

TEST REPORT

Report Number: 14982485-E30V3

Applicant : APPLE INC.
1 APPLE PARK WAY
CUPERTINO, CA 95014, U.S.A.

Model : A3286 (Parent Model)
A3287, A3288 (Variant Models)

Brand : APPLE

FCC ID : BCG-E8689A (Parent Model)
BCG-E8690A, BCG-8691A (Variant Models)

EUT Description : SMARTPHONE

Test Standard(s) : FCC 47 CFR PART 15 SUBPART E

Date Of Issue:
2024/08/21

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REPORT REVISION HISTORY

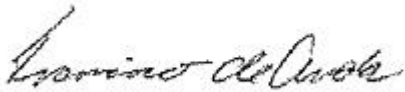
Rev.	Issue Date	Revisions	Revised By
V1	2024/08/17	Initial Review	---
V2	2024/08/21	Address TCB questions, fix formatting issue	Francisco Guarnero
V3	2024/08/21	Addressed addition questions for sections 6.5.2, 9.3 and 9.4.	Francisco Guarnero

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1. ATTESTATION OF TEST RESULTS

Applicant Name and Address	APPLE INC. 1 APPLE PARK WAY CUPERTINO, CA 95014, U.S.A.
Model	A3286 (Parent Model), A3287, A3288 (Variant Models)
Brand	APPLE
FCC ID	BCG-E8689A (Parent Model) BCG-E8690A, BCG-8691A (Variant Models)
EUT Description	SMARTPHONE
Serial Number	C07H1B0003R0000FGT, C07H5T000LS0000FGU (Conducted)
Sample Receipt Date	2024/01/18
Date Tested	2024/02/26 to 2024/08/21
Applicable Standards	CFR 47 Part 15 Subpart E
Test Results	COMPLIES
UL Verification Services Inc. tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report. The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise. This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by A2LA, NIST, any agency of the Federal Government, or any agency of the U.S. government.	
Approved & Released By:	Prepared & Reviewed By:
	
Francisco de Anda Staff Engineer UL Verification Services, Inc.	Francisco Guarnero Senior Test Engineer UL Verification Services, Inc.

2. TEST RESULT SUMMARY

This report contains data provided by the customer which can impact the validity of results. UL Verification Services Inc. is only responsible for correctly integrating customer-provided data with measurements performed by UL Verification Services Inc.

Below is a list of the data provided by the customer:

1. Antenna gain and type (see section 6.3)
2. Cable loss (see section 6.3)

Requirement Description	Requirement Clause Number (FCC)	Result	Comment
Duty Cycle	---	Reporting purposes only	ANSI C63.10 Section 12.2
99% BW	§15.407 (a) (11) KDB 987594 D03 v02 Q18	Compliant	ANSI C63.10 Section 6.9.3
26dB BW			ANSI C63.10 Section 6.9.3
Output Power EIRP	§15.407 (a) (7), (8)	Compliant	Dual Client
PSD EIRP	§15.407 (a) (7), (8)	Compliant	Dual Client
Emissions outside 5.925-7.125 GHz band	§15.407 (b) (6)	Compliant	None
Emissions within 5.925-7.125 GHz Band (Emissions Mask)	§15.407 (b) (7)	Compliant	None
Unwanted emissions in restricted bands	§15.205	Compliant	None

3. TEST METHODOLOGY

The tests documented in this report were performed in accordance with:

- FCC CFR 47 Part 2
- FCC CFR 47 Part 15
- FCC KDB 662911 D01 v02r01
- FCC KDB 789033 D02 v02r01
- FCC KDB 987594 D01 General Requirements v02r02
- FCC KDB 987594 D02 EMC Measurement v02r01
- KDB 414788 D01 Radiated Test Site v01r01
- ANSI C63.10-2013

4. FACILITIES AND ACCREDITATION

UL Verification Services Inc. is accredited by A2LA, certification #0751.05, for all testing performed within the scope of this report. Testing was performed at the locations noted below.

	Address	ISED CABID	ISED Company Number	FCC Registration
☐	Building 1: 47173 Benicia Street, Fremont, CA 94538, USA	US0104	2324A	550739
☒	Building 2: 47266 Benicia Street, Fremont, CA 94538, USA			
☐	Building 3: 843 Auburn Court, Fremont, CA 94538 USA			
☐	Building 4: 47658 Kato Rd, Fremont, CA 94538 USA			
☐	Building 5: 47670 Kato Rd, Fremont, CA 94538 USA			

5. DECISION RULES AND MEASUREMENT UNCERTAINTY

5.1. METROLOGICAL TRACEABILITY

All test and measuring equipment utilized to perform the tests documented in this report are calibrated on a regular basis, with a maximum time between calibrations of one year or the manufacturers' recommendation, whichever is less, and where applicable is traceable to recognized national standards.

5.2. DECISION RULES

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4:2012 Clause 8.2. (Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

5.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	U _{Lab}
Conducted Antenna Port Emission Measurement	1.940 dB
Power Spectral Density	2.466 dB
Time Domain Measurements Using SA	3.39 %
RF Power Measurement Direct Method Using Power Meter	0.450 dB (Ave.) 1.300 dB (Pk)
Radio Frequency (Spectrum Analyzer)	141.16 Hz
Occupied Bandwidth	1.22%
Worst Case Conducted Disturbance, 9KHz to 0.15 MHz	3.78 db
Worst Case Conducted Disturbance, 0.15 to 30 MHz	3.40 db
Worst Case Radiated Disturbance, 9KHz to 30 MHz	2.87 db
Worst Case Radiated Disturbance, 30 to 1000 MHz	6.01 db
Worst Case Radiated Disturbance, 1000 to 18000 MHz	4.73 db
Worst Case Radiated Disturbance, 18000 to 26000 MHz	4.51 db
Worst Case Radiated Disturbance, 26000 to 40000 MHz	5.29 db

Uncertainty figures are valid to a confidence level of 95%.

5.4. SAMPLE CALCULATION

RADIATED EMISSIONS

Where relevant, the following sample calculation is provided:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)

$36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} = 28.9 \text{ dBuV/m}$

MAINS CONDUCTED EMISSIONS

Where relevant, the following sample calculation is provided:

Final Voltage (dBuV) = Measured Voltage (dBuV) + Cable Loss (dB) + Limiter Factor (dB) + LISN Insertion Loss.

$36.5 \text{ dBuV} + 0 \text{ dB} + 10.1 \text{ dB} + 0 \text{ dB} = 46.6 \text{ dBuV}$

6. EQUIPMENT UNDER TEST

6.1. EUT DESCRIPTION

The Apple iPhone is a smartphone with cellular GSM, GPRS, EGPRS, WCDMA, LTE, 5G NR1, IEEE 802.11a/b/g/n/ac/ax/be, Bluetooth (BT), Ultra-Wideband (UWB), Global Positioning System (GPS), Near-Field Communication (NFC), Narrow-Band (NB) UNII, 802.15.4, 802.15.4ab-Narrow Band (NB), WPT and Mobile Satellite Service (MSS) technologies. The rechargeable battery is not user accessible. This device is not user-serviceable and requires special tools to disassemble.

This report covers 6E 802.11 ax/be Wifi radio.

6.1.1. EUT DEVICE CLASS

Class	U-NII Bands of Operation			
	5	6	7	8
Very Low Power Client (6VL)	☒	☐	☒	☐

6.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum EIRP output power as follows:

6.2.1. VLP

UNII-5 BAND

Frequency Range (MHz)	Mode	Output Power EIRP (dBm)	Output Power EIRP (mW)
UNII-5 Band, 1TX			
6115-6415	802.11be HE20	4.57	2.86
6125-6405	802.11be HE40	7.64	5.81
6145-6385	802.11be HE80	10.63	11.56
6185-6345	802.11be HE160	12.84	19.23
UNII-5 Band, 2TX			
6115-6415	802.11be HE20 CDD	1.94	1.56
6115-6415	802.11be HE20 SDM	4.82	3.03
6125-6405	802.11be HE40 CDD	4.95	3.13
6125-6405	802.11be HE40 SDM	7.80	6.03
6145-6385	802.11be HE80 CDD	7.92	6.19
6145-6385	802.11be HE80 SDM	10.81	12.05
6185-6345	802.11be HE160 CDD	10.22	10.52
6185-6345	802.11be HE160 SDM	13.07	20.28

UNII-7 BAND

Frequency Range (MHz)	Mode	Output Power EIRP (dBm)	Output Power EIRP (mW)
UNII-7 Band 1TX			
6535 - 6855	802.11ax HE20	4.74	2.98
6565 - 6845	802.11ax HE40	7.74	5.94
6525 - 6785	802.11ax HE80	10.73	11.83
6665	802.11ax HE160	12.99	19.91
UNII-7 Band 2TX			
6535-6855	802.11ax HE20 CDD	1.62	1.45
6535-6855	802.11ax HE20 SDM	4.70	2.95
6565-6845	802.11ax HE40 CDD	4.72	2.96
6565-6845	802.11ax HE40 SDM	7.71	5.90
6525 - 6785	802.11ax HE80 CDD	7.70	5.89
6525 - 6785	802.11ax HE80 SDM	10.70	11.75
6665	802.11ax HE160 CDD	9.94	9.86
6665	802.11ax HE160 SDM	12.95	19.72

6.3. DESCRIPTION OF AVAILABLE ANTENNAS AND CABLE LOSS

The antennas gain and type, cable loss as provided by the manufacturer' are as follows:

Antenna Type: IFA

Band	Frequency Range Sub-band (MHz)	Antenna 6 (dBi)	Antenna 5 (dBi)	Uncorrelated Chains (dBi)	Correlated Chains (dBi)
UNII-5	Sub-band 1 (5955 - 6095) (Disabled)	1.3	-2.6	-0.23	2.58
	Sub-band 2 (6115 - 6255)	-0.70	-2.20	-1.39	1.59
	Sub-band 3 (6275 - 6415)	0.40	-2.40	-0.78	2.12
UNII-7	6535 - 6855	-0.50	-1.90	-1.14	1.84

Cable type: SMA

Cable Loss		
Frequency Range (MHz)	Antenna 6 (dB)	Antenna 5 (dB)
6105-6425	3.20	2.98
6525-6875	3.20	2.98

The SMA cables were used for RF antenna port tests that had been offset to the test equipment during testing.

6.4. SOFTWARE AND FIRMWARE

The EUT firmware installed during testing was 27_20_111_38

6.5. WORST-CASE CONFIGURATION AND MODE

This report is to document the very low power client mode only. The standard power client and indoor low power client mode are documented in a separate 6CD report.

For RF conducted tests, VLP has been tested with SISO, 2TX CDD, and SDM MIMO modes and was tested on all antenna ports after investigation.

The 802.11a mode 20MHz covered by the 802.11be mode since both have the same power.

Radiated tests are covered by standard power and indoor low power client modes as they have the higher tune up.

For conducted testing - all tests perform on both SU (highest output power) and Partial RU tones (highest PSD reading).

Low data rate was used to test on antenna port conducted since it has the highest maximum power.

The modulation and bandwidth of 802.11ax and 802.11be modes are similar at 20 MHz (40 MHz, 80 MHz, 160 MHz), and the target power of 802.11ax mode is equal to or lower than that of 802.11be mode, and the data rate of 802.11be mode is higher than 802.11ax mode, so 802.11be mode was tested to represent worst-case reporting.

For mask and bandwidth measurements partial RU allocations are tested with the RUs allocated at the lower and upper positions within the channel for the low mid and high channels in each band. Additionally, the center channel is also tested with the RU allocated in the center of the channel to verify that the low / high RU allocations are worst case.

After the investigation, it was found that the worst case of power and PSD modes for full testing as table shown below, in addition we also spot-checked Full RU and the rest of Partial RU modes on radiated bandedge, conducted emissions mask, and radiated spurious emissions.

6.5.1. VLP

WIFI 7 - 802.11be															
BW (MHz)	Tone (T)	RU Index	RU Index from Chipset support	Worst Case Tone (UNII-5) SISO		Worst Case Tone (UNII-5) MIMO CDD		Worst Case Tone (UNII-5) MIMO SDM		Worst Case Tone (UNII-7) SISO		Worst Case Tone (UNII-7) MIMO CDD		Worst Case Tone (UNII-7) MIMO SDM	
				Power	PSD	Power	PSD	Power	PSD	Power	PSD	Power	PSD	Power	PSD
20	26	0 ~ 8	0 ~ 8												
	52	37 ~ 40	37 ~ 40												
	52 + 26	70 ~ 81	70, 71, 72												
	106	53 ~ 54	53 ~ 54							x					x
	106 + 26	82 ~ 89	82, 83		x		x		x				x		
	242	61	61												
	SU	--	--	x		x		x		x		x		x	
40	26	0 ~ 17	0 ~ 17												
	52	37 ~ 44	37 ~ 44												
	52 + 26	70 ~ 81	70, 72, 72, 73, 74, 75												x
	106	53 ~ 56	53 ~ 56												
	106 + 26	82 ~ 89	82, 83, 84, 85		x		x		x		x		x		
	242	61 ~ 61	61 ~ 62												
	484	65	65												
SU	--	--	x		x		x		x		x		x		
80	26	0 ~ 36	0 ~ 36												
	52	37 ~ 52	37 ~ 52												
	52 + 26	70 ~ 81	71,72,73,74,77,78,79,80		x				x						
	106	53 ~ 60	53 ~ 60												
	106 + 26	82 ~ 89	82, 85, 86, 89				x								
	242	61 ~ 64	61 ~ 64												
	484	65 ~ 66	65 ~ 66												
	484 + 242	90, 91, 92, 93	90, 91, 92, 93								x		x		x
	996	67	67												
SU	--	--	x		x		x		x		x		x		
160	26	0 ~ S36	0 ~ S36												
	52	37 ~ S52	37 ~ S52												
	52 + 26	70 ~ S81	sb0: 71,72,73,74,77,78,79,80 sb1: 71,72,73,74,77,78,79,80												
	106	53 ~ S60	53 ~ S60								x				x
	106 + 26	82 ~ 89	82, 85, 86, 89												
	242	61 ~ S64	61 ~ S64										x		
	484	65 ~ S66	65 ~ S66		x		x		x						
	484 + 242	sb0: 90, 91, 92, 93 sb1: 90, 91, 92, 93	sb0: 90, 91, 92, 93 sb1: 90, 91, 92, 93												
	996	67 ~ S67	67 ~ S67												
	996 + 484	sb0: 94, 95 sb1: 94, 95	sb0: 94, 95 sb1: 94, 95												
	996 + 484 + 242	sb0: 96, 97, 98, 99 sb1: 96, 97, 98, 99	sb0: 96, 97, 98, 99 sb1: 96, 97, 98, 99												
	996x2	S68	S68												
	SU	--	--	x		x		x		x		x		x	

6.5.2. REUSE STATEMENT AND COMPARISON TABLE

The maximum output power for A3081 (FCC ID: BCG-E8688A) and A3286(FCC ID: BCG-E8689A)/A3287 (FCC ID: BCG-E8690A)/A3288 (FCC ID: BCG-E8691A) are identical across all power tables for ANT5. AN6 port maximum output power for A3286/ A3287/ A3288 are changed from A3081 as shown in below table.

BANDS	MAXIMUM OUTPUT POWER DIFFERENCE		
	SISO a/ HE/EHT20 All Rates	2Tx CDD HE/EHT20 All Rates	2Tx SDM HE/EHT20 All Rates
UNII-5	HIGHER CH33-61 6115-6255MHz	LOWER CH33-CH93, 6115-6415MHz (except CH65-CH93 disabled Partial RU mode)	LOWER
UNII-7	LOWER	LOWER	LOWER

BANDS	MAXIMUM OUTPUT POWER DIFFERENCE		
	SISO HE/EHT40 All Rates	2Tx CDD HE/EHT40 All Rates	2Tx SDM HE/EHT40 All Rates
UNII-5	HIGHER CH35-59 6125-6245MHz	LOWER CH35-CH91, 6125-6405MHz (except CH67-CH91 disabled Partial RU mode)	LOWER
UNII-7	LOWER	LOWER	LOWER

BANDS	MAXIMUM OUTPUT POWER DIFFERENCE		
	SISO HE/EHT80 All Rates	2Tx CDD HE/EHT80 All Rates	2Tx SDM HE/EHT80 All Rates
UNII-5	HIGHER CH39-55 6145-6225MHz	LOWER CH39-CH87, 6145-6385MHz (except CH87 disabled Partial RU mode)	LOWER
UNII-7	LOWER	LOWER	LOWER

BANDS	MAXIMUM OUTPUT POWER DIFFERENCE		
	SISO HE/EHT160 All Rates	2Tx CDD HE/EHT160 All Rates	2Tx SDM HE/EHT160 All Rates
UNII-5	HIGHER CH47, 6185MHz	LOWER	LOWER
UNII-7	LOWER	LOWER	LOWER

According to the VLP mode output power changed mentioned on above table and antenna gain increased on UNII-5 and UNII-7 as documented in section 6.3, model A3286 ANT6 port was retested on Output power, PSD and Emission mask and radiated tests to cover model A3287 /A3288.

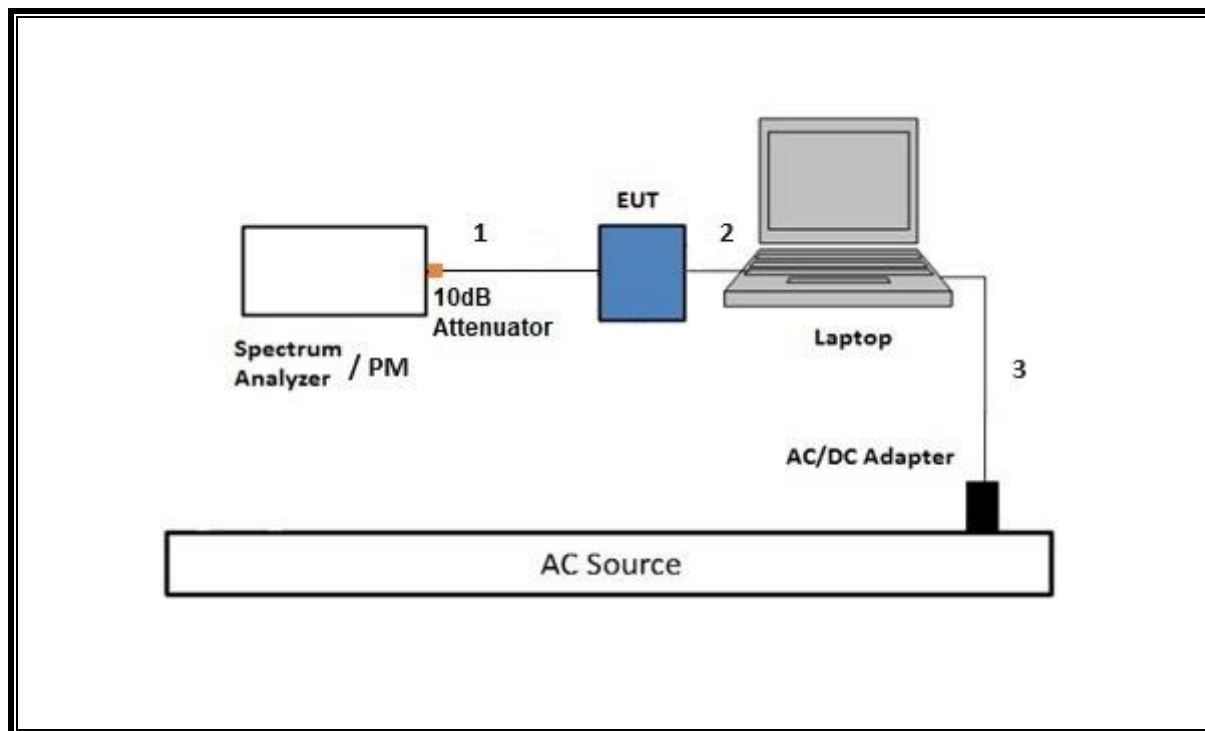
ANT5 rf conducted test results and SISO mode radiated band edge test results are reused from the reference model, A3081. The data reuse plan has been approved by FCC manufacturer inquiry.

6.6. DESCRIPTION OF TEST SETUP

SUPPORT TEST EQUIPMENT						
Description		Manufacturer	Model	Serial Number		FCC ID/ DoC
Laptop		Apple	Macbook Pro	C02VD7SAHV22		BCGA1708
Laptop AC/DC adapter		Liteon Technology	A1424	NSW25679		DoC
EUT AC/DC adapter		Apple	A1720	C3D8417A7R93KVPA8		DoC
I/O CABLES (RF CONDUCTED TEST)						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	SMA	1	SMA	Shielded	0.75	To spectrum Analyzer
2	USB-C	1	USB-C	Shielded	1.0	N/A
3	DC	1	DC	Shielded	2	From AC/DC adapter

TEST SETUP

The EUT setup is shown as below. Test software exercised the radio card.

SETUP DIAGRAM FOR CONDUCTED TESTS**7. MEASUREMENT METHOD**

On Time and Duty Cycle: KDB 789033 D02 v02r01, Section B.

26 dB Emission BW: KDB 789033 D02 v02r01, Section C.

99% Occupied Bandwidth: KDB 789033 D02 v02r01, Section II-D

Conducted Output Power: KDB 789033 D02 v02r01, Section II E.3.b (Method PM-G).

Power Spectral Density (PSD): KDB 789033 D02 v02r01, Section F

Spurious emissions within 5.925-7.125 GHz Band (Emissions Mask): KDB 987594 D02 EMC Measurement Section II-J

8. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

TEST EQUIPMENT LIST				
Description	Manufacturer	Model	ID Num	Cal Due
Power Meter, P-series single channel	Keysight Technologies Inc	N1911A	90731	2025/01/31
Power Sensor, P - series, 50MHz to 18GHz, Wideband	Keysight Technologies Inc	N1921A	80120	2025/01/31
Power Meter, P-series single channel	Keysight Technologies Inc	N1911A	90719	2025/01/31
Power Sensor, P - series, 50MHz to 18GHz, Wideband	Keysight Technologies Inc	N1921A	90389	2025/01/31
10dB Fixed Attenuator	Pasternack Enterprises	PE7087-10	178557	Verified Before Use
10dB Fixed Attenuator	Pasternack Enterprises	PE7087-10	178558	Verified Before Use
Spectrum Analyzer, PXA, 3Hz to 44GHz	Keysight Technologies Inc	N9030A	80397	2025/01/31
Spectrum Analyzer, PXA, 3Hz to 50GHz w/Ext. Mixer	Keysight Technologies Inc	N9030A	80400	2025/02/02
Spectrum Analyzer, PXA, 3Hz to 44GHz	Keysight Technologies Inc	N9030A	125178	2025/01/31
PXA Signal Analyzer	Keysight Technologies Inc	N9030B	222071	2024/11/30
Spectrum Analyzer, PXA, 3Hz to 44GHz	Keysight Technologies Inc	N9030A	80396	2025/2/28
Spectrum Analyzer, PXA, 3Hz to 44GHz	Keysight Technologies Inc	N9030A	81188	2025/1/31

UL AUTOMATION SOFTWARE			
Conducted Software	UL	UL EMC	2023.2.23

9. ANTENNA PORT TEST RESULTS

9.1. ON TIME AND DUTY CYCLE

LIMITS

None; for reporting purposes only.

PROCEDURE

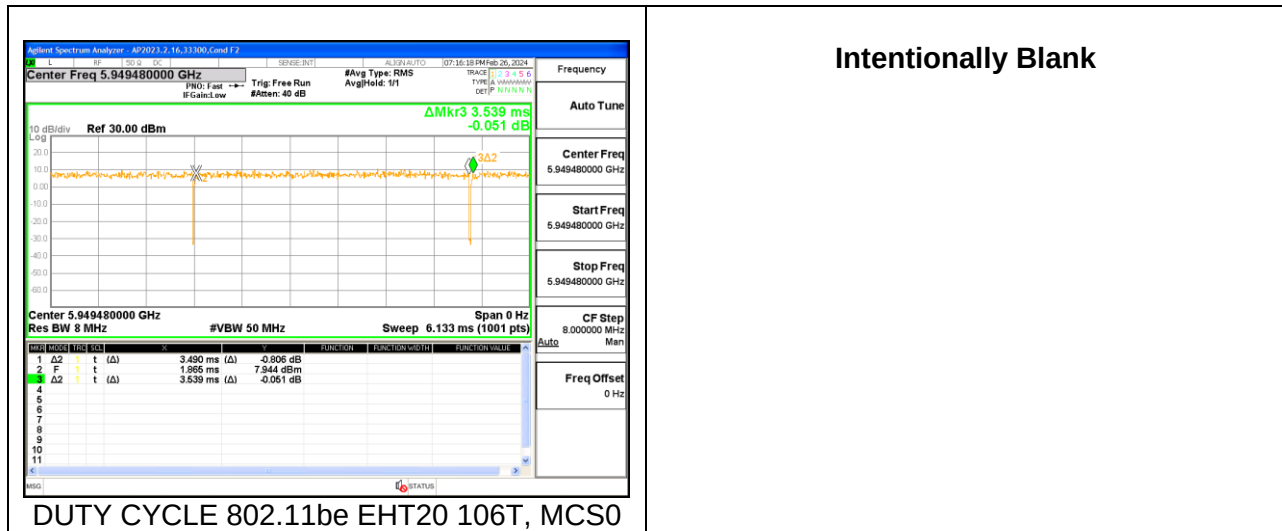
KDB 789033 Zero-Span Spectrum Analyzer Method.

ON TIME AND DUTY CYCLE RESULTS

Mode	Tone (T)	Data Rate (Mbps)	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
EHT20	SU	MCS0	1.577	1.597	0.9875	98.75%	0.00	0.010
	(106+26)T	MCS0	3.547	3.567	0.9944	99.44%	0.00	0.010
	106T	MCS0	3.490	3.539	0.9862	98.62%	0.00	0.010
EHT40	SU	MCS0	1.560	1.584	0.9847	98.47%	0.00	0.010
	(106+26)T	MCS0	3.514	3.584	0.9805	98.05%	0.00	0.010
	106T	MCS0	3.490	3.539	0.9862	98.62%	0.00	0.010
EHT80	SU	MCS0	1.491	1.511	0.9868	98.68%	0.00	0.010
	(52+26)T	MCS0	3.778	3.814	0.9906	99.06%	0.00	0.010
	(106+26)T	MCS0	3.545	3.585	0.9888	98.88%	0.00	0.010
	(484+242)T	MCS0	2.697	2.720	0.9915	99.15%	0.00	0.010
EHT160	SU	MCS0	0.998	1.040	0.9596	95.96%	0.18	1.002
	484T	MCS0	3.990	4.029	0.9903	99.03%	0.00	0.010
	106T	MCS0	3.509	3.556	0.9868	98.68%	0.00	0.010
	242T	MCS0	3.041	3.081	0.9870	98.70%	0.00	0.010

Mode	Tone (T)	Data Rate (Mbps)	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
EHT20 SDM	SU	MCS0	0.779	0.798	0.9756	97.56%	0.11	1.284
	(106 + 26)T	MCS0	3.547	3.585	0.9894	98.94%	0.00	0.010
	106T	MCS0	3.516	3.539	0.9935	99.35%	0.00	0.010
EHT40 SDM	SU	MCS0	0.773	0.793	0.9750	97.50%	0.11	1.293
	(106 + 26)T	MCS0	3.547	3.585	0.9894	98.94%	0.00	0.010
	(52+26)T	MCS0	3.777	3.815	0.9900	99.00%	0.00	0.010
EHT80 SDM	SU	MCS0	0.737	0.759	0.9714	97.14%	0.13	1.357
	(52+26)T	MCS0	3.777	3.816	0.9898	98.98%	0.00	0.010
	(484+242)T	MCS0	2.697	2.720	0.9915	99.15%	0.00	0.010
EHT160 SDM	SU	MCS0	0.515	0.535	0.9621	96.21%	0.17	1.942
	484T	MCS0	4.008	4.028	0.9950	99.50%	0.00	0.010
	106T	MCS0	3.510	3.557	0.9868	98.68%	0.00	0.010

Note: Duty cycle factors are the same for 1TX and 2TX.

DUTY CYCLE PLOTS

Intentionally Blank

9.2. VLP 26 dB AND 99% BANDWIDTH

LIMITS

§15.407 (a) (11)

The maximum bandwidth for U-NII devices in the 5.925-7.125 GHz band is 320 MHz. KDB 987594 D03 U-NII 6 GHz QA v02, modified by FCC TCB Workshop Presentation Review of TCB PAG Submissions - October 2023, allows the maximum bandwidths to be defined by either the 26dB bandwidth or the 99% bandwidth for a 320 MHz nominal channel bandwidth and by the 26dB bandwidth for all other nominal channel bandwidths. The KDB requires that the test report show the 99% and 26 dB bandwidth for all the nominal channel bandwidths used by the device.

PROCEDURE

ANSI C63.10: 2020 §6.9

Band	Tones	20MHz	40MHz	80MHz	160MHz
UNII-5	Partial RU	300kHz/910kHz	510kHz/1.6MHz	510kHz/1.6MHz	510kHz/1.6MHz
	SU	300kHz/910kHz	510kHz/1.6MHz	1MHz/3MHz	2MHz/6MHz
UNII-7	Partial RU	300kHz/910kHz	510kHz/1.6MHz	1MHz/3MHz	300kHz/910kHz (SISO/SDM) 510kHz/1.6MHz (CDD)
	SU	300kHz/910kHz	510kHz/1.6MHz	1MHz/3MHz	2MHz/6MHz

RESULTS

ID:	106045/ 33300	Date:	24/07/09
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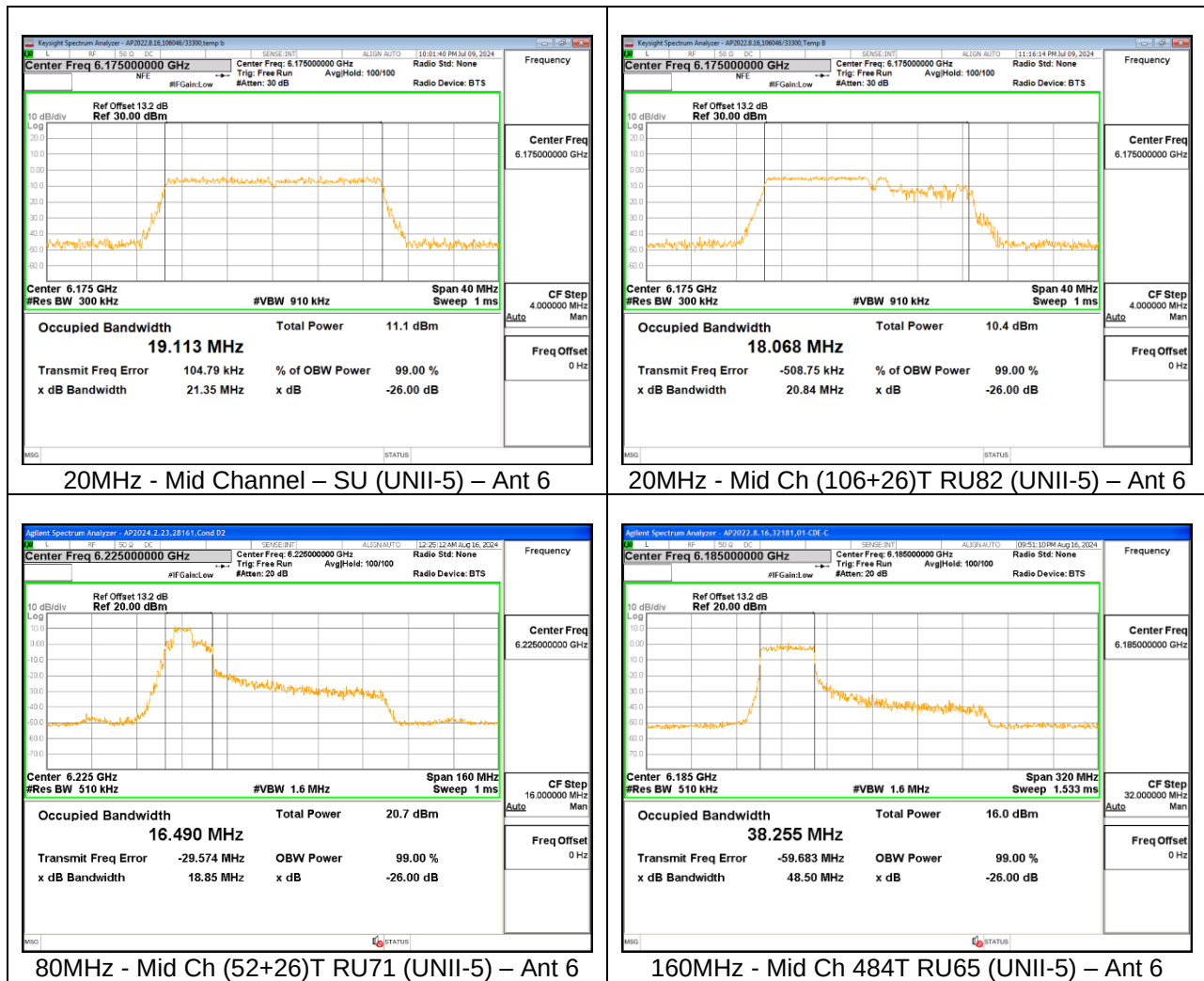
For mask and bandwidth measurements partial RU allocations are tested with the RUs allocated at the lower and upper positions within the channel for the low mid and high channels in each band. Additionally, the center channel is also tested with the RU allocated in the center of the channel to verify that the low / high RU allocations are worst case.

Plots in these sections serve as reference for settings of the different bandwidths measured.

The tests performed on this device show that both 99% and 26dB bandwidths are less than 320 MHz. for all supported channel bandwidths.

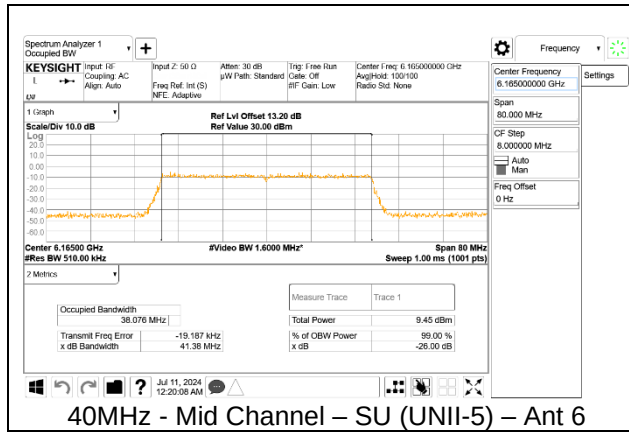
9.2.1. 802.11be SISO MODE IN THE UNII-5 BAND

UNII-5 (SISO)	Frequency (MHz)	Channel Number	Tone	RU Index	26 dB Bandwidth (MHz)		99% Bandwidth (MHz)	
					Ant 6	Ant 5	Ant 6	Ant 5
20 MHz	6115	33	SU	--	21.16	21.84	19.0630	19.1297
			106+26	82	20.57	20.82	18.0890	18.0088
				83	21.04	21.04	18.2650	18.2830
	6175	45	SU	--	21.35	21.80	19.1130	19.0244
			106+26	82	20.84	20.93	18.0680	18.1180
				83	20.58	20.84	18.1680	18.2710
	6415	93	SU	--	20.91	21.96	19.0950	19.0612
			106+26	82	20.86	20.86	18.1270	18.1320
				83	21.03	20.48	18.1400	18.2720
40 MHz	6125	35	SU	--	42.32	42.64	38.0054	37.9384
			106+26	82	25.33	24.07	17.9920	17.9640
				84	26.83	27.74	19.6070	19.5640
				85	23.95	24.53	18.0990	18.1100
	6165	43	SU	--	42.48	42.40	38.0195	38.0115
			106+26	82	23.99	26.76	17.9610	17.9500
				84	26.19	25.50	19.5070	19.3400
				85	24.60	24.70	18.2430	18.0960
	6405	91	SU	--	42.32	42.64	38.0125	38.0644
			106+26	82	21.77	21.78	17.9820	17.9680
				84	25.49	26.41	19.2870	19.4300
				85	23.95	23.56	17.9520	18.1520
80MHz	6145	39	SU	--	81.69	84.48	77.5800	77.5283
			52+26	71	17.77	17.17	13.2160	12.6400
				74	21.71	21.76	14.9660	17.6580
				80	17.44	22.52	12.4700	17.7960
	6225	55	SU	--	91.18	81.66	77.3791	77.4310
			52+26	71	18.85	19.03	16.4900	17.2710
				74	21.54	24.18	17.6340	18.0210
				80	20.86	22.40	17.8490	17.7110
	6385	87	SU	--	81.69	84.00	77.5130	77.4690
			52+26	71	18.95	19.13	14.1720	15.5870
				74	27.30	23.48	16.3090	17.9980
				80	18.57	21.83	12.2030	15.9200
160MHz	6185	47	SU	--	170.24	170.24	157.2440	157.1860
			484	65	48.50	64.88	38.2550	39.9310
				S66	53.45	68.51	40.6800	40.3454
	6345	79	SU	--	169.60	169.92	156.9707	157.1513
			484	65	54.84	61.98	39.7830	40.1240
				S66	54.64	57.87	39.9920	39.8880

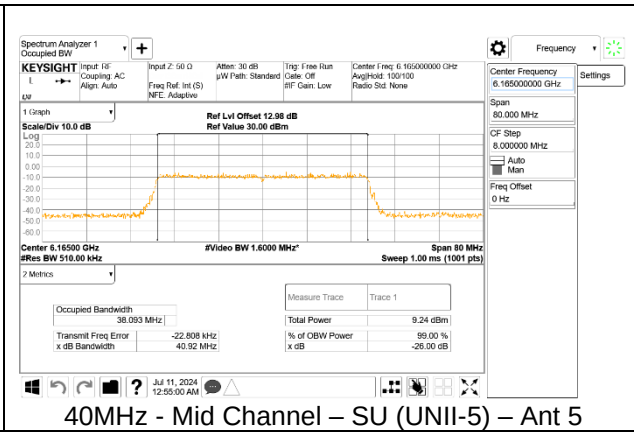


9.2.2. 802.11be MIMO CDD MODE IN THE UNII-5 BAND

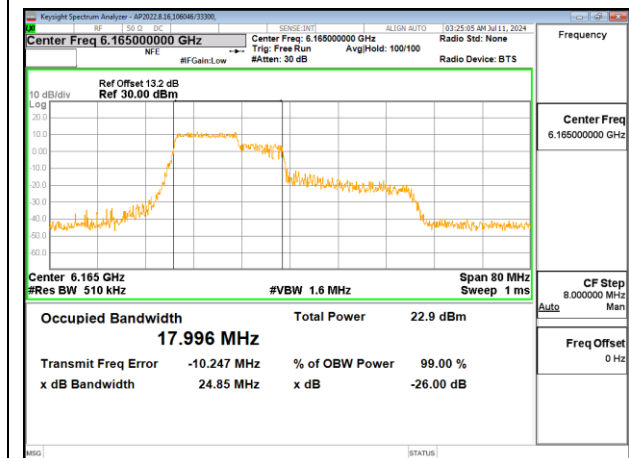
UNII-5 (SISO)	Frequency (MHz)	Channel Number	Tone	RU Index	26 dB Bandwidth (MHz)		99% Bandwidth (MHz)	
20 MHz	6115	33	SU	--	21.18	21.72	19.0780	19.0768
			106+26	82	20.65	21.88	18.1470	18.1190
				83	20.92	21.68	18.1960	18.1110
	6175	45	SU	--	21.24	19.76	19.0900	19.0753
			106+26	82	20.64	19.86	18.1560	18.0700
				83	20.72	19.83	18.2120	18.1520
40 MHz	6125	35	SU	--	21.38	20.45	19.1110	19.1033
			106+26	82	22.13	19.90	17.7670	17.8450
				84	28.22	23.90	19.6350	18.9240
				85	24.04	19.87	18.0690	17.7320
	6165	43	SU	--	41.38	40.92	38.0760	38.0931
			106+26	82	24.85	19.88	17.9960	17.9000
				84	26.44	25.50	19.41	18.94
				85	24.40	20.79	18.1520	17.9030
	6405	91	SU	--	42.48	42.56	38.0407	38.0406
80 MHz	6145	39	SU	--	81.03	83.68	77.4620	77.6213
			106+26	82	25.08	20.21	18.3880	18.2430
				85	37.04	26.61	16.1190	18.9530
				89	25.92	20.81	17.6340	18.2700
	6225	55	SU	--	80.72	81.10	77.4635	77.3990
			106+26	82	21.70	19.59	17.7940	17.7350
				85	25.96	23.68	18.7620	18.6650
				89	24.49	20.34	17.9340	17.7230
160 MHz	6185	47	SU	--	81.48	84.00	77.4890	77.5484
			484	65	48.43	48.49	38.1690	38.2210
				S66	60.32	52.41	40.4020	39.8790
	6345	79	SU	--	170.88	168.96	157.2209	157.1034
			484	65	54.99	56.97	39.9790	40.0710
				S66	62.35	58.79	39.7850	39.8500



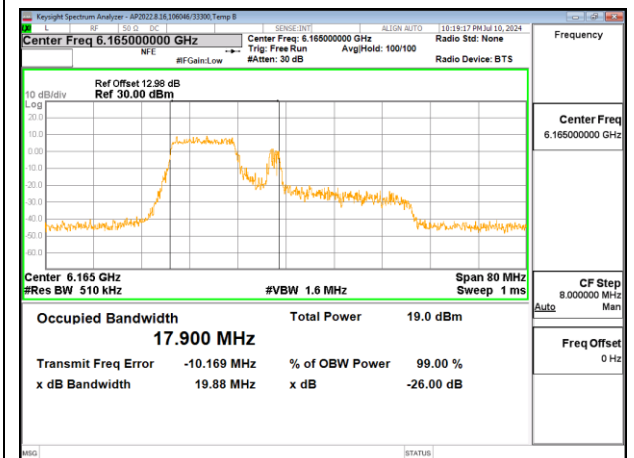
40MHz - Mid Channel – SU (UNII-5) – Ant 6



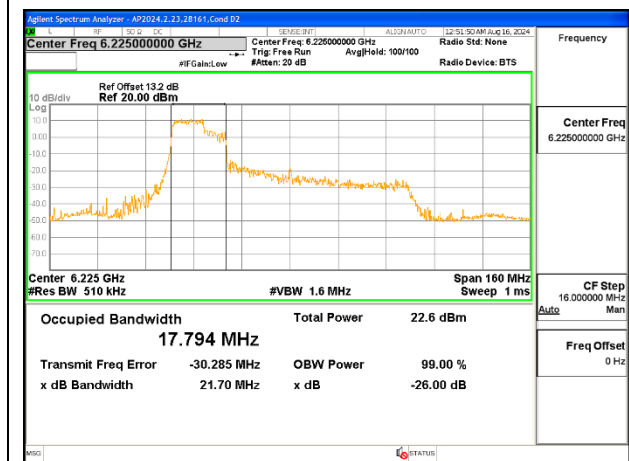
40MHz - Mid Channel – SU (UNII-5) – Ant 5



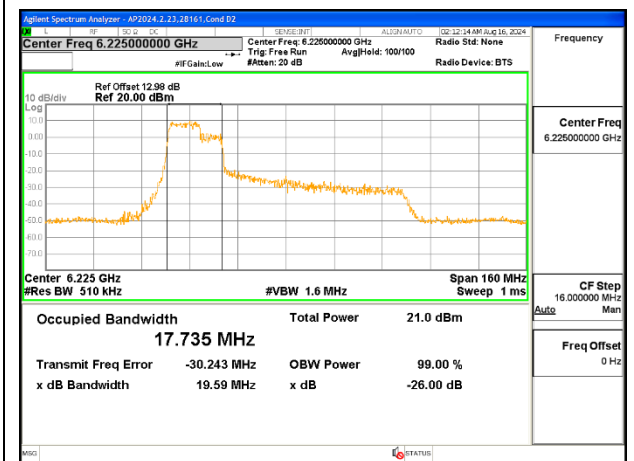
40MHz - Mid Ch (106+26)T RU82 (UNII-5) – Ant 6



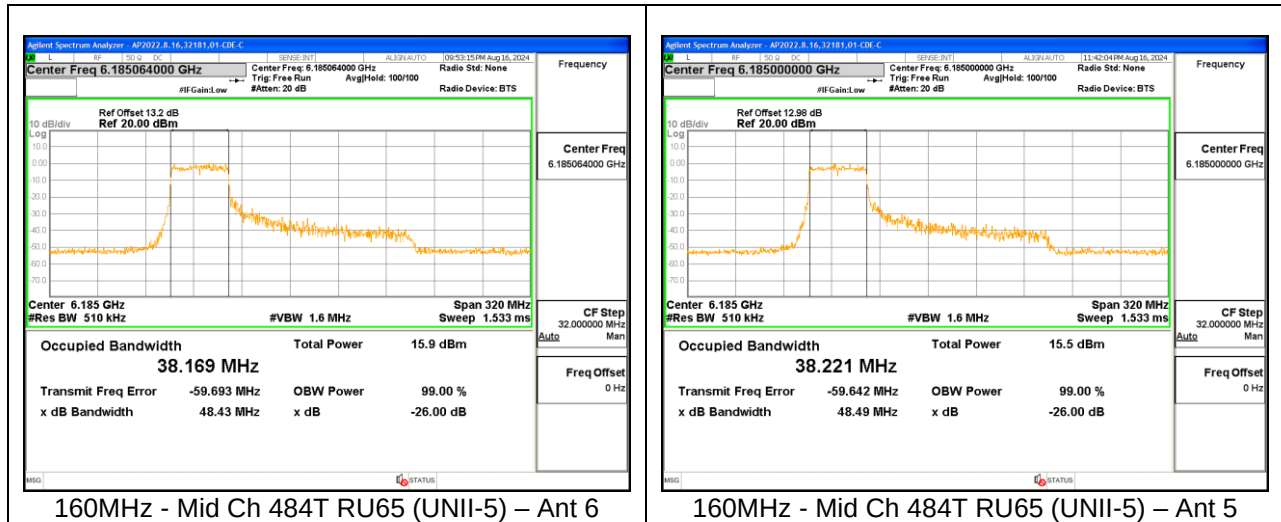
40MHz - Mid Ch (106+26)T RU82 (UNII-5) – Ant 5



80MHz - Mid Ch (106+26)T RU82 (UNII-5) – Ant 6

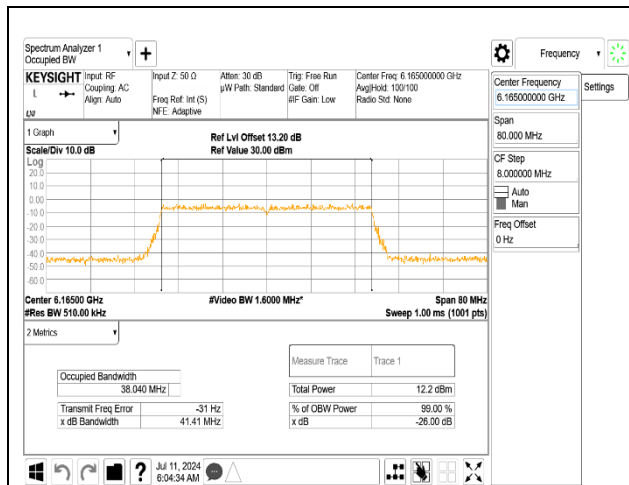


80MHz - Mid Ch (106+26)T RU82 (UNII-5) – Ant 5

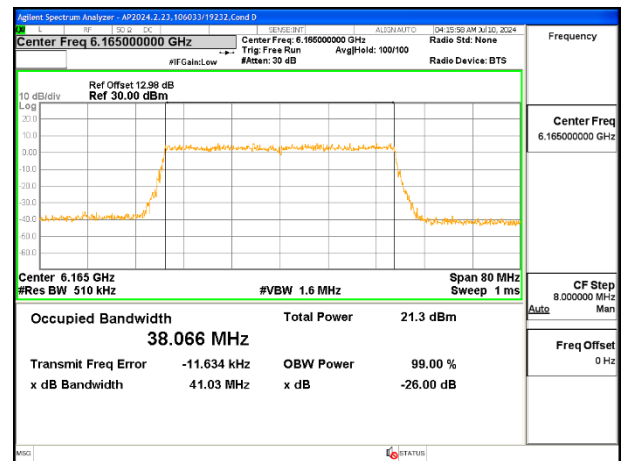


9.2.3. 802.11be MIMO SDM MODE IN THE UNII-5 BAND

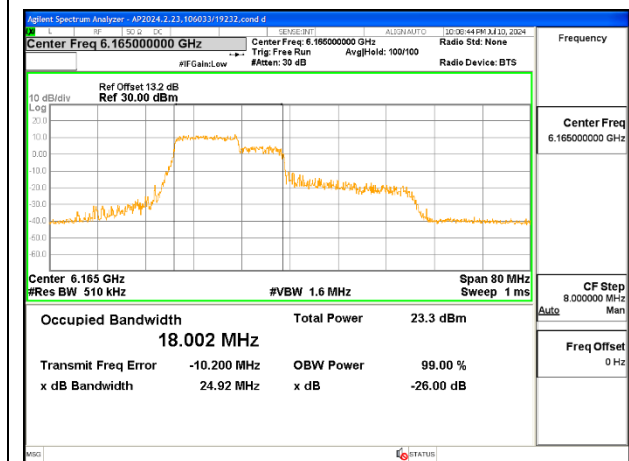
UNII-5 (SISO)	Frequency (MHz)	Channel Number	Tone	RU Index	26 dB Bandwidth (MHz)		99% Bandwidth (MHz)	
					Ant 6	Ant 5	Ant 6	Ant 5
20 MHz	6115	33	SU	--	21.92	21.80	19.0619	19.0449
			106+26	82	20.79	19.76	18.1210	18.1310
				83	21.43	19.98	18.2510	18.0530
	6175	45	SU	--	21.92	21.52	19.0935	19.0907
			106+26	82	20.91	19.66	18.1430	17.9450
				83	21.15	20.00	18.2290	17.9910
	6415	93	SU	--	21.84	21.68	19.1011	19.0869
			106+26	82	21.02	19.80	18.1390	18.0960
				83	20.93	19.82	18.2760	18.0870
40 MHz	6125	35	SU	--	42.56	41.57	38.0038	38.0660
			106+26	82	24.18	20.88	18.0420	17.8870
				84	26.94	25.72	19.5470	19.0090
				85	22.77	21.00	18.1480	17.9170
	6165	43	SU	--	41.41	41.03	38.0400	38.0660
			106+26	82	24.92	20.99	18.0020	15.2970
				84	26.40	26.17	19.7490	19.2740
				85	24.98	21.11	18.2190	17.9150
	6405	91	SU	--	42.56	41.26	38.0717	38.0640
			106+26	82	24.70	25.02	18.0460	17.9810
				84	27.41	26.08	19.7000	19.1700
				85	24.17	19.73	18.2670	17.8770
80MHz	6145	39	SU	--	81.55	81.53	77.5290	77.4410
			52+26	71	19.28	18.77	17.1760	17.0830
				74	23.35	20.13	17.8160	17.3480
				80	22.51	19.27	17.5310	17.3030
	6225	55	SU	--	81.40	81.30	77.4910	77.4550
			52+26	71	18.77	17.82	17.2900	16.4290
				74	24.06	19.06	18.1090	17.2960
				80	21.02	19.08	17.3250	17.2130
	6385	87	SU	--	81.16	81.19	77.4920	77.5110
			52+26	71	19.39	18.60	17.2060	17.0550
				74	21.77	19.49	17.8220	17.0490
				80	22.42	19.78	18.3360	17.3240
160MHz	6185	47	SU	--	164.60	165.30	157.2200	157.3500
			484	65	49.94	45.61	38.1710	38.1840
				566	47.38	46.05	38.0900	38.0130
	6345	79	SU	--	166.50	165.80	157.1720	157.4700
			484	65	47.33	45.94	38.2100	38.1880
				566	46.66	45.09	38.1540	38.2440



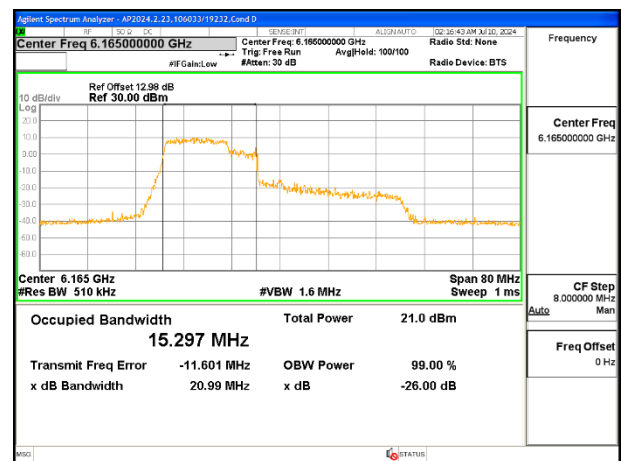
40MHz - Mid Channel – SU (UNII-5) – Ant 6



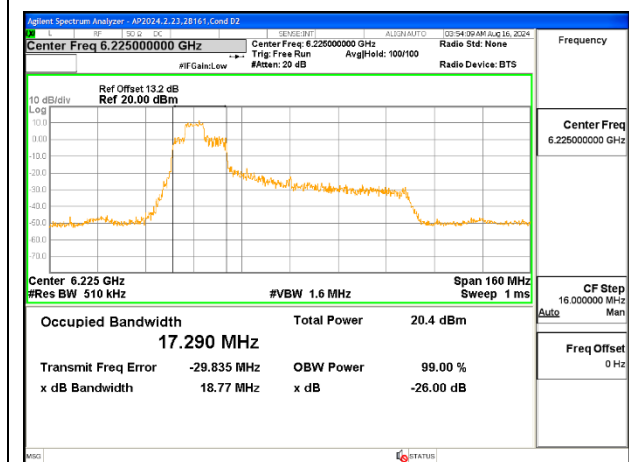
40MHz - Mid Channel – SU (UNII-5) – Ant 5



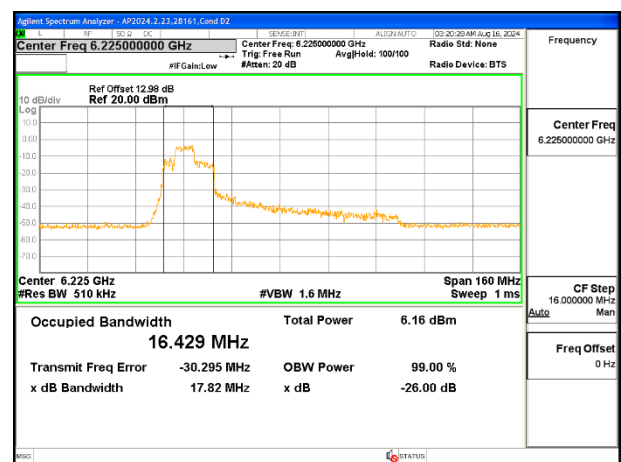
40MHz Mid Ch (106+26)T RU82 (UNII-5) Ant 6



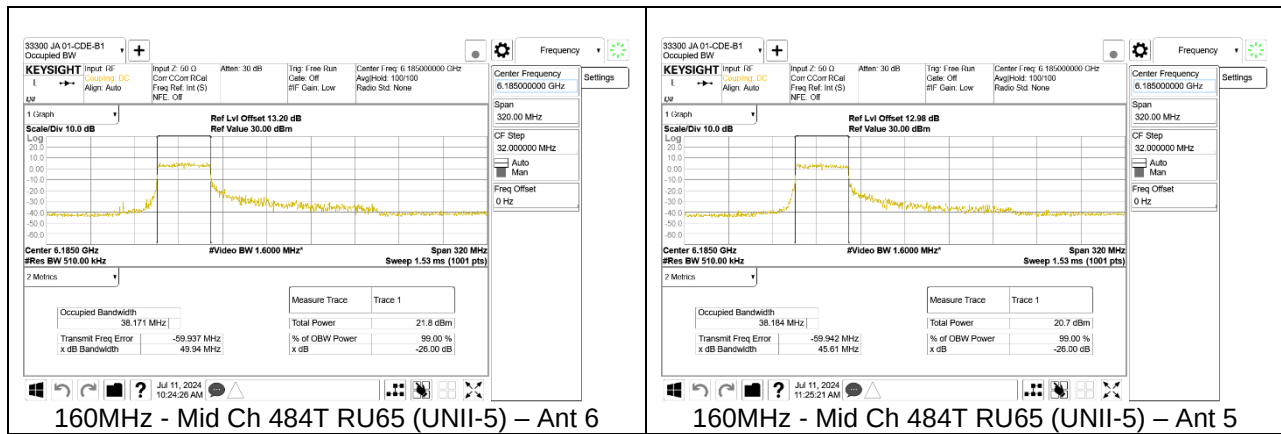
40MHz Mid Ch (106+26)T RU82 (UNII-5) Ant 5



80MHz - Mid Ch (106+26)T RU82 (UNII-5) – Ant 6

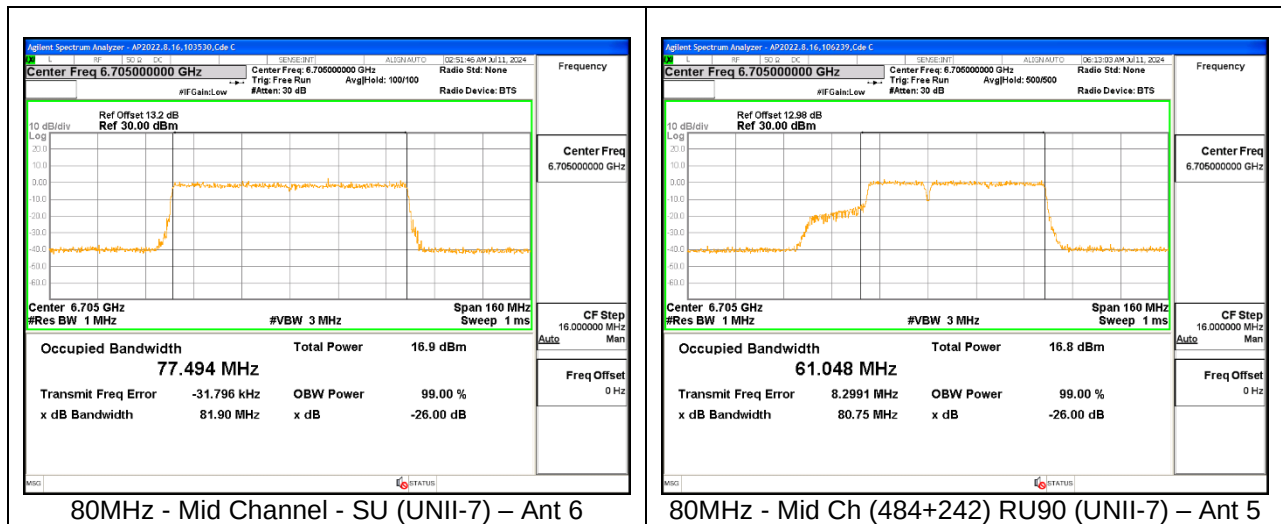


80MHz - Mid Ch (106+26)T RU82 (UNII-5) – Ant 5



9.2.4. 802.11be SISO MODE IN THE UNII-7 BAND

UNII-7 (SISO)	Frequency (MHz)	Channel Number	Tone	RU Index	26 dB Bandwidth (MHz)		99% Bandwidth (MHz)	
					Ant 6	Ant 5	Ant 6	Ant 5
20MHz	6535	117	SU	--	21.51	21.19	19.094	19.062
			106	53	20.46	20.88	18.204	18.104
				54	20.42	20.97	17.758	18.286
	6715	153	SU	--	21.26	21.22	19.105	19.113
			106	53	20.25	20.62	18.227	18.172
				54	20.79	20.93	17.924	18.189
	6855	181	SU	--	21.12	21.18	19.078	19.073
			106	53	20.54	20.75	18.222	18.205
				54	20.81	20.90	18.314	18.313
40MHz	6565	123	SU	--	41.42	41.42	38.055	37.998
			106+26	82	23.22	24.99	12.215	18.018
				84	28.07	24.80	19.157	19.252
				85	20.78	18.90	12.159	11.643
	6685	147	SU	--	41.28	40.84	37.924	38.011
			106+26	82	21.55	24.23	16.561	11.907
				84	25.96	26.26	19.335	19.806
				85	22.35	24.10	18.200	17.966
	6845	179	SU	--	41.44	41.53	38.048	38.039
			106+26	82	25.08	22.76	17.602	17.999
				84	29.00	26.94	19.655	19.529
				85	23.89	24.87	18.112	18.076
80MHz	6625	135	SU	--	81.15	81.33	77.388	77.595
			484+242	90	82.72	83.20	60.851	61.021
				92	84.16	83.68	77.737	77.728
				93	81.12	81.28	58.741	58.817
	6705	151	SU	--	81.90	82.22	77.494	77.481
			484+242	90	82.72	80.75	60.779	61.048
				92	84.00	81.85	77.856	77.763
				93	80.16	80.80	58.823	58.801
	6785	167	SU	--	81.58	81.58	77.493	77.512
			484+242	90	83.04	82.88	60.238	60.411
				92	84.00	84.00	77.772	77.700
				93	80.64	80.80	58.786	58.826
160MHz	6665	484	SU	--	166.40	163.80	157.100	157.100
			106	63	27.84	27.52	18.098	18.642
				S60	30.40	31.36	18.798	18.648



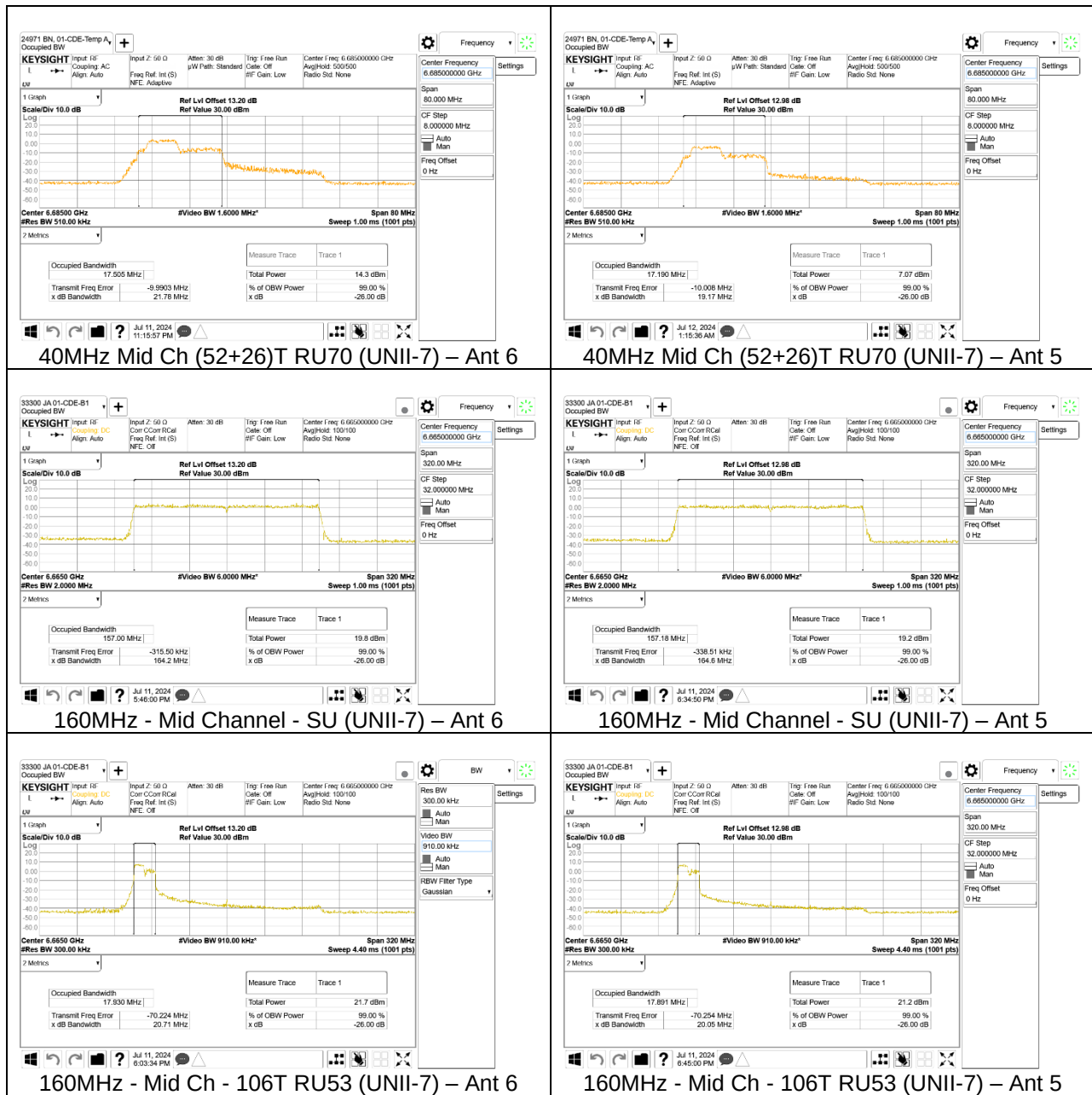
9.2.5. 802.11be MIMO CDD MODE IN THE UNII-7 BAND

UNII-7 (SISO)	Frequency (MHz)	Channel Number	Tone	RU Index	26 dB Bandwidth (MHz)		99% Bandwidth (MHz)	
					Ant 6	Ant 5	Ant 6	Ant 5
20MHz	6535	117	SU	--	21.27	21.21	19.125	19.088
			106+26	82	20.55	19.42	18.063	17.984
				83	20.89	19.43	18.235	17.988
	6715	153	SU	--	21.21	21.30	19.055	19.093
			106+26	82	20.87	19.94	18.080	18.075
				83	21.08	20.02	18.206	17.956
	6855	181	SU	--	20.95	21.41	19.102	19.103
			106+26	82	20.61	19.60	18.014	18.055
				83	21.10	20.00	18.168	18.026
40MHz	6565	121	SU	--	40.95	41.15	38.015	38.019
			106+26	82	26.08	18.13	18.030	12.241
				84	26.24	25.83	18.940	18.802
				85	19.78	20.15	11.847	17.784
	6685	145	SU	--	41.09	41.13	38.089	38.017
			106+26	82	25.05	19.79	17.279	17.653
				84	26.08	25.56	19.753	19.232
				85	23.18	20.30	18.107	17.802
	6845	177	SU	--	41.56	40.97	38.033	38.016
			106+26	82	24.54	20.04	17.980	17.936
				84	26.72	24.40	19.396	19.100
				85	23.72	20.09	17.372	17.855
80MHz	6625	135	SU	--	80.77	81.47	77.426	77.475
			484+242	90	81.09	71.08	61.356	58.824
				92	82.22	81.65	77.827	77.874
				93	74.08	78.34	58.846	58.777
	6705	151	SU	--	81.91	81.18	77.612	77.487
			484+242	90	80.88	72.60	60.799	58.832
				92	81.82	81.44	77.769	77.902
				93	74.73	72.71	58.728	58.691
	6785	167	SU	--	80.78	81.86	77.544	77.542
			484+242	90	81.06	75.40	61.037	58.800
				92	81.65	81.62	77.874	77.827
				93	79.01	75.54	58.871	58.792
160MHz	6665	143	SU	--	164.50	164.00	157.290	157.180
			242	61	28.35	29.84	31.720	27.547
				62	44.31	45.11	39.072	38.738
				S64	28.02	27.83	32.379	27.656



9.2.6. 802.11be MIMO SDM MODE IN THE UNII-7 BAND

UNII-7 (MIMO CDD)	Frequency (MHz)	Channel Number	Tone	RU Index	26 dB Bandwidth (MHz)		99% Bandwidth (MHz)	
					Ant 6	Ant 5	Ant 6	Ant 5
20MHz	6535	117	SU	--	20.98	21.29	18.998	19.122
			106	53	20.92	20.32	18.121	18.121
				54	21.12	20.68	18.308	18.050
	6715	149	SU	--	21.40	21.04	19.110	19.052
			106	53	21.12	20.32	18.221	18.106
				54	21.32	20.80	18.221	18.057
	6855	181	SU	--	21.08	20.96	19.099	19.050
			106	53	21.12	20.52	18.122	18.114
				54	21.24	20.64	18.251	18.081
40MHz	6565	123	SU	--	41.38	40.98	37.992	37.966
			52+26	70	20.61	19.29	17.517	17.295
				75	22.82	19.48	17.652	17.196
	6685	147	SU	--	41.38	41.13	38.073	38.060
			52+26	70	21.78	19.17	17.505	17.190
				75	22.37	19.28	17.841	17.118
	6845	179	SU	--	41.57	41.27	38.002	38.183
			52+26	70	21.20	19.30	17.603	17.208
				75	22.34	19.51	17.534	17.281
80MHz	6625	135	SU	--	81.15	81.43	77.547	77.540
			484+242	90	77.93	77.09	58.671	58.558
				92	81.48	81.25	77.696	77.781
				93	78.34	70.90	58.640	58.625
	6705	151	SU	--	82.74	81.26	77.466	77.408
			484+242	90	77.41	75.12	58.588	58.765
				92	80.71	81.23	77.574	77.666
				93	77.32	69.54	58.798	58.703
	6785	167	SU	--	81.16	81.34	77.532	77.609
			484+242	90	74.09	69.86	58.803	58.654
				92	81.13	81.07	77.690	77.883
				93	73.20	71.69	58.588	58.713
160MHz	6665	143	SU	--	164.20	164.60	157.000	157.180
			106	53	20.71	20.05	17.930	17.891
				S60	23.88	20.87	17.985	17.842



9.3. VLP OUTPUT POWER AND PSD

LIMITS

FCC §15.407

Bands: 5.925–6.425 GHz and 6.525–6.875 GHz

(a)(9) For very low power devices operating in the 5.925-6.425 GHz and 6.525-6.875 GHz bands, the maximum power spectral density must not exceed -5 dBm e.i.r.p in any 1-megahertz band and the maximum e.i.r.p must not exceed 14 dBm.

TEST PROCEDURE

Conducted Output Power: KDB 789033 D02 v02r01, Section II E.3.b (Method PM-G), because the gated power measurement is used the calculation of EIRP power does not include any corrections for duty factor.

The measurement method used for power spectral density is KDB 789033 D02 v02r01, Section F

RESULTS

The plots in these sections are for reference settings only for different bandwidth and different antenna ports.

DIRECTIONAL ANTENNA GAIN

For 1 TX:

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

For 2 TX:

CDD MIMO Tx chains used uncorrelated gain for EIRP calculation and correlated gain for PSD EIRP calculation; SDM MIMO Tx chains used uncorrelated for both EIRP and PSD EIRP calculation. For the straddle channels, the higher antenna gains were chosen between two bands where straddle channels are located. The directional gains are as follows:

Band	Frequency Range Sub-band (MHz)	Antenna 6 (dBi)	Antenna 5 (dBi)	Uncorrelated Chains (dBi)	Correlated Chains (dBi)
UNII-5	Sub-band 1 (5955 - 6095) (Disabled)	1.3	-2.6	-0.23	2.58
	Sub-band 2 (6115 - 6255)	-0.70	-2.20	-1.39	1.59
	Sub-band 3 (6275 - 6415)	0.40	-2.40	-0.78	2.12
UNII-7	6535 - 6855	-0.50	-1.90	-1.14	1.84

Directional Gain Calculation:

ANSI C63.10-2013 section 14.4.3

Uncorrelated directional gain= $10 \cdot \log((10^{(Ant6/10)} + 10^{(Ant5/10)})/2)$

Correlated directional Gain= $10 \cdot \log(((10^{(Ant6/20)} + 10^{(Ant5/20)})^2)/2)$

Sample Calculation at UNII-5 Band:

Ant6= -0.70, Ant5= -2.20

Uncorrelated Antenna gain= $10 \log[(10^{(-0.70/10)} + 10^{(-2.20/10)})/2] = -1.39$ dBi

Correlated Antenna gain= $10 \log[(10^{(-0.70/20)} + 10^{(-2.20/20)})^2/2] = 1.59$ dBi

EIRP Calculation:**1Tx**

EIRP corr'd power = Ant6 + Antenna Gain

Sample Calculation at UNII-5 Band:

Ant6(low channel 106+26T, RU 82) Power=2.91 dBm

EIRP corr'd power = 2.91 + (-0.70) = 2.21 dBm

2Tx

EIRP corr'd power = $10 \cdot \text{LOG}(10^{(\text{Ant6}/10)} + 10^{(\text{Ant5}/10)})$ + uncorrelated directional gain

Sample Calculation at UNII-5 Band:

Ant6(low channel 106+26T, RU 82) Power=-2.32 dBm, Ant5 Power=-2.17

EIRP corr'd power = $10 \cdot \text{LOG}(10^{(-2.32/10)} + 10^{(-2.17/10)})$ + (-1.39) = -0.62 dBm

EIRP PSD Calculation:**1Tx**

EIRP corr'd PSD = DCCF + Ant6 + Antenna Gain

Sample Calculation at UNII-5 Band:

Ant6(low channel 106+26T, RU 82) PSD= -5.79 dBm/1MHz

EIRP corr'd PSD = 0 + -5.79 + (-0.70) = -6.490 dBm/1MHz

2Tx (CDD)

EIRP corr'd PSD = $(10 \cdot \text{LOG}(10^{((\text{DCCF} + \text{Ant6})/10)} + 10^{((\text{DCCF} + \text{Ant5})/10)}))$ + correlated directional gain

Sample Calculation at UNII-5 Band:

Ant6(low channel 106+26T, RU 82) PSD=-12.191 dBm/1MHz, Ant5 PSD=-11.940 dBm/1MHz

EIRP corr'd PSD = $(10 \cdot \text{LOG}(10^{((0 + (-12.191))/10)} + 10^{((0 + (-11.940))/10)}))$ + (1.59) = -7.463 dBm/1MHz

2Tx (SDM)

EIRP corr'd PSD = $(10 \cdot \text{LOG}(10^{((\text{DCCF} + \text{C39})/10)} + 10^{((\text{DCCF} + \text{D39})/10)}))$ + uncorrelated directional gain

Sample Calculation at UNII-5 Band:

Ant6(low channel 106+26T, RU 82) PSD=-8.767 dBm/1MHz, Ant5 PSD=-8.050 dBm/1MHz

EIRP corr'd PSD = $(10 \cdot \text{LOG}(10^{((0 + (-8.767))/10)} + 10^{((0 + (-8.050))/10)}))$ + (-1.39) = -6.773 dBm/1MHz

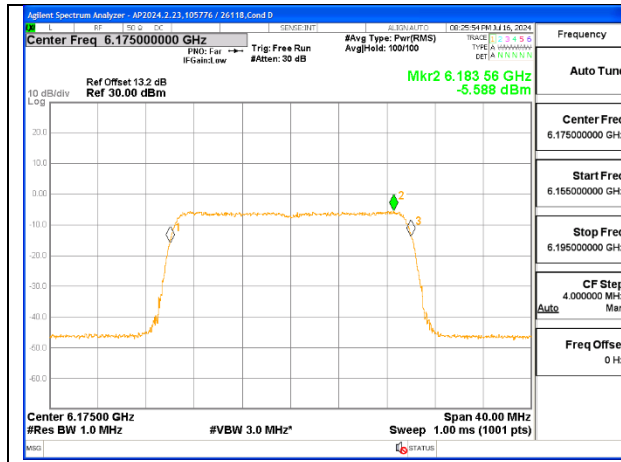
9.3.1. 802.11be SISO MODE IN THE UNII-5 BAND – LOW POWER

LP UNII-5 (SISO)	Duty Factor (dB)		Ant 6 Gain (dBi)	Ant 5 Gain (dBi)	Frequency (MHz)	Channel Number	Tone	RU Index	Conducted Power (Gated) (dBm)		EIRP Power (Limit = 14dBm EIRP)		Conducted PSD (dBm/MHz)		EIRP PSD (Limit = -5 dBm/MHz EIRP)	
	SU	Partial RU							Ant 6	Ant 5	Ant 6	Ant 5	Ant 6	Ant 5	Ant 6	Ant 5
20MHz	0.00	0.00	-0.70	-2.20	6115	33	SU	--	5.18	4.95	4.48	2.75	-5.692	-6.452	-6.392	-8.652
							106+ 26	82	2.91	2.69	2.21	0.49	-5.790	-7.290	-6.490	-9.490
							106+ 26	83	2.94	2.72	2.24	0.52	-5.255	-7.022	-5.955	-9.222
						45	SU	--	5.23	4.95	4.53	2.75	-5.588	-6.857	-6.288	-9.057
							106+ 26	82	2.76	2.71	2.06	0.51	-5.061	-7.086	-5.761	-9.286
							106+ 26	83	2.99	2.71	2.29	0.51	-4.887	-6.835	-5.587	-9.035
			0.40	-2.40	6415	93	SU	--	4.17	4.49	4.57	2.09	-7.321	-7.102	-6.921	-9.502
							106+ 26	82	1.99	2.2	2.39	-0.20	-7.365	-7.441	-6.965	-9.841
							106+ 26	83	1.96	2.22	2.36	-0.18	-7.181	-7.438	-6.781	-9.838
						35	SU	--	8.21	7.95	7.51	5.75	-5.517	-6.642	-6.217	-8.842
							106+ 26	82	2.99	2.72	2.29	0.52	-5.898	-7.416	-6.598	-9.616
							106+ 26	84	2.97	2.73	2.27	0.53	-5.692	-7.202	-6.392	-9.402
40MHz	0.00	0.00	-0.70	-2.20	6125	35	SU	--	8.21	7.95	7.51	5.75	-5.517	-6.642	-6.217	-8.842
							106+ 26	82	2.99	2.72	2.29	0.52	-5.898	-7.416	-6.598	-9.616
							106+ 26	84	2.97	2.73	2.27	0.53	-5.692	-7.202	-6.392	-9.402
						43	SU	--	8.22	7.99	7.52	5.79	-5.755	-6.591	-6.455	-8.791
							106+ 26	82	2.95	2.71	2.25	0.51	-5.706	-7.277	-6.406	-9.477
							106+ 26	84	2.83	2.66	2.13	0.46	-5.433	-7.088	-6.133	-9.288
80MHz	0.00	0.00	-0.70	-2.20	6165	43	SU	--	8.22	7.99	7.52	5.79	-5.755	-6.591	-6.455	-8.791
							106+ 26	82	2.95	2.71	2.25	0.51	-5.706	-7.277	-6.406	-9.477
							106+ 26	84	2.83	2.66	2.13	0.46	-5.433	-7.088	-6.133	-9.288
			0.40	-2.40	6405	91	SU	--	7.24	7.45	7.64	5.05	-7.217	-7.064	-6.817	-9.464
							106+ 26	82	1.91	2.22	2.31	-0.18	-7.723	-6.789	-7.323	-9.189
							106+ 26	84	1.94	2.15	2.34	-0.25	-7.556	-6.863	-7.156	-9.263
160MHz	0.18	0.00	-0.70	-2.20	6145	39	SU	--	11.08	10.9	10.38	8.70	-6.269	-6.446	-6.269	-6.446
							52+ 26	71	0.87	0.55	0.17	-1.65	-6.077	-6.259	-6.077	-6.259
							52+ 26	74	0.89	0.67	0.19	-1.53	-6.178	-6.323	-6.178	-6.323
			-0.70	-2.20	6225	55	SU	--	11.24	10.99	10.54	8.79	-6.990	-6.967	-7.690	-9.167
							52+ 26	71	0.99	0.64	0.29	-1.56	-6.199	-6.552	-6.899	-8.752
							52+ 26	74	0.94	0.68	0.24	-1.52	-6.028	-6.254	-6.728	-8.454
160MHz	0.18	0.00	-0.70	-2.20	6185	47	SU	--	13.49	13.17	12.79	10.97	-6.506	-6.675	-6.506	-6.675
							484	S66	8.15	7.98	7.45	5.78	-6.002	-5.708	-6.002	-5.708
							484	S66	8.16	7.89	7.46	5.69	-6.377	-6.499	-6.377	-6.499
			0.40	-2.40	6345	79	SU	--	12.44	12.59	12.84	10.19	-8.081	-6.481	-8.081	-6.481
							484	S66	7.23	7.35	7.63	4.95	-7.382	-7.373	-7.382	-7.373
							484	S66	7.22	7.4	7.62	5.00	-7.314	-7.143	-7.314	-7.143

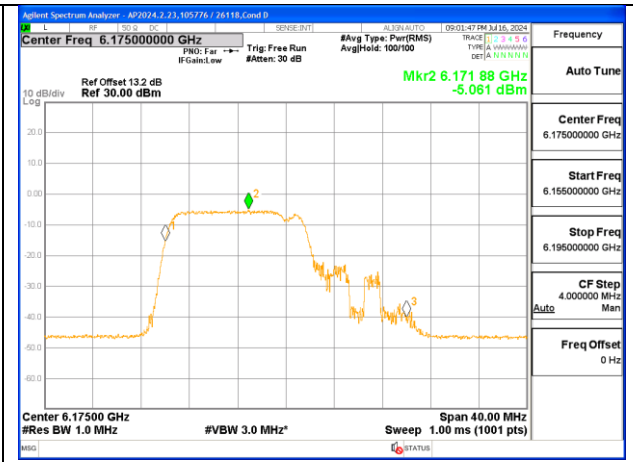
Note:

EIRP Output Power (dBm) = Measured Conducted Power (dBm)+ Peak Antenna Gain (dBi)

EIRP PSD (dBm/MHz) = Measured Conducted PSD (dBm/MHz) + Duty Factor (dB) + Peak Antenna Gain (dBi)



20MHz - Mid Channel – SU (UNII-5) – Ant 6



20MHz - Mid Ch (106+26)T RU82 (UNII-5) – Ant 6

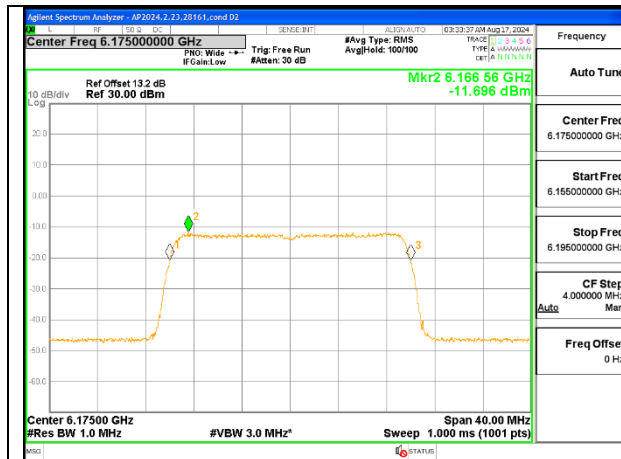
9.3.2. 802.11be MIMO CDD MODE IN THE UNII-5 BAND – LOW POWER

LP CDD UNII-5 (MIMO)	Duty Factor (dB)		Un- Correlated Antenna Gain (dBi)	Correlated Antenna Gain (dBi)	Frequency (MHz)	Channel Number	Tone	RU Index	Conducted Power (Gated)		EIRP MIMO Power (Limit = 14dBm EIRP)	Conducted PSD (dBm/MHz)		EIRP MIMO PSD (Limit = -5 dBm/MHz EIRP)	
	SU	Partial Rus							Ant 6	Ant 5		Ant 6	Ant 5		
20MHz	0.00	0.00	-1.39	1.59	6115	33	SU	--	-0.07	0.19	1.68	-11.659	-11.326	-6.889	
							106+26	82	-2.32	-2.17	-0.62	-12.191	-11.94	-7.463	
								83	-2.35	-2.20	-0.65	-12.021	-11.72	-7.268	
			-1.39	1.59	6175	45	SU	--	-0.01	0.17	1.70	-11.696	-11.49	-6.991	
							106+26	82	-2.33	-2.16	-0.62	-12.26	-11.992	-7.524	
								83	-2.26	-2.12	-0.57	-12.091	-11.525	-7.198	
40MHz	0.00	0.00	-0.78	2.12	6415	93	SU	--	-0.54	-0.06	1.94	-12.59	-11.382	-6.814	
							106+26	SU	--	2.99	3.16	4.70	-11.375	-11.145	-6.658
								82	-2.26	-2.24	-0.63	-11.778	-12.346	-7.452	
			-1.39	1.59	6125	35	84	-2.26	-2.18	-0.60	-12.345	-12.041	-7.590		
							85	-2.3	-2.21	-0.63	-12.153	-11.804	-7.375		
							SU	--	2.93	3.21	4.69	-11.624	-11.289	-6.853	
80MHz	0.00	0.00	-1.39	1.59	6165	43	106+26	82	-2.26	-2.16	-0.59	-12.629	-12.339	-7.881	
							84	-2.3	-2.15	-0.60	-12.7	-12.362	-7.927		
							85	-2.31	-2.22	-0.64	-12.243	-11.981	-7.510		
			-0.78	2.12	6405	91	SU	--	2.47	2.95	4.95	-11.858	-11.53	-6.561	
							106+26	SU	--	5.96	6.15	7.68	-11.697	-11.459	-6.976
							82	-2.37	-2.15	-0.64	-11.46	-10.878	-6.559		
160MHz	0.18	0.00	-1.39	1.59	6145	39	85	-2.33	-2.22	-0.65	-11.353	-11.109	-6.629		
							89	-2.26	-2.10	-0.56	-11.557	-11.293	-6.823		
							106+26	SU	--	5.99	6.24	7.74	-12.383	-11.548	-7.345
			-1.39	1.59	6225	55	82	-2.35	-2.09	-0.60	-12.17	-11.837	-7.400		
							85	-2.3	-2.04	-0.55	-11.564	-11.229	-6.793		
							89	-2.36	-2.05	-0.58	-11.992	-11.652	-7.218		
160MHz	0.18	0.00	-0.78	2.12	6385	87	SU	--	5.48	5.89	7.92	-11.718	-11.574	-6.515	
							484	SU	--	8.07	8.46	9.89	-11.667	-11.464	-6.784
							566	65	2.99	3.13	4.68	-11.206	-10.977	-6.490	
			-0.78	2.12	6345	79	566	2.76	3.09	4.55	-12.037	-11.212	-7.005		
							484	SU	--	7.74	8.22	10.22	-12.515	-11.913	-7.423
							566	65	2.41	2.90	4.89	-12.533	-12.082	-7.171	

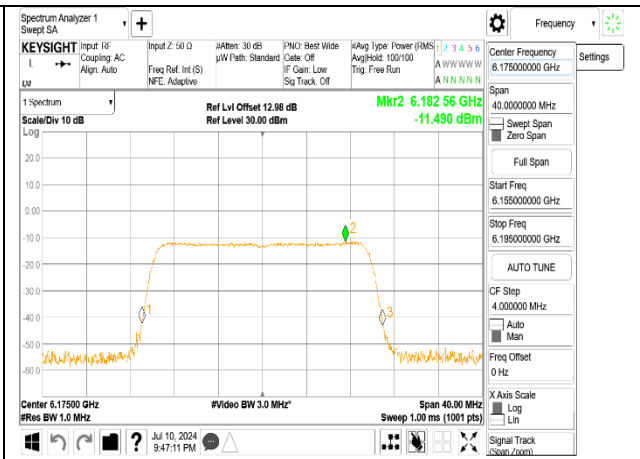
Note:

EIRP MIMO Output Power (dBm) = Measured Conducted Power (dBm) (Ant 6 + Ant 5) + Un-Correlated Antenna Gain (dBi)

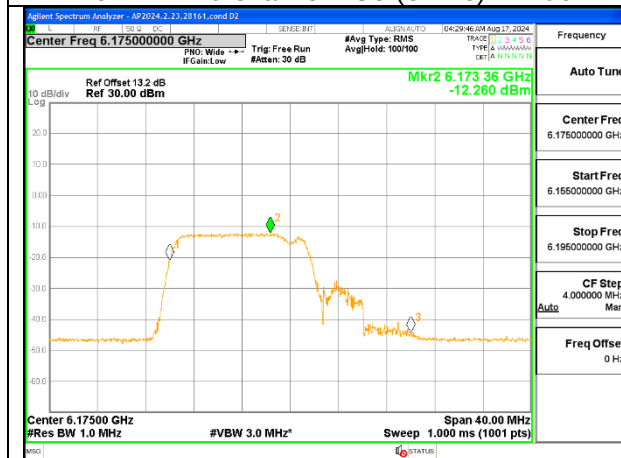
EIRP MIMO PSD (dBm/MHz) = Measured Conducted PSD (dBm/MHz) (Ant 6 + Ant 5) + Duty Factor (dB) + Correlated Antenna Gain (dBi)



20MHz - Mid Channel – SU (UNII-5) – Ant 6



20MHz - Mid Channel – SU (UNII-5) – Ant 5



20MHz - Mid Ch (106+26)T RU82 (UNII-5) – Ant 6



20MHz - Mid Ch (106+26)T RU82 (UNII-5) – Ant 5

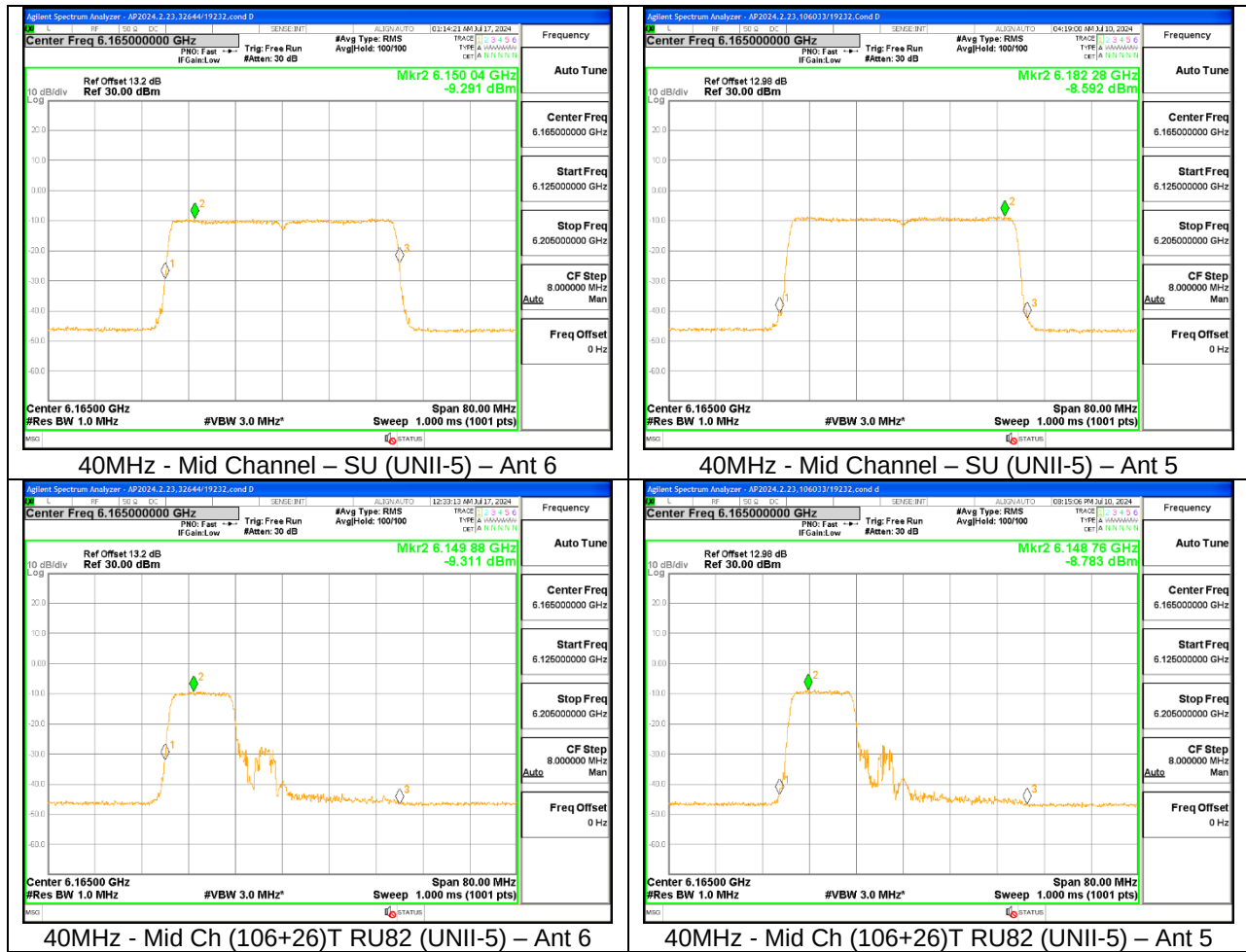
9.3.3. 802.11be MIMO SDM MODE IN THE UNII-5 BAND – LOW POWER

LP SDM UNII-5 (MIMO)	Duty Factor (dB)		Un- Correlated Antenna Gain (dBi)	Correlated Antenna Gain (dBi)	Frequency (MHz)	Channel Number	Tone	RU Index	Conducted Power (Gated)		EIRP MIMO Power (Limit = 14dBm EIRP)	Conducted PSD (dBm/MHz)		EIRP MIMO PSD (Limit = -5 dBm/MHz EIRP)
	SU	Partial Rus							Ant 6	Ant 5		Ant 6	Ant 5	
20MHz	0.00	0.00	-1.39	1.59	6115	33	SU	--	2.98	3.24	4.73	-8.956	-8.205	-6.944
							106+26	82	0.73	0.98	2.48	-8.767	-8.050	-6.773
								83	0.72	0.86	2.41	-8.918	-8.267	-6.960
			-1.39	1.59	6175	45	SU	--	2.95	3.23	4.71	-8.855	-8.547	-7.078
							106+26	82	0.72	0.97	2.47	-8.570	-8.382	-6.855
								83	0.75	0.95	2.47	-8.972	-8.733	-7.231
			-0.78	2.12	6415	93	SU	--	2.48	2.69	4.82	-9.259	-8.708	-6.744
							106+26	82	0.23	0.4	2.55	-8.948	-8.328	-6.397
								83	0.17	0.48	2.56	-8.998	-8.763	-6.649
40MHz	0.00	0.00	-1.39	1.59	6125	35	SU	--	5.99	6.14	7.69	-8.819	-8.431	-7.000
							106+26	82	0.67	0.89	2.40	-8.612	-8.442	-6.906
								84	0.72	0.94	2.45	-9.029	-8.451	-7.110
			-1.39	1.59	6165	43	85	0.67	0.98	2.45	-8.929	-8.643	-7.163	
							SU	--	5.89	6.16	7.65	-9.291	-8.592	-7.307
							106+26	82	0.65	0.98	2.44	-9.311	-8.783	-7.419
			84	0.72	0.94	2.45		-8.975	-8.656	-7.192				
			-0.78	2.12	6405	91	85	0.74	0.86	2.42	-9.021	-8.569	-7.169	
							SU	--	5.49	5.65	7.80	-9.310	-9.038	-6.942
							106+26	82	0.21	0.35	2.51	-9.667	-9.201	-7.197
								84	0.17	0.29	2.46	-9.609	-8.959	-7.042
							85	0.24	0.38	2.54	-9.323	-8.882	-6.867	
80MHz	0.00	0.00	-1.39	1.59	6145	39	SU	--	8.99	9.12	10.68	-8.481	-8.320	-5.389
							52 + 26	71	-1.27	-1.14	0.42	-9.558	-9.208	-6.369
								74	-1.25	-1.11	0.44	-9.604	-9.269	-6.423
			-1.39	1.59	6225	55	80	-1.27	-1.13	0.42	-9.687	-9.369	-7.905	
							SU	--	8.99	9.24	10.74	-9.358	-8.814	-7.457
							52 + 26	71	-1.33	-1.01	0.45	-9.399	-8.656	-7.391
			74	-1.26	-1.09	0.45		-9.226	-8.223	-7.075				
			-0.78	2.12	6385	87	80	-1.32	-1.02	0.45	-9.399	-8.054	-7.054	
							SU	--	8.46	8.7	10.81	-9.256	-8.985	-6.108
							52 + 26	71	-1.78	-1.67	0.51	-10.990	-10.696	-7.830
								74	-1.87	-1.61	0.49	-10.603	-10.313	-7.445
			160MHz	0.18	0.00	-1.39	1.59	6185	47	SU	--	11.22	11.46	12.96
484	65	5.97								6.15	7.68	-9.354	-8.971	-6.148
	S66	5.90								6.12	7.63	-9.183	-8.770	-5.961
-0.78	2.12	6345				79	SU	--	10.74	10.94	13.07	-9.538	-8.931	-7.604
			484	65	5.49		5.70	7.83	-9.351	-9.426	-6.378			
				S66	5.41		5.72	7.80	-9.722	-9.425	-6.561			

Note:

EIRP MIMO Output Power (dBm) = Measured Conducted Power (dBm) (Ant 6 + Ant 5) + Un-Correlated Antenna Gain (dBi)

EIRP MIMO PSD (dBm/MHz) = Measured Conducted PSD (dBm/MHz) (Ant 6 + Ant 5) + Duty Factor (dB) + Un-Correlated Antenna Gain (dBi)



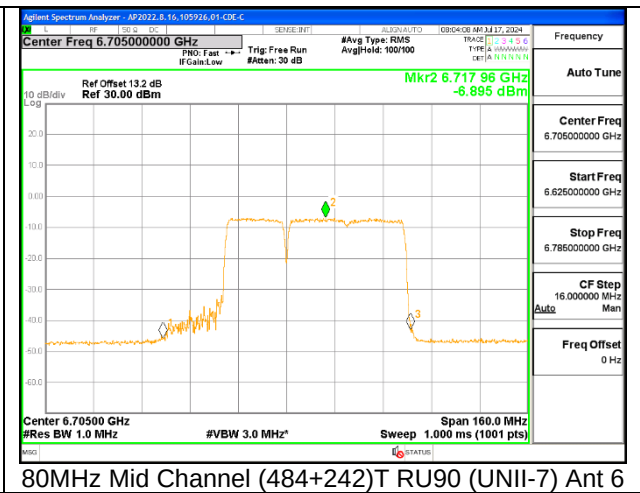
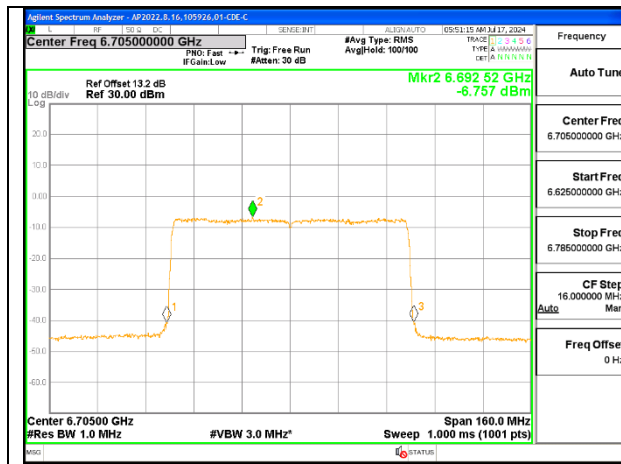
9.3.4. 802.11be SISO MODE IN THE UNII-7 BAND – LOW POWER

LP UNII-7 (SISO)	Duty Factor (dB)		Ant 1 Gain (dBi)	Ant 2 Gain (dBi)	Frequency (MHz)	Channel Number	Tone	RU Index	Conducted Power (Gated) (dBm)		EIRP Power (Limit = 14dBm EIRP)		Conducted PSD (dBm/MHz)		EIRP PSD (Limit = -5 dBm/MHz EIRP)						
	SU	Partial RU							Ant 6	Ant 5	Ant 6	Ant 5	Ant 6	Ant 5	Ant 6	Ant 5					
20MHz	0.00	0.00	-0.50	-1.90	6535	117	SU	--	5.14	5.7	4.64	3.80	-6.377	-5.797	-6.877	-7.697					
							106	53	2.23	2.66	1.73	0.76	-5.697	-5.688	-6.197	-7.588					
								54	2.2	2.71	1.70	0.81	-5.822	-5.384	-6.322	-7.284					
					6715	149	SU	--	5.21	5.72	4.71	3.82	-6.616	-6.103	-7.116	-8.003					
							106	53	2.25	2.65	1.75	0.75	-6.463	-5.958	-6.963	-7.858					
								54	2.24	2.73	1.74	0.83	-5.733	-5.726	-6.233	-7.626					
			-0.50	-1.90	6855	181	SU	--	5.24	5.68	4.74	3.78	-6.662	-6.196	-7.162	-8.096					
							106	53	2.22	2.67	1.72	0.77	-6.714	-6.201	-7.214	-8.101					
								54	2.19	2.66	1.69	0.76	-6.549	-6.009	-7.049	-7.909					
					6565	123	SU	--	8.22	8.66	7.72	6.76	-6.922	-6.403	-7.422	-8.303					
							106+26	82	2.92	3.49	2.42	1.59	-6.438	-5.683	-6.938	-7.583					
								84	2.95	3.40	2.45	1.50	-6.47	-5.859	-6.970	-7.759					
40MHz	0.00	0.00	-0.50	-1.90	6685	147	106+26	85	2.91	3.30	2.41	1.40	-6.667	-6.007	-7.167	-7.907					
								SU	--	8.18	8.73	7.68	6.83	-6.968	-6.453	-7.468	-8.353				
									82	2.99	3.36	2.49	1.46	-6.853	-6.476	-7.353	-8.376				
					6845	179	106+26	84	2.98	3.49	2.48	1.59	-6.564	-5.983	-7.064	-7.883					
								85	2.98	3.33	2.48	1.43	-6.292	-5.875	-6.792	-7.775					
								SU	--	8.24	8.66	7.74	6.76	-7.703	-7.462	-8.203	-9.362				
					6845	179	106+26	82	2.99	3.33	2.49	1.43	-6.868	-6.245	-7.368	-8.145					
								84	2.9	3.49	2.40	1.59	-6.758	-6.339	-7.258	-8.239					
								85	2.99	3.42	2.49	1.52	-6.929	-6.462	-7.429	-8.362					
					80MHz	0.00	0.00	-0.50	-1.90	6625	129	SU	--	11.15	11.66	10.65	9.76	-6.551	-5.661	-7.051	-7.561
												484 + 242	90	9.83	10.44	9.33	8.54	-6.72	-5.910	-7.220	-7.810
													92	9.99	10.47	9.49	8.57	-6.406	-5.816	-6.906	-7.716
6705	145	484 + 242	93	9.85						10.46	9.35	8.56	-6.571	-5.837	-7.071	-7.737					
			SU	--						11.13	11.71	10.63	9.81	-6.757	-5.65	-7.257	-7.550				
			90	9.8						10.47	9.30	8.57	-6.895	-5.761	-7.395	-7.661					
-0.50	-1.90	6785	161	484 + 242				92	9.94	10.45	9.44	8.55	-6.947	-5.938	-7.447	-7.838					
								93	9.86	10.49	9.36	8.59	-6.914	-6.125	-7.414	-8.025					
								SU	--	11.23	11.64	10.73	9.74	-7.211	-5.701	-7.711	-7.601				
		6665	143	106				90	9.92	10.42	9.42	8.52	-7.149	-6.669	-7.649	-8.569					
								92	9.79	10.46	9.29	8.56	-6.998	-6.897	-7.498	-8.797					
								93	9.9	10.44	9.40	8.54	-6.922	-6.744	-7.422	-8.644					
160MHz	0.18	0.00	-0.50	-1.90	6665	143	SU	--	13.49	13.95	12.99	12.05	-6.443	-6.021	-6.763	-7.741					
							106	53	2.15	2.64	1.65	0.74	-6.841	-5.570	-7.341	-7.470					
								560	2.24	2.65	1.74	0.75	-6.275	-6.152	-6.775	-8.052					

Note:

EIRP Output Power (dBm) = Measured Conducted Power (dBm)+ Peak Antenna Gain (dBi)

EIRP PSD (dBm/MHz) = Measured Conducted PSD (dBm/MHz) + Duty Factor (dB) + Peak Antenna Gain (dBi)



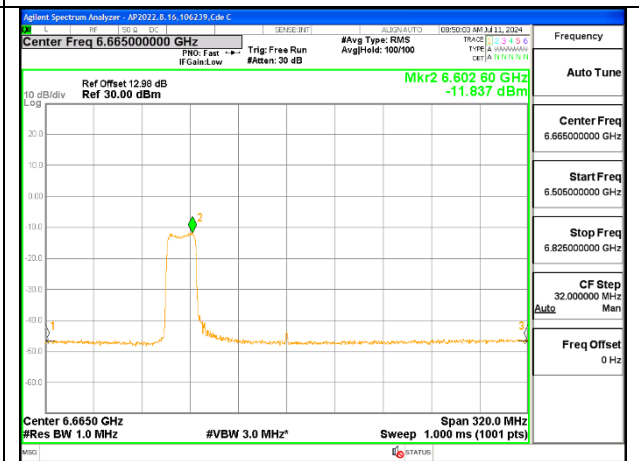
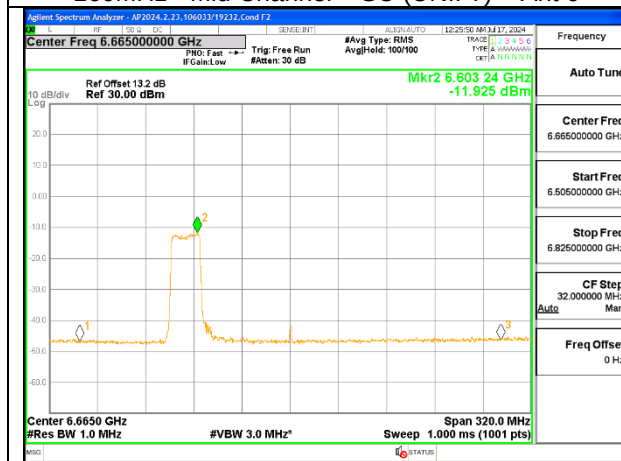
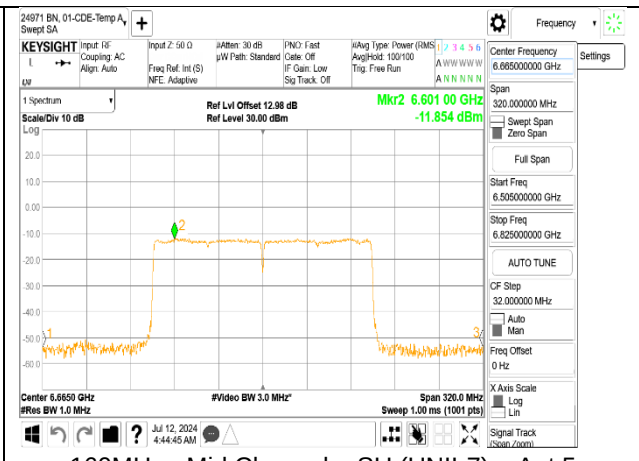
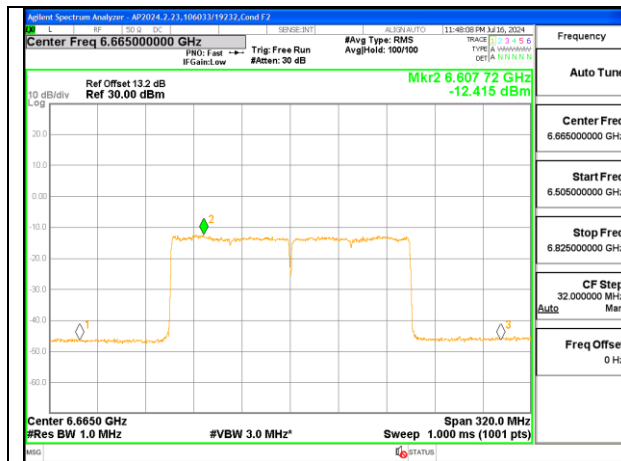
9.3.5. 802.11be MIMO CDD MODE IN THE UNII-7 BAND – LOW POWER

LP CDD UNII-7 (MIMO)	Duty Factor (dB)		Un- Correlated Antenna Gain (dBi)	Correlated Antenna Gain (dBi)	Frequency (MHz)	Channel Number	Tone	RU Index	Conducted Power (Gated)		EIRP MIMO Power (Limit = 14dBm EIRP)	Conducted PSD (dBm/MHz)		EIRP MIMO PSD (Limit = -5 dBm/MHz EIRP)
	SU	Partial Rus							Ant 6	Ant 5		Ant 6	Ant 5	
20MHz	0.00	0.00	-1.14	1.84	6535	117	SU	--	-0.27	-0.29	1.59	-12.272	-11.915	-7.240
							106+26	82	-2.56	-2.32	-0.57	-11.923	-11.646	-6.932
								83	-2.59	-2.45	-0.65	-11.397	-11.325	-6.511
					6715	153	SU	--	-0.31	-0.58	1.43	-12.743	-12.459	-7.748
							106+26	82	-2.64	-2.49	-0.69	-12.517	-12.372	-7.594
								83	-2.57	-2.44	-0.63	-12.421	-12.136	-7.426
					6855	181	SU	--	-0.29	-0.21	1.62	-11.800	-11.986	-7.042
							106+26	82	-2.55	-2.30	-0.55	-12.201	-12.034	-7.266
								83	-2.69	-2.45	-0.70	-12.296	-12.06	-7.326
40MHz	0.00	0.00	-1.14	1.84	6565	121	SU	--	2.74	2.96	4.72	-11.277	-11.888	-6.721
							106+26	82	-2.52	-2.3	-0.54	-11.756	-12.281	-7.160
								84	-2.56	-2.37	-0.59	-11.889	-12.182	-7.183
								85	-2.53	-2.35	-0.57	-11.885	-12.057	-7.120
					6685	145	SU	--	2.72	2.91	4.69	-12.796	-12.31	-7.696
							106+26	82	-2.52	-2.31	-0.54	-11.99	-12.367	-7.324
								84	-2.73	-2.39	-0.69	-12.133	-12.575	-7.498
								85	-2.51	-2.32	-0.54	-12.162	-12.569	-7.510
					6845	177	SU	--	2.73	2.88	4.68	-11.328	-13.003	-7.235
							106+26	82	-2.58	-2.27	-0.55	-11.384	-13.299	-7.386
								84	-2.56	-2.26	-0.54	-11.293	-13.135	-7.267
								85	-2.52	-2.34	-0.56	-11.425	-13.143	-7.349
80MHz	0.00	0.00	-1.14	1.84	6625	129	SU	--	5.61	5.97	7.66	-11.863	-11.625	-6.892
							484+242	37	4.49	4.72	6.48	-11.863	-11.676	-6.918
								45	4.45	4.62	6.41	-11.797	-11.654	-6.875
								52	4.36	4.73	6.42	-12.152	-11.875	-7.161
			-1.14	1.84	6705	145	SU	--	5.74	5.91	7.70	-12.455	-11.448	-7.072
							484+242	37	4.49	4.63	6.43	-12.475	-12.102	-7.434
								45	4.5	4.67	6.46	-11.942	-11.815	-7.028
								52	4.49	4.73	6.48	-12.131	-11.745	-7.083
			-1.14	1.84	6785	161	SU	--	5.6	5.88	7.61	-12.487	-11.444	-7.084
							484+242	37	4.48	4.73	6.48	-12.52	-11.749	-7.267
								45	4.34	4.67	6.38	-12.611	-12.346	-7.626
								52	4.29	4.61	6.32	-12.431	-12.178	-7.452
160MHz	0.18	0.00	-1.14	1.84	6665	143	SU	--	7.93	8.21	9.94	-12.415	-11.854	-7.095
							242	61	-0.33	-0.11	1.65	-11.925	-11.837	-7.030
								62	-0.28	-0.12	1.67	-12.150	-11.821	-7.132
								S64	-0.26	-0.12	1.68	-12.427	-11.614	-7.151

Note:

EIRP MIMO Output Power (dBm) = Measured Conducted Power (dBm) (Ant 6 + Ant 5) + Un-Correlated Antenna Gain (dBi)

EIRP MIMO PSD (dBm/MHz) = Measured Conducted PSD (dBm/MHz) (Ant 6 + Ant 5) + Duty Factor (dB) + Correlated Antenna Gain (dBi)



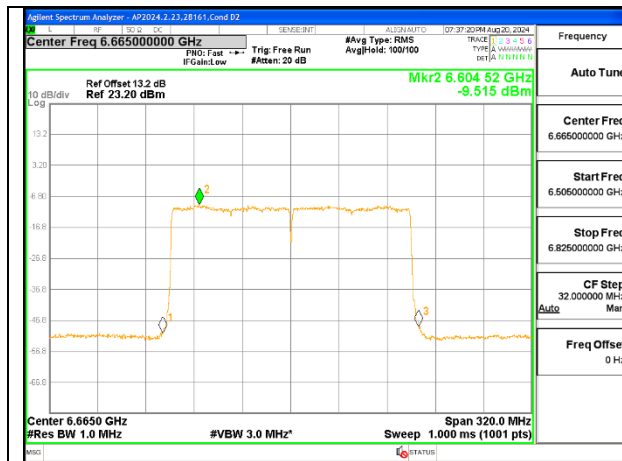
9.3.6. 802.11be MIMO SDM MODE IN THE UNII-7 BAND – LOW POWER

LP CDD UNII-7 (MIMO)	Duty Factor (dB)		Un- Correlated Antenna Gain (dBi)	Correlated Antenna Gain (dBi)	Frequency (MHz)	Channel Number	Tone	RU Index	Conducted Power (Gated)		EIRP MIMO Power (Limit = 14dBm EIRP)	Conducted PSD (dBm/MHz)		EIRP MIMO PSD (Limit = -5 dBm/MHz EIRP)
	SU	Partial Rus							Ant 6	Ant 5		Ant 6	Ant 5	
20MHz	0.00	0.00	-1.14	1.84	6535	117	SU	--	2.70	2.94	4.69	-8.796	-8.627	-6.840
							106	53	-0.30	-0.11	1.67	-8.789	-8.240	-6.636
								54	-0.39	-0.05	1.65	-8.711	-8.317	-6.639
					6715	153	SU	--	2.58	2.86	4.59	-9.205	-8.886	-7.172
							106	53	-0.34	-0.08	1.66	-8.977	-8.353	-6.784
								54	-0.27	-0.09	1.69	-8.973	-8.184	-6.690
			-1.14	1.84	6855	181	SU	--	2.74	2.92	4.70	-9.193	-8.953	-7.201
							106	53	-0.25	-0.12	1.69	-9.030	-8.322	-6.791
								54	-0.27	-0.06	1.71	-9.019	-8.311	-6.780
40MHz	0.00	0.00	-1.14	1.84	6565	123	SU	--	5.68	5.91	7.67	-9.354	-8.493	-7.032
							52 + 26	70	-1.51	-1.29	0.47	-8.930	-8.259	-6.711
								75	-1.52	-1.28	0.47	-8.908	-8.356	-6.753
					6685	147	SU	--	5.74	5.94	7.71	-9.366	-8.615	-7.104
							52 + 26	70	-1.61	-1.33	0.42	-9.555	-8.521	-7.137
								75	-1.52	-1.30	6.62	-9.453	-8.305	-6.971
			6845	179	SU	--	5.66	5.90	7.65	-10.219	-8.899	-7.639		
					52 + 26	70	-1.53	-1.35	0.43	-10.258	-8.277	-7.285		
						75	-1.55	-1.29	0.45	-9.969	-8.241	-7.149		
80MHz	0.00	0.00	-1.14	1.84	6625	129	SU	--	8.71	8.95	10.70	-8.995	-8.844	-7.049
							484 + 242	90	7.42	7.65	9.41	-9.303	-9.041	-7.300
								92	7.33	7.71	9.39	-8.959	-8.837	-7.027
					93	7.32		7.73	9.40	-8.916	-8.948	-7.062		
			-1.14	1.84	6705	149	SU	--	8.65	8.91	10.65	-9.149	-8.813	-7.107
							484 + 242	90	7.46	7.69	9.45	-9.278	-8.901	-7.215
								92	7.49	7.72	9.48	-9.277	-8.991	-7.261
					93	7.38		7.69	9.41	-9.289	-8.901	-7.220		
			-1.14	1.84	6785	161	SU	--	8.72	8.91	10.69	-9.276	-8.854	-7.190
484 + 242	90	7.44					7.64	9.41	-8.926	-8.754	-6.969			
	92	7.42					7.62	9.39	-9.059	-8.888	-7.102			
	93	7.46			7.65	9.43	-8.962	-8.671	-6.944					
160MHz	0.18	0.00	-1.14	1.84	6665	143	SU	--	10.94	11.21	12.95	-9.515	-9.210	-7.310
							106	53	-0.26	-0.08	1.70	-8.817	-8.406	-6.736
								S60	-0.28	-0.01	1.73	-8.792	-8.370	-6.706

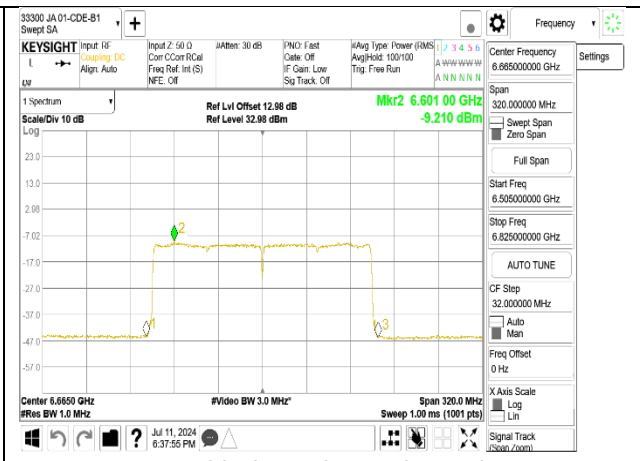
Note:

EIRP MIMO Output Power (dBm) = Measured Conducted Power (dBm) (Ant 6 + Ant 5) + Un-Correlated Antenna Gain (dBi)

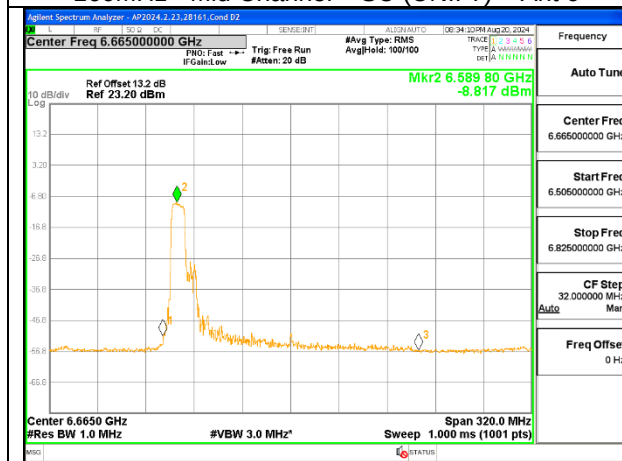
EIRP MIMO PSD (dBm/MHz) = Measured Conducted PSD (dBm/MHz) (Ant 6 + Ant 5) + Duty Factor (dB) + Un-Correlated Antenna Gain (dBi)



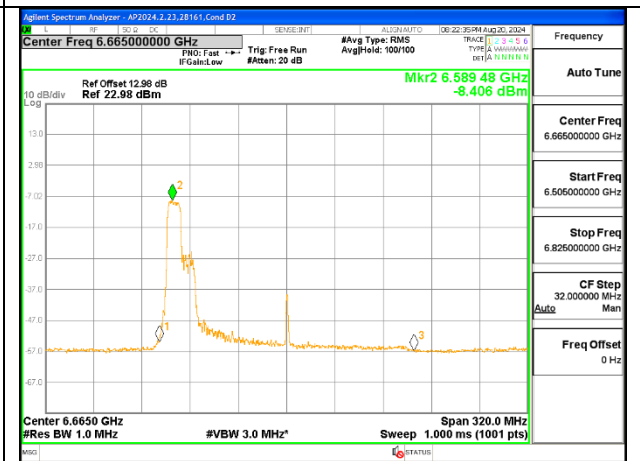
160MHz - Mid Channel - SU (UNII-7) - Ant 6



160MHz - Mid Channel - SU (UNII-7) - Ant 5



160MHz - Mid Channel - 106T RU53 (UNII-7) - Ant 6



160MHz - Mid Channel - 106T RU53 (UNII-7) - Ant 5

9.4. VLP SPURIOUS EMISSIONS IN-BAND – EMISSION MASK LIMITS

FCC §15.407

(b)(7) 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.

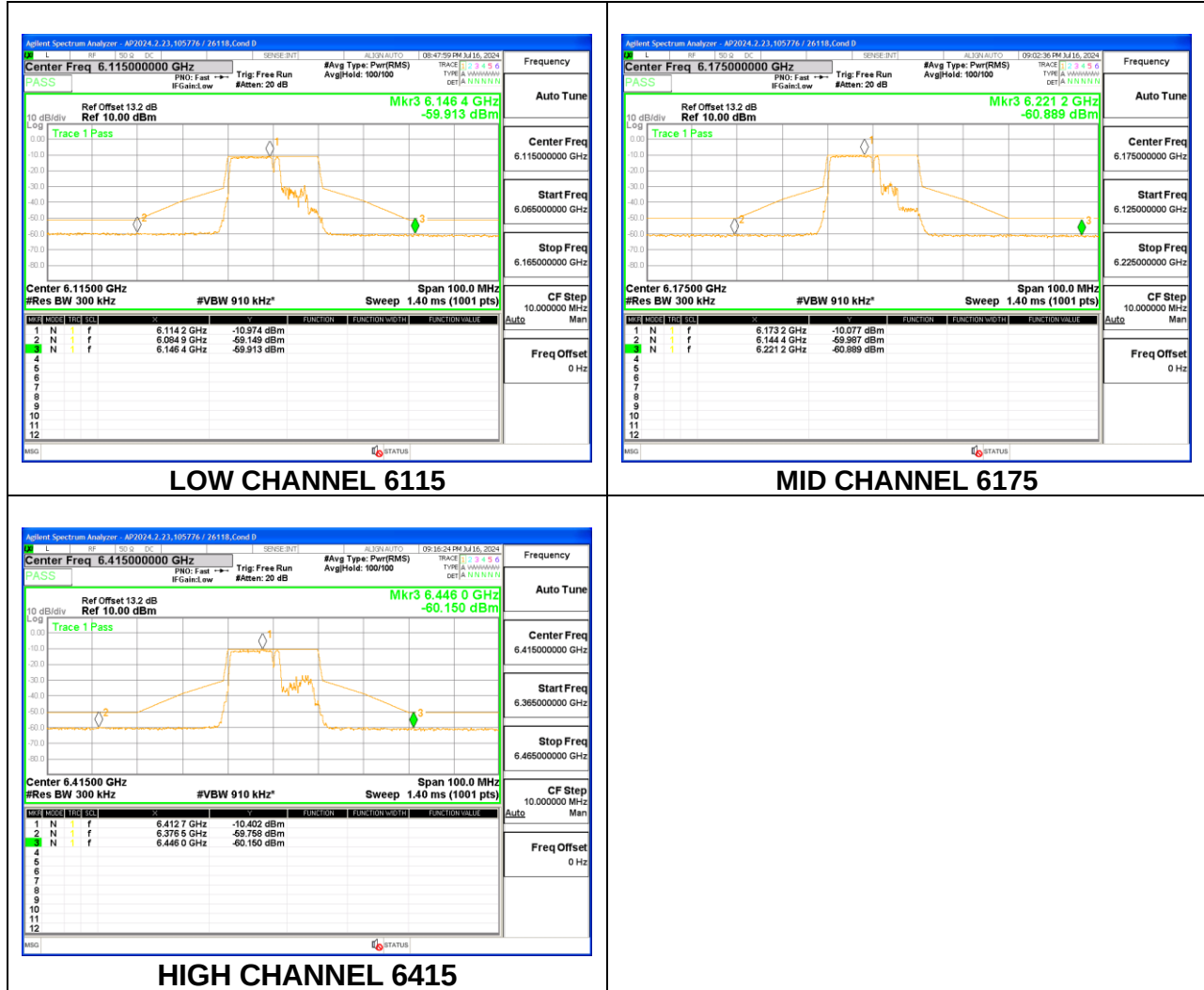
TEST PROCEDURE

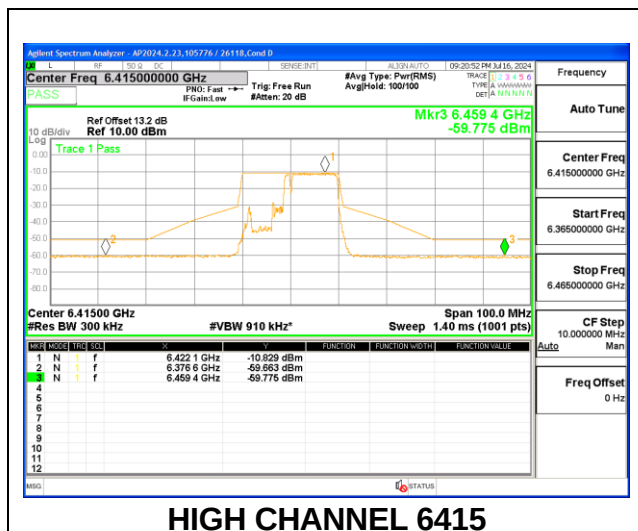
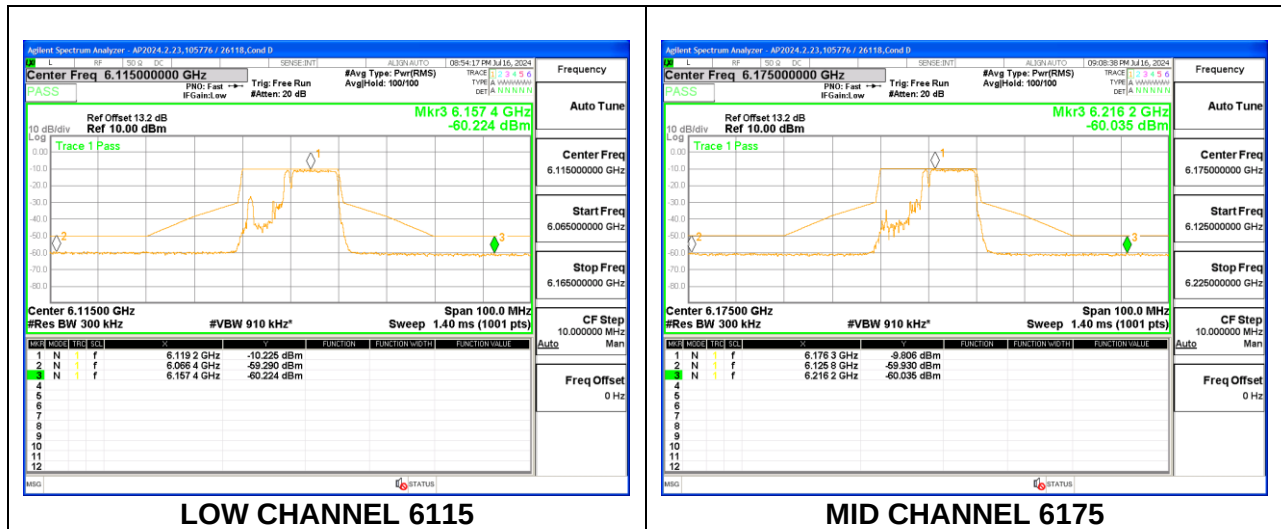
Follow KCB 987594 D02 v01r01, Section II-J, RBW & VBW settings were based on 26dB bandwidth test settings. Only RU26 tone for all bandwidths, the RBW & VBW settings were used equal or greater than 26dB bandwidth test settings.

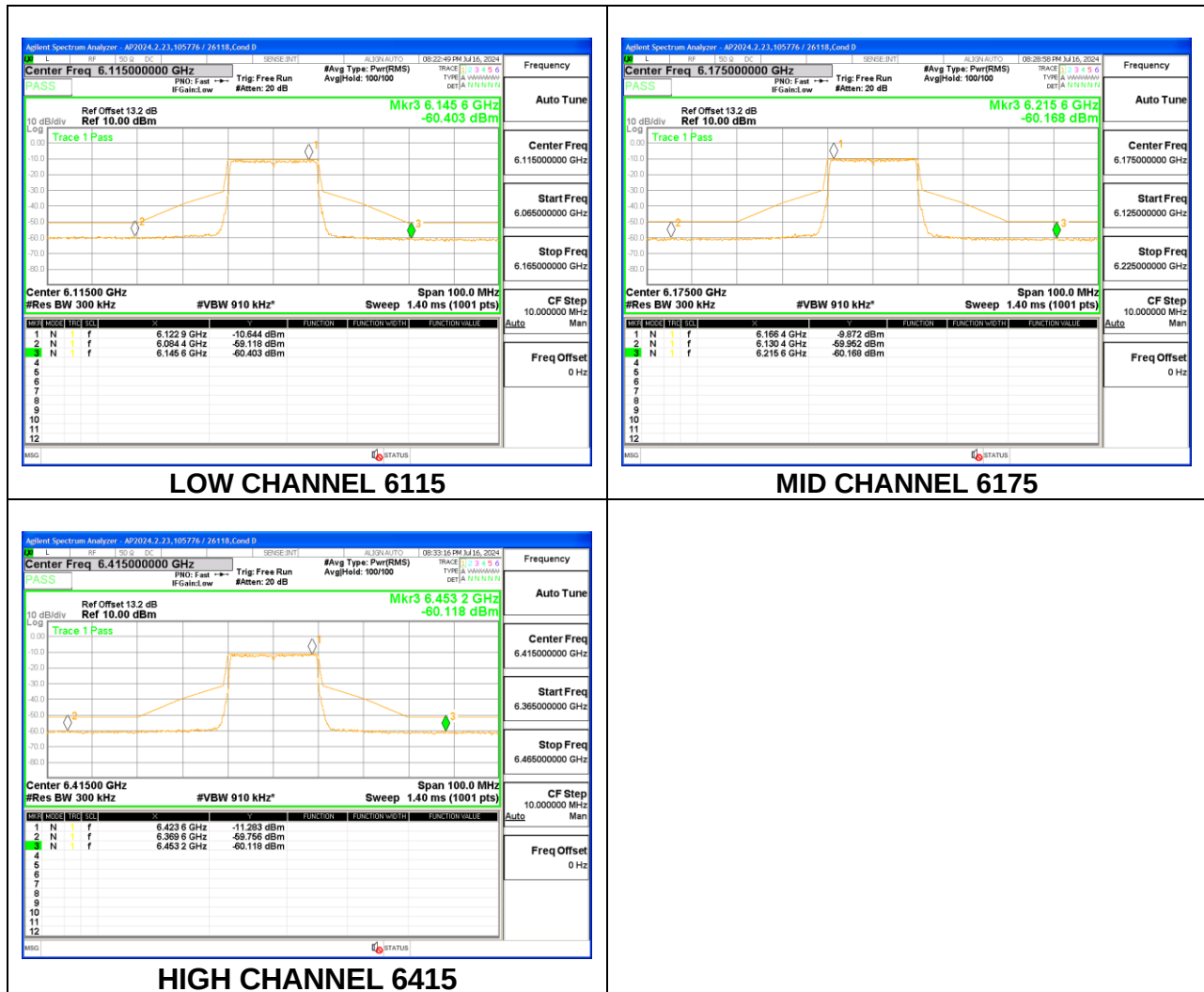
Band	Tones	20MHz	40MHz	80MHz	160MHz
UNII-5	Partial RU	300kHz/910kHz	510kHz/1.6MHz	510kHz/1.6MHz	510kHz/1.6MHz
	SU	300kHz/910kHz	510kHz/1.6MHz	1MHz/3MHz	2MHz/6MHz
UNII-7	Partial RU	300kHz/910kHz	510kHz/1.6MHz	1MHz/3MHz	300kHz/910kHz (SISO/SDM) 510kHz/1.6MHz (CDD)
	SU	300kHz/910kHz	510kHz/1.6MHz	1MHz/3MHz	2MHz/6MHz

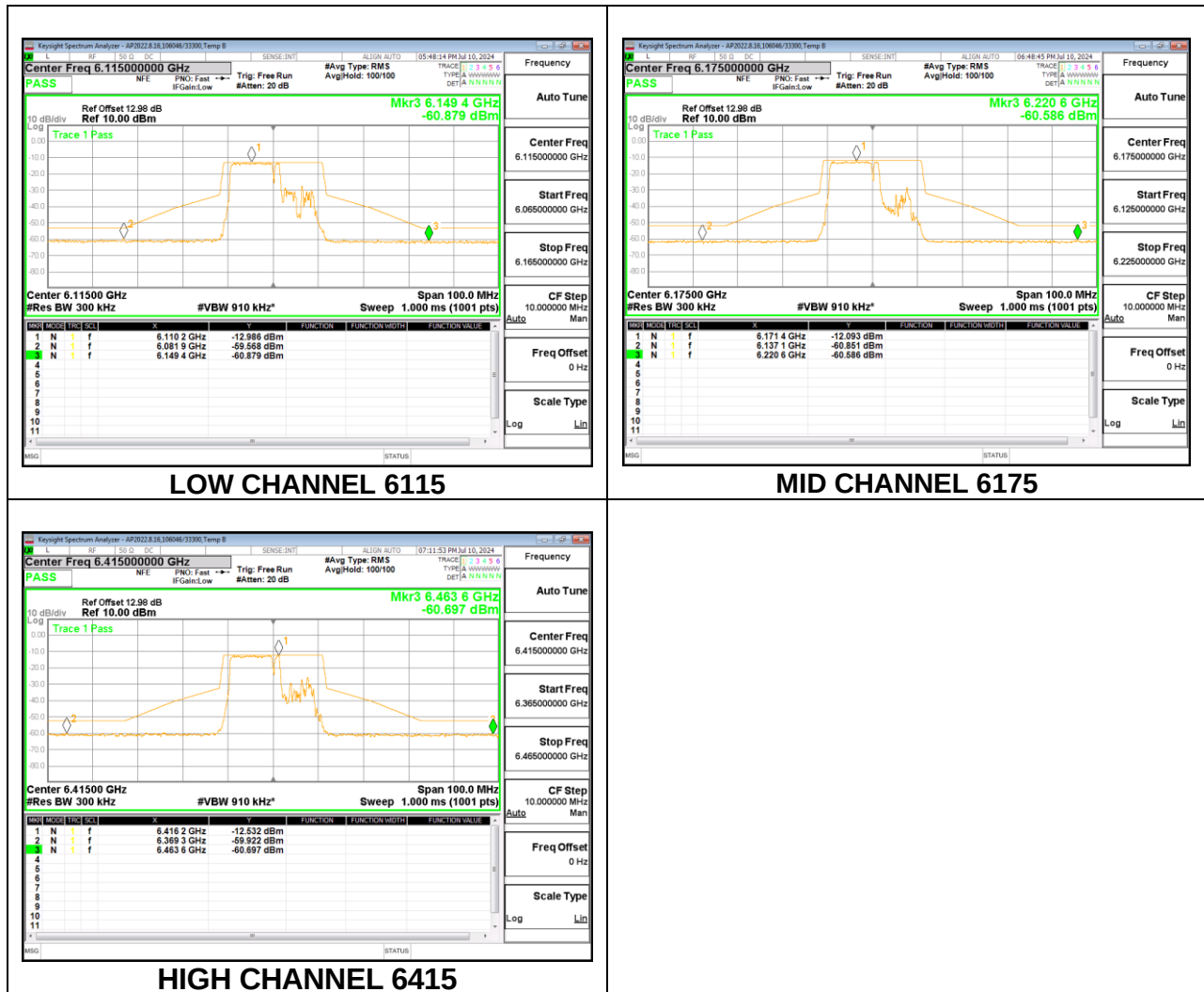
RESULTS

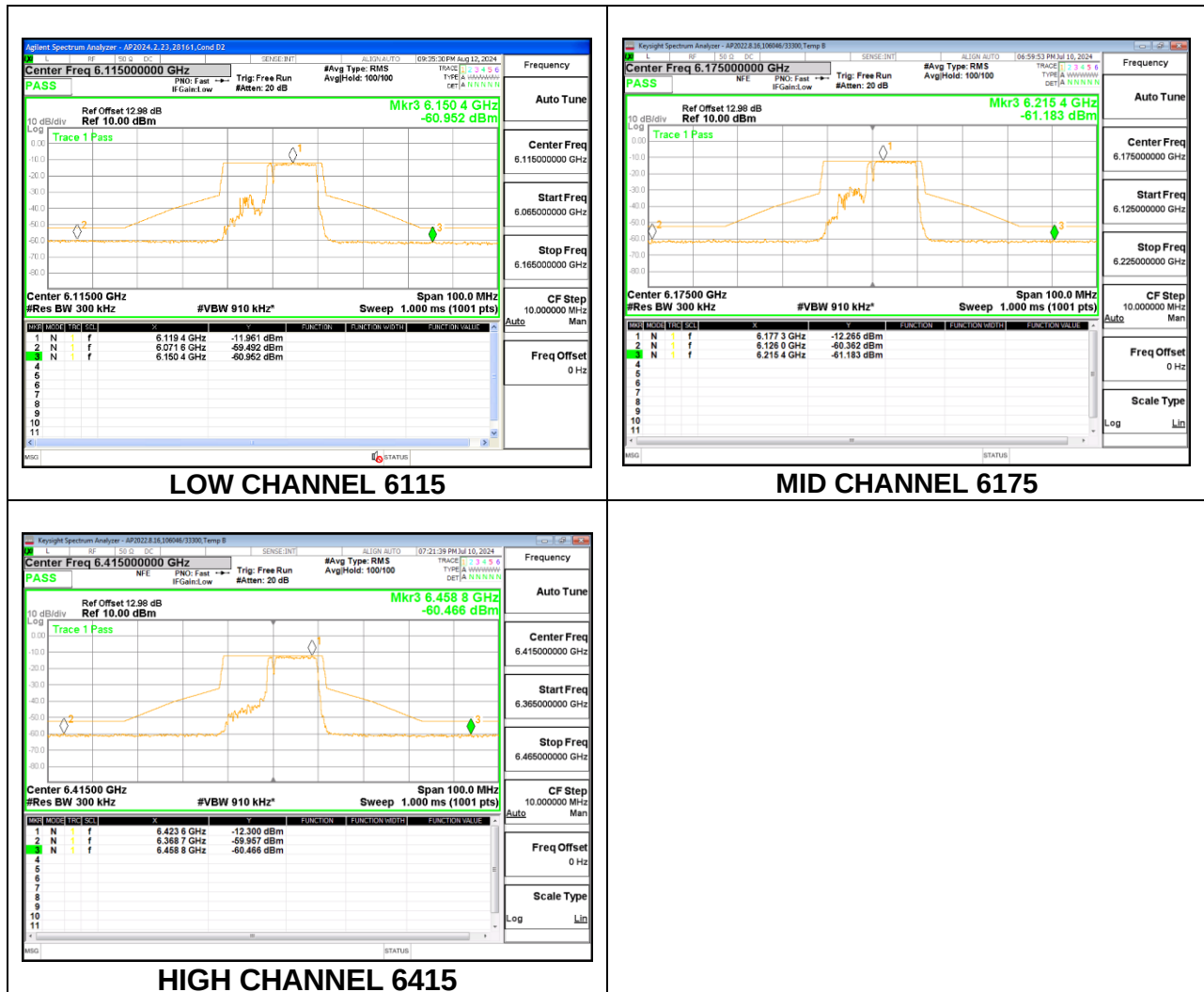
For mask and bandwidth measurements partial RU allocations are tested with the RUs allocated at the lower and upper positions within the channel for the low mid and high channels in each band. Additionally, the center channel is also tested with the RU allocated in the center of the channel to verify that the low / high RU allocations are worst case.

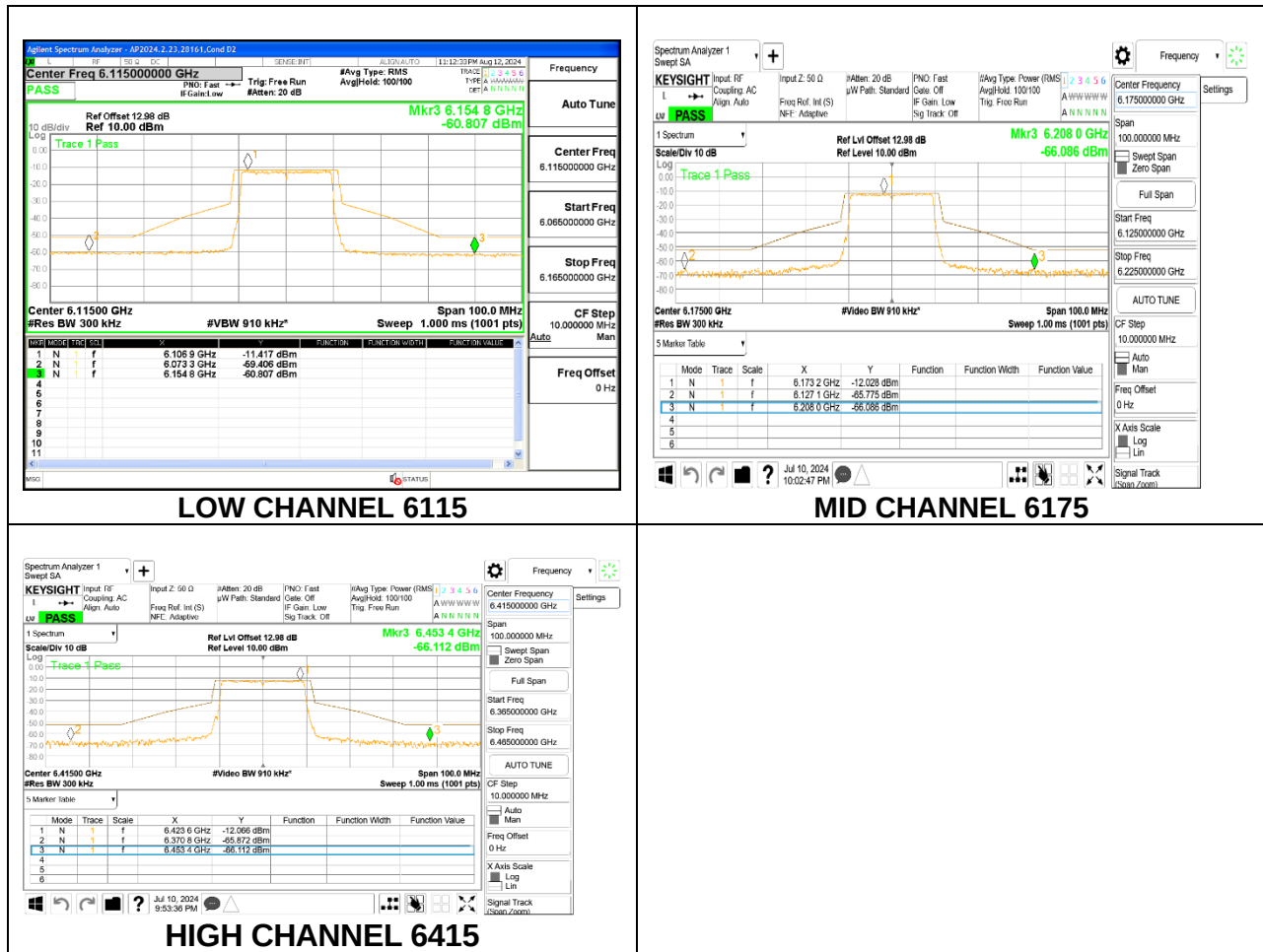
9.4.1. 802.11be EHT20 MODE IN THE UNII-5 BAND**1TX Antenna 6 MODE (FCC+IC) MOBILE – 106 + 26-Tones, RU Index 82**

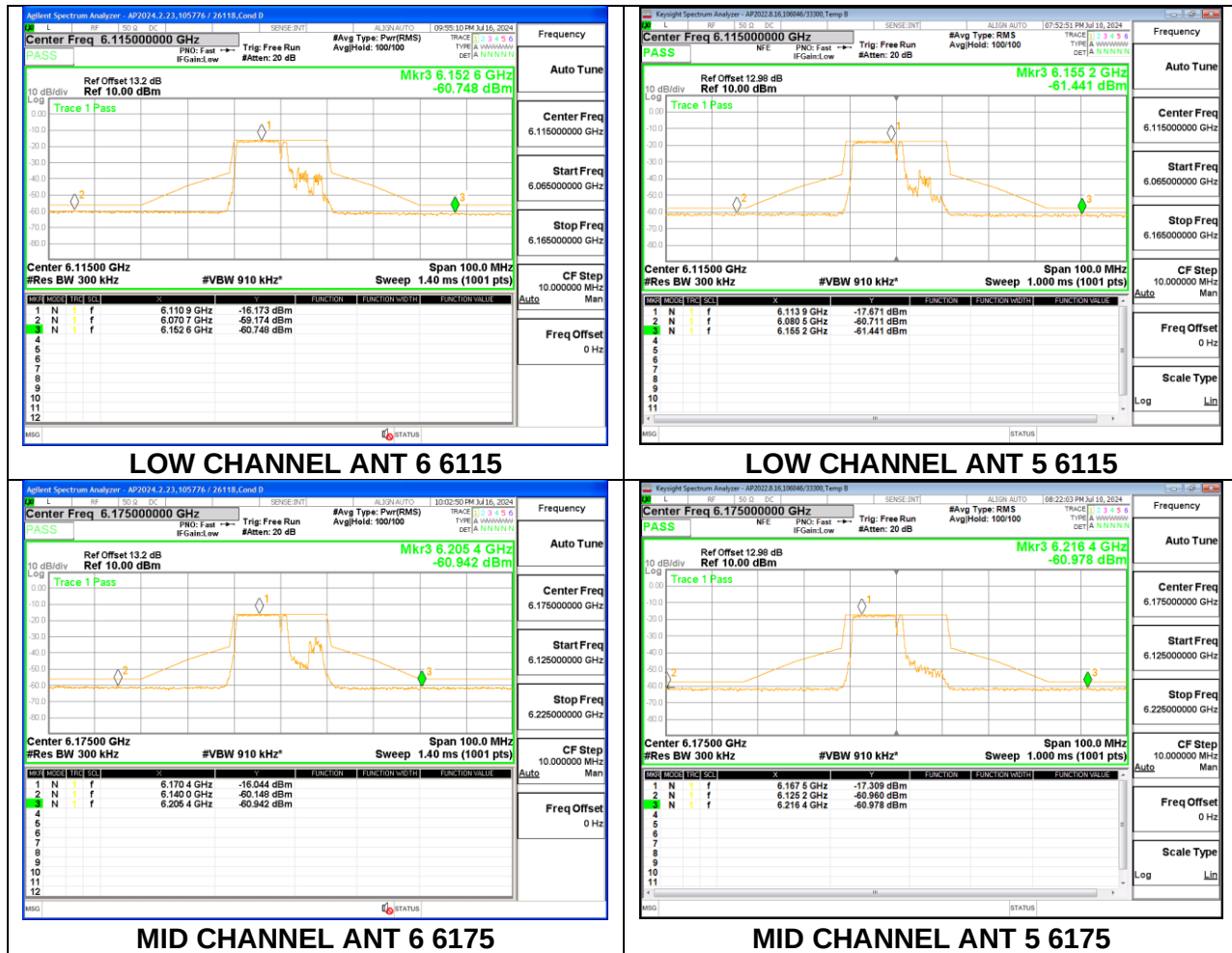
1TX Antenna 6 MODE (FCC+IC) MOBILE – 106 + 26-Tones, RU Index 83

1TX Antenna 6 MODE (FCC+IC) MOBILE – SU MODE

1TX Antenna 5 MODE (FCC+IC) MOBILE – 106 + 26-Tones, RU Index 82

1TX Antenna 5 MODE (FCC+IC) MOBILE – 106 + 26-Tones, RU Index 83

1TX Antenna 5 MODE (FCC+IC) MOBILE – SU MODE

2TX Antenna 6 + Antenna 5 CDD MODE (FCC + IC) – 106 + 26-Tones, RU Index 82

2TX Antenna 6 + Antenna 5 CDD MODE (FCC + IC) – 106 + 26-Tones, RU Index 83