	123	6565	187	6885
:	:	:	:	:	:	:	:
43	6165	107	6485	155	6725	211	7005
:	:	:	:	:	:	:	:
91	6405	115	6525	179	6845	227	7085

Table 2-2. 802.11ax/be (40MHz BW) Frequency / Channel Operations

Band 5		Band 6		Band 7		Band 8	
Ch.	**Frequency (MHz)**	**Ch.**	**Frequency (MHz)**	**Ch.**	**Frequency (MHz)**	**Ch.**	**Frequency (MHz)**
7	5985	103	6465	119	6545	199	6945
:	:			:	:	:	:
39	6145			151	6705	215	7025
:	:			:	:		
87	6385			183	6865		

Table 2-3. 802.11ax/be (80MHz BW) Frequency / Channel Operations

Band 5		Band 6		Band 7		Band 8	
Ch.	Frequency (MHz)	Ch.	Frequency (MHz)	Ch.	Frequency (MHz)	Ch.	Frequency (MHz)
15	6025	111	6505	143	6665	207	6985
47	6185			175	6825		
79	6345						

Table 2-4. 802.11ax/be (160MHz BW) Frequency / Channel Operations

Band 5		Band 6		Band 7		Band 8	
Ch.	Frequency (MHz)	Ch.	Frequency (MHz)	Ch.	Frequency (MHz)	Ch.	Frequency (MHz)
31	6105	95	6425	127	6585	191	6905
63	6265			159	6745		

Table 2-5. 802.11be (320MHz BW) Frequency / Channel Operations

Notes:

1. 6GHz NII operation is possible in 20MHz, 40MHz, 80MHz, 160MHz, and 320MHz channel bandwidths. The maximum achievable duty cycles for all modes were determined based on measurements performed on a spectrum analyzer in zero-span mode with RBW = 8MHz, VBW = 50MHz, and detector = peak per the guidance of Section B)2)b) of ANSI C63.10-2013. The RBW and VBW were both greater than 50/T, where T is the minimum transmission duration, and the number of sweep points across T was greater than 100. The duty cycles are as follows:

802.11 Mode/Band		ANT1		ANT2		MIMO (1+2)	
		Duty Cycle [%]	DCCF [dB]	Duty Cycle [%]	DCCF [dB]	Duty Cycle [%]	DCCF [dB]
6GHz	a	93.67	0.28	93.67	0.28	93.67	0.28
	ax (HE20)	99.65	N/A	99.65	N/A	99.63	N/A
	be (EHT20)	99.65	N/A	99.65	N/A	99.63	N/A
	ax (HE40)	99.69	N/A	99.69	N/A	99.65	N/A
	be (EHT40)	99.67	N/A	99.69	N/A	99.67	N/A
	ax (HE80)	99.27	N/A	99.56	N/A	99.27	N/A
	be (EHT80)	99.27	N/A	99.56	N/A	99.27	N/A
	ax (HE160)	99.67	N/A	99.65	N/A	99.67	N/A
	be (EHT160)	99.65	N/A	99.67	N/A	99.65	N/A
	be (EHT320)	99.67	N/A	99.65	N/A	99.65	N/A

Table 2-6. Measured Duty Cycles

2. The device employs MIMO technology. Below are the possible configurations.

WiFi Configurations		SISO		CDD		SDM	
		ANT1	ANT2	ANT1	ANT2	ANT1	ANT2
6GHz	11a	✓	✓	✓	✓	×	×
	11ax	✓	✓	✓	✓	✓	✓
	11be	✓	✓	✓	✓	✓	✓

Table 2-7. Antenna / Technology Configurations

✓= Support; ×= NOT Support
SISO = Single Input Single Output
SDM = Spatial Diversity Multiplexing – MIMO function
CDD = Cyclic Delay Diversity – 2Tx Function

3. The device supports the following data rates (shown in Mbps):

802.11a	MCS Index		Spatial Stream	OFDM (802.11ax/be)													
20MHz				20MHz			40MHz			80MHz			160MHz			320MHz		
	HT	EHT		0.8µs GI	1.6µs GI	3.2µs GI	0.8µs GI	1.6µs GI	3.2µs GI	0.8µs GI	1.6µs GI	3.2µs GI	0.8µs GI	1.6µs GI	3.2µs GI	0.8µs GI	1.6µs GI	3.2µs GI
6	0	0	1	8.6	8.1	7.3	17.2	16.3	14.6	36	34	30.6	72.1	68.1	61.3	144.1	136.1	122.5
9	1	1	1	17.2	16.3	14.6	34.4	32.5	29.3	72.1	68.1	61.3	144.1	136.1	122.5	288.2	272.2	245
12	2	2	1	25.8	24.4	21.9	51.6	48.8	43.9	108.1	102.1	91.9	216.2	204.2	183.8	432.4	408.3	367.5
18	3	3	1	34.4	32.5	29.3	68.8	65	58.5	144.1	136.1	122.5	288.2	272.2	245	576.5	544.4	490
24	4	4	1	51.6	48.8	43.9	103.2	97.5	87.8	216.2	204.2	183.8	432.4	408.3	367.5	864.7	816.7	735
36	5	5	1	68.8	65	58.5	137.6	130	117	288.2	272.2	245	576.5	544.4	490	1152.9	1088.9	980
48	7	6	1	77.4	73.1	65.8	154.9	146.3	131.6	324.3	306.3	275.6	648.5	612.5	551.3	1297.1	1225	1102.5
54		7	1	86	81.3	73.1	172.1	162.5	146.3	360.3	340.3	306.3	720.6	680.6	612.5	1441.2	1361.1	1225
		8	1	103.2	97.5	87.8	206.5	195	175.5	432.4	408.3	367.5	864.7	816.7	735	1729.4	1633.3	1470
		9	1	114.7	108.3	97.5	229.4	216.7	195	480.4	453.7	408.3	960.8	907.4	816.7	1921.6	1814.8	1633.3
		10	1	129	121.9	109.7	258.1	243.8	219.4	540.4	510.4	459.4	1080.9	1020.8	918.8	2161.8	2041.7	1837.5
		11	1	143.4	135.4	121.9	286.8	270.8	243.8	600.5	567.1	510.4	1201	1134.3	1020.8	2402	2268.5	2041.7
		12	1	154.9	146.3	131.6	309.7	292.5	263.3	648.5	612.5	551.3	1297.1	1225	1102.5	2594.1	2450	2205
		13	1	172.1	162.5	146.3	344.1	325	292.5	720.6	680.6	612.5	1441.2	1361.1	1225	2882.4	2722.2	2450
6	8	0	2	17.2	16.3	14.6	34.4	32.5	29.3	72.1	68.1	61.3	144.1	136.1	122.5	288.2	272.2	245
9	9	1	2	34.4	32.5	29.3	68.8	65	58.5	144.1	136.1	122.5	288.2	272.2	245	576.5	544.4	490
12	10	2	2	51.6	48.8	43.9	103.2	97.5	87.8	216.2	204.2	183.8	432.4	408.3	367.5	864.7	816.7	735
18	11	3	2	68.8	65	58.5	137.6	130	117	288.2	272.2	245	576.5	544.4	490	1152.9	1088.9	980
24	12	4	2	103.2	97.5	87.8	206.5	195	175.5	432.4	408.3	367.5	864.7	816.7	735	1729.4	1633.3	1470
36	13	5	2	137.6	130	117	275.3	260	234	576.5	544.4	490	1152.9	1088.9	980	2305.9	2177.8	1960
48	14	6	2	154.9	146.3	131.6	309.7	292.5	263.3	648.5	612.5	551.3	1297.1	1225	1102.5	2594.1	2450	2205
54	15	7	2	172.1	162.5	146.3	344.1	325	292.5	720.6	680.6	612.5	1441.2	1361.1	1225	2882.4	2722.2	2450
		8	2	206.5	195	175.5	412.9	390	351	864.7	816.7	735	1729.4	1633.3	1470	3458.8	3266.7	2940
		9	2	229.4	216.7	195	458.8	433.3	390	960.8	907.4	816.7	1921.6	1814.8	1633.3	3843.1	3629.6	3266.7
		10	2	258.1	243.8	219.4	516.2	487.5	438.8	1080.9	1020.8	918.8	2161.8	2041.7	1837.5	4323.5	4083.3	3675
		11	2	286.8	270.8	243.8	573.5	541.7	487.5	1201	1134.3	1020.8	2402	2268.5	2041.7	4803.9	4537	4083.3
		12	2	309.7	292.5	263.3	619.4	585	526.5	1297.1	1225	1102.5	2594.1	2450	2205	5188.2	4900	4410
		13	2	344.1	325	292.5	688.2	650	585	1441.2	1361.1	1225	2882.4	2722.2	2450	5764.7	5444.4	4900

Table 2-8. Supported Data Rates

4. The device supports either Standard Power (SP) or Low Power Indoor (LPI) operation in the following UNII bands:

UNII Band	Standard Power (SP)	Low Power Indoor (LPI)	Very Low Power (VLP)
UNII 5	✓	✓	✓
UNII 6	×	✓	×
UNII 7	✓	✓	✓
UNII 8	×	✓	×

Table 2-9. Power Operation

✓= Support; × = NOT Support

2.3 Antenna Description

The following antenna gains are used in this device per the "Unlicensed Band Antenna Gain" document provided by the client. This document is also included in the filing as a public exhibit.

Frequency	Ant1 Peak Gain [dBi]	Ant2 Peak Gain [dBi]	Directional Gain [dBi]
5925 MHz	-5.82	-6.38	-3.09
6025 MHz	-7.62	-6.84	-4.21
6125 MHz	-6.28	-6.57	-3.41
6225 MHz	-6.83	-7.48	-4.14
6325 MHz	-6.40	-5.24	-2.79
6425 MHz	-6.13	-5.46	-2.78
6525 MHz	-6.12	-6.94	-3.51
6625MHz	-7.36	-8.47	-4.89
6725MHz	-8.71	-8.93	-5.81
6825MHz	-7.02	-8.60	-4.76
6925MHz	-7.49	-6.34	-3.89
7025MHz	-6.78	-5.41	-3.06
7125MHz	-7.03	-7.07	-4.04

Table 2-10 Antenna Peak Gain per Frequency

	Ant1 Peak Gain [dBi]	Ant2 Peak Gain [dBi]	Directional Gain [dBi]
5925 – 6425 MHz	-6.40	-5.24	-2.79
6425 – 6525 MHz	-6.13	-5.46	-2.78
6525 – 6875 MHz	-6.12	-6.94	-3.51
6875 – 7125 MHz	-6.78	-5.41	-3.06

Table 2-11. Antenna Peak Gain

2.4 Test Configuration

The EUT was tested per the guidance of ANSI C63.10-2013 and KDB 987594 D02 v01r01. ANSI C63.10-2013 was used to reference the appropriate EUT setup for radiated spurious emissions testing and AC line conducted testing. See Sections 3.2 for AC line conducted emissions test setups, 3.3 for radiated emissions test setups, and 7.2, 7.3, 7.4, 7.5 and 7.6 for antenna port conducted emissions test setups.

This device supports operation under control of either a low-power indoor access point or standard power access point or very low power access point

This device operates in the 5.925-7.125 GHz band when under control of an indoor access point. Additionally, the device may operate in the 5.925-6.425 GHz and 6.525-6.875 GHz bands when under control of a standard power access point or very lower power access point.

This device supports wireless charging capability and, thus, is subject to the test requirements of KDB 648474 D03 v01r04. Additional radiated spurious emission measurements were performed with the EUT lying flat on an authorized wireless charging pad (WCP) Model: NQ-WC-06 while operating under normal conditions in a simulated call or data transmission configuration. The worst case radiated emissions data is shown in this report.

2.5 Software and Firmware

The test was conducted with firmware version S936BXXU0AXHJ installed on the EUT.

2.6 EMI Suppression Device(s) / Modifications

No EMI suppression device(s) were added and/or no modifications were made during testing.

3.0 DESCRIPTION OF TESTS

3.1 Evaluation Procedure

The measurement procedures described in the American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices (ANSI C63.10-2013) and the guidance provided in KDB 987594 D02 v01r01 were used in the measurement of the EUT.

Deviation from measurement procedure……..…….....None

3.2 AC Line Conducted Emissions

The line-conducted facility is located inside a 10'x16'x9' shielded enclosure. The shielded enclosure is manufactured by ETS Lindgren RF Enclosures. The shielding effectiveness of the shielded room is in accordance with MIL-Std-285 or NSA 65-5. A 1m x 1.5m wooden table 80cm high is placed 40cm away from the vertical wall and 80cm away from the sidewall of the shielded room. Two 10kHz-30MHz, 50Ω/50μH Line-Impedance Stabilization Networks (LISNs) are bonded to the shielded room floor. Power to the LISNs is filtered by external high-current high-insertion loss power line filters. The external power line filter is an ETS Lindgren Model LPRX-4X30 (100dB Attenuation, 14kHz-18GHz) and the two EMI/RFI filters are ETS Lindgren Model LRW-2030-S1 (100dB Minimum Insertion Loss, 14kHz – 10GHz). These filters attenuate ambient signal noise from entering the measurement lines. These filters are also bonded to the shielded enclosure.

The EUT is powered from one LISN and the support equipment is powered from the second LISN. If the EUT is a DC-powered device, power will be derived from the source power supply it normally will be powered from and this supply line(s) will be connected to the second LISN. All interconnecting cables more than 1 meter were shortened to a 1 meter length by non-inductive bundling (serpentine fashion) and draped over the back edge of the test table. All cables were at least 40cm above the horizontal reference groundplane. Power cables for support equipment were routed down to the second LISN while ensuring that that cables were not draped over the second LISN.

Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The RF output of the LISN was connected to the spectrum analyzer and exploratory measurements were made to determine the frequencies producing the maximum emission from the EUT. The spectrum was scanned from 150kHz to 30MHz with a spectrum analyzer. The detector function was set to peak mode for exploratory measurements while the bandwidth of the analyzer was set to 10kHz. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Once the worst case emissions have been identified, the one EUT cable configuration/arrangement and mode of operation that produced these emissions is used for final measurements on the same test site. The analyzer is set to CISPR quasi-peak and average detectors with a 9kHz resolution bandwidth for final measurements.

Line conducted emissions test results are shown in Section 7.9. The EMI Receiver mode of the Agilent MXE was used to perform AC line conducted emissions testing.

3.3 Radiated Emissions

The radiated test facilities consisted of an indoor 3-meter semi-anechoic chamber used for final measurements and exploratory measurements, when necessary. The measurement area is contained within the semi-anechoic chamber which is shielded from any ambient interference. The test site inside the chamber is a 6m x 5.2m elliptical, obstruction-free area in accordance with Figure 5.7 of Clause 5 in ANSI C63.4-2014. Absorbers are arranged on the floor between the turn table and the antenna mast in such a way so as to maximize the reduction of reflections for measurements above 1GHz. An 80cm tall test table made of Styrodur is placed on top of the turn table. For measurements above 1GHz, an additional Styrodur pedestal is placed on top of the test table to bring the total table height to 1.5m.

For all measurements, the spectrum was scanned through all EUT azimuths and from 1 to 4 meter receive antenna height using a broadband antenna from 30MHz up to the upper frequency shown in 15.33 depending on the highest frequency generated or used in the device or on which the device operates or tunes. For frequencies above 1GHz, linearly polarized double ridge horn antennas were used. For frequencies below 30MHz, a calibrated loop antenna was used. When exploratory measurements were necessary, they were performed at 1 meter test distance inside the semi-anechoic chamber using broadband antennas, broadband amplifiers, and spectrum analyzers to determine the frequencies and modes producing the maximum emissions. Sufficient time for the EUT, support equipment, and test equipment was allowed for them to warm up to their normal operating condition. The test set-up was placed on top of the 1 x 1.5 meter table. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Appropriate precautions were taken to ensure that all emissions from the EUT were maximized and investigated. The system configuration, mode of operation, turntable azimuth, and receive antenna height were noted for each frequency found.

Final measurements were made in the semi-anechoic chamber using calibrated, linearly polarized broadband and horn antennas. The test setup was configured to the setup that produced the worst-case emissions. The spectrum analyzer was set to investigate all frequencies required for testing to compare the highest radiated disturbances with respect to the specified limits. The turntable containing the EUT was rotated through 360 degrees and the height of the receive antenna was varied 1 to 4 meters and stopped at the azimuth and height producing the maximum emission. Each emission was maximized by changing the orientation of the EUT through three orthogonal planes and changing the polarity of the receive antenna, whichever produced the worst-case emissions.

All radiated measurements are performed in a chamber that meets the site requirements per ANSI C63.4-2014. Additionally, radiated emissions below 30MHz are also validated on an Open Area Test Site to assert correlation with the chamber measurements per the requirements of KDB 414788 D01 v01r01.

3.4 Environmental Conditions

The temperature is controlled within range of 15°C to 35°C. The relative humidity is controlled within range of 10% to 75%. The atmospheric pressure is monitored within the range 86-106kPa (860-1060mbar).

4.0 ANTENNA REQUIREMENTS

Excerpt from §15.203 of the FCC Rules/Regulations:
"An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section."

- The antennas of the EUT are **permanently attached.**
- There are no provisions for connection to an external antenna.

Conclusion:

The EUT complies with the requirement of §15.203.

5.0 MEASUREMENT UNCERTAINTY

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.10-2013. All measurement uncertainty values are shown with a coverage factor of k = 2 to indicate a 95% level of confidence. The measurement uncertainty shown below meets or exceeds the U_{CISPR} measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance.

Contribution	Expanded Uncertainty (±dB)
Contention Based Protocol Conducted Measurements	0.86
Conducted Bench Top Measurements	1.13
Line Conducted Disturbance	3.09
Radiated Disturbance (<1GHz)	4.98
Radiated Disturbance (>1GHz)	5.07
Radiated Disturbance (>18GHz)	5.09

Table 5-1. Measurement Uncertainty Budget – MD

Contribution	Expanded Uncertainty (±dB)
Conducted Bench Top Measurements	1.65
Line Conducted Disturbance	2.71
Radiated Disturbance (<30MHz)	4.06
Radiated Disturbance (30MHz - 1GHz)	4.30
Radiated Disturbance (1 - 18GHz)	4.78
Radiated Disturbance (>18GHz)	4.79

Table 5-2. Measurement Uncertainty Budget – CA

6.0 TEST EQUIPMENT CALIBRATION DATA

Test Equipment Calibration is traceable to the National Institute of Standards and Technology (NIST). Measurements antennas used during testing were calibrated in accordance to the requirements of ANSI C63.5-2017.

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
-	WL25-1	Conducted Cable Set (25GHz)	4/2/2024	Annual	4/2/2025	WL25-1
-	WL25-2	Conducted Cable Set (25GHz)	4/2/2024	Annual	4/2/2025	WL25-2
-	WL40-1	Conducted Cable Set (40GHz)	4/2/2024	Annual	4/2/2025	WL40-1
-	AP1-002	EMC Cable and Switch System	4/2/2024	Annual	4/2/2025	AP1-002
-	ETS-001	EMC Cable and Switch System	4/2/2024	Annual	4/2/2025	ETS-001
-	ETS-002	EMC Cable and Switch System	4/2/2024	Annual	4/2/2025	ETS-002
-	MD 1M 18-40	EMC Cable and Switch System	4/2/2024	Annual	4/2/2025	MD 1M 18-40
Anritsu	MA24408A	Microwave Peak Power Sensor	5/21/2024	Annual	5/21/2025	11675
Anritsu	MA24408A	Microwave Peak Power Sensor	4/10/2024	Annual	4/10/2025	12798
ETS-Lindgren	3116C	Horn Antenna (18-40GHz)	2/27/2023	Biennial	2/27/2025	218893
Rohde & Schwarz	TC-TA18	Vivaldi Antenna	2/23/2023	Biennial	2/23/2025	26040036
Rohde & Schwarz	FSW26	Signal and Spectrum Analyzer (26.5GHz)	3/8/2024	Annual	3/8/2025	103187
Rohde & Schwarz	ESU26	EMI Test Receiver (26.5GHz)	9/25/2023	Annual	9/25/2024	100342
Rohde & Schwarz	ESU40	EMI Test Receiver (40GHz)	9/11/2023	Annual	9/11/2024	100348
Rohde & Schwarz	ESW44	EMI Test Receiver (44GHz)	4/5/2024	Annual	4/5/2025	101716
Pasternak	NMLC-2	EMI Test Receiver (2Hz to 44GHz)	4/2/2024	Annual	4/2/2025	NMLC-2
Rohde & Schwarz	ENV216	Two-Line V-Network	1/31/2023	Biennial	1/31/2025	101379
Keysight Technologies	N9030A	PXA Signal Analyzer (44GHz)	4/9/2024	Annual	4/9/2025	MY52350166
Keysight Technologies	N9020A	MXA Signal Analyzer	4/11/2024	Annual	4/11/2025	MY54500644
Keysight Technologies	N9030A	PXA Signal Analyzer	2/29/2024	Annual	3/1/2025	MY55410501
Keysight Technologies	N9030B	PXA Signal Analyzer, Multi-touch	9/19/2024	Annual	9/19/2025	MY57141001
Sunol	JB6	JB6 Antenna	3/2/2023	Biennial	3/2/2025	A082816
Sunol	JB5	Bi-Log Antenna (20M-5GHz)	9/11/2024	Biennial	9/11/2026	A051107
Rohde & Schwarz	SMW200A	Vector Signal Generator	4/4/2024	Annual	4/4/2025	109456

Table 6-1. Test Equipment Calibration Table – MD

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
ETS-Lindgren	3117	Double Ridged Guide Antenna (1-18 GHz)	4/9/2024	Annual	4/9/2025	00218555
Rohde & Schwarz	TS-PR18	Pre-Amplifier (1GHz - 18GHz)	5/29/2024	Annual	11/29/2024	102132
Rohde & Schwarz	TS-PR18	Pre-Amplifier (1GHz - 18GHz)	8/14/2024	Annual	8/15/2025	101648
Rohde & Schwarz	FSV40	Signal Analyzer (10Hz-40GHz)	5/29/2024	Annual	5/29/2025	101619
Rohde & Schwarz	ESW44	EMI Test Receiver	5/1/2024	Annual	5/1/2025	101867
Rohde & Schwarz	FSW67	Signal and Spectrum Analyzer (2Hz-67GHz)	7/5/2024	Annual	7/5/2025	101366
Rohde & Schwarz	TS-PR8	Pre-Amplifier (30MHz - 8GHz)	7/3/2024	Annual	7/3/2025	102356
Schwarzbeck	VULB 9162	Bilog Antenna (30MHz - 6GHz)	4/29/2024	Annual	4/29/2025	00304

Table 6-2. Test Equipment Calibration Table – CA

Note:

For equipment listed above that has a calibration date or calibration due date that falls within the test date range, care was taken to ensure that this equipment was used after the calibration date and before the calibration due date.

7.0 TEST RESULTS

7.1 Summary

Company Name: Samsung Electronics Co., Ltd.
FCC ID: A3LSMS936B
FCC Classification: 15E 6GHz Low Power Dual Client (6CD)

FCC Part Section(s)	Test Description	Test Limit	Test Condition	Test Result	Reference	Test Lab Location
2.1046, 15.407(a)(11)	Maximum Conducted Output Power	N/A	CONDUCTED	PASS	Section 7.4	MD
15.407(a)(8), 15.407(a)(7)	Maximum Radiated Output Power	< 24dBm over the frequency band of operation <30dBm over the frequency band of operation when connecting to a standard power access point		PASS	Section 7.4	MD
2.1049, 15.407(a)(11)	Occupied Bandwidth/ 26dB Bandwidth	99% of the occupied bandwidth of any channel must be contained within each of its respective U-NII sub bands. The maximum transmitter channel bandwidth for U-NII devices in the 5.925-7.125 GHz band is 320 megahertz.		PASS	Section 7.2	MD
15.407(a)(8), 15.407(a)(7)	Maximum Power Spectral Density	< -1dBm/MHz e.i.r.p. <17dBm/MHz when operating with a standard power access point		PASS	Section 7.5	MD
15.407(b)(7)	In-Band Emissions	EUT must meet the limits detailed in 15.407(b)(7)		PASS	Section 7.6	MD
15.407(d)(6)	Contention Based Protocol	EUT must detect AWGN signal with 90% (or better) certainty	RADIATED	PASS	Section 7.7	MD
15.407(b)(6)	Undesirable Emissions	< -27dBm/MHz e.i.r.p. outside of the 5.925 – 7.125GHz band		PASS	Section 7.8	CA
15.205, 15.209	General Field Strength Limits (Restricted Bands and Radiated Emission Limits)	Emissions in restricted bands must meet the radiated limits detailed in 15.209		PASS	Section 7.8	CA
15.407(b)(9)	AC Conducted Emissions (150kHz – 30MHz)	< FCC 15.207 limits	LINE CONDUCTED	PASS	Section 7.9	MD

Table 7-1. Summary of Test Results

Notes:

1) All channels, modes, and modulations/data rates were investigated among all UNII bands. The test results shown in the following sections represent the worst-case emissions.
2) The analyzer plots shown in this section were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.
3) All antenna port conducted emissions testing was performed on a test bench with the antenna port of the EUT connected to the spectrum analyzer through calibrated cables and attenuators.
4) Per 15.407(a)(7), a device operating under the control of a standard power access point in 5.925-6.425 GHz and 6.525-6.875 GHz bands must not have the maximum power spectral density exceed 17 dBm/MHz e.i.r.p., must limit the maximum e.i.r.p. over the frequency band of operation does not exceed 30 dBm, and must limit its power to no more than 6 dB below its associated standard power access point's authorized transmit power.
5) For conducted spurious emissions, automated test software was used to measure emissions and capture the corresponding plots necessary to show compliance. The measurement software utilized is Element "EMC Software Tool" Version 2.3.0.
6) For radiated band edge, automated test software was used to measure emissions and capture the corresponding plots necessary to show compliance. The measurement software utilized is Element "Chamber Automation," Version 1.6.1.

7.2 Data Reference Spot Check Results

Overview

The spot-check data presented in this section was measured on the variant model following the guidance of the FCC's Data Referencing guidance in KDB 484596. Each spot-check test on the EUT was performed using the same procedure and setting that were used to perform the test on the corresponding reference device. For the worst-case RSE data, the measurement is determined by an actual emission and not by noise floor.

All test cases were performed to verify the variant EUT is still in compliance with the spot-checked results to the reference device and was performed using the guidance of ANSI C63.10-2013.

Results

FCC Rules	Test Item	Test Case	Wifi Mode	Units	Limit	Reference Model: SM-S936U	Variant Model: SM-S936B	Deviation (dB)	Max Deviation (dB)	Pass/Fail
2.1046, 15.407(a)(8)	Conducted Output Power	Mid Channel Each UNII Band - 802.11a 20MHz - LPi	Lpi	dBm	N/A	10.70	10.60	-0.10	1	PASS
15.407(d)(6)	Contention Based Protocol	Ch.31 - 320 MHz	LPi	dBm	-62	-64.78	-63.72	1.06	2	PASS
15.209	Radiated Spurious Emissions	802.11a MIMO Ch.2 - Average - 11870 MHz	SP	dBµV/m	53.98	43.17	42.43	-0.74	3	PASS
15.209	Radiated Band Edge Emissions	802.11a MIMO Ch.2 - Average	SP	dBµV/m	68.2	66.18	64.28	-1.90	3	PASS

Table 7-2. Summary of Spot-checks

Conducted Output Power Spot-Check – SM-S936B/DS

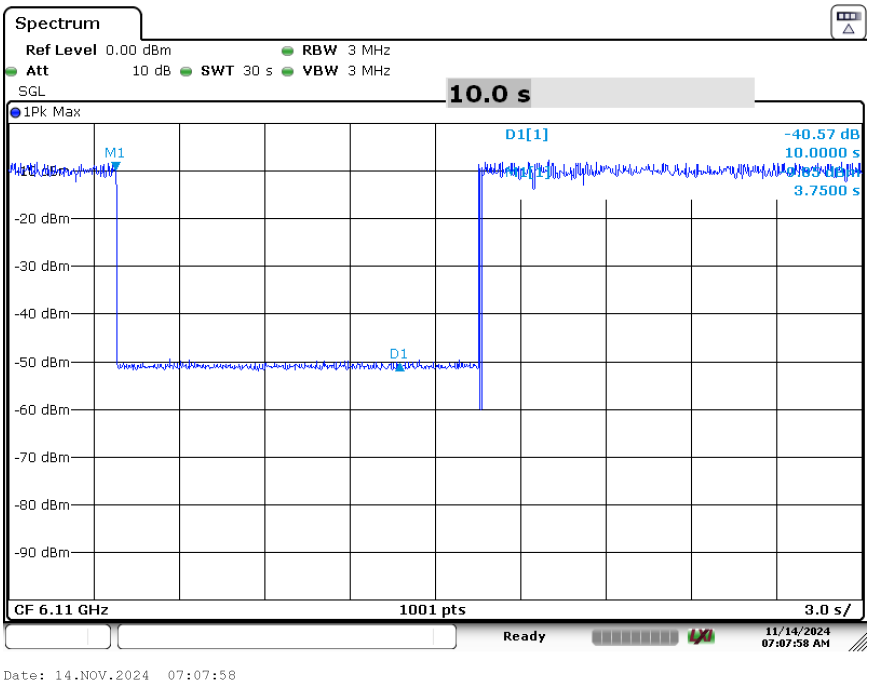
6GHz WIFI (20MHz 802.11a MIMO)						Directional Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq [MHz]	Channel	Avg. Conducted Powers [dBm]						
			ANT1	ANT2	MIMO				
UNII-5	6175	45	7.11	7.26	10.20	-2.79	7.41	24.00	-16.59
UNII-6	6475	105	7.07	7.87	10.50	-2.78	7.72	24.00	-16.28
UNII-7	6675	145	7.48	7.69	10.60	-2.78	7.82	24.00	-16.18
UNII-8	6995	209	7.52	7.42	10.48	-3.06	7.42	24.00	-16.58

Table 7-3. Conducted Output Power Measurements (Spot-check SM-S936B/DS)

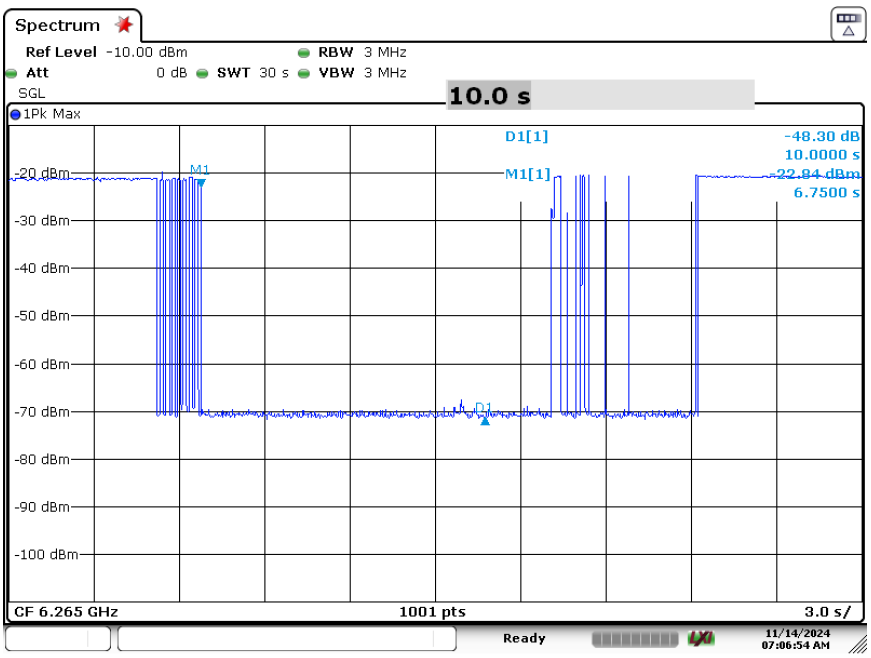
Contention Based Protocol Detection Spot-check – SM-S936B/DS

Band	Channel	Channel Freq [MHz]	Channel BW [MHz]	Incumbent Freq [MHz]	Injected (AWGN) [dBm]	Antenna Gain [dBi]	Path Loss (dB)	Adjusted Power Level [dBm]	Detection Limit [dBm]	Margin [dB]
UNII Band 5	31	6265	320	6110	-75.69	-6.57	0.85	-68.27	-62.0	-6.27
				6265	-72.05	-7.48	0.85	-63.72	-62.0	-1.72
				6420	-74.08	-6.13	0.85	-67.10	-62.0	-5.10

Table 7-4. Contention Based Protocol – Incumbent Detection (Spot-Check SM-S936B/DS)

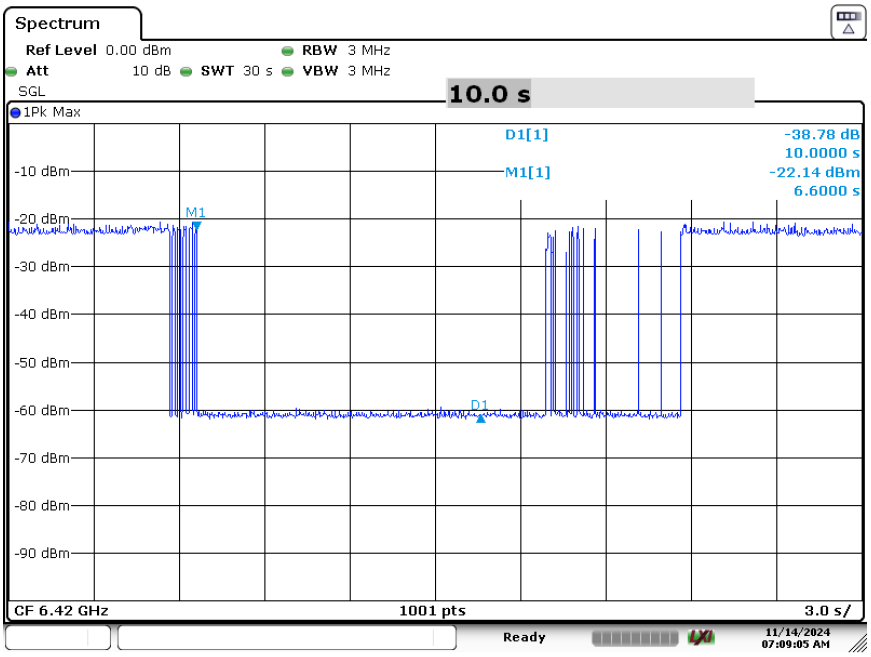


Plot 7-1. Contention Based Protocol Timing Plot (320MHz (UNII Band 5) – Ch. 31 Low)



Date: 14.NOV.2024 07:06:54

Plot 7-2. Contention Based Protocol Timing Plot (320MHz (UNII Band 5) – Ch. 31 Mid)

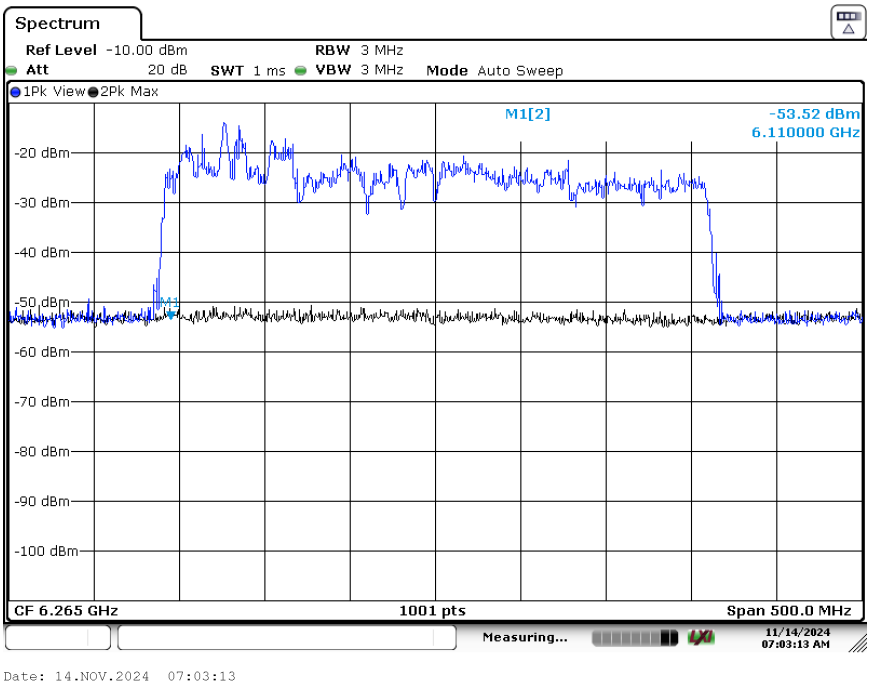


Date: 14.NOV.2024 07:09:05

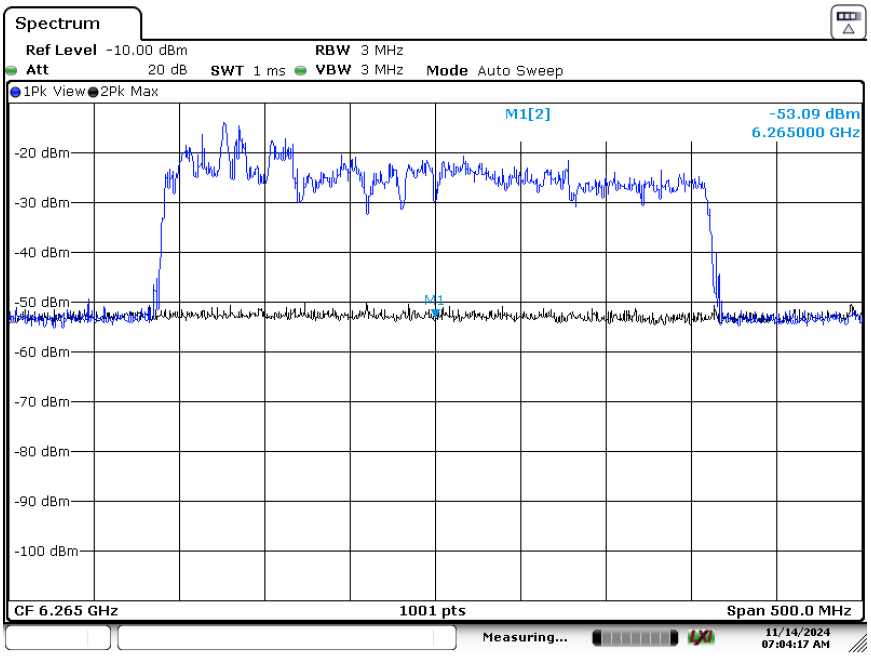
Plot 7-3. Contention Based Protocol Timing Plot (320MHz (UNII Band 5) – Ch. 31 High)

Contention Based Protocol Incumbent Avoidance Spot-Check – SM-S936B/DS

- When a 10 MHz AWGN signal centered at 6110 MHz (lower edge of channel) is injected, the channel completely stops transmitting.
- When a 10 MHz AWGN signal centered at 6265 MHz (middle of channel) is injected, the channel completely stops transmitting.
- When a 10 MHz AWGN signal centered at 6420 MHz (upper edge of channel) is injected, the channel completely stops transmitting.

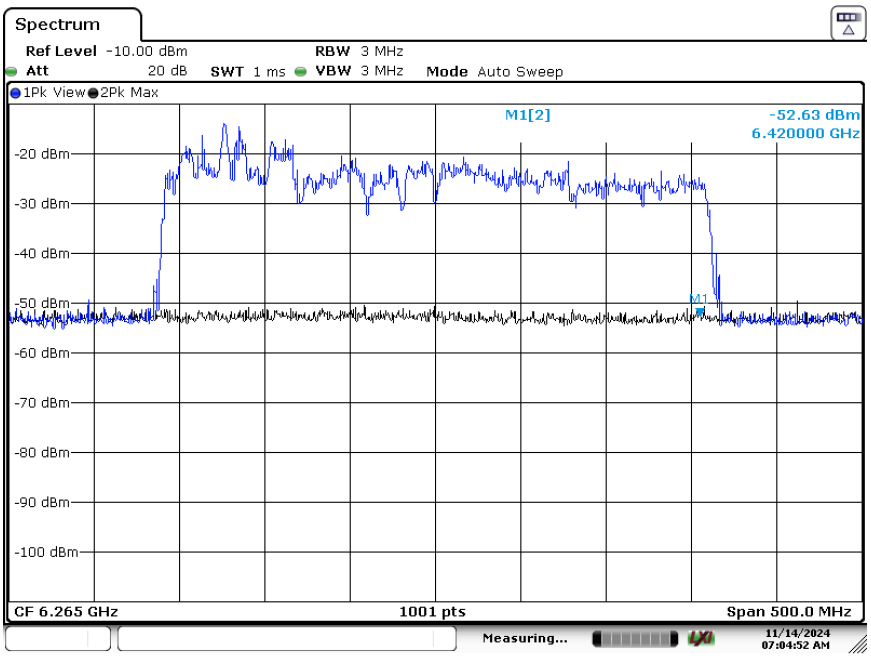


Plot 7-4. CBP 320MHz Channel - Injection Lower Edge – [6110 MHz]



Date: 14.NOV.2024 07:04:17

Plot 7-5. CBP 320MHz Channel - Injection Center – [6265 MHz]



Date: 14.NOV.2024 07:04:52

Plot 7-6. CBP 320MHz Channel - Injection Upper Edge – [6420 MHz]

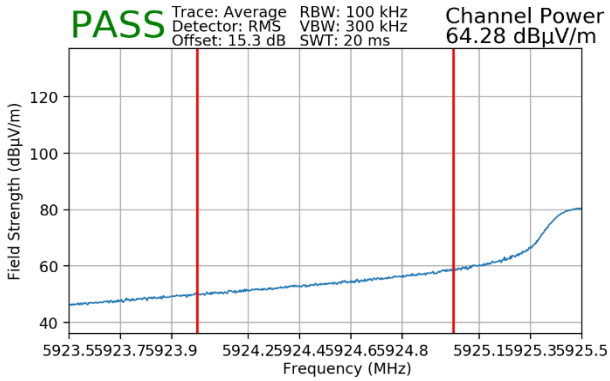
Radiated Spurious Emission Spot-Check – SM-S936B/DS

Mode	Antenna	UNII Band	Channel	Test Channel Freq. [MHz]	Restricted	Frequency [MHz]	Detector	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Distance Correction Factor [dB]	Field Strength [dBµV/m]	Limit [dBµV/m]	Margin [dB]
802.11a	MIMO	5	2	5935	*	11870.00	Average	H	-	-	-87.55	22.98	0.00	42.43	53.98	-11.55

Table 7-5. Radiated Measurements MIMO (Spot-check SM-S936B/DS)

Radiated Band Edge Spot-Check – SM-S936B/DS

Worst Case Mode:	802.11a
Worst Case Transfer Rate:	6Mbps
Distance of Measurements:	3 Meters
Operating Frequency:	5935MHz
Channel:	2



Plot 7-7. Radiated Lower Band Edge Plot MIMO (Average – UNII Band 5)

7.3 26dB Bandwidth Measurement

Test Overview and Limit

The bandwidth at 26dB down from the highest in-band spectral density is measured with a spectrum analyzer connected to the antenna terminal while the EUT is operating at its maximum duty cycle, at its maximum power control level, as defined in ANSI C63.10-2013, and at the appropriate frequencies. The spectrum analyzer's bandwidth measurement function is configured to measure the 26dB bandwidth.

Test Procedure Used

ANSI C63.10-2013 – Section 12.4

Test Settings

1. The signal analyzers' automatic bandwidth measurement capability was used to perform the 26dB bandwidth measurement. The "X" dB bandwidth parameter was set to X = 26. The automatic bandwidth measurement function also has the capability of simultaneously measuring the 99% occupied bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
2. RBW = approximately 1% of the emission bandwidth
3. VBW ≥ 3 x RBW
4. Detector = Peak
5. Trace mode = max hold

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

Figure 7-1. Test Instrument & Measurement Setup

Test Notes

1. All cases were investigated; a subset of the taken plots were included to represent relevant settings and measurements.
2. In this section, the bandwidth data tables include mainly the 26dB bandwidth measurements. In case of 320MHz operation, an occupied bandwidth measurement was included in the table to demonstrate compliance. Thus, all measurements in the tables are 26dB bandwidth measurements except for the 320MHz bandwidth cases which are occupied bandwidth measurements.
3. SP 80/160/320MHz BW share same target as LPI 80/160/320MHz BW, and only the emissions from worst case have been reported

	Frequency [MHz]	Channel	802.11 MODE	Antenna-1 26dB Bandwidth [MHz]	Antenna-2 26dB Bandwidth [MHz]	Antenna-1 Occupied Bandwidth [MHz]	Antenna-2 Occupied Bandwidth [MHz]
Band 5	5935	2	a	20.88	21.00	-	-
	6175	45	a	20.57	21.10	-	-
	6415	93	a	20.31	20.81	-	-
	5935	2	be (20MHz)	22.28	22.27	-	-
	6175	45	be (20MHz)	21.78	21.93	-	-
	6415	93	be (20MHz)	22.27	21.94	-	-
	5695	3	be (40MHz)	42.45	42.20	-	-
	6165	43	be (40MHz)	42.45	42.47	-	-
	6405	91	be (40MHz)	42.40	42.06	-	-
	5985	7	be (80MHz)	90.22	91.19	-	-
	6145	39	be (80MHz)	93.03	90.37	-	-
	6385	87	be (80MHz)	93.52	89.76	-	-
	6025	15	be (160MHz)	177.53	174.75	-	-
	6185	47	be (160MHz)	176.67	175.46	-	-
	6345	79	be (160MHz)	177.32	175.66	-	-
	6105	31	be (320MHz)	-	-	315.54	314.99
	6265	63	be (320MHz)	-	-	315.16	315.10
Band 6	6435	97	a	20.91	21.08	-	-
	6475	105	a	20.93	20.89	-	-
	6515	113	a	21.35	20.98	-	-
	6435	97	be (20MHz)	21.83	22.19	-	-
	6475	105	be (20MHz)	22.15	21.96	-	-
	6515	113	be (20MHz)	21.85	22.11	-	-
	6445	99	be (40MHz)	43.13	42.33	-	-
	6485	107	be (40MHz)	42.78	42.51	-	-
	6525	115	be (40MHz)	43.11	41.90	-	-
	6465	103	be (80MHz)	90.75	88.58	-	-
	6505	111	be (160MHz)	176.94	174.07	-	-
Band 5/6/7	6425	95	be (320MHz)	-	-	315.28	315.23
Band 7	6535	117	a	21.26	20.81	-	-
	6695	149	a	21.02	20.88	-	-
	6875	185	a	21.02	20.78	-	-
	6535	117	be (20MHz)	22.14	22.00	-	-
	6695	149	be (20MHz)	21.74	21.87	-	-
	6875	185	be (20MHz)	22.07	21.81	-	-
	6565	123	be (40MHz)	42.78	42.73	-	-
	6725	155	be (40MHz)	42.93	42.63	-	-
	6885	179	be (40MHz)	42.40	42.63	-	-
	6545	119	be (80MHz)	91.55	90.01	-	-
	6705	151	be (80MHz)	92.16	89.72	-	-
	6865	183	be (80MHz)	91.85	90.29	-	-
	6665	143	be (160MHz)	178.55	175.26	-	-
	6825	175	be (160MHz)	177.36	175.25	-	-
Band 6/7	6585	127	be (320MHz)	-	-	315.50	315.79
Band 7/8	6745	159	be (320MHz)	-	-	315.44	315.27
Band 8	6895	189	a	21.56	20.49	-	-
	6995	209	a	21.12	20.87	-	-
	7115	233	a	21.20	20.95	-	-
	6895	189	be (20MHz)	22.11	22.29	-	-
	6995	209	be (20MHz)	21.89	22.20	-	-
	7115	233	be (20MHz)			-	-
	6925	187	be (40MHz)	42.82	42.41	-	-
	7005	211	be (40MHz)	42.41	42.05	-	-
	7085	227	be (40MHz)	42.52	41.89	-	-
	6945	199	be (80MHz)	91.82	88.76	-	-
	7025	215	be (80MHz)	91.20	88.69	-	-
	6985	207	be (160MHz)	178.31	174.55	-	-
Band 7/8	6905	191	be (320MHz)	-	-	315.95	315.39

Table 7-6. 26dB Bandwidth Results - LPI

	Frequency [MHz]	Channel	802.11 MODE	Puncture Size	Antenna-1 26dB Bandwidth [MHz]	Antenna-2 26dB Bandwidth [MHz]	Antenna-1 Occupied Bandwidth [MHz]	Antenna-2 Occupied Bandwidth [MHz]
Band 5	6145	39	be (80MHz)	20MHz	89.89	88.09	-	-
	6185	47	be (160MHz)	20MHz	176.92	175.95	-	-
	6185	47	be (160MHz)	40MHz	176.26	174.90	-	-
	6105	31	be (320MHz)	40MHz	-	-	315.76	315.79
Band 6	6465	103	be (80MHz)	20MHz	92.13	89.94	-	-
	6505	111	be (160MHz)	20MHz	177.97	176.33	-	-
	6505	111	be (160MHz)	40MHz	174.39	174.53	-	-
Band 5/6/7	6425	95	be (320MHz)	40MHz	-	-	316.23	315.89
Band 7	6705	151	be (80MHz)	20MHz	90.72	89.57	-	-
	6665	143	be (160MHz)	20MHz	177.73	175.33	-	-
	6665	143	be (160MHz)	40MHz	176.89	175.82	-	-
Band 7/8	6745	159	be (320MHz)	40MHz	-	-	315.92	315.63
Band 8	7025	215	be (80MHz)	20MHz	89.26	88.82	-	-
	6985	207	be (160MHz)	20MHz	177.75	174.43	-	-
	6985	207	be (160MHz)	40MHz	178.18	175.81	-	-
Band 7/8	6905	191	be (320MHz)	40MHz	-	-	316.60	315.30

Table 7-7. 26dB Bandwidth Results – Punctured Cases - LPI

	Frequency [MHz]	Channel	802.11 MODE	Antenna-1 26dB Bandwidth [MHz]	Antenna-2 26dB Bandwidth [MHz]	Antenna-1 Occupied Bandwidth [MHz]	Antenna-2 Occupied Bandwidth [MHz]
Band 5	5935	2	a	20.90	20.74	-	-
	6175	45	a	20.78	20.33	-	-
	6415	93	a	21.03	21.53	-	-
	5935	2	be (20MHz)	21.75	21.84	-	-
	6175	45	be (20MHz)	21.65	21.33	-	-
	6415	93	be (20MHz)	22.20	22.01	-	-
	5695	3	be (40MHz)	41.88	41.83	-	-
	6165	43	be (40MHz)	41.35	41.48	-	-
	6405	91	be (40MHz)	42.47	41.29	-	-
	5985	7	be (80MHz)	90.62	88.74	-	-
	6145	39	be (80MHz)	89.29	89.04	-	-
	6385	87	be (80MHz)	91.60	89.20	-	-
	6025	15	be (160MHz)	177.42	174.04	-	-
	6185	47	be (160MHz)	173.88	177.38	-	-
	6345	79	be (160MHz)	174.37	176.99	-	-
	6105	31	be (320MHz)	-	-	316.68	316.55
Band 7	6535	117	a	20.85	21.00	-	-
	6695	149	a	21.23	20.97	-	-
	6855	181	a	21.59	21.11	-	-
	6535	117	be (20MHz)	21.90	22.45	-	-
	6695	149	be (20MHz)	21.59	21.56	-	-
	6855	181	be (20MHz)	21.52	21.74	-	-
	6565	123	be (40MHz)	42.47	42.30	-	-
	6725	155	be (40MHz)	42.15	41.63	-	-
	6885	179	be (40MHz)	42.58	42.07	-	-
	6625	135	be (80MHz)	90.40	89.58	-	-
	6705	151	be (80MHz)	92.15	88.97	-	-
	6785	167	be (80MHz)	89.55	91.14	-	-
	6665	143	be (160MHz)	174.10	172.83	-	-
Band 7/8	6745	159	be (320MHz)	-	-	315.06	314.47

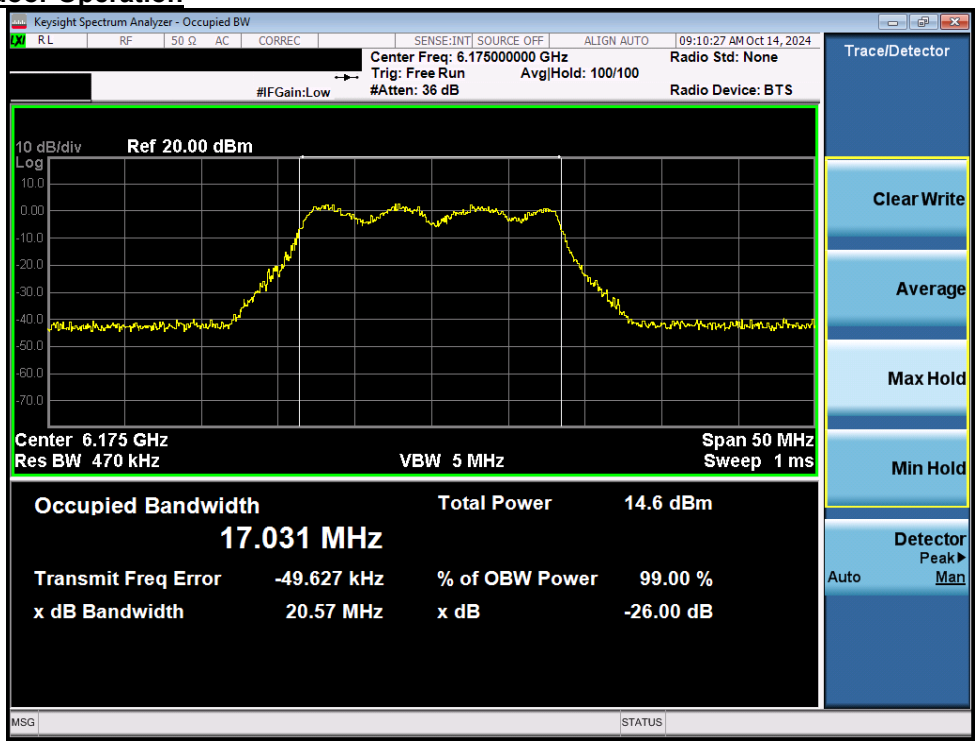
Table 7-8. 26dB Bandwidth Results – SP

	Frequency [MHz]	Channel	802.11 MODE	Puncture Size	Antenna-1 26dB Bandwidth [MHz]	Antenna-2 26dB Bandwidth [MHz]	Antenna-1 Occupied Bandwidth [MHz]	Antenna-2 Occupied Bandwidth [MHz]
Band 5	6145	39	be (80MHz)	20MHz	90.33	88.48	-	-
	6185	47	be (160MHz)	20MHz	239.40	323.43	-	-
	6105	31	be (320MHz)	40MHz	-	-	316.23	316.04
Band 7/8	6705	151	be (80MHz)	20MHz	90.51	88.35	-	-
	6665	143	be (160MHz)	20MHz	239.52	174.27	-	-
Band 7/8	6745	159	be (320MHz)	40MHz	-	-	317.41	317.03

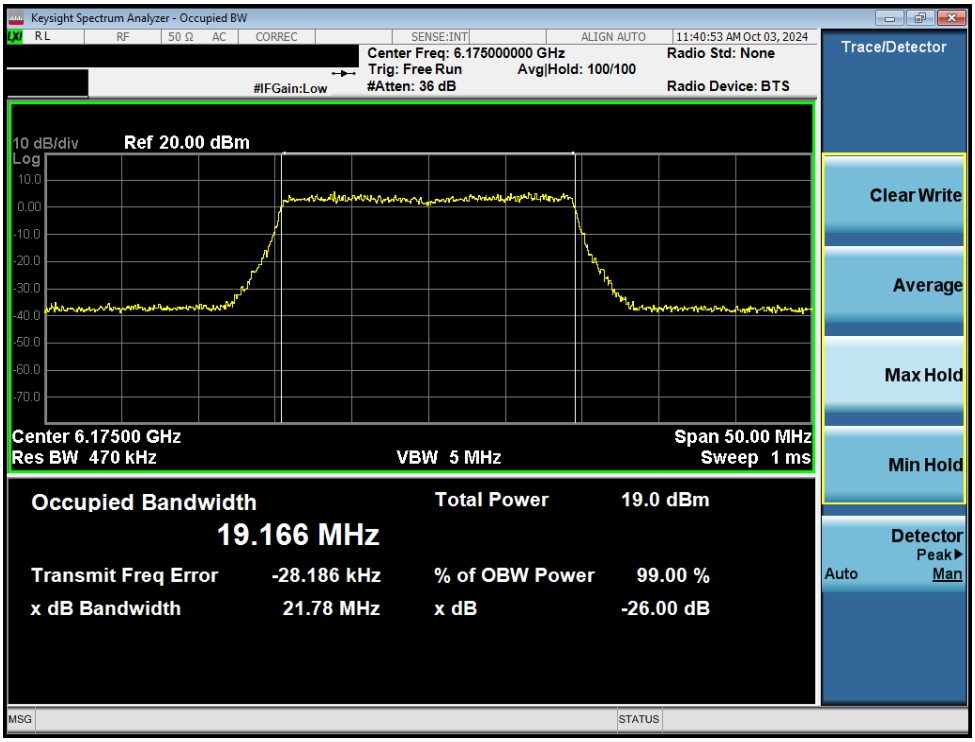
Table 7-9. 26dB Bandwidth Results – Punctured Cases - SP

7.3.1 MIMO Antenna-1 26 dB Bandwidth Measurements - (UNII Band 5)

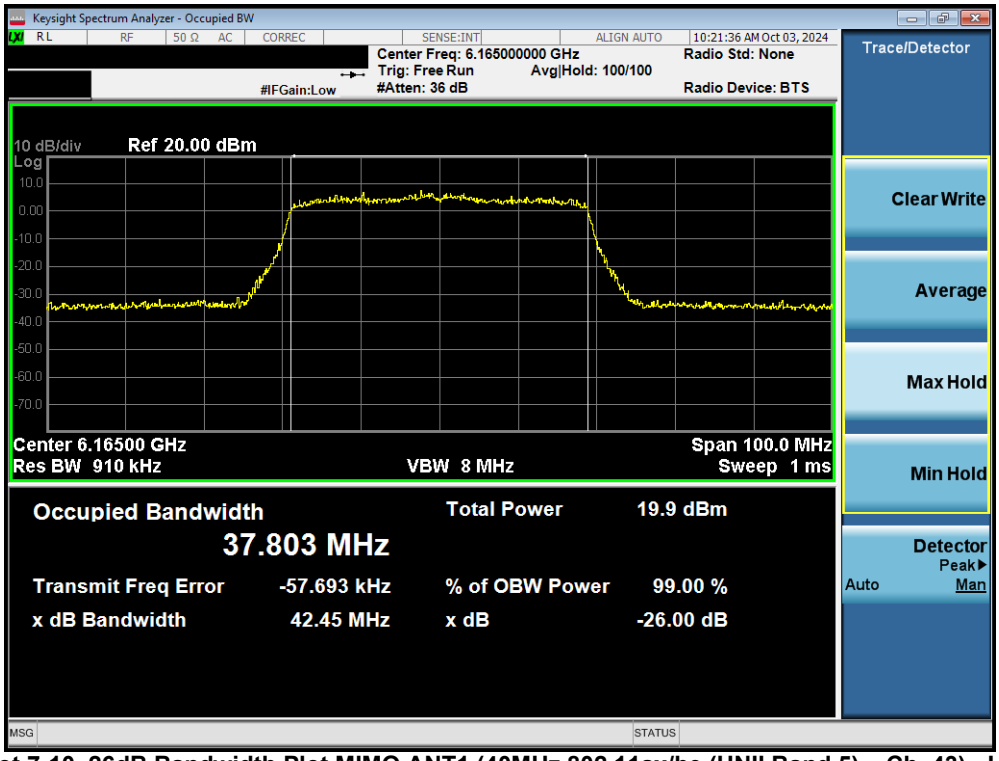
Low Power Indoor Operation



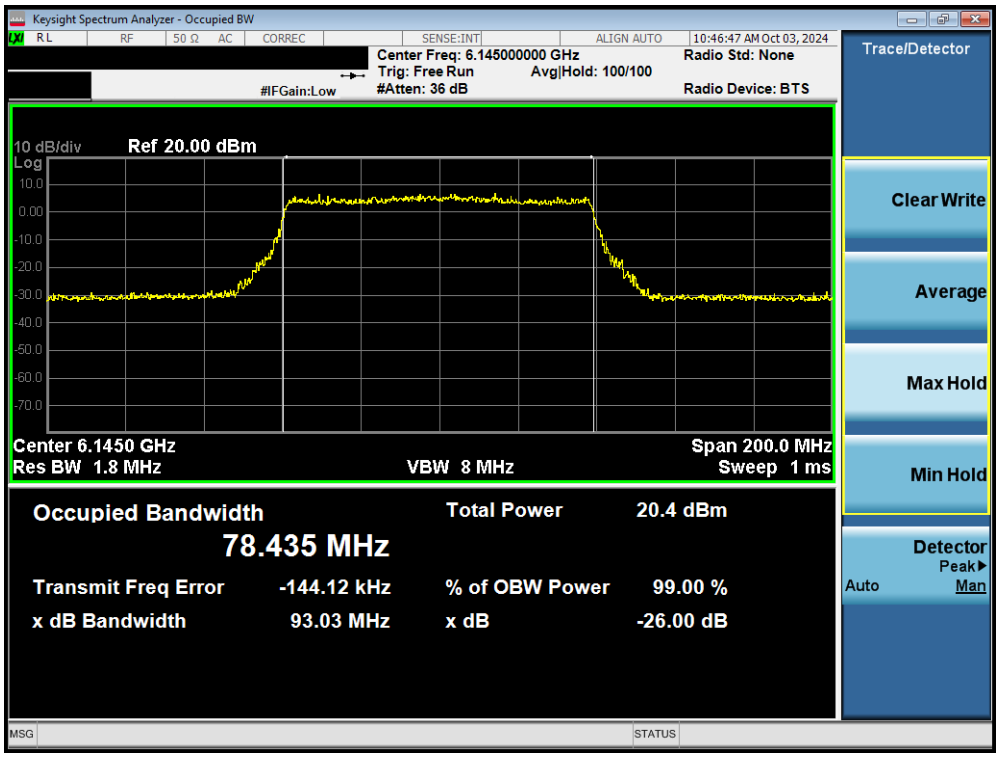
Plot 7-8. 26dB Bandwidth Plot MIMO ANT1 (20MHz 802.11a (UNII Band 5) – Ch. 45) - LPI



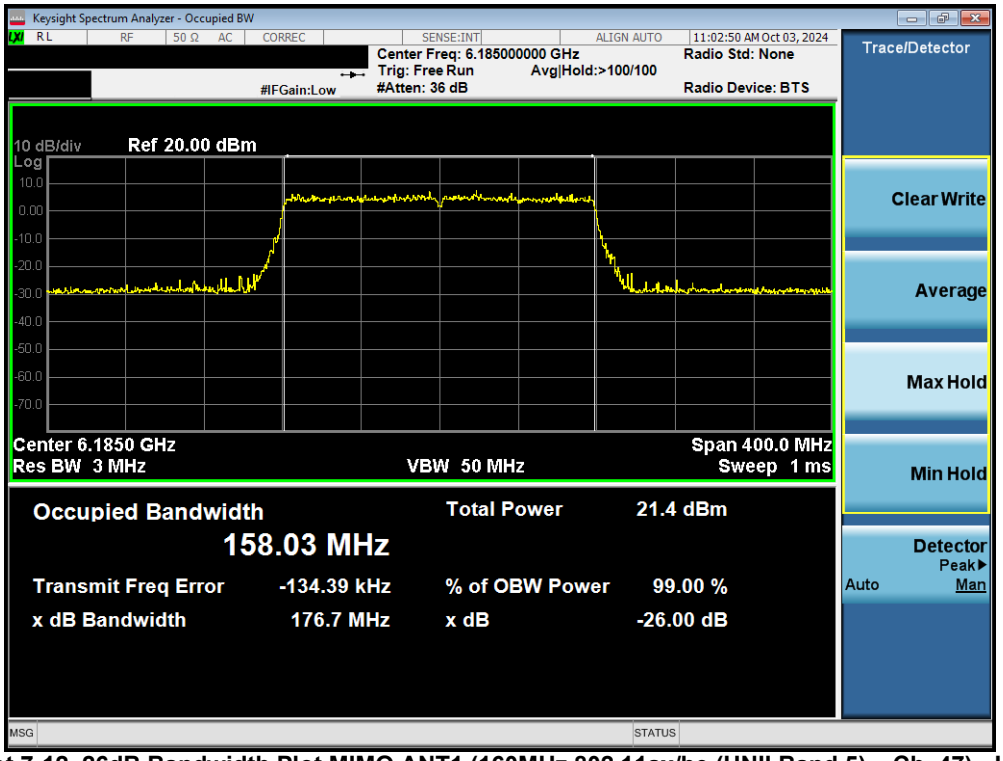
Plot 7-9. 26dB Bandwidth Plot MIMO ANT1 (20MHz 802.11ax/be (UNII Band 5) – Ch. 45) - LPI



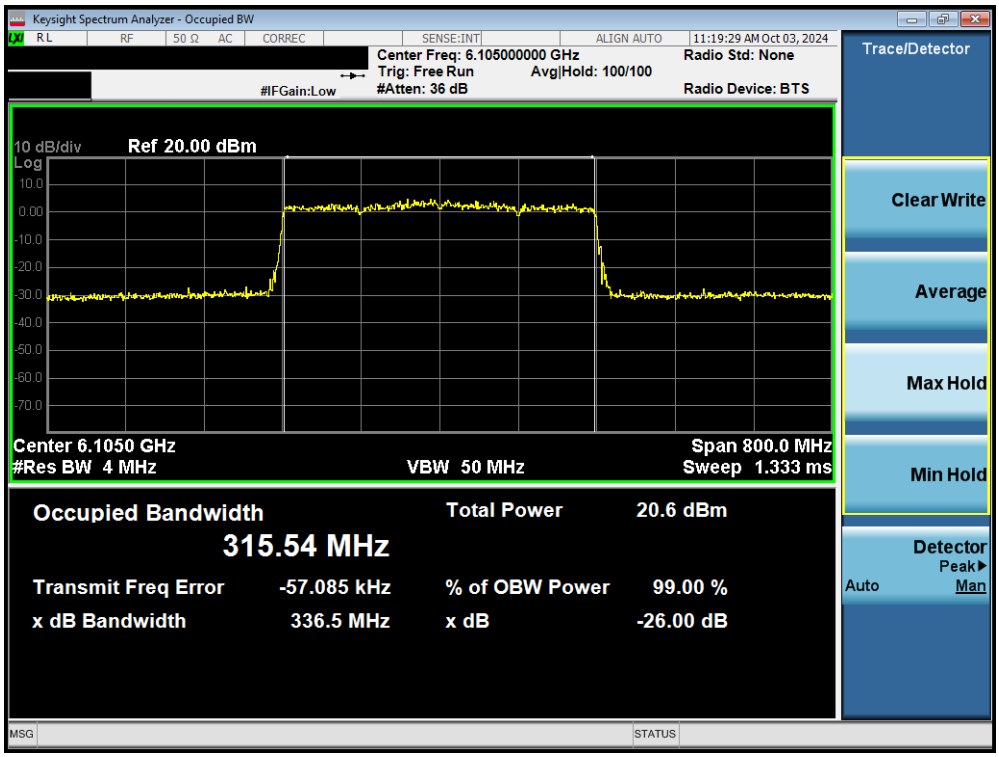
Plot 7-10. 26dB Bandwidth Plot MIMO ANT1 (40MHz 802.11ax/be (UNII Band 5) – Ch. 43) - LPI



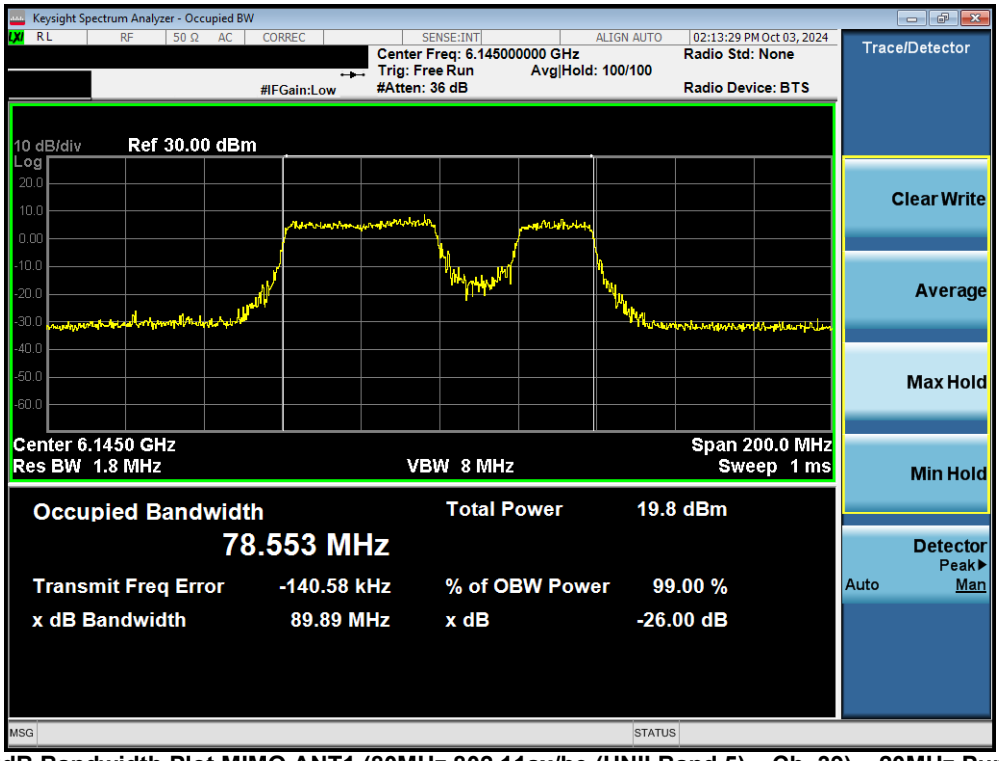
Plot 7-11. 26dB Bandwidth Plot MIMO ANT1 (80MHz 802.11ax/be (UNII Band 5) – Ch. 39) - LPI



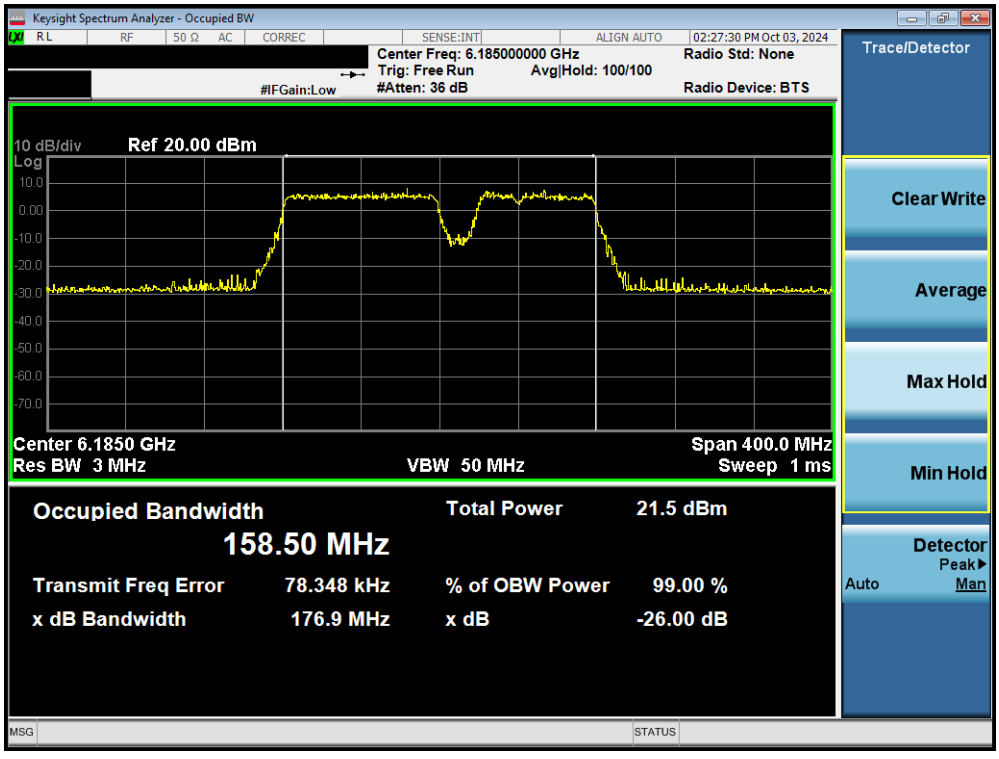
Plot 7-12. 26dB Bandwidth Plot MIMO ANT1 (160MHz 802.11ax/be (UNII Band 5) – Ch. 47) - LPI



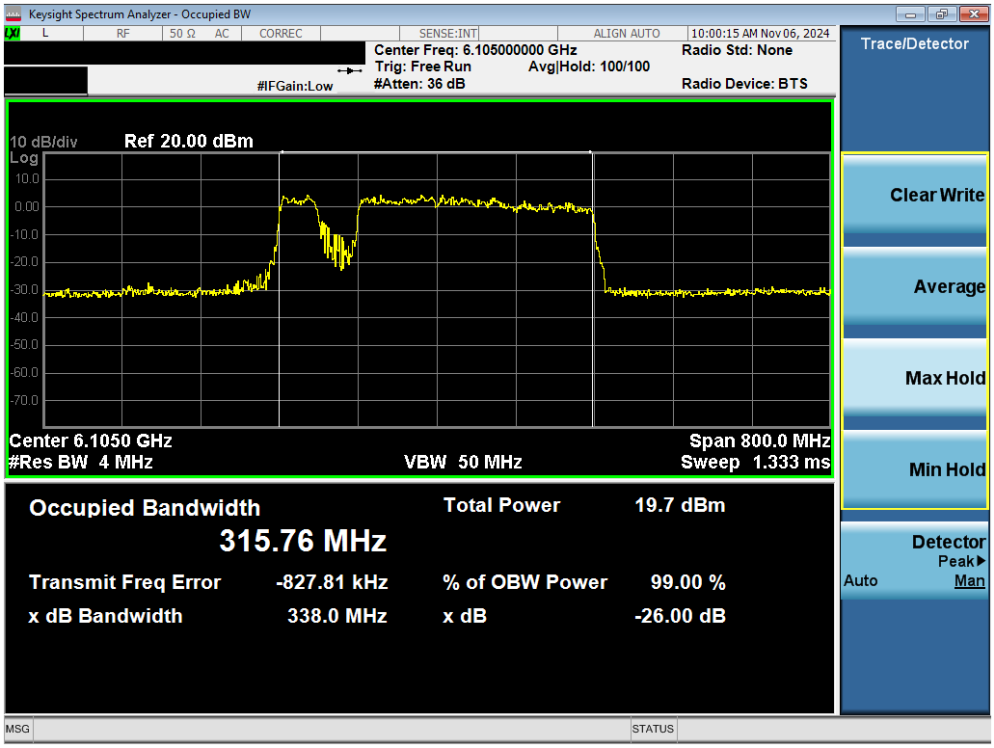
Plot 7-13. 26dB Bandwidth Plot MIMO ANT1 (320MHz 802.11ax/be (UNII Band 5) – Ch. 31) - LPI



Plot 7-14. 26dB Bandwidth Plot MIMO ANT1 (80MHz 802.11ax/be (UNII Band 5) – Ch. 39) – 20MHz Punctured - LPI

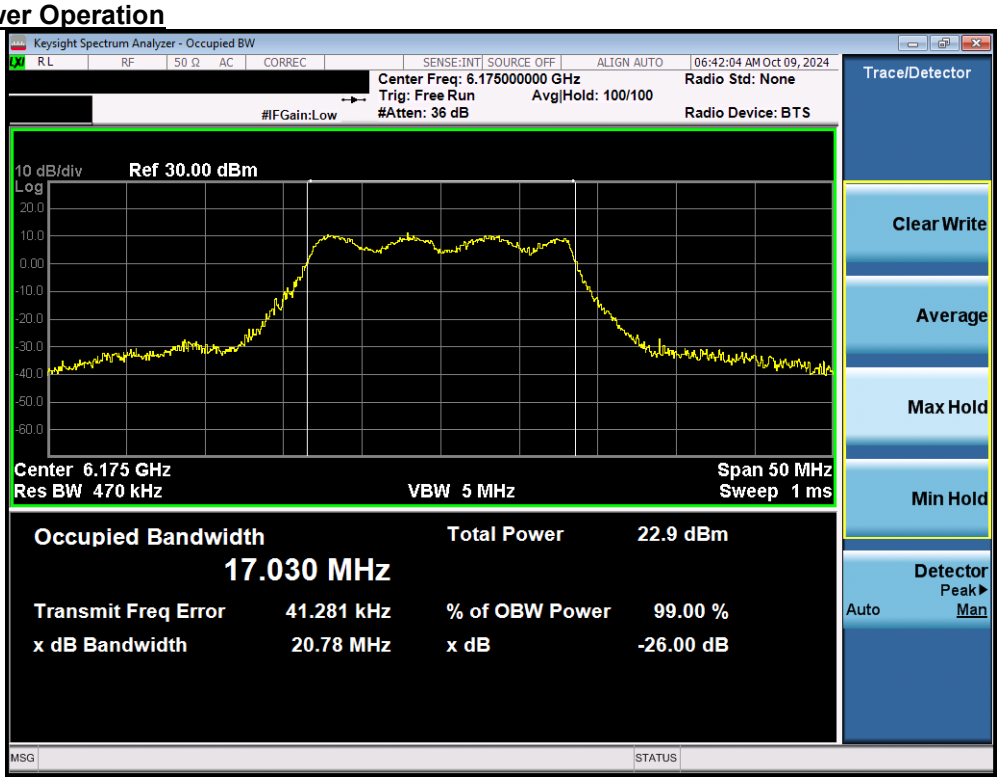


Plot 7-15. 26dB Bandwidth Plot MIMO ANT1 (160MHz 802.11ax/be (UNII Band 5) – Ch. 47) – 20MHz Punctured - LPI

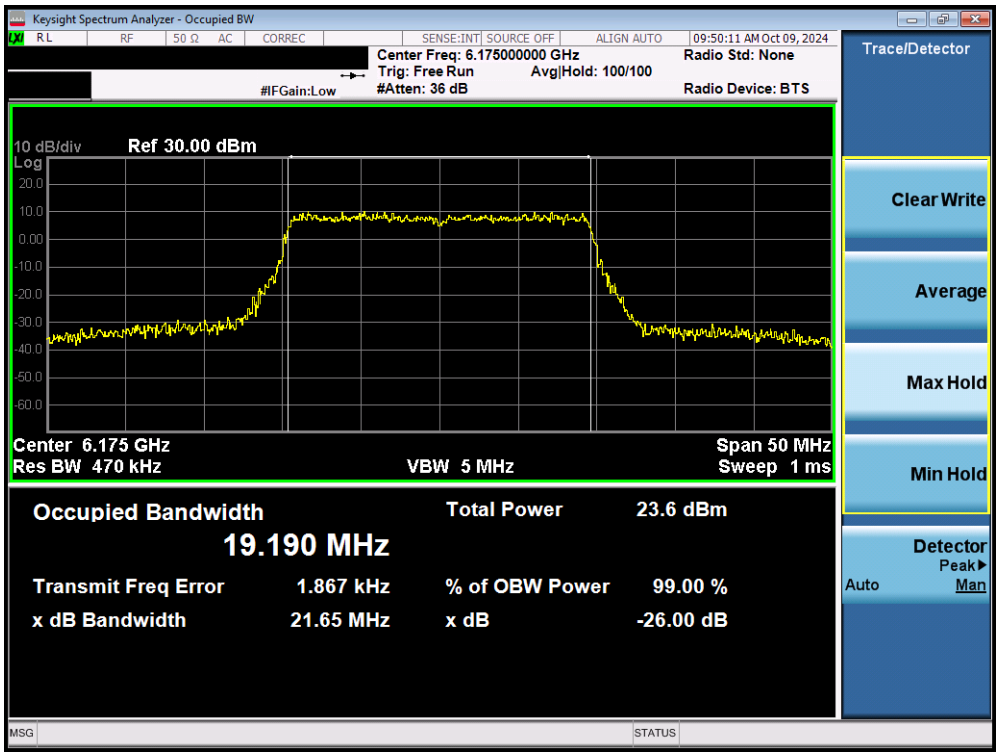


Plot 7-16. 26dB Bandwidth Plot MIMO ANT1 (320MHz 802.11ax/be (UNII Band 5) – Ch. 31) – 40MHz Punctured – LPI

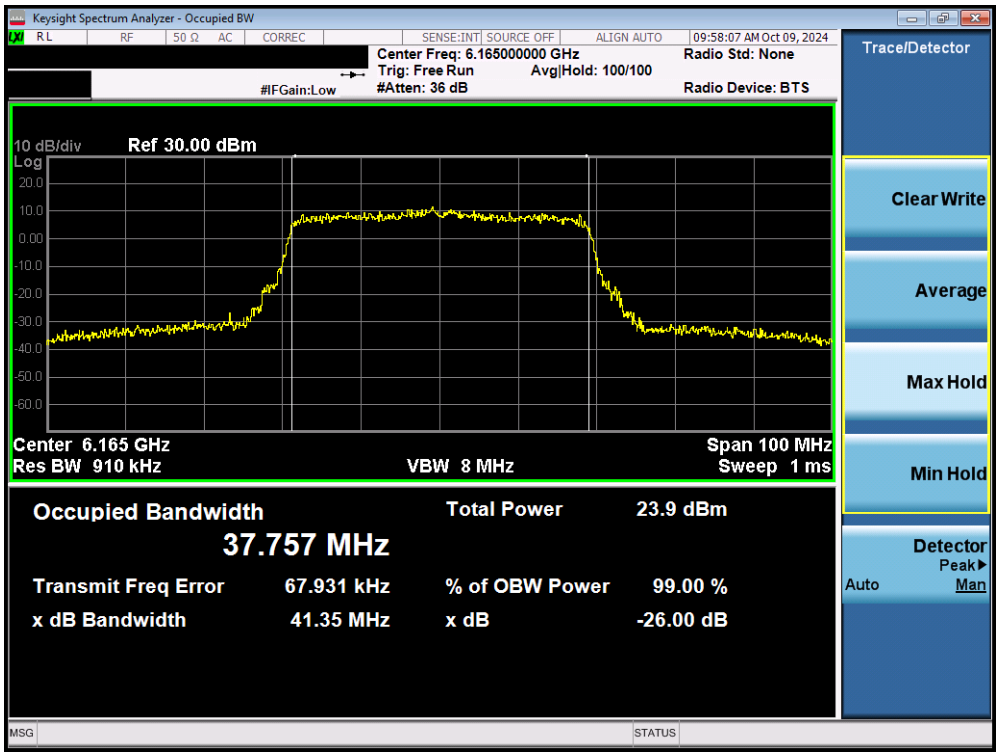
Standard Power Operation



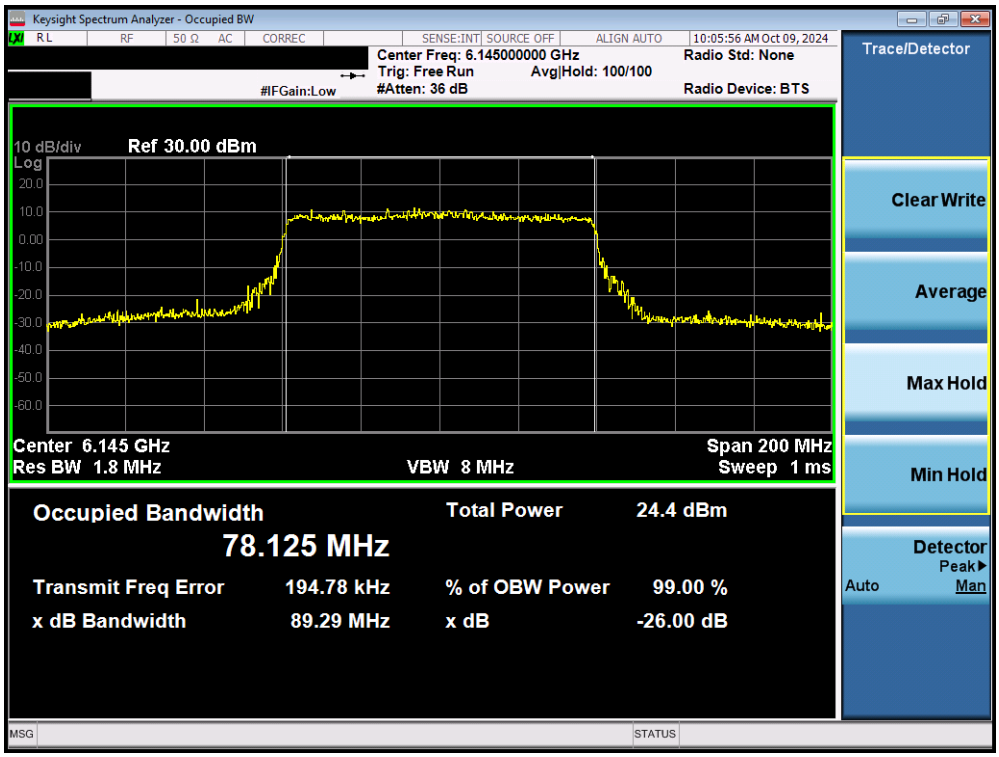
Plot 7-17. 26dB Bandwidth Plot MIMO ANT1 (20MHz 802.11a (UNII Band 5) – Ch. 45) - SP



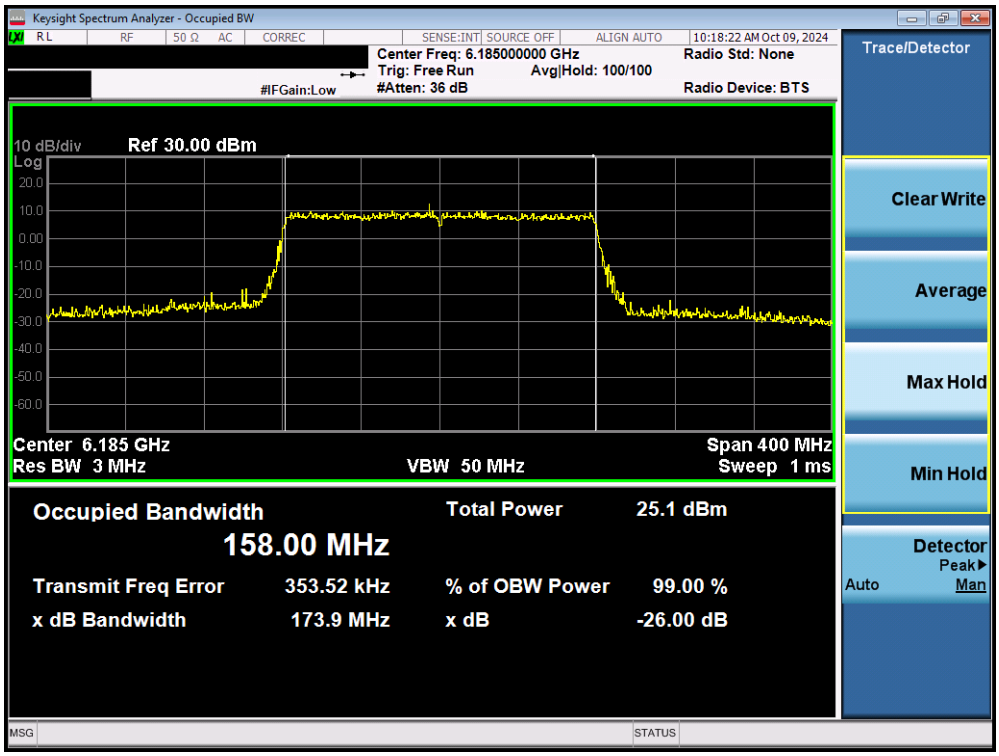
Plot 7-18. 26dB Bandwidth Plot MIMO ANT1 (20MHz 802.11ax/be (UNII Band 5) – Ch. 45) - SP



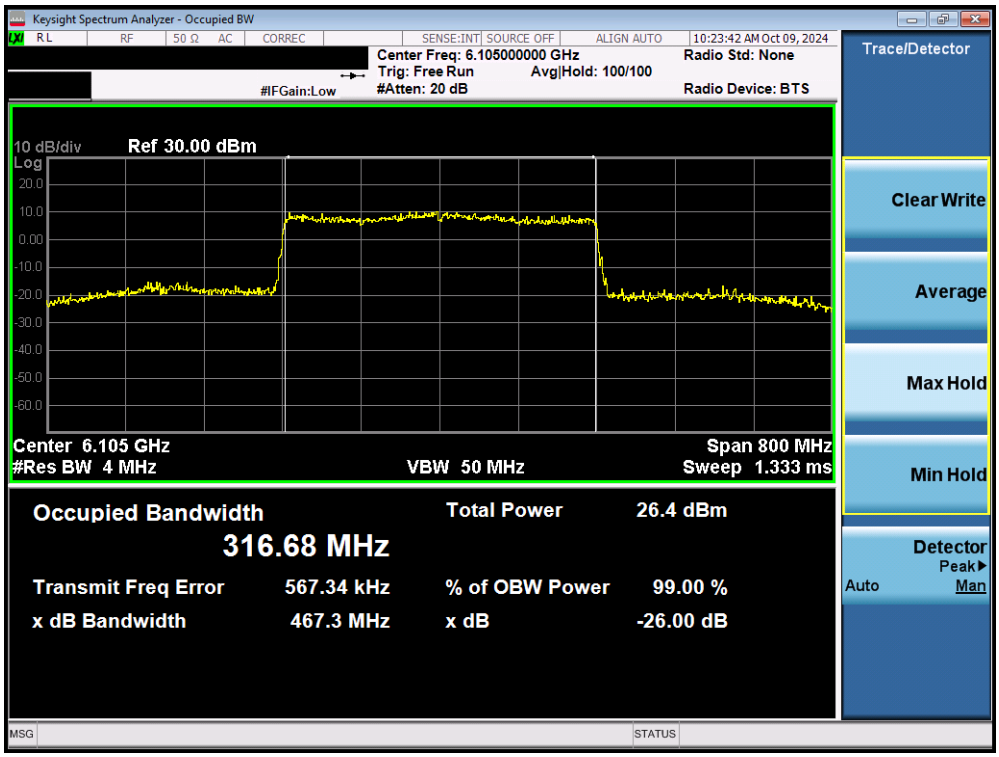
Plot 7-19. 26dB Bandwidth Plot MIMO ANT1 (40MHz 802.11ax/be (UNII Band 5) – Ch. 43) - SP



Plot 7-20. 26dB Bandwidth Plot MIMO ANT1 (80MHz 802.11ax/be (UNII Band 5) – Ch. 39) - SP

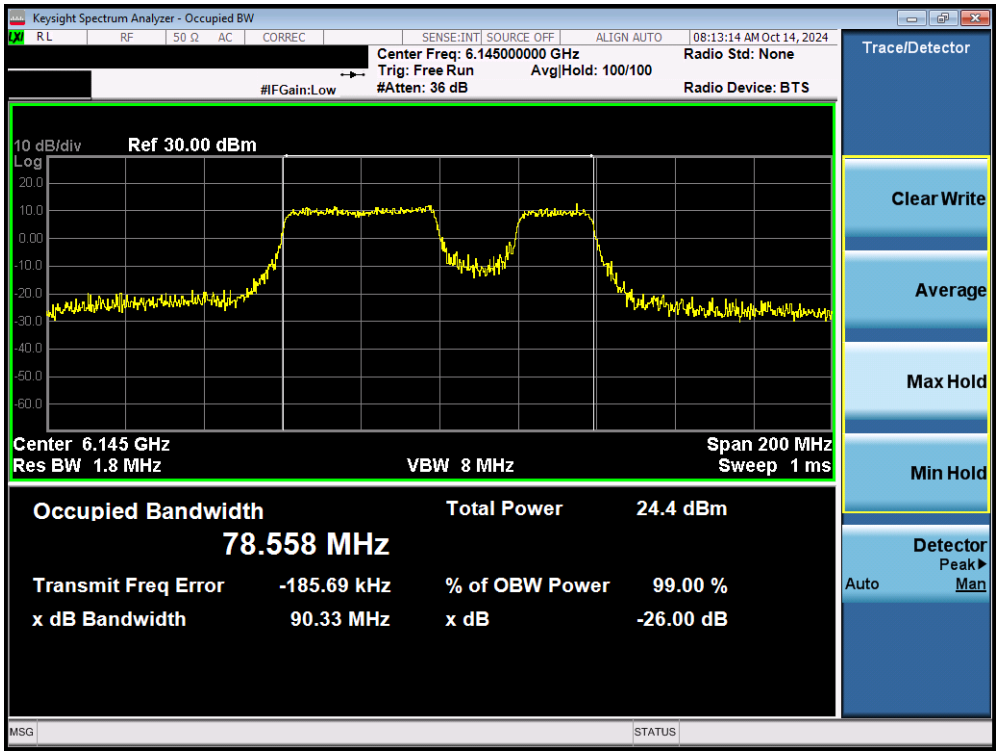


Plot 7-21. 26dB Bandwidth Plot MIMO ANT1 (160MHz 802.11ax/be (UNII Band 5) – Ch. 47) - SP

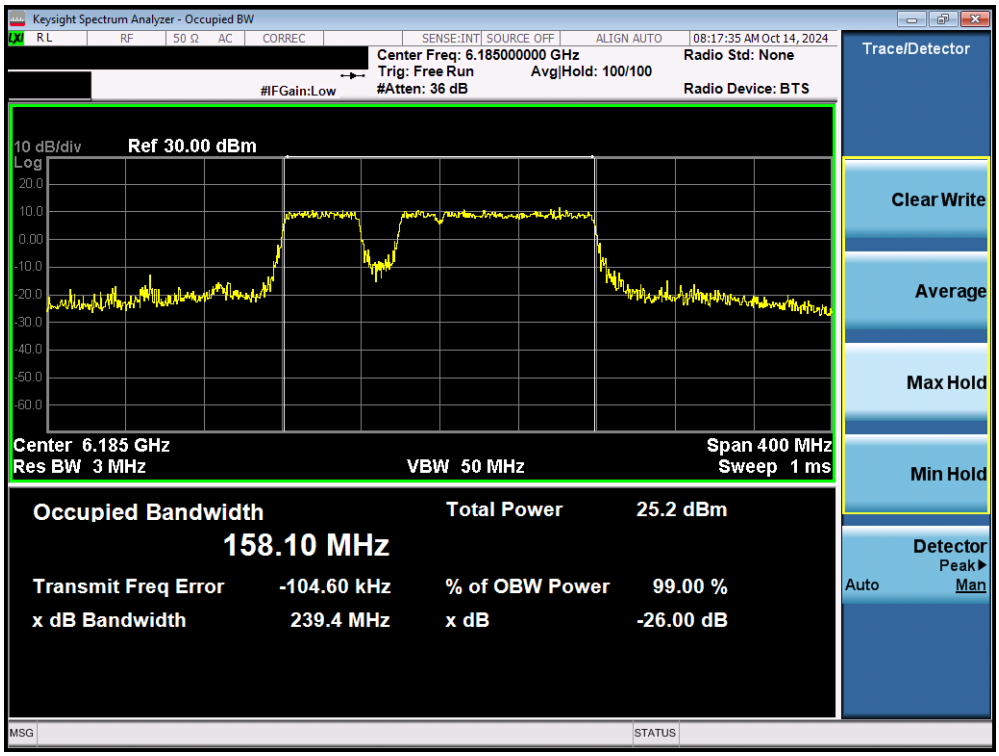


Plot 7-22. 26dB Bandwidth Plot MIMO ANT1 (320MHz 802.11ax/be (UNII Band 5) – Ch. 31) - SP

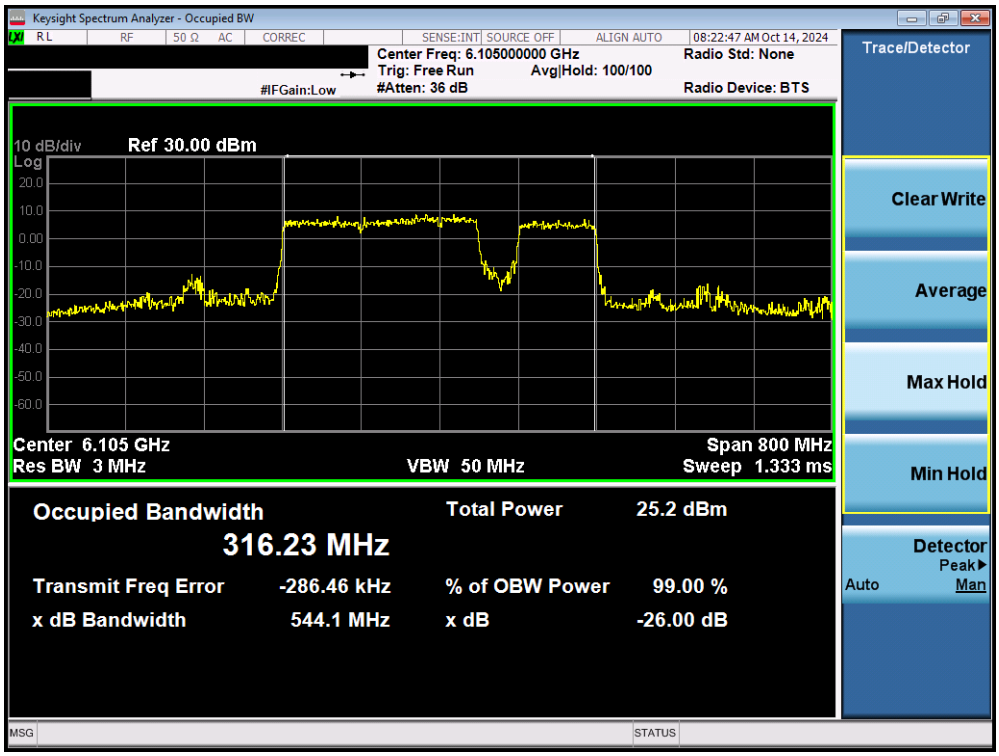
Standard Power (Punctured) Operation



Plot 7-23. 26dB Bandwidth Plot MIMO ANT1 (80MHz 802.11ax/be (UNII Band 5) – Ch. 39) – 20MHz Punctured - SP



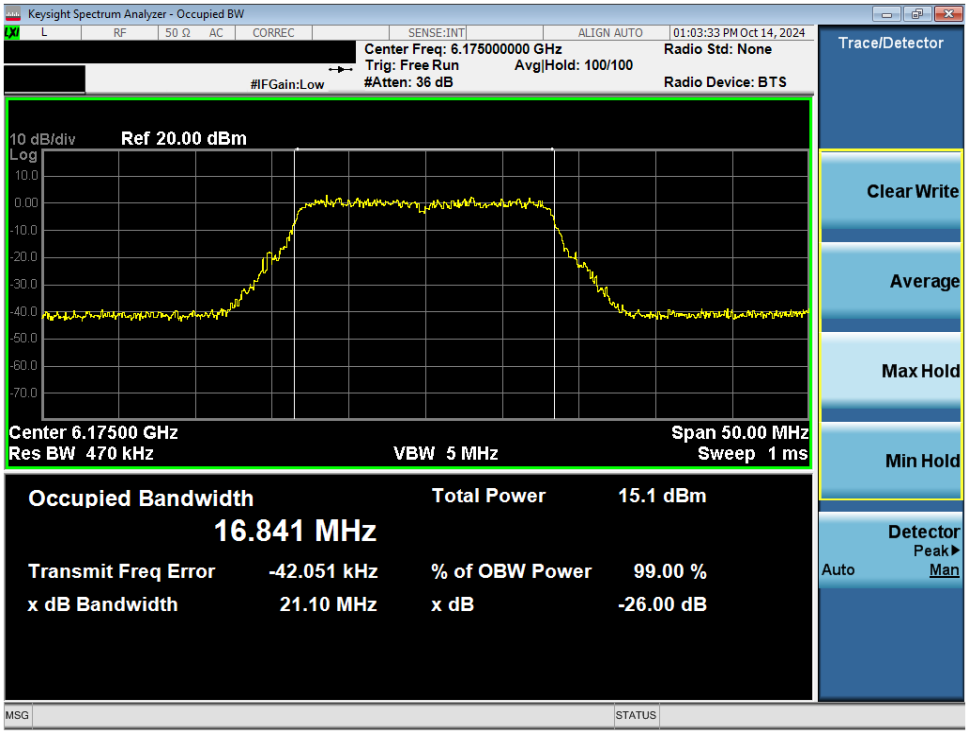
Plot 7-24. 26dB Bandwidth Plot MIMO ANT1 (160MHz 802.11ax/be (UNII Band 5) – Ch. 47) – 20MHz Punctured - SP



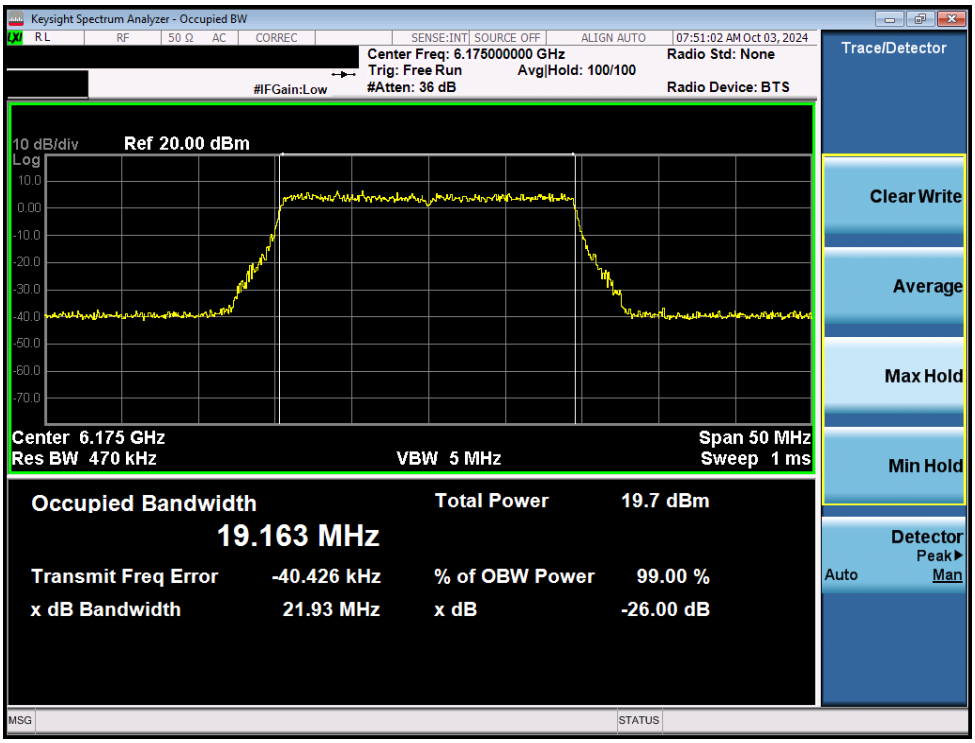
Plot 7-25. 26dB Bandwidth Plot MIMO ANT1 (320MHz 802.11ax/be (UNII Band 5) – Ch. 31) – 40MHz Punctured – SP

7.3.2 MIMO Antenna-2 26 dB Bandwidth Measurements - (UNII Band 5)

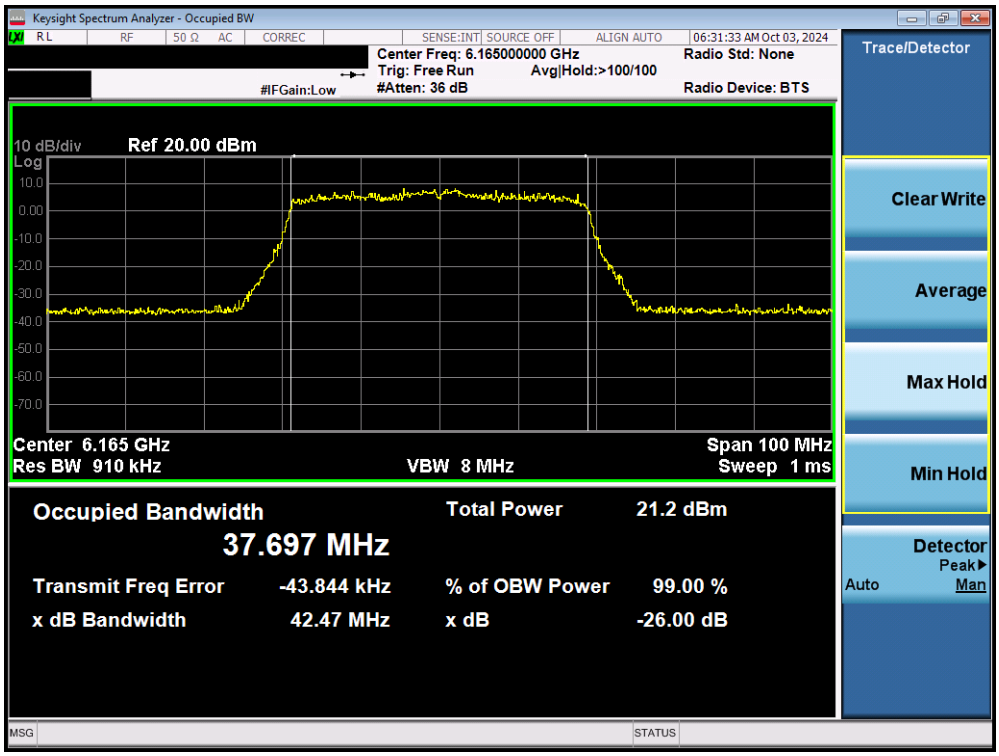
Low Power Indoor Operation



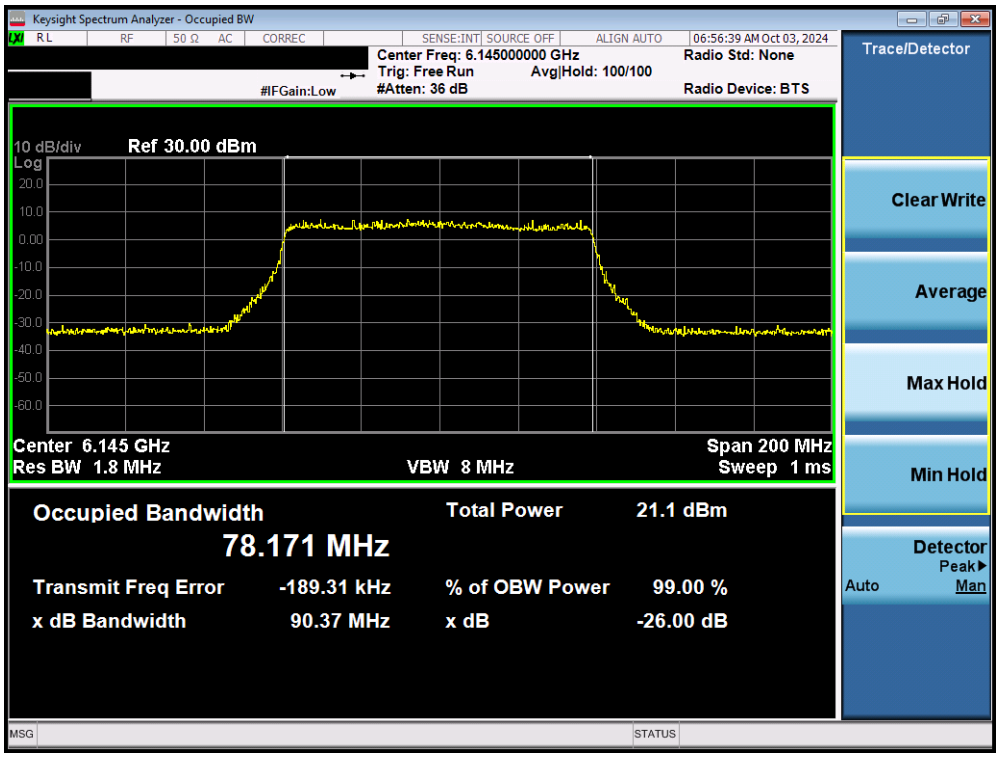
Plot 7-26. 26dB Bandwidth Plot MIMO ANT2 (20MHz 802.11a (UNII Band 5) – Ch. 45) - LPI



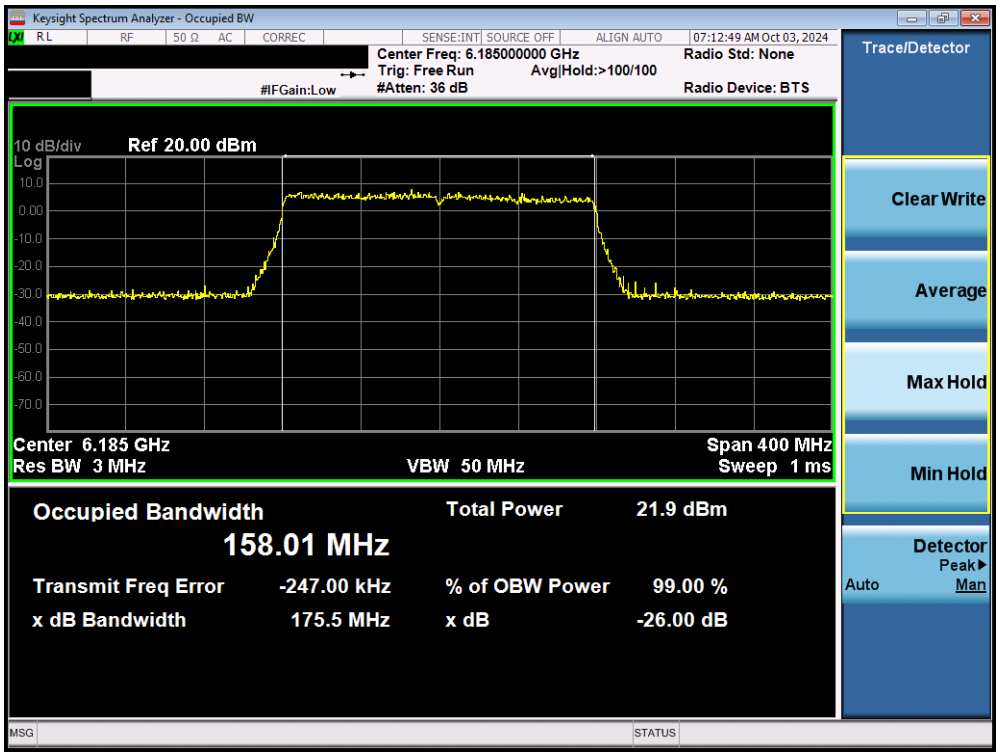
Plot 7-27. 26dB Bandwidth Plot MIMO ANT2 (20MHz 802.11ax/be (UNII Band 5) – Ch. 45) - LPI



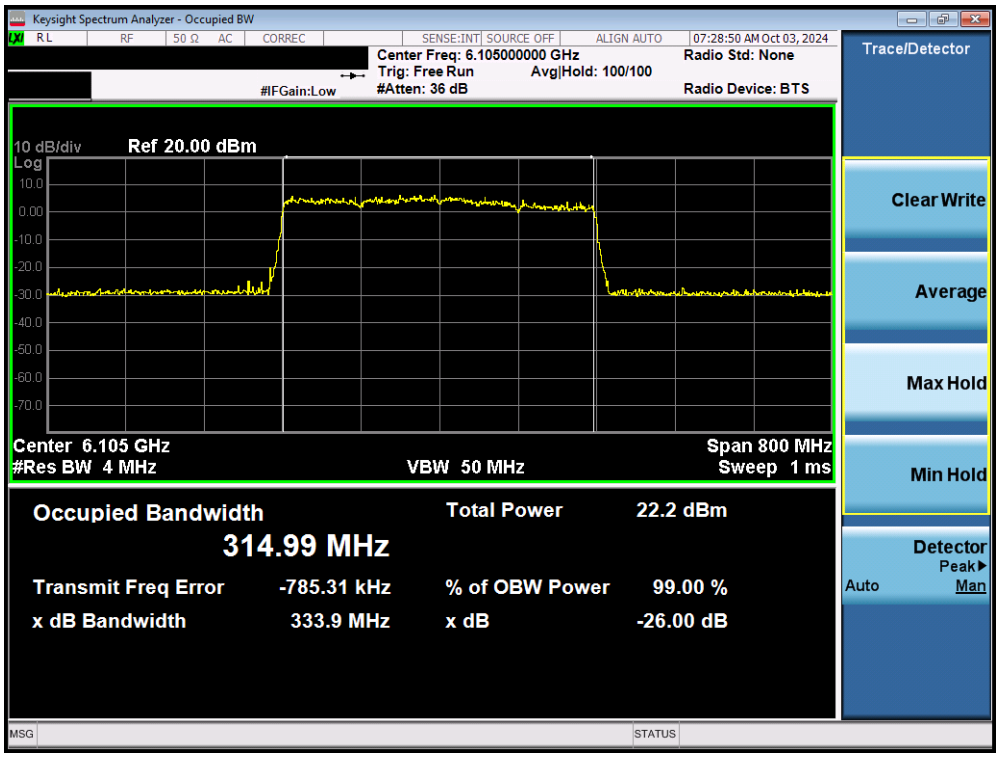
Plot 7-28. 26dB Bandwidth Plot MIMO ANT2 (40MHz 802.11ax/be (UNII Band 5) – Ch. 43) - LPI



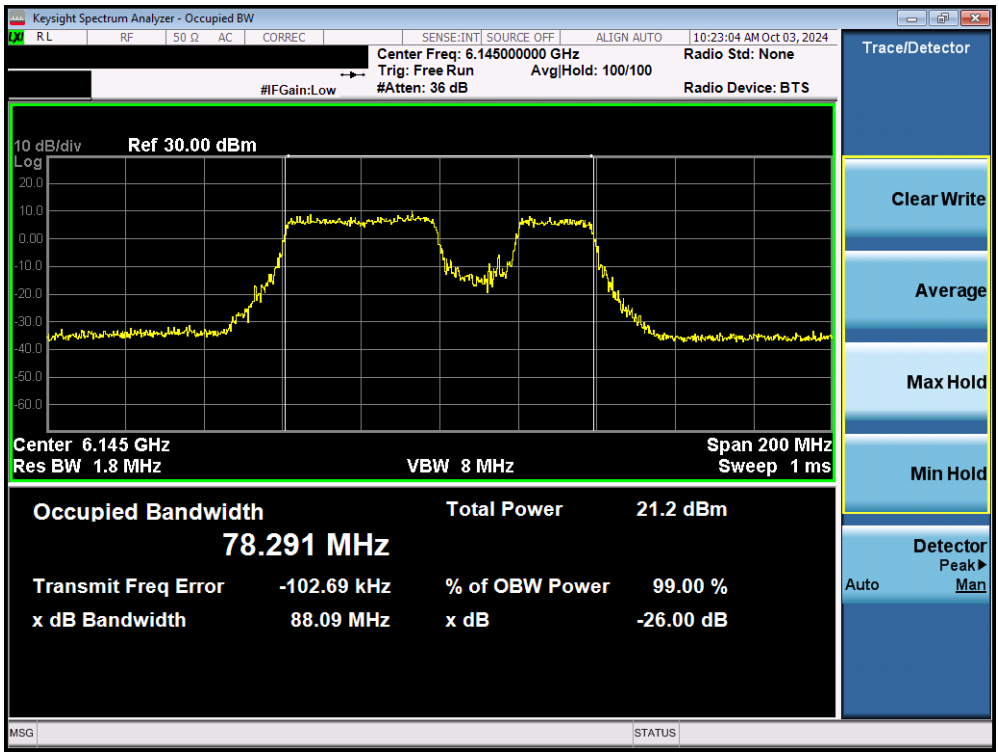
Plot 7-29. 26dB Bandwidth Plot MIMO ANT2 (80MHz 802.11ax/be (UNII Band 5) – Ch. 39) - LPI



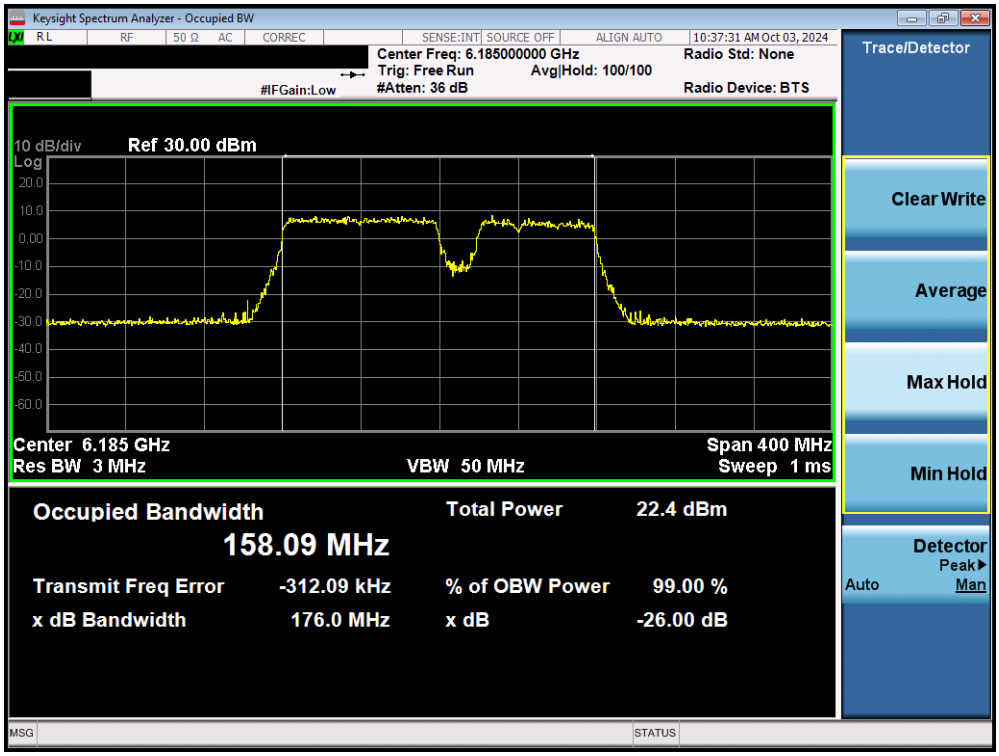
Plot 7-30. 26dB Bandwidth Plot MIMO ANT2 (160MHz 802.11ax/be (UNII Band 5) – Ch. 47) - LPI



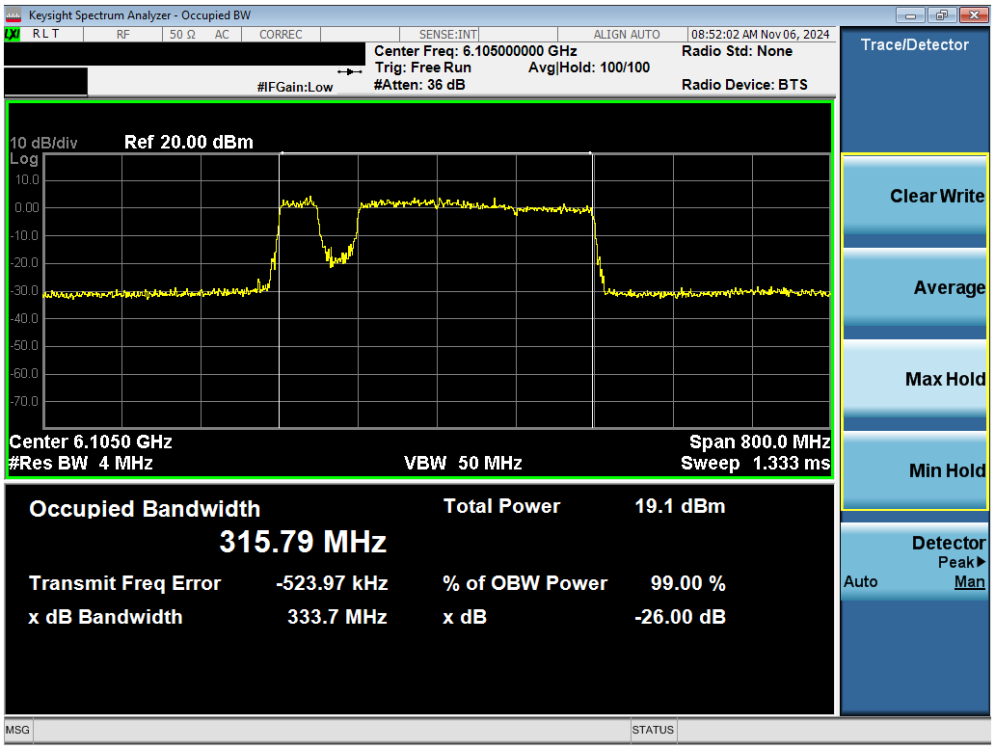
Plot 7-31. 26dB Bandwidth Plot MIMO ANT2 (320MHz 802.11ax/be (UNII Band 5) – Ch. 31) - LPI



Plot 7-32. 26dB Bandwidth Plot MIMO ANT2 (80MHz 802.11ax/be (UNII Band 5) – Ch. 39) – 20MHz Punctured - LPI

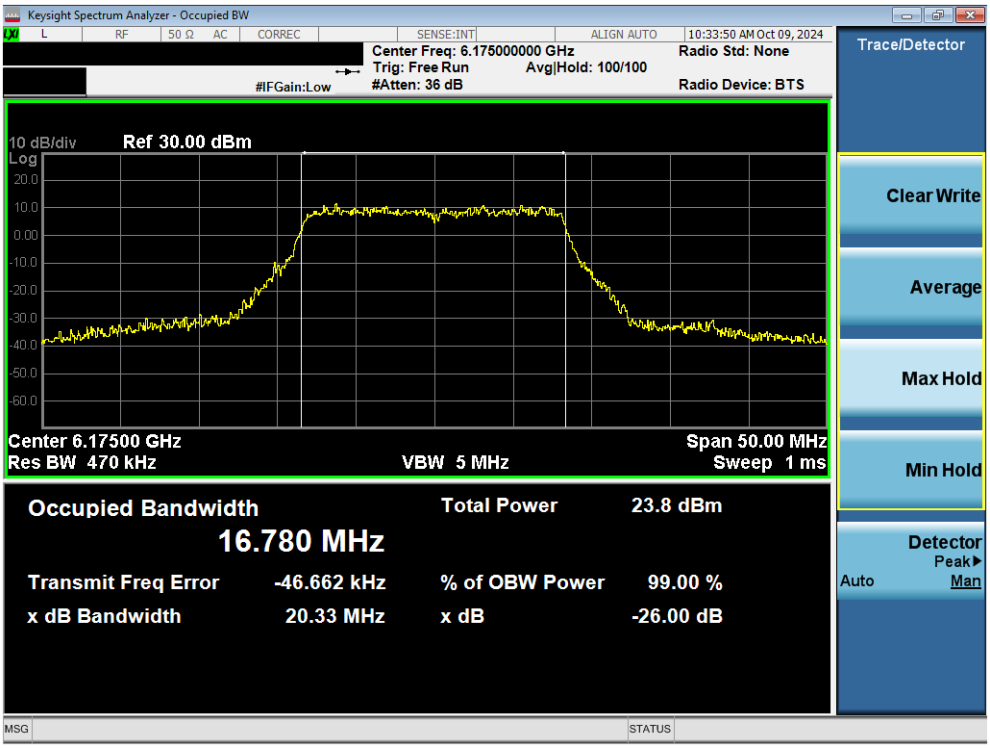


Plot 7-33. 26dB Bandwidth Plot MIMO ANT2 (160MHz 802.11ax/be (UNII Band 5) – Ch. 47) – 20MHz Punctured - LPI

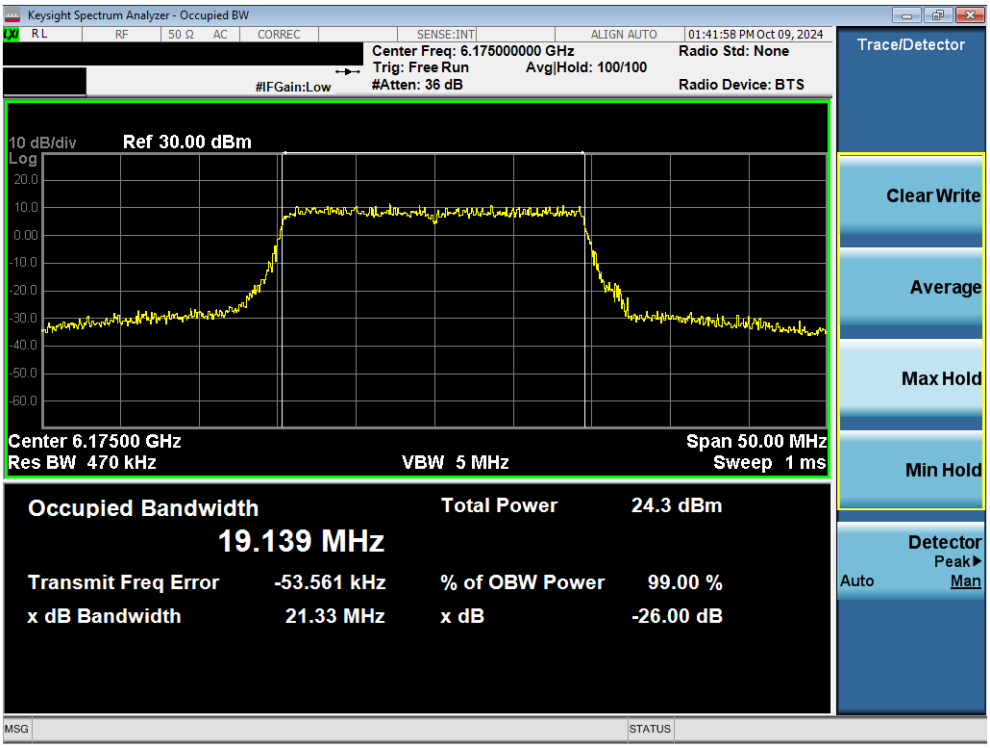


Plot 7-34. 26dB Bandwidth Plot MIMO ANT2 (320MHz 802.11ax/be (UNII Band 5) – Ch. 31) – 40MHz Punctured – LPI

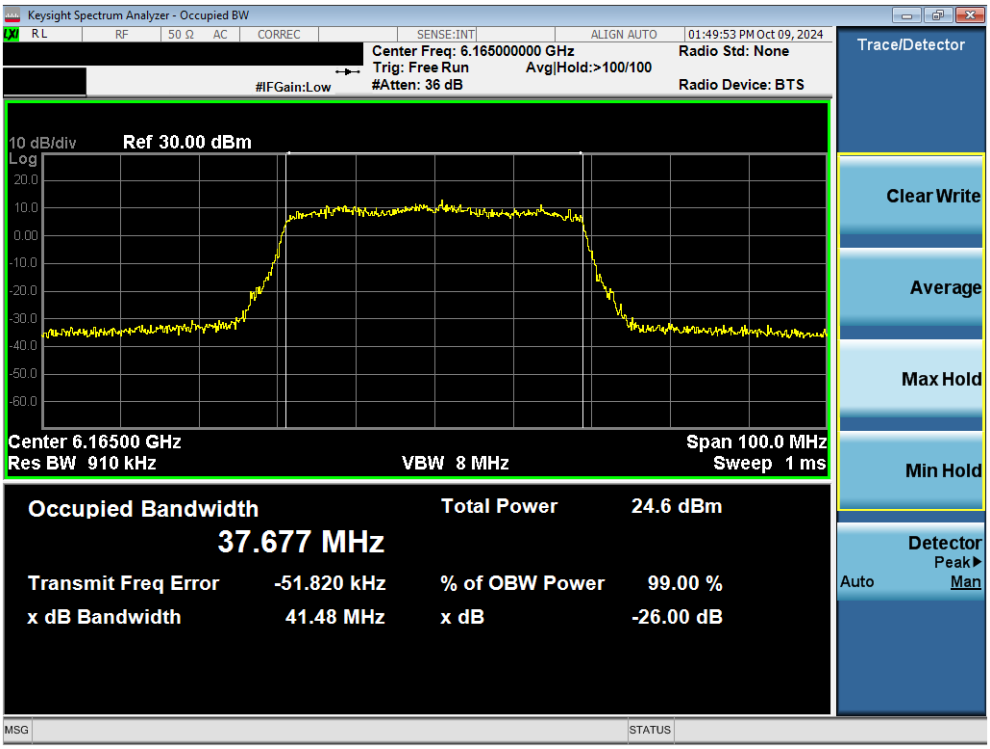
Standard Power Operation



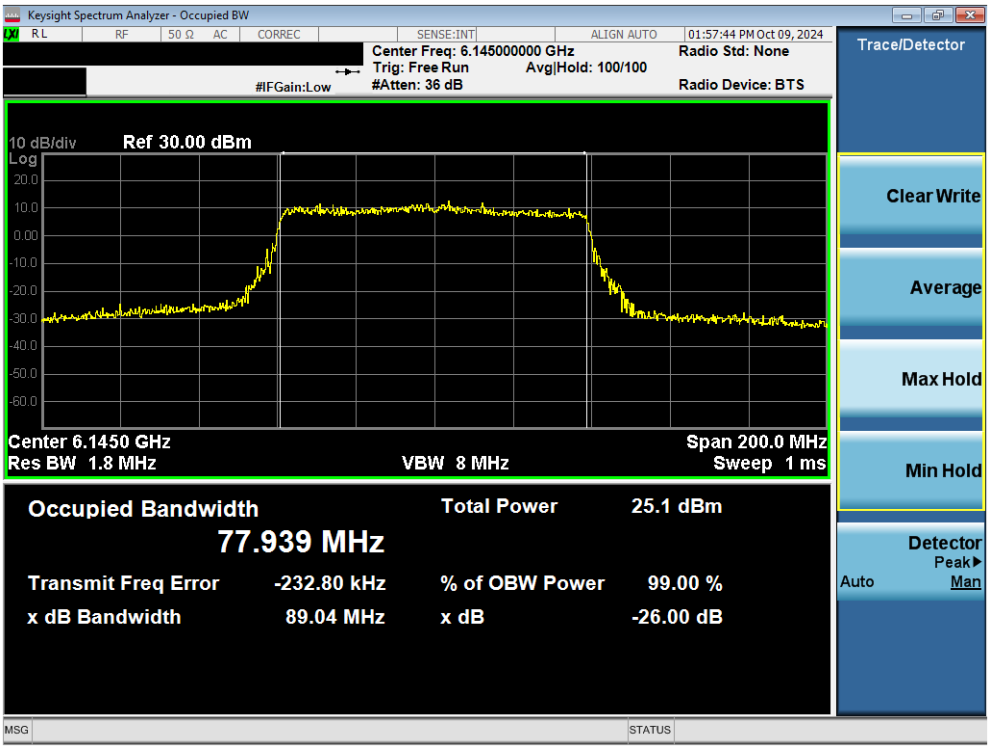
Plot 7-35. 26dB Bandwidth Plot MIMO ANT2 (20MHz 802.11a (UNII Band 5) – Ch. 45) - SP



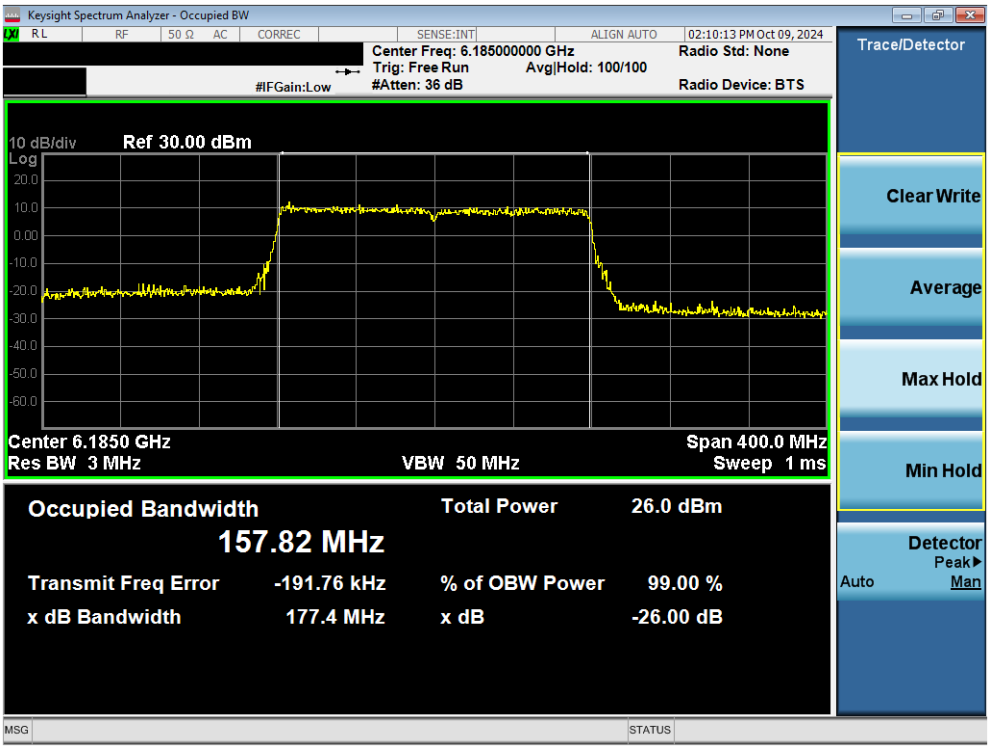
Plot 7-36. 26dB Bandwidth Plot MIMO ANT2 (20MHz 802.11ax/be (UNII Band 5) – Ch. 45) - SP



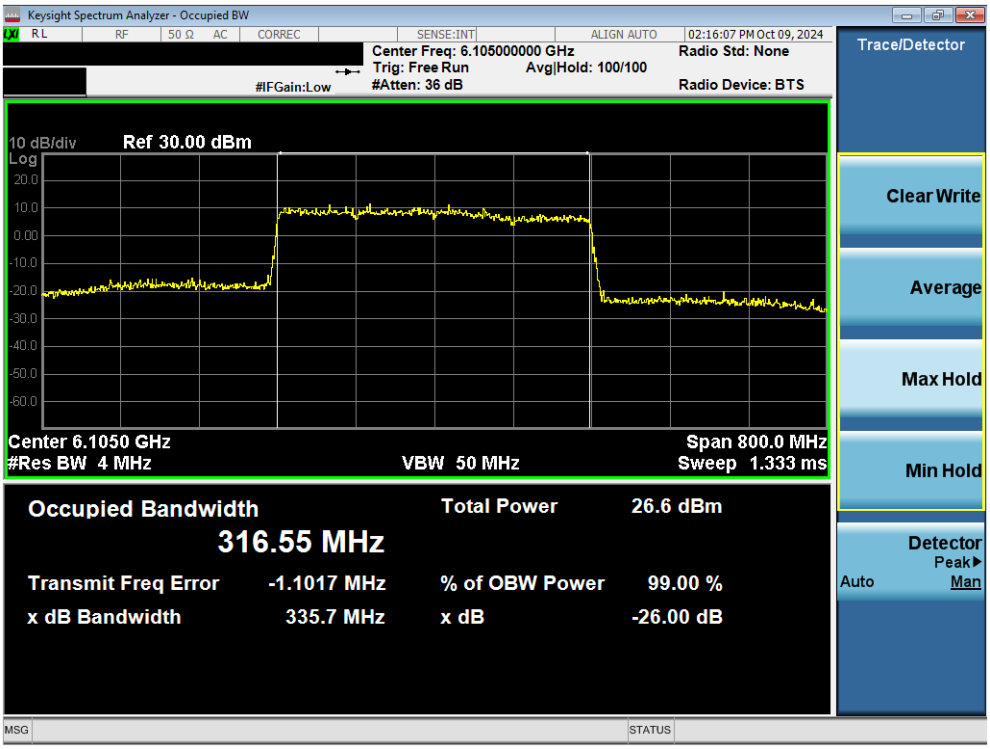
Plot 7-37. 26dB Bandwidth Plot MIMO ANT2 (40MHz 802.11ax/be (UNII Band 5) – Ch. 43) - SP



Plot 7-38. 26dB Bandwidth Plot MIMO ANT2 (80MHz 802.11ax/be (UNII Band 5) – Ch. 39) - SP

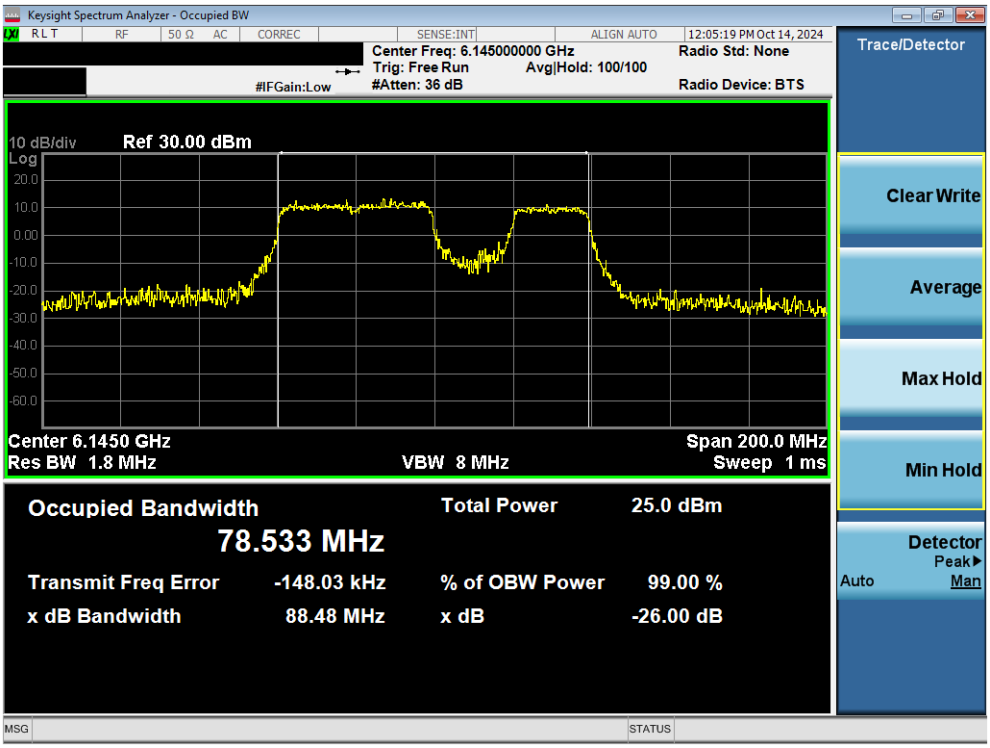


Plot 7-39. 26dB Bandwidth Plot MIMO ANT2 (160MHz 802.11ax/be (UNII Band 5) – Ch. 47) - SP

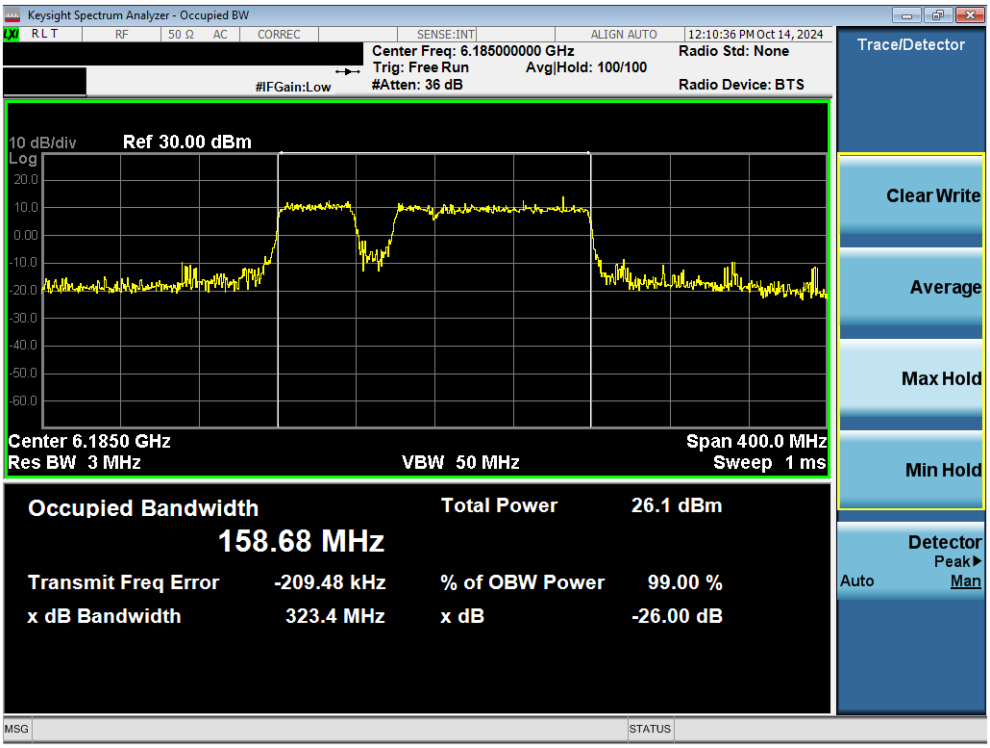


Plot 7-40. 26dB Bandwidth Plot MIMO ANT2 (320MHz 802.11ax/be (UNII Band 5) – Ch. 31) - SP

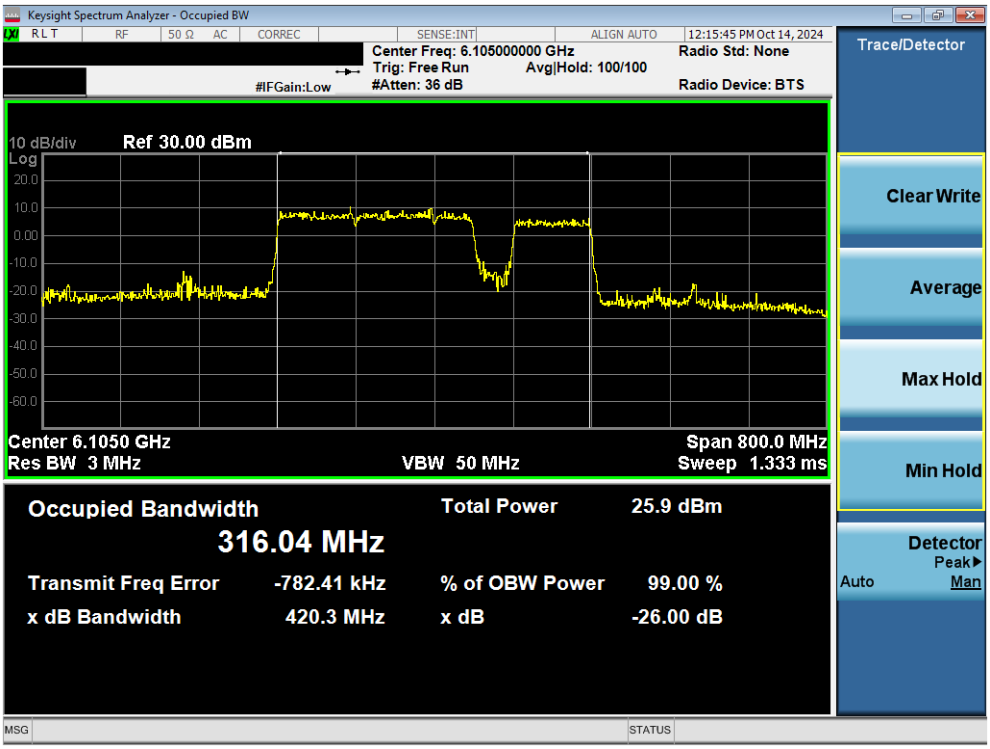
Standard Power (Punctured) Operation



Plot 7-41. 26dB Bandwidth Plot MIMO ANT2 (80MHz 802.11ax/be (UNII Band 5) – Ch. 39) – 20MHz Punctured - SP



Plot 7-42. 26dB Bandwidth Plot MIMO ANT2 (160MHz 802.11ax/be (UNII Band 5) – Ch. 47) – 20MHz Punctured - SP



Plot 7-43. 26dB Bandwidth Plot MIMO ANT2 (320MHz 802.11ax/be (UNII Band 5) – Ch. 31) – 40MHz Punctured - SP

7.4 UNII Output Power Measurement

Test Overview and Limits

A transmitter antenna terminal of the EUT is connected to the input of an RF pulse power sensor. Measurement is made using a broadband average power meter while the EUT is operating at its maximum duty cycle, at its maximum power control level, as defined in ANSI C63.10-2013 and KDB 789033 D02 v02r01, and at the appropriate frequencies.

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. For client devices operating under the control of a standard power access point, the maximum e.i.r.p. over the frequency band of operation must not exceed 30 dBm and the device must limit its power to no more than 6 dB below its associated standard power access point's authorized transmit power.

Test Procedure Used

ANSI C63.10-2013 – Section 12.3.3.2 Method PM-G
ANSI C63.10-2013 – Section 14.2 Measure-and-Sum Technique

Test Settings

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter. The trace was averaged over 100 traces to obtain the final measured average power.

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

Figure 7-2. Test Instrument & Measurement Setup

Test Notes

None.

SISO ANT1 Maximum Conducted Output Power Measurements

6GHz WIFI (20MHz 802.11a SISO ANT1)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	5935	2	7.06	-6.40	0.66	24.00	-23.34
	5955	1	7.28	-6.40	0.88	24.00	-23.12
	6175	45	7.01	-6.40	0.61	24.00	-23.39
	6415	93	7.04	-6.40	0.64	24.00	-23.36
UNII-6	6435	97	7.12	-6.13	0.99	24.00	-23.01
	6475	105	7.21	-6.13	1.08	24.00	-22.92
	6515	113	7.14	-6.13	1.01	24.00	-22.99
UNII-7	6535	117	7.20	-6.12	1.08	24.00	-22.92
	6675	145	7.05	-6.12	0.93	24.00	-23.07
	6695	149	7.09	-6.12	0.97	24.00	-23.03
	6875	185	7.11	-6.12	0.99	24.00	-23.01
UNII-8	6895	189	7.38	-6.78	0.60	24.00	-23.40
	6995	209	7.18	-6.78	0.66	24.00	-23.34
	7115	233	7.72	-6.78	0.61	24.00	-23.39

Table 7-10. SISO ANT1 20MHz BW 802.11a (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (20MHz 802.11ax SISO ANT1)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	5935	2	8.97	-6.40	2.57	24.00	-21.43
	5955	1	10.04	-6.40	3.64	24.00	-20.36
	6175	45	10.27	-6.40	3.87	24.00	-20.13
	6415	93	10.25	-6.40	3.85	24.00	-20.15
UNII-6	6435	97	10.46	-6.13	4.33	24.00	-19.67
	6475	105	10.06	-6.13	3.93	24.00	-20.07
	6515	113	10.46	-6.13	4.33	24.00	-19.67
UNII-7	6535	117	10.01	-6.12	3.89	24.00	-20.11
	6675	145	10.32	-6.12	4.20	24.00	-19.80
	6695	149	10.38	-6.12	4.26	24.00	-19.74
	6875	185	10.22	-6.12	4.10	24.00	-19.90
UNII-8	6895	189	10.26	-6.78	3.48	24.00	-20.52
	6995	209	10.50	-6.78	0.66	24.00	-23.34
	7115	233	10.47	-6.78	0.61	24.00	-23.39

Table 7-11. SISO ANT1 20MHz BW 802.11ax (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (20MHz 802.11be SISO ANT1)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	5935	2	8.99	-6.40	2.59	24.00	-21.41
	5955	1	10.06	-6.40	3.66	24.00	-20.34
	6175	45	10.29	-6.40	3.89	24.00	-20.11
	6415	93	10.27	-6.40	3.87	24.00	-20.13
UNII-6	6435	97	10.48	-6.13	4.35	24.00	-19.65
	6475	105	10.08	-6.13	3.95	24.00	-20.05
	6515	113	10.48	-6.13	4.35	24.00	-19.65
UNII-7	6535	117	10.03	-6.12	3.91	24.00	-20.09
	6675	145	10.34	-6.12	4.22	24.00	-19.78
	6695	149	10.40	-6.12	4.28	24.00	-19.72
	6875	185	10.24	-6.12	4.12	24.00	-19.88
UNII-8	6895	189	10.28	-6.78	3.50	24.00	-20.50
	6995	209	10.52	-6.78	0.66	24.00	-23.34
	7115	233	10.49	-6.78	0.61	24.00	-23.39

Table 7-12. SISO ANT1 20MHz BW 802.11be (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (40MHz 802.11ax SISO ANT1)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	5965	3	10.42	-6.40	4.02	24.00	-19.98
	6165	43	10.07	-6.40	3.67	24.00	-20.33
	6285	67	10.46	-6.40	4.06	24.00	-19.94
	6405	91	10.22	-6.40	3.82	24.00	-20.18
UNII-6	6445	99	10.17	-6.13	4.04	24.00	-19.96
	6485	107	10.37	-6.13	4.24	24.00	-19.76
	6525	115	10.19	-6.12	4.07	24.00	-19.93
UNII-7	6565	123	10.27	-6.12	4.15	24.00	-19.85
	6685	147	10.10	-6.12	3.98	24.00	-20.02
	6725	155	10.21	-6.12	4.09	24.00	-19.91
	6845	179	10.43	-6.12	4.31	24.00	-19.69
UNII-8	6885	187	10.52	-6.78	3.74	24.00	-20.26
	7005	211	10.47	-6.78	3.69	24.00	-20.31
	7085	227	10.58	-6.78	3.80	24.00	-20.20

Table 7-13. SISO ANT1 40MHz BW 802.11ax (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (40MHz 802.11be SISO ANT1)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	5965	3	10.26	-6.40	3.86	24.00	-20.14
	6165	43	10.36	-6.40	3.96	24.00	-20.04
	6285	67	10.29	-6.40	3.89	24.00	-20.11
	6405	91	10.06	-6.40	3.66	24.00	-20.34
UNII-6	6445	99	10.04	-6.13	3.91	24.00	-20.09
	6485	107	10.21	-6.13	4.08	24.00	-19.92
	6525	115	10.02	-6.12	3.90	24.00	-20.10
UNII-7	6565	123	10.13	-6.12	4.01	24.00	-19.99
	6685	147	10.51	-6.12	4.39	24.00	-19.61
	6725	155	10.02	-6.12	3.90	24.00	-20.10
	6845	179	10.26	-6.12	4.14	24.00	-19.86
UNII-8	6885	187	10.39	-6.78	3.61	24.00	-20.39
	7005	211	10.34	-6.78	3.56	24.00	-20.44
	7085	227	10.42	-6.78	3.64	24.00	-20.36

Table 7-14. SISO ANT1 40MHz BW 802.11be (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (80MHz 802.11ax SISO ANT1)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	5985	7	10.57	-6.40	4.17	24.00	-19.83
	6145	39	10.25	-6.40	3.85	24.00	-20.15
	6305	71	10.10	-6.40	3.70	24.00	-20.30
	6385	87	10.32	-6.40	3.92	24.00	-20.08
UNII-6	6465	103	10.58	-6.13	4.45	24.00	-19.55
UNII-7	6545	119	10.06	-6.12	3.94	24.00	-20.06
	6705	151	10.41	-6.12	4.29	24.00	-19.71
	6785	167	10.35	-6.12	4.23	24.00	-19.77
	6865	183	10.28	-6.12	4.16	24.00	-19.84
UNII-8	6945	199	10.52	-6.78	3.74	24.00	-20.26
	7025	215	10.74	-6.78	3.96	24.00	-20.04

Table 7-15. SISO ANT1 80MHz BW 802.11ax (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (80MHz 802.11be SISO ANT1)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	5985	7	10.53	-6.40	4.13	24.00	-19.87
	6145	39	10.21	-6.40	3.81	24.00	-20.19
	6305	71	10.06	-6.40	3.66	24.00	-20.34
	6385	87	10.28	-6.40	3.88	24.00	-20.12
UNII-6	6465	103	10.54	-6.13	4.41	24.00	-19.59
UNII-7	6545	119	10.02	-6.12	3.90	24.00	-20.10
	6705	151	10.37	-6.12	4.25	24.00	-19.75
	6785	167	10.31	-6.12	4.19	24.00	-19.81
	6865	183	10.24	-6.12	4.12	24.00	-19.88
UNII-8	6945	199	10.48	-6.78	3.70	24.00	-20.30
	7025	215	10.70	-6.78	3.92	24.00	-20.08

Table 7-16. SISO ANT1 80MHz BW 802.11be (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (160MHz 802.11ax SISO ANT1)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	6025	15	10.44	-6.40	4.04	24.00	-19.96
	6185	47	10.17	-6.40	3.77	24.00	-20.23
	6345	79	10.43	-6.40	4.03	24.00	-19.97
UNII-6	6505	111	10.15	-6.12	4.03	24.00	-19.97
UNII-7	6665	143	10.21	-6.12	4.09	24.00	-19.91
	6825	175	10.53	-6.12	4.41	24.00	-19.59
UNII-8	6985	207	10.22	-6.78	3.44	24.00	-20.56

Table 7-17. SISO ANT1 160MHz BW 802.11ax (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (160MHz 802.11be SISO ANT1)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	6025	15	10.28	-6.40	3.88	24.00	-20.12
	6185	47	10.01	-6.40	3.61	24.00	-20.39
	6345	79	10.25	-6.40	3.85	24.00	-20.15
UNII-6	6505	111	10.51	-6.12	4.39	24.00	-19.61
UNII-7	6665	143	10.04	-6.12	3.92	24.00	-20.08
	6825	175	10.37	-6.12	4.25	24.00	-19.75
UNII-8	6985	207	10.06	-6.78	3.28	24.00	-20.72

Table 7-18. SISO ANT1 160MHz BW 802.11be (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (320MHz 802.11be SISO ANT1)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	6105	31	10.19	-6.40	3.79	24.00	-20.21
UNII-5	6265	63	10.24	-6.40	3.84	24.00	-20.16
UNII-6	6425	95	10.30	-6.13	4.17	24.00	-19.83
UNII-7	6585	127	10.30	-6.12	4.18	24.00	-19.82
UNII-7	6745	159	10.45	-6.12	4.33	24.00	-19.67
UNII-8	6905	191	10.12	-6.78	3.34	24.00	-20.66

Table 7-19. SISO ANT1 320MHz BW 802.11be (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (20MHz 802.11a SISO ANT1)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	5935	2	8.21	-6.40	1.81	30.00	-28.19
	5955	1	16.66	-6.40	10.26	30.00	-19.74
	6175	45	16.79	-6.40	10.39	30.00	-19.61
	6415	93	16.74	-6.40	10.34	30.00	-19.66
UNII-7	6535	117	16.80	-6.12	10.68	30.00	-19.32
	6675	145	16.14	-6.12	10.02	30.00	-19.98
	6695	149	16.23	-6.12	10.11	30.00	-19.89

Table 7-20. SISO ANT1 20MHz BW 802.11a (UNII) Maximum Conducted Output Power– SP

6GHz WIFI (20MHz 802.11ax SISO ANT1)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	5935	2	8.76	-6.40	2.36	30.00	-27.64
	5955	1	16.18	-6.40	9.78	30.00	-20.22
	6175	45	16.44	-6.40	10.04	30.00	-19.96
	6415	93	16.45	-6.40	10.05	30.00	-19.95
UNII-7	6535	117	16.64	-6.12	10.52	30.00	-19.48
	6675	145	16.53	-6.12	10.41	30.00	-19.59
	6695	149	16.67	-6.12	10.55	30.00	-19.45

Table 7-21. SISO ANT1 20MHz BW 802.11ax (UNII) Maximum Conducted Output Power– SP

6GHz WIFI (20MHz 802.11be SISO ANT1)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	5935	2	8.52	-6.40	2.12	30.00	-27.88
	5955	1	16.12	-6.40	9.72	30.00	-20.28
	6175	45	16.44	-6.40	10.04	30.00	-19.96
	6415	93	16.46	-6.40	10.06	30.00	-19.94
UNII-7	6535	117	16.69	-6.12	10.57	30.00	-19.43
	6675	145	16.56	-6.12	10.44	30.00	-19.56
	6695	149	16.71	-6.12	10.59	30.00	-19.41

Table 7-22. SISO ANT1 20MHz BW 802.11be (UNII) Maximum Conducted Output Power– SP

6GHz WIFI (40MHz 802.11ax SISO ANT1)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	5965	3	16.04	-6.40	9.64	30.00	-20.36
	6165	43	16.05	-6.40	9.65	30.00	-20.35
	6285	67	16.01	-6.40	9.61	30.00	-20.39
	6405	91	16.06	-6.40	9.66	30.00	-20.34
UNII-7	6565	123	16.50	-6.12	10.38	30.00	-19.62
	6685	147	16.60	-6.12	10.48	30.00	-19.52
	6725	155	16.65	-6.12	10.53	30.00	-19.47
	6845	179	16.53	-6.12	10.41	30.00	-19.59

Table 7-23. SISO ANT1 40MHz BW 802.11ax (UNII) Maximum Conducted Output Power– SP

6GHz WIFI (40MHz 802.11be SISO ANT1)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	5965	3	16.04	-6.40	9.64	30.00	-20.36
	6165	43	16.02	-6.40	9.62	30.00	-20.38
	6285	67	16.01	-6.40	9.61	30.00	-20.39
	6405	91	16.03	-6.40	9.63	30.00	-20.37
UNII-7	6565	123	16.33	-6.12	10.21	30.00	-19.79
	6685	147	16.40	-6.12	10.28	30.00	-19.72
	6725	155	16.55	-6.12	10.43	30.00	-19.57
	6845	179	16.36	-6.12	10.24	30.00	-19.76

Table 7-24. SISO ANT1 40MHz BW 802.11be (UNII) Maximum Conducted Output Power– SP

6GHz WIFI (80MHz 802.11ax SISO ANT1)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	5985	7	16.38	-6.40	9.98	30.00	-20.02
	6145	39	16.05	-6.40	9.65	30.00	-20.35
	6305	71	16.56	-6.40	10.16	30.00	-19.84
	6385	87	16.14	-6.40	9.74	30.00	-20.26
UNII-7	6705	151	16.25	-6.12	10.13	30.00	-19.87
	6785	167	16.38	-6.12	10.26	30.00	-19.74

Table 7-25. SISO ANT1 80MHz BW 802.11ax (UNII) Maximum Conducted Output Power– SP

6GHz WIFI (80MHz 802.11be SISO ANT1)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	5985	7	16.14	-6.40	9.74	30.00	-20.26
	6145	39	16.34	-6.40	9.94	30.00	-20.06
	6305	71	16.20	-6.40	9.80	30.00	-20.20
	6385	87	16.39	-6.40	9.99	30.00	-20.01
UNII-7	6705	151	16.07	-6.12	9.95	30.00	-20.05
	6785	167	16.10	-6.12	9.98	30.00	-20.02

Table 7-26. SISO ANT1 80MHz BW 802.11be (UNII) Maximum Conducted Output Power– SP

6GHz WIFI (160MHz 802.11ax SISO ANT1)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	6025	15	16.07	-6.40	9.67	30.00	-20.33
	6185	47	16.13	-6.40	9.73	30.00	-20.27
	6345	79	16.08	-6.40	9.68	30.00	-20.32
UNII-7	6665	143	16.02	-6.12	9.90	30.00	-20.10

Table 7-27. SISO ANT1 160MHz BW 802.11ax (UNII) Maximum Conducted Output Power– SP

6GHz WIFI (160MHz 802.11be SISO ANT1)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	6025	15	16.41	-6.40	10.01	30.00	-19.99
	6185	47	16.05	-6.40	9.65	30.00	-20.35
	6345	79	16.36	-6.40	9.96	30.00	-20.04
UNII-7	6665	143	16.34	-6.12	10.22	30.00	-19.78

Table 7-28. SISO ANT1 160MHz BW 802.11be (UNII) Maximum Conducted Output Power – SP

6GHz WIFI (320MHz 802.11be SISO ANT1)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	6105	31	16.07	-6.40	9.67	30.00	-20.33
UNII-7	6745	159	16.43	-6.12	10.31	30.00	-19.69

Table 7-29. SISO ANT1 320MHz BW 802.11be (UNII) Maximum Conducted Output Power – SP

SISO ANT2 Maximum Conducted Output Power Measurements

6GHz WIFI (20MHz 802.11a SISO ANT2)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	5935	2	7.22	-5.24	1.98	24.00	-22.02
	5955	1	7.02	-5.24	1.78	24.00	-22.22
	6175	45	7.39	-5.24	2.15	24.00	-21.85
	6415	93	7.22	-5.24	1.98	24.00	-22.02
UNII-6	6435	97	7.16	-5.46	1.70	24.00	-22.30
	6475	105	7.37	-5.46	1.91	24.00	-22.09
	6515	113	7.23	-5.46	1.77	24.00	-22.23
UNII-7	6535	117	7.57	-6.94	0.63	24.00	-23.37
	6675	145	7.24	-6.94	0.30	24.00	-23.70
	6695	149	7.35	-6.94	0.41	24.00	-23.59
	6875	185	7.21	-5.41	1.80	24.00	-22.20
UNII-8	6895	189	7.33	-5.41	1.92	24.00	-22.08
	6995	209	7.32	-5.41	0.66	24.00	-23.34
	7115	233	7.51	-5.41	0.61	24.00	-23.39

Table 7-30. SISO ANT2 20MHz BW 802.11a (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (20MHz 802.11ax SISO ANT2)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	5935	2	8.98	-5.24	3.74	24.00	-20.26
	5955	1	10.08	-5.24	4.84	24.00	-19.16
	6175	45	10.24	-5.24	5.00	24.00	-19.00
	6415	93	10.47	-5.24	5.23	24.00	-18.77
UNII-6	6435	97	10.03	-5.46	4.57	24.00	-19.43
	6475	105	10.20	-5.46	4.74	24.00	-19.26
	6515	113	10.55	-5.46	5.09	24.00	-18.91
UNII-7	6535	117	10.28	-6.94	3.34	24.00	-20.66
	6675	145	10.01	-6.94	3.07	24.00	-20.93
	6695	149	10.13	-6.94	3.19	24.00	-20.81
	6875	185	10.03	-5.41	4.62	24.00	-19.38
UNII-8	6895	189	10.41	-5.41	5.00	24.00	-19.00
	6995	209	10.13	-5.41	0.66	24.00	-23.34
	7115	233	10.33	-5.41	0.61	24.00	-23.39

Table 7-31. SISO ANT2 20MHz BW 802.11ax (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (20MHz 802.11be SISO ANT2)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	5935	2	8.56	-5.24	3.32	24.00	-20.68
	5955	1	10.39	-5.24	5.15	24.00	-18.85
	6175	45	10.22	-5.24	4.98	24.00	-19.02
	6415	93	10.47	-5.24	5.23	24.00	-18.77
UNII-6	6435	97	10.51	-5.46	5.05	24.00	-18.95
	6475	105	10.18	-5.46	4.72	24.00	-19.28
	6515	113	10.52	-5.46	5.06	24.00	-18.94
UNII-7	6535	117	10.29	-6.94	3.35	24.00	-20.65
	6675	145	10.57	-6.94	3.63	24.00	-20.37
	6695	149	10.09	-6.94	3.15	24.00	-20.85
	6875	185	10.16	-5.41	4.75	24.00	-19.25
UNII-8	6895	189	10.38	-5.41	4.97	24.00	-19.03
	6995	209	10.14	-5.41	0.66	24.00	-23.34
	7115	233	10.34	-5.41	0.61	24.00	-23.39

Table 7-32. SISO ANT2 20MHz BW 802.11be (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (40MHz 802.11ax SISO ANT2)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	5965	3	10.51	-5.24	5.27	24.00	-18.73
	6165	43	10.58	-5.24	5.34	24.00	-18.66
	6285	67	10.55	-5.24	5.31	24.00	-18.69
	6405	91	10.20	-5.24	4.96	24.00	-19.04
UNII-6	6445	99	10.40	-5.46	4.94	24.00	-19.06
	6485	107	10.57	-5.46	5.11	24.00	-18.89
	6525	115	10.18	-5.46	4.72	24.00	-19.28
UNII-7	6565	123	10.10	-6.94	3.16	24.00	-20.84
	6685	147	10.40	-6.94	3.46	24.00	-20.54
	6725	155	10.22	-6.94	3.28	24.00	-20.72
	6845	179	10.44	-6.94	3.50	24.00	-20.50
UNII-8	6885	187	10.11	-5.41	4.70	24.00	-19.30
	7005	211	10.41	-5.41	5.00	24.00	-19.00
	7085	227	10.75	-5.41	5.34	24.00	-18.66

Table 7-33. SISO ANT2 40MHz BW 802.11ax (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (40MHz 802.11be SISO ANT2)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	5965	3	10.32	-5.24	5.08	24.00	-18.92
	6165	43	10.42	-5.24	5.18	24.00	-18.82
	6285	67	10.42	-5.24	5.18	24.00	-18.82
	6405	91	10.05	-5.24	4.81	24.00	-19.19
UNII-6	6445	99	10.22	-5.46	4.76	24.00	-19.24
	6485	107	10.41	-5.46	4.95	24.00	-19.05
	6525	115	10.01	-5.46	4.55	24.00	-19.45
UNII-7	6565	123	10.64	-6.94	3.70	24.00	-20.30
	6685	147	10.24	-6.94	3.30	24.00	-20.70
	6725	155	10.06	-6.94	3.12	24.00	-20.88
	6845	179	10.33	-6.94	3.39	24.00	-20.61
UNII-8	6885	187	10.60	-5.41	5.19	24.00	-18.81
	7005	211	10.34	-5.41	4.93	24.00	-19.07
	7085	227	10.64	-5.41	5.23	24.00	-18.77

Table 7-34. SISO ANT2 40MHz BW 802.11be (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (80MHz 802.11ax SISO ANT2)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	5985	7	10.17	-5.24	4.93	24.00	-19.07
	6145	39	10.28	-5.24	5.04	24.00	-18.96
	6305	71	10.18	-5.24	4.94	24.00	-19.06
	6385	87	10.08	-5.24	4.84	24.00	-19.16
UNII-6	6465	103	10.92	-5.46	5.46	24.00	-18.54
UNII-7	6545	119	10.43	-5.46	4.97	24.00	-19.03
	6705	151	10.35	-6.94	3.41	24.00	-20.59
	6785	167	10.33	-6.94	3.39	24.00	-20.61
	6865	183	10.39	-5.41	4.98	24.00	-19.02
UNII-8	6945	199	10.92	-5.41	5.51	24.00	-18.49
	7025	215	10.99	-5.41	5.58	24.00	-18.42

Table 7-35. SISO ANT2 80MHz BW 802.11ax (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (80MHz 802.11be SISO ANT2)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	5985	7	10.23	-5.24	4.99	24.00	-19.01
	6145	39	10.34	-5.24	5.10	24.00	-18.90
	6305	71	10.24	-5.24	5.00	24.00	-19.00
	6385	87	10.14	-5.24	4.90	24.00	-19.10
UNII-6	6465	103	10.98	-5.46	5.52	24.00	-18.48
UNII-7	6545	119	10.49	-5.46	5.03	24.00	-18.97
	6705	151	10.41	-6.94	3.47	24.00	-20.53
	6785	167	10.39	-6.94	3.45	24.00	-20.55
	6865	183	10.45	-5.41	5.04	24.00	-18.96
UNII-8	6945	199	10.98	-5.41	5.57	24.00	-18.43
	7025	215	10.99	-5.41	5.58	24.00	-18.42

Table 7-36. SISO ANT2 80MHz BW 802.11be (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (160MHz 802.11ax SISO ANT2)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	6025	15	10.36	-5.24	5.12	24.00	-18.88
	6185	47	10.32	-5.24	5.08	24.00	-18.92
	6345	79	10.43	-5.24	5.19	24.00	-18.81
UNII-6	6505	111	10.15	-5.46	4.69	24.00	-19.31
UNII-7	6665	143	10.27	-6.94	3.33	24.00	-20.67
	6825	175	10.52	-5.41	5.11	24.00	-18.89
UNII-8	6985	207	10.44	-5.41	5.03	24.00	-18.97

Table 7-37. SISO ANT2 160MHz BW 802.11ax (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (160MHz 802.11be SISO ANT2)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	6025	15	10.17	-5.24	4.93	24.00	-19.07
	6185	47	10.15	-5.24	4.91	24.00	-19.09
	6345	79	10.27	-5.24	5.03	24.00	-18.97
UNII-6	6505	111	10.63	-5.46	5.17	24.00	-18.83
UNII-7	6665	143	10.10	-6.94	3.16	24.00	-20.84
	6825	175	10.34	-6.94	3.40	24.00	-20.60
UNII-8	6985	207	10.26	-5.41	4.85	24.00	-19.15

Table 7-38. SISO ANT2 160MHz BW 802.11be (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (320MHz 802.11be SISO ANT2)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	6105	31	10.28	-5.24	5.04	24.00	-18.96
UNII-5	6265	63	10.05	-5.24	4.81	24.00	-19.19
UNII-6	6425	95	10.16	-5.46	4.70	24.00	-19.30
UNII-7	6585	127	10.16	-6.94	3.22	24.00	-20.78
UNII-7	6745	159	10.08	-6.94	3.14	24.00	-20.86
UNII-8	6905	191	10.43	-5.41	5.02	24.00	-18.98

Table 7-39. SISO ANT2 320MHz BW 802.11be (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (20MHz 802.11a SISO ANT2)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	5935	2	8.66	-5.24	3.42	30.00	-26.58
	5955	1	16.72	-5.24	11.48	30.00	-18.52
	6175	45	16.69	-5.24	11.45	30.00	-18.55
	6415	93	16.88	-5.24	11.64	30.00	-18.36
UNII-7	6535	117	16.81	-6.94	9.87	30.00	-20.13
	6675	145	16.31	-6.94	9.37	30.00	-20.63
	6695	149	16.46	-6.94	9.52	30.00	-20.48

Table 7-40. SISO ANT2 20MHz BW 802.11a (UNII) Maximum Conducted Output Power– SP

6GHz WIFI (20MHz 802.11ax SISO ANT2)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	5935	2	8.99	-5.24	3.75	30.00	-26.25
	5955	1	16.52	-5.24	11.28	30.00	-18.72
	6175	45	16.52	-5.24	11.28	30.00	-18.72
	6415	93	16.72	-5.24	11.48	30.00	-18.52
UNII-7	6535	117	16.67	-6.94	9.73	30.00	-20.27
	6675	145	16.68	-6.94	9.74	30.00	-20.26
	6695	149	16.81	-6.94	9.87	30.00	-20.13

Table 7-41. SISO ANT2 20MHz BW 802.11ax (UNII) Maximum Conducted Output Power– SP

6GHz WIFI (20MHz 802.11be SISO ANT2)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	5935	2	8.78	-5.24	3.54	30.00	-26.46
	5955	1	16.52	-5.24	11.28	30.00	-18.72
	6175	45	16.52	-5.24	11.28	30.00	-18.72
	6415	93	16.71	-5.24	11.47	30.00	-18.53
UNII-7	6535	117	16.64	-6.94	9.70	30.00	-20.30
	6675	145	16.64	-6.94	9.70	30.00	-20.30
	6695	149	16.80	-6.94	9.86	30.00	-20.14

Table 7-42. SISO ANT2 20MHz BW 802.11be (UNII) Maximum Conducted Output Power– SP

6GHz WIFI (40MHz 802.11ax SISO ANT2)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	5965	3	16.91	-5.24	11.67	30.00	-18.33
	6165	43	16.84	-5.24	11.60	30.00	-18.40
	6285	67	16.99	-5.24	11.75	30.00	-18.25
	6405	91	16.89	-5.24	11.65	30.00	-18.35
UNII-7	6565	123	16.99	-6.94	10.05	30.00	-19.95
	6685	147	16.59	-6.94	9.65	30.00	-20.35
	6725	155	16.75	-6.94	9.81	30.00	-20.19
	6845	179	16.85	-6.94	9.91	30.00	-20.09

Table 7-43. SISO ANT2 40MHz BW 802.11ax (UNII) Maximum Conducted Output Power– SP

6GHz WIFI (40MHz 802.11be SISO ANT2)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	5965	3	16.79	-5.24	11.55	30.00	-18.45
	6165	43	16.71	-5.24	11.47	30.00	-18.53
	6285	67	16.99	-5.24	11.75	30.00	-18.25
	6405	91	16.98	-5.24	11.74	30.00	-18.26
UNII-7	6565	123	16.90	-6.94	9.96	30.00	-20.04
	6685	147	16.47	-6.94	9.53	30.00	-20.47
	6725	155	16.62	-6.94	9.68	30.00	-20.32
	6845	179	16.69	-6.94	9.75	30.00	-20.25

Table 7-44. SISO ANT2 40MHz BW 802.11be (UNII) Maximum Conducted Output Power– SP

6GHz WIFI (80MHz 802.11ax SISO ANT2)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	5985	7	16.84	-5.24	11.60	30.00	-18.40
	6145	39	16.68	-5.24	11.44	30.00	-18.56
	6305	71	16.93	-5.24	11.69	30.00	-18.31
	6385	87	16.96	-5.24	11.72	30.00	-18.28
UNII-7	6705	151	16.87	-6.94	9.93	30.00	-20.07
	6785	167	16.88	-6.94	9.94	30.00	-20.06

Table 7-45. SISO ANT2 80MHz BW 802.11ax (UNII) Maximum Conducted Output Power– SP

6GHz WIFI (80MHz 802.11be SISO ANT2)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	5985	7	16.53	-5.24	11.29	30.00	-18.71
	6145	39	16.88	-5.24	11.64	30.00	-18.36
	6305	71	16.71	-5.24	11.47	30.00	-18.53
	6385	87	16.56	-5.24	11.32	30.00	-18.68
UNII-7	6705	151	16.99	-6.94	10.05	30.00	-19.95
	6785	167	16.98	-6.94	10.04	30.00	-19.96

Table 7-46. SISO ANT2 80MHz BW 802.11be (UNII) Maximum Conducted Output Power– SP

6GHz WIFI (160MHz 802.11ax SISO ANT2)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	6025	15	16.55	-5.24	11.31	30.00	-18.69
	6185	47	16.28	-5.24	11.04	30.00	-18.96
	6345	79	16.45	-5.24	11.21	30.00	-18.79
UNII-7	6665	143	16.55	-6.94	9.61	30.00	-20.39

Table 7-47. SISO ANT2 160MHz BW 802.11ax (UNII) Maximum Conducted Output Power– SP

6GHz WIFI (160MHz 802.11be SISO ANT2)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	6025	15	16.43	-5.24	11.19	30.00	-18.81
	6185	47	16.09	-5.24	10.85	30.00	-19.15
	6345	79	16.24	-5.24	11.00	30.00	-19.00
UNII-7	6665	143	16.35	-6.94	9.41	30.00	-20.59

Table 7-48. SISO ANT2 160MHz BW 802.11be (UNII) Maximum Conducted Output Power – SP

6GHz WIFI (320MHz 802.11be SISO ANT2)				Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq. [MHz]	Channel	Avg. Conducted Power [dBm]				
UNII-5	6105	31	16.30	-5.24	11.06	30.00	-18.94
UNII-7	6745	159	16.22	-6.94	9.28	30.00	-20.72

Table 7-49. SISO ANT2 320MHz BW 802.11be (UNII) Maximum Conducted Output Power – SP

MIMO Maximum Conducted Output Power Measurements

6GHz WIFI (20MHz 802.11a MIMO)						Directional Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq [MHz]	Channel	Avg. Conducted Powers [dBm]						
			ANT1	ANT2	MIMO				
UNII-5	5935	2	7.30	7.54	10.43	-2.79	7.64	24.00	-16.36
	5955	1	7.25	7.71	10.50	-2.79	7.71	24.00	-16.29
	6175	45	7.05	7.25	10.16	-2.79	7.37	24.00	-16.63
	6415	93	7.08	7.56	10.34	-2.79	7.55	24.00	-16.45
UNII-6	6435	97	7.17	7.68	10.44	-2.78	7.66	24.00	-16.34
	6475	105	7.05	7.92	10.52	-2.78	7.74	24.00	-16.26
	6515	113	7.08	7.86	10.50	-2.78	7.72	24.00	-16.28
UNII-7	6535	117	7.05	7.65	10.37	-3.51	6.86	24.00	-17.14
	6675	145	7.54	7.84	10.70	-3.51	7.19	24.00	-16.81
	6695	149	7.11	7.51	10.32	-3.51	6.81	24.00	-17.19
	6875	185	7.11	7.69	10.42	-3.51	6.91	24.00	-17.09
UNII-8	6895	189	7.54	7.55	10.56	-3.06	7.50	24.00	-16.50
	6995	209	7.45	7.56	10.52	-3.06	7.46	24.00	-16.54
	7115	233	7.94	7.75	10.86	-3.06	7.80	24.00	-16.20

Table 7-50. MIMO 20MHz BW 802.11a (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (20MHz 802.11ax MIMO)						Directional Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq [MHz]	Channel	Avg. Conducted Powers [dBm]						
			ANT1	ANT2	MIMO				
UNII-5	5935	2	8.01	8.55	11.30	-2.79	8.51	24.00	-15.49
	5955	1	10.05	10.44	13.26	-2.79	10.47	24.00	-13.53
	6175	45	10.46	10.99	13.74	-2.79	10.95	24.00	-13.05
	6415	93	10.06	10.87	13.49	-2.79	10.70	24.00	-13.30
UNII-6	6435	97	10.21	10.98	13.62	-2.78	10.84	24.00	-13.16
	6475	105	10.02	10.76	13.42	-2.78	10.64	24.00	-13.36
	6515	113	10.08	10.72	13.42	-2.78	10.64	24.00	-13.36
UNII-7	6535	117	10.41	10.99	13.72	-3.51	10.21	24.00	-13.79
	6675	145	10.49	10.75	13.63	-3.51	10.12	24.00	-13.88
	6695	149	10.60	10.86	13.74	-3.51	10.23	24.00	-13.77
	6875	185	10.05	10.56	13.32	-3.51	9.81	24.00	-14.19
UNII-8	6895	189	10.97	10.90	13.95	-3.06	10.89	24.00	-13.11
	6995	209	10.32	10.71	13.53	-3.06	10.47	24.00	-13.53
	7115	233	10.85	10.71	13.79	-3.06	10.73	24.00	-13.27

Table 7-51. MIMO 20MHz BW 802.11ax (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (20MHz 802.11be MIMO)						Directional Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq [MHz]	Channel	Avg. Conducted Powers [dBm]						
			ANT1	ANT2	MIMO				
UNII-5	5935	2	8.21	8.88	11.57	-2.79	8.78	24.00	-15.22
	5955	1	10.20	10.79	13.52	-2.79	10.73	24.00	-13.27
	6175	45	10.02	10.91	13.50	-2.79	10.71	24.00	-13.29
	6415	93	10.01	10.72	13.39	-2.79	10.60	24.00	-13.40
UNII-6	6435	97	10.18	10.87	13.55	-2.78	10.77	24.00	-13.23
	6475	105	10.05	10.98	13.55	-2.78	10.77	24.00	-13.23
	6515	113	10.02	10.32	13.18	-2.78	10.40	24.00	-13.60
UNII-7	6535	117	10.02	10.69	13.38	-3.51	9.87	24.00	-14.13
	6675	145	10.64	10.79	13.73	-3.51	10.22	24.00	-13.78
	6695	149	10.77	10.91	13.85	-3.51	10.34	24.00	-13.66
	6875	185	10.71	10.93	13.83	-3.51	10.32	24.00	-13.68
UNII-8	6895	189	10.82	10.32	13.59	-3.06	10.53	24.00	-13.47
	6995	209	10.56	10.62	13.60	-3.06	10.54	24.00	-13.46
	7115	233	10.99	10.87	13.94	-3.06	10.88	24.00	-13.12

Table 7-52. MIMO 20MHz BW 802.11be (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (40MHz 802.11ax MIMO)						Directional Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq [MHz]	Channel	Avg. Conducted Powers [dBm]						
			ANT1	ANT2	MIMO				
UNII-5	5965	3	10.01	10.69	13.37	-2.79	10.58	24.00	-13.42
	6165	43	10.01	10.86	13.47	-2.79	10.68	24.00	-13.32
	6285	67	10.03	10.99	13.55	-2.79	10.76	24.00	-13.24
	6405	91	10.33	10.99	13.68	-2.79	10.89	24.00	-13.11
UNII-6	6445	99	10.39	10.99	13.71	-2.78	10.93	24.00	-13.07
	6485	107	10.63	10.99	13.82	-2.78	11.04	24.00	-12.96
	6525	115	10.47	10.98	13.74	-2.78	10.96	24.00	-13.04
UNII-7	6565	123	10.58	10.97	13.79	-3.51	10.28	24.00	-13.72
	6685	147	10.58	10.77	13.69	-3.51	10.18	24.00	-13.82
	6725	155	10.65	10.94	13.81	-3.51	10.30	24.00	-13.70
	6845	179	10.96	10.99	13.99	-3.51	10.48	24.00	-13.52
UNII-8	6885	187	10.99	10.63	13.82	-3.06	10.76	24.00	-13.24
	7005	211	10.99	10.97	13.99	-3.06	10.93	24.00	-13.07
	7085	227	10.97	10.98	13.99	-3.06	10.93	24.00	-13.07

Table 7-53. MIMO 40MHz BW 802.11ax (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (40MHz 802.11be MIMO)						Directional Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq [MHz]	Channel	Avg. Conducted Powers [dBm]						
			ANT1	ANT2	MIMO				
UNII-5	5965	3	10.40	10.66	13.54	-2.79	10.75	24.00	-13.25
	6165	43	10.01	10.29	13.16	-2.79	10.37	24.00	-13.63
	6285	67	10.03	10.65	13.36	-2.79	10.57	24.00	-13.43
	6405	91	10.15	10.58	13.38	-2.79	10.59	24.00	-13.41
UNII-6	6445	99	10.24	10.77	13.52	-2.78	10.74	24.00	-13.26
	6485	107	10.44	10.95	13.71	-2.78	10.93	24.00	-13.07
	6525	115	10.29	10.73	13.53	-2.78	10.75	24.00	-13.25
UNII-7	6565	123	10.43	10.71	13.58	-3.51	10.07	24.00	-13.93
	6685	147	10.99	10.70	13.86	-3.51	10.35	24.00	-13.65
	6725	155	10.97	10.93	13.96	-3.51	10.45	24.00	-13.55
	6845	179	10.82	10.59	13.72	-3.51	10.21	24.00	-13.79
UNII-8	6885	187	10.93	10.09	13.54	-3.06	10.48	24.00	-13.52
	7005	211	10.89	10.46	13.69	-3.06	10.63	24.00	-13.37
	7085	227	10.94	10.79	13.88	-3.06	10.82	24.00	-13.18

Table 7-54. MIMO 40MHz BW 802.11be (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (80MHz 802.11ax MIMO)						Directional Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq [MHz]	Channel	Avg. Conducted Powers [dBm]						
			ANT1	ANT2	MIMO				
UNII-5	5985	7	10.12	10.84	13.51	-2.79	10.72	24.00	-13.28
	6145	39	10.01	10.68	13.37	-2.79	10.58	24.00	-13.42
	6305	71	10.02	10.96	13.53	-2.79	10.74	24.00	-13.26
	6385	87	10.02	10.97	13.53	-2.79	10.74	24.00	-13.26
II-6	6465	103	10.27	10.99	13.66	-2.78	10.88	24.00	-13.12
UNII-7	6545	119	10.31	10.92	13.64	-2.78	10.86	24.00	-13.14
	6705	151	10.29	10.62	13.47	-3.51	9.96	24.00	-14.04
	6785	167	10.31	10.41	13.37	-3.51	9.86	24.00	-14.14
	6865	183	10.89	10.25	13.59	-3.06	10.53	24.00	-13.47
UNII-8	6945	199	10.76	10.44	13.61	-3.06	10.55	24.00	-13.45
	7025	215	10.91	10.65	13.79	-3.06	10.73	24.00	-13.27

Table 7-55. MIMO 80MHz BW 802.11ax (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (80MHz 802.11be MIMO)						Directional Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq [MHz]	Channel	Avg. Conducted Powers [dBm]						
			ANT1	ANT2	MIMO				
UNII-5	5985	7	10.01	10.47	13.26	-2.79	10.47	24.00	-13.53
	6145	39	10.07	10.68	13.40	-2.79	10.61	24.00	-13.39
	6305	71	10.01	10.59	13.32	-2.79	10.53	24.00	-13.47
	6385	87	10.09	10.65	13.39	-2.79	10.60	24.00	-13.40
II-6	6465	103	10.01	10.84	13.46	-2.78	10.68	24.00	-13.32
UNII-7	6545	119	10.04	10.54	13.31	-2.78	10.53	24.00	-13.47
	6705	151	10.57	10.85	13.72	-3.51	10.21	24.00	-13.79
	6785	167	10.35	10.44	13.41	-3.51	9.90	24.00	-14.10
	6865	183	10.55	10.03	13.31	-3.06	10.25	24.00	-13.75
UNII-8	6945	199	10.43	10.21	13.33	-3.06	10.27	24.00	-13.73
	7025	215	10.61	10.42	13.53	-3.06	10.47	24.00	-13.53

Table 7-56. MIMO 80MHz BW 802.11be (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (160MHz 802.11ax MIMO)								Directional Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq [MHz]	Channel	Avg. Conducted Powers [dBm]			Per ANT Target	MIMO Target				
			ANT1	ANT2	MIMO						
UNII-5	6025	15	10.31	10.99	13.67	10.0	13.0	-2.79	10.88	24.00	-13.12
	6185	47	10.07	10.80	13.46	10.0	13.0	-2.79	10.67	24.00	-13.33
	6345	79	10.09	10.82	13.48	10.0	13.0	-2.79	10.69	24.00	-13.31
II-6	6505	111	10.05	10.88	13.50	10.0	13.0	-2.78	10.72	24.00	-13.28
UNII-7	6665	143	10.77	10.70	13.75	10.0	13.0	-3.51	10.24	24.00	-13.76
	6825	175	10.76	10.68	13.73	10.0	13.0	-3.06	10.67	24.00	-13.33
II-8	6985	207	10.44	10.56	13.51	10.0	13.0	-3.06	10.45	24.00	-13.55

Table 7-57. MIMO 160MHz BW 802.11ax (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (160MHz 802.11be MIMO)								Directional Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq [MHz]	Channel	Avg. Conducted Powers [dBm]			Per ANT Target	MIMO Target				
			ANT1	ANT2	MIMO						
UNII-5	6025	15	10.15	10.87	13.54	10.0	13.0	-2.79	10.75	24.00	-13.25
	6185	47	10.05	10.63	13.36	10.0	13.0	-2.79	10.57	24.00	-13.43
	6345	79	10.04	10.66	13.37	10.0	13.0	-2.79	10.58	24.00	-13.42
II-6	6505	111	10.08	10.71	13.42	10.0	13.0	-2.78	10.64	24.00	-13.36
UNII-7	6665	143	10.58	10.55	13.58	10.0	13.0	-3.51	10.07	24.00	-13.93
	6825	175	10.55	10.51	13.54	10.0	13.0	-3.06	10.48	24.00	-13.52
II-8	6985	207	10.26	10.40	13.34	10.0	13.0	-3.06	10.28	24.00	-13.72

Table 7-58. MIMO 160MHz BW 802.11be (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (320MHz 802.11be MIMO)						Directional Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq [MHz]	Channel	Avg. Conducted Powers [dBm]						
			ANT1	ANT2	MIMO				
II-5	6105	31	10.02	10.77	13.42	-2.79	10.63	24.00	-13.37
II-5	6265	63	10.07	10.66	13.39	-2.79	10.60	24.00	-13.40
II-6	6425	95	10.03	10.79	13.44	-2.78	10.66	24.00	-13.34
II-7	6585	127	10.05	10.99	13.56	-3.51	10.05	24.00	-13.95
II-7	6745	159	10.17	10.72	13.46	-3.51	9.95	24.00	-14.05
II-8	6905	191	10.01	10.49	13.27	-3.06	10.21	24.00	-13.79

Table 7-59. MIMO 320MHz BW 802.11be (UNII) Maximum Conducted Output Power – LPI

6GHz WIFI (20MHz 802.11a MIMO)						Directional Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq [MHz]	Channel	Avg. Conducted Powers [dBm]						
			ANT1	ANT2	MIMO				
UNII-5	5935	2	8.22	8.69	11.47	-2.79	8.68	30.00	-21.32
	5955	1	15.84	16.72	19.31	-2.79	16.52	30.00	-13.48
	6175	45	15.97	16.69	19.36	-2.79	16.57	30.00	-13.43
	6415	93	15.92	16.88	19.44	-2.79	16.65	30.00	-13.35
UNII-7	6535	117	15.98	16.81	19.43	-3.51	15.92	30.00	-14.08
	6675	145	16.14	16.31	19.24	-3.51	15.73	30.00	-14.27
	6695	149	16.23	16.46	19.36	-3.51	15.85	30.00	-14.15

Table 7-60. MIMO 20MHz BW 802.11a (UNII) Maximum Conducted Output Power– SP

6GHz WIFI (20MHz 802.11ax MIMO)						Directional Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq [MHz]	Channel	Avg. Conducted Powers [dBm]						
			ANT1	ANT2	MIMO				
UNII-5	5935	2	8.21	8.99	11.63	-2.79	8.84	30.00	-21.16
	5955	1	15.36	16.52	18.99	-2.79	16.20	30.00	-13.80
	6175	45	15.62	16.52	19.10	-2.79	16.31	30.00	-13.69
	6415	93	15.63	16.72	19.22	-2.79	16.43	30.00	-13.57
UNII-7	6535	117	15.82	16.67	19.28	-3.51	15.77	30.00	-14.23
	6675	145	16.53	16.68	19.62	-3.51	16.11	30.00	-13.89
	6695	149	16.67	16.81	19.75	-3.51	16.24	30.00	-13.76

Table 7-61. MIMO 20MHz BW 802.11ax (UNII) Maximum Conducted Output Power– SP

6GHz WIFI (20MHz 802.11be MIMO)						Directional Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq [MHz]	Channel	Avg. Conducted Powers [dBm]						
			ANT1	ANT2	MIMO				
UNII-5	5935	2	8.32	8.99	11.68	-2.79	8.89	30.00	-21.11
	5955	1	15.30	16.52	18.96	-2.79	16.17	30.00	-13.83
	6175	45	15.62	16.52	19.10	-2.79	16.31	30.00	-13.69
	6415	93	15.64	16.71	19.22	-2.79	16.43	30.00	-13.57
UNII-7	6535	117	15.87	16.64	19.28	-3.51	15.77	30.00	-14.23
	6675	145	16.56	16.64	19.61	-3.51	16.10	30.00	-13.90
	6695	149	16.71	16.80	19.77	-3.51	16.26	30.00	-13.74

Table 7-62. MIMO 20MHz BW 802.11be (UNII) Maximum Conducted Output Power– SP

6GHz WIFI (40MHz 802.11ax MIMO)						Directional Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq [MHz]	Channel	Avg. Conducted Powers [dBm]						
			ANT1	ANT2	MIMO				
UNII-5	5965	3	15.87	16.91	19.43	-2.79	16.64	30.00	-13.36
	6165	43	16.05	16.84	19.47	-2.79	16.68	30.00	-13.32
	6285	67	15.81	16.98	19.44	-2.79	16.65	30.00	-13.35
	6405	91	16.06	16.99	19.56	-2.79	16.77	30.00	-13.23
UNII-7	6565	123	16.50	16.79	19.66	-3.51	16.15	30.00	-13.85
	6685	147	16.60	16.59	19.61	-3.51	16.10	30.00	-13.90
	6725	155	16.65	16.75	19.71	-3.51	16.20	30.00	-13.80
	6845	179	16.53	16.85	19.70	-3.51	16.19	30.00	-13.81

Table 7-63. MIMO 40MHz BW 802.11ax (UNII) Maximum Conducted Output Power– SP

6GHz WIFI (40MHz 802.11be MIMO)						Directional Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq [MHz]	Channel	Avg. Conducted Powers [dBm]						
			ANT1	ANT2	MIMO				
UNII-5	5965	3	15.73	16.79	19.30	-2.79	16.51	30.00	-13.49
	6165	43	15.91	16.71	19.34	-2.79	16.55	30.00	-13.45
	6285	67	15.64	16.98	19.37	-2.79	16.58	30.00	-13.42
	6405	91	15.93	16.98	19.50	-2.79	16.71	30.00	-13.29
UNII-7	6565	123	16.33	16.90	19.63	-3.51	16.12	30.00	-13.88
	6685	147	16.40	16.47	19.45	-3.51	15.94	30.00	-14.06
	6725	155	16.55	16.62	19.60	-3.51	16.09	30.00	-13.91
	6845	179	16.36	16.69	19.54	-3.51	16.03	30.00	-13.97

Table 7-64. MIMO 40MHz BW 802.11be (UNII) Maximum Conducted Output Power– SP

6GHz WIFI (80MHz 802.11ax MIMO)						Directional Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq [MHz]	Channel	Avg. Conducted Powers [dBm]						
			ANT1	ANT2	MIMO				
UNII-5	5985	7	16.38	16.84	19.63	-2.79	16.84	30.00	-13.16
	6145	39	16.05	16.68	19.39	-2.79	16.60	30.00	-13.40
	6305	71	15.46	16.93	19.27	-2.79	16.48	30.00	-13.52
	6385	87	15.64	16.96	19.36	-2.79	16.57	30.00	-13.43
UNII-7	6705	151	15.75	16.87	19.36	-3.51	15.85	30.00	-14.15
	6785	167	15.88	16.88	19.42	-3.51	15.91	30.00	-14.09

Table 7-65. MIMO 80MHz BW 802.11ax (UNII) Maximum Conducted Output Power– SP

6GHz WIFI (80MHz 802.11be MIMO)						Directional Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq [MHz]	Channel	Avg. Conducted Powers [dBm]						
			ANT1	ANT2	MIMO				
UNII-5	5985	7	16.14	16.53	19.35	-2.79	16.56	30.00	-13.44
	6145	39	16.34	16.88	19.63	-2.79	16.84	30.00	-13.16
	6305	71	15.20	16.71	19.03	-2.79	16.24	30.00	-13.76
	6385	87	15.39	16.56	19.02	-2.79	16.23	30.00	-13.77
UNII-7	6705	151	16.07	16.99	19.56	-3.51	16.05	30.00	-13.95
	6785	167	16.21	16.98	19.62	-3.51	16.11	30.00	-13.89

Table 7-66. MIMO 80MHz BW 802.11be (UNII) Maximum Conducted Output Power– SP

6GHz WIFI (160MHz 802.11ax MIMO)						Directional Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq [MHz]	Channel	Avg. Conducted Powers [dBm]						
			ANT1	ANT2	MIMO				
UNII-5	6025	15	16.44	16.59	19.53	-2.79	16.74	30.00	-13.26
	6185	47	16.30	16.87	19.60	-2.79	16.81	30.00	-13.19
	6345	79	15.65	16.82	19.28	-2.79	16.49	30.00	-13.51
UNII-7	6665	143	16.30	16.90	19.62	-3.51	16.11	30.00	-13.89

Table 7-67. MIMO 160MHz BW 802.11ax (UNII) Maximum Conducted Output Power– SP

6GHz WIFI (160MHz 802.11be MIMO)						Directional Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq [MHz]	Channel	Avg. Conducted Powers [dBm]						
			ANT1	ANT2	MIMO				
UNII-5	6025	15	16.29	16.44	19.38	-2.79	16.59	30.00	-13.41
	6185	47	16.09	16.72	19.43	-2.79	16.64	30.00	-13.36
	6345	79	15.42	16.70	19.12	-2.79	16.33	30.00	-13.67
UNII-7	6665	143	16.08	16.78	19.45	-3.51	15.94	30.00	-14.06

Table 7-68. MIMO 160MHz BW 802.11be (UNII) Maximum Conducted Output Power – SP

6GHz WIFI (320MHz 802.11be MIMO)						Directional Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
Band	Freq [MHz]	Channel	Avg. Conducted Powers [dBm]						
			ANT1	ANT2	MIMO				
II-5	6105	31	15.70	16.71	19.24	-2.79	16.45	30.00	-13.55
II-7	6745	159	16.10	16.55	19.34	-3.51	15.83	30.00	-14.17

Table 7-69. MIMO 320MHz BW 802.11be (UNII) Maximum Conducted Output Power – SP

80MHz BW	Band	Freq [MHz]	Channel	Puncture Size	Average Conducted Power (dBm)									Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
					Puncture Case												
					90			91			93						
					ANT1	ANT2	MIMO	ANT1	ANT2	MIMO	ANT1	ANT2	MIMO				
	5	5985	7	20MHz	10.52	10.99	13.77	10.37	10.80	13.60	10.48	10.95	13.73	-2.79	11.0	24.0	-13.02
		6145	39	20MHz	10.05	10.85	13.48	10.04	10.65	13.37	10.05	10.82	13.46	-2.79	10.7	24.0	-13.31
		6385	87	20MHz	10.06	10.80	13.46	10.05	10.66	13.38	10.02	10.85	13.47	-2.79	10.7	24.0	-13.33
	6	6465	103	20MHz	10.06	10.94	13.53	10.06	10.90	13.51	10.06	10.95	13.54	-2.78	10.8	24.0	-13.24
	7	6545	119	20MHz	10.01	10.45	13.25	10.35	10.98	13.69	10.04	10.37	13.22	-3.51	10.2	24.0	-13.82
		6705	151	20MHz	10.37	10.98	13.70	10.27	10.89	13.60	10.42	10.94	13.70	-3.51	10.2	24.0	-13.81
		6865	183	20MHz	10.36	10.51	13.45	10.27	10.40	13.35	10.37	10.43	13.41	-3.51	9.9	24.0	-14.06
	8	6945	199	20MHz	10.20	10.75	13.49	10.09	10.58	13.35	10.28	10.71	13.51	-3.06	10.5	24.0	-13.55
		7025	215	20MHz	10.20	10.99	13.62	10.02	10.86	13.47	10.06	10.98	13.55	-3.06	10.6	24.0	-13.43

Table 7-70. MIMO 80MHz BW 802.11be (UNII) Maximum Conducted Output Power – 20MHz Puncture– LPI

160MHz BW	Band	Freq [MHz]	Channel	Puncture Size	Average Conducted Power (dBm)									Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
					Puncture Case												
					96			99			1098						
					ANT1	ANT2	MIMO	ANT1	ANT2	MIMO	ANT1	ANT2	MIMO				
	5	6025	15	20MHz	10.02	10.65	13.36	10.19	10.86	13.55	10.26	10.95	13.63	-2.79	10.8	24.0	-13.16
		6185	47	20MHz	10.33	10.96	13.67	10.23	10.83	13.55	10.29	10.98	13.66	-2.79	10.9	24.0	-13.12
		6345	79	20MHz	10.01	10.57	13.31	10.05	10.99	13.56	10.03	10.62	13.35	-2.79	10.8	24.0	-13.23
	6	6505	111	20MHz	10.03	10.94	13.52	10.08	10.80	13.47	10.01	10.88	13.48	-2.78	10.7	24.0	-13.26
	7	6665	143	20MHz	10.20	10.50	13.36	10.14	10.29	13.23	10.23	10.37	13.31	-3.51	9.9	24.0	-14.15
		6825	175	20MHz	10.34	10.74	13.55	10.21	10.58	13.41	10.34	10.61	13.49	-3.51	10.0	24.0	-13.96
	8	6985	207	20MHz	10.05	10.70	13.40	10.25	10.98	13.64	10.08	10.66	13.39	-3.06	10.6	24.0	-13.42

Table 7-71. MIMO 160MHz BW 802.11be (UNII) Maximum Conducted Output Power – 20MHz Puncture– LPI

160MHz BW	Band	Freq [MHz]	Channel	Puncture Size	Average Conducted Power (dBm)									Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
					Puncture Case												
					94			95			1095						
					ANT1	ANT2	MIMO	ANT1	ANT2	MIMO	ANT1	ANT2	MIMO				
	5	6025	15	40MHz	10.08	10.78	13.45	10.15	10.76	13.48	10.05	10.74	13.42	-2.79	10.7	24.0	-13.31
		6185	47	40MHz	10.04	10.68	13.38	10.05	10.95	13.53	10.03	10.74	13.41	-2.79	10.7	24.0	-13.26
		6345	79	40MHz	10.04	10.65	13.37	10.05	10.99	13.56	10.08	10.72	13.42	-2.79	10.8	24.0	-13.23
	6	6505	111	40MHz	10.15	10.99	13.60	10.08	10.78	13.45	10.08	10.97	13.56	-2.78	10.8	24.0	-13.18
	7	6665	143	40MHz	10.25	10.58	13.43	10.39	10.80	13.61	10.70	10.96	13.84	-3.51	10.3	24.0	-13.67
		6825	175	40MHz	10.34	10.85	13.61	10.07	10.55	13.33	10.44	10.73	13.60	-3.51	10.1	24.0	-13.90
	8	6985	207	40MHz	10.08	10.75	13.44	10.11	10.99	13.58	10.02	10.80	13.44	-3.06	10.5	24.0	-13.48

Table 7-72. MIMO 160MHz BW 802.11be (UNII) Maximum Conducted Output Power – 40MHz Puncture – LPI

320MHz BW	Band	Freq [MHz]	Channel	Puncture Size	Average Conducted Power (dBm)									Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
					Puncture Case												
					106			10105			11106						
					ANT1	ANT2	MIMO	ANT1	ANT2	MIMO	ANT1	ANT2	MIMO				
	5	6105	31	40MHz	10.01	10.75	13.41	10.06	10.99	13.56	10.01	10.82	13.44	-2.79	10.8	24.0	-13.23
		6265	63	40MHz	10.05	10.98	13.55	10.05	10.97	13.54	10.04	10.70	13.39	-2.79	10.8	24.0	-13.24
	6	6425	95	40MHz	10.15	10.94	13.57	10.03	10.87	13.48	10.24	10.92	13.60	-2.78	10.8	24.0	-13.17
	7	6585	127	40MHz	10.44	10.99	13.73	10.41	10.92	13.68	10.09	10.65	13.39	-3.51	10.2	24.0	-13.78
		6745	159	40MHz	10.04	10.30	13.18	10.04	10.09	13.08	10.09	10.08	13.10	-3.51	9.7	24.0	-14.33
	8	6905	191	40MHz	10.27	10.65	13.47	10.27	10.47	13.38	10.48	10.70	13.60	-3.06	10.5	24.0	-13.46

Table 7-73. MIMO 320MHz BW 802.11be (UNII) Maximum Conducted Output Power – 40MHz Puncture– LPI

320MHz BW	Band	Freq [MHz]	Channel	Puncture Size	Average Conducted Power (dBm)									Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
					Puncture Case												
					104			10104			11104						
					ANT1	ANT2	MIMO	ANT1	ANT2	MIMO	ANT1	ANT2	MIMO				
	5	6105	31	80MHz	10.02	10.80	13.44	10.01	10.82	13.44	10.03	10.93	13.51	-2.79	10.7	24.0	-13.28
		6265	63	80MHz	10.04	10.62	13.35	10.02	10.99	13.54	10.04	10.70	13.39	-2.79	10.8	24.0	-13.25
	6	6425	95	80MHz	10.26	10.99	13.65	10.02	10.72	13.39	10.30	10.89	13.62	-2.78	10.9	24.0	-13.13
	7	6585	127	80MHz	10.01	10.84	13.46	10.40	10.80	13.61	10.11	10.50	13.32	-3.51	10.1	24.0	-13.90
		6745	159	80MHz	10.15	10.37	13.27	10.50	10.60	13.56	10.77	10.90	13.85	-3.51	10.3	24.0	-13.66
	8	6905	191	80MHz	10.40	10.73	13.58	10.30	10.35	13.34	10.60	10.68	13.65	-3.06	10.6	24.0	-13.41

Table 7-74. MIMO 320MHz BW 802.11be (UNII) Maximum Conducted Output Power – 80MHz Puncture– LPI

320MHz BW	Band	Freq [MHz]	Channel	Puncture Size	Average Conducted Power (dBm)									Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
					Puncture Case												
					101			1101			11102						
					ANT1	ANT2	MIMO	ANT1	ANT2	MIMO	ANT1	ANT2	MIMO				
	5	6105	31	120MHz	10.04	10.99	13.55	10.01	10.82	13.44	10.04	10.99	13.55	-2.79	10.8	24.0	-13.24
		6265	63	120MHz	10.05	10.94	13.53	10.07	10.99	13.56	10.06	10.80	13.46	-2.79	10.8	24.0	-13.23
	6	6425	95	120MHz	10.12	10.56	13.36	10.16	10.56	13.37	10.17	10.67	13.44	-2.78	10.7	24.0	-13.34
	7	6585	127	120MHz	10.02	10.43	13.24	10.23	10.41	13.33	10.04	10.57	13.32	-3.51	9.8	24.0	-14.18
		6745	159	120MHz	10.07	10.40	13.25	10.28	10.43	13.37	10.45	10.59	13.53	-3.51	10.0	24.0	-13.98
	8	6905	191	120MHz	10.76	10.96	13.87	10.99	10.90	13.96	10.66	10.98	13.83	-3.06	10.9	24.0	-13.10

Table 7-75. MIMO 320MHz BW 802.11be (UNII) Maximum Conducted Output Power – 120MHz Puncture– LPI

80MHz BW	Band	Freq [MHz]	Channel	Puncture Size	Average Conducted Power (dBm)									Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
					Puncture Case												
					90			91			93						
					ANT1	ANT2	MIMO	ANT1	ANT2	MIMO	ANT1	ANT2	MIMO				
	5	6145	39	20MHz	15.52	16.73	19.18	15.28	16.60	19.00	15.35	16.70	19.09	-2.79	16.4	24.0	-7.61
	7	6705	151	20MHz	15.96	16.84	19.43	15.90	16.75	19.36	16.00	16.90	19.48	-3.51	16.0	24.0	-8.03

Table 7-76. MIMO 80MHz BW 802.11be (UNII) Maximum Conducted Output Power – 20MHz Puncture– SP

160MHz BW	Band	Freq [MHz]	Channel	Puncture Size	Average Conducted Power (dBm)									Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
					Puncture Case												
					96			99			1098						
					ANT1	ANT2	MIMO	ANT1	ANT2	MIMO	ANT1	ANT2	MIMO				
	5	6025	15	20MHz	15.92	16.60	19.28	16.30	16.80	19.57	16.35	16.99	19.69	-2.79	16.9	24.0	-7.10
	7	6665	143	20MHz	16.20	16.82	19.53	16.10	16.62	19.38	16.18	16.75	19.48	-3.51	16.0	24.0	-7.98

Table 7-77. MIMO 160MHz BW 802.11be (UNII) Maximum Conducted Output Power – 20MHz Puncture– SP

160MHz BW	Band	Freq [MHz]	Channel	Puncture Size	Average Conducted Power (dBm)									Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
					Puncture Case												
					94			95			1095						
					ANT1	ANT2	MIMO	ANT1	ANT2	MIMO	ANT1	ANT2	MIMO				
	5	6025	15	40MHz	15.92	16.65	19.31	16.20	16.80	19.52	15.84	16.70	19.30	-2.79	16.7	24.0	-7.27
	7	6665	143	40MHz	16.25	16.95	19.62	16.00	16.65	19.35	16.40	16.85	19.64	-3.51	16.1	24.0	-7.87

Table 7-78. MIMO 160MHz BW 802.11be (UNII) Maximum Conducted Output Power – 40MHz Puncture – SP

320MHz BW	Band	Freq [MHz]	Channel	Puncture Size	Average Conducted Power (dBm)									Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
					Puncture Case												
					106			10105			11106						
					ANT1	ANT2	MIMO	ANT1	ANT2	MIMO	ANT1	ANT2	MIMO				
	5	6105	31	40MHz	15.30	16.99	19.24	15.23	16.95	19.18	15.40	17.23	19.42	-2.79	16.6	24.0	-7.37
	7	6585	127	40MHz	15.65	16.45	19.08	15.70	16.25	18.99	15.85	16.43	19.16	-3.51	15.6	24.0	-8.35

Table 7-79. MIMO 320MHz BW 802.11be (UNII) Maximum Conducted Output Power – 40MHz Puncture– SP

320MHz BW	Band	Freq [MHz]	Channel	Puncture Size	Average Conducted Power (dBm)									Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
					Puncture Case												
					104			10104			11104						
					ANT1	ANT2	MIMO	ANT1	ANT2	MIMO	ANT1	ANT2	MIMO				
	5	6105	31	80MHz	15.45	16.99	19.30	15.20	16.98	19.19	15.40	17.20	19.40	-2.79	16.6	24.0	-7.39
	7	6585	127	80MHz	15.65	16.60	19.16	16.32	16.52	19.43	16.38	16.85	19.63	-3.51	16.1	24.0	-7.88

Table 7-80. MIMO 320MHz BW 802.11be (UNII) Maximum Conducted Output Power – 80MHz Puncture– SP

320MHz BW	Band	Freq [MHz]	Channel	Puncture Size	Average Conducted Power (dBm)									Dir. Ant. Gain [dBi]	Max e.i.r.p [dBm]	e.i.r.p Limit [dBm]	e.i.r.p Margin [dB]
					Puncture Case												
					101			1101			11102						
					ANT1	ANT2	MIMO	ANT1	ANT2	MIMO	ANT1	ANT2	MIMO				
	5	6105	31	120MHz	15.70	17.40	19.64	15.09	17.12	19.23	15.11	16.77	19.03	-2.79	16.9	24.0	-7.15
	7	6585	127	120MHz	16.04	16.65	19.37	16.26	16.68	19.49	15.90	16.78	19.37	-3.51	16.0	24.0	-8.02

Table 7-81. MIMO 320MHz BW 802.11be (UNII) Maximum Conducted Output Power – 120MHz Puncture– SP

Sample MIMO Calculation:

At 5935MHz in 802.11a (20MHz BW) mode, the average conducted output power was measured to be 9.96 dBm for Antenna-1 and 9.70 dBm for Antenna-2.

Antenna 1 + Antenna 2 = MIMO

(7.96 dBm + 7.70 dBm) = (6.252 mW + 5.888 mW) = 12.140 mW = 10.84 dBm

Sample Directional Gain Calculation:

Per ANSI C63.10-2013 Section 14.4.3, the directional gain is calculated using the following formula, where GN is the gain of the nth antenna and NANT, the total number of antennas used.

$$\text{Directional gain} = 10 \log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}] \text{ dBi}$$

Sample e.i.r.p. Calculation:

At 5935MHz in 802.11a (20MHz BW) mode, the average MIMO conducted power was calculated to be dBm with directional gain of -2.63 dBi.

e.i.r.p. (dBm) = Conducted Power (dBm) + Ant gain (dBi)

10.84 dBm + -2.63 dBi = 9.90 dBm

7.5 Maximum Power Spectral Density

Test Overview and Limit

The spectrum analyzer was connected to the antenna terminal while the EUT was operating at its maximum duty cycle, at its maximum power control level, as defined in ANSI C63.10-2013, and at the appropriate frequencies. Method SA-1, as defined in ANSI C63.10-2013, was used to measure the power spectral density for 802.11a/ax.

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. For client devices, except for fixed client devices as defined in this subpart, operating under the control of a standard power access point in 5.925-6.425 GHz and 6.525-6.875 GHz bands, the maximum power spectral density must not exceed 17 dBm/MHz e.i.r.p.

Test Procedure Used

ANSI C63.10-2013 – Section 12.3.2.2
ANSI C63.10-2013 – Section 14.3.2.2 Measure-and-Sum Technique

Test Settings

1. Analyzer was set to the center frequency of the UNII channel under investigation.
2. Span was set to encompass the entire emission bandwidth of the signal.
3. RBW = 1MHz
4. VBW = 3MHz
5. Number of sweep points ≥ 2 x (span/RBW)
6. Sweep time = auto
7. Detector = power averaging (RMS)
8. Trigger was set to free run for all modes.
9. Trace was averaged over 100 sweeps.
10. The peak search function of the spectrum analyzer was used to find the peak of the spectrum.

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

Figure 7-3. Test Instrument & Measurement Setup

Test Notes

SP 80/160/320MHz BW share same target as LPI 80/160/320MHz BW, and only the emissions from worst case have been reported

MIMO Power Spectral Density Measurements

	Frequency [MHz]	Channel	802.11 MODE	Antenna-1 Power Density [dBm]	Antenna-2 Power Density [dBm]	Antenna-1 Gain [dBi]	Antenna-2 Gain [dBi]	Summed MIMO Power Density [dBm/MHz]	Directional Gain [dBi]	DCCF [dB]	e.i.r.p Density [dBm/MHz]	EIRP Density Limit [dBm/MHz]	Margin [dB]
Band 5	5935	2	a	-2.01	-2.27	-6.40	-5.24	0.87	-2.79	0.28	-1.64	-1	-0.64
	6175	45	a	-1.80	-3.21	-6.40	-5.24	0.56	-2.79	0.28	-1.95	-1	-0.95
	6415	93	a	-1.84	-2.61	-6.40	-5.24	0.81	-2.79	0.28	-1.70	-1	-0.70
	5935	2	be (20MHz)	-1.55	-0.95	-6.40	-5.24	1.77	-2.79	0.00	-1.02	-1	-0.02
	6175	45	be (20MHz)	-1.91	-0.86	-6.40	-5.24	1.66	-2.79	0.00	-1.13	-1	-0.13
	6415	93	be (20MHz)	-1.80	-1.13	-6.40	-5.24	1.56	-2.79	0.00	-1.23	-1	-0.23
	5965	3	be (40MHz)	-2.44	-2.30	-6.40	-5.24	0.64	-2.79	0.00	-2.15	-1	-1.15
	6165	43	be (40MHz)	-2.63	-1.71	-6.40	-5.24	0.87	-2.79	0.00	-1.92	-1	-0.92
	6405	91	be (40MHz)	-2.21	-2.03	-6.40	-5.24	0.90	-2.79	0.00	-1.90	-1	-0.90
	5985	7	be (80MHz)	-5.83	-5.97	-6.40	-5.24	-2.89	-2.79	0.00	-5.68	-1	-4.68
	6145	39	be (80MHz)	-6.25	-5.67	-6.40	-5.24	-2.94	-2.79	0.00	-5.73	-1	-4.73
	6385	87	be (80MHz)	-6.01	-5.76	-6.40	-5.24	-2.87	-2.79	0.00	-5.66	-1	-4.66
	6025	15	be (160MHz)	-9.54	-9.06	-6.40	-5.24	-6.28	-2.79	0.00	-9.07	-1	-8.07
	6185	47	be (160MHz)	-9.43	-8.50	-6.40	-5.24	-5.93	-2.79	0.00	-8.72	-1	-7.72
	6345	79	be (160MHz)	-9.40	-8.40	-6.40	-5.24	-5.86	-2.79	0.00	-8.65	-1	-7.65
	6105	31	be (320MHz)	-11.55	-10.60	-6.40	-5.24	-8.04	-2.79	0.00	-10.83	-1	-9.83
	6265	63	be (320MHz)	-11.30	-10.43	-6.40	-5.24	-7.83	-2.79	0.00	-10.62	-1	-9.62
Band 6	6435	97	a	-1.80	-2.21	-6.13	-5.46	1.01	-2.78	0.28	-1.49	-1	-0.49
	6475	105	a	-1.62	-1.90	-6.13	-5.46	1.25	-2.78	0.28	-1.25	-1	-0.25
	6515	113	a	-1.46	-2.30	-6.13	-5.46	1.15	-2.78	0.28	-1.35	-1	-0.35
	6435	97	be (20MHz)	-2.20	-1.39	-6.13	-5.46	1.23	-2.78	0.00	-1.54	-1	-0.54
	6475	105	be (20MHz)	-2.00	-1.47	-6.13	-5.46	1.28	-2.78	0.00	-1.50	-1	-0.50
	6515	113	be (20MHz)	-1.61	-1.09	-6.13	-5.46	1.67	-2.78	0.00	-1.11	-1	-0.11
	6445	99	be (40MHz)	-2.20	-1.56	-6.13	-5.46	1.14	-2.78	0.00	-1.64	-1	-0.64
	6485	107	be (40MHz)	-2.16	-1.81	-6.13	-5.46	1.02	-2.78	0.00	-1.75	-1	-0.75
	6525	115	be (40MHz)	-2.08	-1.96	-6.13	-5.46	0.99	-2.78	0.00	-1.78	-1	-0.78
	6465	103	be (80MHz)	-5.98	-5.29	-6.13	-5.46	-2.61	-2.78	0.00	-5.39	-1	-4.39
	6505	111	be (160MHz)	-8.97	-8.69	-6.13	-5.46	-5.82	-2.78	0.00	-8.60	-1	-7.60
Band 5/6/7	6425	95	be (320MHz)	-11.32	-9.95	-6.13	-5.46	-7.57	-2.78	0.00	-10.35	-1	-9.35
Band 7	6535	117	a	-1.19	-1.92	-6.12	-6.94	1.47	-3.51	0.28	-1.76	-1	-0.76
	6695	149	a	-1.37	-1.93	-6.12	-6.94	1.37	-3.51	0.28	-1.86	-1	-0.86
	6875	185	a	-1.31	-2.48	-6.12	-6.94	1.15	-3.51	0.28	-2.08	-1	-1.08
	6535	117	be (20MHz)	-0.97	-0.94	-6.12	-6.94	2.06	-3.51	0.00	-1.45	-1	-0.45
	6695	149	be (20MHz)	-0.96	-0.68	-6.12	-6.94	2.19	-3.51	0.00	-1.32	-1	-0.32
	6875	185	be (20MHz)	-1.07	-1.15	-6.12	-6.94	1.90	-3.51	0.00	-1.61	-1	-0.61
	6565	123	be (40MHz)	-2.13	-2.13	-6.12	-6.94	0.88	-3.51	0.00	-2.63	-1	-1.63
	6725	155	be (40MHz)	-2.14	-1.77	-6.12	-6.94	1.06	-3.51	0.00	-2.45	-1	-1.45
	6885	179	be (40MHz)	-1.92	-1.57	-6.12	-6.94	1.27	-3.51	0.00	-2.24	-1	-1.24
	6545	119	be (80MHz)	-6.08	-5.81	-6.12	-6.94	-2.93	-3.51	0.00	-6.44	-1	-5.44
	6705	151	be (80MHz)	-5.87	-5.68	-6.12	-6.94	-2.76	-3.51	0.00	-6.27	-1	-5.27
	6865	183	be (80MHz)	-5.71	-5.36	-6.12	-6.94	-2.52	-3.51	0.00	-6.03	-1	-5.03
	6665	143	be (160MHz)	-8.72	-9.17	-6.12	-6.94	-5.93	-3.51	0.00	-9.44	-1	-8.44
	6825	175	be (160MHz)	-8.83	-8.47	-6.12	-6.94	-5.64	-3.51	0.00	-9.15	-1	-8.15
Band 6/7	6585	127	be (320MHz)	-11.12	-10.51	-6.12	-6.94	-7.79	-3.51	0.00	-11.30	-1	-10.30
Band 7/8	6745	159	be (320MHz)	-10.94	-10.02	-6.12	-6.94	-7.44	-3.51	0.00	-10.95	-1	-9.95
Band 8	6895	189	a	-0.85	-2.21	-6.78	-5.41	1.53	-3.06	0.28	-1.24	-1	-0.24
	6995	209	a	-1.53	-2.11	-6.78	-5.41	1.20	-3.06	0.28	-1.58	-1	-0.58
	7115	233	a	-1.03	-2.08	-6.78	-5.41	1.49	-3.06	0.28	-1.29	-1	-0.29
	6895	189	be (20MHz)	-1.06	-1.12	-6.78	-5.41	1.92	-3.06	0.00	-1.14	-1	-0.14
	6995	209	be (20MHz)	-1.32	-0.80	-6.78	-5.41	1.96	-3.06	0.00	-1.10	-1	-0.10
	7115	233	be (20MHz)	-1.29	-0.77	-6.78	-5.41	1.99	-3.06	0.00	-1.07	-1	-0.07
	6925	187	be (40MHz)	-1.79	-1.69	-6.78	-5.41	1.28	-3.06	0.00	-1.78	-1	-0.78
	7005	211	be (40MHz)	-1.95	-1.64	-6.78	-5.41	1.22	-3.06	0.00	-1.84	-1	-0.84
	7085	227	be (40MHz)	-2.52	-1.50	-6.78	-5.41	1.03	-3.06	0.00	-2.03	-1	-1.03
	6945	199	be (80MHz)	-5.58	-5.55	-6.78	-5.41	-2.55	-3.06	0.00	-5.61	-1	-4.61
	7025	215	be (80MHz)	-5.64	-5.09	-6.78	-5.41	-2.35	-3.06	0.00	-5.41	-1	-4.41
	6985	207	be (160MHz)	-8.77	-8.51	-6.78	-5.41	-5.63	-3.06	0.00	-8.69	-1	-7.69
Band 7/8	6905	191	be (320MHz)	-10.31	-10.08	-6.78	-5.41	-7.18	-3.06	0.00	-10.24	-1	-9.24

Table 7-82. MIMO e.i.r.p. Conducted Power Spectral Density Measurements LPI

	Frequency [MHz]	Channel	802.11 MODE	Puncture Size	Antenna-1 Power Density [dBm]	Antenna-2 Power Density [dBm]	Antenna-1 Gain [dBi]	Antenna-2 Gain [dBi]	Summed MIMO Power Density [dBm/MHz]	Directional Gain [dBi]	e.i.r.p Density [dBm/MHz]	Max EIRP Density [dBm/MHz]	Margin [dB]
Band 5	6145	39	be (80MHz)	20MHz	-4.60	-3.58	-6.40	-5.24	-1.05	-2.79	-3.84	-1	-2.84
	6185	47	be (160MHz)	40MHz	-8.89	-7.35	-6.40	-5.24	-5.04	-2.79	-7.83	-1	-6.83
	6185	47	be (160MHz)	20MHz	-8.54	-6.73	-6.40	-5.24	-4.53	-2.79	-7.32	-1	-6.32
	6105	31	be (320MHz)	120MHz	-12.05	-11.73	-6.40	-5.24	-8.88	-2.79	-11.67	-1	-10.67
Band 6	6465	103	be (80MHz)	20MHz	-4.25	-3.18	-6.13	-5.46	-0.67	-2.78	-3.45	-1	-2.45
	6505	111	be (160MHz)	40MHz	-8.31	-7.35	-6.13	-5.46	-4.80	-2.78	-7.57	-1	-6.57
	6505	111	be (160MHz)	20MHz	-7.80	-6.90	-6.13	-5.46	-4.32	-2.78	-7.10	-1	-6.10
Band 5/6/7	6425	95	be (320MHz)	120MHz	-11.40	-10.54	-6.13	-5.46	-7.94	-2.78	-10.72	-1	-9.72
Band 7	6705	151	be (80MHz)	20MHz	-3.94	-3.34	-6.12	-6.94	-0.62	-3.51	-4.13	-1	-3.13
	6665	143	be (160MHz)	40MHz	-8.26	-8.05	-6.12	-6.94	-5.14	-3.51	-8.65	-1	-7.65
	6665	143	be (160MHz)	20MHz	-7.72	-7.31	-6.12	-6.94	-4.50	-3.51	-8.01	-1	-7.01
Band 7/8	6745	159	be (320MHz)	120MHz	-10.80	-10.31	-6.12	-6.94	-7.54	-3.51	-11.05	-1	-10.05
Band 8	7025	215	be (80MHz)	20MHz	-3.73	-3.35	-6.78	-5.41	-0.53	-3.06	-3.58	-1	-2.58
	6985	207	be (160MHz)	40MHz	-8.16	-7.50	-6.78	-5.41	-4.81	-3.06	-7.87	-1	-6.87
	6985	207	be (160MHz)	20MHz	-7.69	-6.79	-6.78	-5.41	-4.21	-3.06	-7.26	-1	-6.26
Band 7/8	6905	191	be (320MHz)	120MHz	-10.51	-10.26	-6.78	-5.41	-7.37	-3.06	-10.43	-1	-9.43

Table 7-83. MIMO e.i.r.p. Conducted Power Spectral Density Measurements – Punctured Cases LPI

	Frequency [MHz]	Channel	802.11 MODE	Antenna-1 Power Density [dBm]	Antenna-2 Power Density [dBm]	Antenna-1 Gain [dBi]	Antenna-2 Gain [dBi]	Summed MIMO Power Density [dBm/MHz]	Directional Gain [dBi]	e.i.r.p Density [dBm/MHz]	Max EIRP Density [dBm/MHz]	Margin [dB]
Band 5	5935	2	a	5.70	5.88	-6.40	-5.24	8.80	-2.79	6.01	17	-10.99
	6175	45	a	6.62	5.53	-6.40	-5.24	9.12	-2.79	6.33	17	-10.67
	6415	93	a	6.44	6.24	-6.40	-5.24	9.35	-2.79	6.56	17	-10.44
	5935	2	be (20MHz)	4.30	5.48	-6.40	-5.24	7.94	-2.79	5.15	17	-11.85
	6175	45	be (20MHz)	4.33	4.94	-6.40	-5.24	7.65	-2.79	4.86	17	-12.14
	6415	93	be (20MHz)	4.51	5.18	-6.40	-5.24	7.87	-2.79	5.08	17	-11.92
	5965	3	be (40MHz)	2.69	3.47	-6.40	-5.24	6.11	-2.79	3.32	17	-13.68
	6165	43	be (40MHz)	2.58	3.39	-6.40	-5.24	6.01	-2.79	3.22	17	-13.78
	6405	91	be (40MHz)	2.97	3.45	-6.40	-5.24	6.23	-2.79	3.44	17	-13.56
	5985	7	be (80MHz)	-0.91	-0.23	-6.40	-5.24	2.45	-2.79	-0.34	17	-17.34
	6145	39	be (80MHz)	-0.82	-0.46	-6.40	-5.24	2.37	-2.79	-0.42	17	-17.42
	6385	87	be (80MHz)	-1.05	0.42	-6.40	-5.24	2.76	-2.79	-0.03	17	-17.03
	6025	15	be (160MHz)	-4.08	-3.60	-6.40	-5.24	-0.82	-2.79	-3.61	17	-20.61
	6185	47	be (160MHz)	-4.21	-2.90	-6.40	-5.24	-0.49	-2.79	-3.29	17	-20.29
	6345	79	be (160MHz)	-4.65	-3.24	-6.40	-5.24	-0.88	-2.79	-3.67	17	-20.67
	6105	31	be (320MHz)	-6.93	-5.35	-6.40	-5.24	-3.06	-2.79	-5.85	17	-22.85
Band 7	6535	117	a	6.94	6.31	-6.12	-6.94	9.64	-3.51	6.13	17	-10.87
	6695	149	a	6.77	6.16	-6.12	-6.94	9.48	-3.51	5.97	17	-11.03
	6855	181	a	6.82	5.82	-6.12	-6.94	9.36	-3.51	5.85	17	-11.15
	6535	117	be (20MHz)	4.76	5.44	-6.12	-6.94	8.12	-3.51	4.61	17	-12.39
	6695	149	be (20MHz)	4.63	5.66	-6.12	-6.94	8.18	-3.51	4.67	17	-12.33
	6855	181	be (20MHz)	4.87	5.78	-6.12	-6.94	8.36	-3.51	4.85	17	-12.15
	6565	123	be (40MHz)	2.97	4.03	-6.12	-6.94	6.54	-3.51	3.03	17	-13.97
	6725	155	be (40MHz)	3.03	3.71	-6.12	-6.94	6.39	-3.51	2.88	17	-14.12
	6885	179	be (40MHz)	2.91	3.63	-6.12	-6.94	6.30	-3.51	2.79	17	-14.21
	6625	135	be (80MHz)	-0.67	-0.08	-6.12	-6.94	2.64	-3.51	-0.87	17	-17.87
	6705	151	be (80MHz)	-0.78	0.07	-6.12	-6.94	2.68	-3.51	-0.83	17	-17.83
	6785	167	be (80MHz)	-0.63	0.15	-6.12	-6.94	2.79	-3.51	-0.72	17	-17.72
	6665	143	be (160MHz)	-4.48	-3.89	-6.12	-6.94	-1.17	-3.51	-4.68	17	-21.68
Band 7/8	6745	159	be (320MHz)	-6.02	-5.37	-6.12	-6.94	-2.67	-3.51	-6.18	17	-23.18

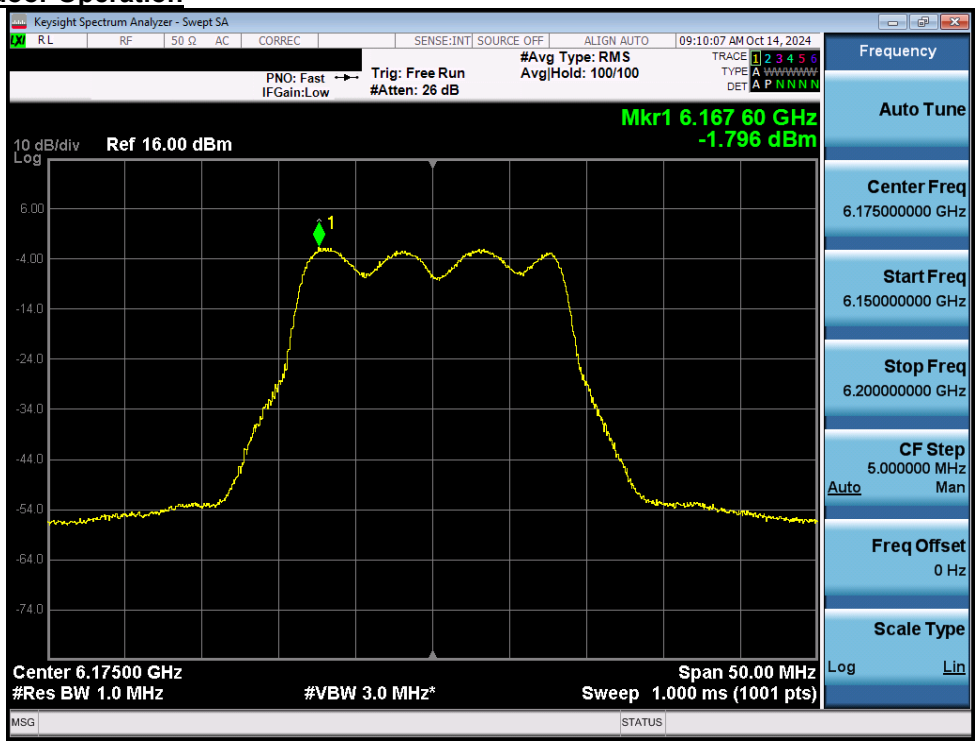
Table 7-84. MIMO e.i.r.p. Conducted Power Spectral Density Measurements SP

	Frequency [MHz]	Channel	802.11 MODE	Puncture Size	Antenna-1 Power Density [dBm]	Antenna-2 Power Density [dBm]	Antenna-1 Gain [dBi]	Antenna-2 Gain [dBi]	Summed MIMO Power Density [dBm/MHz]	Directional Gain [dBi]	e.i.r.p Density [dBm/MHz]	Max EIRP Density [dBm/MHz]	Margin [dB]
Band 5	6145	39	be (80MHz)	20MHz	0.08	0.59	-6.40	-5.24	3.35	-2.79	0.56	17	-16.44
	6185	47	be (160MHz)	40MHz	-3.17	-2.20	-6.40	-5.24	0.35	-2.79	-2.44	17	-19.44
	6105	31	be (320MHz)	120MHz	-4.86	-4.75	-6.40	-5.24	-1.79	-2.79	-4.58	17	-21.58
Band 7	6705	151	be (80MHz)	20MHz	0.91	1.57	-6.12	-6.94	4.26	-3.51	0.75	17	-16.25
	6665	143	be (160MHz)	40MHz	-2.94	-2.27	-6.12	-6.94	0.42	-3.51	-3.09	17	-20.09
Band 7/8	6745	159	be (320MHz)	120MHz	-4.37	-3.43	-6.12	-6.94	-0.87	-3.51	-4.38	17	-21.38

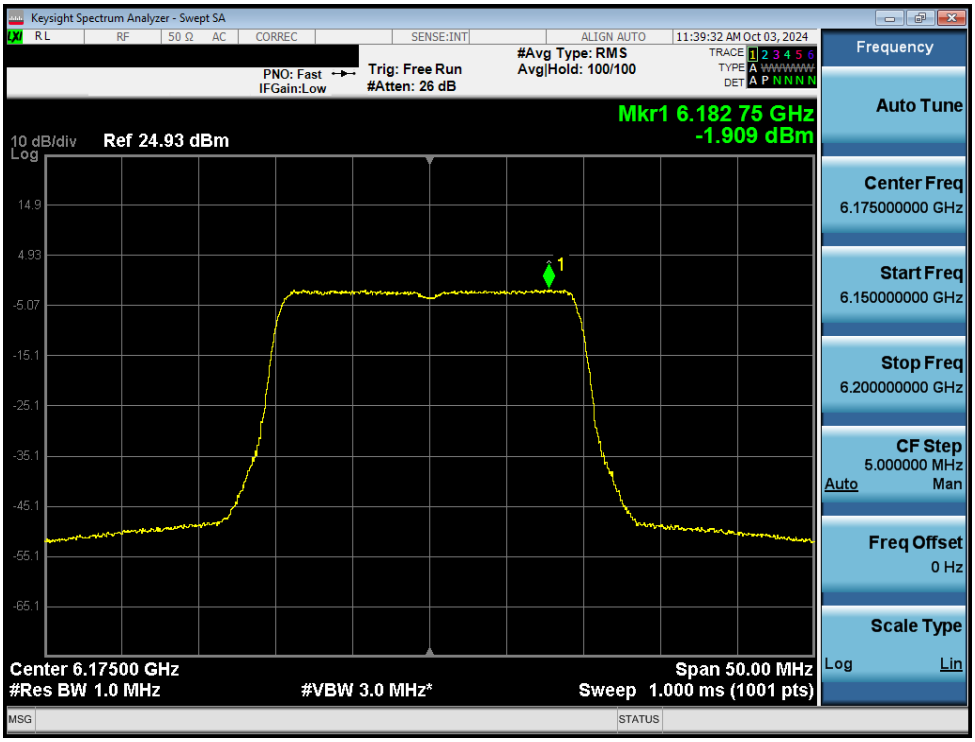
Table 7-85. MIMO e.i.r.p. Conducted Power Spectral Density Measurements – Punctured Cases SP

7.5.1 MIMO Antenna-1 Power Spectral Density Measurement - (UNII Band 5)

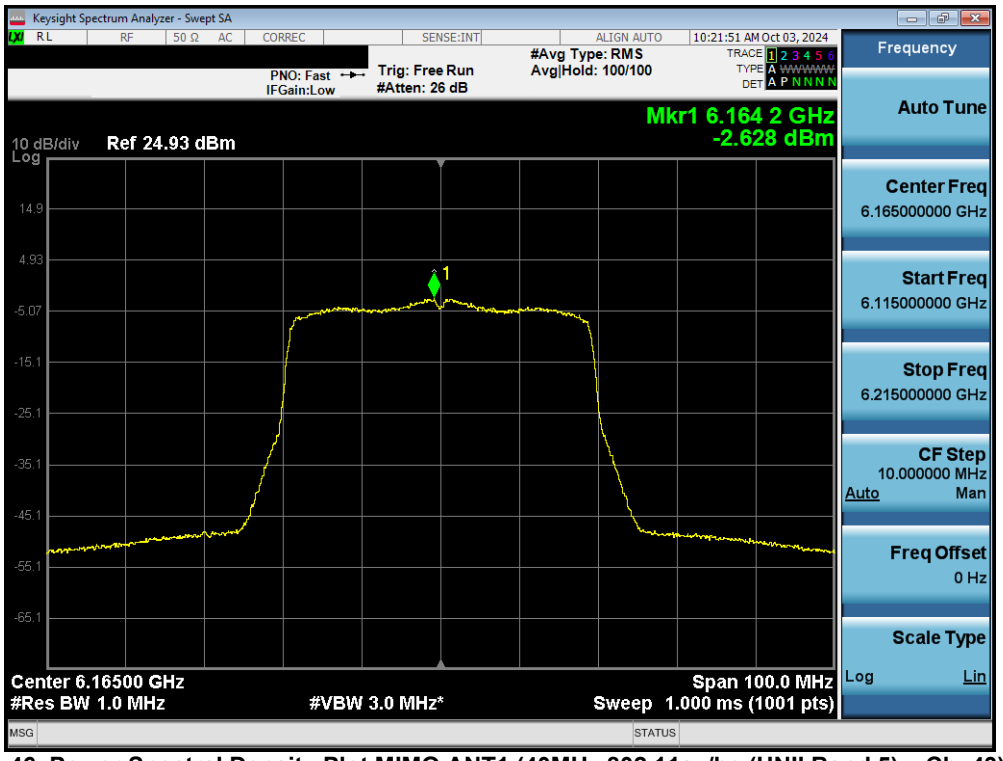
Low Power Indoor Operation



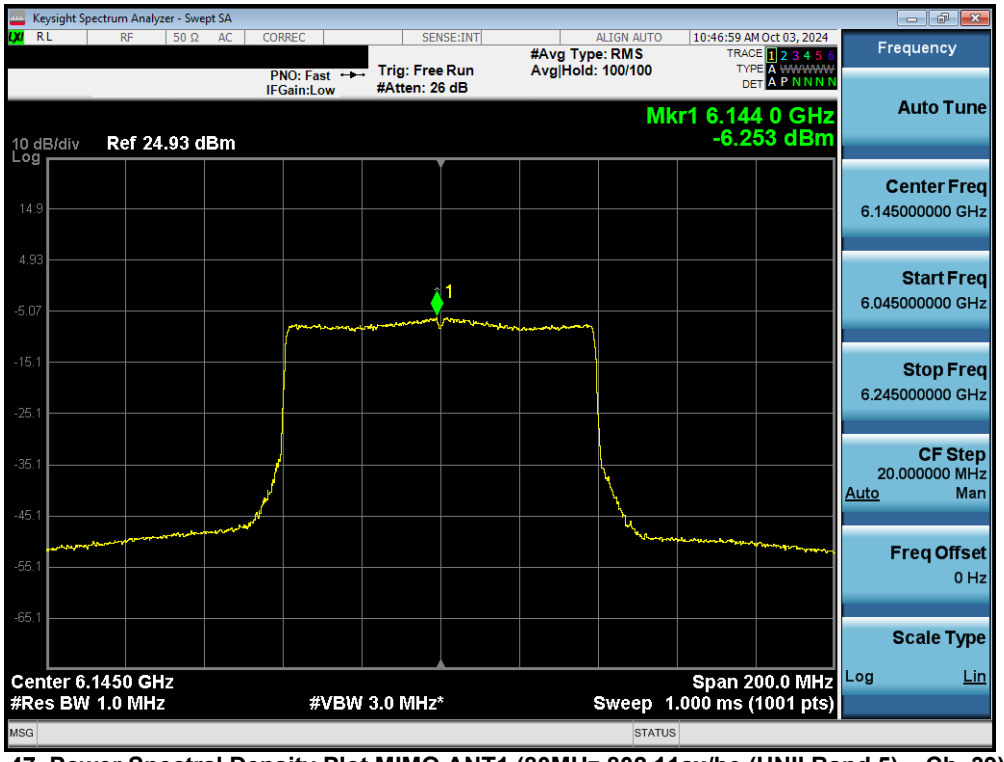
Plot 7-44. Power Spectral Density Plot MIMO ANT1 (20MHz 802.11a (UNII Band 5) – Ch. 45) - LPI



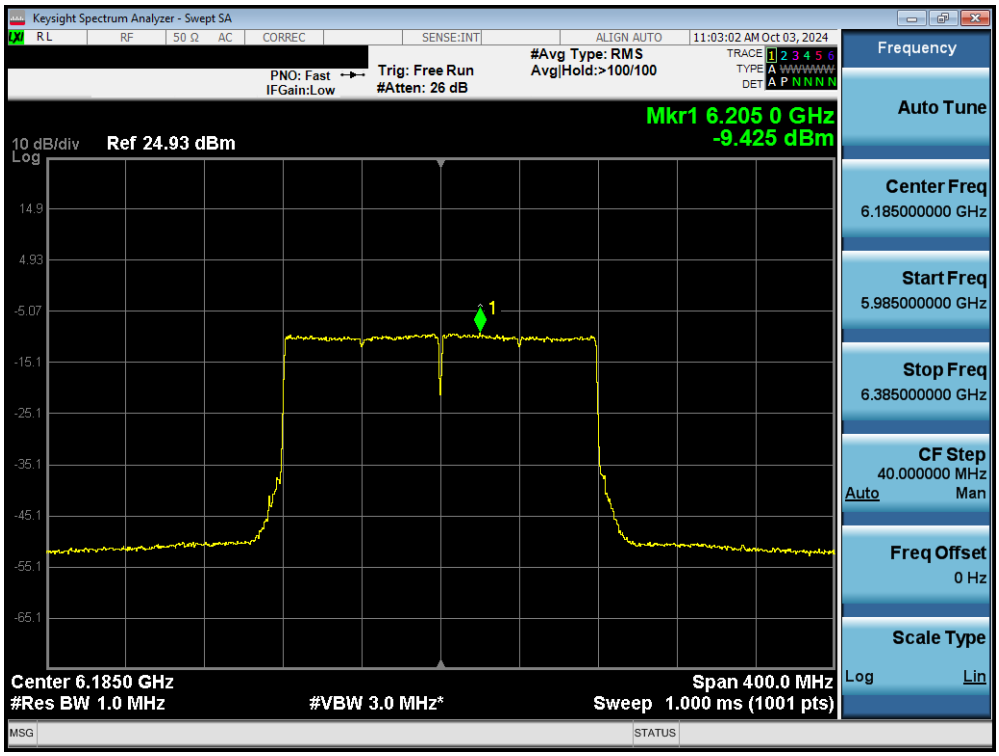
Plot 7-45. Power Spectral Density Plot MIMO ANT1 (20MHz 802.11ax/be (UNII Band 5) – Ch. 45) - LPI



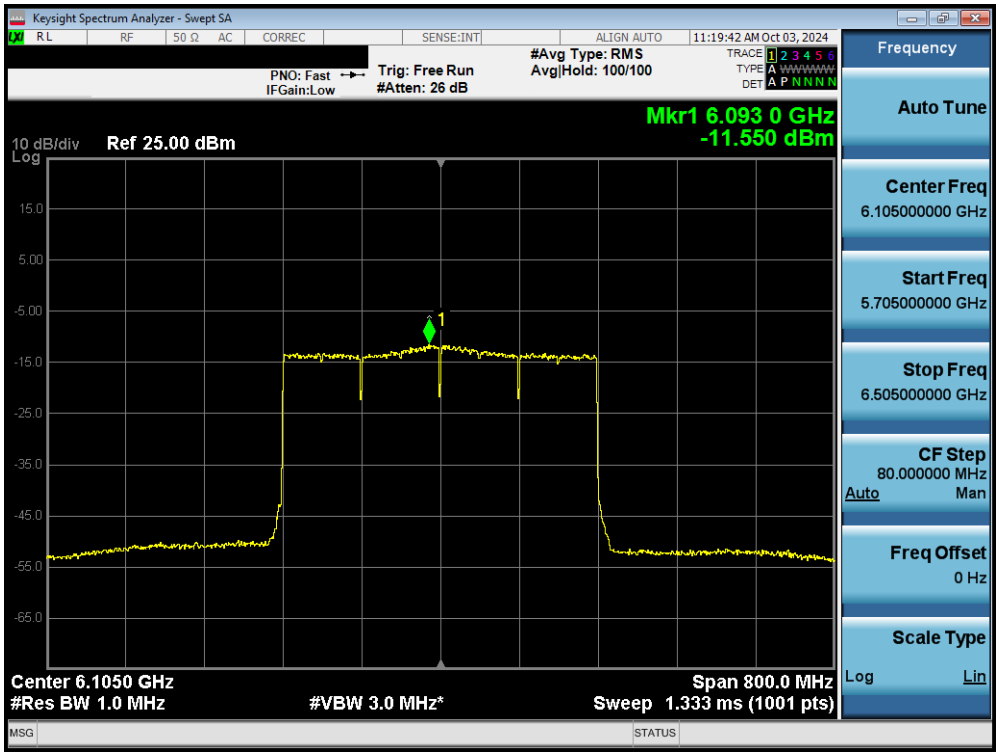
Plot 7-46. Power Spectral Density Plot MIMO ANT1 (40MHz 802.11ax/be (UNII Band 5) – Ch. 43) - LPI



Plot 7-47. Power Spectral Density Plot MIMO ANT1 (80MHz 802.11ax/be (UNII Band 5) – Ch. 39) - LPI

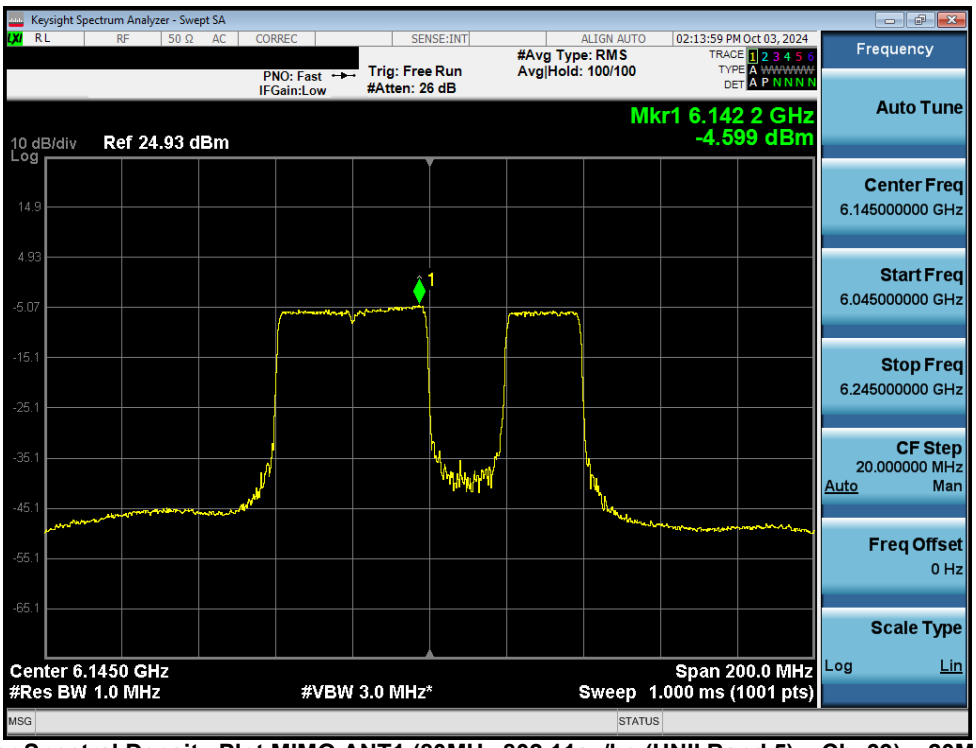


Plot 7-48. Power Spectral Density Plot MIMO ANT1 (160MHz 802.11ax/be (UNII Band 5) – Ch. 47) - LPI

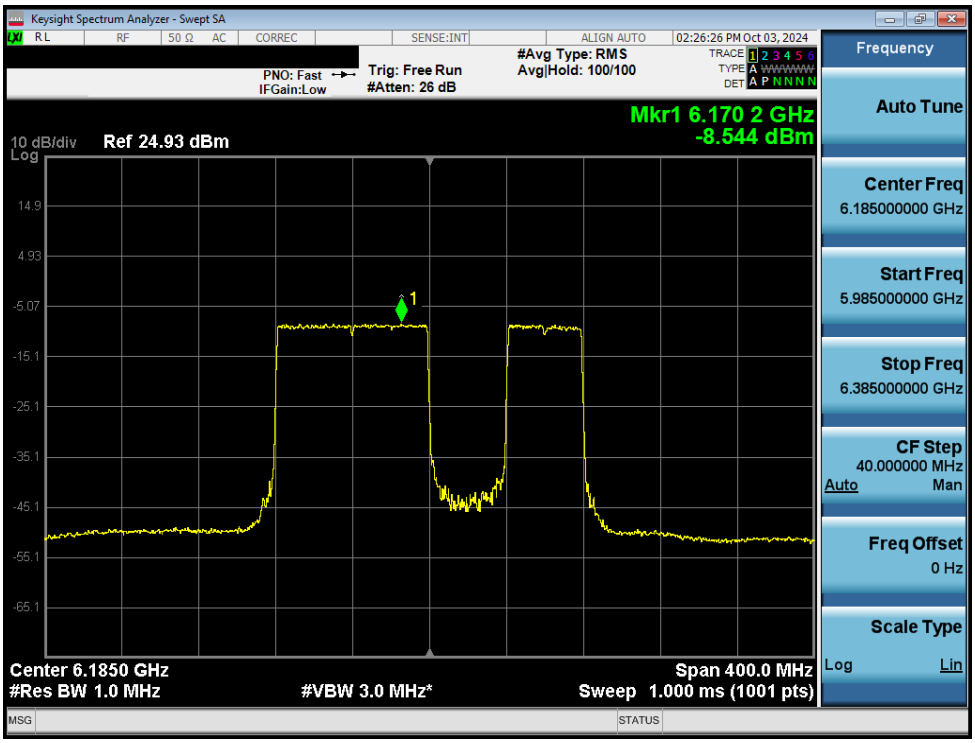


Plot 7-49. Power Spectral Density Plot MIMO ANT1 (320MHz 802.11ax/be (UNII Band 5) – Ch. 31) - LPI

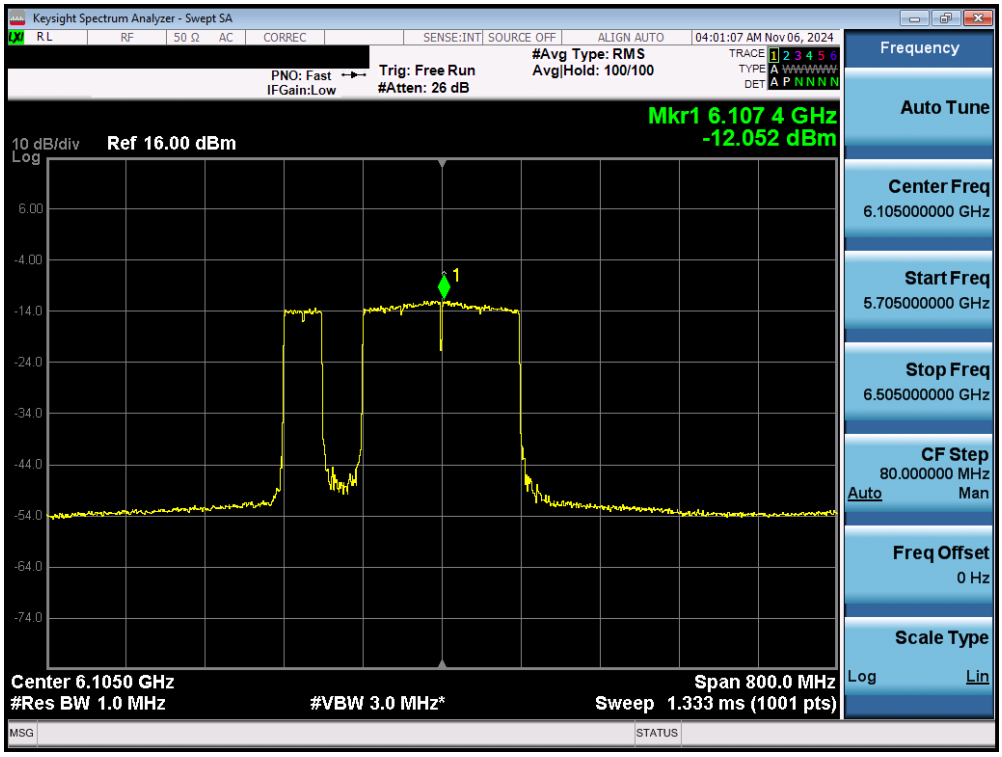
Low Power Indoor (Punctured) Operation



Plot 7-50. Power Spectral Density Plot MIMO ANT1 (80MHz 802.11ax/be (UNII Band 5) – Ch. 39) – 20MHz Punctured - LPI

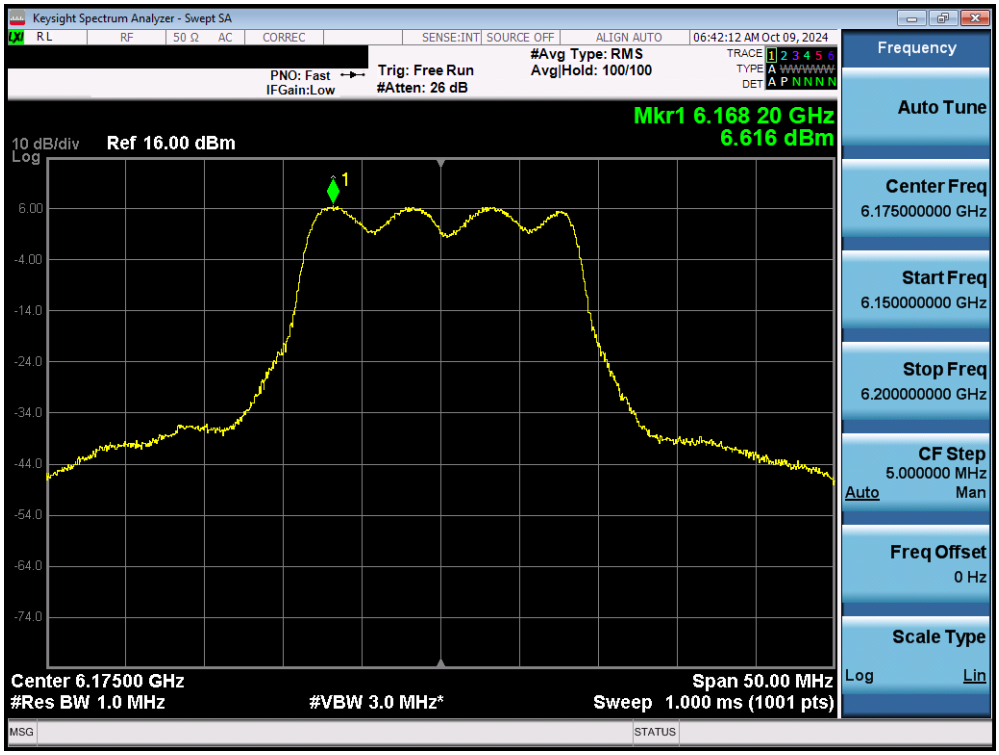


Plot 7-51. Power Spectral Density Plot MIMO ANT1 (160MHz 802.11ax/be (UNII Band 5) – Ch. 47) – 40MHz Punctured - LPI

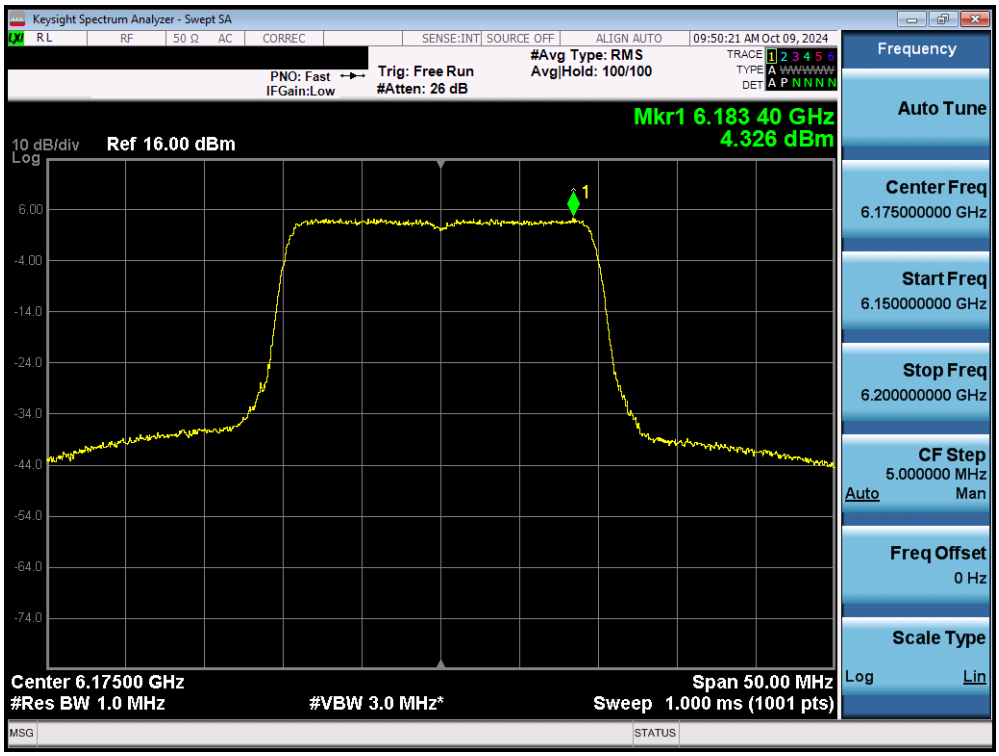


Plot 7-52. Power Spectral Density Plot MIMO ANT1 (320MHz 802.11ax/be (UNII Band 5) – Ch. 31) – 120MHz Punctured – LPI

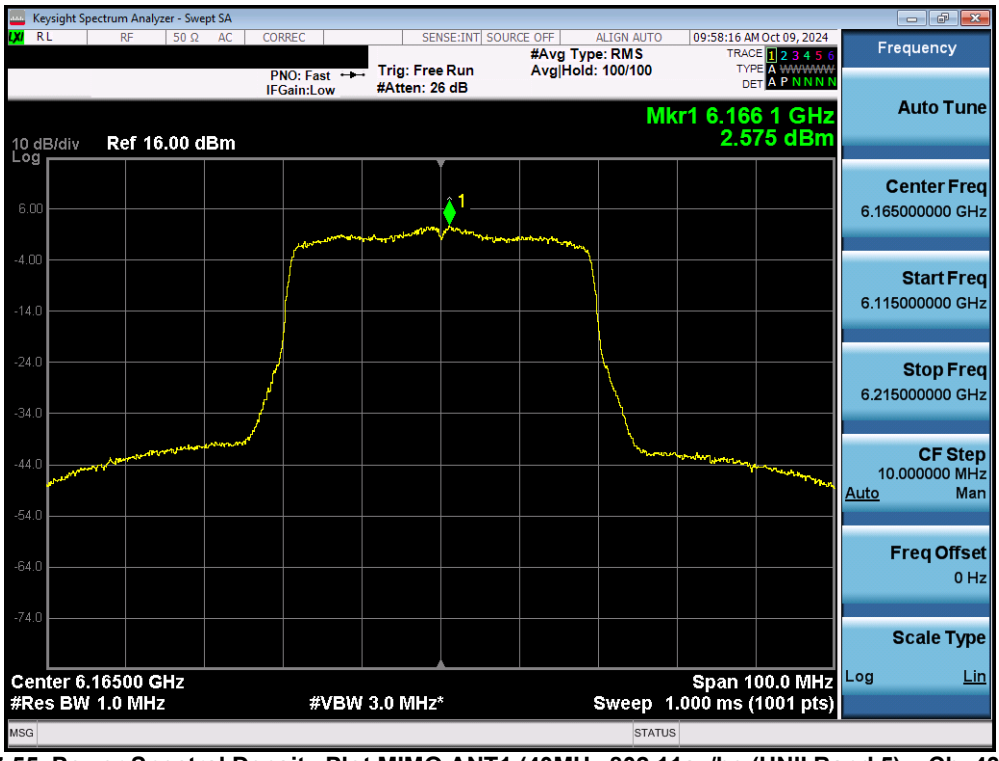
Standard Power Operation



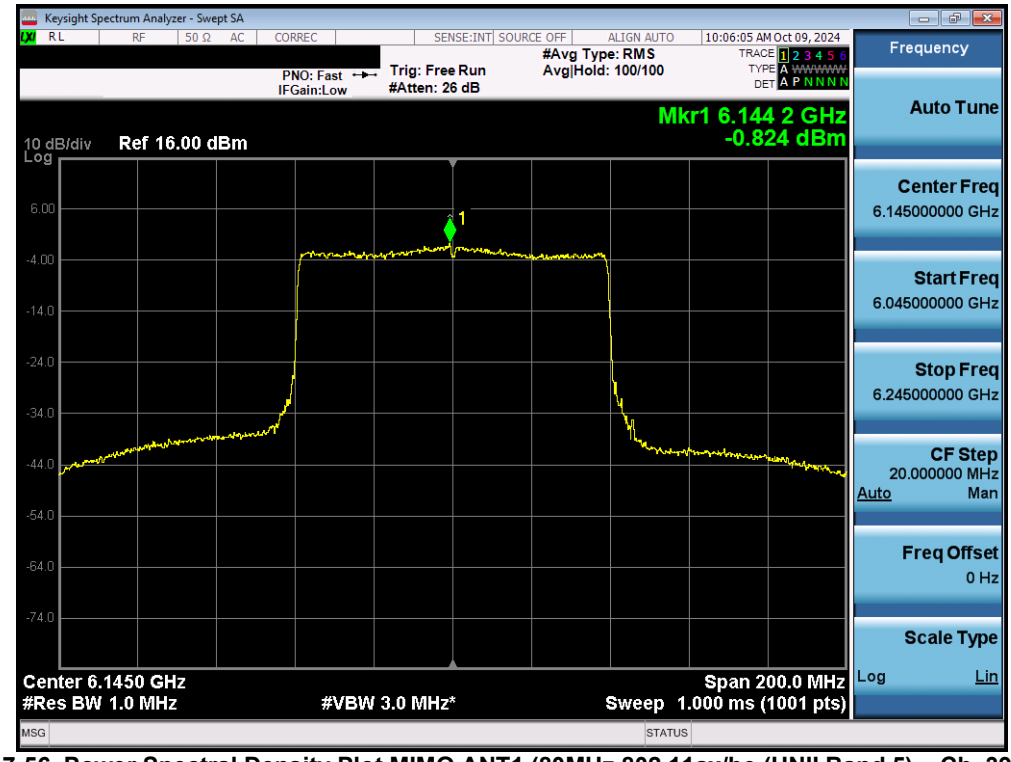
Plot 7-53. Power Spectral Density Plot MIMO ANT1 (20MHz 802.11a (UNII Band 5) – Ch. 45) - SP



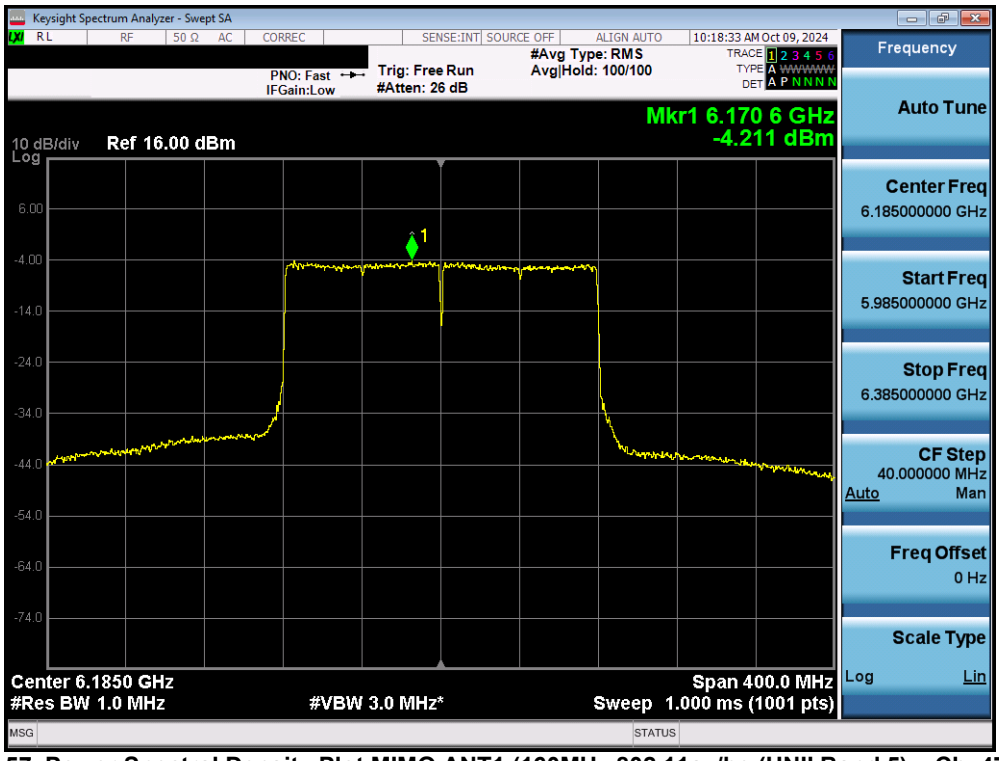
Plot 7-54. Power Spectral Density Plot MIMO ANT1 (20MHz 802.11ax/be (UNII Band 5) – Ch. 45) - SP



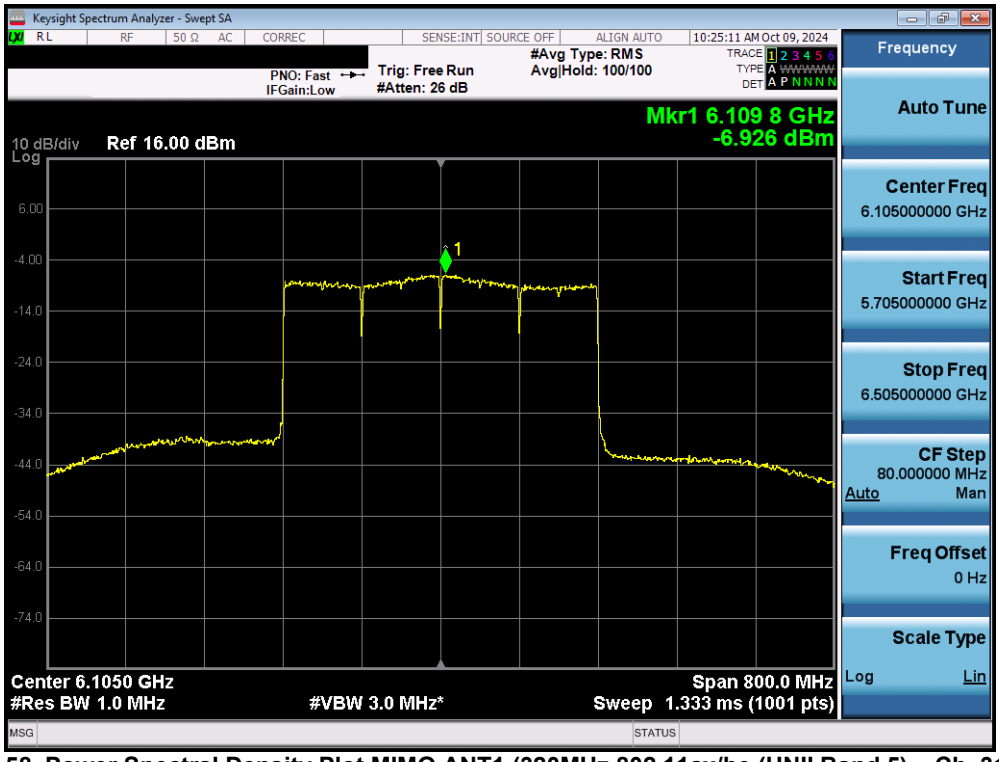
Plot 7-55. Power Spectral Density Plot MIMO ANT1 (40MHz 802.11ax/be (UNII Band 5) – Ch. 43) - SP



Plot 7-56. Power Spectral Density Plot MIMO ANT1 (80MHz 802.11ax/be (UNII Band 5) – Ch. 39) - SP

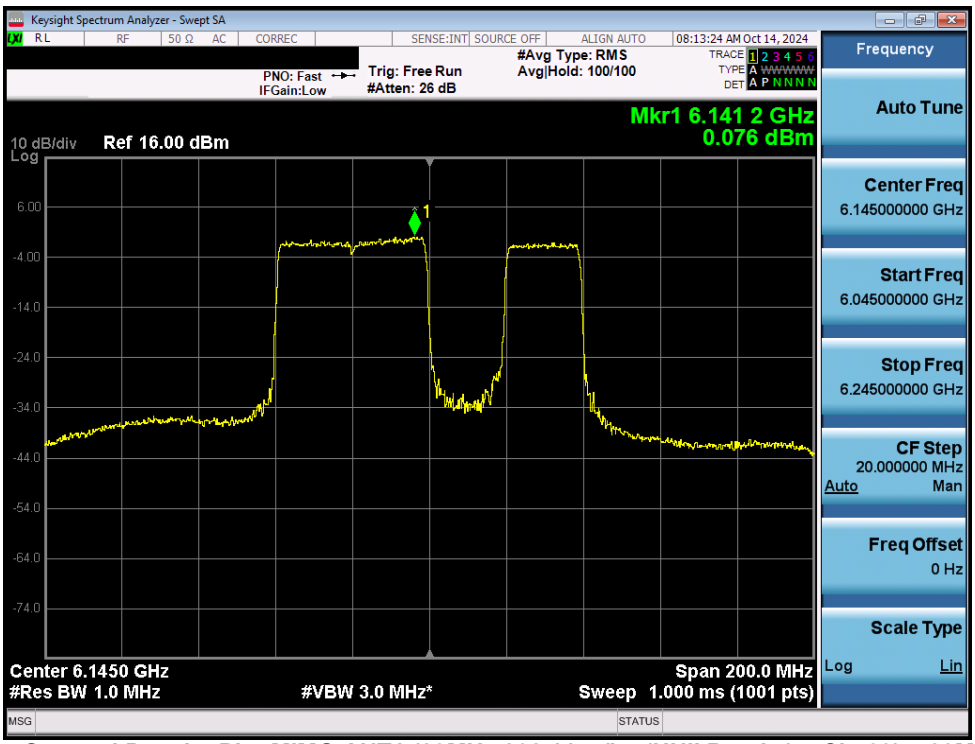


Plot 7-57. Power Spectral Density Plot MIMO ANT1 (160MHz 802.11ax/be (UNII Band 5) – Ch. 47) - SP

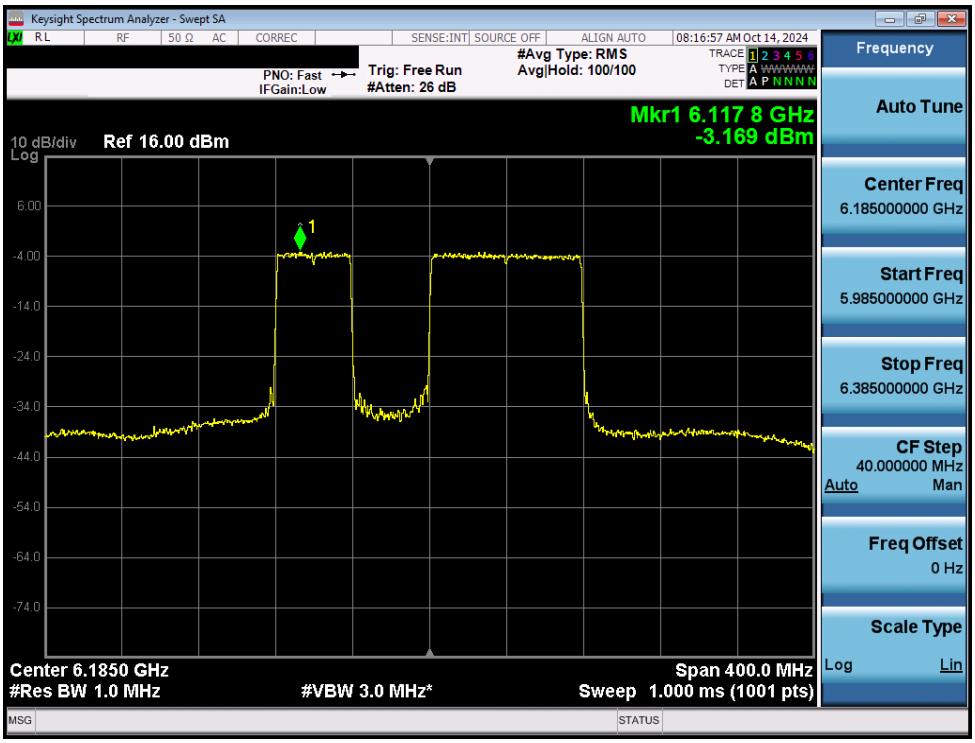


Plot 7-58. Power Spectral Density Plot MIMO ANT1 (320MHz 802.11ax/be (UNII Band 5) – Ch. 31) - SP

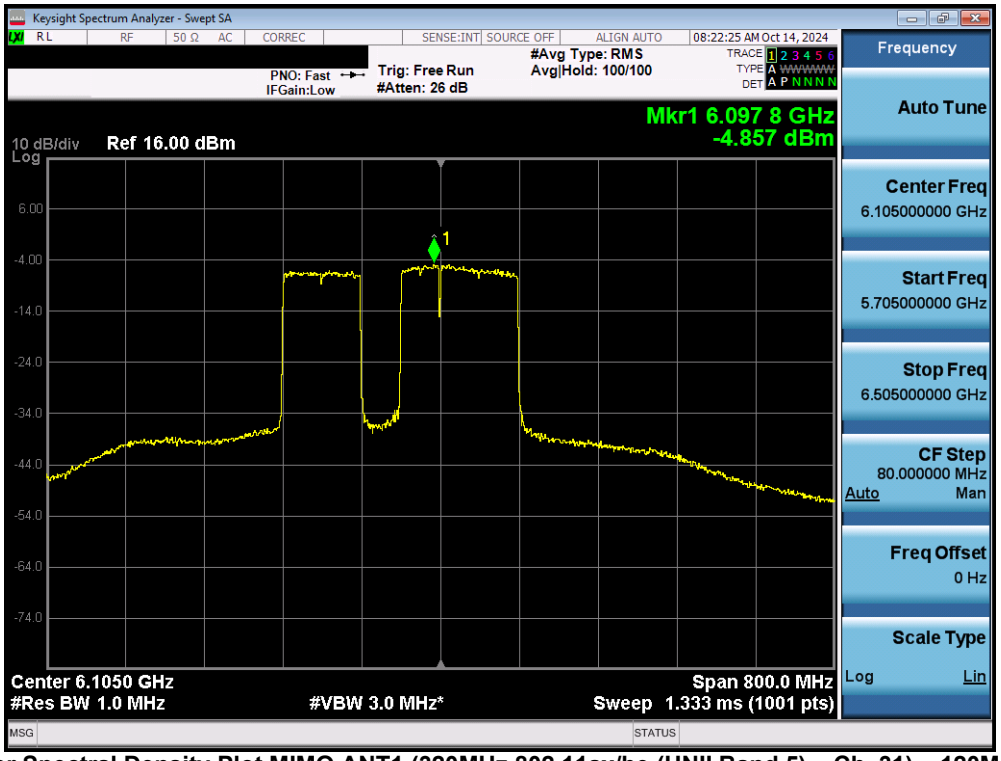
Standard Power (Punctured) Operation



Plot 7-59. Power Spectral Density Plot MIMO ANT1 (80MHz 802.11ax/be (UNII Band 5) – Ch. 39) – 20MHz Punctured - SP



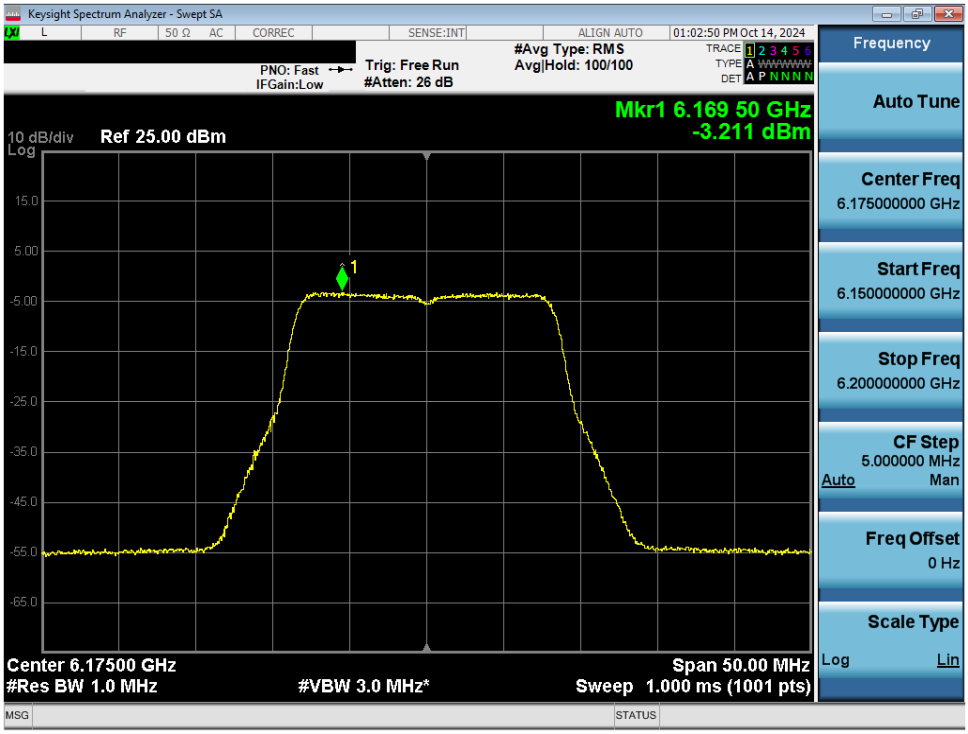
Plot 7-60. Power Spectral Density Plot MIMO ANT1 (160MHz 802.11ax/be (UNII Band 5) – Ch. 47) – 40MHz Punctured - SP



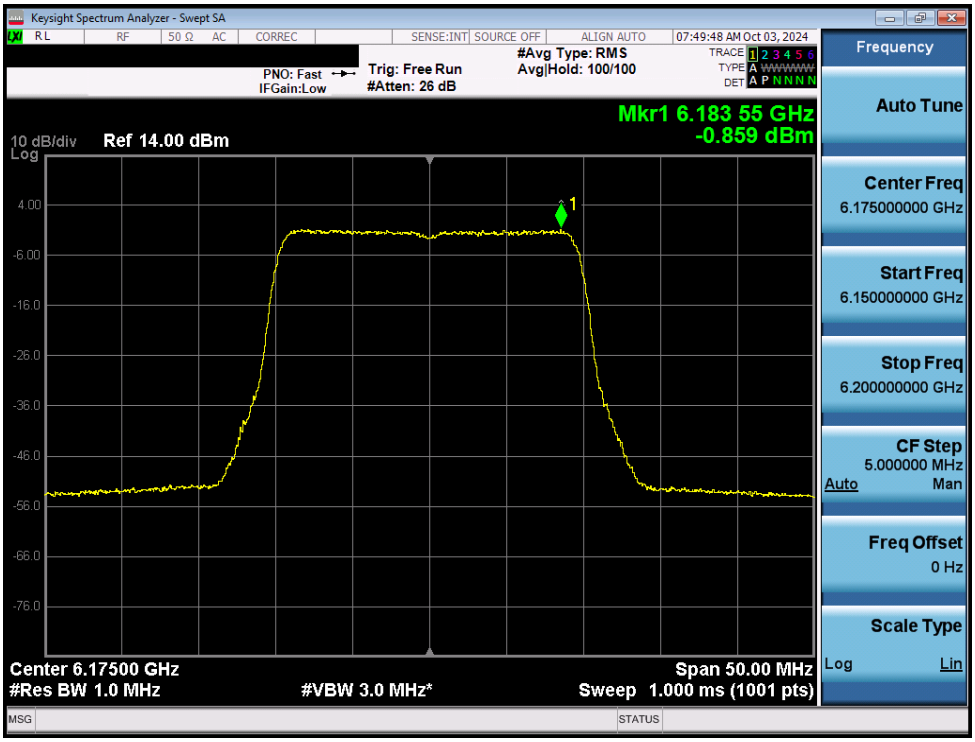
Plot 7-61. Power Spectral Density Plot MIMO ANT1 (320MHz 802.11ax/be (UNII Band 5) – Ch. 31) – 120MHz Punctured - SP

7.5.2 MIMO Antenna-2 Power Spectral Density Measurement - (UNII Band 5)

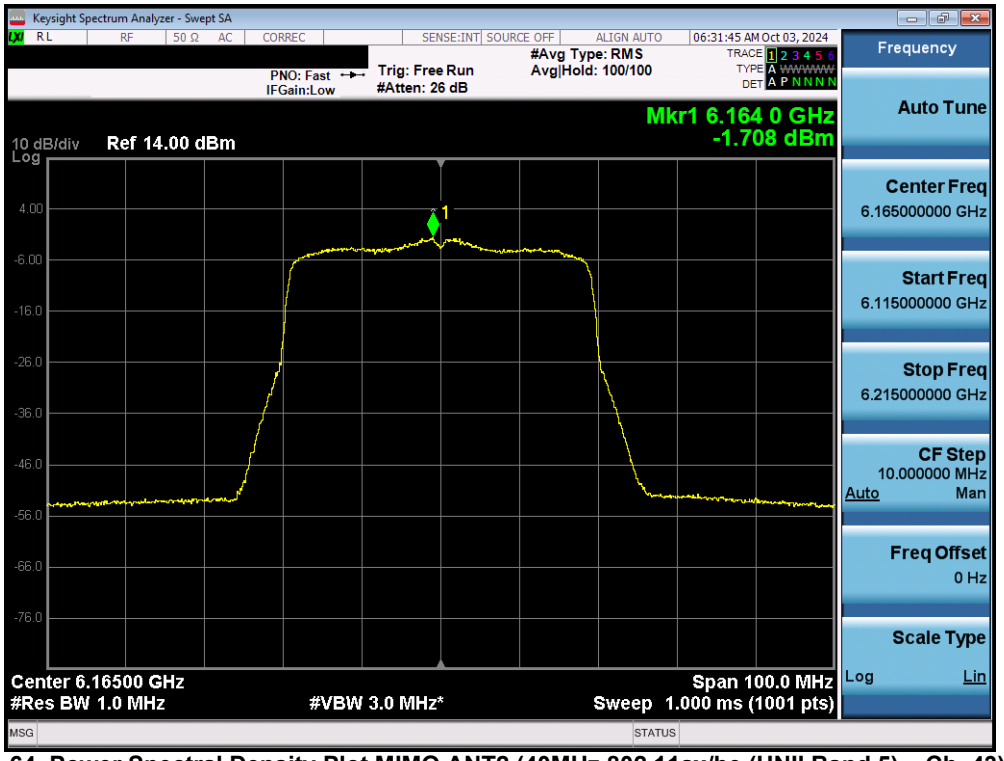
Low Power Indoor Operation



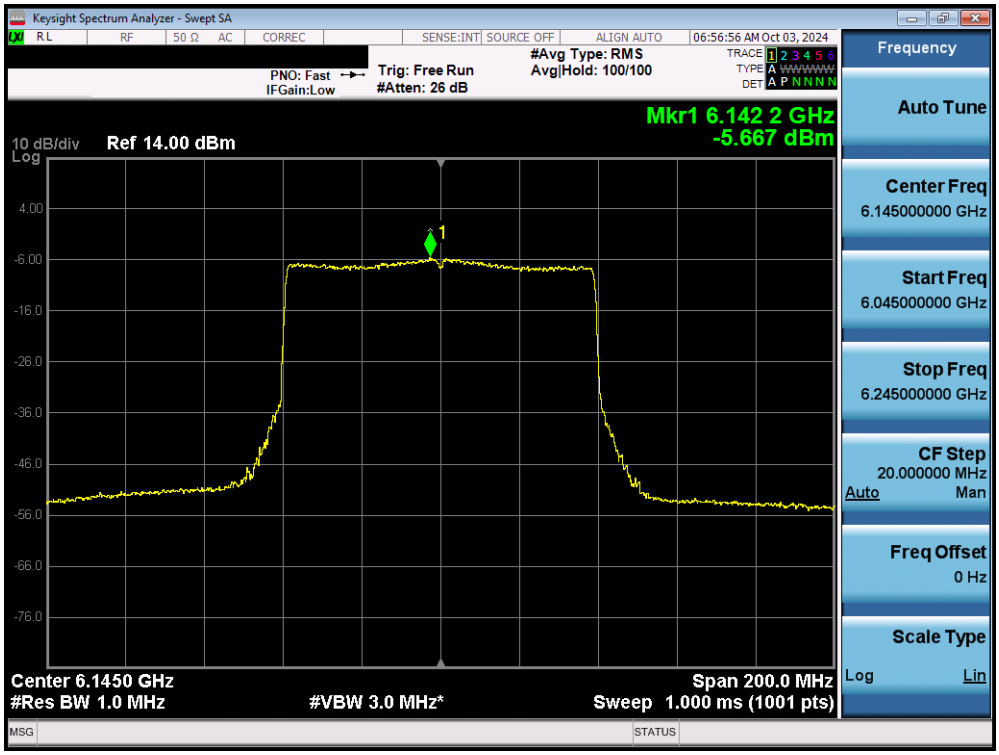
Plot 7-62. Power Spectral Density Plot MIMO ANT2 (20MHz 802.11a (UNII Band 5) – Ch. 45) - LPI



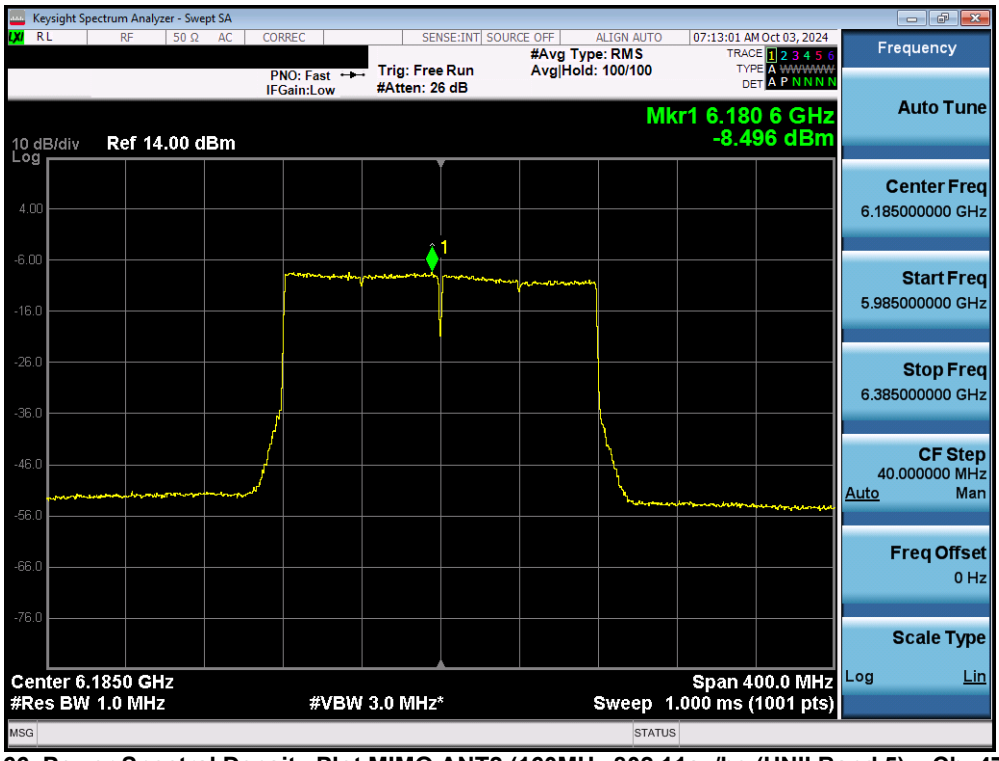
Plot 7-63. Power Spectral Density Plot MIMO ANT2 (20MHz 802.11ax/be (UNII Band 5) – Ch. 45) - LPI



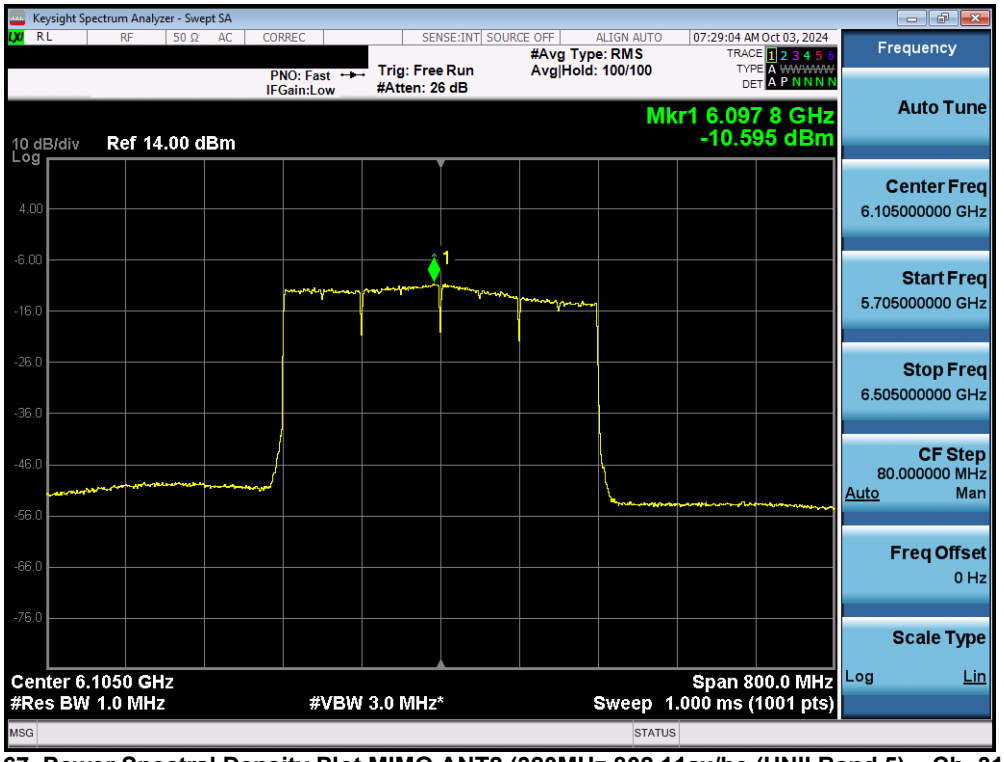
Plot 7-64. Power Spectral Density Plot MIMO ANT2 (40MHz 802.11ax/be (UNII Band 5) – Ch. 43) - LPI



Plot 7-65. Power Spectral Density Plot MIMO ANT2 (80MHz 802.11ax/be (UNII Band 5) – Ch. 39) - LPI

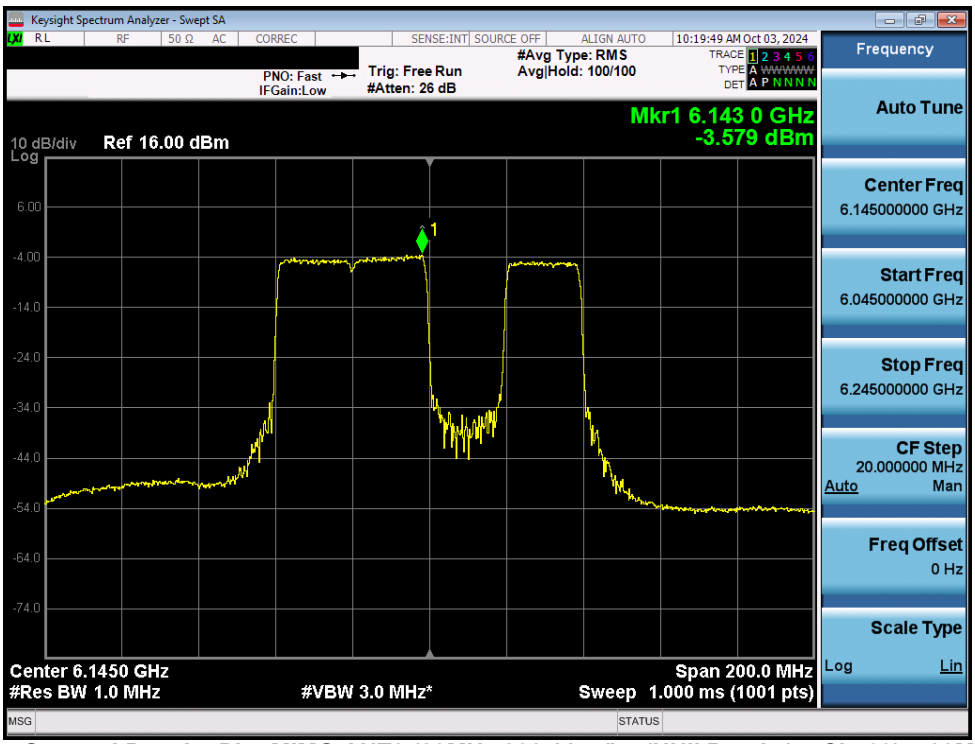


Plot 7-66. Power Spectral Density Plot MIMO ANT2 (160MHz 802.11ax/be (UNII Band 5) – Ch. 47) - LPI

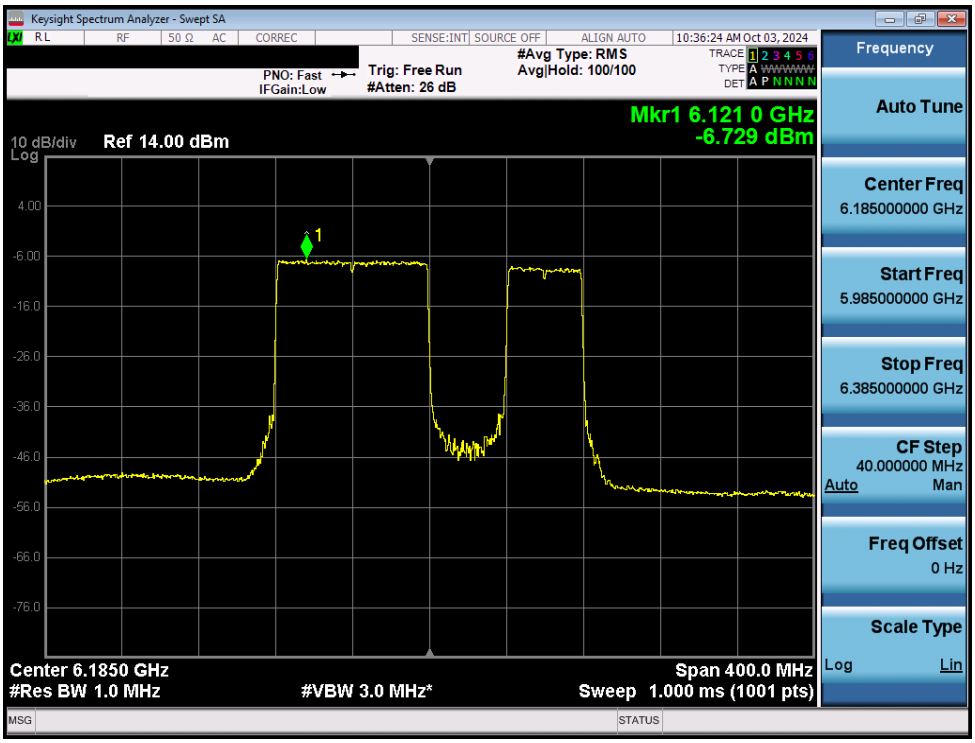


Plot 7-67. Power Spectral Density Plot MIMO ANT2 (320MHz 802.11ax/be (UNII Band 5) – Ch. 31) - LPI

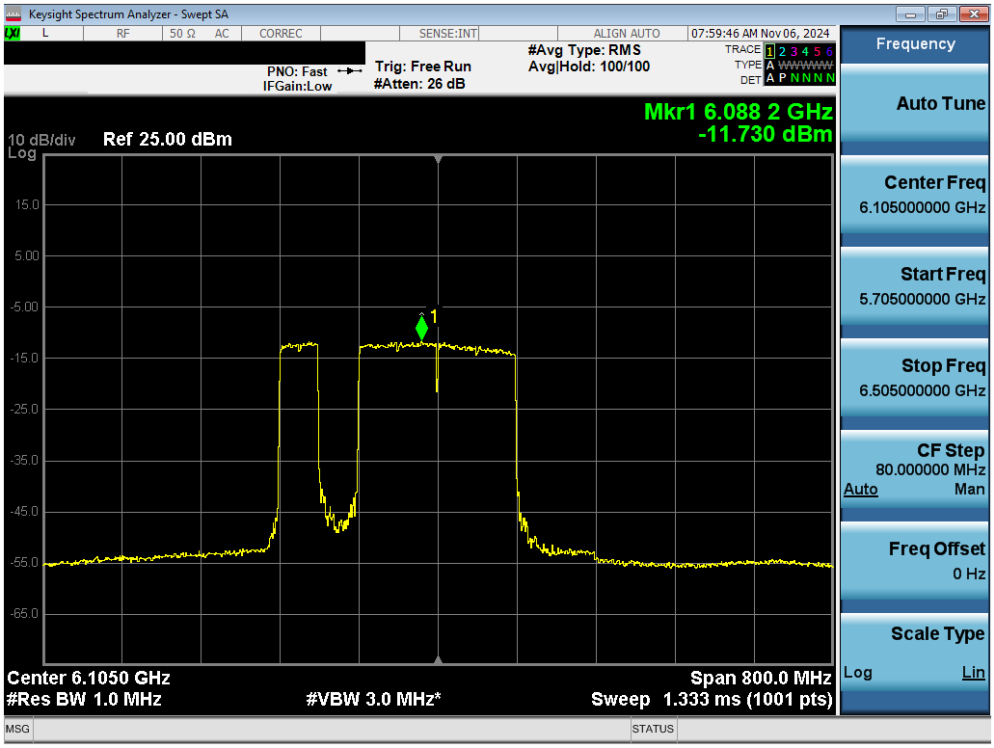
Low Power Indoor (Punctured) Operation



Plot 7-68. Power Spectral Density Plot MIMO ANT2 (80MHz 802.11ax/be (UNII Band 5) – Ch. 39) – 20MHz Punctured - LPI

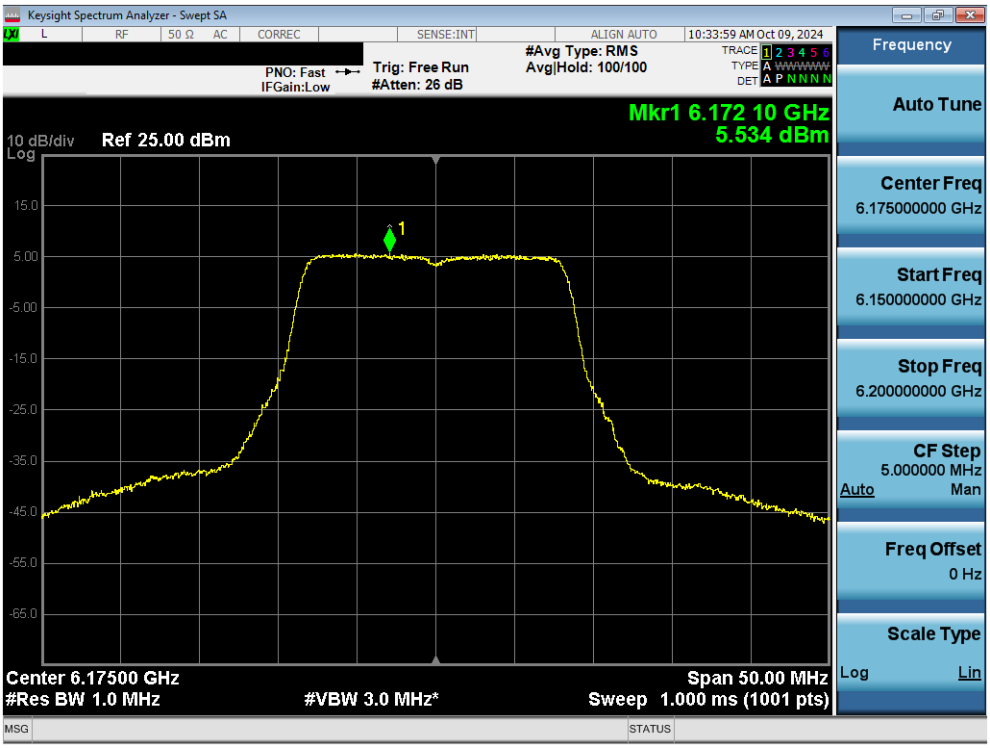


Plot 7-69. Power Spectral Density Plot MIMO ANT2 (160MHz 802.11ax/be (UNII Band 5) – Ch. 47) – 40MHz Punctured - LPI

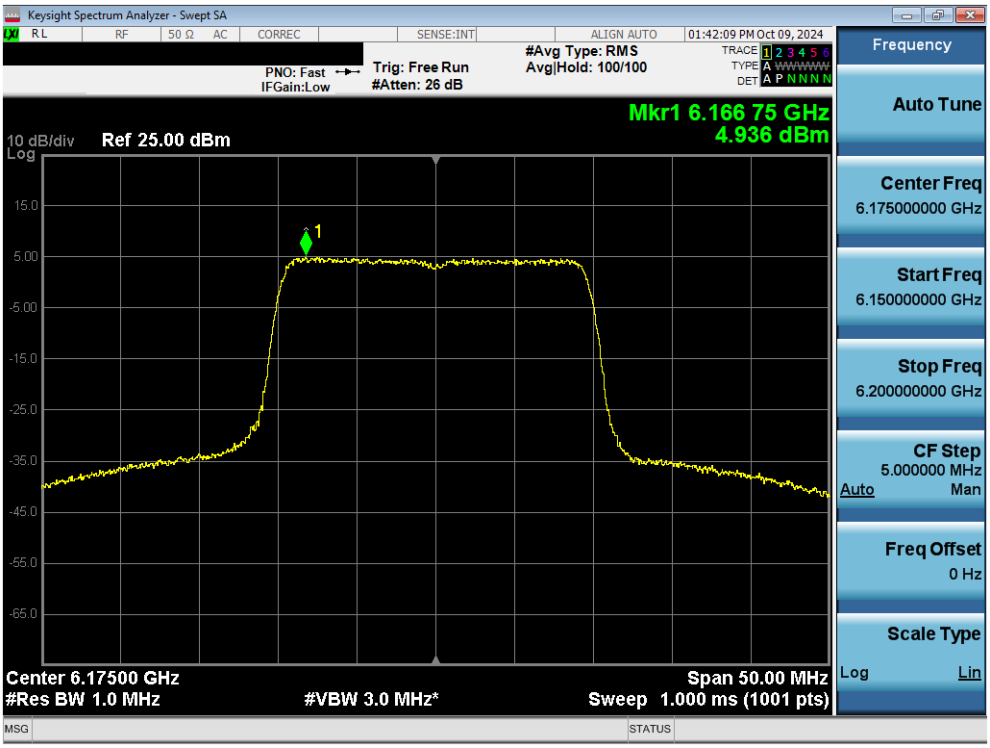


Plot 7-70. Power Spectral Density Plot MIMO ANT2 (320MHz 802.11ax/be (UNII Band 5) – Ch. 31) – 120MHz Punctured – LPI

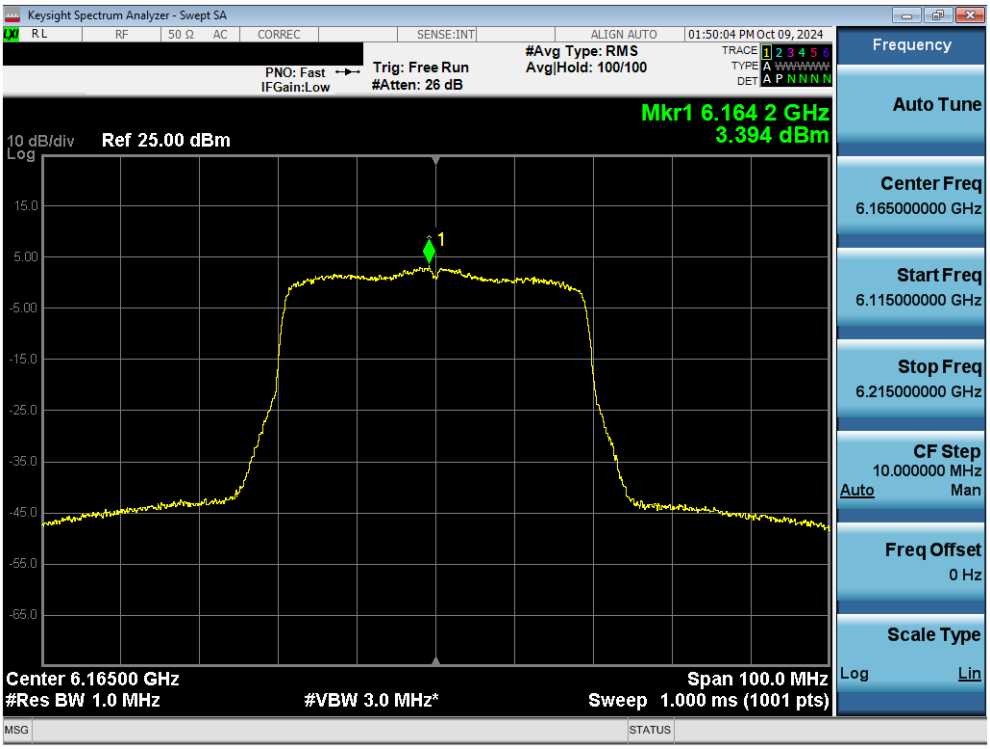
Standard Power Operation



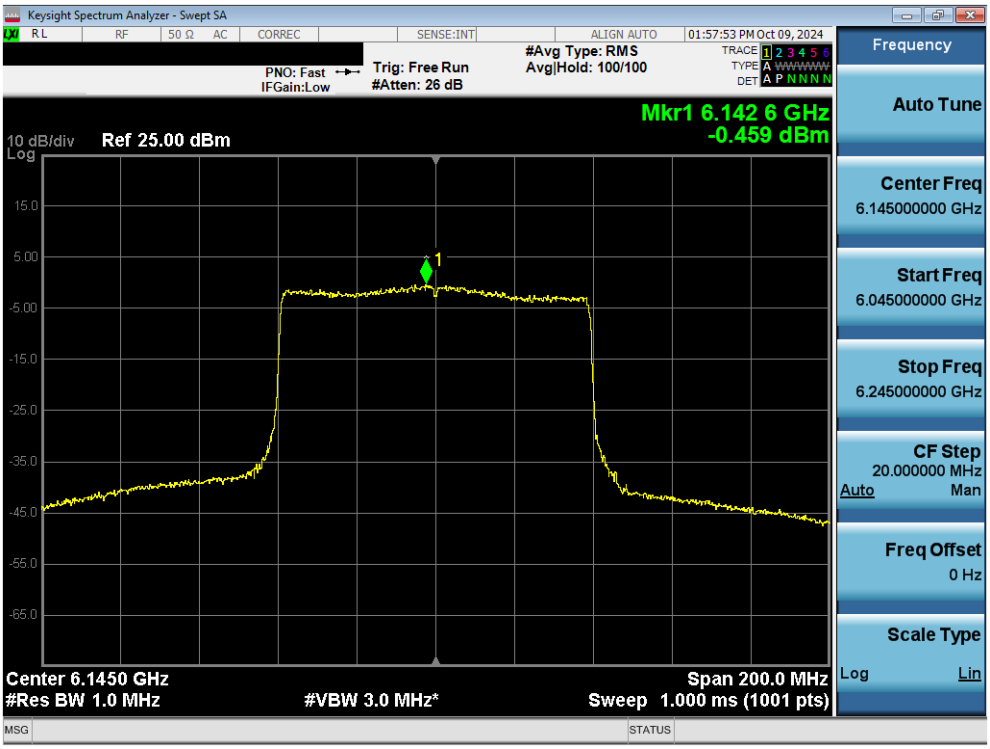
Plot 7-71. Power Spectral Density Plot MIMO ANT2 (20MHz 802.11a (UNII Band 5) – Ch. 45) - SP



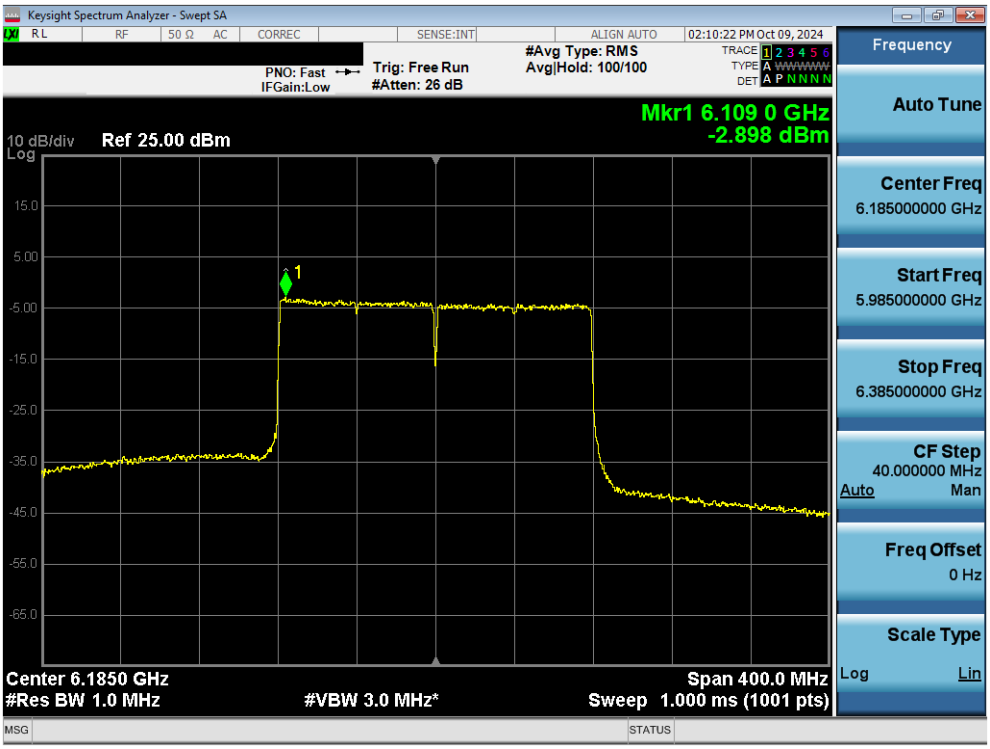
Plot 7-72. Power Spectral Density Plot MIMO ANT2 (20MHz 802.11ax/be (UNII Band 5) – Ch. 45) - SP



Plot 7-73. Power Spectral Density Plot MIMO ANT2 (40MHz 802.11ax/be (UNII Band 5) – Ch. 43) - SP



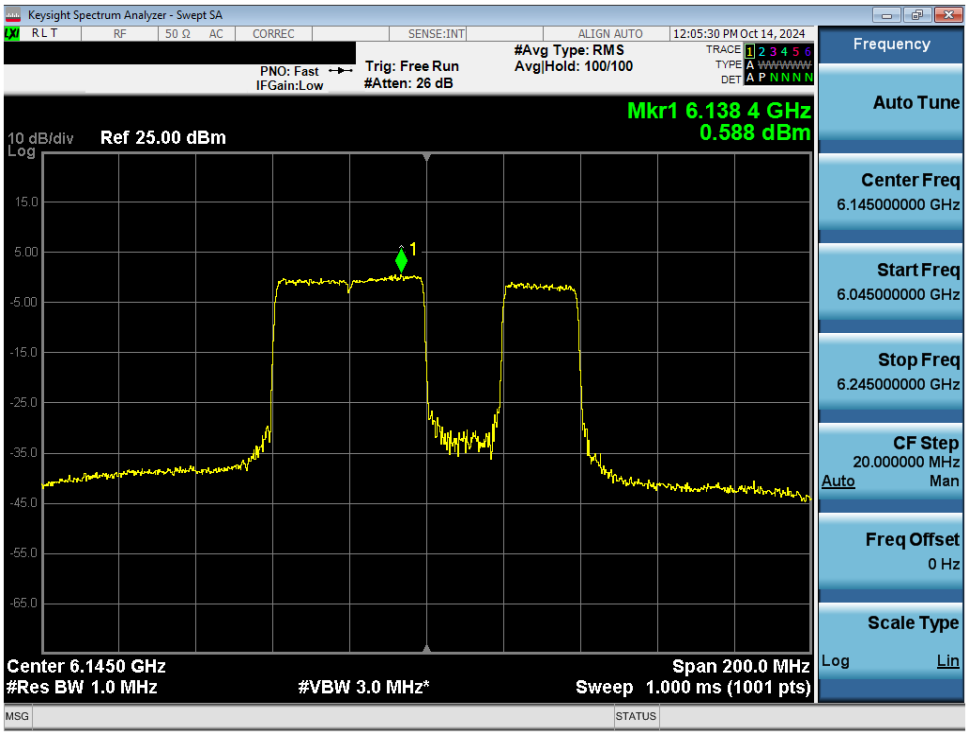
Plot 7-74. Power Spectral Density Plot MIMO ANT2 (80MHz 802.11ax/be (UNII Band 5) – Ch. 39) - SP



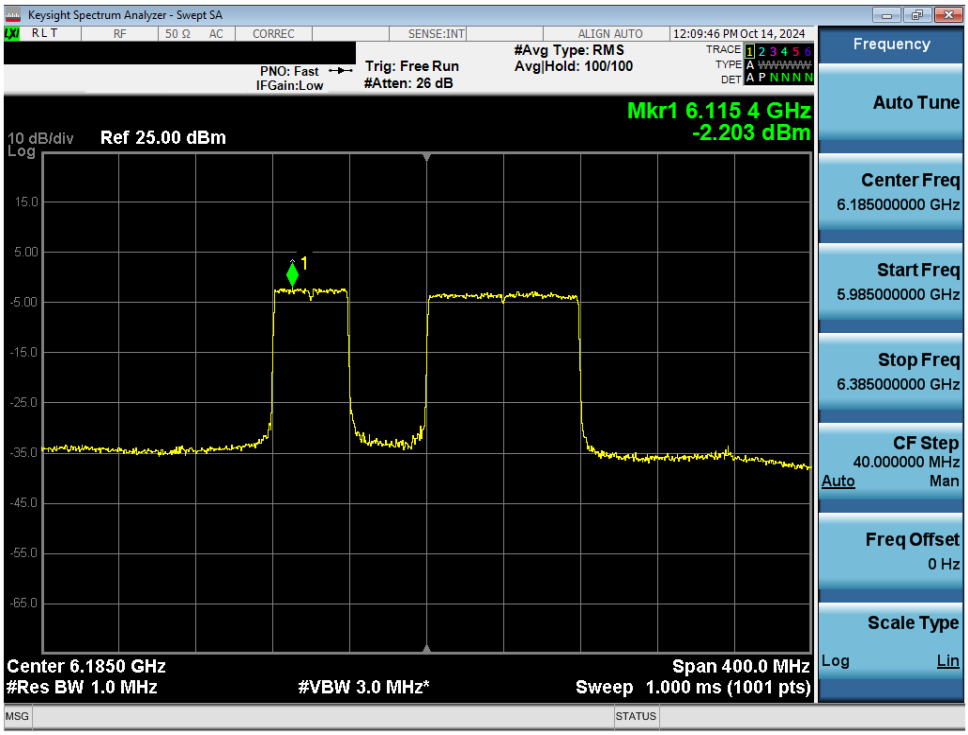
Plot 7-75. Power Spectral Density Plot MIMO ANT2 (160MHz 802.11ax/be (UNII Band 5) – Ch. 47) - SP

Plot 7-76. Power Spectral Density Plot MIMO ANT2 (320MHz 802.11ax/be (UNII Band 5) – Ch. 31) - SP

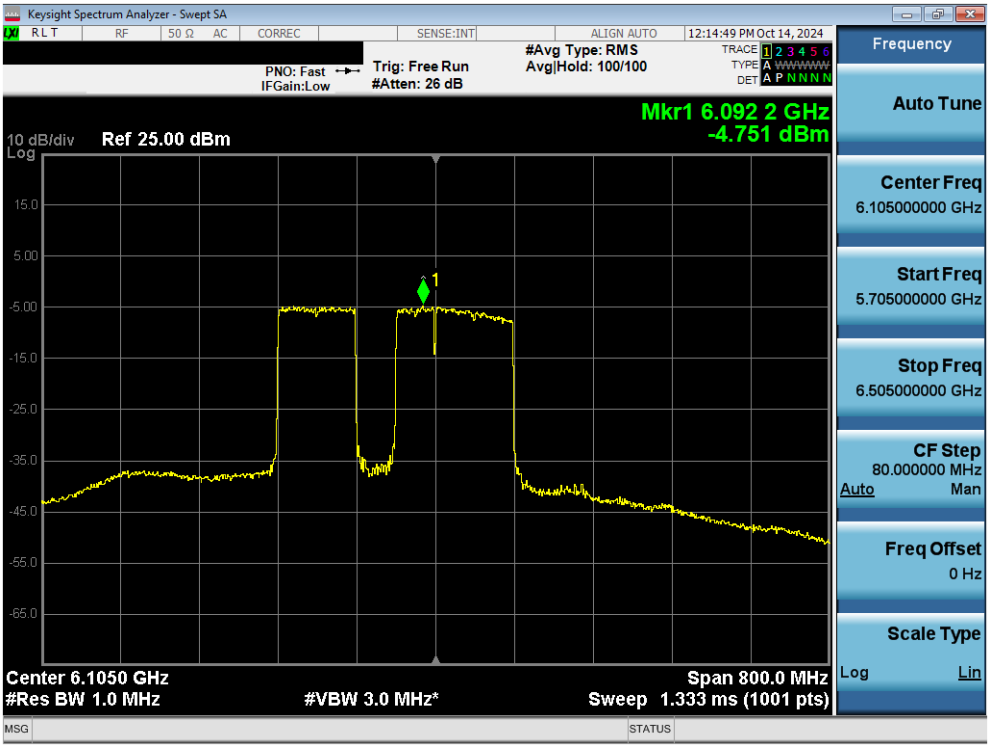
Standard Power (Punctured) Operation



Plot 7-77. Power Spectral Density Plot MIMO ANT2 (80MHz 802.11ax/be (UNII Band 5) – Ch. 39) – 20MHz Punctured - SP



Plot 7-78. Power Spectral Density Plot MIMO ANT2 (160MHz 802.11ax/be (UNII Band 5) – Ch. 47) – 40MHz Punctured - SP



Plot 7-79. Power Spectral Density Plot MIMO ANT2 (320MHz 802.11ax/be (UNII Band 5) – Ch. 31) – 120MHz Punctured - SP

7.6 In-Band Emissions

Test Overview and Limit

The spectrum analyzer was connected to the antenna terminal while the EUT was operating at its maximum duty cycle, at its maximum power control level, as defined in ANSI C63.10-2013, and at the appropriate frequencies.

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.

Test Procedure Used

KDB 987594 D02 v01r01

Test Settings

1. Connect output of the antenna port to a spectrum analyzer or EMI receiver, with appropriate attenuation, as to not damage the instrumentation.
2. Set the reference level of the measuring equipment in accordance with procedure 4.1.5.2 of ANSI C63.10- 2013.
3. Measure the 26 dB EBW using the test procedure 12.4.1 of ANSI C63.10-2013. (This will be used to determine the channel edge.)
4. 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.
5. For the purposes of developing the emission mask, the channel bandwidth is defined as the 26 dB EBW.
6. 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:
    i) Suppressed by 20 dB at 1 MHz outside of the channel edge. (The channel edge is defined as the 26-dB point on either side of the carrier center frequency.)
    j) Suppressed by 28 dB at one channel bandwidth from the channel center.
    k) Suppressed by 40 dB at one- and one-half times the channel bandwidth from the channel center.
7. Adjust the span to encompass the entire mask as necessary.
8. Clear trace.
9. Trace average at least 100 traces in power averaging (rms) mode.
10. Adjust the reference level as necessary so that the crest of the channel touches the top of the emission mask.

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

Figure 7-4. Test Instrument & Measurement Setup

Test Notes

None.

	Frequency [MHz]	Channel	802.11 MODE	Antenna-1 In-Band Emission	Antenna-2 In-Band Emission
Band 5	5935	2	a	PASS	PASS
	6175	45	a	PASS	PASS
	6415	93	a	PASS	PASS
	5935	2	be (20MHz)	PASS	PASS
	6175	45	be (20MHz)	PASS	PASS
	6415	93	be (20MHz)	PASS	PASS
	5965	3	be (40MHz)	PASS	PASS
	6165	43	be (40MHz)	PASS	PASS
	6405	91	be (40MHz)	PASS	PASS
	5985	7	be (80MHz)	PASS	PASS
	6145	39	be (80MHz)	PASS	PASS
	6385	87	be (80MHz)	PASS	PASS
	6025	15	be (160MHz)	PASS	PASS
	6185	47	be (160MHz)	PASS	PASS
	6345	79	be (160MHz)	PASS	PASS
	6105	31	be (320MHz)	PASS	PASS
	6265	63	be (320MHz)	PASS	PASS
Band 6	6435	97	a	PASS	PASS
	6475	105	a	PASS	PASS
	6515	113	a	PASS	PASS
	6435	97	be (20MHz)	PASS	PASS
	6475	105	be (20MHz)	PASS	PASS
	6515	113	be (20MHz)	PASS	PASS
	6445	99	be (40MHz)	PASS	PASS
	6485	107	be (40MHz)	PASS	PASS
	6525	115	be (40MHz)	PASS	PASS
	6465	103	be (80MHz)	PASS	PASS
	6505	111	be (160MHz)	PASS	PASS
Band 5/6/7	6425	95	be (320MHz)	PASS	PASS
Band 7	6535	117	a	PASS	PASS
	6695	149	a	PASS	PASS
	6875	185	a	PASS	PASS
	6535	117	be (20MHz)	PASS	PASS
	6695	149	be (20MHz)	PASS	PASS
	6875	185	be (20MHz)	PASS	PASS
	6565	123	be (40MHz)	PASS	PASS
	6725	155	be (40MHz)	PASS	PASS
	6885	179	be (40MHz)	PASS	PASS
	6545	119	be (80MHz)	PASS	PASS
	6705	151	be (80MHz)	PASS	PASS
	6865	183	be (80MHz)	PASS	PASS
	6665	143	be (160MHz)	PASS	PASS
	6825	175	be (160MHz)	PASS	PASS
Band 6/7	6665	127	be (320MHz)	PASS	PASS
Band 7/8	6745	159	be (320MHz)	PASS	PASS
Band 8	6895	189	a	PASS	PASS
	6995	209	a	PASS	PASS
	7115	233	a	PASS	PASS
	6895	189	be (20MHz)	PASS	PASS
	6995	209	be (20MHz)	PASS	PASS
	7115	233	be (20MHz)	PASS	PASS
	6925	187	be (40MHz)	PASS	PASS
	7005	211	be (40MHz)	PASS	PASS
	7085	227	be (40MHz)	PASS	PASS
	6945	199	be (80MHz)	PASS	PASS
	7025	215	be (80MHz)	PASS	PASS
	6985	207	be (160MHz)	PASS	PASS
Band 7/8	6905	191	be (320MHz)	PASS	PASS

Table 7-86. MIMO In-Band Emissions Results – LPI

	Frequency [MHz]	Channel	802.11 MODE	Puncture Size	Antenna-1 In-Band Emission	Antenna-2 In-Band Emission
Band 5	6145	39	be (80MHz)	20MHz	PASS	PASS
	6185	47	be (160MHz)	40MHz	PASS	PASS
	6185	47	be (160MHz)	20MHz	PASS	PASS
	6105	31	be (320MHz)	40MHz	PASS	PASS
	6105	31	be (320MHz)	80MHz	PASS	PASS
	6105	31	be (320MHz)	120MHz	PASS	PASS
Band 6	6465	103	be (80MHz)	20MHz	PASS	PASS
	6505	111	be (160MHz)	40MHz	PASS	PASS
	6505	111	be (160MHz)	20MHz	PASS	PASS
Band 5/6/7	6425	95	be (320MHz)	40MHz	PASS	PASS
	6425	95	be (320MHz)	80MHz	PASS	PASS
	6425	95	be (320MHz)	120MHz	PASS	PASS
Band 7	6705	151	be (80MHz)	20MHz	PASS	PASS
	6665	143	be (160MHz)	40MHz	PASS	PASS
	6665	143	be (160MHz)	20MHz	PASS	PASS
Band 7/8	6745	159	be (320MHz)	40MHz	PASS	PASS
	6745	159	be (320MHz)	80MHz	PASS	PASS
	6745	159	be (320MHz)	120MHz	PASS	PASS

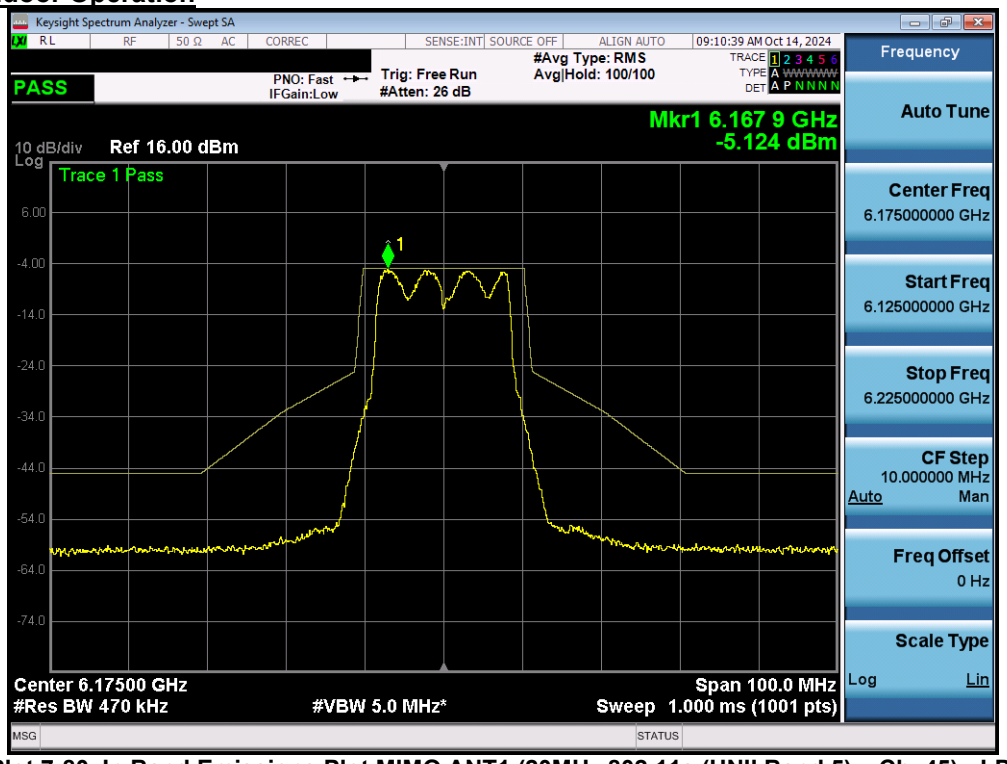
Table 7-87. MIMO In-Band Emissions Results – Punctured Cases – LPI

	Frequency [MHz]	Channel	802.11 MODE	Antenna-1 In-Band Emission	Antenna-2 In-Band Emission
Band 5	5935	2	a	PASS	PASS
	6175	45	a	PASS	PASS
	6415	93	a	PASS	PASS
	5935	2	be (20MHz)	PASS	PASS
	6175	45	be (20MHz)	PASS	PASS
	6415	93	be (20MHz)	PASS	PASS
	5965	3	be (40MHz)	PASS	PASS
	6165	43	be (40MHz)	PASS	PASS
	6405	91	be (40MHz)	PASS	PASS
Band 7	6535	117	a	PASS	PASS
	6695	149	a	PASS	PASS
	6875	185	a	PASS	PASS
	6535	117	be (20MHz)	PASS	PASS
	6695	149	be (20MHz)	PASS	PASS
	6875	185	be (20MHz)	PASS	PASS
	6565	123	be (40MHz)	PASS	PASS
	6725	155	be (40MHz)	PASS	PASS
	6885	179	be (40MHz)	PASS	PASS

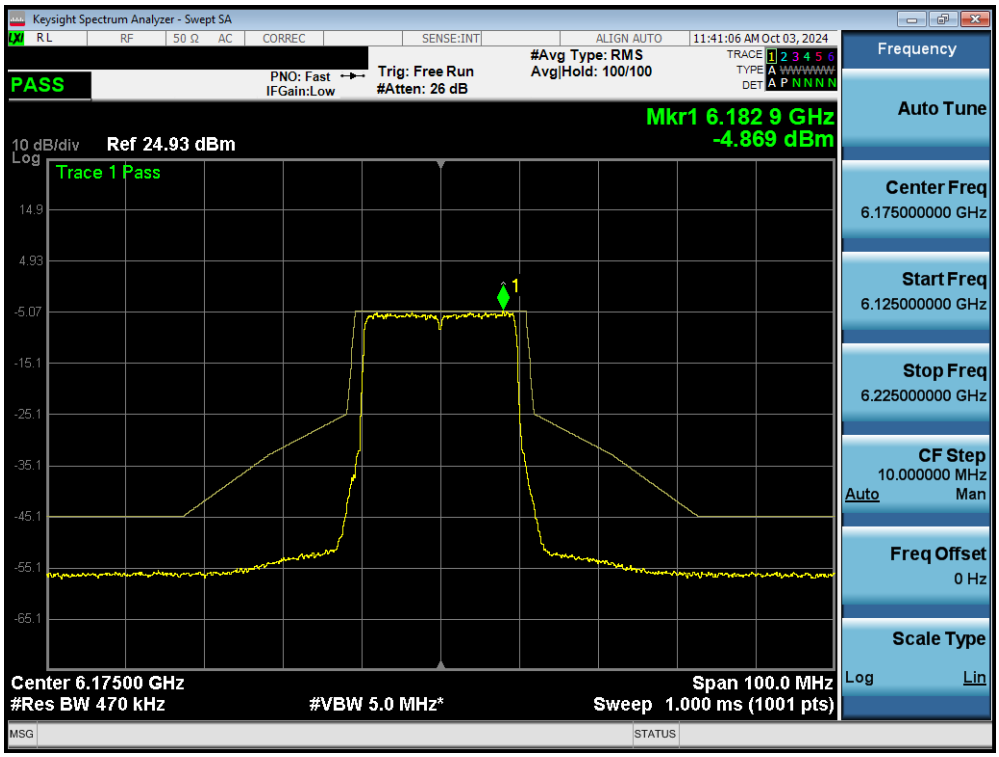
Table 7-88. MIMO In-Band Emissions Results – SP

7.6.1 MIMO Antenna-1 In-Band Emission Plot Measurement - (UNII Band 5)

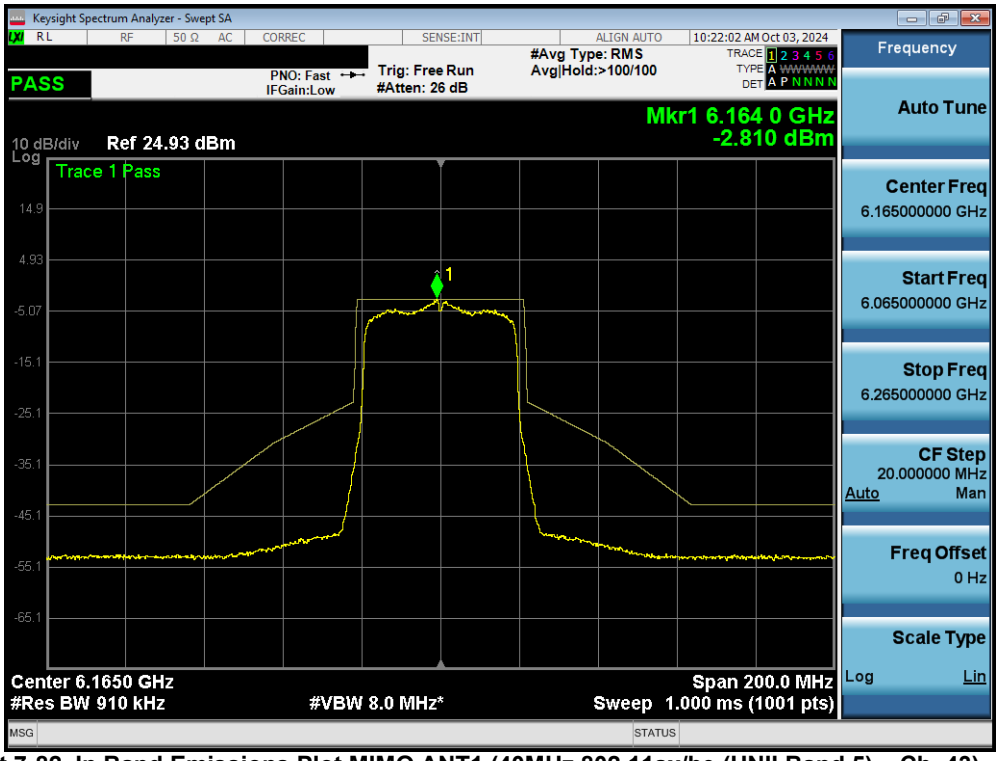
Low Power Indoor Operation



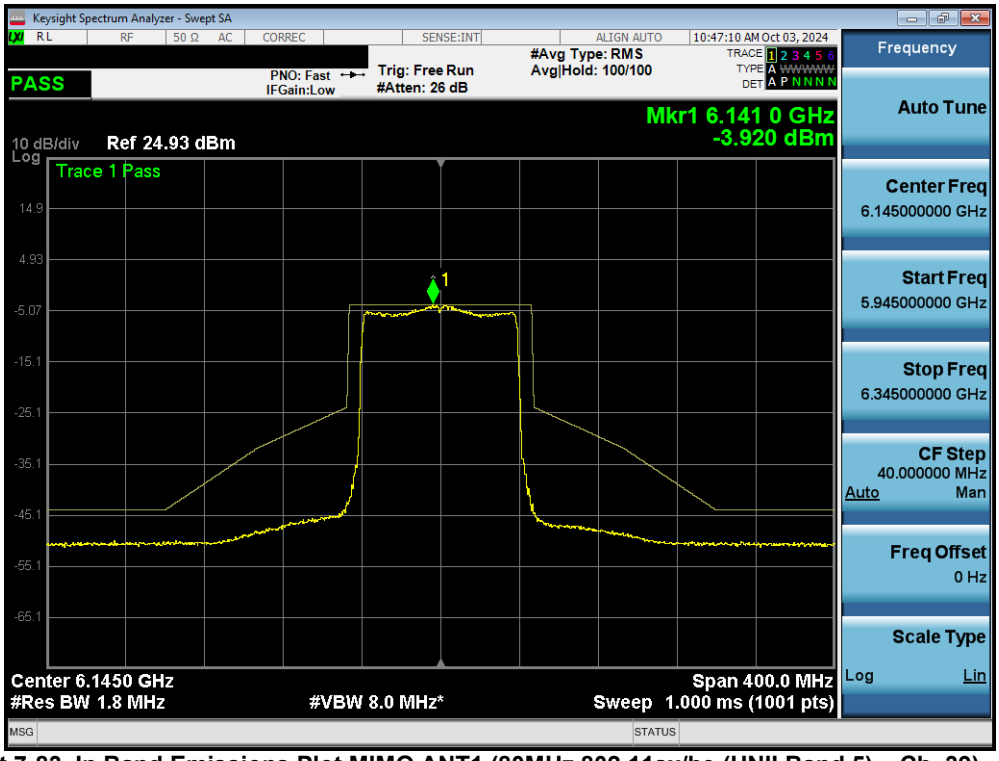
Plot 7-80. In Band Emissions Plot MIMO ANT1 (20MHz 802.11a (UNII Band 5) – Ch. 45) - LPI



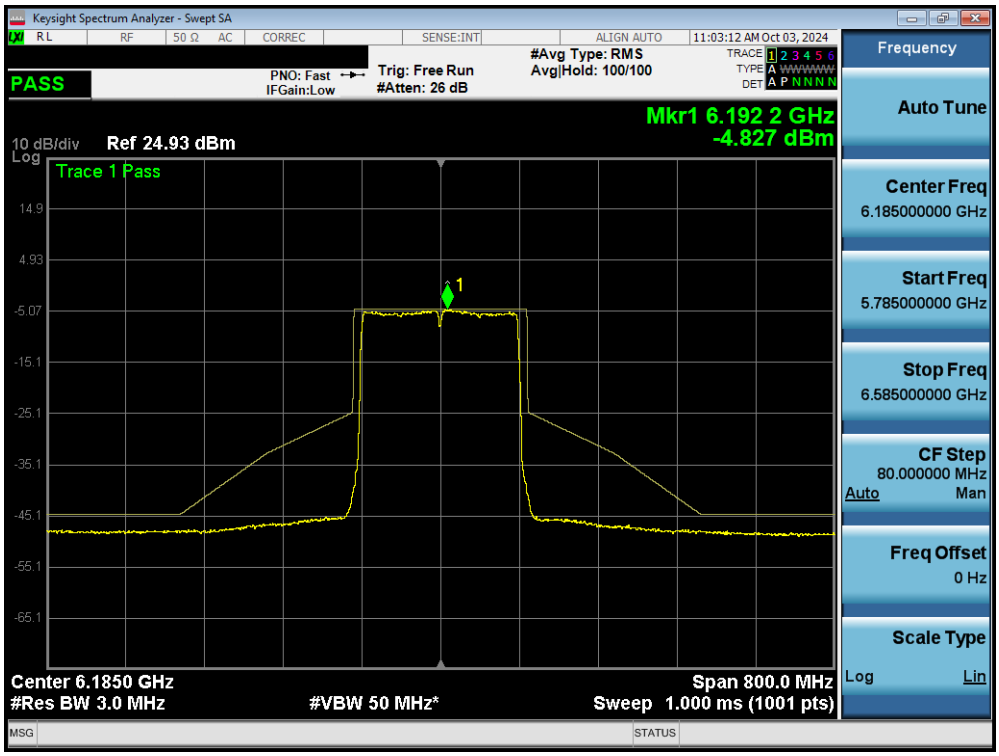
Plot 7-81. In Band Emissions Plot MIMO ANT1 (20MHz 802.11ax/be (UNII Band 5) – Ch. 45) - LPI



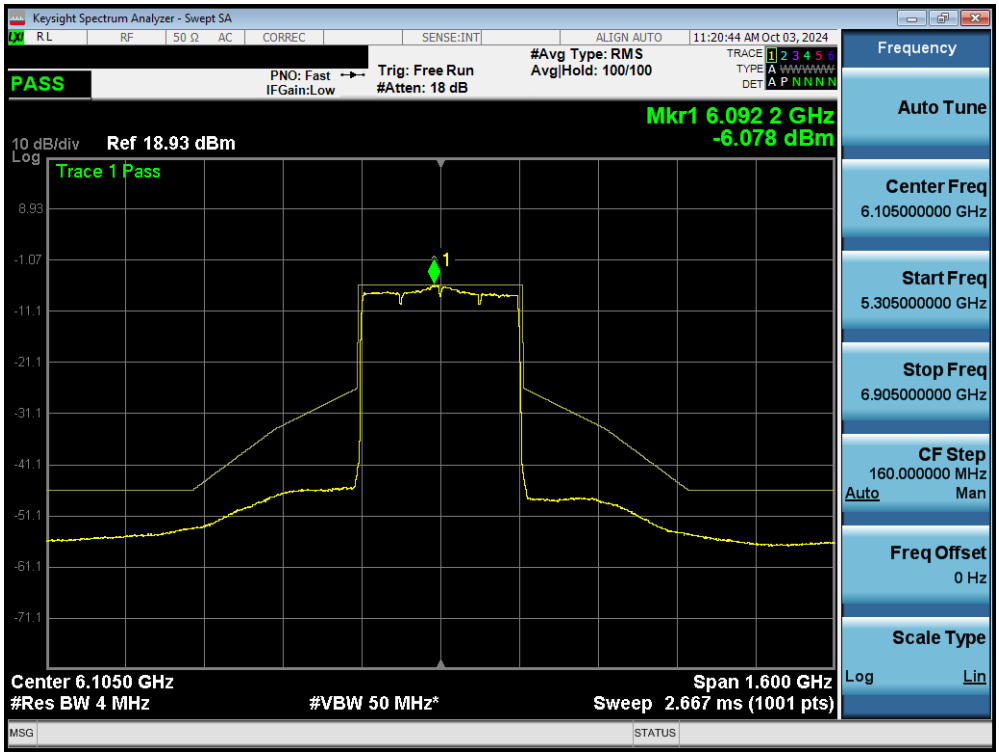
Plot 7-82. In Band Emissions Plot MIMO ANT1 (40MHz 802.11ax/be (UNII Band 5) – Ch. 43) - LPI



Plot 7-83. In Band Emissions Plot MIMO ANT1 (80MHz 802.11ax/be (UNII Band 5) – Ch. 39) - LPI

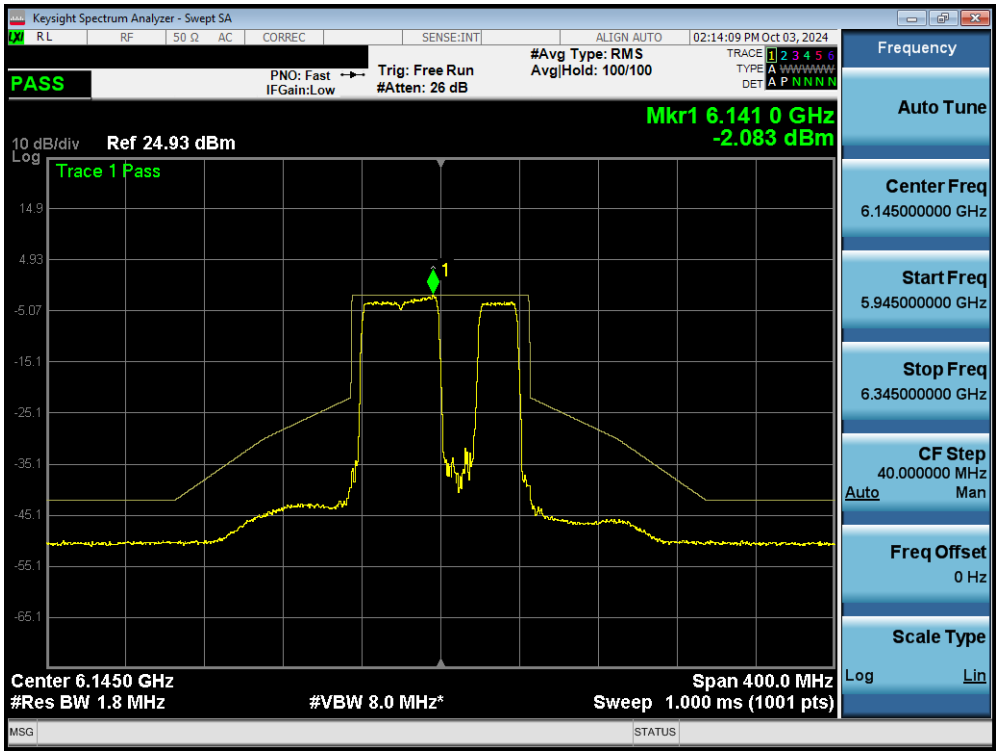


Plot 7-84. In Band Emissions Plot MIMO ANT1 (160MHz 802.11ax/be (UNII Band 5) – Ch. 47) - LPI

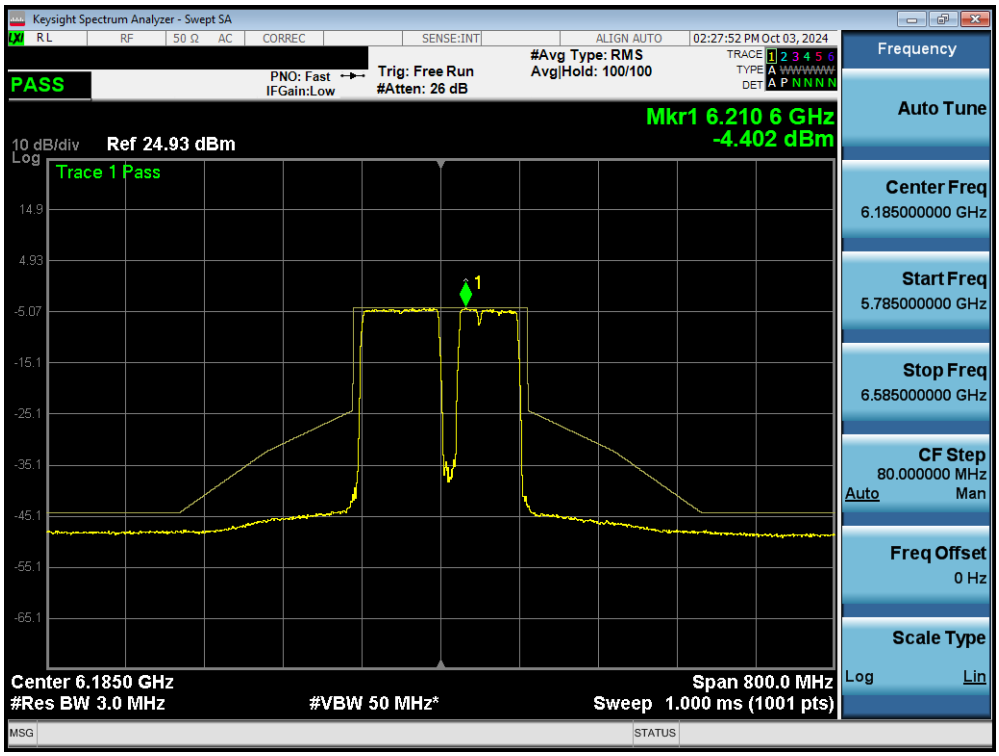


Plot 7-85. In Band Emissions Plot MIMO ANT1 (320MHz 802.11ax/be (UNII Band 5) – Ch. 31) - LPI

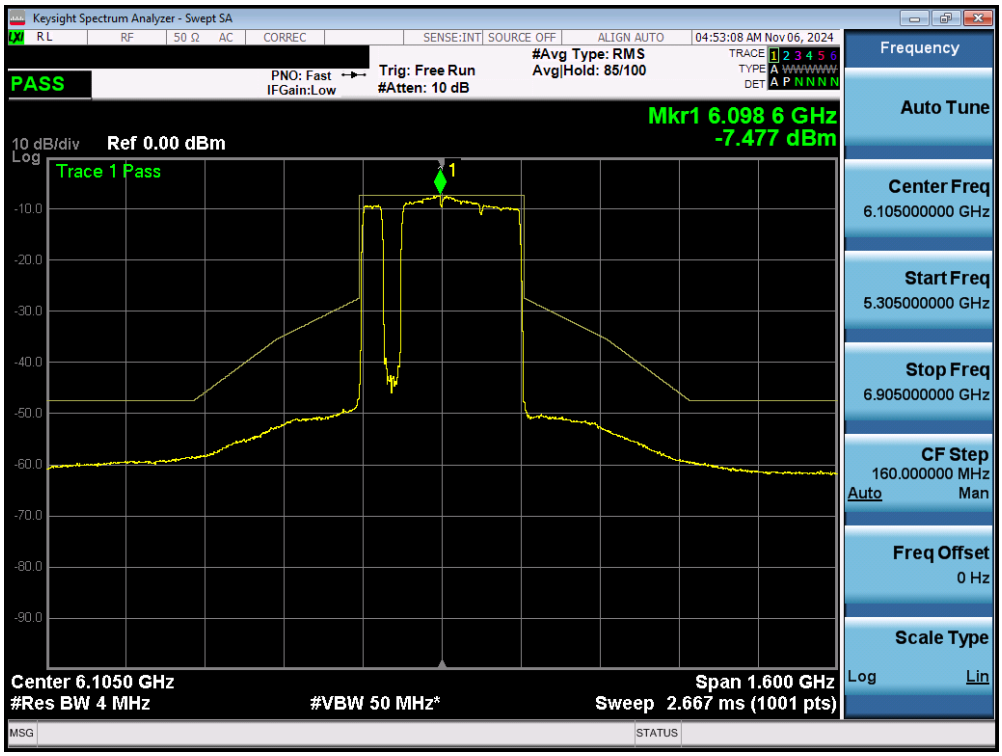
Low Power Indoor (Punctured) Operation



Plot 7-86. In Band Emissions Plot MIMO ANT1 (80MHz 802.11ax/be (UNII Band 5) – Ch. 39) – 20MHz Punctured - LPI

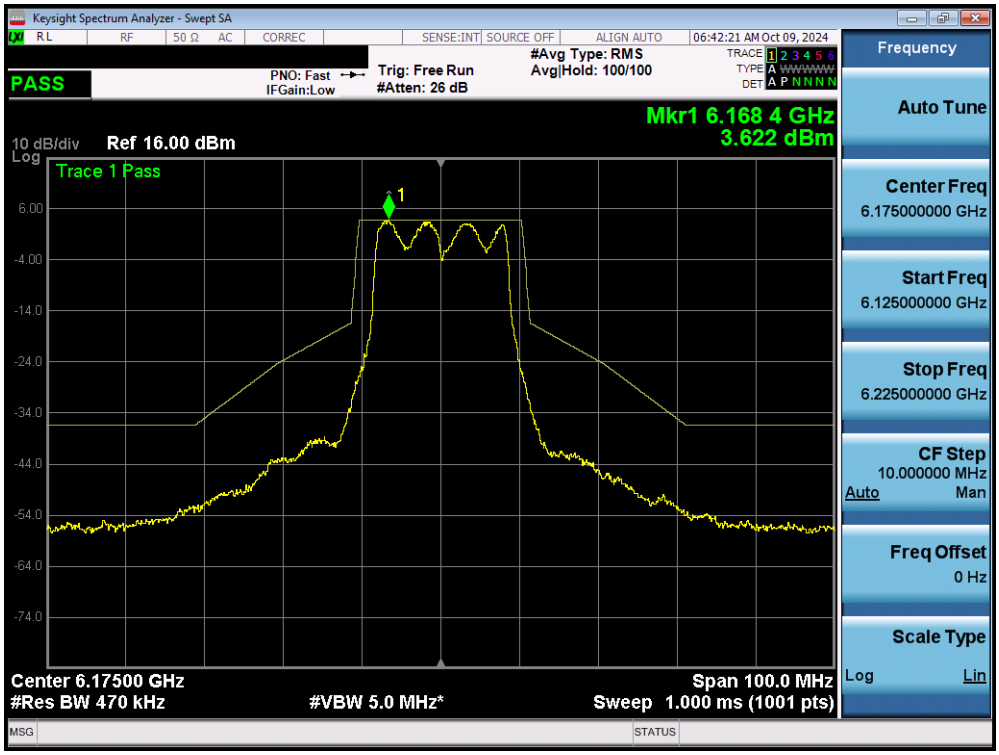


Plot 7-87. In Band Emissions Plot MIMO ANT1 (160MHz 802.11ax/be (UNII Band 5) – Ch. 47) – 20MHz Punctured - LPI

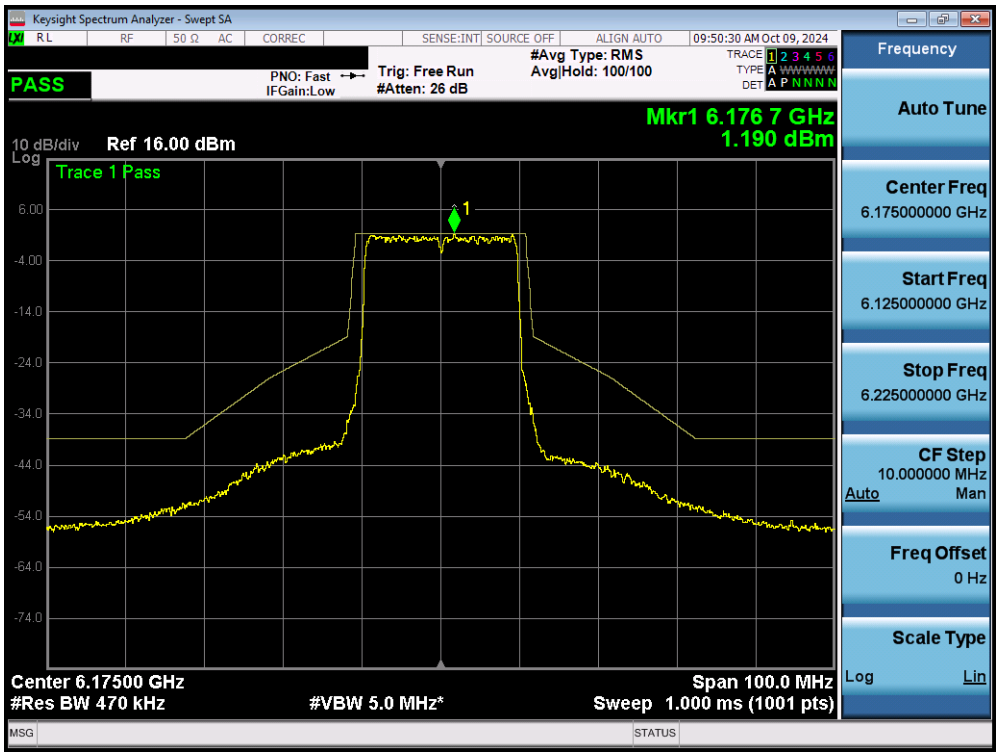


Plot 7-88. In Band Emissions Plot MIMO ANT1 (320MHz 802.11ax/be (UNII Band 5) – Ch. 31) – 40MHz Punctured – LPI

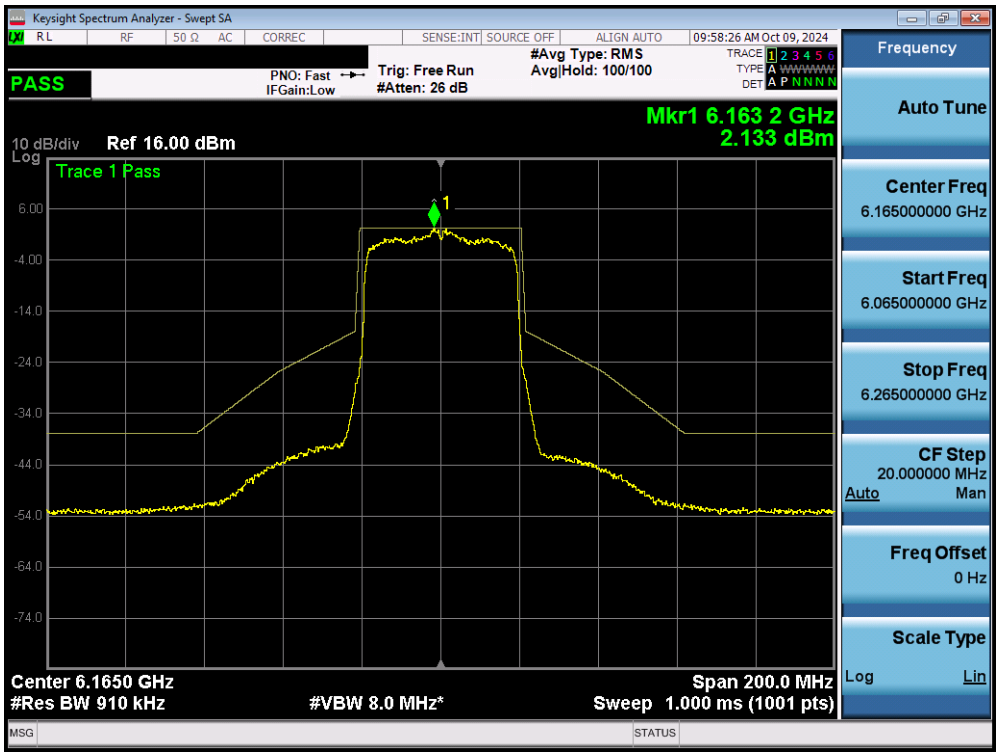
Standard Power Operation



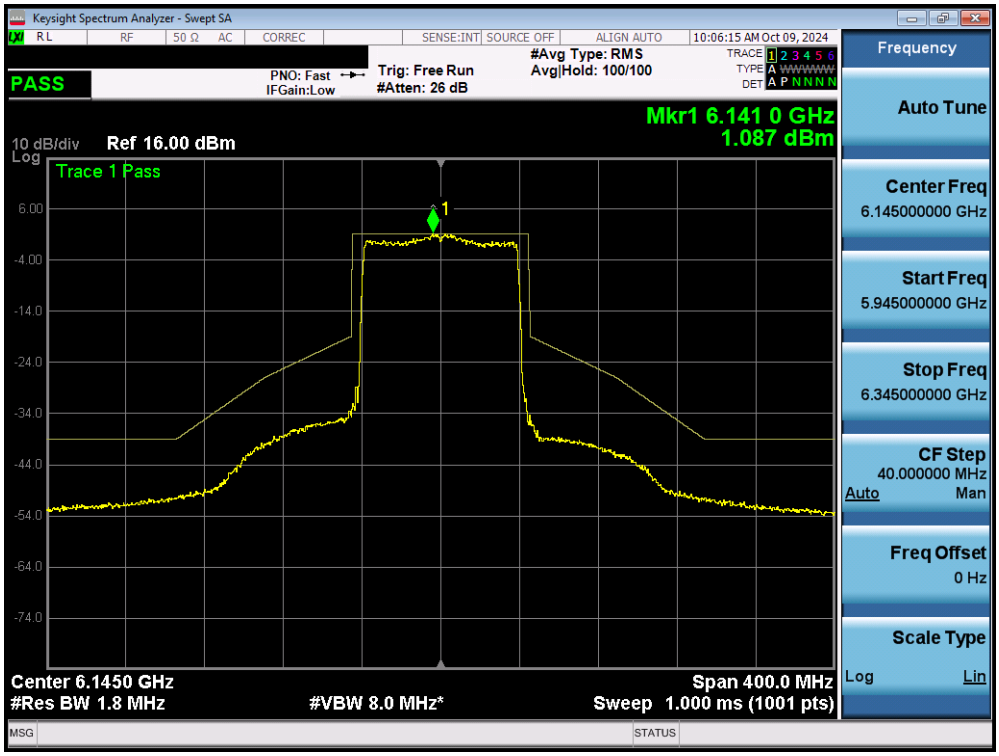
Plot 7-89. In Band Emissions Plot MIMO ANT1 (20MHz 802.11a (UNII Band 5) – Ch. 45) - SP



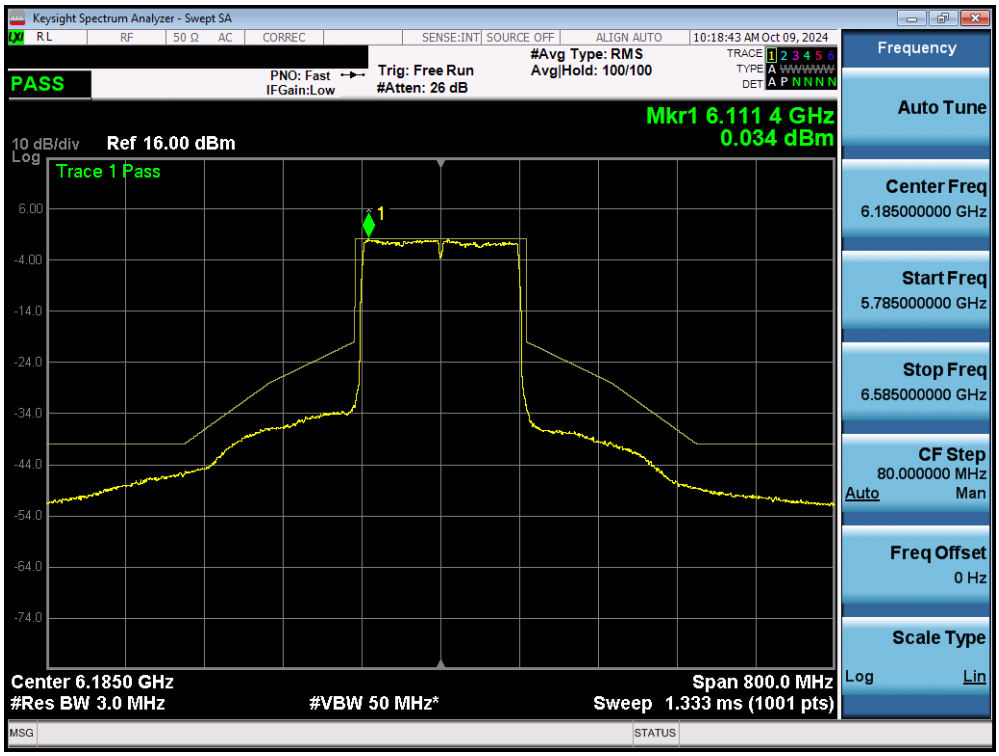
Plot 7-90. In Band Emissions Plot MIMO ANT1 (20MHz 802.11ax/be (UNII Band 5) – Ch. 45) - SP



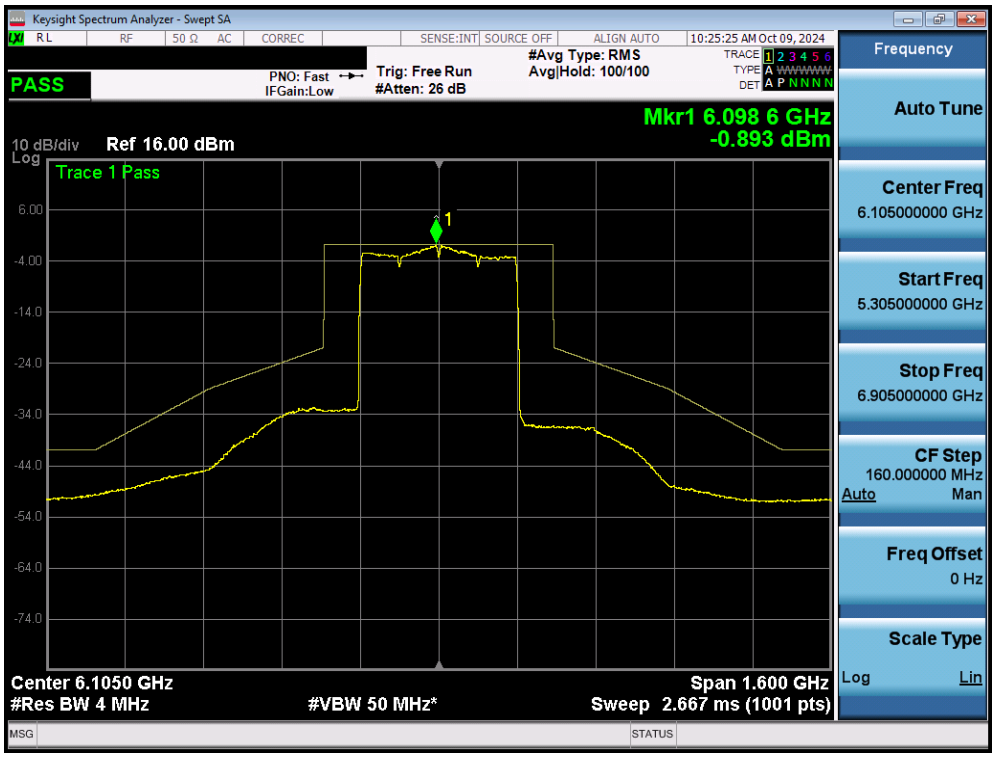
Plot 7-91. In Band Emissions Plot MIMO ANT1 (40MHz 802.11ax/be (UNII Band 5) – Ch. 43) - SP



Plot 7-92. In Band Emissions Plot MIMO ANT1 (80MHz 802.11ax/be (UNII Band 5) – Ch. 39) - SP

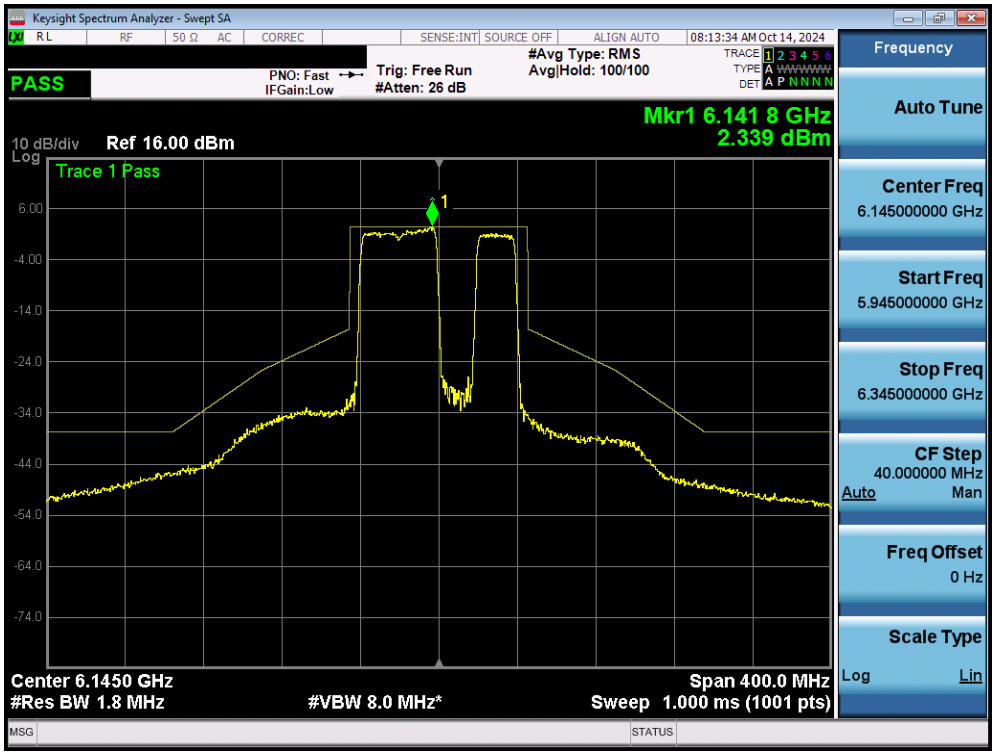


Plot 7-93. In Band Emissions Plot MIMO ANT1 (160MHz 802.11ax/be (UNII Band 5) – Ch. 47) - SP

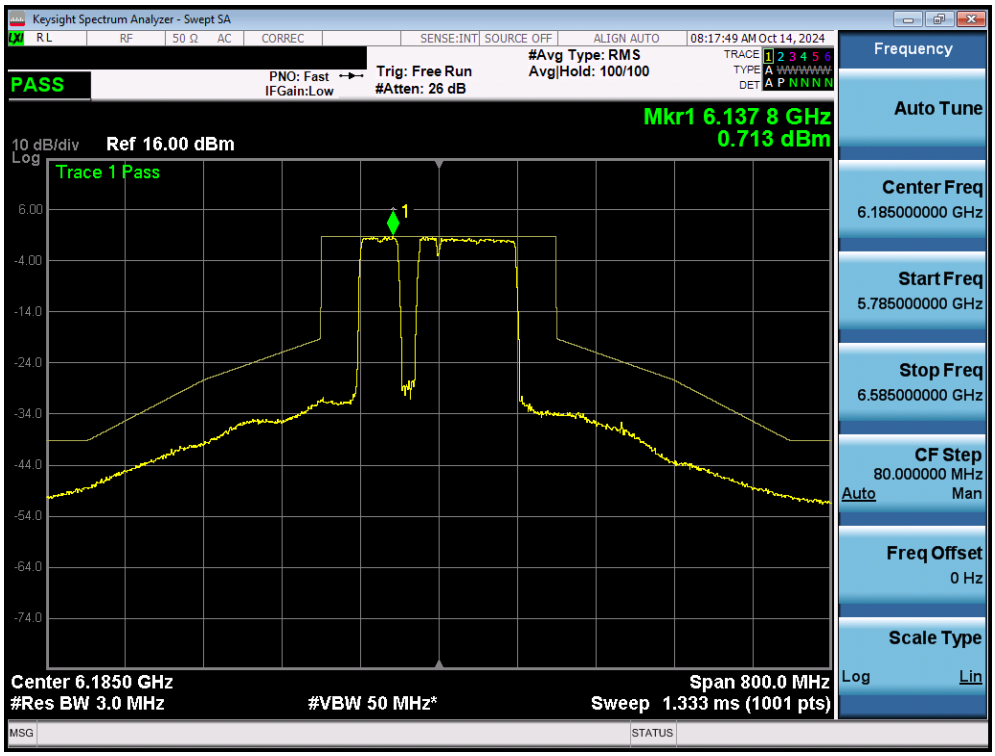


Plot 7-94. In Band Emissions Plot MIMO ANT1 (320MHz 802.11ax/be (UNII Band 5) – Ch. 31) - SP

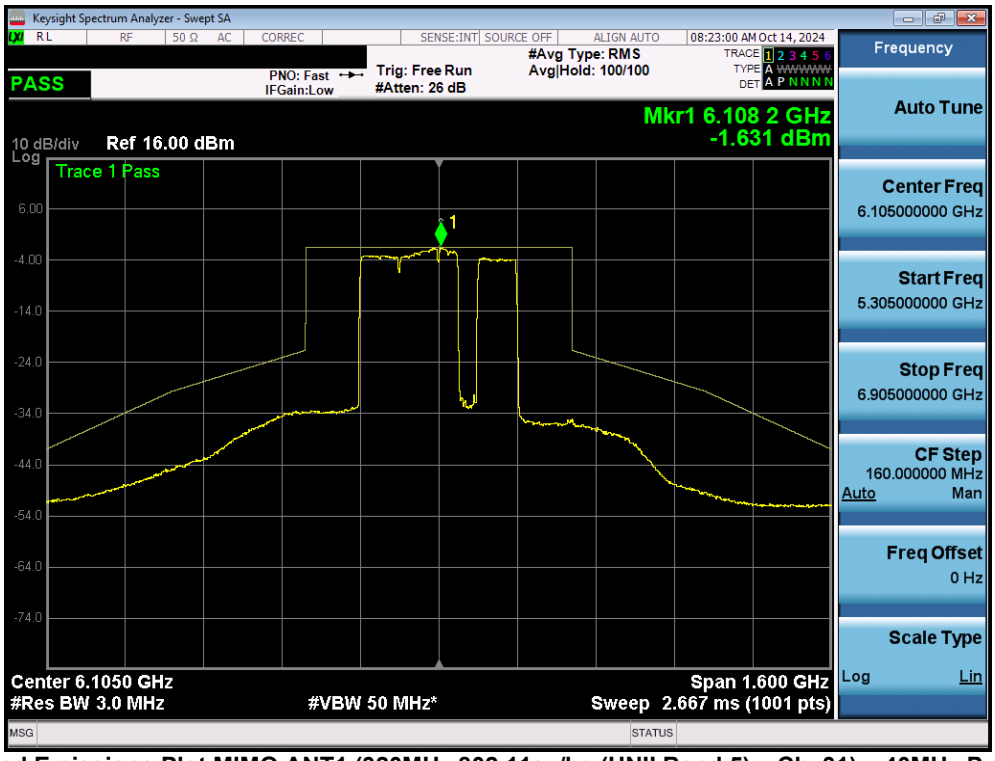
Standard Power (Punctured) Operation



Plot 7-95. In Band Emissions Plot MIMO ANT1 (80MHz 802.11ax/be (UNII Band 5) – Ch. 39) – 20MHz Punctured - SP



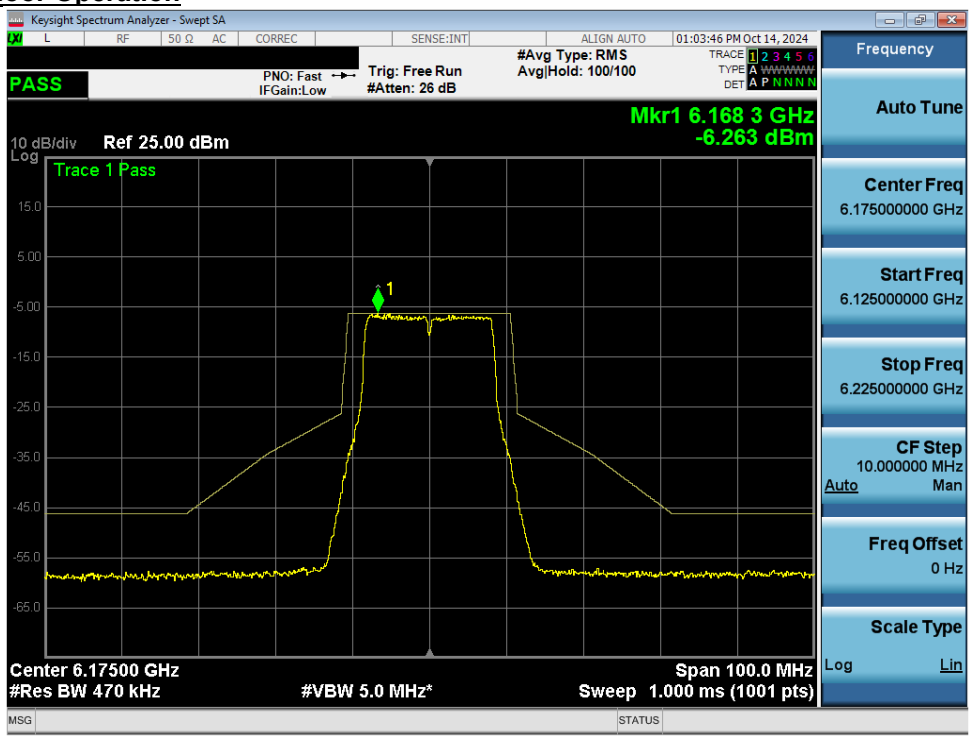
Plot 7-96. In Band Emissions Plot MIMO ANT1 (160MHz 802.11ax/be (UNII Band 5) – Ch. 47) – 20MHz Punctured - SP



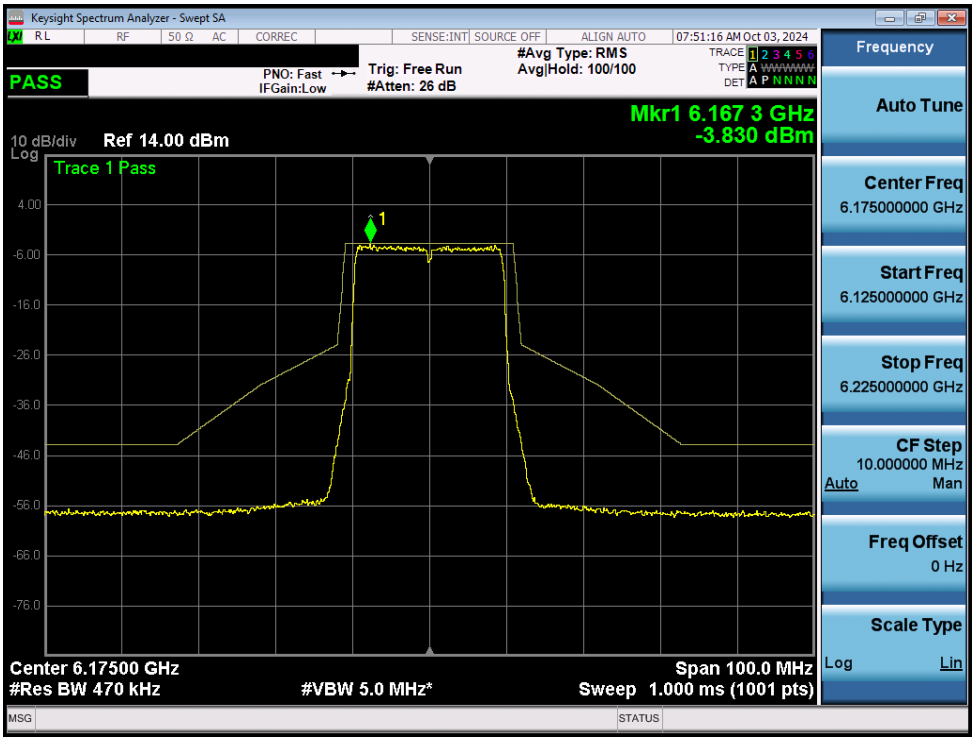
Plot 7-97. In Band Emissions Plot MIMO ANT1 (320MHz 802.11ax/be (UNII Band 5) – Ch. 31) – 40MHz Punctured - SP

7.6.2 MIMO Antenna-2 In-Band Emission Plot Measurement - (UNII Band 5)

Low Power Indoor Operation



Plot 7-98. In Band Emissions Plot MIMO ANT2 (20MHz 802.11a (UNII Band 5) – Ch. 45) - LPI



Plot 7-99. In Band Emissions Plot MIMO ANT2 (20MHz 802.11ax/be (UNII Band 5) – Ch. 45) - LPI