

TEST REPORT

Report Number: 15496282-E7V4

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

Model : A3260 (Parent)
A3516, A3517, A3518 (Variants)

Brand : APPLE

FCC ID : BCG-E8948A(Parent)
BCG-E8954A, BCG-E8955A, BCG-E8956A (Variants)

EUT Description : SMARTPHONE

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

Date Of Issue:
2025/08/21

Prepared by:
UL Verification Services Inc.
47173 Benicia Street
Fremont, CA 94538 U.S.A.
TEL: (510) 319-4000
FAX: (510) 661-0888



REPORT REVISION HISTORY

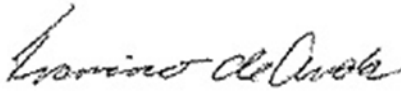
Rev.	Issue Date	Revisions	Revised By
V1	2025/07/18	Initial Review	---
V2	2025/07/22	Addressed TCB questions Sections 6,9,10 & 11	G. Escano
V3	2025/07/25	Addressed TCB questions on Sections 6, 9 & 10	G. Escano
V4	2025/08/21	Fix main model number	G. Escano

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS.....	5
2. TEST RESULT SUMMARY.....	6
3. TEST METHODOLOGY	7
4. FACILITIES AND ACCREDITATION.....	7
5. DECISION RULES AND MEASUREMENT UNCERTAINTY.....	8
5.1. METROLOGICAL TRACEABILITY	8
5.2. DECISION RULES	8
5.3. MEASUREMENT UNCERTAINTY	8
5.4. SAMPLE CALCULATION.....	9
6. EQUIPMENT UNDER TEST	10
6.1. EUT DESCRIPTION.....	10
6.2. MAXIMUM OUTPUT POWER.....	10
6.3. DESCRIPTION OF AVAILABLE ANTENNAS.....	12
6.4. SOFTWARE AND FIRMWARE.....	12
6.5. WORST-CASE CONFIGURATION AND MODE.....	13
6.6. DESCRIPTION OF TEST SETUP.....	15
7. TEST AND MEASUREMENT EQUIPMENT	20
8. MEASUREMENT METHODS.....	21
9. ANTENNA PORT TEST RESULTS	22
9.1. ON TIME AND DUTY CYCLE	22
9.2. 26 dB AND 99% BANDWIDTH.....	23
9.2.1. HIGH POWER SISO MODE	24
9.2.2. HIGH POWER TXBF MODE.....	27
9.3. 6 dB BANDWIDTH	31
9.3.1. HIGH OUTPUT SISO MODE IN THE UNII-3 BAND	32
9.3.2. HIGH OUTPUT TXBF MODE IN THE UNII-3 BAND.....	34
9.4. OUTPUT POWER AND PSD	38
9.4.1. UNII-1 BAND SISO MODE.....	40
9.4.2. UNII-1 BAND MIMO TXBF MODE	43
9.4.3. UNII-3 BAND SISO MODE.....	46
9.4.4. UNII-3 BAND MIMO TXBF MODE	49
10. RADIATED TEST RESULTS.....	53
10.1. TRANSMITTER ABOVE 1 GHz.....	55
10.1.1. UNII-1 BAND SISO MODE – BANDEDGE – HIGH POWER	55

10.1.2.	UNII-1 BAND MIMO TXBF MODE – BANDEDGE – HIGH POWER	59
10.1.3.	UNII-1 MIMO TXBF BAND – SPURIOUS EMISSIONS – HIGH POWER	62
10.1.4.	UNII-3 BAND SISO MODE – BANDEDGE – HIGH POWER	68
10.1.5.	UNII-3 BAND MIMO TXBF MODE – BANDEDGE – HIGH POWER	74
10.1.6.	UNII-3 MIMO TXBF BAND – SPURIOUS EMISSIONS – HIGH POWER	79
10.2.	<i>WORST CASE BELOW 1 GHz</i>	85
10.3.	<i>WORST CASE 18-26 GHz</i>	87
10.4.	<i>WORST CASE 26-40 GHz</i>	89
11.	AC POWERLINE CONDUCTED EMISSIONS	91
11.1.	<i>AC POWER LINE WITH LAPTOP</i>	92
11.2.	<i>AC POWER LINE WITH AC/DC ADAPTER</i>	94
12.	SETUP PHOTOS	96
13.	APPENDIX A – SPOT CHECK EVALUATION	96
13.1.	<i>MODEL DIFFERENCES</i>	96
13.2.	<i>SPOT CHECK VERIFICATION RESULTS SUMMARY FOR A3516</i>	97
13.3.	<i>SPOT CHECK VERIFICATION RESULTS SUMMARY FOR A3517</i>	98
13.4.	<i>SPOT CHECK VERIFICATION RESULTS SUMMARY FOR A3518</i>	99

1. ATTESTATION OF TEST RESULTS

Applicant Name and Address	APPLE INC. 1 APPLE PARK WAY CUPERTINO, CA 95014, U.S.A.		
Model	A3260 (Parent) A3516, A3517, A3518 (Variants)		
Brand	APPLE		
FCC ID	BCG-E8948A(Parent) BCG-E8954A, BCG-E8955A, BCG-E8956A (Variants)		
EUT Description	SMARTPHONE		
Serial Number	C07HC90002Z0000X9L (Conducted) Lfk6GGFV2V (Radiated)		
Sample Receipt Date	2025-02-21		
Date Tested	2025/03/11 to 2025/07/25		
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 can demonstrate 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..		Jordan Bailey & Glenn Escano Laboratory Engineer & 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)

FCC Clause	Requirement	Result	Comment
See Comment	Duty Cycle	Reporting purposes only	Per ANSI C63.10, Section 12.2.
See Comment	26dB BW/99% OBW	Reporting purposes only	Per ANSI C63.10 Sections 6.9.2 and 6.9.3
15.407 (e)	6 dB BW	Complies	Per ANSI C63.10, Section 12.5.1
15.407 (a) (1 & 3)	Output Power	Complies	Per ANSI C63.10, Section 12.4.3.2
15.407 (a) (1 & 3)	PSD	Complies	Per ANSI C63.10, Section 12.6
15.209, 15.205, 15.407 (b)	Radiated Emissions	Complies	Per ANSI C63.10, Section 12.7
15.207	AC Mains Conducted Emissions	Complies	Per ANSI C63.10, Section 6.2

3. TEST METHODOLOGY

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

- ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024
- FCC 47 CFR Part 2
- FCC 47CFR Part 15
- FCC KDB 414788 D01 Radiated Test Site
- FCC KDB 662911 D01 Multiple Transmitter Output
- FCC KDB 789033 D02 General UNII Test Procedures New Rules

*Note: The use of ANSI C63.10-2020 + Cor. 1-2023 + C63.10a-2024 does not deviate from the testing procedures of ANSI C63.10-2020.

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	1.94 dB
Power Spectral Density	2.47 dB
Time Domain Measurements Using SA	3.39 %
RF Power Measurement Direct Method Using Power Meter	1.30 (Peak), 0.45 (Ave)
Radio Frequency (Spectrum Analyzer)	141.16 Hz
Occupied Bandwidth	1.2%
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), Wireless Power Transfer (WPT) and Mobile Satellite Service (MSS) technologies. The rechargeable battery is not user accessible.

This report covers the NB UNII-1 and UNII-3 bands.

6.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum conducted output power as follows:

UNII-1 Frequency Range (MHz)	Mode	Antenna	Configuration	Output Power (dBm)	Output Power (mW)
5162 - 5245	BDR	Ant 6	High Power	10.2	10.47
			Low Power	2.49	1.77
		Ant 5	High Power	10.2	10.47
			Low Power	5.2	3.31
		BF, Ant 6 + Ant 5	High Power	10.2	10.47
			Low Power	7.07	5.09
5162 - 5245	HDT3	Ant 6	High Power	12.7	18.62
			Low Power	-0.56	0.88
		Ant 5	High Power	12.68	18.54
			Low Power	2	1.58
		BF, Ant 6 + Ant 5	High Power	12.63	18.32
			Low Power	3.94	2.48
5162 - 5245	LE1M	Ant 6	High Power	10.27	10.64
			Low Power	2.5	1.78
		Ant 5	High Power	10.3	10.72
			Low Power	5.2	3.31
		BF, Ant 6 + Ant 5	High Power	10.31	10.74
			Low Power	7.06	5.08
5162 - 5245	LE2M	Ant 6	High Power	11.2	13.18
			Low Power	2.5	1.78
		Ant 5	High Power	11.2	13.18
			Low Power	5.2	3.31
		BF, Ant 6 + Ant 5	High Power	11.21	13.21
			Low Power	7.07	5.09
5162 - 5245	HDR4	Ant 6	High Power	12.3	16.98
			Low Power	-0.51	0.89
		Ant 5	High Power	12.29	16.94
			Low Power	2	1.58
		BF, Ant 6 + Ant 5	High Power	12.29	16.94
			Low Power	3.94	2.48
5162 - 5245	HDRPM4	Ant 6	High Power	14	25.12
			Low Power	-0.5	0.89
		Ant 5	High Power	14	25.12
			Low Power	2	1.58
		BF, Ant 6 + Ant 5	High Power	15.17	32.89
			Low Power	3.94	2.48
5162 - 5245	HDRPL8	Ant 6	High Power	14	25.12
			Low Power	-0.5	0.89
		Ant 5	High Power	14	25.12
			Low Power	1.91	1.55
		BF, Ant 6 + Ant 5	High Power	17.01	50.23
			Low Power	3.91	2.46

UNII-3 Frequency Range (MHz)	Worst-Case Mode	Bandwidth (MHz)	Antenna	Configuration	Output Power (dBm)	Output Power (mW)
5733 - 5844	BDR	0.887	Ant 6	High Power	18.50	70.79
				Low Power	2.00	1.58
			Ant 5	High Power	19.00	79.43
				Low Power	5.20	3.31
			BF, Ant 6 + Ant 5	High Power	21.75	149.62
				Low Power	6.89	4.89
5733 - 5844	HDT3	2.4	Ant 6	High Power	14.00	25.12
				Low Power	-1.00	0.79
			Ant 5	High Power	14.00	25.12
				Low Power	2.00	1.58
			BF, Ant 6 + Ant 5	High Power	16.99	50.00
				Low Power	3.76	2.38
5733 - 5844	LE1M	1	Ant 6	High Power	18.49	70.63
				Low Power	2.00	1.58
			Ant 5	High Power	19.00	79.43
				Low Power	5.16	3.28
			BF, Ant 6 + Ant 5	High Power	21.75	149.62
				Low Power	6.86	4.85
5733 - 5844	LE2M	2	Ant 6	High Power	18.50	70.79
				Low Power	2.00	1.58
			Ant 5	High Power	19.00	79.43
				Low Power	5.20	3.31
			BF, Ant 6 + Ant 5	High Power	21.76	149.97
				Low Power	6.87	4.86
5733 - 5844	HDR4	2.34	Ant 6	High Power	14.00	25.12
				Low Power	-1.01	0.79
			Ant 5	High Power	14.00	25.12
				Low Power	2.00	1.58
			BF, Ant 6 + Ant 5	High Power	17.01	50.23
				Low Power	3.76	2.38
5733 - 5844	HDRPM4	5	Ant 6	High Power	14.00	25.12
				Low Power	-1.00	0.79
			Ant 5	High Power	14.00	25.12
				Low Power	2.00	1.58
			BF, Ant 6 + Ant 5	High Power	16.95	49.55
				Low Power	3.74	2.37
5733 - 5844	HDRPL8	10	Ant 6	High Power	14.00	25.12
				Low Power	-1.00	0.79
			Ant 5	High Power	14.00	25.12
				Low Power	2.00	1.58
			BF, Ant 6 + Ant 5	High Power	17.01	50.23
				Low Power	3.73	2.36

6.3. DESCRIPTION OF AVAILABLE ANTENNAS

Antenna Type is PIFA.

The antennas' gains, as provided by the manufacturer, are as follows:

Frequency Range (MHz)	Antenna 6 (dBi)	Antenna 5 (dBi)	Uncorrelated Chains (dBi)	Correlated Chains (dBi)
5150 - 5250 UNII - 1	0.70	-3.40	-0.88	1.90
5725 - 5825 UNII 3	1.70	-2.90	-0.02	2.71

Note: antenna C0 and antenna C1 indicated in power tune-up document pertain to Ant 6 and ANT 5 of this report respectively.

Frequency Range (MHz)	Cable Loss	
	Antenna 6 (dBi)	Antenna 5 (dBi)
5150 - 5250 UNII - 1	-0.40	-2.30
5725 - 5825 UNII 3	-0.41	-2.39

The 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 Luck23A256.

6.5. WORST-CASE CONFIGURATION AND MODE

The EUT was investigated in three orthogonal orientations X, Y and Z on ANT 6, ANT 5 and 2TX, it was determined that Z (Landscape) was the worst-case orientation for both ANT 6 and ANT 5, and Z (Portrait) orientation for 2TX beamforming.

For Radiated band edge test all test modes have been investigated with power setting equal or higher than FCC conducted SISO modes as worst-case scenario and no emissions at both lower and upper band edges were found.

For the radiation spurious harmonics testing, we have investigated both SISO and MIMO modes under low power and high power, only high power mode data is included in report, as this represents the worst case.

For radiated harmonics spurious below 1GHz, 1-18GHz L/M/H channels, 18-26GHz, 26-40GHz and power line conducted emissions were performed with the EUT set at the 2TX BF at high power mode with power setting equal or higher than SISO modes as worst-case scenario.

2TX Beamforming modes were used to perform on radiated harmonic spurious final test to cover all SISO modes. Max power was tuned to maximum based among all the modes. For testing purposes, radiated harmonics spurious below 1GHz, 1-18GHz L/M/H channels, 18-40GHz, and power line conducted emissions were performed with the EUT set at the 2TX Beamforming mode with power setting equal or higher than FCC conducted SISO modes as worst-case scenario.

Below 1GHz tests were performed with EUT connected to AC power adapter as the worst case; and for above 1GHz, the worst-case configuration reported was tested with EUT only. For AC line conducted emission, test was investigated with AC power adapter and with laptop. There were no emissions found below 30MHz within 20dB of the limit.

For simultaneous transmission of multiple channels in the 2.4GHz BT and NB UNII 5GHz bands, no noticeable emission was found.

After the investigation, the worst case of power and PSD modes selecting for test are as table shown below.

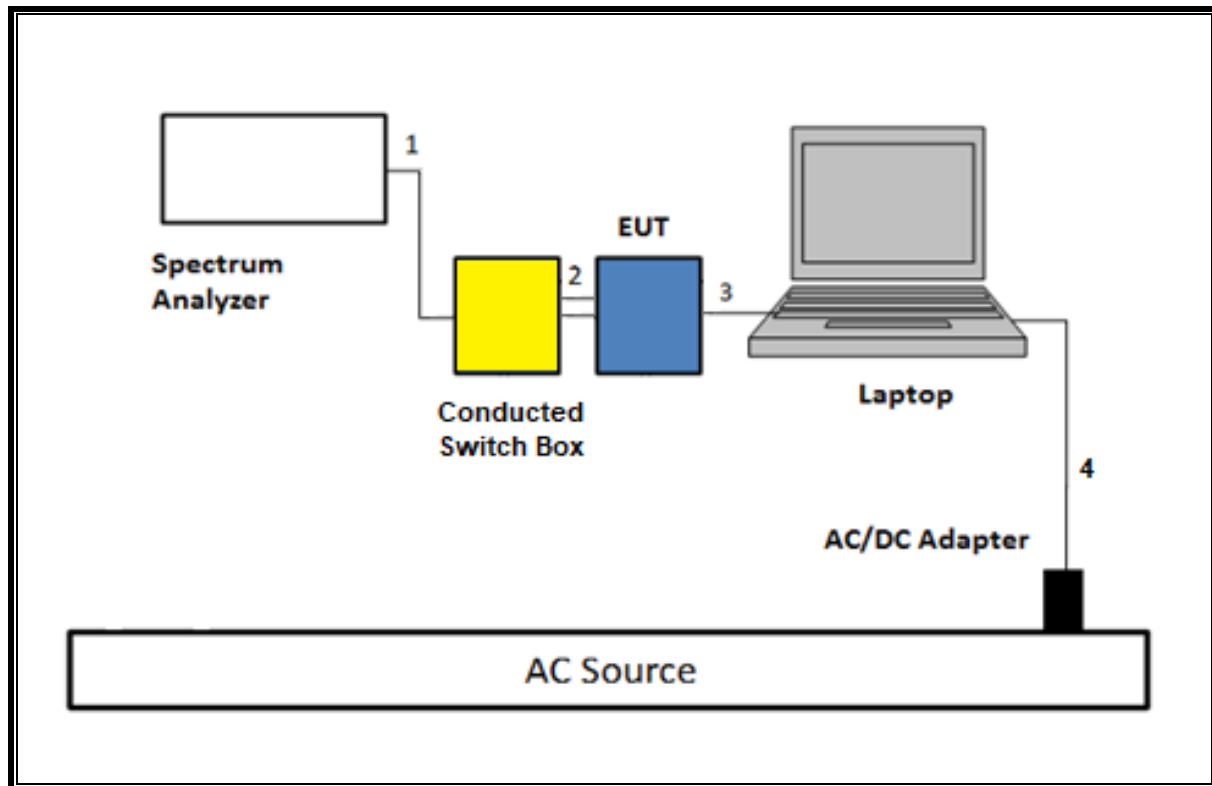
5G			UNII-1			UNII-3		
Mode	BW (MHz)	Modulation	Frequency Range (MHz)	Worst Case Tone		Frequency Range (MHz)	Worst Case Tone	
				Power	PSD		Power	PSD
BT5G	1MHz	BDR	5162-5245	x	x	5733-5844	x	x
	1.5MHz	EDR	5162-5245			5733-5844		
LE	1MHz	LE Adv	5162-5245			5733-5844		
		LE1M		x	x		x	x
		LELR125k						
		LELR500k						
	2MHz	LE2M	5162-5245	x	x	5733-5844	x	x
	2.5MHz	HDT2	5162-5245			5733-5844		
		HDT3		x	x		x	x
		HDT4						
		HDT6						
		HDT8						
HDR	2.5MHz	HDR4	5162-5245	x	x	5733-5844	x	x
		HDRPS2						
		XHDRPS2						
	5MHz	HDR8	5162-5245			5733-5844		
		HDRPM4		x	x		x	x
		HDRPM6						
		HDRPM8						
		XHDRPM4						
		XHDRPM6						
		XHDRPM8						
		HDRPM12						
		HDRPM16						
		XHDRPM12						
		XHDRPM16						
	9MHz	HDRPL8	5162-5245	x	x	5733-5844	x	x
		HDRPL12						
		HDRPL16						
		XHDRPL8						
		XHDRPL12						
		XHDRPL16						
		HDRPL24						
		HDRPL32						
		XHDRPL24						
		XHDRPL32						

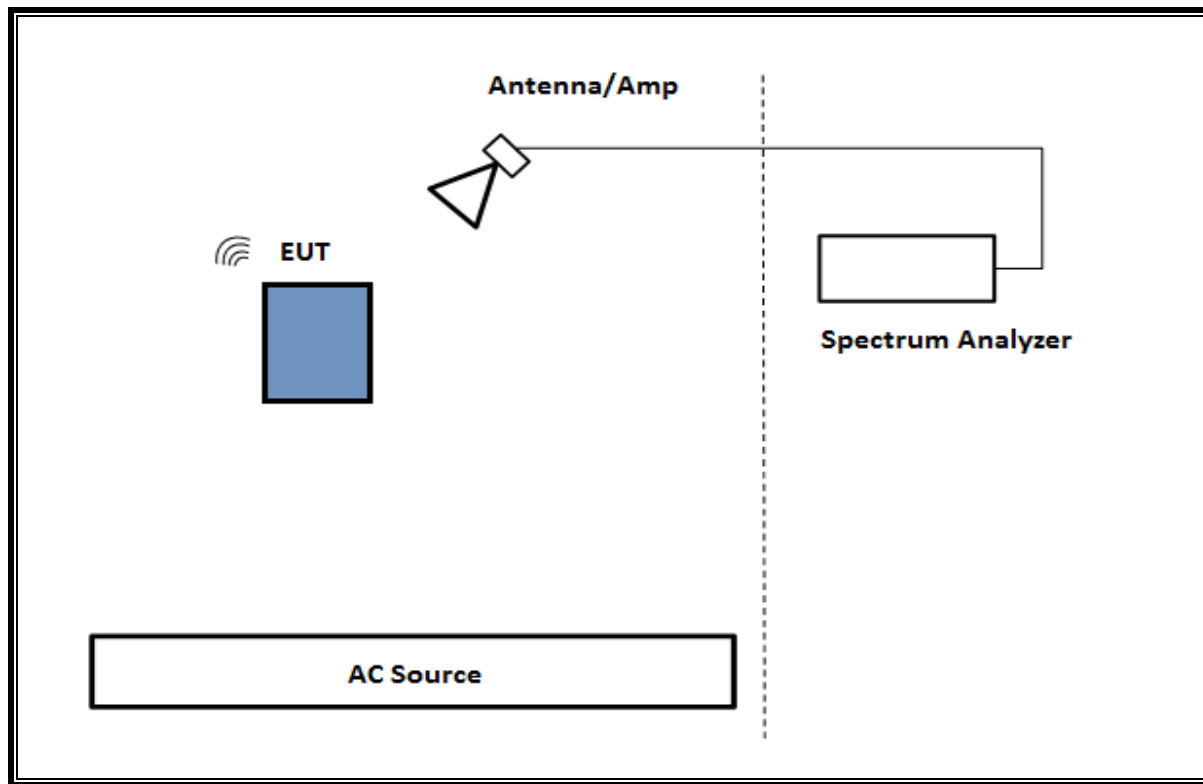
6.6. DESCRIPTION OF TEST SETUP

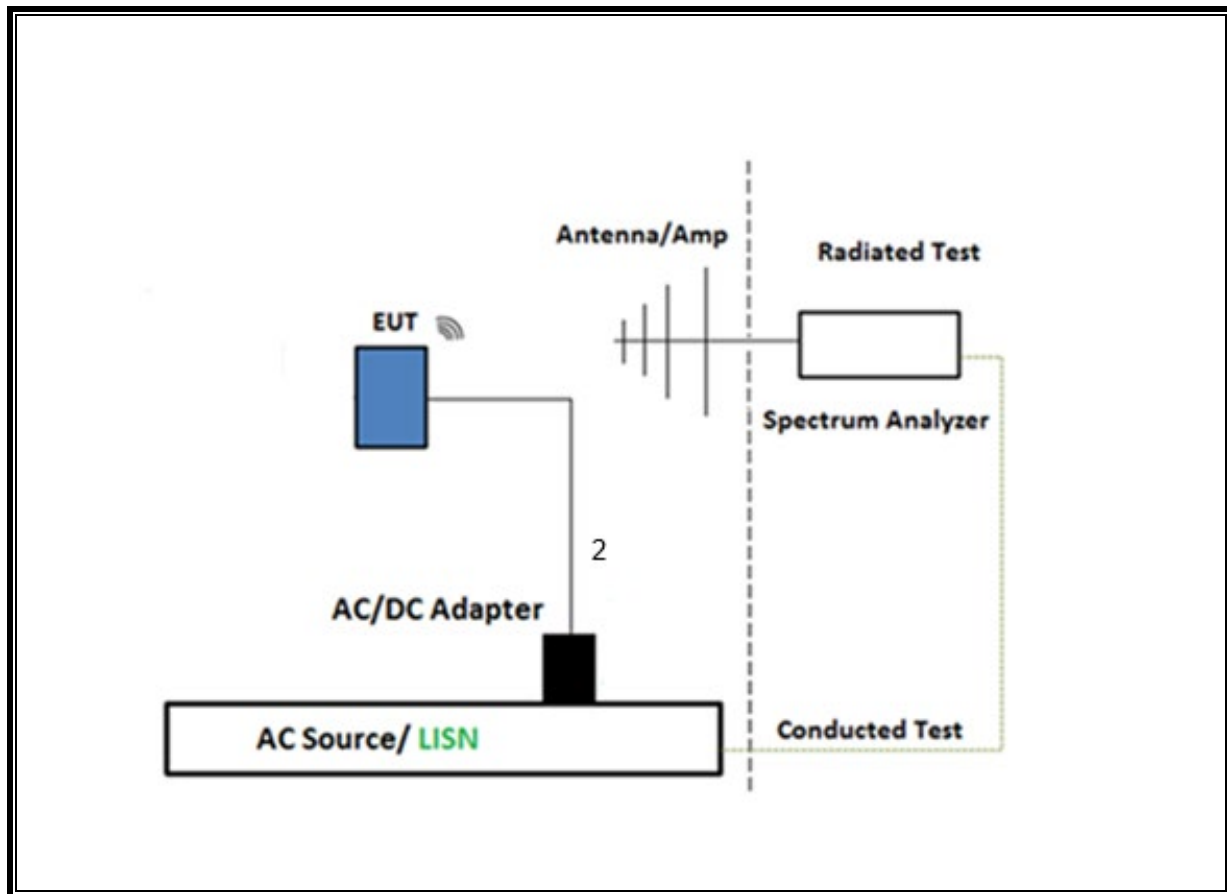
SUPPORT TEST EQUIPMENT						
Description		Manufacturer	Model	Serial Number		FCC ID/ DoC
Laptop		Apple	Macbook	G2YKJ9LWH5		N/A
Laptop AC/DC adapter		Apple	N/A	C4H238408AEPM0WAS		DoC
EUT AC/DC adapter		Apple	N/A	C4H238505ARPM0WAP		DoC
Conducted Switch Box		UL	N/A	245782		N/A
I/O CABLES (RF CONDUCTED TEST)						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	SMA	1	SMA	Shielded	0.2	To spectrum Analyzer
2	Antenna	2	SMA	Shielded	0.2	EUT to Switchbox
3	USB	1	USB-C	Shielded	1.0	N/A
4	DC	1	DC	Shielded	2	N/A
I/O CABLES (RF RADIATED AND AC LINE CONDUCTED TEST)						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	DC	1	DC	Shielded	2	N/A
2	USB	1	USB-C	Shielded	1	N/A

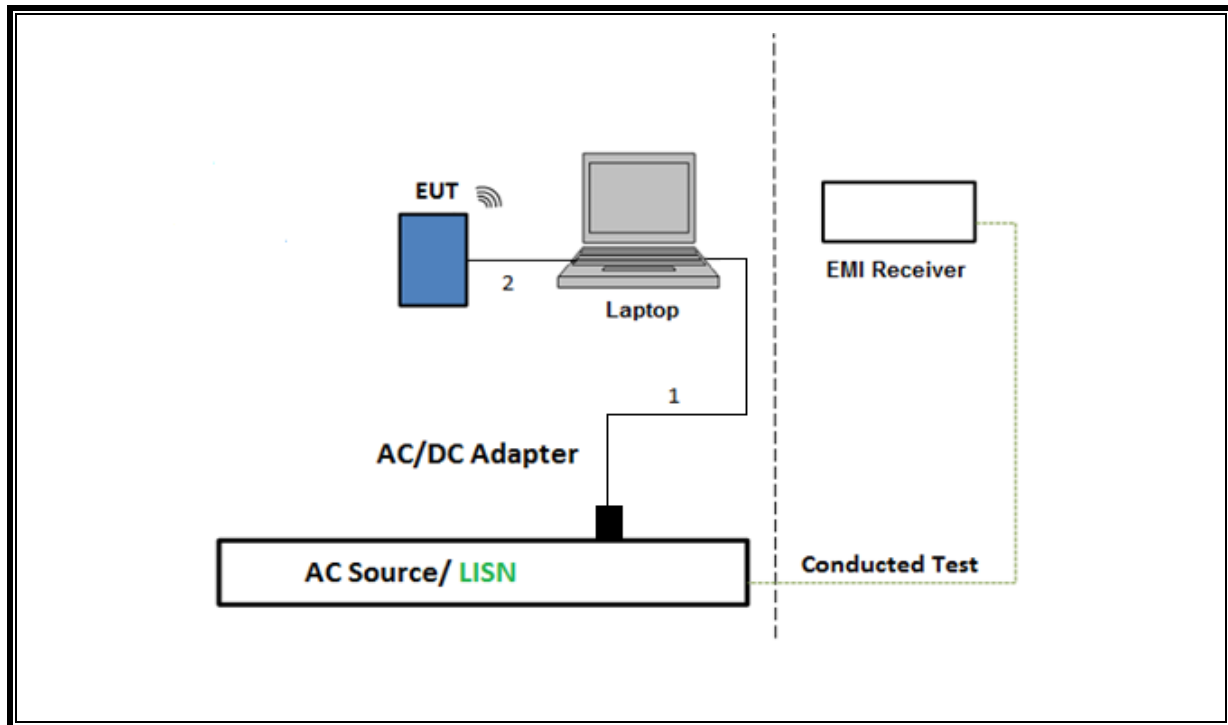
TEST SETUP

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

SETUP DIAGRAM FOR CONDUCTED TESTS

SETUP DIAGRAM FOR RADIATED TESTS Above 1 GHz

SETUP DIAGRAM FOR Below 1GHz and AC LINE CONDUCTED TEST

TEST SETUP- AC LINE CONDUCTED: LAPTOP CONFIGURATION

7. TEST AND MEASUREMENT EQUIPMENT

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

Description	Manufacturer	Model	ID Num	Cal Due
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	80403	*2025-06-30
RF Filter Box, 1-18GHz	UL-FR1	RATS 2.0	236726	2025-10-31
EMI Test Receiver	Rohde & Schwarz	ESW44	223460	2026-02-28
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	226672	2026-02-29
RF Filter Box, 1-18GHz	UL-FR1	Frankenstein	231876	2026-04-30
EMI Test Receiver	Rohde & Schwarz	ESW44	223459	2026-02-27
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	80404	2025-08-31
RF Filter Box, 1-18GHz	UL-FR1	RATS 2.0	226781	2026-03-31
EMI Test Receiver	Rohde & Schwarz	ESW44	226078	2026-02-28
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	79834	2025-07-31
RF Filter Box, 1-18GHz	UL-FR1	Frankenstein, 2 Amp version	237597	2025-10-30
EMI Test Receiver	Rohde & Schwarz	ESW44	169935	2026-02-27
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	222741	2025-09-30
RF Filter Box, 1-18GHz, 12 Port	UL-FR1	Frankenstein	217521	2025-08-31
EMI Test Receiver	Rohde & Schwarz	ESW44	223461	2026-02-28
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	206806	2026-02-28
RF Filter Box, 1-18GHz	UL-FR1	Silver Box	173233	2026-04-30
EMI Test Receiver	Rohde & Schwarz	ESW44	235266	2026-02-28
Antenna, Horn 18-26.5GHz	A.R.A	MWH-1826/B	81140	*2025-3-31
Link File, RF Amplifier Assembly, 18-26.5GHz, 60dB Gain	Amplical	AMP18G26.5-60	236106	*2025-4-18
Antenna, Horn 26.5-40GHz	A.R.A	MWH-2640/B	230656	*2025-3-31
Link File, RF Amplifier Assembly, 26.5-40GHz, 65dB Gain	Amplical	AMP26G40-65	236107	*2025-4-17
Antenna, Broadband Hybrid 30 MHz - 2 or 3 GHz	Sunol Sciences Corp.	JB3	202301	2027-02-28
Amplifier, 9KHz to 1GHz, 32dB	SONOMA INSTRUMENT	310	79584	2026-01-31
Spectrum Analyzer, PXA, 3Hz to 44GHz	Keysight Technologies Inc	N9030A-544	90238	2026-01-31
Spectrum Analyzer, PXA, 3Hz to 50GHz w/Ext. Mixer	Keysight Technologies Inc	N9030A	80400	2026-01-31
RF Device, Switch	UL	CSB	245262	2026-04-30
RF Device, Switch	UL	CSB	262287	2026-04-30
Power Meter, P-series single channel	Keysight Technologies Inc	N1911A	90718	2026-03-31
Power Sensor, P-series, 50MHz to 18GHz, Wideband	Keysight Technologies Inc	N1921A	257704	2026-03-31
Antenna, Passive Loop 30Hz - 1MHz	ELECTRO-METRICS	EM-6871	170013	2025-07-31
Antenna, Passive Loop 100KHz - 30MHz	ELECTRO-METRICS	EM-6872	170015	2025-07-31

AC Line Conducted				
Description	Manufacturer	Model	ID Num	Cal Due
EMI Test Receiver 9kHz-7GHz	Rohde & Schwarz	ESR	171646	2026-02-28
LISN for Conducted Emissions CISPR-16	Fischer Custom Communications	FCC-LISN-50/250-25-2-01-480V	175765	2026-01-31
Transient Limiter	TE	TBFL1	207996	2025-09-30
UL AUTOMATION SOFTWARE				
Conducted Software	UL	Antenna Port	Ver 2022.8.16, 2024.2.23	
Conducted Software	UL	Station Tool	Ver 3.0, 5.3, 6.1	
Radiated Software	UL	UL EMC	Ver 9.5 May 01, 2023; Jul 31, 2024	
AC Line Conducted Software	UL	UL EMC	Ver 9.5 Mar 03, 2023; 09 Jan 2023	

*Testing was completed before equipment calibration date.

8. MEASUREMENT METHODS

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

6 dB Emission BW: KDB 789033 D02 v02r01, Section C.2

26 dB Emission BW: KDB 789033 D02 v02r01, Section C.1

99% Occupied BW: KDB 789033 D02 v02r01, Section D.

Conducted Output Power: KDB 789033 D02 v02r01

Power Spectral Density: KDB 789033 D02 v02r01, Section F

Unwanted emissions in restricted bands: KDB 789033 D02 v02r01, Sections G.3, G.4, G.5, and G.6.

Unwanted emissions in non-restricted bands: KDB 789033 D02 v02r01, Sections G.3, G.4, and G.5.

AC Power Line Conducted Emissions: ANSI C63.10-2020, Section 6.2.

Radiated Spurious Emissions Below 30MHz: ANSI C63.10-2020 Section 6.4

9. ANTENNA PORT TEST RESULTS

9.1. ON TIME AND DUTY CYCLE

LIMITS

None; for reporting purposes only.

PROCEDURE

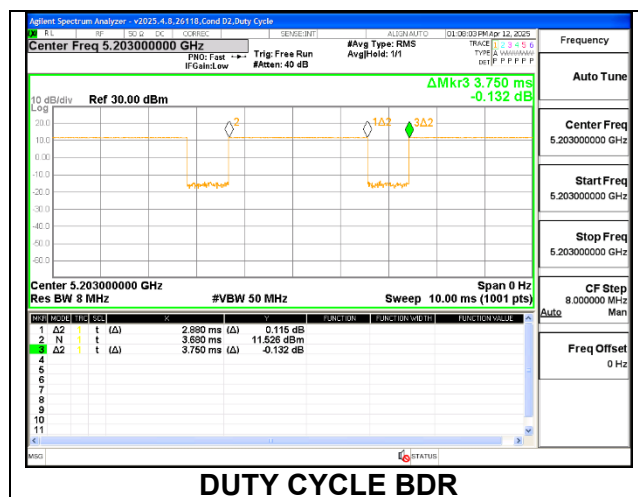
ANSI C63.10, Section 12.2: Zero-Span Spectrum Analyzer Method.

ON TIME AND DUTY CYCLE RESULTS

Worst-Case Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)
BDR	2.88	3.75	0.768	76.8%	1.15	0.347
LE1M	2.12	2.50	0.848	84.8%	0.72	0.472
LE2M	1.06	1.88	0.564	56.4%	2.49	0.943
HDT3	1.44	1.52	0.944	94.4%	0.25	0.697
HDR4	2.78	3.75	0.741	74.1%	1.30	0.360
HDRPM4	8.07	8.70	0.928	92.8%	0.33	0.124
HDRPL8	3.56	3.75	0.949	94.9%	0.23	0.281

Note: There are the same DCCF on 1TX and 2TX.

DUTY CYCLE PLOTS



9.2. 26 dB AND 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

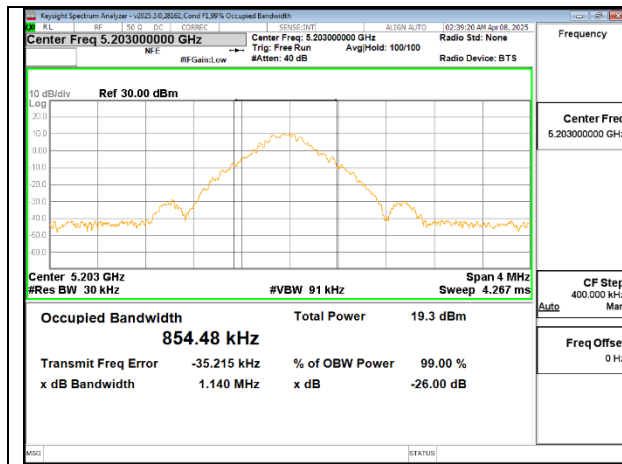
The transmitter output is connected to a spectrum analyzer. The RBW is set to $\geq 1\%$ of the 20 dB bandwidth. The VBW is set to $\geq 3 \times \text{RBW}$. The sweep time is coupled.

RESULTS

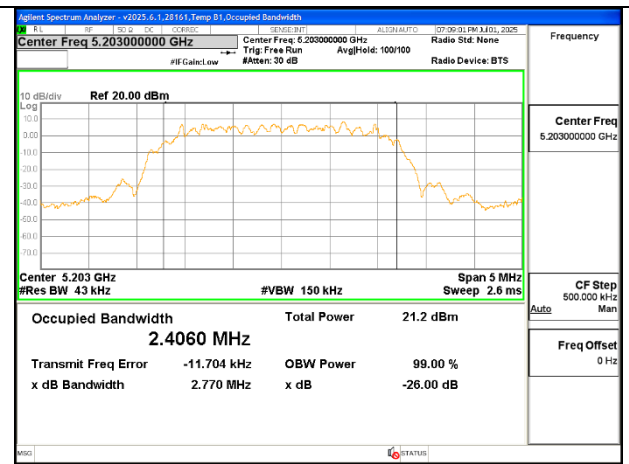
Only High Power modes result is reported, it covers all Low Power modes. Only Mid channel plot is reported to show setting parameter complies with testing method/procedure.

9.2.1. HIGH POWER SISO MODE

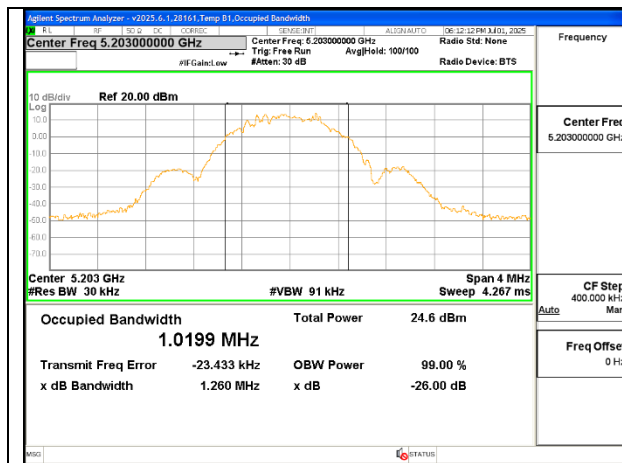
Worst-Case Mode (SISO)	Frequency (MHz)	Channel Number	26 dB Bandwidth (MHz)		99% Bandwidth (MHz)	
			Ant 6	Ant 5	Ant 6	Ant 5
BDR	5162	Low	1.141	1.139	0.8568	0.85782
	5203	Mid	1.14	1.145	0.85448	0.85616
	5245	High	1.139	1.142	0.85718	0.85814
HDT3	5162	Low	2.768	2.768	2.3985	2.3962
	5203	Mid	2.775	2.77	2.4092	2.406
	5245	High	2.766	2.758	2.4047	2.3859
LE1M	5162	Low	1.259	1.26	1.0172	1.0152
	5203	Mid	1.26	1.261	1.02	1.0134
	5245	High	1.27	1.26	1.0246	1.0192
LE2M	5162	Low	2.517	2.489	2.0328	2.0482
	5203	Mid	2.502	2.48	2.0335	2.0169
	5245	High	2.496	2.497	2.0243	2.0428
HDR4	5162	Low	2.676	2.68	2.3385	2.3311
	5203	Mid	2.677	2.78	2.3425	2.3622
	5245	High	2.715	2.74	2.3617	2.3498
HDRPM4	5162	Low	5.582	5.602	4.761	4.7505
	5203	Mid	5.6	5.464	4.7548	4.7793
	5245	High	5.339	5.491	4.7593	4.7624
HDRPL8	5162	Low	11.09	11.05	9.4053	9.4407
	5203	Mid	11.04	10.84	9.4462	9.394
	5245	High	10.71	10.69	9.4282	9.4534



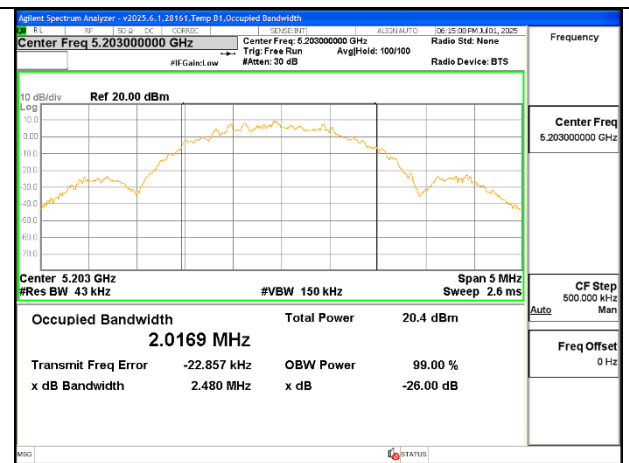
Mid Channel (UNII-1 BDR) – Ant 6



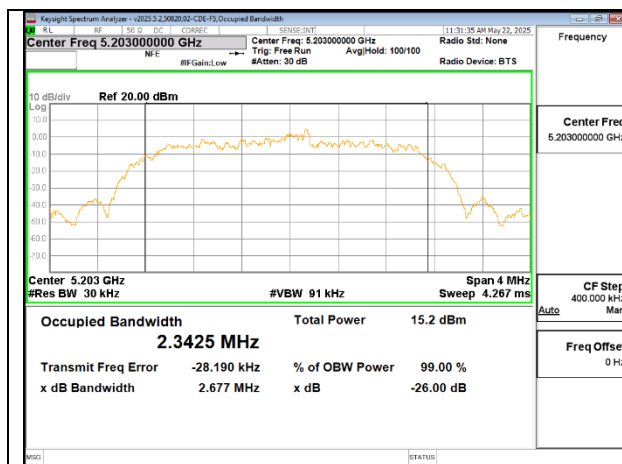
Mid Channel (UNII-1 HDT3) – Ant 5



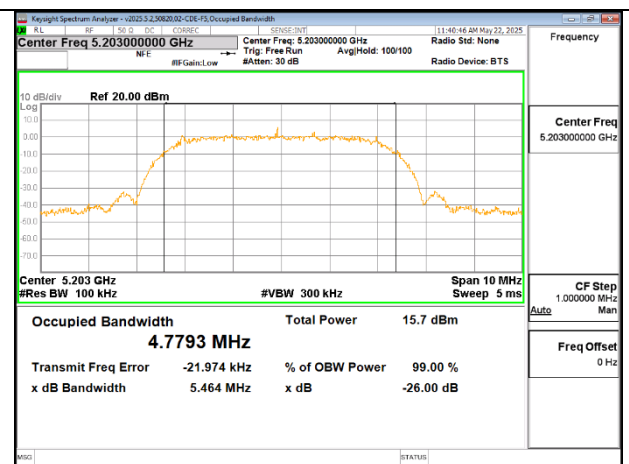
Mid Channel (UNII-1 LE1M) – Ant 6



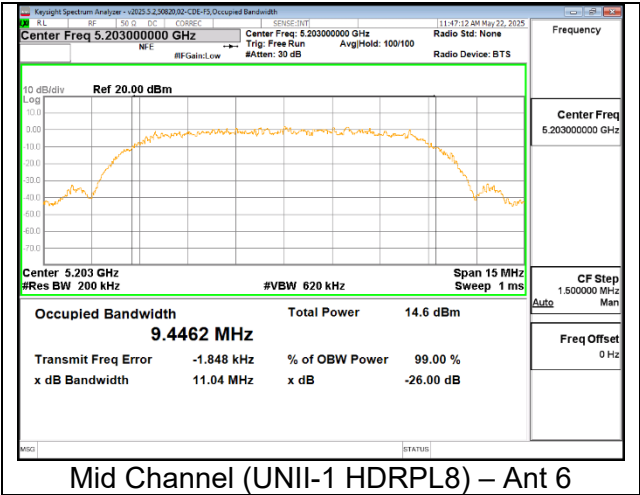
Mid Channel (UNII-1 LE2M) – Ant 5



Mid Channel (UNII-1 HDR4) – Ant 6

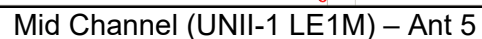


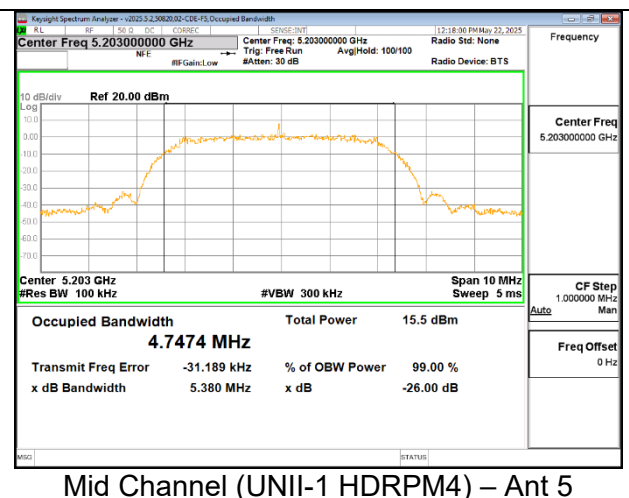
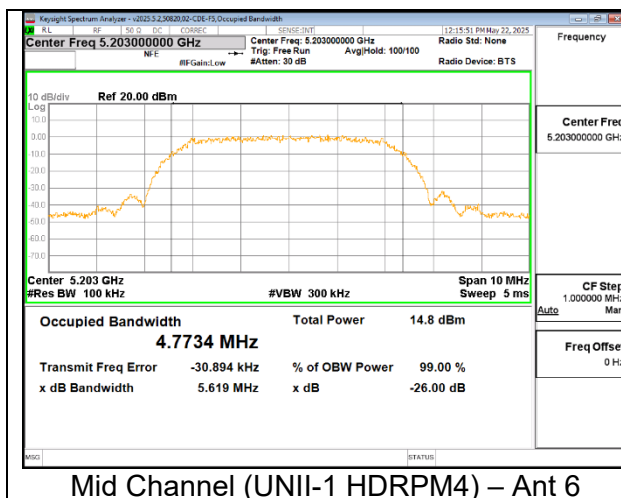
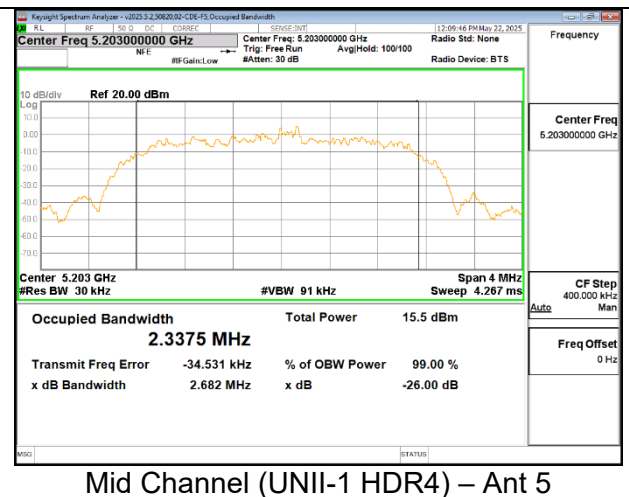
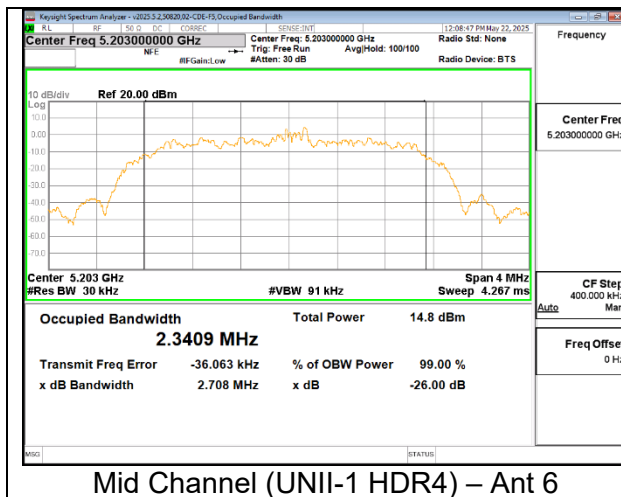
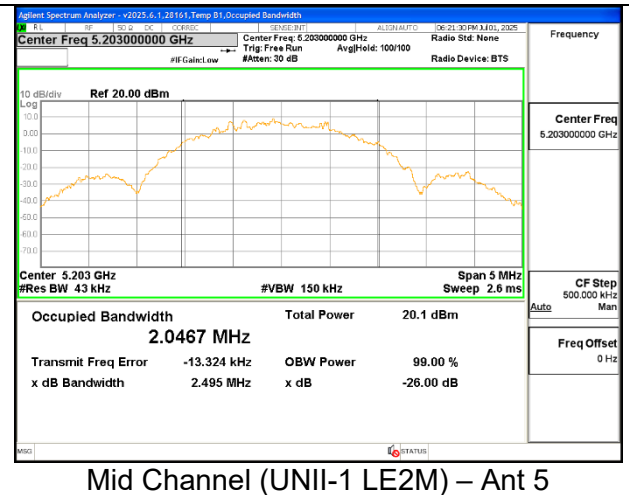
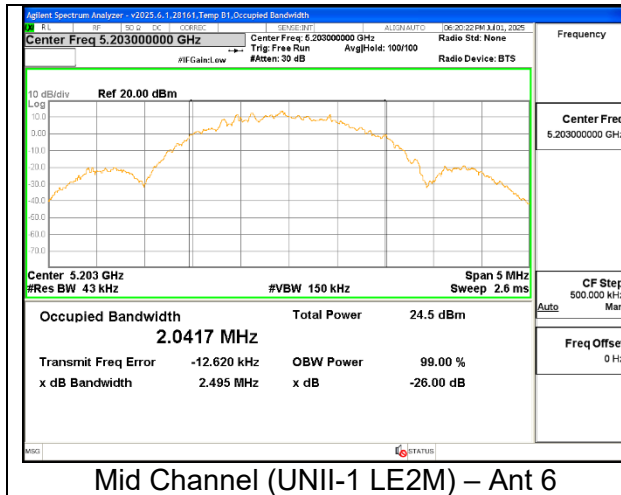
Mid Channel (UNII-1 HDRPM4) – Ant 5

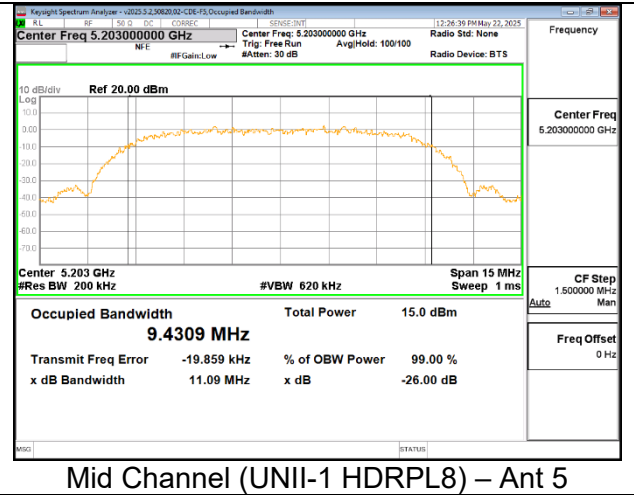
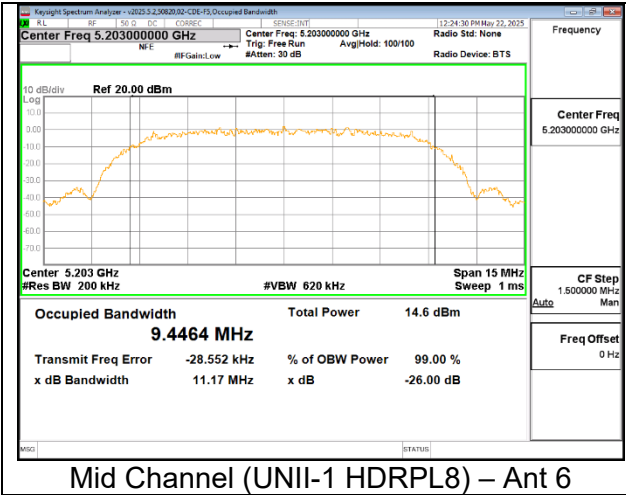


9.2.2. HIGH POWER TXBF MODE

Worst-Case Mode (MIMO)	Frequency (MHz)	Channel Number	26 dB Bandwidth (MHz)		99% Bandwidth (MHz)	
			Ant 6	Ant 5	Ant 6	Ant 5
BDR	5162	Low	1.136	1.144	0.85723	0.86238
	5203	Mid	1.199	1.144	0.85677	0.85025
	5245	High	1.137	1.138	0.85155	0.84918
HDT3	5162	Low	2.768	2.758	2.407	2.4069
	5203	Mid	2.766	2.768	2.4004	2.4003
	5245	High	2.758	2.759	2.3788	2.4092
LE1M	5162	Low	1.26	1.259	1.0182	1.0163
	5203	Mid	1.265	1.258	1.0195	1.0208
	5245	High	1.259	1.263	1.0135	1.0193
LE2M	5162	Low	2.512	2.401	2.0406	1.8973
	5203	Mid	2.495	2.495	2.0417	2.0467
	5245	High	2.507	2.514	2.0369	2.0417
HDR4	5162	Low	2.732	2.774	2.3549	2.3618
	5203	Mid	2.708	2.682	2.3409	2.3375
	5245	High	2.68	2.693	2.357	2.3432
HDRPM4	5162	Low	5.599	5.593	4.7661	4.7764
	5203	Mid	5.619	5.38	4.7734	4.7474
	5245	High	5.403	5.565	4.753	4.758
HDRPL8	5162	Low	10.67	10.69	9.4563	9.3833
	5203	Mid	11.17	11.09	9.4464	9.4309
	5245	High	11.23	11.1	9.5172	9.448







9.3. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

The minimum 6 dB bandwidth shall be at least 500 kHz.

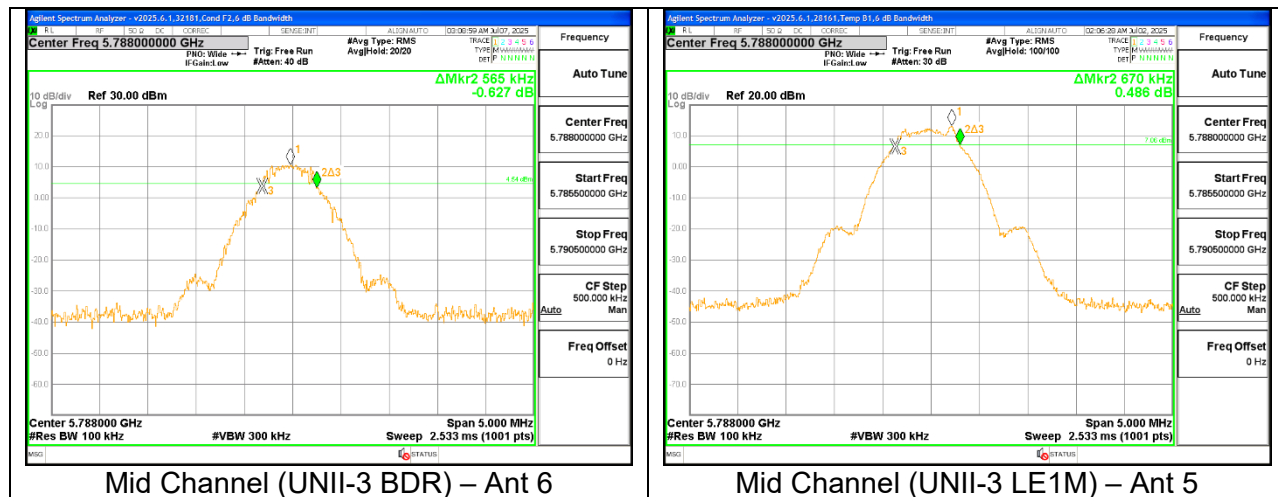
RESULTS

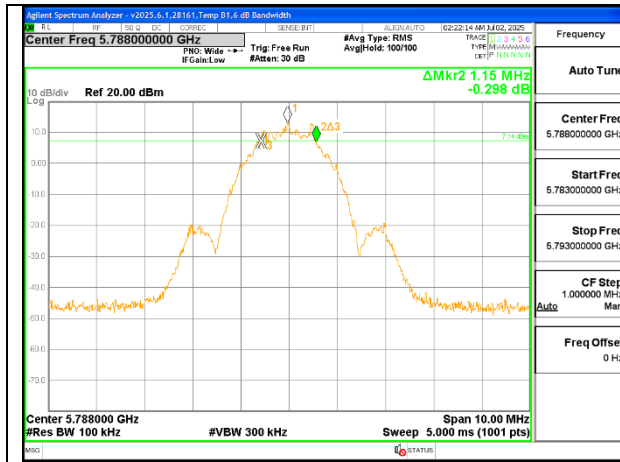
For 6dB bandwidth measurements, the narrowest bandwidths of BDR mode was set to test as the worst-case scenario.

Only High Power modes result reported, it covers all Low Power modes. Only Mid channel plot is reported to show setting parameter complies with testing method/procedure.

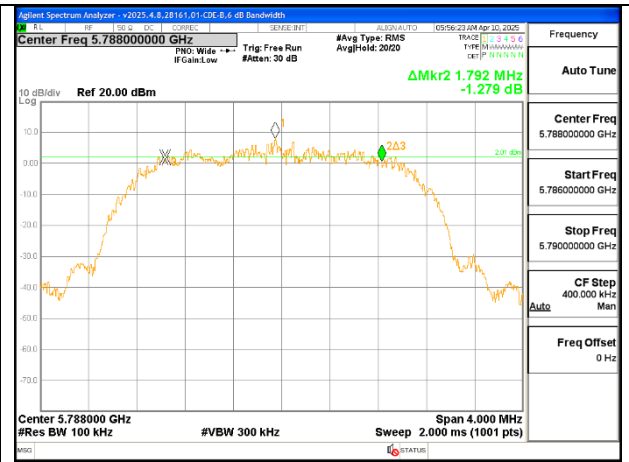
9.3.1. HIGH OUTPUT SISO MODE IN THE UNII-3 BAND

UNII-3 (SISO)	Frequency (MHz)	Channel Number	6 dB BW (MHz)	
			Ant 6	Ant 5
BDR	5733	Low	0.545	0.56
	5788	Mid	0.565	0.555
	5844	High	0.56	0.56
HDT3	5733	Low	1.944	2.072
	5788	Mid	2.046	2.032
	5844	High	2.064	1.997
LE1M	5733	Low	0.685	0.665
	5788	Mid	0.67	0.67
	5844	High	0.67	0.665
LE2M	5733	Low	1.16	1.24
	5788	Mid	1.15	1.24
	5844	High	1.18	1.15
HDR4	5733	Low	1.704	1.612
	5788	Mid	1.636	1.792
	5844	High	1.828	1.704
HDRPM4	5733	Low	4.05	3.51
	5788	Mid	4.24	4.21
	5844	High	4.06	4.27
HDRPL8	5733	Low	4.125	7.605
	5788	Mid	7.395	4.47
	5844	High	4.08	7.98

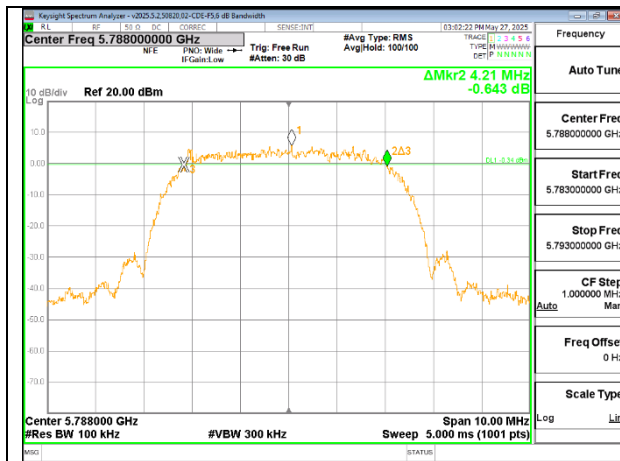




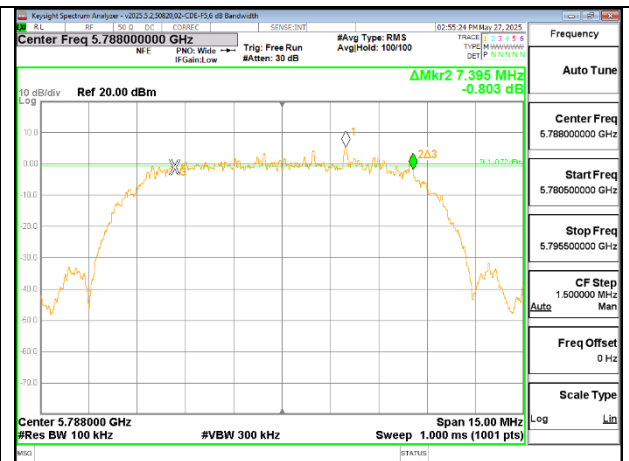
Mid Channel (UNII-3 LE2M) – Ant 6



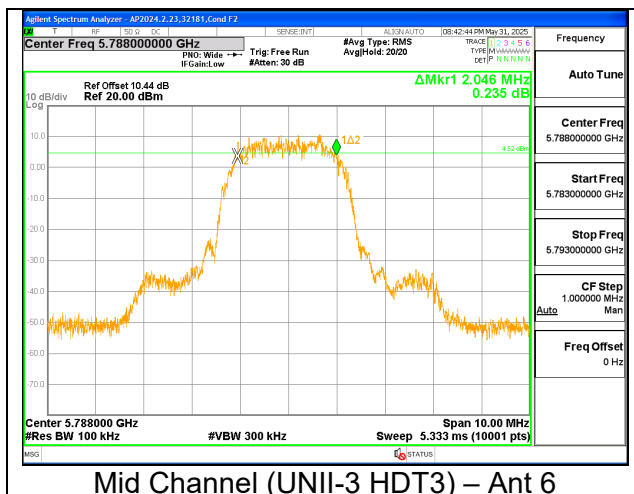
Mid Channel (UNII-3 HDR4) – Ant 5



Mid Channel (UNII-3 HDRPM4) – Ant 5



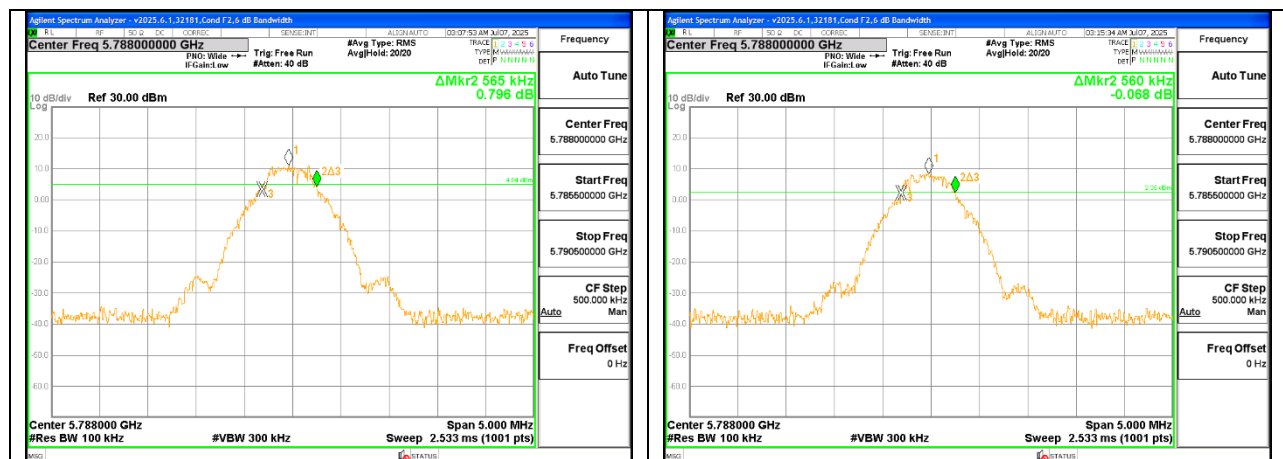
Mid Channel (UNII-3 HDRPL8) – Ant 6



Mid Channel (UNII-3 HDT3) – Ant 6

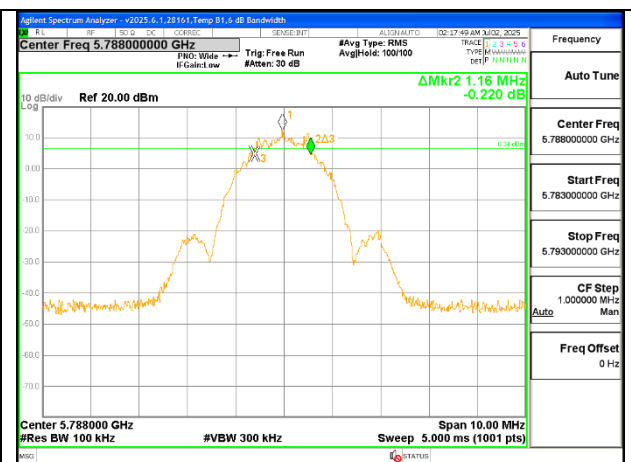
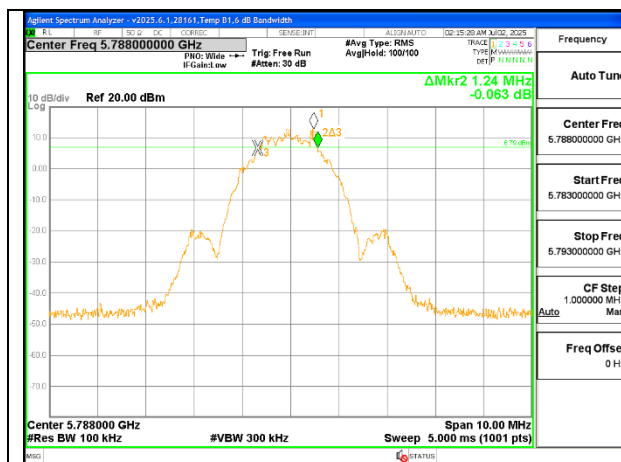
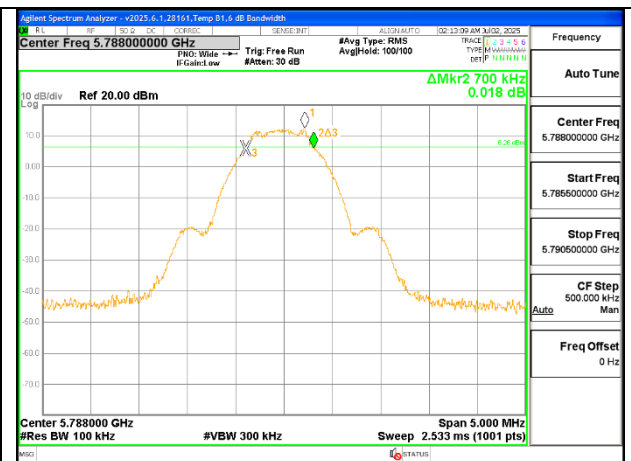
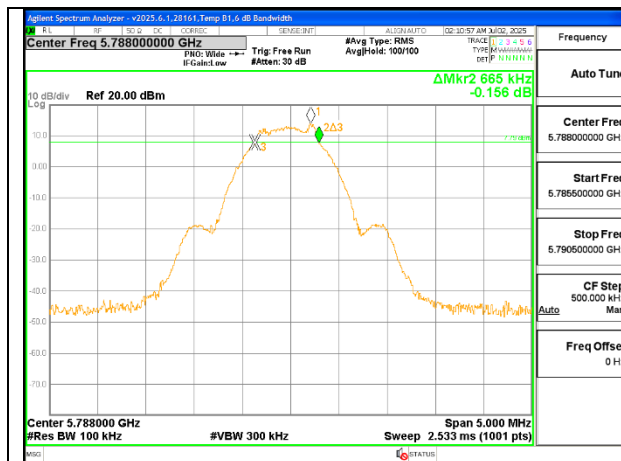
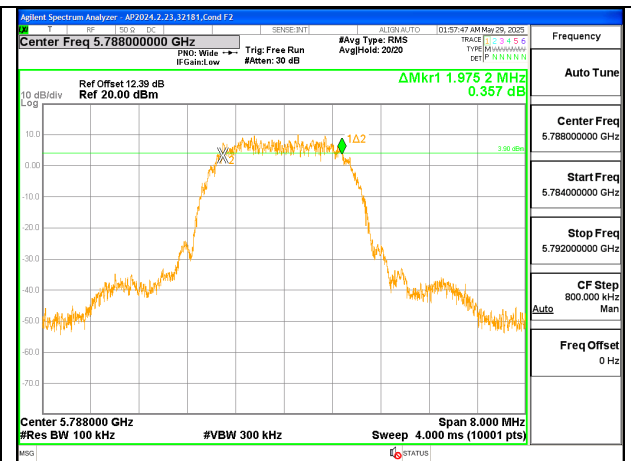
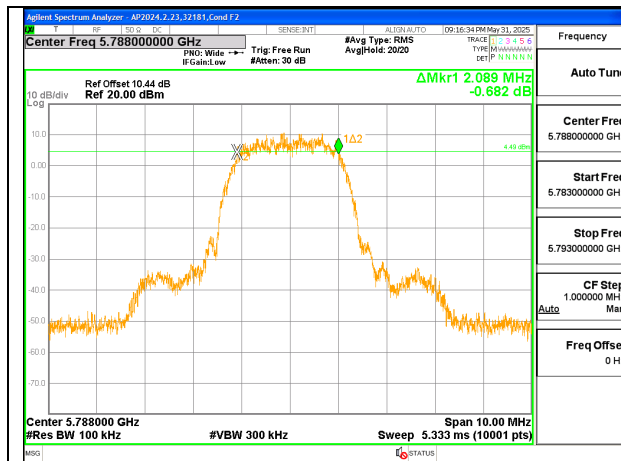
9.3.2. HIGH OUTPUT TXBF MODE IN THE UNII-3 BAND

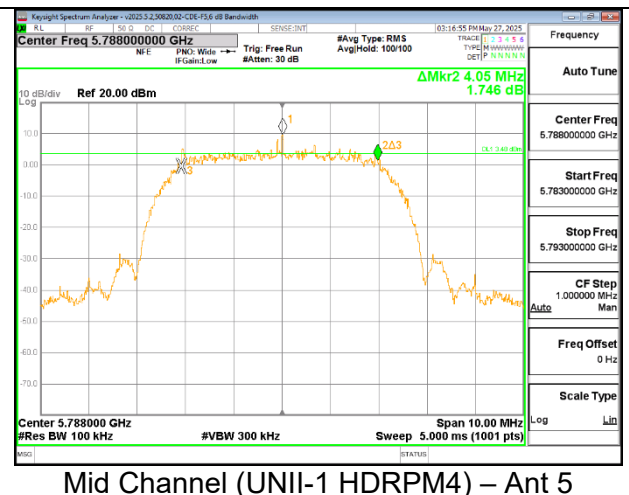
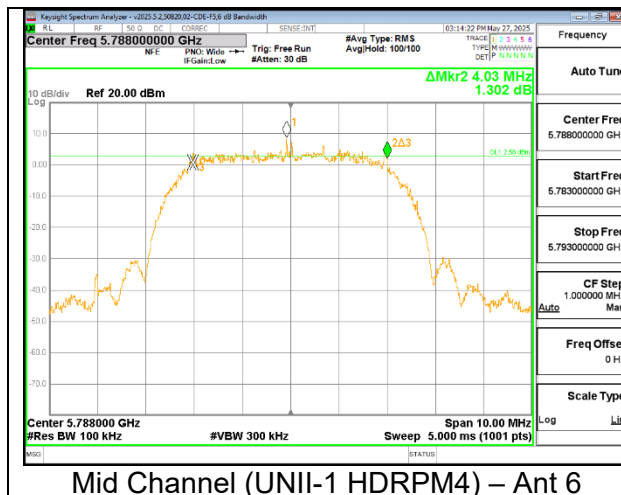
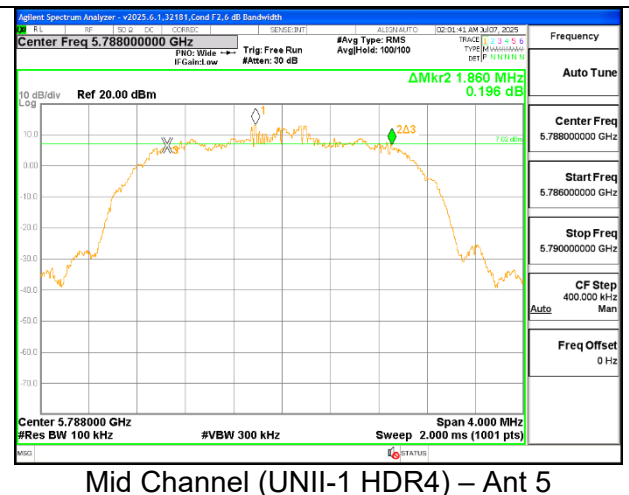
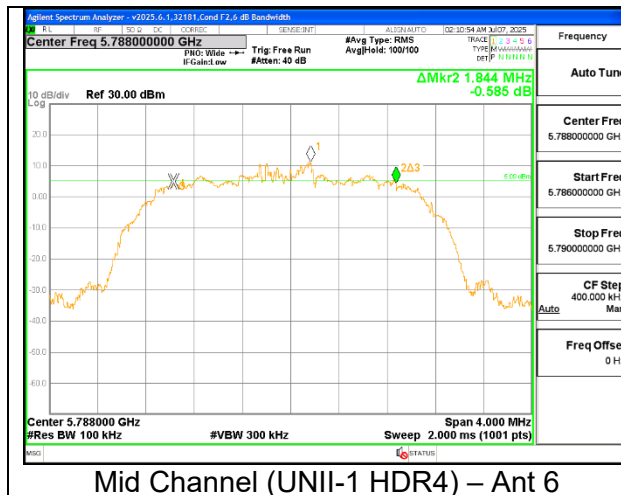
UNII-3 (SISO)	Frequency (MHz)	Channel Number	6 dB BW (MHz)	
			Ant 6	Ant 5
BDR	5733	Low	0.555	0.515
	5788	Mid	0.565	0.56
	5844	High	0.57	0.575
HDT3	5733	Low	2.036	2.115
	5788	Mid	2.089	1.975
	5844	High	1.896	1.96
LE1M	5733	Low	0.675	0.67
	5788	Mid	0.665	0.7
	5844	High	0.665	0.71
LE2M	5733	Low	1.16	1.18
	5788	Mid	1.24	1.16
	5844	High	1.17	1.24
HDR4	5733	Low	1.82	1.808
	5788	Mid	1.844	1.86
	5844	High	1.852	1.856
HDRPM4	5733	Low	4.03	4.08
	5788	Mid	4.03	4.05
	5844	High	4.32	4.28
HDRPL8	5733	Low	6.9	7.875
	5788	Mid	6.99	7.905
	5844	High	7.65	7.59

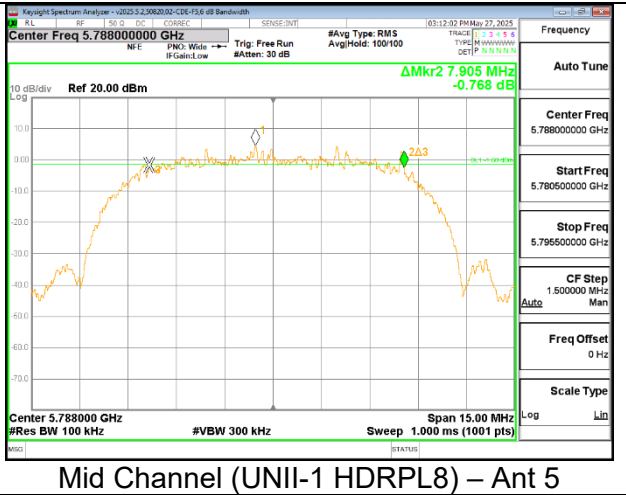
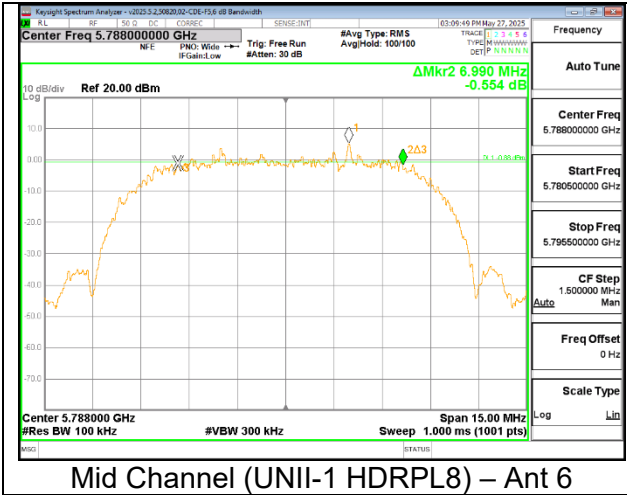


Mid Channel (UNII-1 BDR) – Ant 6

Mid Channel (UNII-1 BDR) – Ant 5







9.4. OUTPUT POWER AND PSD

LIMITS

FCC §15.407

Band 5.15–5.25 GHz

(iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Band 5.725-5.85 GHz

The maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple colocated transmitters transmitting the same information.

TEST PROCEDURE

The measurement method used for output power is KDB 789033 D02 v02r01, Section E.3.b (Method PM-G).

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

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:

Tx chains are correlated for power and correlated for PSD due to the device supporting TX BF in all MIMO modes. The directional gains are as follows:

Frequency Range (MHz)	Antenna 6 (dBi)	Antenna 5 (dBi)	Uncorrelated Chains (dBi)	Correlated Chains (dBi)
5150 - 5250 UNII - 1	0.70	-3.40	-0.88	1.90
5725 - 5825 UNII 3	1.70	-2.90	-0.02	2.71

RESULTS:**DIRECTIONAL GAIN CALCULATION:**

ANSI C63.10-2020 section 14.6.3

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:

Ant6=0.7, Ant5=-3.4

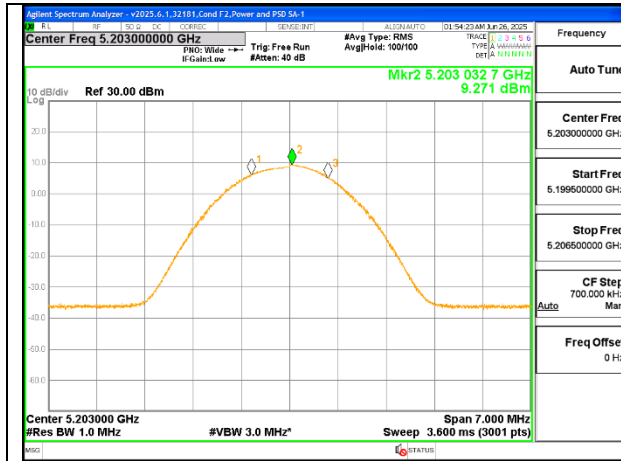
Uncorrelated Antenna gain= $10 \log[(10^{(0.7/10)} + 10^{(-3.4/10)})/2] = -0.88 \text{dBi}$

Correlated Antenna gain= $10 \log[(10^{(0.7/20)} + 10^{(-3.4/20)})^2/2] = 1.90 \text{dBi}$

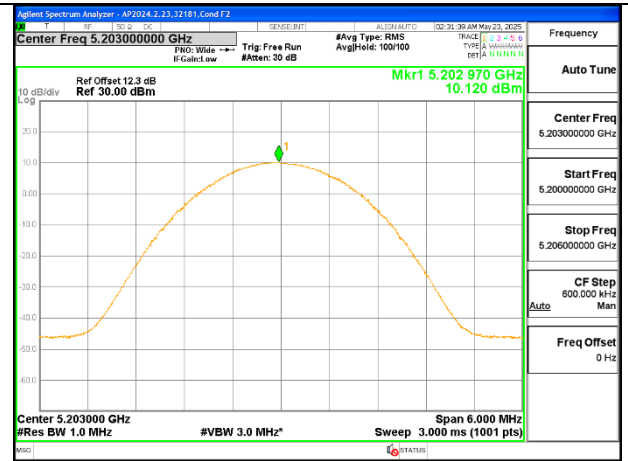
9.4.1. UNII-1 BAND SISO MODE

UNII-1 (SISO) (5162 - 5245MHz)	
Ant 6 (dBi)	0.70
Ant 5 (dBi)	-3.40

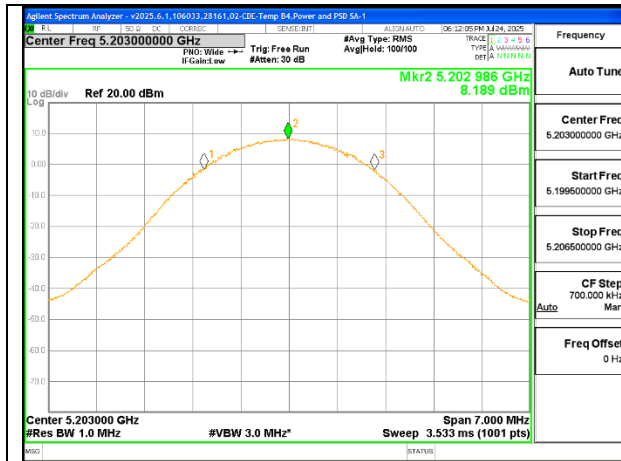
UNII-1 (SISO)	Power Config.	Freq (MHz)	Ch. #	Duty Cycle (dB)	Minimum Bandwidth (MHz)		Power Limit (dBm)		Output Power (Gated) (dBm)		Total Corrected Power (dBm)		PSD Limit (dBm/MHz)		PSD (dBm/MHz)		Total Corrected PSD (dBm/MHz)										
					Ant 6	Ant 5	Ant 6	Ant2	Ant 6	Ant 5	Ant 6	Ant 5	Ant 6	Ant2	Ant 6	Ant 5	Ant 6	Ant 5									
BDR	High	5162	Low	1.15		24	24	10.20	10.10	10.20	10.10	11	11	8.991	8.973	10.141	10.123										
		5203	Mid					10.15	10.20	10.15	10.20			9.271	8.771	10.421	9.921										
		5245	High					10.18	10.16	10.18	10.16			8.833	9.249	9.983	10.399										
	Low	5162	Low					2.47	5.20	2.47	5.20			1.322	3.920	2.472	5.070										
		5203	Mid					2.45	5.14	2.45	5.14			1.552	4.459	2.702	5.609										
		5245	High					2.49	5.16	2.49	5.16			1.217	4.058	2.367	5.208										
HDT3	High	5162	Low	0.25				--	24	24	12.70			12.63	12.70	12.63	11	11	9.975	9.891	10.225	10.141					
		5203	Mid								12.65			12.68	12.65	12.68			9.829	10.006	10.079	10.256					
		5245	High								12.63			12.64	12.63	12.64			9.821	9.946	10.071	10.196					
	Low	5162	Low								-0.58			2.05	-0.58	2.05			-2.615	-1.056	-2.365	-0.806					
		5203	Mid								-0.56			2.02	-0.56	2.02			-2.976	-1.467	-2.726	-1.217					
		5245	High								-0.60			2.02	-0.60	2.02			-2.528	-1.347	-2.278	-1.097					
LE1M	High	5162	Low	0.72										24	24	10.27			10.28	10.27	10.28	11	11	10.062	10.060	10.782	10.780
		5203	Mid													10.27			10.25	10.27	10.25			10.123	10.120	10.843	10.840
		5245	High													10.20			10.30	10.20	10.30			9.968	10.026	10.688	10.746
	Low	5162	Low													2.50			5.13	2.50	5.13			1.753	4.136	2.473	4.856
		5203	Mid													2.47			5.13	2.47	5.13			1.802	4.411	2.522	5.131
		5245	High													2.42			5.20	2.42	5.20			1.501	4.385	2.221	5.105
LE2M	High	5162	Low	2.49		24	24					11.20	11.14			11.20			11.14	11	11			8.331	8.067	10.821	10.557
		5203	Mid									11.11	11.18			11.11			11.18					8.189	8.048	10.679	10.538
		5245	High									11.01	11.20			11.01			11.20					8.066	7.881	10.556	10.371
	Low	5162	Low									2.50	5.00			2.50			5.00					-0.808	1.833	1.682	4.323
		5203	Mid									2.49	5.16			2.49			5.16					-1.012	1.803	1.478	4.293
		5245	High									2.49	5.20			2.49			5.20					-1.239	1.749	1.251	4.239
HDR4	High	5162	Low	1.3				--	24	24		12.30	12.28			12.30	12.28	11	11					8.495	8.408	9.795	9.708
		5203	Mid									12.12	12.16			12.12	12.16							8.576	8.485	9.876	9.785
		5245	High									12.16	12.29			12.16	12.29							8.422	8.457	9.722	9.757
	Low	5162	Low									-0.57	1.90			-0.57	1.90							-3.830	-1.840	-2.530	-0.540
		5203	Mid									-0.56	1.96			-0.56	1.96							-4.103	-3.828	-2.803	-2.528
		5245	High									-0.51	2.00			-0.51	2.00							-4.085	-3.013	-2.785	-1.713
HDRPM4	High	5162	Low	0.33								24	24	13.90	13.95	13.90	13.95					11	11	10.288	10.272	10.618	10.602
		5203	Mid											13.95	13.95	13.95	13.95							10.585	10.349	10.915	10.679
		5245	High											14.00	14.00	14.00	14.00							10.428	10.583	10.758	10.913
	Low	5162	Low											-0.52	1.83	-0.52	1.83							-5.683	-4.039	-5.353	-3.709
		5203	Mid											-0.50	1.94	-0.50	1.94							-5.842	-6.044	-5.512	-5.714
		5245	High											-0.57	2.00	-0.57	2.00							-5.799	-5.065	-5.469	-4.735
HDRPL8	High	5162	Low	0.23		24	24							13.90	13.97	13.90	13.97			11	11			8.362	8.187	8.592	8.417
		5203	Mid											14.00	14.00	14.00	14.00							8.011	7.987	8.241	8.217
		5245	High											13.99	13.99	13.99	13.99							8.092	7.730	8.322	7.960
	Low	5162	Low											-0.60	1.75	-0.60	1.75							-8.483	-6.769	-8.253	-6.539
		5203	Mid											-0.65	1.87	-0.65	1.87							-8.468	-8.519	-8.238	-8.289
		5245	High											-0.50	1.91	-0.50	1.91							-8.422	-7.557	-8.192	-7.327



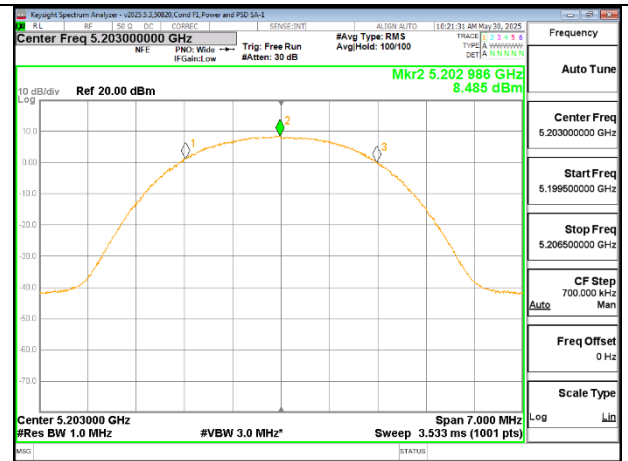
Mid Channel (UNII-1 BDR) – Ant 6



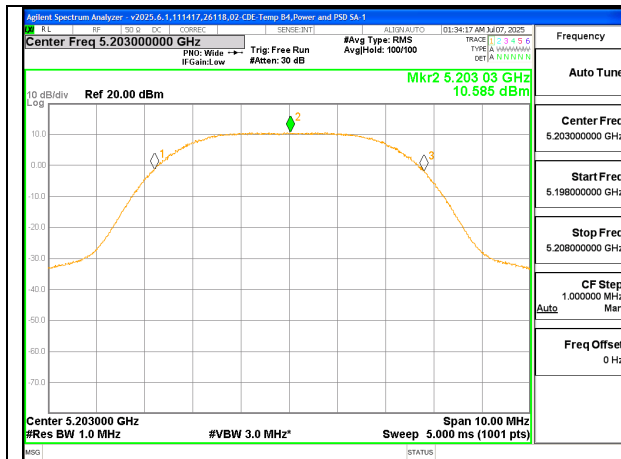
Mid Channel (UNII-1 LE1M) – Ant 5



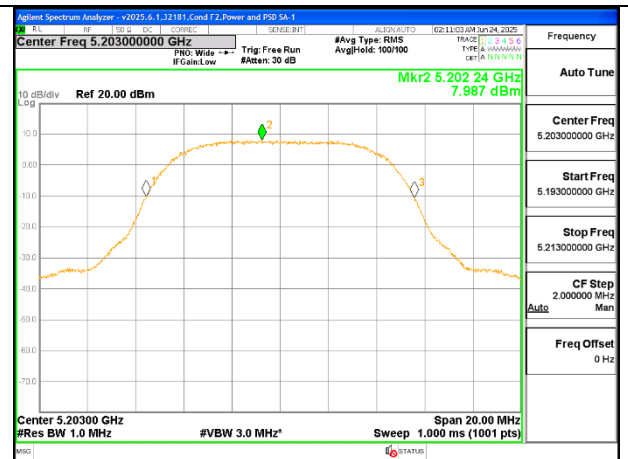
Mid Channel (UNII-1 LE2M) – Ant 6



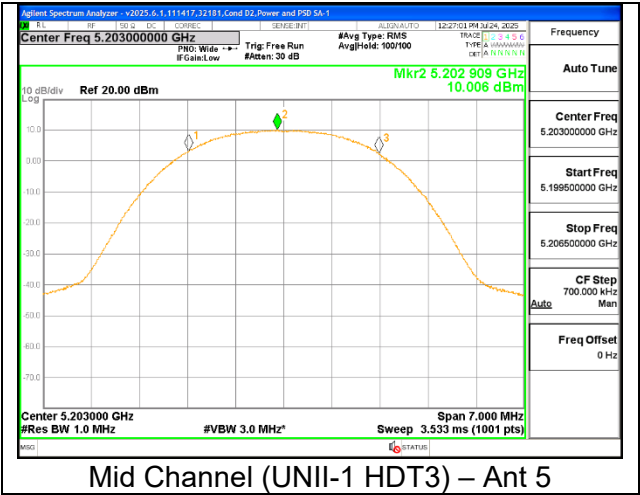
Mid Channel (UNII-1 HDR4) – Ant 5



Mid Channel (UNII-1 HDRPM4) – Ant 6



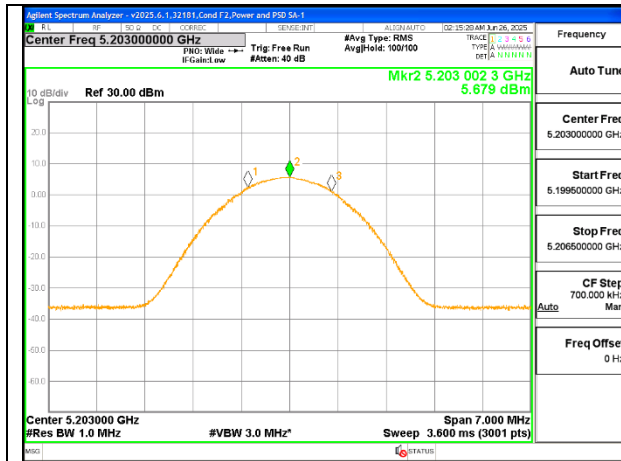
Mid Channel (UNII-1 HDRPL8) – Ant 5



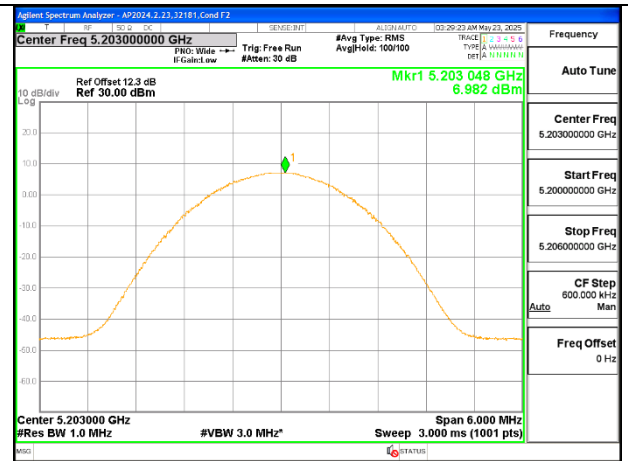
9.4.2. UNII-1 BAND MIMO TXBF MODE

UNII-1 (MIMO BF) (5162 - 5245MHz)				
Un-Correlated Gain (dBi)			-0.88	
Correlated Gain (dBi)			1.90	

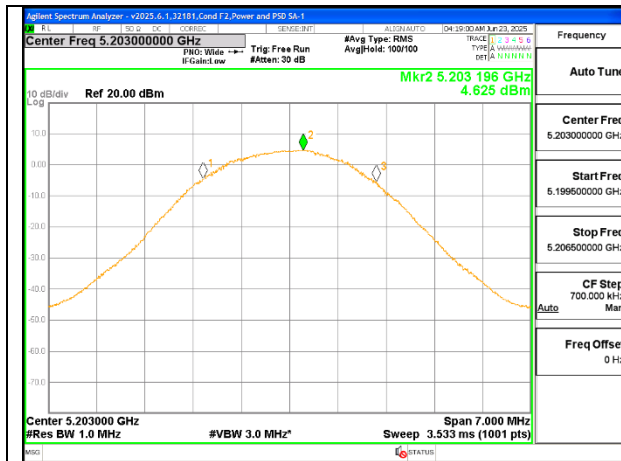
UNII-1 (MIMO BF)	Power Config.	Freq (MHz)	Ch. #	Duty Cycle (dB)	Min BW (MHz)	Power Limit (dBm)	Output Power (Gated) (dBm)		Total MIMO Corrected Power (dBm)	PSD Limit (dBm/MHz)	PSD (dBm/MHz)		Total MIMO Corrected PSD (dBm/MHz)
							Ant 6	Ant 5			Ant 6	Ant 5	
BDR (FCC)	High	5162	Low	1.15	--	24	7.20	7.16	10.19	11	5.958	6.067	10.173
		5203	Mid				7.17	7.20	10.20		5.679	5.997	10.001
		5245	High				7.14	7.16	10.16		6.122	5.656	10.056
	Low	5162	Low				2.48	5.19	7.05		1.291	4.022	7.028
		5203	Mid				2.48	5.17	7.04		1.549	4.142	7.197
		5245	High				2.50	5.20	7.07		1.122	4.021	6.969
HDT3	High	5162	Low	0.25			9.65	9.58	12.63		6.786	6.439	9.876
		5203	Mid				9.67	9.54	12.62		7.033	6.562	10.064
		5245	High				9.67	9.52	12.61		6.908	6.602	10.018
	Low	5162	Low				-0.54	1.89	3.85		-2.988	-1.071	1.336
		5203	Mid				-0.50	2.00	3.94		-2.932	-1.516	1.094
		5245	High				-0.52	1.94	3.89		-2.735	-1.234	1.340
LE1M	High	5162	Low	0.72			7.30	7.30	10.31		6.958	6.882	10.650
		5203	Mid				7.25	7.30	10.29		6.813	6.982	10.629
		5245	High				7.30	7.25	10.29		6.297	7.092	10.443
	Low	5162	Low				2.50	5.16	7.04		1.707	4.373	6.972
		5203	Mid				2.49	5.20	7.06		1.807	4.287	6.952
		5245	High				2.38	5.20	7.03		1.444	4.069	6.682
LE2M (FCC)	High	5162	Low	2.49			8.20	8.20	11.21		4.766	4.973	10.371
		5203	Mid				8.20	8.20	11.21		4.625	4.946	10.289
		5245	High				8.14	8.17	11.17		4.661	4.814	10.238
	Low	5162	Low				2.38	5.17	7.01		-0.893	1.479	5.953
		5203	Mid				2.50	5.15	7.03		-1.160	1.886	6.125
		5245	High				2.50	5.20	7.07		-1.330	1.838	6.037
HDR4	High	5162	Low	1.3			9.00	9.30	12.16		6.311	6.192	10.562
		5203	Mid				9.09	9.16	12.14		6.318	6.382	10.660
		5245	High				9.30	9.25	12.29		6.256	6.094	10.486
	Low	5162	Low				-0.50	2.00	3.94		-3.715	-0.854	2.257
		5203	Mid				-0.56	1.90	3.85		-3.716	-1.552	1.810
		5245	High				-0.60	2.00	3.90		-3.527	-1.113	2.156
HDRPM4	High	5162	Low	0.33			12.08	12.00	15.05		6.394	5.783	9.440
		5203	Mid				12.18	12.13	15.17		6.675	6.103	9.739
		5245	High				11.93	12.06	15.01		5.705	6.094	9.244
	Low	5162	Low				-0.51	2.00	3.93		-5.533	-3.445	-1.024
		5203	Mid				-0.50	1.97	3.92		-5.340	-3.722	-1.116
		5245	High				-0.61	1.98	3.89		-5.654	-3.336	-1.002
HDRPL8	High	5162	Low	0.23			13.90	13.88	16.90		5.163	4.760	8.206
		5203	Mid				14.00	14.00	17.01		5.656	5.184	8.667
		5245	High				13.97	13.91	16.95		5.414	5.083	8.492
	Low	5162	Low				-0.53	1.93	3.88		-8.151	-6.290	-3.881
		5203	Mid				-0.50	1.85	3.84		-8.080	-6.674	-4.080
		5245	High				-0.59	2.00	3.91		-8.178	-5.872	-3.633



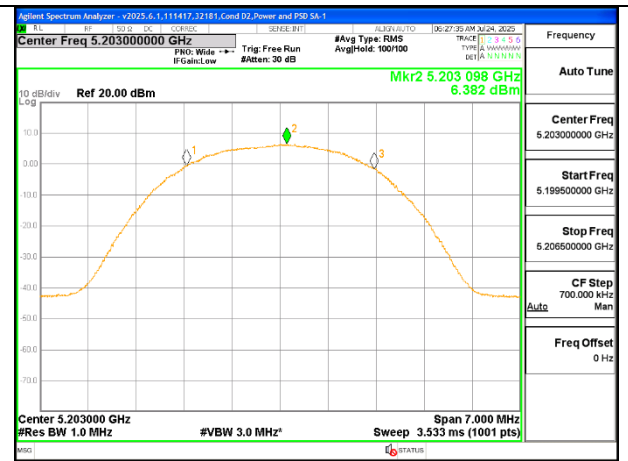
Mid Channel (UNII-1 BDR) – Ant 6



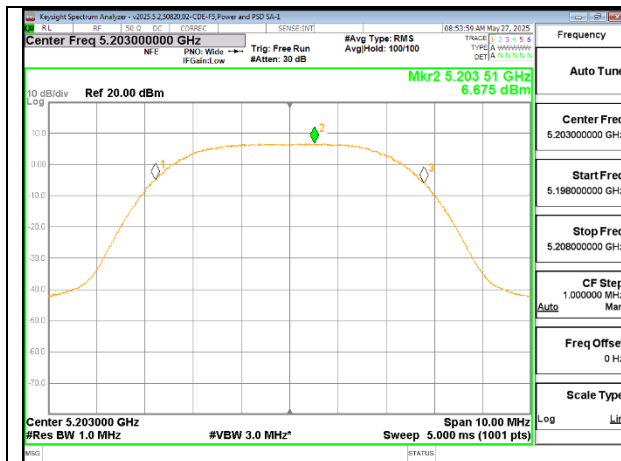
Mid Channel (UNII-1 LE1M) – Ant 5



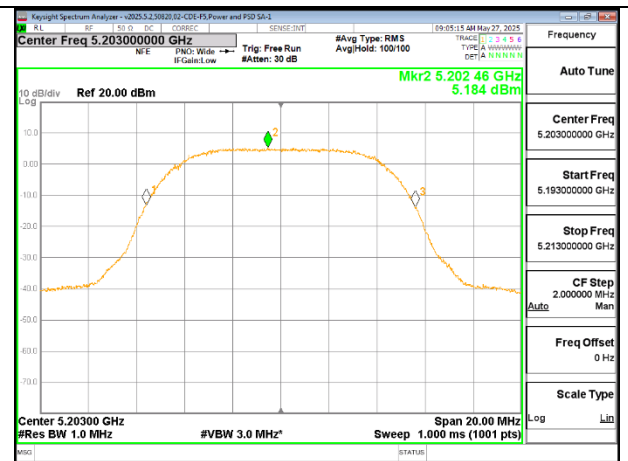
Mid Channel (UNII-1 LEM2) – Ant 6



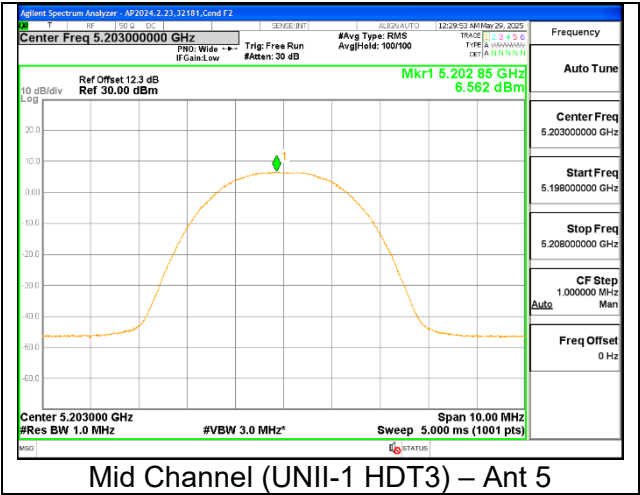
Mid Channel (UNII-1 HDR4) – Ant 5



Mid Channel (UNII-1 HDRPM4) – Ant 6



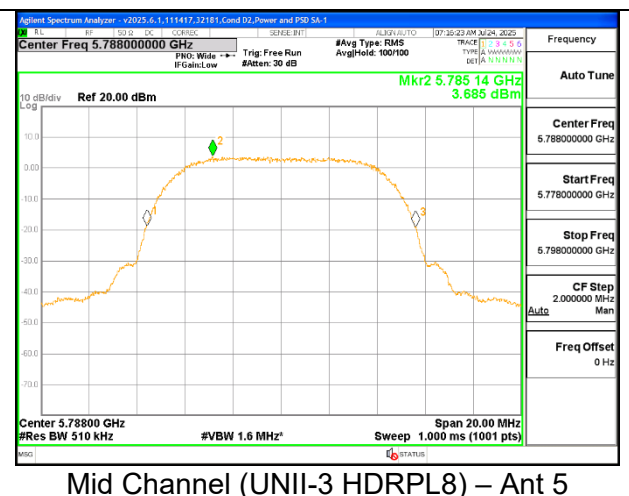
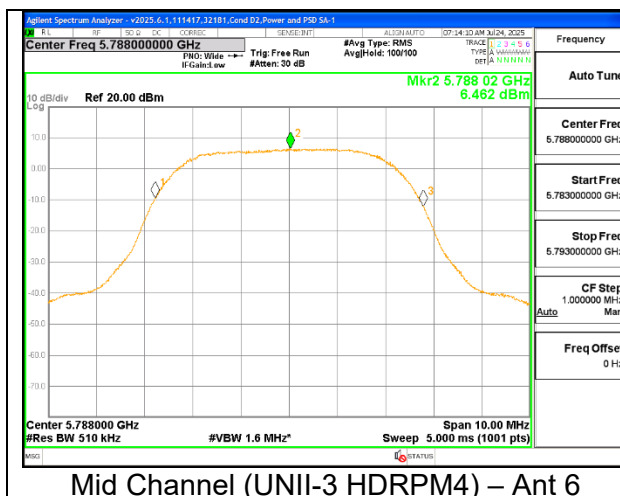
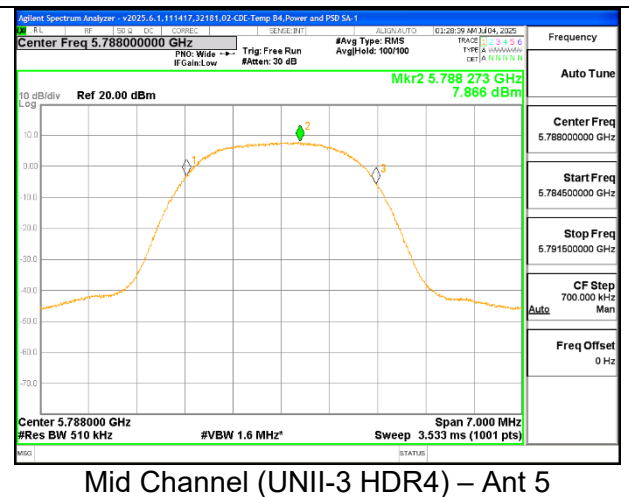
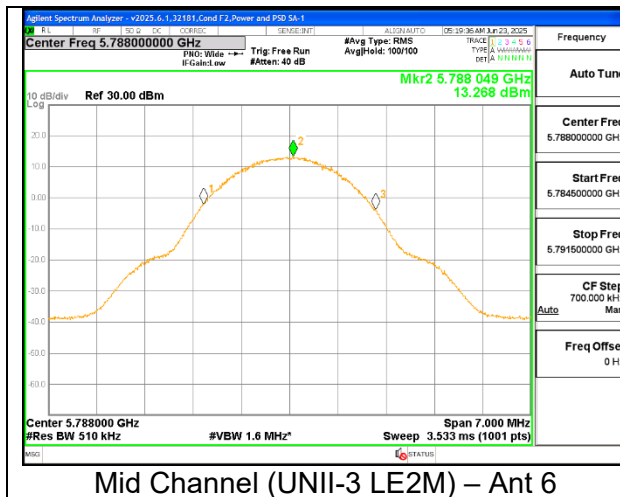
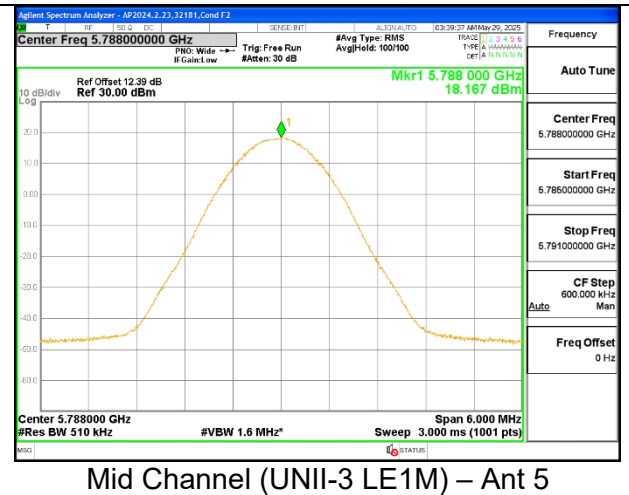
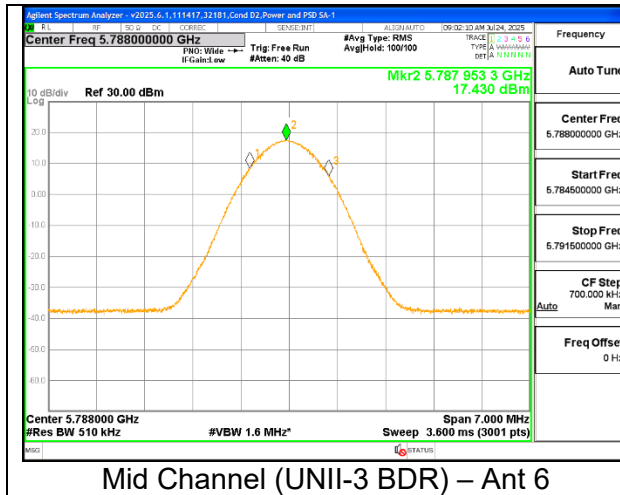
Mid Channel (UNII-1 HDRPL8) – Ant 5

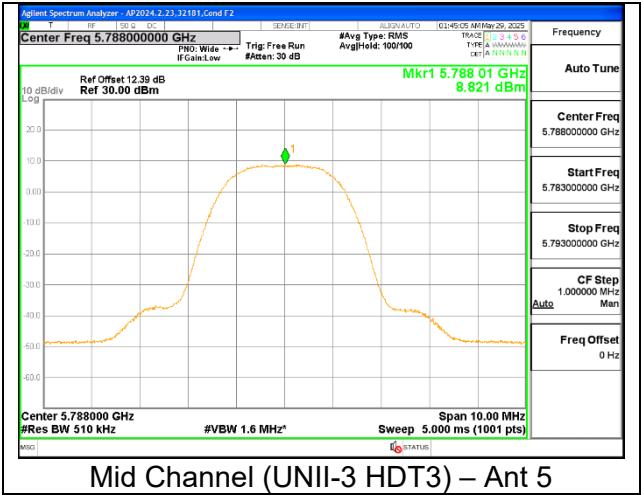


9.4.3. UNII-3 BAND SISO MODE

UNII-3 (SISO) (5733- 5844MHz)	
Ant 6 (dBi)	1.70
Ant 5 (dBi)	-2.90

UNII-3 (SISO)	Power Config.	Freq (MHz)	Ch. #	Duty Cycle (dB)	Power Limit (dBm)		Output Power (Gated) (dBm)		Total Corrected Power (dBm)		PSD Limit (dBm/500kHz)		PSD (dBm/500kHz)		Total Corrected PSD (dBm/500kHz)	
					Ant 6	Ant 5	Ant 6	Ant 5	Ant 6	Ant 5	Ant 6	Ant 5	Ant 6	Ant 5	Ant 6	Ant 5
BDR	High	5733	Low	1.15	30	30	18.45	18.98	18.45	18.98	30	30	17.520	18.046	18.670	19.196
		5788	Mid				18.50	18.99	18.50	18.99			17.430	17.759	18.580	18.909
		5844	High				18.46	19.00	18.46	19.00			17.064	17.613	18.214	18.763
	Low	5733	Low				2.00	5.16	2.00	5.16			-2.283	3.498	-1.133	4.648
		5788	Mid				1.95	5.20	1.95	5.20			-2.316	3.581	-1.166	4.731
		5844	High				2.00	5.18	2.00	5.18			-2.226	3.644	-1.076	4.794
HDT3	High	5733	Low	0.25			13.89	13.95	13.89	13.95			8.459	8.607	8.709	8.857
		5788	Mid				14.00	14.00	14.00	14.00			9.113	8.821	9.363	9.071
		5844	High				14.00	14.00	14.00	14.00			8.801	9.056	9.051	9.306
	Low	5733	Low				-1.00	1.91	-1.00	1.91			-6.318	-2.848	-6.068	-2.598
		5788	Mid				-1.00	1.90	-1.00	1.90			-6.081	-2.982	-5.831	-2.732
		5844	High				-1.10	2.00	-1.10	2.00			-6.412	-2.743	-6.162	-2.493
LE1M	High	5733	Low	0.72			18.45	18.95	18.45	18.95			16.797	17.877	17.517	18.597
		5788	Mid				18.49	18.95	18.49	18.95			16.823	18.167	17.543	18.887
		5844	High				18.45	19.00	18.45	19.00			17.308	18.392	18.028	19.112
	Low	5733	Low				1.96	5.15	1.96	5.15			-0.604	4.051	0.116	4.771
		5788	Mid				1.95	5.12	1.95	5.12			-0.724	4.567	-0.004	5.287
		5844	High				2.00	5.16	2.00	5.16			-0.827	4.284	-0.107	5.004
LE2M	High	5733	Low	2.49			18.50	19.00	18.50	19.00			13.495	14.202	15.985	16.692
		5788	Mid				18.45	18.97	18.45	18.97			13.268	14.148	15.758	16.638
		5844	High				18.44	18.97	18.44	18.97			13.801	14.175	16.291	16.665
	Low	5733	Low				2.00	5.18	2.00	5.18			-4.662	2.183	-2.172	4.673
		5788	Mid				1.92	5.16	1.92	5.16			-4.295	2.675	-1.805	5.165
		5844	High				1.98	5.20	1.98	5.20			-4.373	2.497	-1.883	4.987
HDR4	High	5733	Low	1.3			14.00	13.98	14.00	13.98			7.797	7.943	9.097	9.243
		5788	Mid				14.00	14.00	14.00	14.00			7.879	7.866	9.179	9.166
		5844	High				14.00	13.99	14.00	13.99			8.171	8.061	9.471	9.361
	Low	5733	Low				-1.01	1.85	-1.01	1.85			-7.622	-4.361	-6.322	-3.061
		5788	Mid				-1.06	1.95	-1.06	1.95			-7.200	-4.198	-5.900	-2.898
		5844	High				-1.04	2.00	-1.04	2.00			-6.786	-4.254	-5.486	-2.954
HDRPM4	High	5733	Low	0.33			13.95	13.93	13.95	13.93			6.139	6.223	6.469	6.553
		5788	Mid				13.97	14.00	13.97	14.00			6.462	6.202	6.792	6.532
		5844	High				14.00	13.89	14.00	13.89			6.092	5.987	6.422	6.317
	Low	5733	Low				-1.00	1.97	-1.00	1.97			-9.715	-5.023	-9.385	-4.693
		5788	Mid				-1.10	1.93	-1.10	1.93			-10.698	-6.436	-10.368	-6.106
		5844	High				-1.05	2.00	-1.05	2.00			-11.179	-6.951	-10.849	-6.621
HDRPL8	High	5733	Low	0.23			14.00	13.89	14.00	13.89			3.865	4.068	4.095	4.298
		5788	Mid				13.92	13.95	13.92	13.95			3.768	3.685	3.998	3.915
		5844	High				13.96	14.00	13.96	14.00			3.883	3.562	4.113	3.792
	Low	5733	Low				-1.10	1.85	-1.10	1.85			-13.582	-7.352	-13.352	-7.122
		5788	Mid				-1.01	1.95	-1.01	1.95			-12.948	-8.634	-12.718	-8.404
		5844	High				-1.00	2.00	-1.00	2.00			-13.939	-9.680	-13.709	-9.450

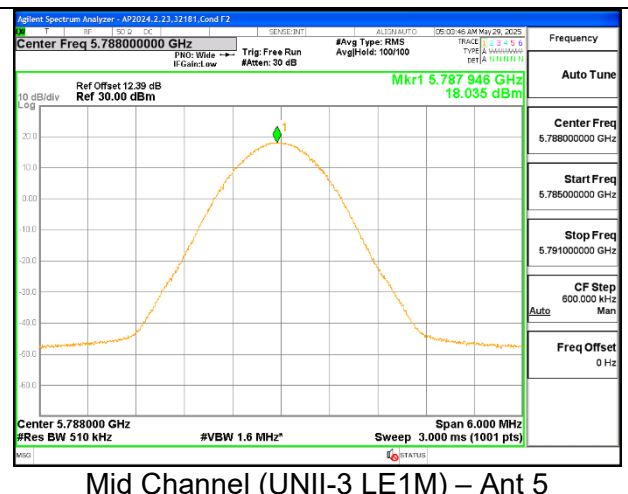
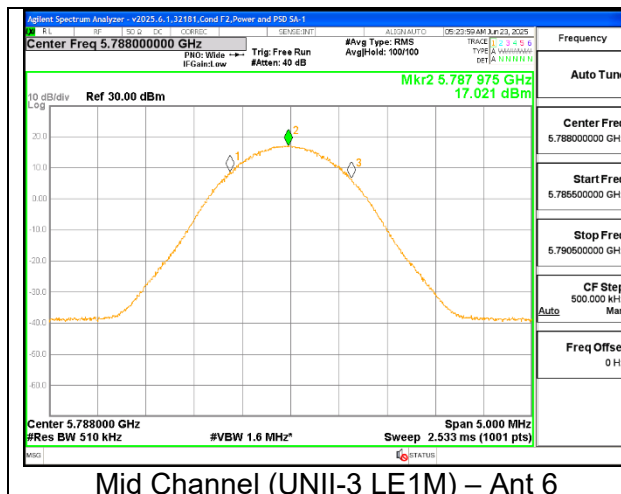
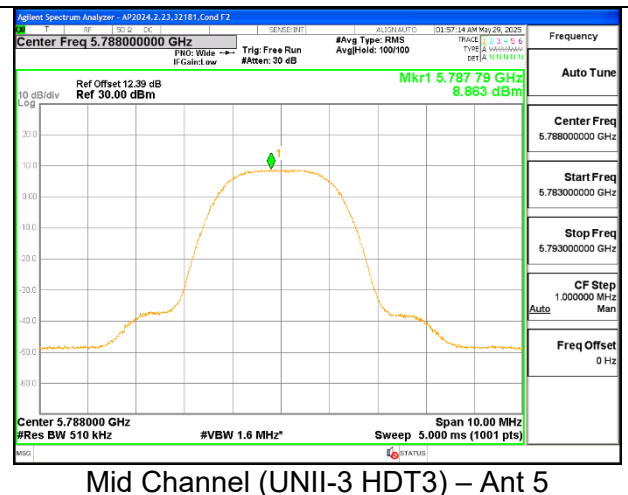
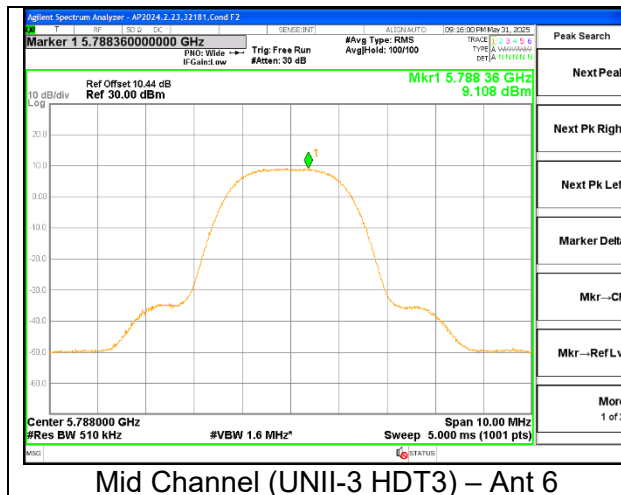
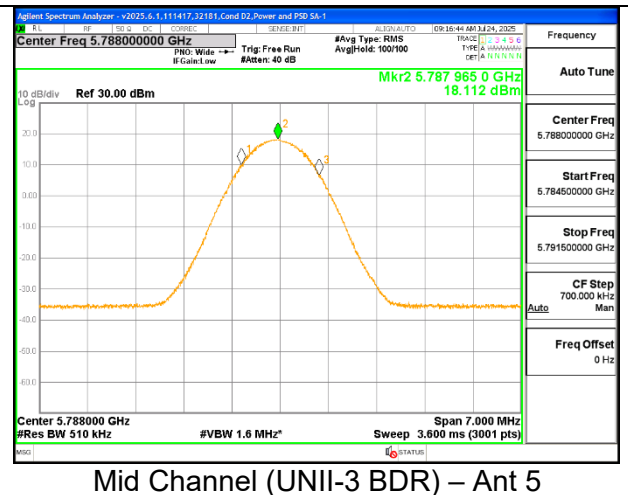
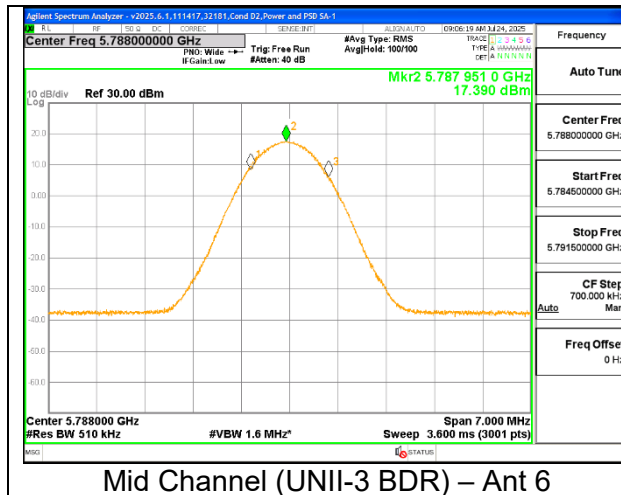


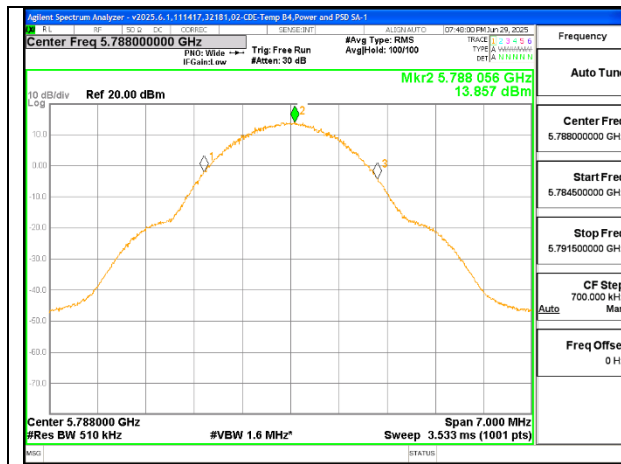


9.4.4. UNII-3 BAND MIMO TXBF MODE

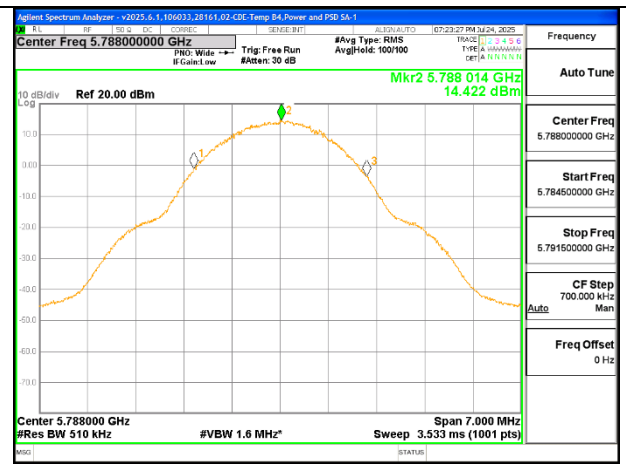
UNII-3 (MIMO BF) (5733- 5844MHz)	
Un-Correlated Gain (dBi)	-0.02
Correlated Gain (dBi)	2.71

UNII-3 (MIMO BF)	Power Config.	Freq (MHz)	Ch. #	Duty Cycle (dB)	Power Limit (dBm)	Output Power (Gated) (dBm)		Total MIMO Corrected Power (dBm)	PSD Limit (dBm/500kHz)	PSD (dBm/500kHz)		Total MIMO Corrected PSD (dBm/500kHz)
						Ant 6	Ant 5			Ant 6	Ant 5	
BDR	High	5733	Low	1.15	30	18.47	19.00	21.75	30	17.499	18.131	21.987
		5788	Mid			18.50	18.92	21.73		17.390	18.112	21.926
		5844	High			18.45	18.91	21.70		16.986	17.610	21.469
	Low	5733	Low			1.94	5.16	6.85		1.016	3.305	6.470
		5788	Mid			2.00	5.18	6.89		1.411	3.608	6.807
		5844	High			1.97	5.20	6.89		1.483	3.197	6.584
HDT3	High	5733	Low	0.25		13.80	13.85	16.84		8.736	8.808	12.032
		5788	Mid			14.00	13.95	16.99		9.108	8.863	12.248
		5844	High			13.80	14.00	16.91		8.668	8.854	12.022
	Low	5733	Low			-1.00	1.87	3.68		-6.683	-3.527	-1.564
		5788	Mid			-1.11	2.00	3.73		-6.501	-3.043	-1.176
		5844	High			-1.01	2.00	3.76		-6.048	-2.687	-0.790
LE1M	High	5733	Low	0.72		18.41	18.90	21.67		16.849	18.237	21.329
		5788	Mid			18.44	18.81	21.64		17.021	18.035	21.288
		5844	High			18.46	19.00	21.75		17.025	18.497	21.553
	Low	5733	Low			1.98	5.15	6.86		-1.115	4.239	6.070
		5788	Mid			1.94	5.15	6.85		-1.144	4.330	6.134
		5844	High			1.93	5.15	6.84		-1.075	4.412	6.213
LE2M	High	5733	Low	2.49		18.50	18.98	21.76		13.674	14.190	19.440
		5788	Mid			18.48	19.00	21.76		13.857	14.422	19.649
		5844	High			18.46	19.00	21.75		13.685	14.110	19.403
	Low	5733	Low			1.99	5.15	6.86		-4.227	2.551	5.869
		5788	Mid			1.96	5.15	6.85		-4.515	3.028	6.222
		5844	High			1.99	5.16	6.87		-4.579	3.023	6.209
HDR4	High	5733	Low	1.3		14.00	14.00	17.01		7.912	7.809	12.171
		5788	Mid			14.00	13.99	17.01		7.878	7.957	12.228
		5844	High			14.00	13.96	16.99		8.133	7.873	12.315
	Low	5733	Low			-1.00	1.98	3.75		-7.340	-4.167	-1.160
		5788	Mid			-1.04	2.00	3.75		-6.965	-4.554	-1.284
		5844	High			-1.00	2.00	3.76		-6.788	-4.296	-1.055
HDRPM4	High	5733	Low	0.33		13.96	13.81	16.90		6.697	6.574	9.976
		5788	Mid			13.91	13.90	16.92		6.387	6.296	9.682
		5844	High			14.00	13.87	16.95		5.927	5.912	9.260
	Low	5733	Low			-1.15	2.00	3.71		-10.807	-4.794	-3.493
		5788	Mid			-1.16	1.93	3.66		-10.923	-5.982	-4.444
		5844	High			-1.00	1.96	3.74		-11.358	-7.128	-5.407
HDRPL8	High	5733	Low	0.23		14.00	14.00	17.01		4.199	4.330	7.505
		5788	Mid			13.92	13.91	16.93		4.114	4.115	7.355
		5844	High			13.89	13.88	16.90		4.011	4.137	7.315
	Low	5733	Low			-1.11	2.00	3.73		-13.150	-7.581	-6.288
		5788	Mid			-1.01	1.86	3.67		-13.277	-8.500	-7.022
		5844	High			-1.00	1.92	3.71		-13.447	-9.766	-7.987

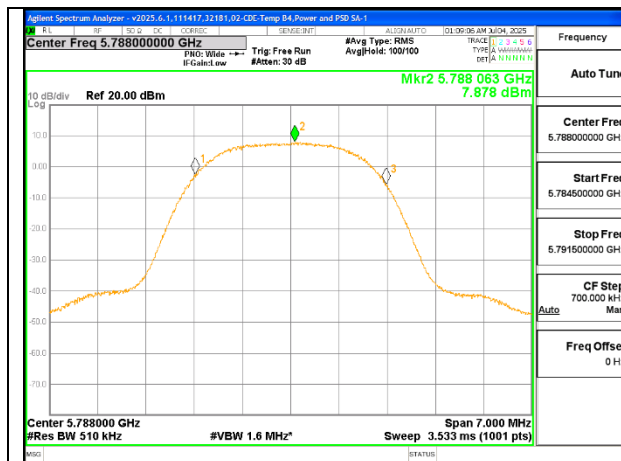




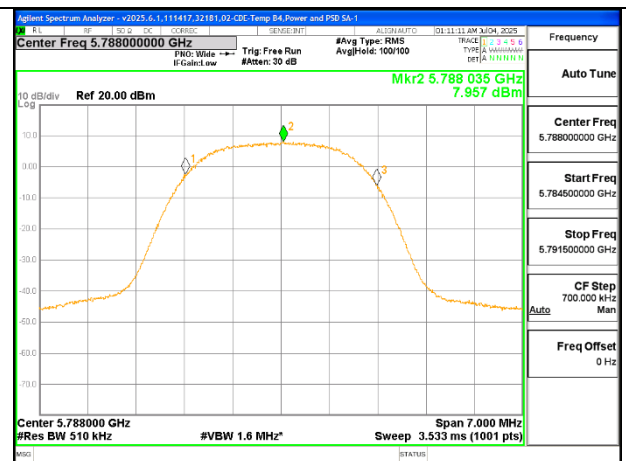
Mid Channel (UNII-3 LE2M) – Ant 6



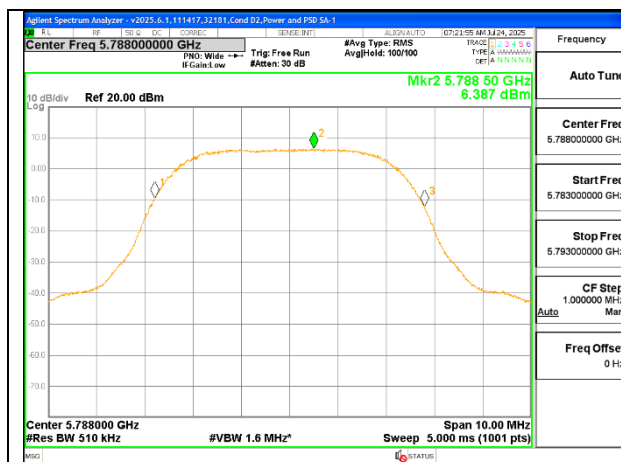
Mid Channel (UNII-3 LE2M) – Ant 5



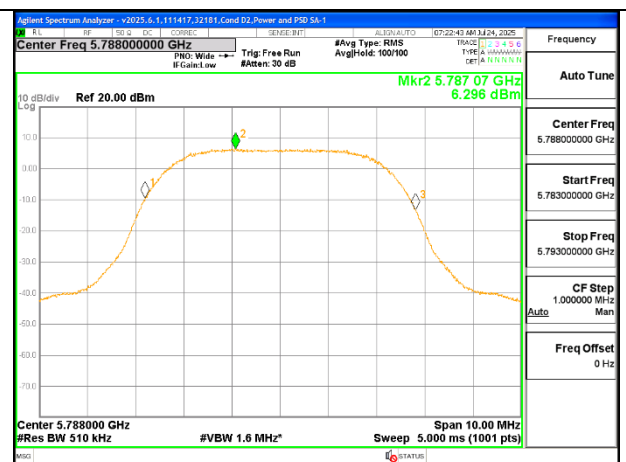
Mid Channel (UNII-3 HDR4) – Ant 6



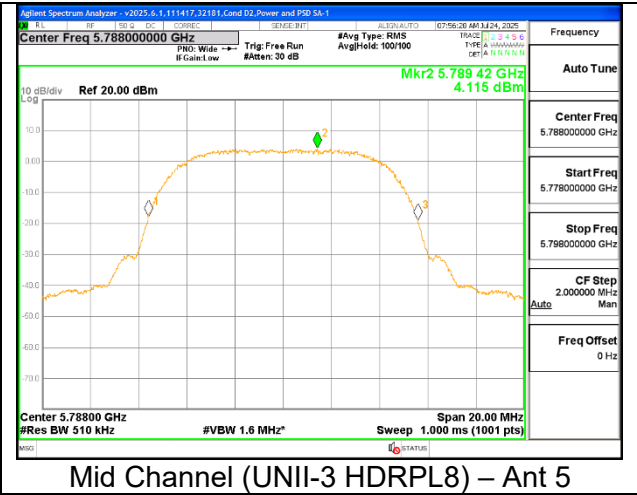
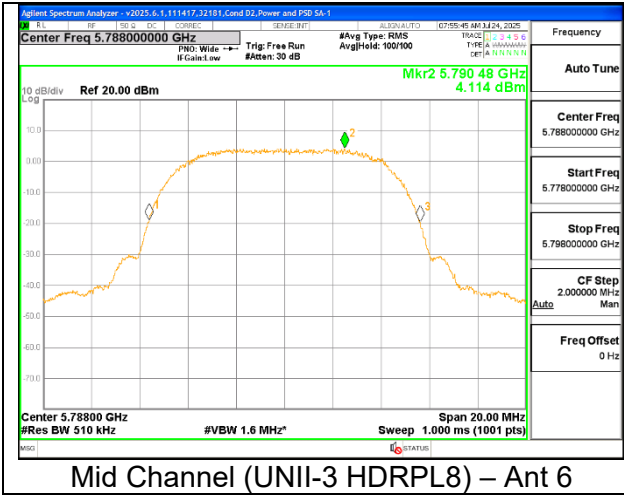
Mid Channel (UNII-3 HDR4) – Ant 5



Mid Channel (UNII-3 HDRPM4) – Ant 6



Mid Channel (UNII-3 HDRPM4) – Ant 5



10. RADIATED TEST RESULTS

LIMITS

FCC §15.205 and §15.209 -Restricted bands

FCC §15.407(b)(1-3) -Un-Restricted bands

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for measurement below 1GHz and 1.5 meters above the ground plane for measurement above 1GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements in the 30-1000MHz range, 9kHz for peak and/or quasi-peak detection measurements in the 0.15-30MHz range and 200Hz for peak and/or quasi-peak detection measurements in the 9 to 150kHz range. Peak detection is used unless otherwise noted as quasi-peak or average (9-90kHz and 110-490kHz).

For pre-scans above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 30 KHz for peak measurements.

For final measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and as applicable for average measurements.

The spectrum from 30 MHz to 1GHz and 18GHz to 40 GHz is investigated with the transmitter set to transmit at the channel with highest output power as worst-case scenario. 1GHz to 18GHz was set to the lowest, middle, and highest channels in the 5 GHz bands.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

Note: The limits in CFR 47, Part 15, Subpart C, paragraph 15.209(a), are identical to those in RSS-Gen section 8.9, Table 6, since the measurements are performed in terms of magnetic field strength and converted to electric field strength levels (as report in the table) using free space impedance of 377 Ohms. For example, the measurement at frequency X kHz resulted in a level of Y dBuV/m, which is equivalent to $Y - 51.5 = Z$ dBuA/m, which has the same margin, W dB to the corresponding RSS-Gen Table 6 limit as it has to 15.209(a) limit.

KDB 414788 Open Field Site(OFS) and Chamber Correlation Justification

Base on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.

OFS and chamber correlation testing had been performed and chamber measured test result is the worst-case test result.

RESULTS

10.1. TRANSMITTER ABOVE 1 GHz

10.1.1. UNII-1 BAND SISO MODE – BANDEDGE – HIGH POWER

UNII-1 (SISO)	Channel Frequency (MHz)	Ant. #	Frequency (GHz)	Meter Reading (dBuV)	Det	ACF (dB/m)	DCCF (dB)	Amp/Cbl/ Ftr/Pad (dB)	Correct Reading (dBuV/m)	Avg Limit (dBuV/m)	Avg Margin (dB)	Pk Limit (dBuV/m)	Pk Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
BDR	5162	6	* 5.15	58.03	Pk	34.4	0	-37.9	54.53	-	-	74	-19.47	175	175	H
			* 5.13514	60.37	Pk	34.3	0	-37.89	56.78	-	-	74	-17.22	175	175	H
			* 5.15	47.85	RMS	34.4	1.15	-37.9	45.5	54	-8.5	-	-	175	175	H
			* 5.149001	47.94	RMS	34.4	1.15	-37.9	45.59	54	-8.41	-	-	175	175	H
			* 5.15	58.63	Pk	34.4	0	-37.9	55.13	-	-	74	-18.87	185	193	V
			* 5.140584	59.27	Pk	34.3	0	-37.8	55.77	-	-	74	-18.23	185	193	V
		5	* 5.15	46.98	RMS	34.4	1.15	-37.9	44.63	54	-9.37	-	-	185	193	V
			* 5.127973	47.61	RMS	34.3	1.15	-37.8	45.26	54	-8.74	-	-	185	193	V
			* 5.15	56.74	Pk	34.4	0	-37.9	53.24	-	-	74	-20.76	238	400	H
			* 5.083223	59.47	Pk	34.3	0	-37.8	55.97	-	-	74	-18.03	238	400	H
			* 5.15	46.08	RMS	34.4	1.15	-37.9	43.73	54	-10.27	-	-	238	400	H
			* 5.141584	47.73	RMS	34.3	1.15	-37.8	45.38	54	-8.62	-	-	238	400	H
			* 5.15	57.88	Pk	34.4	0	-37.9	54.38	-	-	74	-19.62	205	361	V
			* 5.121307	59.85	Pk	34.3	0	-37.8	56.35	-	-	74	-17.65	205	361	V
			* 5.15	47.16	RMS	34.4	1.15	-37.9	44.81	54	-9.19	-	-	205	361	V
			* 5.14914	48.09	RMS	34.4	1.15	-37.9	45.74	54	-8.26	-	-	205	361	V
LE1M	5162	6	5.07889	58.59	Pk	34.3	0	-36.76	56.13	-	-	74	-17.87	305	165	H
			5.132446	47.06	RMS	34.3	0.72	-36.74	45.34	54	-8.66	-	-	305	165	H
			5.15	56.38	Pk	34.3	0	-36.68	54	-	-	74	-20	305	165	H
			5.15	46.13	RMS	34.3	0.72	-36.68	44.47	54	-9.53	-	-	305	165	H
			5.056139	46.64	RMS	34.3	0.72	-36.85	44.81	54	-9.19	-	-	319	177	V
			5.09764	58.33	Pk	34.3	0	-36.82	55.81	-	-	74	-18.19	319	177	V
		5	5.15	54.87	Pk	34.3	0	-36.68	52.49	-	-	74	-21.51	319	177	V
			5.15	45.5	RMS	34.3	0.72	-36.68	43.84	54	-10.16	-	-	319	177	V
			5.110584	59.46	Pk	34.3	0	-36.76	57	-	-	74	-17	305	217	H
			5.146335	46.33	RMS	34.3	0.72	-36.78	44.57	54	-9.43	-	-	305	217	H
			5.15	55.94	Pk	34.3	0	-36.68	53.56	-	-	74	-20.44	305	217	H
			5.15	44.92	RMS	34.3	0.72	-36.68	43.26	54	-10.74	-	-	305	217	H
			5.076723	58.56	Pk	34.3	0	-36.71	56.15	-	-	74	-17.85	346	286	V
			5.144973	46.72	RMS	34.3	0.72	-36.78	44.96	54	-9.04	-	-	346	286	V
			5.15	55.8	Pk	34.3	0	-36.68	53.42	-	-	74	-20.58	346	286	V
			5.15	46.06	RMS	34.3	0.72	-36.68	44.4	54	-9.6	-	-	346	286	V
LE2M	5162	6	5.12839	46.94	RMS	34.3	2.49	-36.81	46.92	54	-7.08	-	-	305	161	H
			5.148696	58.6	Pk	34.3	0	-36.71	56.19	-	-	74	-17.81	305	161	H
			5.15	56.15	Pk	34.3	0	-36.68	53.77	-	-	74	-20.23	305	161	H
			5.15	45.34	RMS	34.3	2.49	-36.68	45.45	54	-8.55	-	-	305	161	H
			5.068112	58.4	Pk	34.3	0	-36.84	55.86	-	-	74	-18.14	320	178	V
			5.08539	46.38	RMS	34.4	2.49	-36.84	46.43	54	-7.57	-	-	320	178	V
		5	5.15	55.21	Pk	34.3	0	-36.68	52.83	-	-	74	-21.17	320	178	V
			5.15	45.12	RMS	34.3	2.49	-36.68	45.23	54	-8.77	-	-	320	178	V
			5.005444	46.65	RMS	34.2	2.49	-36.84	46.5	54	-7.5	-	-	304	205	H
			5.015917	58.67	Pk	34.1	0	-36.77	56	-	-	74	-18	304	205	H
			5.15	55.97	Pk	34.3	0	-36.68	53.59	-	-	74	-20.41	304	205	H
			5.15	45.42	RMS	34.3	2.49	-36.68	45.53	54	-8.47	-	-	304	205	H
			5.137279	46.86	RMS	34.3	2.49	-36.68	46.97	54	-7.03	-	-	347	329	V
			5.138723	58.84	Pk	34.3	0	-36.72	56.42	-	-	74	-17.58	347	329	V
			5.15	55.45	Pk	34.3	0	-36.68	53.07	-	-	74	-20.93	347	329	V
			5.15	45.89	RMS	34.3	2.49	-36.68	46	54	-8	-	-	347	329	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

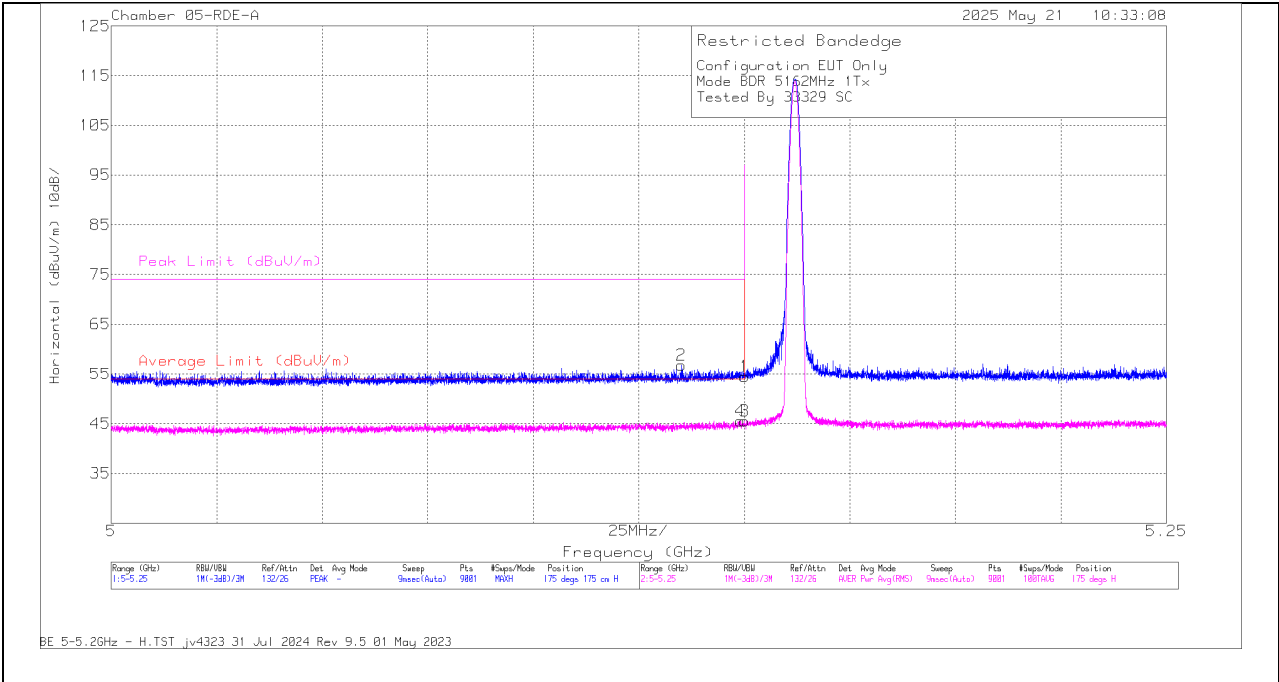
RMS - RMS detection

UNII-1 (SISO)	Channel Frequency (MHz)	Ant. #	Frequency (GHz)	Meter Reading (dBuV)	Det	ACF (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	DCCF (dB)	Correct Reading (dBuV/m)	Avg Limit (dBuV/m)	Avg Margin (dB)	Pk Limit (dBuV/m)	Pk Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
HDT3	5162	6	* 5.15	53.08	Pk	34.5	-35.4	0	52.18	-	-	74	-21.82	28	174	H
			* 5.102326	55.39	Pk	34.4	-35.6	0	54.19	-	-	74	-19.81	28	174	H
			* 5.15	42	RMS	34.5	-35.4	0.25	41.35	54	-12.65	-	-	28	174	H
			* 5.147988	42.95	RMS	34.5	-35.4	0.25	42.3	54	-11.7	-	-	28	174	H
			* 5.15	51.82	Pk	34.5	-35.4	0	50.92	-	-	74	-23.08	45	189	V
			* 5.116234	54.36	Pk	34.4	-35.5	0	53.26	-	-	74	-20.74	45	189	V
			* 5.15	41.44	RMS	34.5	-35.4	0.25	40.79	54	-13.21	-	-	45	189	V
			* 5.143956	42.44	RMS	34.4	-35.4	0.25	41.69	54	-12.31	-	-	45	189	V
		5	* 5.15	52.07	Pk	34.5	-35.4	0	51.17	-	-	74	-22.83	201	184	H
			* 5.070134	54.95	Pk	34.3	-35.6	0	53.65	-	-	74	-20.35	201	184	H
			* 5.15	41.22	RMS	34.5	-35.4	0.25	40.57	54	-13.43	-	-	201	184	H
			* 5.13308	42.22	RMS	34.4	-35.4	0.25	41.47	54	-12.53	-	-	201	184	H
			* 5.15	52.57	Pk	34.5	-35.4	0	51.67	-	-	74	-22.33	64	383	V
			* 5.125985	55.01	Pk	34.4	-35.5	0	53.91	-	-	74	-20.09	64	383	V
			* 5.15	42.1	RMS	34.5	-35.4	0.25	41.45	54	-12.55	-	-	64	383	V
			* 5.149457	42.87	RMS	34.5	-35.4	0.25	42.22	54	-11.78	-	-	64	383	V
HDR4	5162	6	* 5.15	57.63	Pk	34.4	-37.9	0	54.13	-	-	74	-19.87	177	159	H
			* 5.149279	59.6	Pk	34.4	-37.9	0	56.1	-	-	74	-17.9	177	159	H
			* 5.15	46.88	RMS	34.4	-37.9	1.3	44.68	54	-9.32	-	-	177	159	H
			* 5.148612	47.92	RMS	34.4	-37.94	1.3	45.68	54	-8.32	-	-	177	159	H
			* 5.15	56.74	Pk	34.4	-37.9	0	53.24	-	-	74	-20.76	189	249	V
			* 5.039889	59.32	Pk	34.3	-37.81	0	55.81	-	-	74	-18.19	189	249	V
			* 5.15	46.71	RMS	34.4	-37.9	1.3	44.51	54	-9.49	-	-	189	249	V
			* 5.14939	47.61	RMS	34.4	-37.9	1.3	45.41	54	-8.59	-	-	189	249	V
		5	* 5.15	58	Pk	34.4	-37.9	0	54.5	-	-	74	-19.5	238	397	H
			* 5.106612	59.59	Pk	34.3	-38	0	55.89	-	-	74	-18.11	238	397	H
			* 5.15	47.01	RMS	34.4	-37.9	1.3	44.81	54	-9.19	-	-	238	397	H
			* 5.13439	47.79	RMS	34.3	-37.9	1.3	45.49	54	-8.51	-	-	238	397	H
			* 5.15	57.76	Pk	34.4	-37.9	0	54.26	-	-	74	-19.74	206	287	V
			* 5.144918	59.73	Pk	34.4	-37.99	0	56.14	-	-	74	-17.86	206	287	V
			* 5.15	46.56	RMS	34.4	-37.9	1.3	44.36	54	-9.64	-	-	206	287	V
			* 5.149029	47.95	RMS	34.4	-37.9	1.3	45.75	54	-8.25	-	-	206	287	V
HDRPM4	5162	6	* 5.15	57.22	Pk	34.4	-37.9	0	53.72	-	-	74	-20.28	4	271	H
			* 5.135862	59.71	Pk	34.3	-37.81	0	56.2	-	-	74	-17.8	4	271	H
			* 5.15	46.89	RMS	34.4	-37.9	0.33	43.72	54	-10.28	-	-	4	271	H
			* 5.149946	47.69	RMS	34.4	-37.9	0.33	44.52	54	-9.48	-	-	4	271	H
			* 5.15	57.14	Pk	34.4	-37.9	0	53.64	-	-	74	-20.36	355	171	V
			* 5.088501	60.41	Pk	34.3	-38	0	56.71	-	-	74	-17.29	355	171	V
			* 5.15	46.92	RMS	34.4	-37.9	0.33	43.75	54	-10.25	-	-	355	171	V
			* 5.005611	47.92	RMS	34.2	-38	0.33	44.45	54	-9.55	-	-	355	171	V
		5	5.048695	58.64	Pk	34.2	-36.82	0	56.02	-	-	74	-17.98	114	187	H
			5.138973	46.73	RMS	34.3	-36.73	0.33	44.63	54	-9.37	-	-	114	187	H
			5.15	56.72	Pk	34.3	-36.68	0	54.34	-	-	74	-19.66	114	187	H
			5.15	44.76	RMS	34.3	-36.68	0.33	42.71	54	-11.29	-	-	114	187	H
			5.107223	46.69	RMS	34.3	-36.69	0.33	44.63	54	-9.37	-	-	324	261	V
			5.14964	59.38	Pk	34.3	-36.69	0	56.99	-	-	74	-17.01	324	261	V
			5.15	57.81	Pk	34.3	-36.68	0	55.43	-	-	74	-18.57	324	261	V
			5.15	46.47	RMS	34.3	-36.68	0.33	44.42	54	-9.58	-	-	324	261	V
HDRPL8	5162	4	5.149751	66.48	Pk	34.3	-38.28	0	62.5	-	-	74	-11.5	327	202	H
			5.149918	52.63	RMS	34.3	-38.27	0.23	48.89	54	-5.11	-	-	327	202	H
			5.15	65.84	Pk	34.3	-38.27	0	61.87	-	-	74	-12.13	327	202	H
			5.15	52.1	RMS	34.3	-38.27	0.23	48.36	54	-5.64	-	-	327	202	H
			5.14964	60.08	Pk	34.3	-38.29	0	56.09	-	-	74	-17.91	261	204	V
			5.149696	47.84	RMS	34.3	-38.29	0.23	44.08	54	-9.92	-	-	261	204	V
			5.15	59.43	Pk	34.3	-38.27	0	55.46	-	-	74	-18.54	261	204	V
			5.15	47.51	RMS	34.3	-38.27	0.23	43.77	54	-10.23	-	-	261	204	V
		3	* 5.15	56	Pk	34.5	-35.4	0	55.1	-	-	74	-18.9	200	211	H
			* 5.149957	56.66	Pk	34.5	-35.4	0	55.76	-	-	74	-18.24	200	211	H
			* 5.15	43.91	RMS	34.5	-35.4	0.23	43.24	54	-10.76	-	-	200	211	H
			* 5.149957	44.18	RMS	34.5	-35.4	0.23	43.51	54	-10.49	-	-	200	211	H
			* 5.15	63.22	Pk	34.5	-35.4	0	62.32	-	-	74	-11.68	60	101	V
			* 5.149832	63.38	Pk	34.5	-35.4	0	62.48	-	-	74	-11.52	60	101	V
			* 5.15	50.51	RMS	34.5	-35.4	0.23	49.84	54	-4.16	-	-	60	101	V
			* 5.149988	50.93	RMS	34.5	-35.4	0.23	50.26	54	-3.74	-	-	60	101	V

1TX Antenna 6

BANDEGE (LOW CHANNEL)

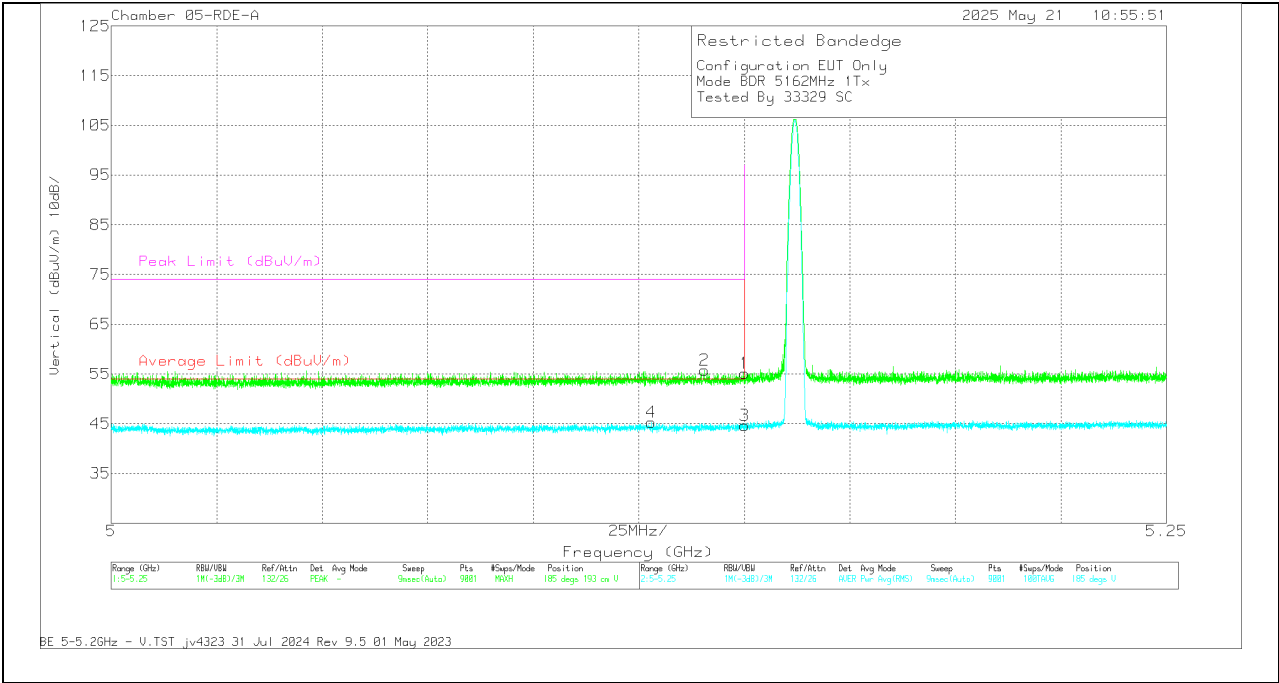
HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	80403 ACF 3m (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	58.03	Pk	34.4	0	-37.9	54.53	-	-	74	-19.47	175	175	H
2	* 5.13514	60.37	Pk	34.3	0	-37.89	56.78	-	-	74	-17.22	175	175	H
3	* 5.15	47.85	RMS	34.4	1.15	-37.9	45.5	54	-8.5	-	-	175	175	H
4	* 5.149001	47.94	RMS	34.4	1.15	-37.9	45.59	54	-8.41	-	-	175	175	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

VERTICAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	80403 ACF 3m (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	58.63	Pk	34.4	0	-37.9	55.13	-	-	74	-18.87	185	193	V
2	* 5.140584	59.27	Pk	34.3	0	-37.8	55.77	-	-	74	-18.23	185	193	V
3	* 5.15	46.98	RMS	34.4	1.15	-37.9	44.63	54	-9.37	-	-	185	193	V
4	* 5.127973	47.61	RMS	34.3	1.15	-37.8	45.26	54	-8.74	-	-	185	193	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

10.1.2. UNII-1 BAND MIMO TXBF MODE – BANEDGE – HIGH POWER

UNII-1 (MIMO)	Channel Frequency (MHz)	Ant. #	Frequency (GHz)	Meter Reading (dBuV)	Det	ACF (dB/m)	DCCF (dB)	Amp/Cbl/ Ftr/Pad (dB)	Correct Reading (dBuV/m)	Avg Limit (dBuV/m)	Avg Margin (dB)	Pk Limit (dBuV/m)	Pk Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
BDR	5162	6 + 5	* 5.15	57.67	Pk	34.4	0	-37.9	54.17	-	-	74	-19.83	162	176	H
			* 5.141807	60.35	Pk	34.3	0	-37.8	56.85	-	-	74	-17.15	162	176	H
			* 5.15	46.91	RMS	34.4	1.15	-37.9	44.56	54	-9.44	-	-	162	176	H
			* 5.144279	47.9	RMS	34.4	1.15	-37.93	45.52	54	-8.48	-	-	162	176	H
			* 5.15	58.15	Pk	34.4	0	-37.9	54.65	-	-	74	-19.35	203	358	V
			* 5.147223	60.24	Pk	34.4	0	-38	56.64	-	-	74	-17.36	203	358	V
			* 5.15	47.47	RMS	34.4	1.15	-37.9	45.12	54	-8.88	-	-	203	358	V
			* 5.149057	47.91	RMS	34.4	1.15	-37.9	45.56	54	-8.44	-	-	203	358	V
HDT3	5162	6 + 5	* 5.11589	60.2	Pk	34.3	0	-37.99	56.51	-	-	74	-17.49	172	165	H
			* 5.144112	47.88	RMS	34.4	0.25	-37.91	44.62	54	-9.38	-	-	172	165	H
			* 5.15	57.39	Pk	34.4	0	-37.9	53.89	-	-	74	-20.11	172	165	H
			* 5.15	46.62	RMS	34.4	0.25	-37.9	43.37	54	-10.63	-	-	172	165	H
			* 5.143084	59.97	Pk	34.3	0	-37.9	56.37	-	-	74	-17.63	212	396	V
			* 5.144946	47.95	RMS	34.4	0.25	-37.99	44.61	54	-9.39	-	-	212	396	V
			* 5.15	58.51	Pk	34.4	0	-37.9	55.01	-	-	74	-18.99	212	396	V
			* 5.15	47.39	RMS	34.4	0.25	-37.9	44.14	54	-9.86	-	-	212	396	V
LE1M	5162	6 + 5	5.133668	48.41	RMS	34.2	0.72	-38.53	44.8	54	-9.2	-	-	154	136	H
			5.146057	60.17	Pk	34.3	0	-38.41	56.06	-	-	74	-17.94	154	136	H
			5.15	57.54	Pk	34.3	0	-38.27	53.57	-	-	74	-20.43	154	136	H
			5.15	47.11	RMS	34.3	0.72	-38.27	43.86	54	-10.14	-	-	154	136	H
			5.145779	59.99	Pk	34.3	0	-38.42	55.87	-	-	74	-18.13	199	349	V
			5.149001	48.26	RMS	34.3	0.72	-38.32	44.96	54	-9.04	-	-	199	349	V
			5.15	58.27	Pk	34.3	0	-38.27	54.3	-	-	74	-19.7	199	349	V
			5.15	47.29	RMS	34.3	0.72	-38.27	44.04	54	-9.96	-	-	199	349	V
LE2M	5162	6 + 5	5.149668	48.12	RMS	34.3	2.49	-38.29	46.62	54	-7.38	-	-	162	152	H
			5.149918	60.35	Pk	34.3	0	-38.27	56.38	-	-	74	-17.62	162	152	H
			5.15	58.57	Pk	34.3	0	-38.27	54.6	-	-	74	-19.4	162	152	H
			5.15	47.57	RMS	34.3	2.49	-38.27	46.09	54	-7.91	-	-	162	152	H
			5.135834	60.74	Pk	34.2	0	-38.53	56.41	-	-	74	-17.59	204	390	V
			5.146723	48.51	RMS	34.3	2.49	-38.4	46.9	54	-7.1	-	-	204	390	V
			5.15	57.67	Pk	34.3	0	-38.27	53.7	-	-	74	-20.3	204	390	V
			5.15	48.02	RMS	34.3	2.49	-38.27	46.54	54	-7.46	-	-	204	390	V
HDR4	5162	6 + 5	* 5.15	58.38	Pk	34.4	0	-37.9	54.88	-	-	74	-19.12	173	190	H
			* 5.12414	59.46	Pk	34.3	0	-37.7	56.06	-	-	74	-17.94	173	190	H
			* 5.15	47.24	RMS	34.4	1.3	-37.9	45.04	54	-8.96	-	-	173	190	H
			* 5.149973	47.91	RMS	34.4	1.3	-37.9	45.71	54	-8.29	-	-	173	190	H
			* 5.15	58.03	Pk	34.4	0	-37.9	54.53	-	-	74	-19.47	212	376	V
			* 5.131834	60.55	Pk	34.3	0	-38.07	56.78	-	-	74	-17.22	212	376	V
			* 5.15	46.39	RMS	34.4	1.3	-37.9	44.19	54	-9.81	-	-	212	376	V
			* 5.149473	47.89	RMS	34.4	1.3	-37.9	45.69	54	-8.31	-	-	212	376	V
HDRPM4	5162	6 + 5	5.146946	60.17	Pk	34.3	0	-38.39	56.08	-	-	74	-17.92	305	225	H
			5.149946	48.8	RMS	34.3	0.33	-38.27	45.16	54	-8.84	-	-	305	225	H
			5.15	57.95	Pk	34.3	0	-38.27	53.98	-	-	74	-20.02	305	225	H
			5.15	47.63	RMS	34.3	0.33	-38.27	43.99	54	-10.01	-	-	305	225	H
			5.123584	60.46	Pk	34.2	0	-38.26	56.4	-	-	74	-17.6	4	364	V
			5.149085	48.5	RMS	34.3	0.33	-38.32	44.81	54	-9.91	-	-	4	364	V
			5.15	58.67	Pk	34.3	0	-38.27	54.7	-	-	74	-19.3	4	364	V
			5.15	47.8	RMS	34.3	0.33	-38.27	44.16	54	-9.84	-	-	4	364	V
HDRPL8	5164	6 + 5	5.149835	54.35	RMS	34.3	0.23	-38.28	50.6	54	-3.4	-	-	309	170	H
			5.149973	67.33	Pk	34.3	0	-38.27	63.36	-	-	74	-10.64	309	170	H
			5.15	66.84	Pk	34.3	0	-38.27	62.87	-	-	74	-11.13	309	170	H
			5.15	53.27	RMS	34.3	0.23	-38.27	49.53	54	-4.47	-	-	309	170	H
			5.149835	66.45	Pk	34.3	0	-38.28	62.47	-	-	74	-11.53	354	323	V
			5.149862	53.29	RMS	34.3	0.23	-38.28	49.54	54	-4.46	-	-	354	323	V
			5.15	65.76	Pk	34.3	0	-38.27	61.79	-	-	74	-12.21	354	323	V
			5.15	51.85	RMS	34.3	0.23	-38.27	48.11	54	-5.89	-	-	354	323	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

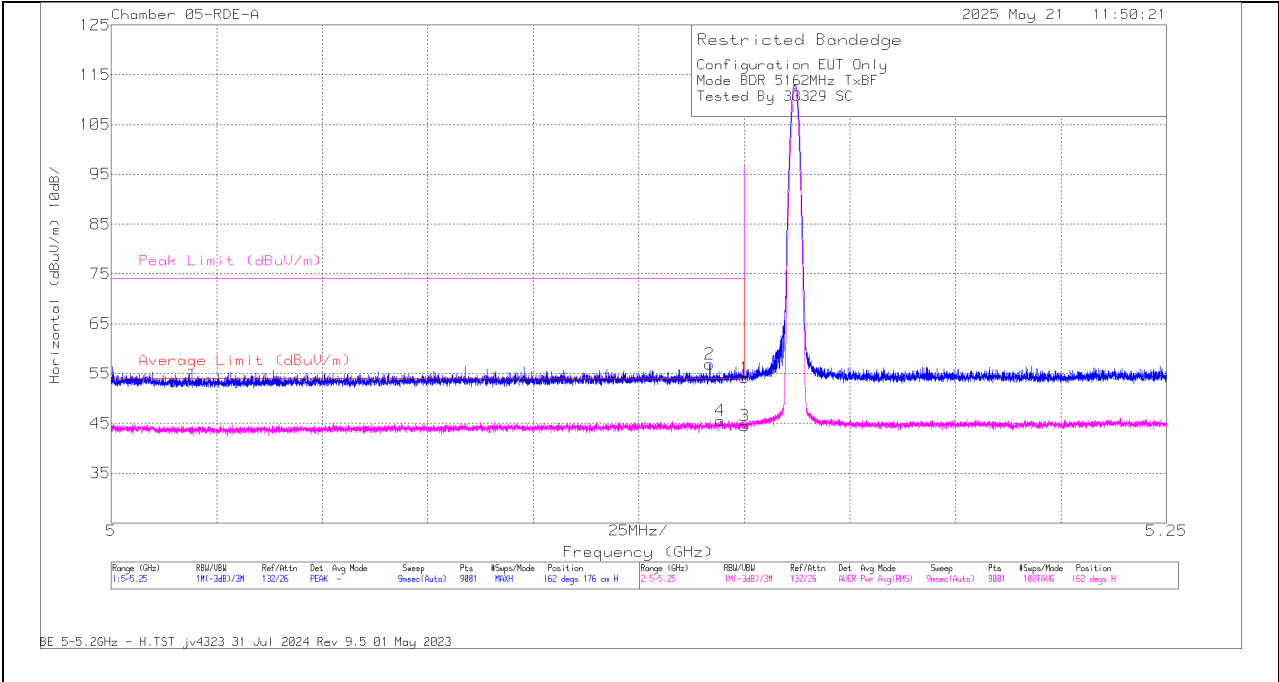
Pk - Peak detector

RMS - RMS detection

2TX Antenna 6 + Antenna 5 TX BF MODE

BANDEDGE (LOW CHANNEL)

HORIZONTAL RESULT



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	80403 ACF 3m (dB/m)	DCCF (dB)	Gain/Loss (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	57.67	Pk	34.4	0	-37.9	54.17	-	-	74	-19.83	162	176	H
2	* 5.141807	60.35	Pk	34.3	0	-37.8	56.85	-	-	74	-17.15	162	176	H
3	* 5.15	46.91	RMS	34.4	1.15	-37.9	44.56	54	-9.44	-	-	162	176	H
4	* 5.144279	47.9	RMS	34.4	1.15	-37.93	45.52	54	-8.48	-	-	162	176	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection