



TEST REPORT

Report Number: 15143746-E1V2

Applicant : eero LLC
660 3rd Street 4th Floor
San Francisco, CA 94107, U.S.A.

Model : V010001

Brand : eero

FCC ID : 2AEM4-711917312

IC : 20631-711917312

EUT Description : Wireless Access Point

Test Standard(s) : FCC 47 CFR PART 15 SUBPART E
ISED RSS-247 ISSUE 3
ISED RSS-GEN ISSUE 5 + A1 + A2

Date Of Issue:
2024-05-07

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	2024-03-22	Initial Issue	---
V2	2024-05-07	Signature added	Henry Lau

TABLE OF CONTENTS

REPORT REVISION HISTORY	2
TABLE OF CONTENTS	3
1. ATTESTATION OF TEST RESULTS	6
2. TEST RESULT SUMMARY	8
3. TEST METHODOLOGY	9
4. FACILITIES AND ACCREDITATION	9
5. DECISION RULES AND MEASUREMENT UNCERTAINTY	10
5.1. <i>METROLOGICAL TRACEABILITY</i>	10
5.2. <i>DECISION RULES</i>	10
5.3. <i>MEASUREMENT UNCERTAINTY</i>	10
5.4. <i>SAMPLE CALCULATION</i>	11
6. EQUIPMENT UNDER TEST	12
6.1. <i>EUT & CLASS II PERMISSIVE CHANGE DESCRIPTION</i>	12
6.2. <i>MAXIMUM OUTPUT POWER</i>	12
6.3. <i>DESCRIPTION OF AVAILABLE ANTENNAS AND CABLE LOSS</i>	12
6.4. <i>SOFTWARE AND FIRMWARE</i>	12
6.5. <i>DESCRIPTION OF TEST SETUP</i>	13
7. MEASUREMENT METHOD.....	15
8. TEST AND MEASUREMENT EQUIPMENT	16
9. ANTENNA PORT TEST RESULTS	17
9.1. <i>LOWER BAND RESULTS FOR 160 MHz BANDWIDTH (5260)</i>	17
9.1.1. <i>TEST CHANNEL</i>	17
9.1.2. <i>RADAR WAVEFORMS AND TRAFFIC</i>	17
9.1.3. <i>MOVE AND CLOSING TIME</i>	22
9.1.4. <i>26 dB BANDWIDTH + 99% BW(Bandwidth Shrinking)</i>	26
9.1.5. <i>OUTPUT POWER AND PSD (Bandwidth Shrinking)</i>	27
9.1.6. <i>NON-OCCUPANCY/RECOVERY PERIOD</i>	31
9.1.7. <i>26 dB & 99% BANDWIDTH (Bandwidth Expansion)</i>	34
9.1.8. <i>OUTPUT POWER AND PSD (Bandwidth Expansion)</i>	35
9.2. <i>LOWER BAND RESULTS FOR 160 MHz BANDWIDTH (5280)</i>	39
9.2.1. <i>TEST CHANNEL</i>	39
9.2.2. <i>RADAR WAVEFORMS AND TRAFFIC</i>	39
9.2.3. <i>MOVE AND CLOSING TIME</i>	42
9.2.4. <i>26 dB BANDWIDTH + 99% BW(Bandwidth Shrinking)</i>	46

9.2.5. OUTPUT POWER AND PSD (Bandwidth Shrinking)	47
9.3. LOWER BAND RESULTS FOR 80 MHz BANDWIDTH (5260)	51
9.3.1. TEST CHANNEL	51
9.3.2. RADAR WAVEFORMS AND TRAFFIC.....	51
9.3.3. MOVE AND CLOSING TIME	56
9.3.4. 26 dB BANDWIDTH + 99% BW (Bandwidth Shrinking).....	60
9.3.5. OUTPUT POWER AND PSD (Bandwidth Shrinking)	61
9.4. LOWER BAND RESULTS FOR 80 MHz BANDWIDTH (5280)	64
9.4.1. TEST CHANNEL	64
9.4.2. RADAR WAVEFORMS AND TRAFFIC.....	64
9.4.3. MOVE AND CLOSING TIME	67
9.4.4. 26 dB BANDWIDTH + 99% BW(Bandwidth Shrinking)	71
9.4.5. OUTPUT POWER AND PSD (Bandwidth Shrinking)	72
9.5. UPPER BAND RESULTS FOR 240 MHz BANDWIDTH (5500)	75
9.5.1. TEST CHANNEL	75
9.5.2. RADAR WAVEFORMS AND TRAFFIC.....	75
9.5.3. MOVE AND CLOSING TIME	80
9.5.4. 26 dB & 99% BANDWIDTH (Bandwidth Shrinking).....	84
9.5.5. OUTPUT POWER AND PSD (Bandwidth Shrinking)	85
9.6. UPPER BAND RESULTS FOR 240 MHz BANDWIDTH (5520)	88
9.6.1. TEST CHANNEL	88
9.6.2. RADAR WAVEFORMS AND TRAFFIC.....	88
9.6.3. MOVE AND CLOSING TIME	91
9.6.4. 26 dB & 99% BANDWIDTH (Bandwidth Shrinking).....	95
9.6.5. OUTPUT POWER AND PSD (Bandwidth Shrinking)	96
9.6.6. NON-OCCUPANCY/RECOVERY PERIOD	99
9.6.7. 26 dB & 99% BANDWIDTH (Bandwidth Expansion)	102
9.6.8. OUTPUT POWER AND PSD (Bandwidth Expansion).....	103
9.7. UPPER BAND RESULTS FOR 160 MHz BANDWIDTH (5500)	106
9.7.1. TEST CHANNEL	106
9.7.2. RADAR WAVEFORMS AND TRAFFIC.....	106
9.7.3. MOVE AND CLOSING TIME	111
9.7.4. 26 dB BANDWIDTH + 99% BW(Bandwidth Shrinking)	115
9.7.5. OUTPUT POWER AND PSD (Bandwidth Shrinking)	116
9.8. UPPER BAND RESULTS FOR 160 MHz BANDWIDTH (5520)	119
9.8.1. TEST CHANNEL	119
9.8.2. RADAR WAVEFORMS AND TRAFFIC.....	119
9.8.3. MOVE AND CLOSING TIME	122
9.8.4. 26 dB BANDWIDTH + 99% BW(Bandwidth Shrinking)	126
9.8.5. OUTPUT POWER AND PSD (Bandwidth Shrinking)	127
9.9. UPPER BAND RESULTS FOR 80 MHz BANDWIDTH (5500)	130
9.9.1. TEST CHANNEL	130
9.9.2. RADAR WAVEFORMS AND TRAFFIC.....	130
9.9.3. MOVE AND CLOSING TIME	135
9.9.4. 26 dB BANDWIDTH + 99% BW(Bandwidth Shrinking)	139
9.9.5. OUTPUT POWER AND PSD (Bandwidth Shrinking)	140
9.10. UPPER BAND RESULTS FOR 80 MHz BANDWIDTH (5520).....	143

9.10.1. TEST CHANNEL	143
9.10.2. RADAR WAVEFORMS AND TRAFFIC.....	143
9.10.3. MOVE AND CLOSING TIME	146
9.10.4. 26 dB BANDWIDTH + 99% BW(Bandwidth Shrinking)	150
9.10.5. OUTPUT POWER AND PSD (Bandwidth Shrinking)	151
10. SETUP PHOTOS.....	154

1. ATTESTATION OF TEST RESULTS

COMPANY NAME: eero LLC
660 3rd Street 4th Floor
San Francisco, CA 94107, U.S.A.

EUT DESCRIPTION: Wireless Access Point

MODEL: V010001

BRAND: eero

SERIAL NUMBER: GGB2-1E08-3287-00CK

SAMPLE RECEIPT DATE: 2024-02-01

DATE TESTED: 2024-02-01 to 2024-03-08

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC 47 CFR Part 15 Subpart E	Complies
ISED RSS-247 Issue 3	Complies
ISED RSS-GEN Issue 5 + A1 + A2	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.

Approved & Released For
UL Verification Services Inc. By:



Frank Ibrahim
Staff Engineer
Consumer, Medical & Information Technologies
UL Verification Services Inc.

Prepared By:



Henry Lau
Project Engineer
Consumer, Medical & Information Technologies
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	ISED Clause	Requirement	Result	Comment
See Comment		Duty Cycle	N/A	Reporting Purposes only
See Comment	RSS-GEN 6.7	26dB BW/99% OBW	N/A	Reporting Purposes only
15.407 (a) (1), (3)(i)	RSS-247 6.2	Output Power	Pass	
15.407 (a) (1), (3)(i)	RSS-247 6.2	PSD	Pass	
15.407 (h) (2) iii	RSS 247 6.3.2 c	Move Time	Pass	
15.407 (h) (2) iv	RSS 247 6.3.2 e	Non-Occupancy	Pass	

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 789033 D02
- ANSI C63.10-2013
- RSS-GEN Issue 5 + A1 + A2
- RSS-247 Issue 3

4. FACILITIES AND ACCREDITATION

UL Verification Services Inc. is accredited by A2LA, Certificate Number 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
<input checked="" type="checkbox"/>	Building 1: 47173 Benicia Street Fremont, CA 94538, U.S.A	US0104	2324A	550739
<input type="checkbox"/>	Building 2: 47266 Benicia Street Fremont, CA 94538, U.S.A			
<input type="checkbox"/>	Building 4: 47658 Kato Rd Fremont, CA 94538, U.S.A			

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}
Radio Frequency (Spectrum Analyzer)	141.16 Hz
Occupied Bandwidth	1.22%
Power Spectral Density	2.47 dB
RF Power Measurement Direct Method Using Power Meter	1.3 dB (PK) / 0.45 dB (AV)
Unwanted Emissions, Conducted	1.94 dB
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
Time Domain Measurements	3.39%
Temperature	0.57°C
Humidity	3.39%
DC Supply Voltages	0.57%

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 & CLASS II PERMISSIVE CHANGE DESCRIPTION

The EUT is a low power indoor Access Point that supports 802.11 a/b/g/n/ac/ax/be Wifi, BLE 1Mbps/2Mbps and 802.15.4 technologies.

This C2PC report is to add progressive DFS.

6.2. MAXIMUM OUTPUT POWER

Refer to original grant report

FCCID: 2AEM4-711917312

ISEDID: 20631-711917312

6.3. DESCRIPTION OF AVAILABLE ANTENNAS AND CABLE LOSS

The antenna(s) gain and type, cable loss as provided by the manufacturer are as follows:

The radio utilizes Flex PCB antennas, with a maximum gain as below table. EUT support the following transmit configurations:

- 1x1 SISO, Antenna 6 only
- 2x2 MIMO, Antenna 6 and Antenna 4 only
- 4x4 MIMO, Antenna 6, Antenna 4, Antenna 9 and Antenna 1 only

Frequency Range (MHz)	Peak Antenna Gain (dBi)				Cable Loss (dB)
	Antenna 6	Antenna 4	Antenna 9	Antenna 1	
5150 – 5250	3.89	3.89	3.89	3.89	1.3
5250 – 5350	3.76	3.76	3.76	3.76	1.3
5500 – 5700	3.59	3.59	3.59	3.59	1.3

DIRECTIONAL ANTENNA GAIN

For 1 TX:

As per manufacturer specification, only 1Tx mode is tested therefore the directional gain is equal to the antenna gain.

6.4. SOFTWARE AND FIRMWARE

The EUT firmware installed during testing was v7.3.0-1199+PDFS-EXPANSION.stage.jupiter.

Iperf was used for traffic generation.

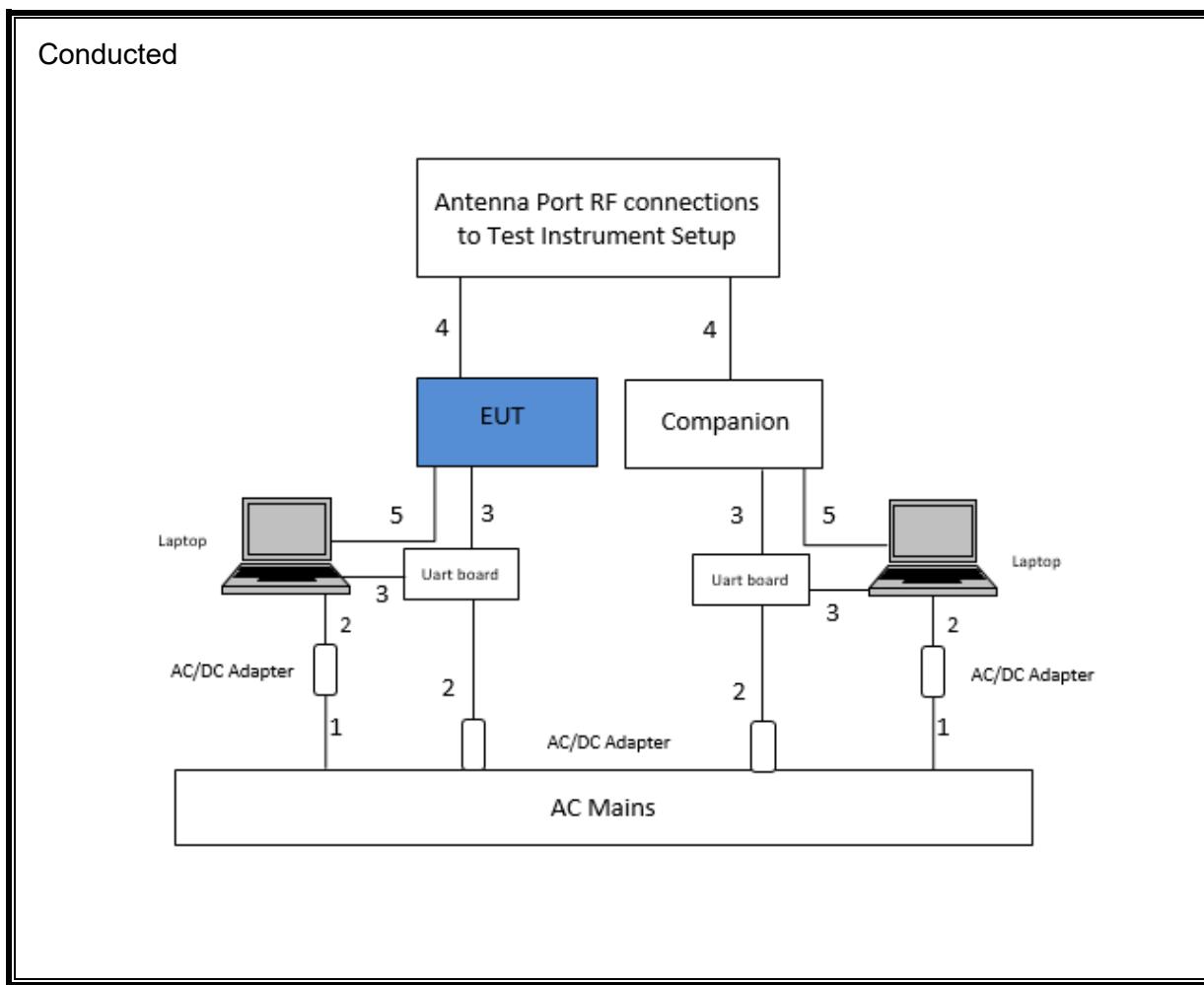
6.5. DESCRIPTION OF TEST SETUP

SUPPORT TEST EQUIPMENT				
Description	Manufacturer	Model	Serial Number	FCC ID/ DoC
Companion Device	eero	V310011	GGB2-1E05-3164-01DW	2AEM4-711917312
EUT AC/DC Adapter (Luxshare)	eero	C310011	No Serial Number	DoC
EUT AC/DC Adapter (Luxshare)	eero	C310011	No Serial Number	DoC
Laptop	Apple	A2337	FVFDR32NQ6L5	DoC
Travel Adapter	No Brand name	XHDPD45W	No Serial Numer	DoC
Laptop	Apple	A2442	V7N3WDGYQJ	DoC
Laptop AC/DC Adapter	Apple	A2166	No Serial Number	DoC
I/O CABLES				
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type
1	AC	2	2-Prong	AC
2	DC	4	DC	DC
3	USB	4	USB-C	USB
4	SMA	2	SMA	SMA
5	RJ45	1	RJ45	RJ45
Cable Length (m)				
				1m
				1m
				0.5 – 1m
				0.3
				0.5 – 1m

TEST SETUP

The EUT is powered by AC/DC adapter through a uart board and connected to a support laptop. Radio is exercised via a 3rd party program Iperf.

SETUP DIAGRAM



7. MEASUREMENT METHOD

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

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

Output Power: KDB 789033 D02, Section E.3.b (Method PM-G) and KDB 789033 D02, Section E.2.b (Method SA-1)

Power Spectral Density: KDB 789033 D02, Section F

Duty Cycle KDB 558074 Zero-Span Spectrum Analyzer Method.

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
Spectrum Analyzer, PXA, 3Hz to 8.4GHz	Keysight	N9030A	150667	2025-01-31
Signal Generator, MXG X-Series RF Vector	Keysight	N5182B	215999	2025-01-31
Frequency Extender	Keysight	N5182BX	213906	2025-01-31
Power Meter, P-series single channel	Keysight Technologies Inc	N1921A	90731	2025-01-31
Power Sensor, P - series, 50MHz to 18GHz, Wideband	Keysight Technologies Inc	N1911A	90388	2025-01-31
10dB Fixed Attenuator, up to 26GHz	Pasternack Enterprises	PE7087-10	231192	Verified/characterized before use

UL TEST SOFTWARE LIST				
PXA Read	UL	Labview	3.1	
Aggregate Time-PXA	UL	Labview	3.1	
SGXProject.exe	UL	SGX	1.7	

9. ANTENNA PORT TEST RESULTS

9.1. LOWER BAND RESULTS FOR 160 MHz BANDWIDTH (5260)

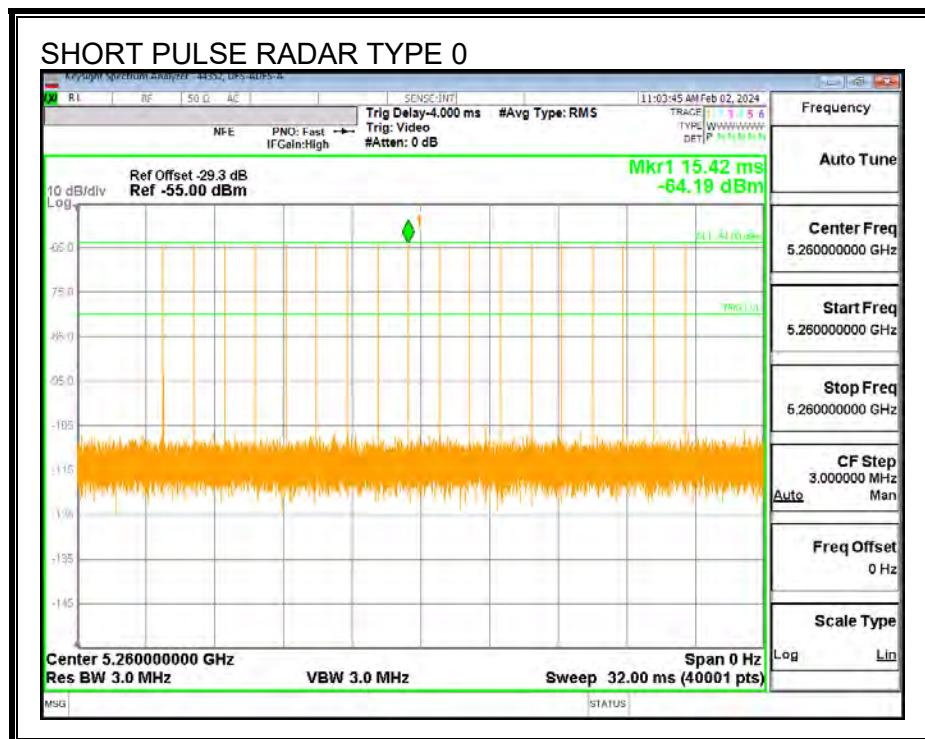
9.1.1. TEST CHANNEL

Tests were performed at a channel center frequency of 5250 MHz and 5210 MHz.
The Radar is injected at 5260 MHz

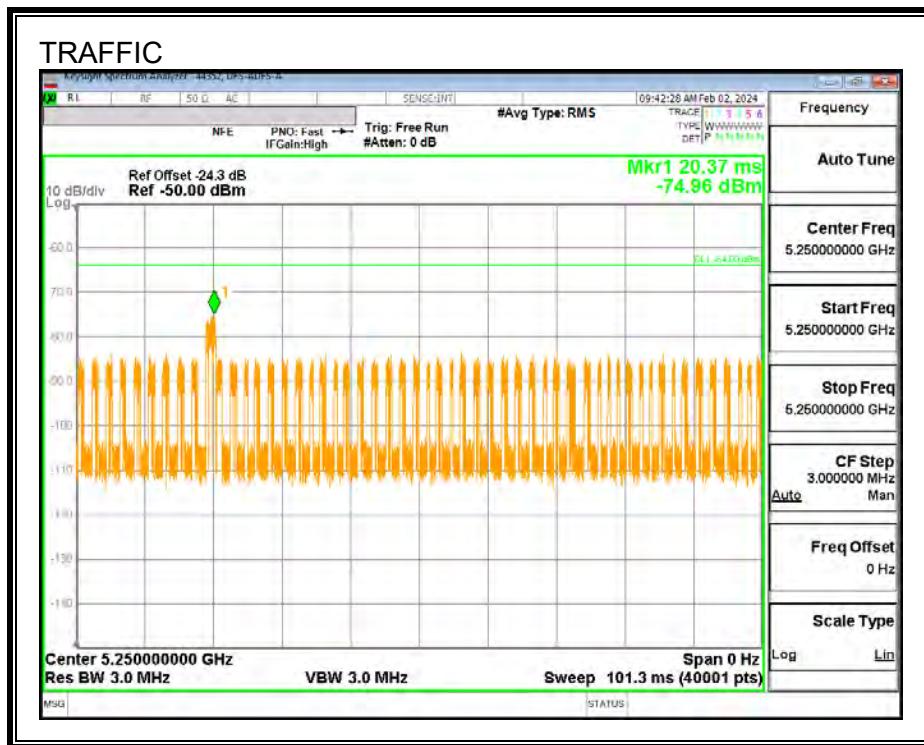
EUT bandwidth shrunk from 5250 160MHz Bandwidth to 5210 80MHz bandwidth

9.1.2. RADAR WAVEFORMS AND TRAFFIC

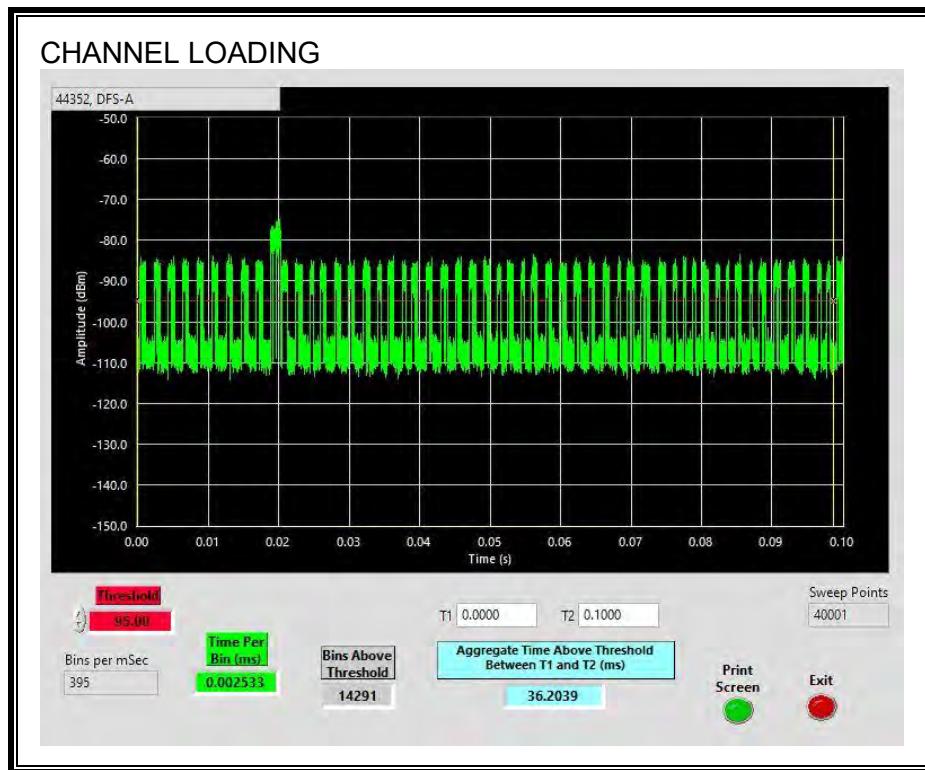
RADAR WAVEFORMS



TRAFFIC

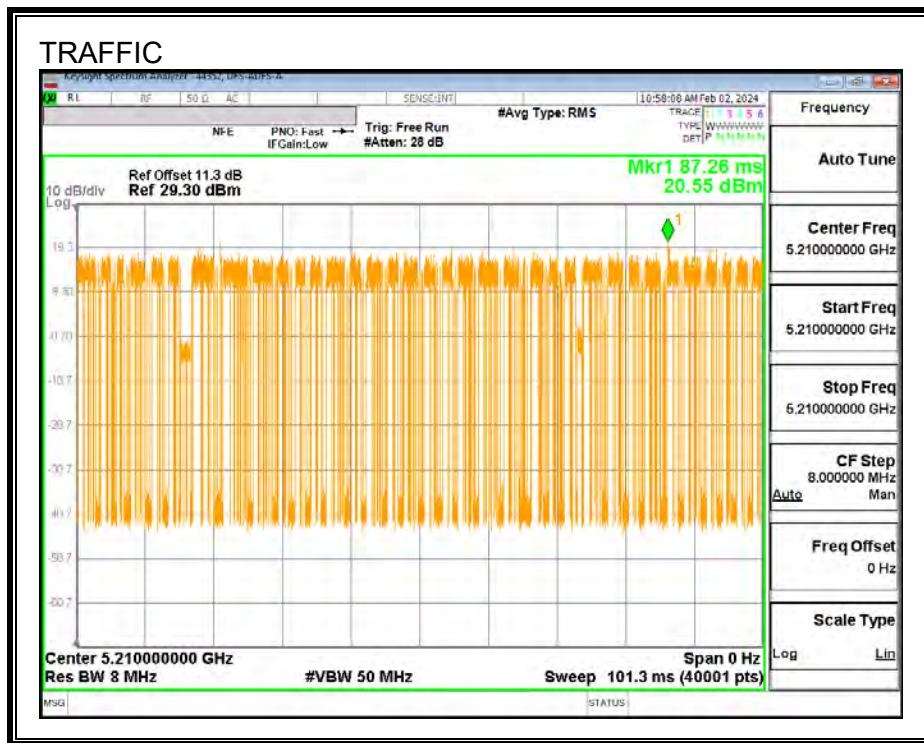


CHANNEL LOADING

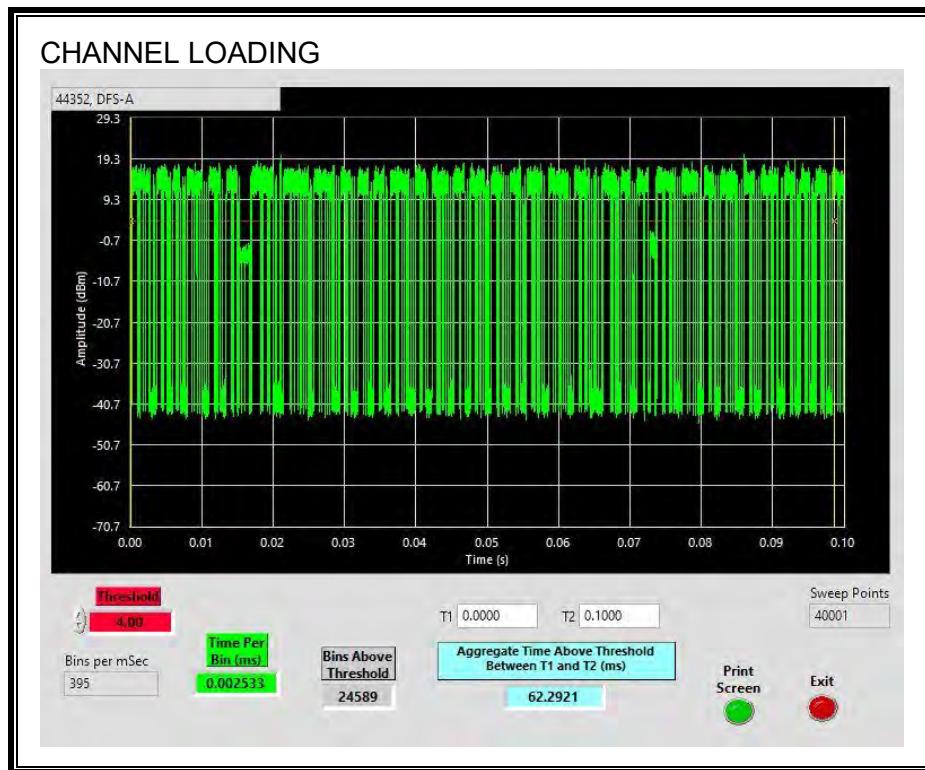


The level of traffic loading on the channel by the EUT is 36.2%

TRAFFIC (Bandwidth Shrinking)



CHANNEL LOADING (Bandwidth Shrinking)



Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
80 MHz	62.2921	100.000	0.623	62.29	2.06	0.016

9.1.3. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

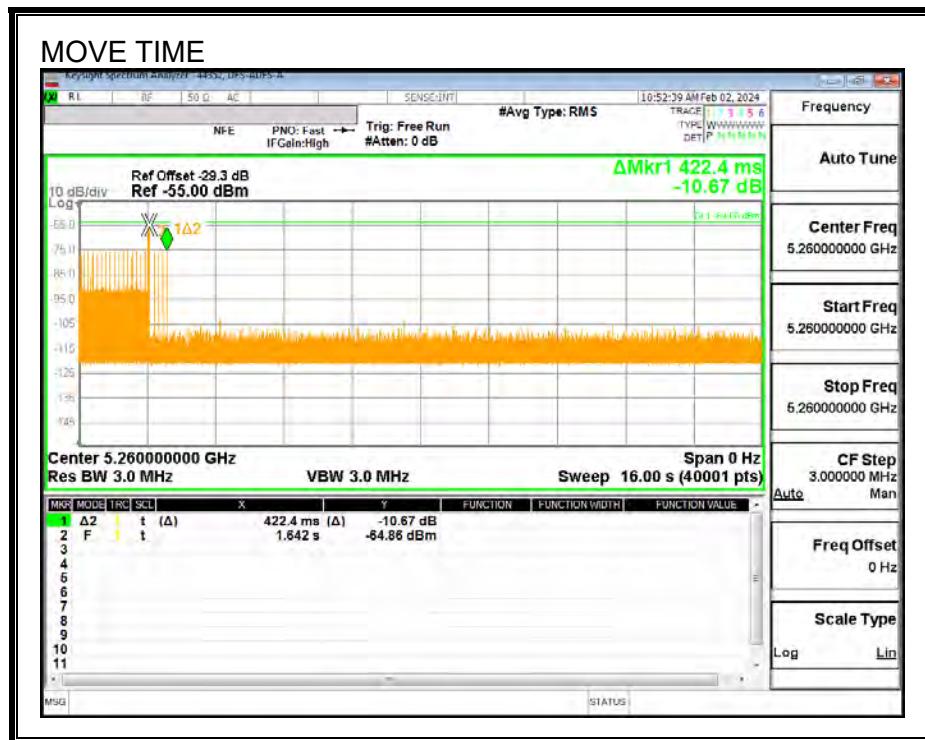
The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

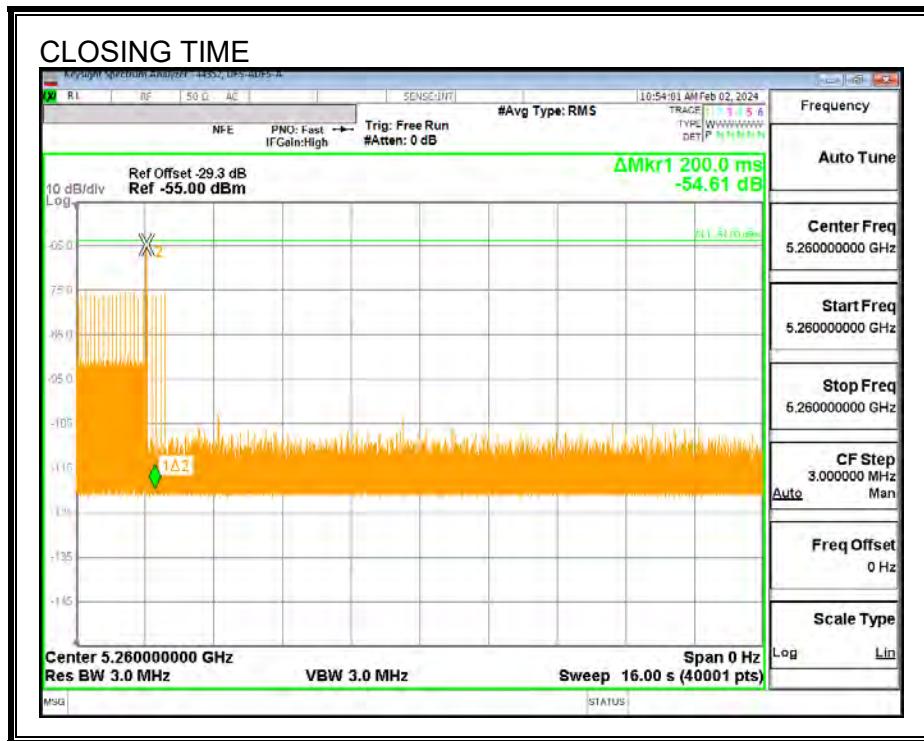
Channel Move Time (sec)	Limit (sec)
0.4224	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
6	60

MOVE TIME

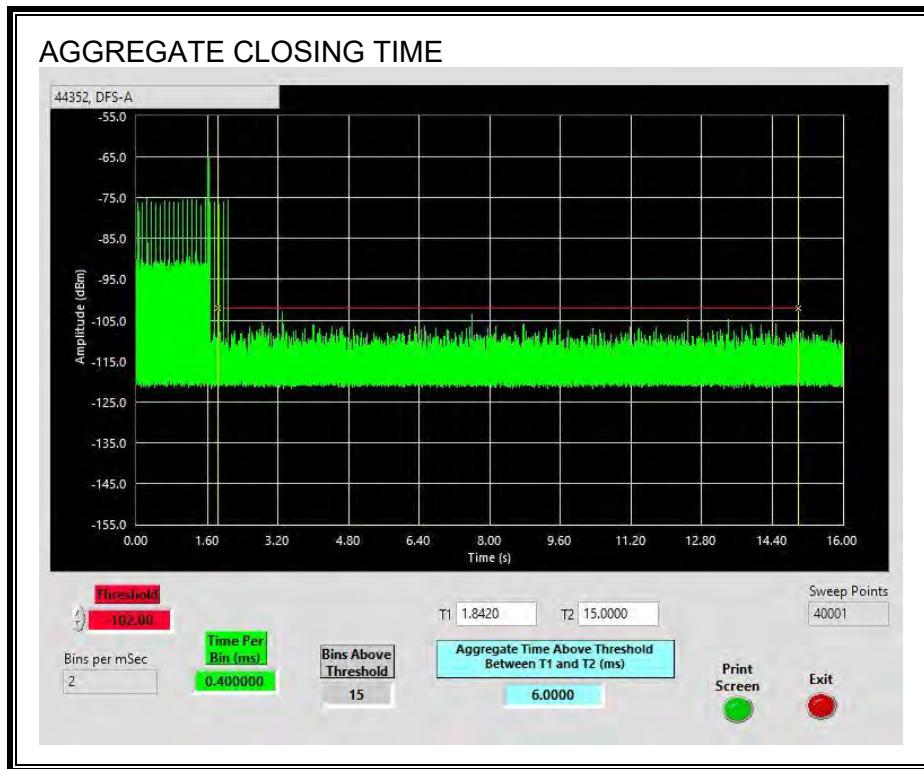


CHANNEL CLOSING TIME



AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

Only intermittent transmissions are observed during the aggregate monitoring period.



9.1.4. 26 dB BANDWIDTH + 99% BW(Bandwidth Shrinking)

LIMITS

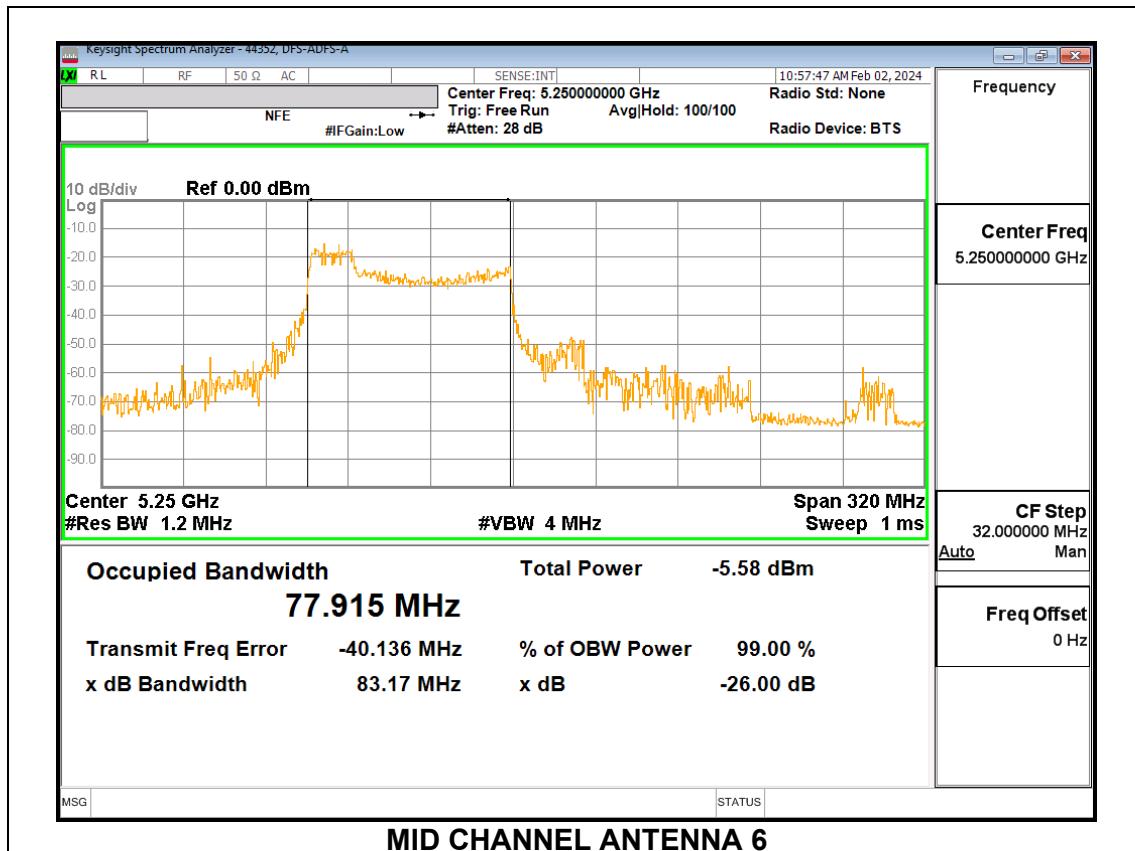
None; for reporting purposes only.

1TX Antenna 6 SISO MODE

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)
42	5210	83.17

Channel	Frequency (MHz)	99% Bandwidth Antenna 6 (MHz)
42	5210	77.915

MID CHANNEL



9.1.5. OUTPUT POWER AND PSD (Bandwidth Shrinking)

LIMITS

FCC §15.407

Band 5.15–5.25 GHz

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 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.

RSS-247

Band 5.15-5.25 GHz

The maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10}B$, dBm, whichever power is less. B is the 99% emission bandwidth in megahertz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

TEST PROCEDURE

The measurement method used for output power is KDB 789033 D02, Section E.3.b (Method PM-G) and for straddles channels KDB 789033 D02, Section E.2.b (Method SA-1) was used.

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

The power output was measured on the EUT antenna port using SMA cable with 10dB attenuator connected to a power meter via wideband power sensor. Gated average output power was read directly from power meter.

RESULTS

1TX Antenna 6 SISO MODE (FCC+IC)

Test Engineer:	44352
Test Date:	2024-02-02

FCC

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Mid	5210	3.89	30.00	17.00

Duty Cycle CF (dB)	2.06	Included in Calculations of Corr'd PSD
--------------------	------	--

Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	18.73	18.73	30.00	-11.27

PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Mid	5210	2.797	4.86	17.00	-12.14

IC

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)	EIRP Power Limit (dBm)	Power Limit (dBm)	EIRP PSD Limit (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)
Mid	5210	77.915	3.89	23.00	19.11	10.00	6.11

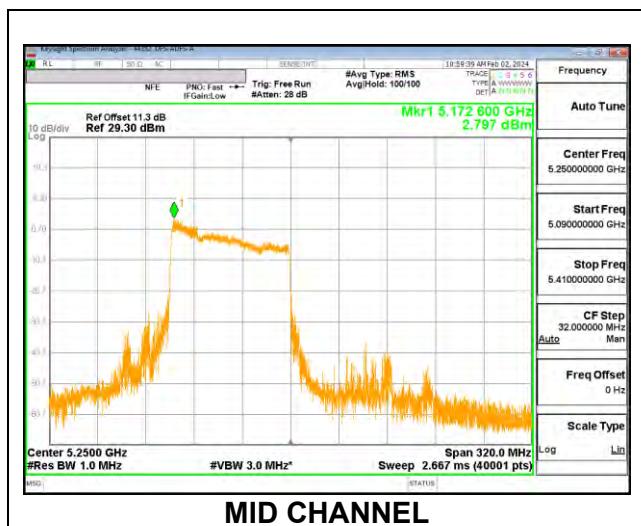
Duty Cycle CF (dB)	2.06	Included in Calculations of Corr'd Power & PSD
---------------------------	------	---

Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	18.73	18.73	19.11	-0.38

PSD Results

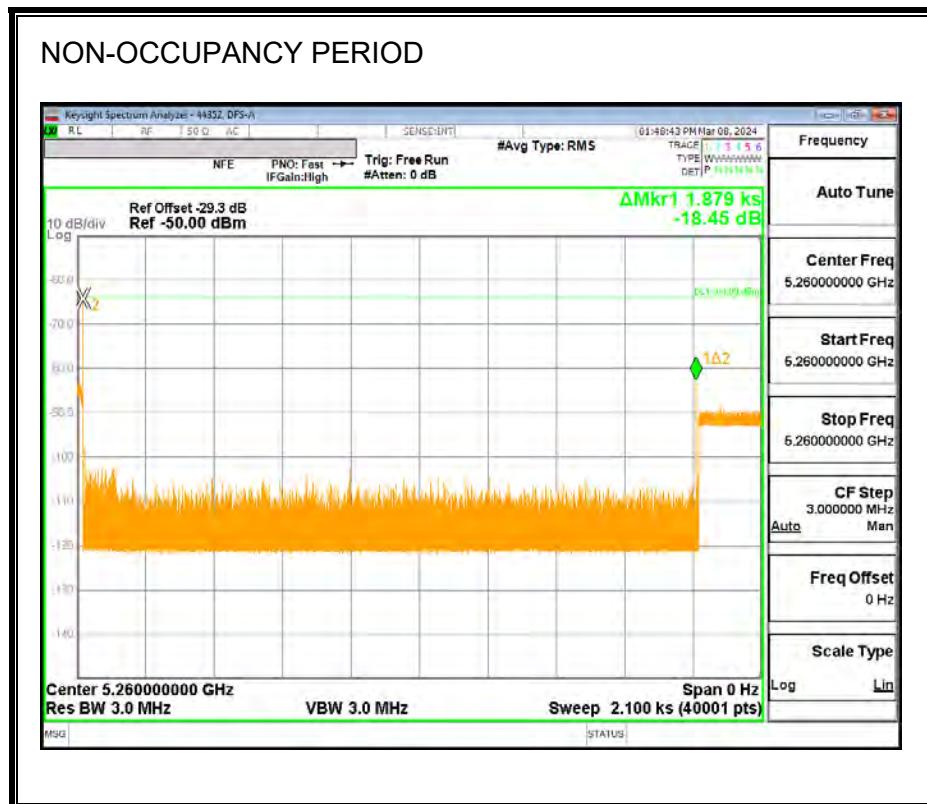
Channel	Frequency (MHz)	Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	2.80	4.86	6.11	-1.25



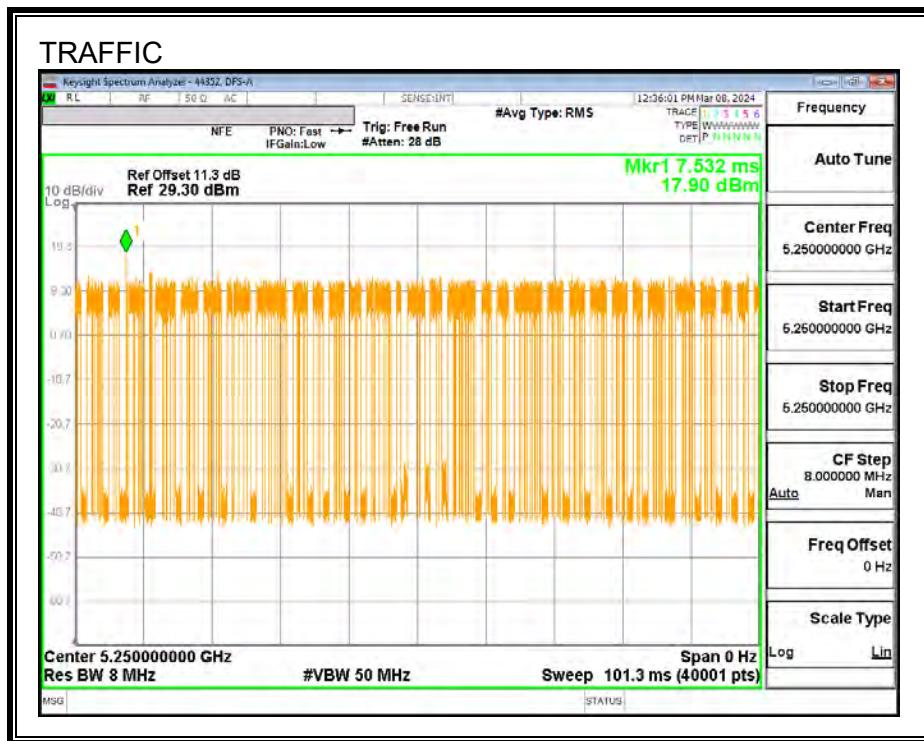
9.1.6. NON-OCCUPANCY/RECOVERY PERIOD

RESULTS

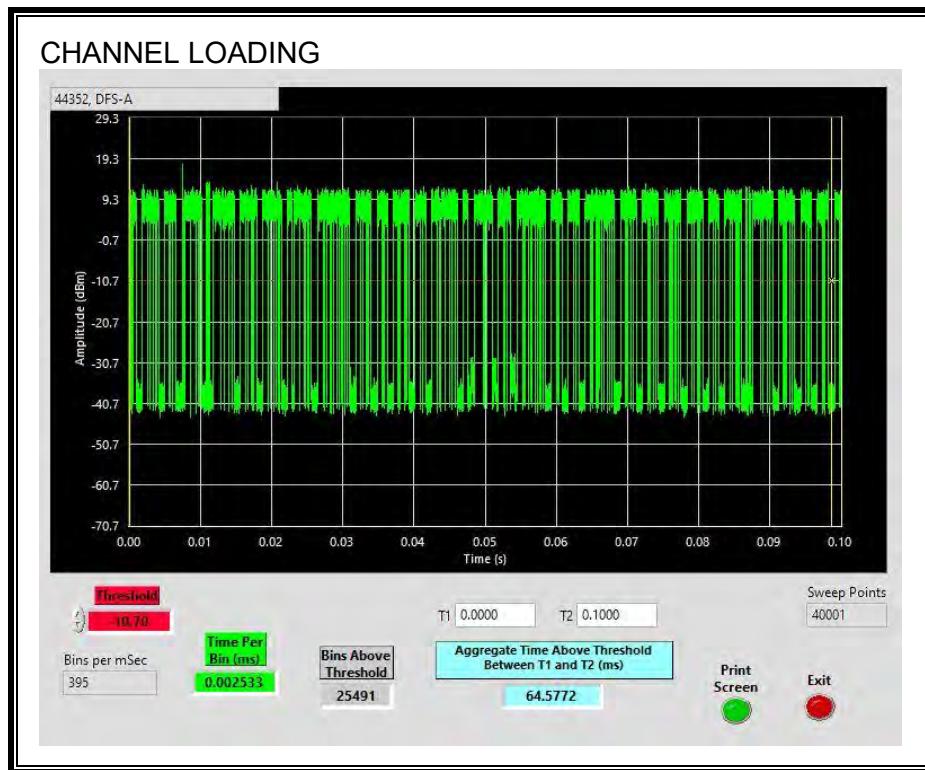
EUT transmissions were observed to resume on the channel after the completion of the 30-minute non-occupancy plus a 60s minimum subsequent CAC time (1860s).



TRAFFIC (Bandwidth Expansion)



CHANNEL LOADING (Bandwidth Expansion)



Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
160 MHz	64.5772	100.000	0.646	64.58	1.90	0.015

9.1.7. 26 dB & 99% BANDWIDTH (Bandwidth Expansion)

LIMITS

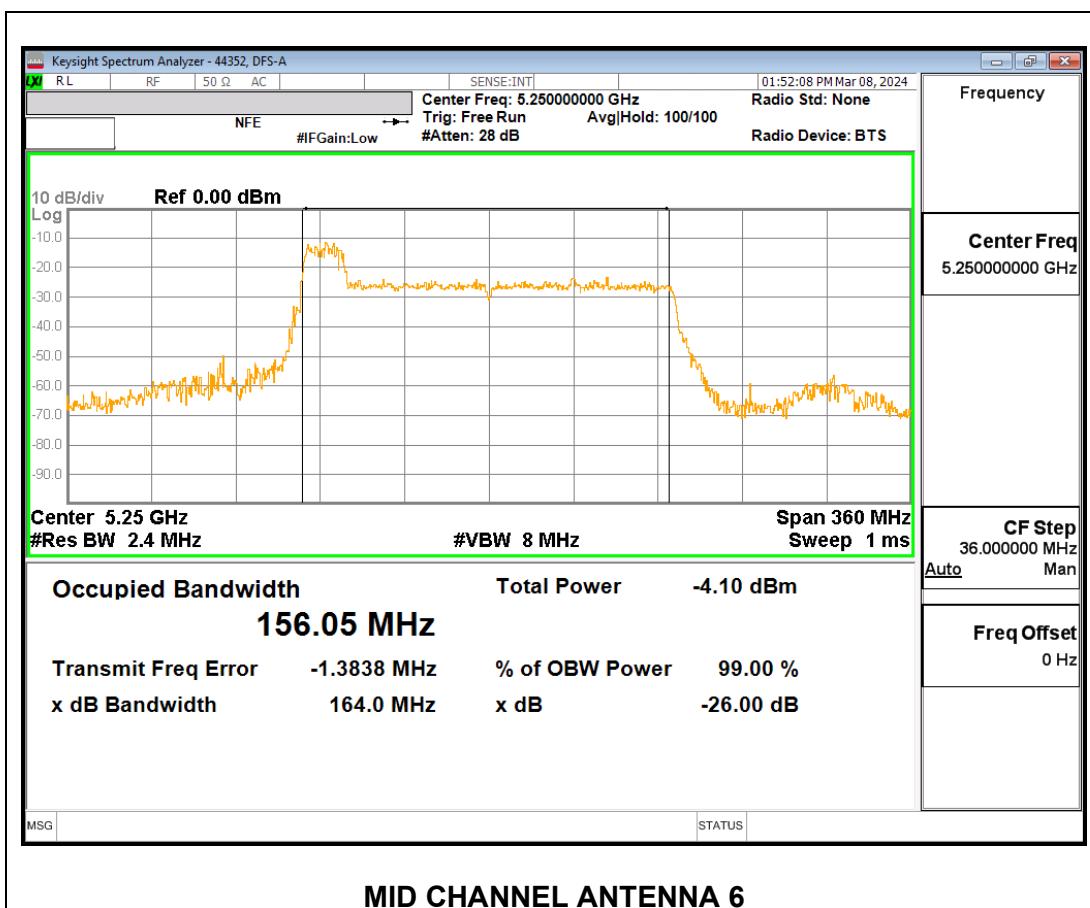
None; for reporting purposes only.

1TX Antenna 6 SISO MODE

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)
Mid	5250	164.00

Channel	Frequency (MHz)	99% Bandwidth Antenna 6 (MHz)
Mid	5250	156.05

MID CHANNEL



9.1.8. OUTPUT POWER AND PSD (Bandwidth Expansion)

LIMITS

FCC §15.407

Band 5.15–5.25 GHz

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 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.

Bands 5.25-5.35 GHz and 5.47-5.725 GHz

The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. 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.

RSS-247

Band 5.15-5.25 GHz

The maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log 10B$, dBm, whichever power is less. B is the 99% emission bandwidth in megahertz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

Band 5.25-5.35 GHz

The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log 10B$, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log 10B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

TEST PROCEDURE

The measurement method used for output power is KDB 789033 D02, Section E.3.b (Method PM-G) and for straddles channels KDB 789033 D02, Section E.2.b (Method SA-1) was used.

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

The power output was measured on the EUT antenna port using SMA cable with 10dB attenuator connected to a power meter via wideband power sensor. Gated average output power was read directly from power meter.

RESULTS

1TX Antenna 6 SISO MODE (FCC+IC)

Test Engineer:	44352
Test Date:	2024-03-08

FCC

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Mid	5250	3.89	30.00	17.00

Duty Cycle CF (dB)	1.90	Included in Calculations of Corr'd PSD
--------------------	------	--

Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5250	18.03	18.03	30.00	-11.97

PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Mid	5250	2.170	4.07	17.00	-12.93

IC

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)	EIRP Power Limit (dBm)	Power Limit (dBm)	EIRP PSD Limit (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)
Mid	5210	156.050	3.89	23.00	19.11	10.00	6.11

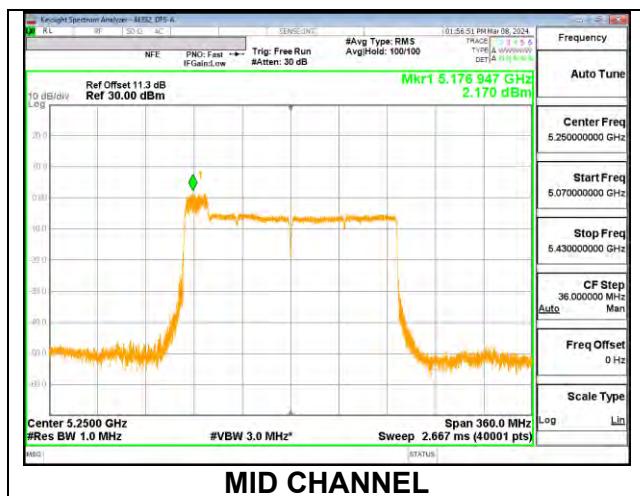
Duty Cycle CF (dB)	1.90	Included in Calculations of Corr'd Power & PSD
---------------------------	------	---

Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	18.03	18.03	19.11	-1.08

PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	2.17	4.07	6.11	-2.04



9.2. LOWER BAND RESULTS FOR 160 MHz BANDWIDTH (5280)

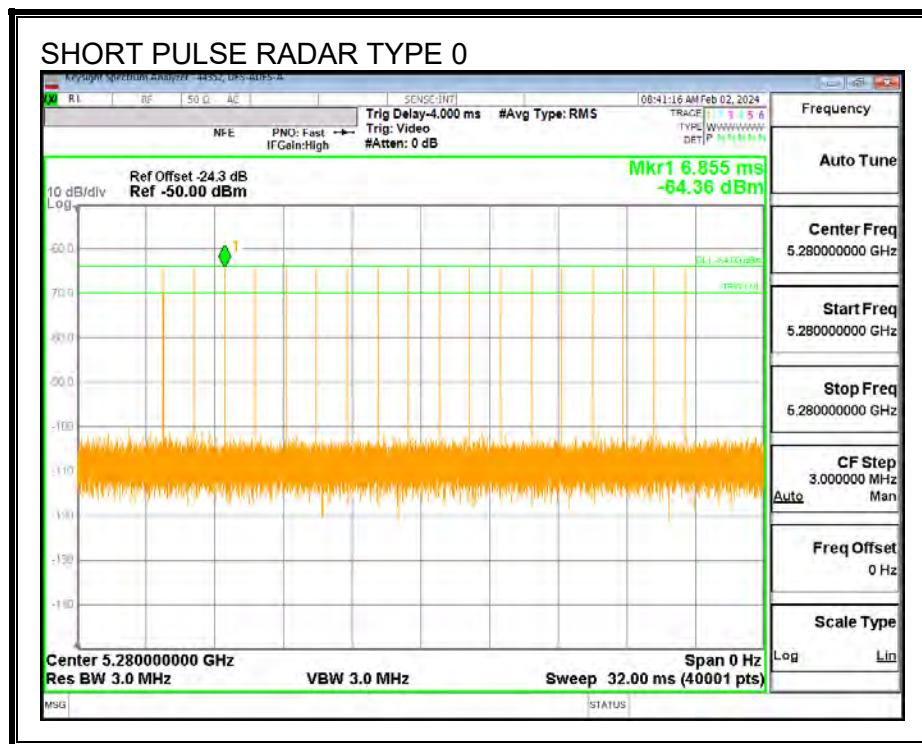
9.2.1. TEST CHANNEL

Tests were performed at a channel center frequency of 5250 MHz and 5210 MHz.
The Radar is injected at 5280 MHz

EUT bandwidth shrunk from 5250 160MHz Bandwidth to 5210 80MHz bandwidth

9.2.2. RADAR WAVEFORMS AND TRAFFIC

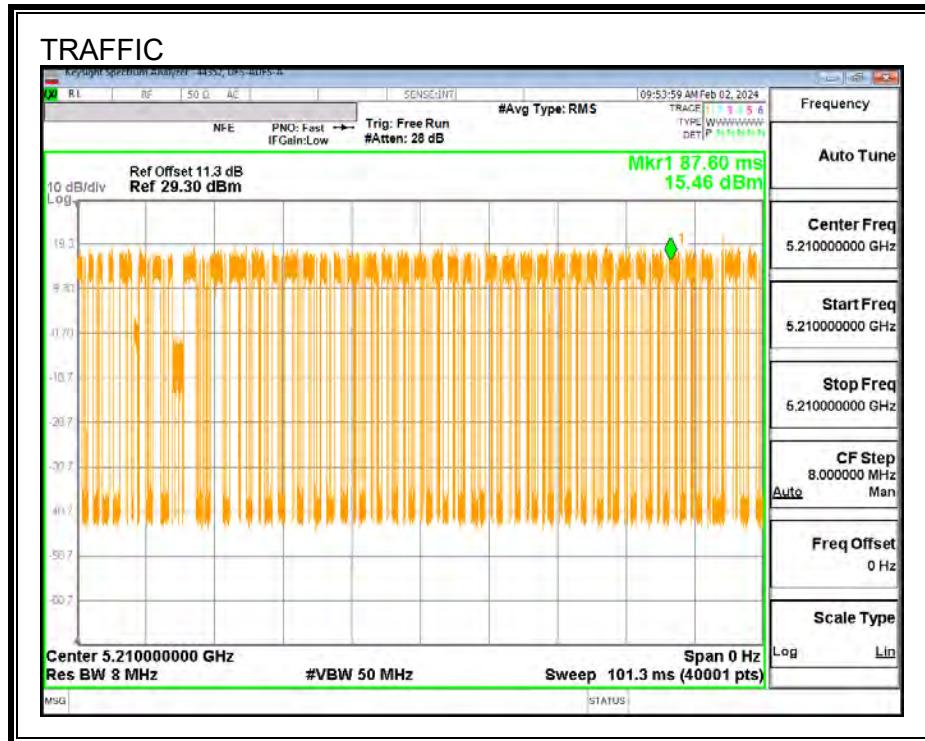
RADAR WAVEFORMS



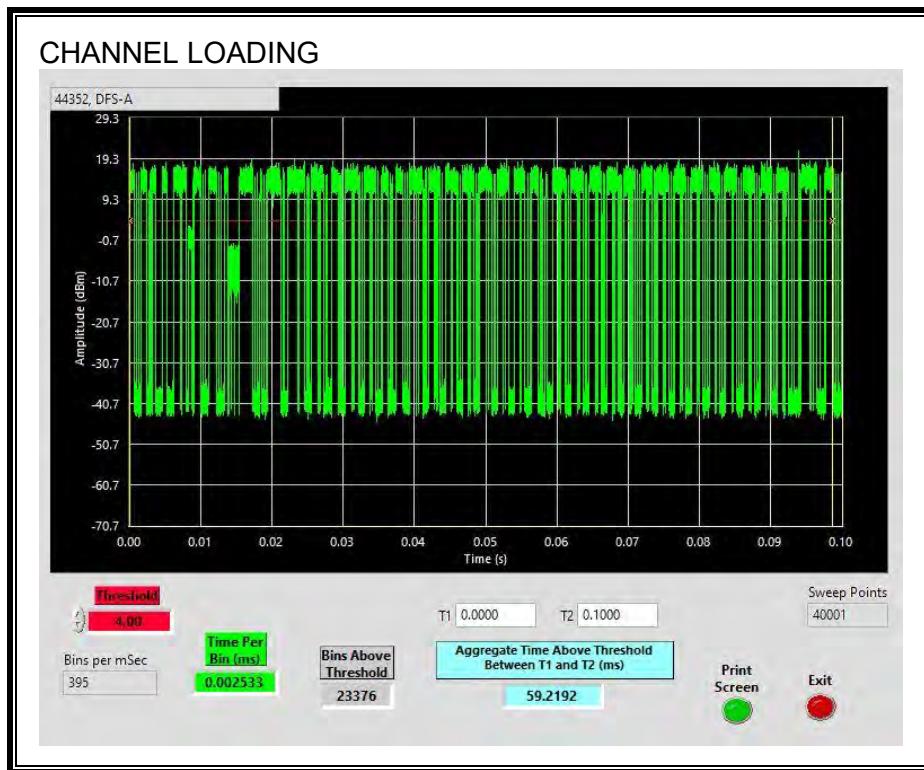
TRAFFIC & CHANNEL LOADING

Refer to section 9.1.2

TRAFFIC (Bandwidth Shrinking)



CHANNEL LOADING



Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
80 MHz	59.2192	100.000	0.592	59.22	2.28	0.017

9.2.3. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

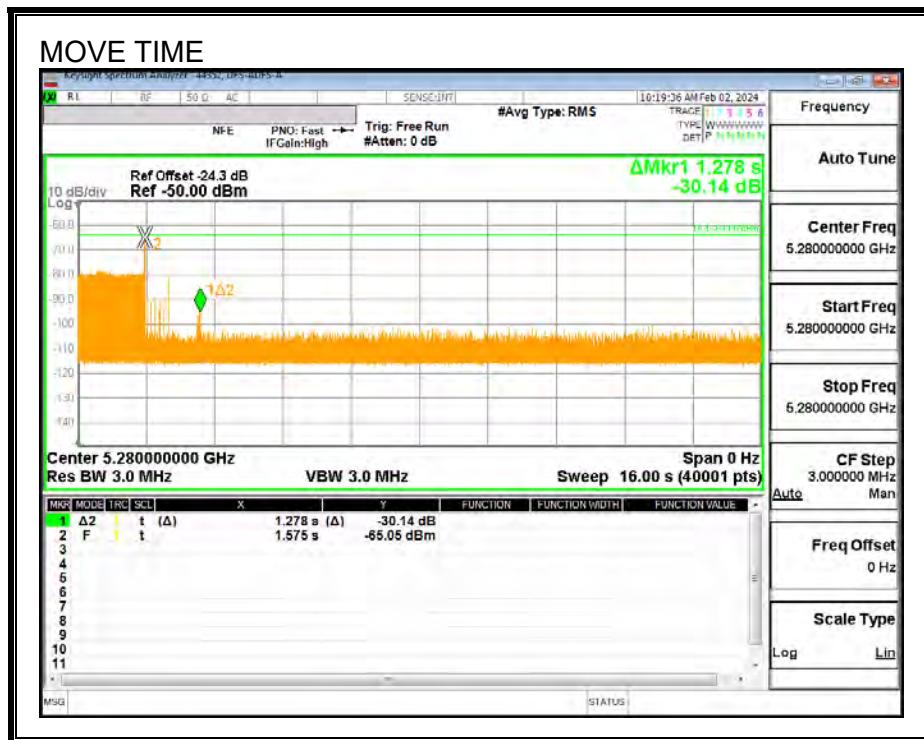
The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

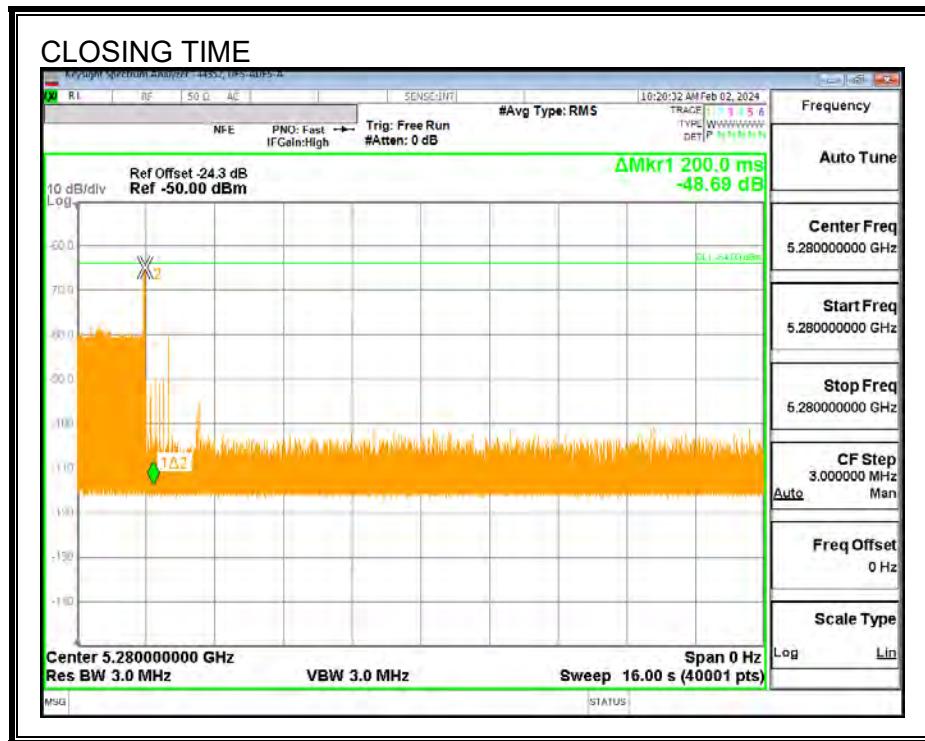
Channel Move Time (sec)	Limit (sec)
1.278	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
12.8	60

MOVE TIME

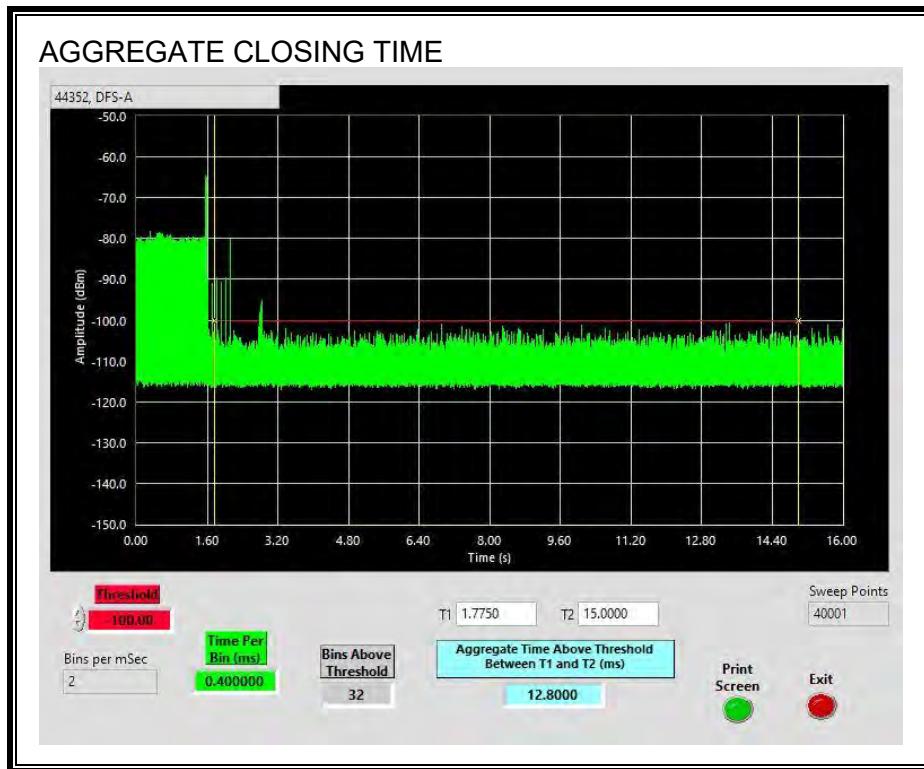


CHANNEL CLOSING TIME



AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

Only intermittent transmissions are observed during the aggregate monitoring period.



9.2.4. 26 dB BANDWIDTH + 99% BW(Bandwidth Shrinking)

LIMITS

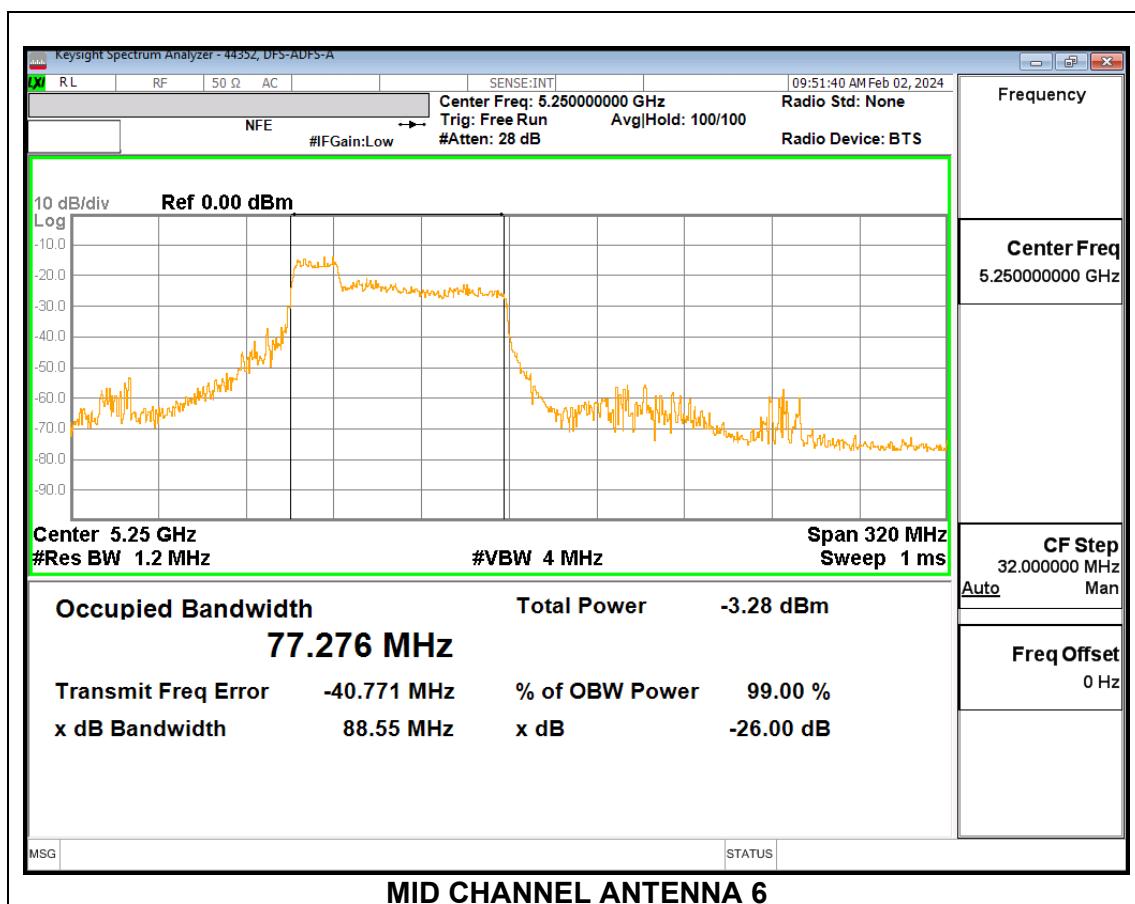
None; for reporting purposes only.

1TX Antenna 6 SISO MODE

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)
42	5210	88.55

Channel	Frequency (MHz)	99% Bandwidth Antenna 6 (MHz)
42	5210	77.276

MID CHANNEL



9.2.5. OUTPUT POWER AND PSD (Bandwidth Shrinking)

LIMITS

FCC §15.407

Band 5.15–5.25 GHz

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 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.

RSS-247

Band 5.15-5.25 GHz

The maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10}B$, dBm, whichever power is less. B is the 99% emission bandwidth in megahertz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

TEST PROCEDURE

The measurement method used for output power is KDB 789033 D02, Section E.3.b (Method PM-G) and for straddles channels KDB 789033 D02, Section E.2.b (Method SA-1) was used.

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

The power output was measured on the EUT antenna port using SMA cable with 10dB attenuator connected to a power meter via wideband power sensor. Gated average output power was read directly from power meter.

RESULTS

1TX Antenna 6 MODE (FCC+IC)

Test Engineer:	44352
Test Date:	2024-02-2

FCC

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Mid	5210	3.89	30.00	17.00

Duty Cycle CF (dB)	2.28	Included in Calculations of Corr'd PSD
--------------------	------	--

Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	17.43	17.43	30.00	-12.57

PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Mid	5210	2.695	4.98	17.00	-12.03

IC

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)	EIRP Power Limit (dBm)	Power Limit (dBm)	EIRP PSD Limit (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)
Mid	5210	77.276	3.89	23.00	19.11	10.00	6.11

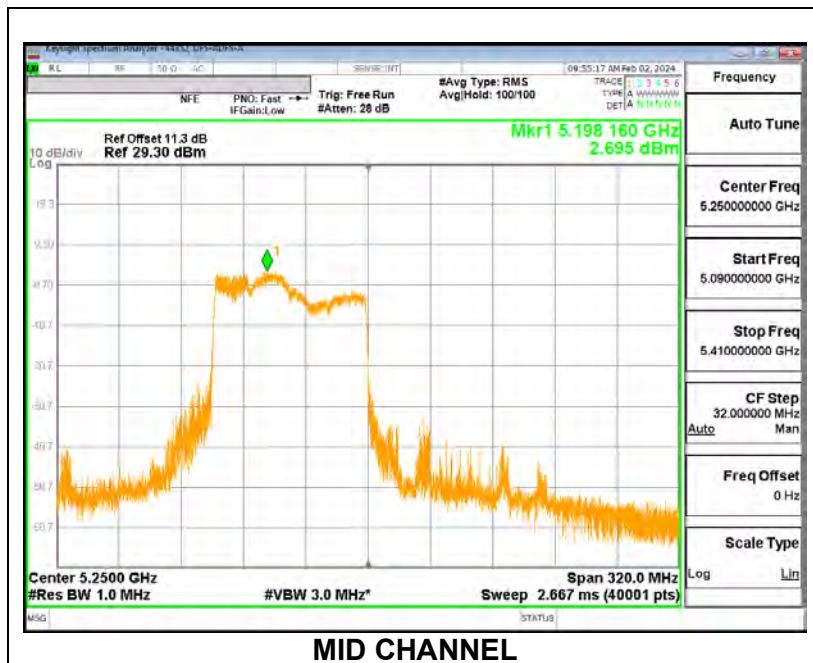
Duty Cycle CF (dB) 2.28 **Included in Calculations of Corr'd Power & PSD**

Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	17.43	17.43	19.11	-1.68

PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	2.70	4.98	6.11	-1.14



9.3. LOWER BAND RESULTS FOR 80 MHz BANDWIDTH (5260)

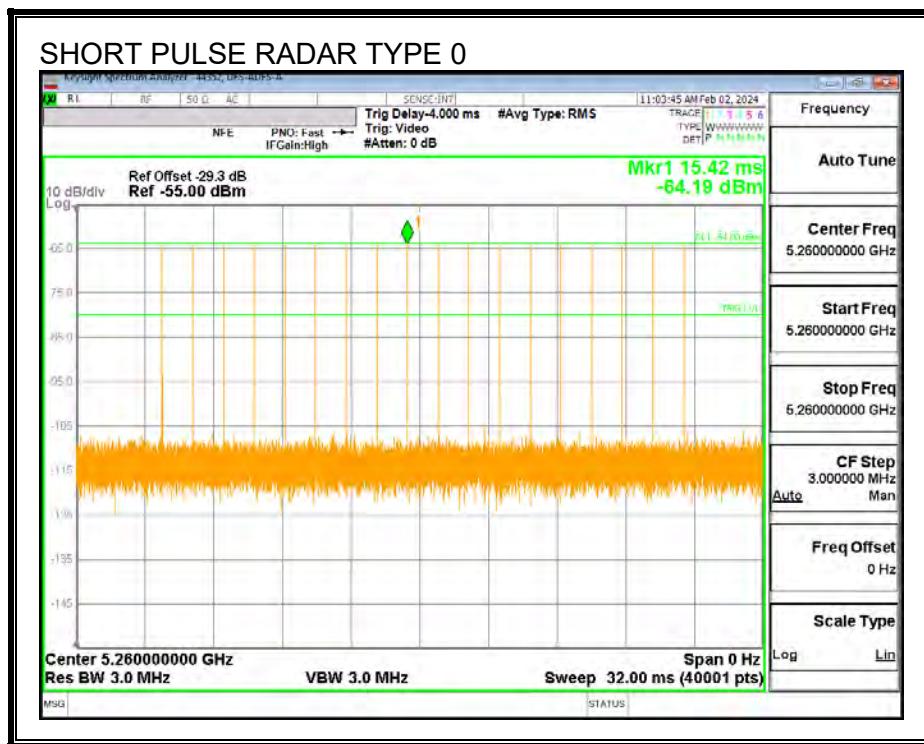
9.3.1. TEST CHANNEL

Tests were performed at a channel center frequency of 5290 MHz and 5310 MHz. The Radar is injected at 5260 MHz

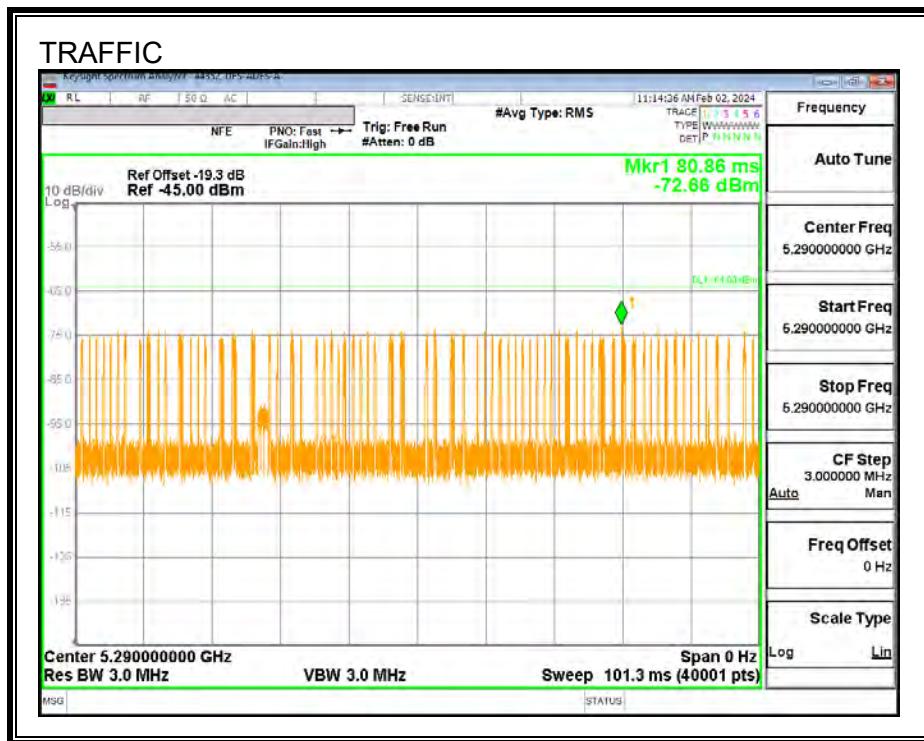
EUT bandwidth shrunk from 5290 80MHz Bandwidth to 5310 40MHz bandwidth

9.3.2. RADAR WAVEFORMS AND TRAFFIC

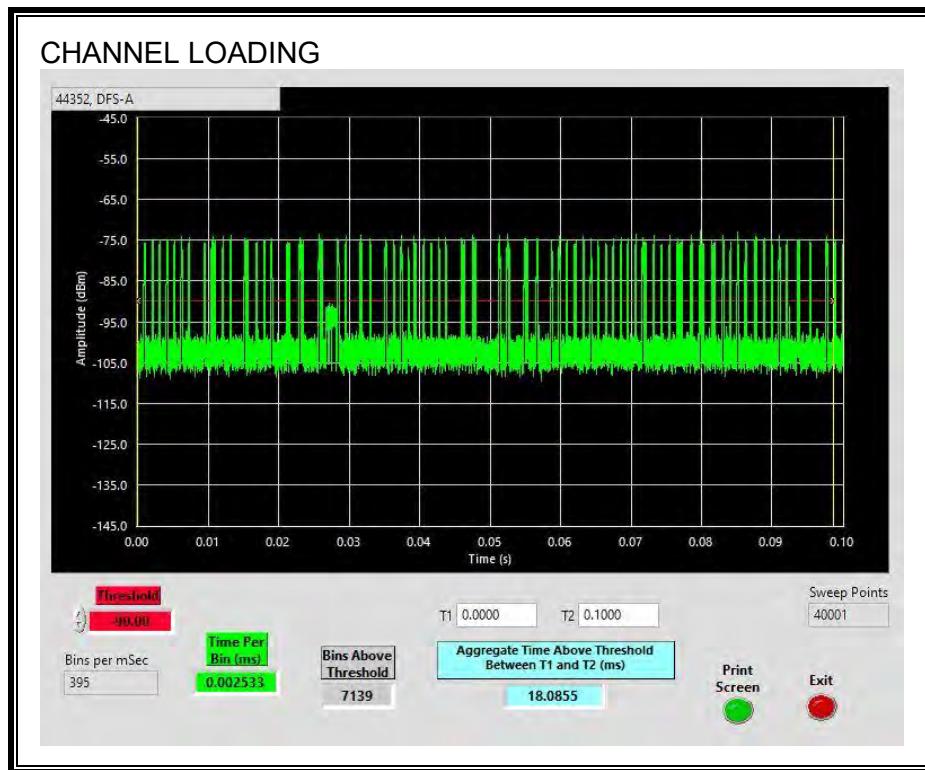
RADAR WAVEFORMS



TRAFFIC

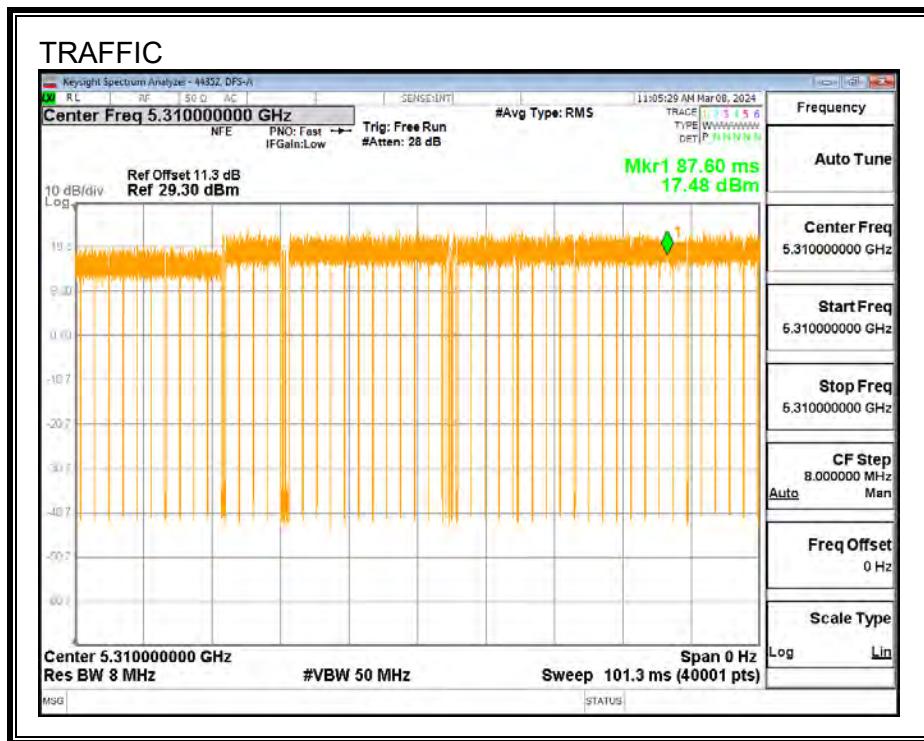


CHANNEL LOADING

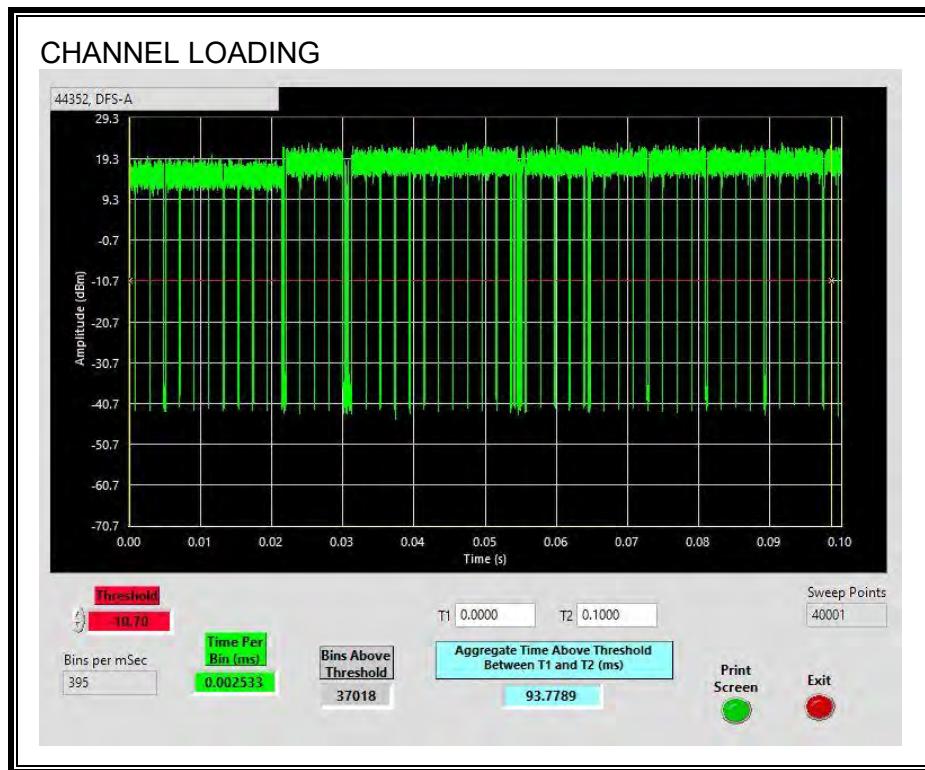


The level of traffic loading on the channel by the EUT is 18.086%

TRAFFIC (Bandwidth Shrinking)



CHANNEL LOADING (Bandwidth Shrinking)



Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
80 MHz	93.7789	100.000	0.938	93.78	0.28	0.011

9.3.3. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

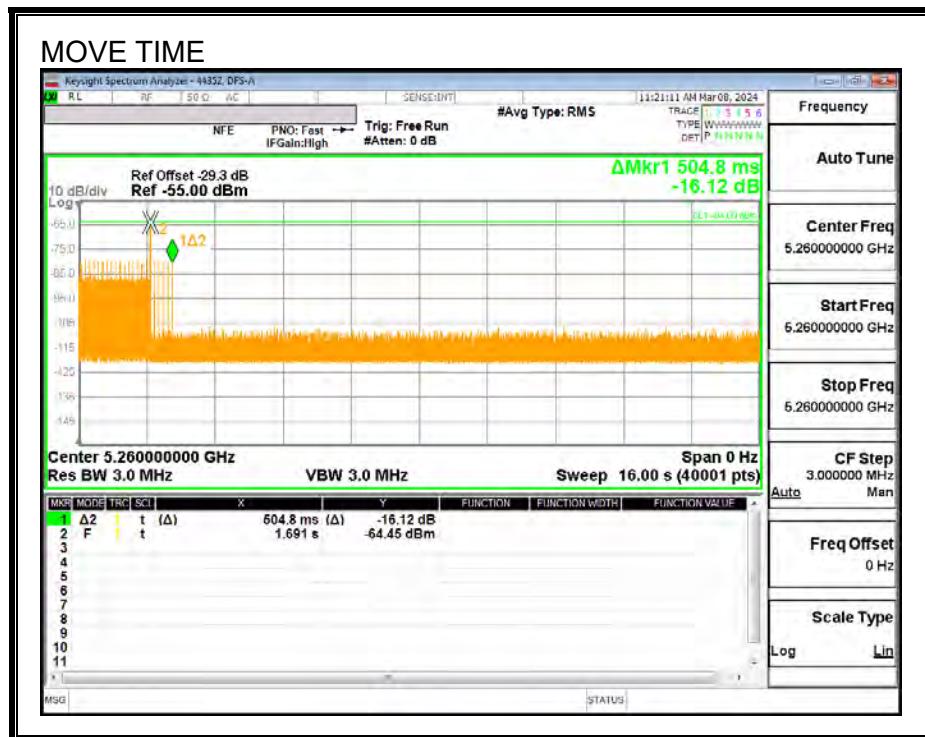
The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

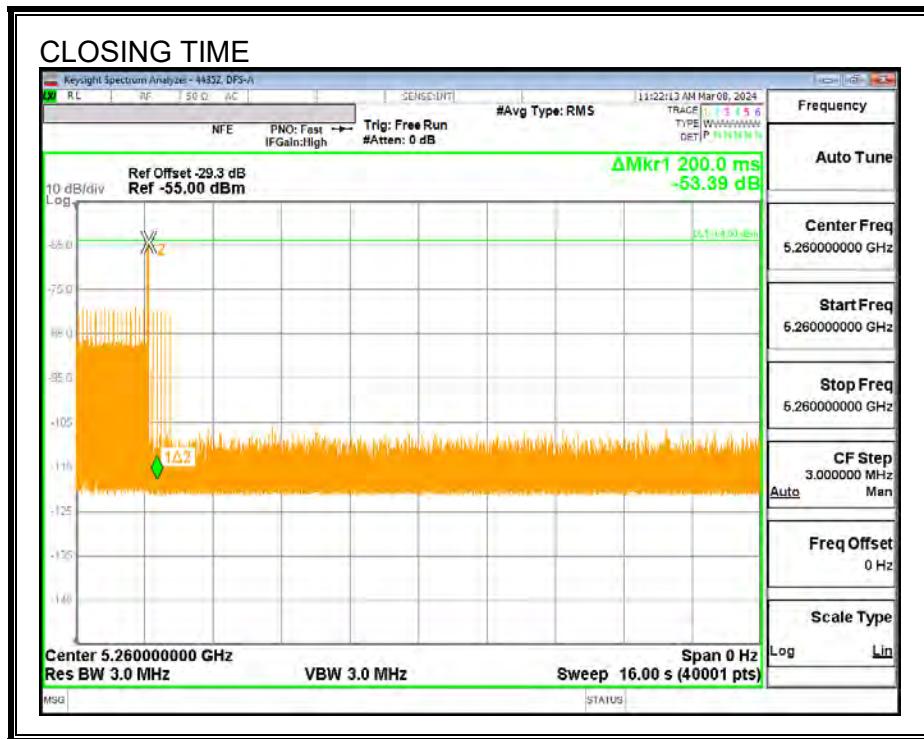
Channel Move Time (sec)	Limit (sec)
0.5048	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
6.4	60

MOVE TIME



CHANNEL CLOSING TIME



AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

Only intermittent transmissions are observed during the aggregate monitoring period.



9.3.4. 26 dB BANDWIDTH + 99% BW (Bandwidth Shrinking)

LIMITS

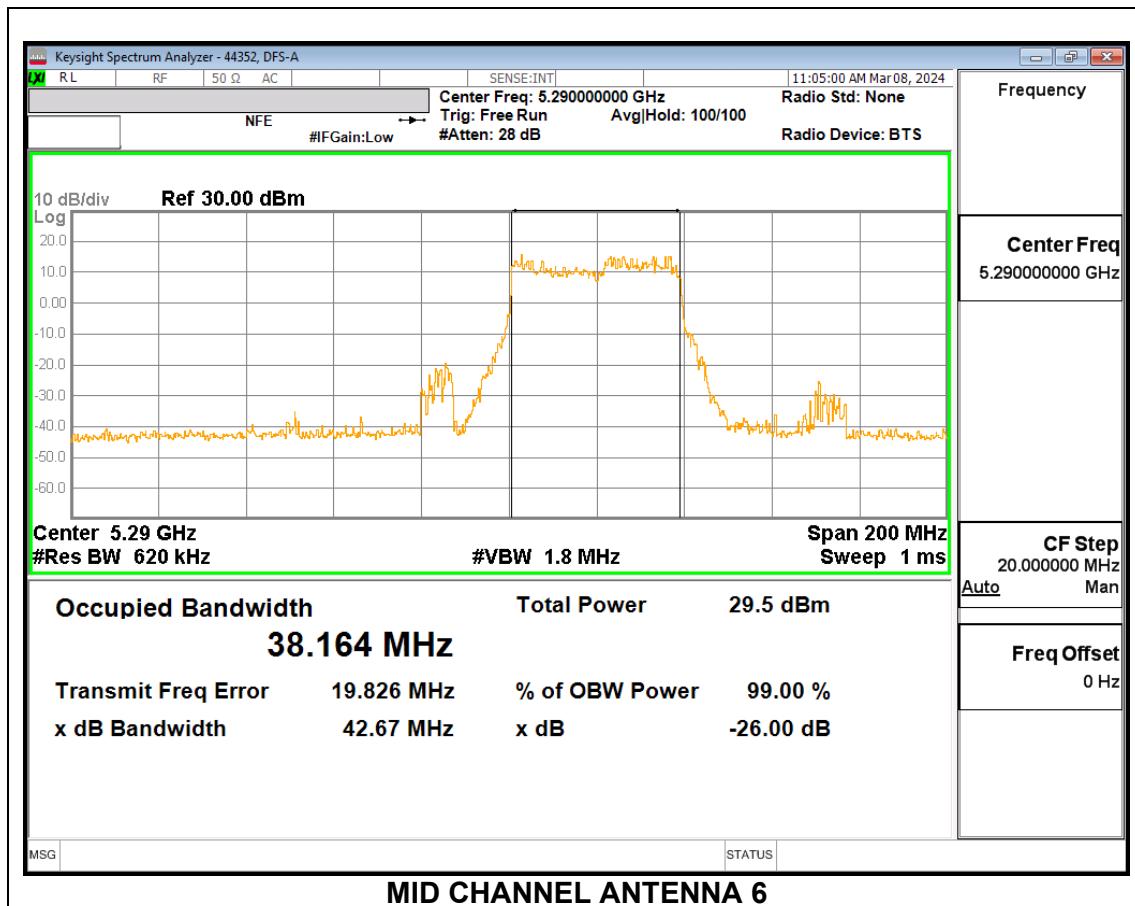
None; for reporting purposes only.

1TX Antenna 6 SISO MODE

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)
62	5310	42.67

Channel	Frequency (MHz)	99% Bandwidth Antenna 6 (MHz)
62	5310	38.164

MID CHANNEL



9.3.5. OUTPUT POWER AND PSD (Bandwidth Shrinking)

LIMITS

FCC §15.407

Bands 5.25-5.35 GHz and 5.47-5.725 GHz

The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. 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.

RSS-247

Band 5.25-5.35 GHz

The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log 10B$, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log 10B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

TEST PROCEDURE

The measurement method used for output power is KDB 789033 D02, Section E.3.b (Method PM-G) and for straddles channels KDB 789033 D02, Section E.2.b (Method SA-1) was used.

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

The power output was measured on the EUT antenna port using SMA cable with 10dB attenuator connected to a power meter via wideband power sensor. Gated average output power was read directly from power meter.

RESULTS

1TX Antenna 6 SISO MODE (FCC+IC)

Test Engineer:	44352
Test Date:	2024-03-08

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PPSSD (dBi)
Mid	5310	42.67	38.164	3.76	3.76

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSSD Limit (dBm)	IC PSD Limit (dBm)	PPSSD Limit (dBm)
Mid	5310	24.00	24.00	30.00	24.00	11.00	11.00	11.00

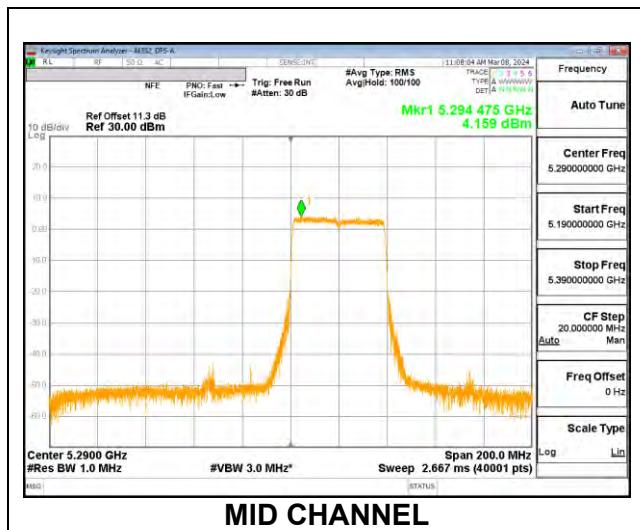
Duty Cycle CF (dB)	0.28	Included in Calculations of Corr'd PPSSD
--------------------	------	--

Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5310	19.23	19.23	24.00	-4.77

PPSSD Results

Channel	Frequency (MHz)	Meas PPSSD (dBm/ 1MHz)	Total Corr'd PPSSD (dBm/ 1MHz)	PPSSD Limit (dBm/ 1MHz)	PPSSD Margin (dB)
Mid	5310	4.159	4.44	11.00	-6.56



9.4. LOWER BAND RESULTS FOR 80 MHz BANDWIDTH (5280)

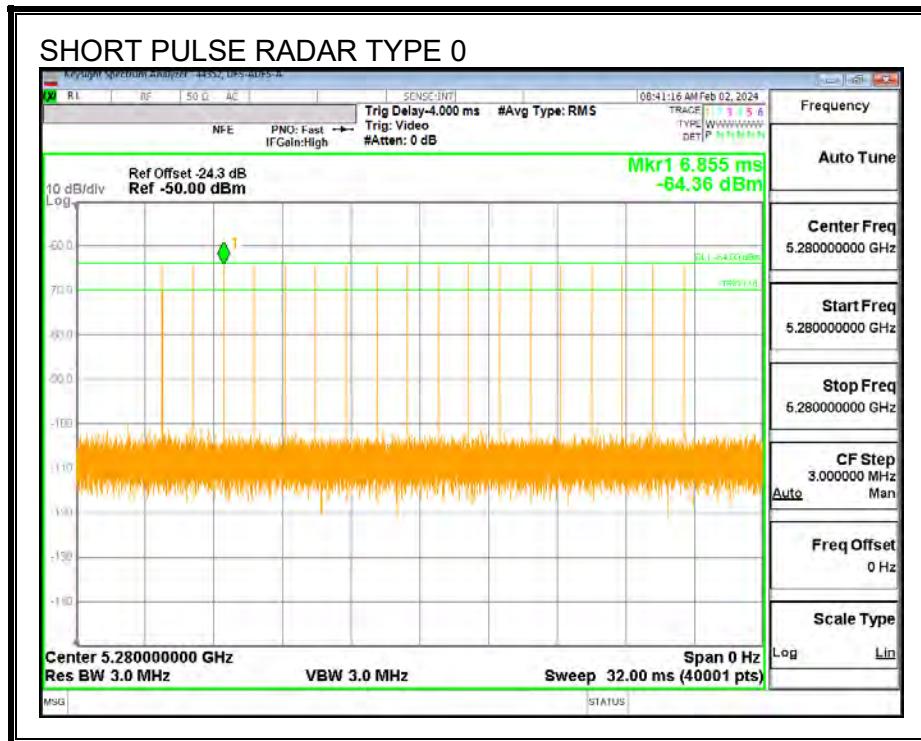
9.4.1. TEST CHANNEL

Tests were performed at a channel center frequency of 5290 MHz and 5310 MHz. The Radar is injected at 5280 MHz

EUT bandwidth shrunk from 5290 80MHz Bandwidth to 5310 40MHz bandwidth

9.4.2. RADAR WAVEFORMS AND TRAFFIC

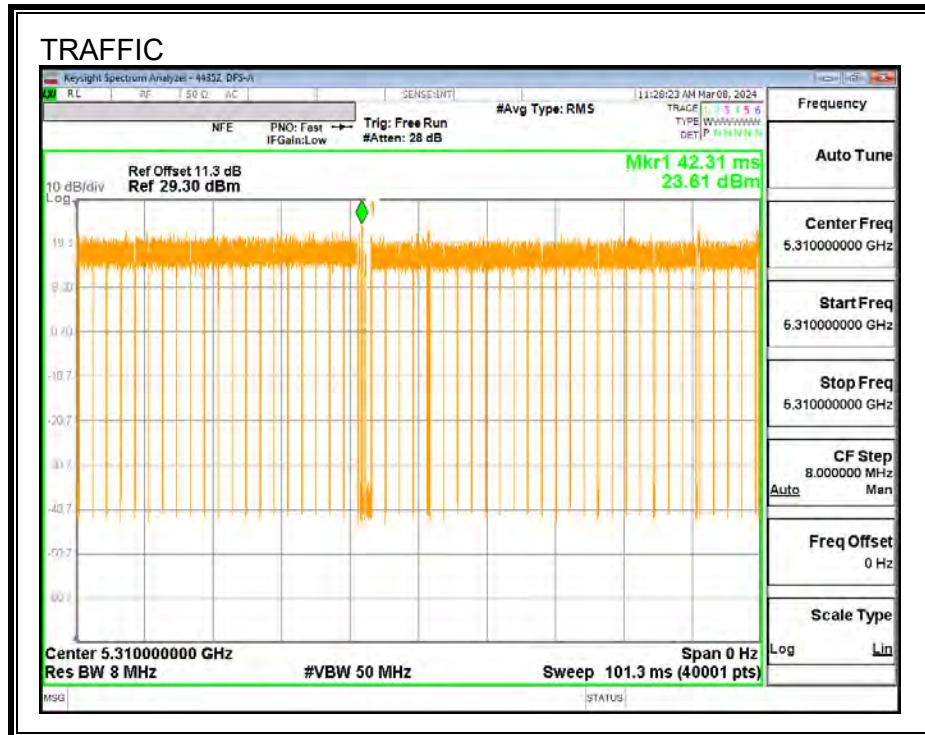
RADAR WAVEFORMS



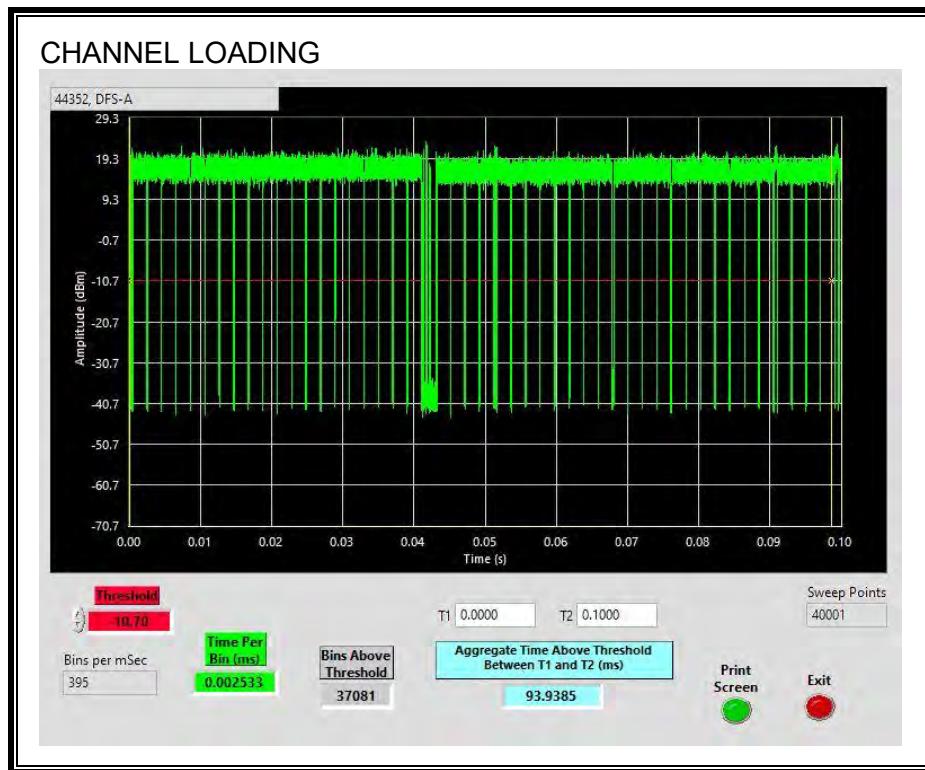
TRAFFIC & CHANNEL LOADING

Refer to section 9.3.2

TRAFFIC (Bandwidth Shrinking)



CHANNEL LOADING



Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
40 MHz	93.9385	100.000	0.939	93.94	0.27	0.011

9.4.3. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

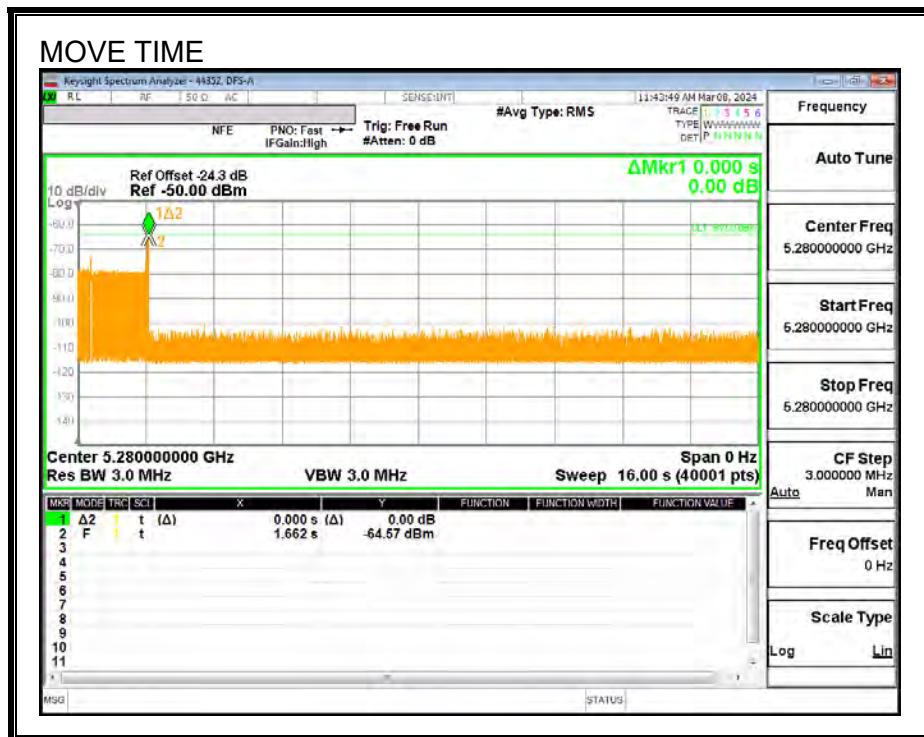
The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

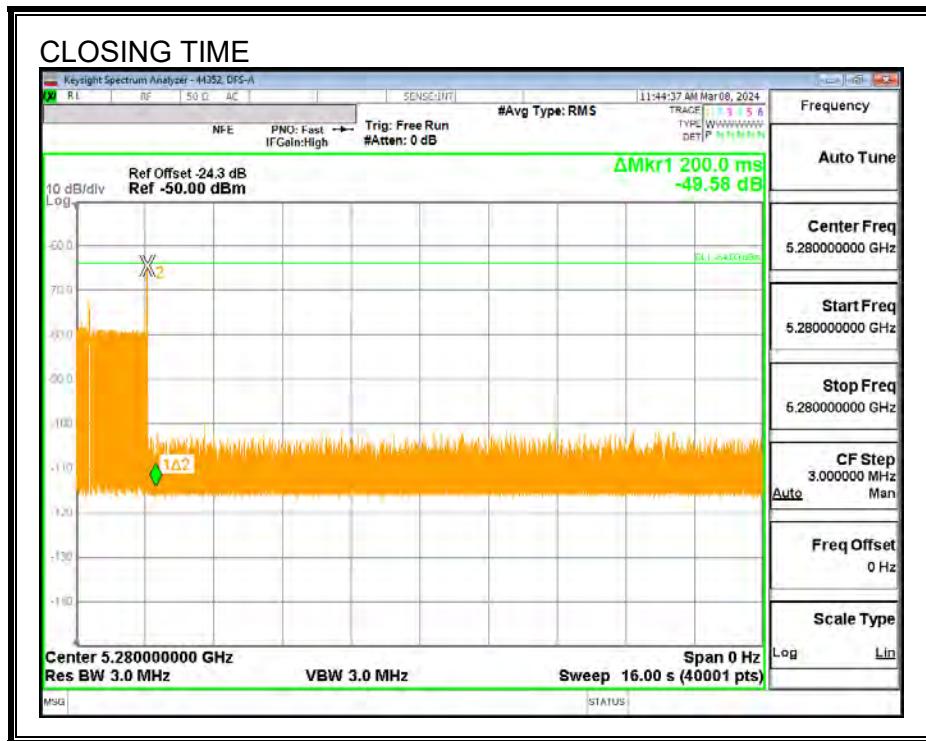
Channel Move Time (sec)	Limit (sec)
0	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
0	60

MOVE TIME

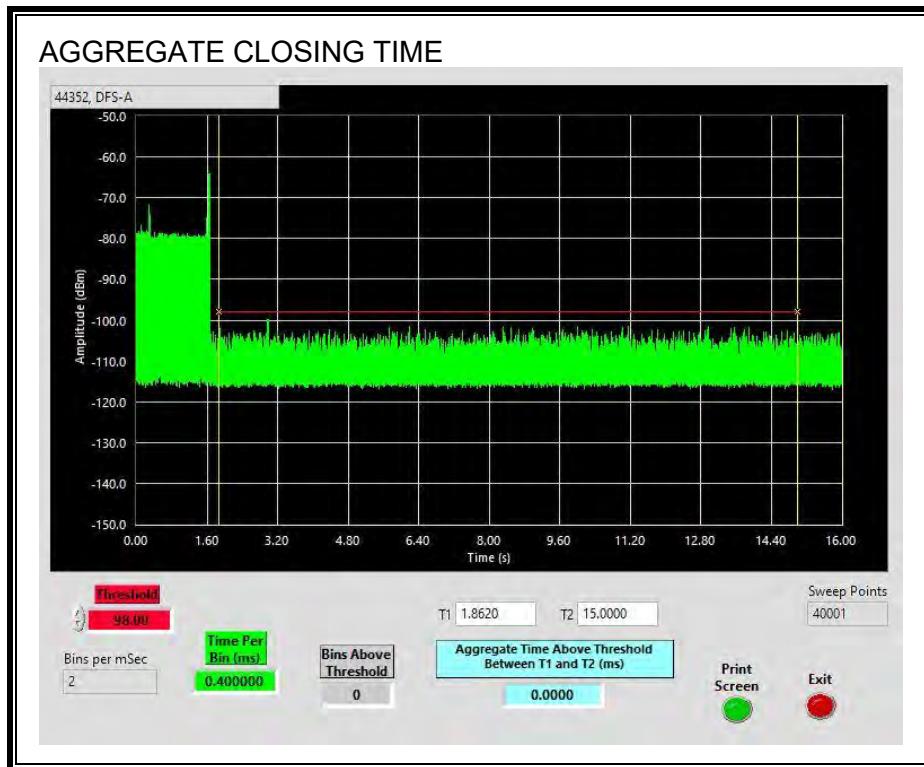


CHANNEL CLOSING TIME



AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

Only intermittent transmissions are observed during the aggregate monitoring period.



9.4.4. 26 dB BANDWIDTH + 99% BW(Bandwidth Shrinking)

LIMITS

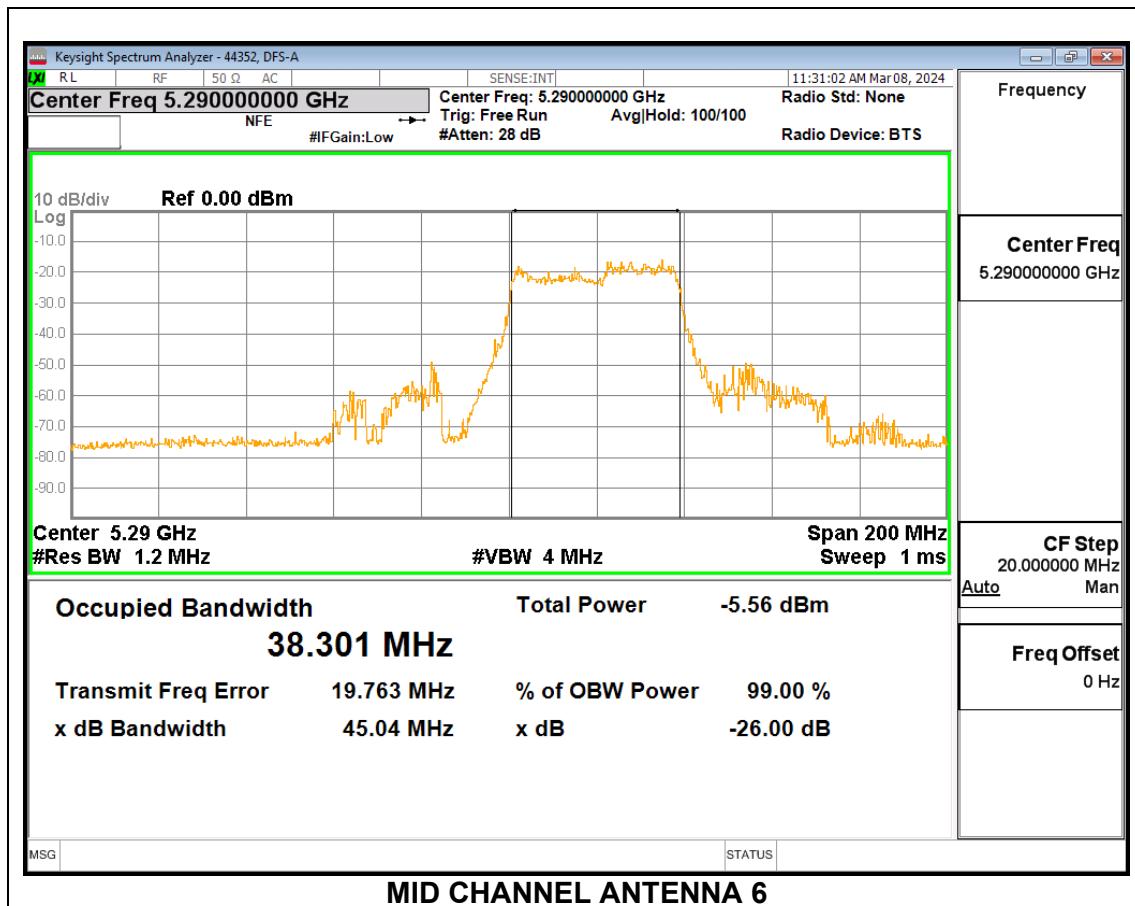
None; for reporting purposes only.

1TX Antenna 6 SISO MODE

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)
62	5310	45.04

Channel	Frequency (MHz)	99% Bandwidth Antenna 6 (MHz)
62	5310	38.301

MID CHANNEL



9.4.5. OUTPUT POWER AND PSD (Bandwidth Shrinking)

LIMITS

FCC §15.407

Bands 5.25-5.35 GHz and 5.47-5.725 GHz

The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. 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.

RSS-247

Band 5.25-5.35 GHz

The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log 10B$, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log 10B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

TEST PROCEDURE

The measurement method used for output power is KDB 789033 D02, Section E.3.b (Method PM-G) and for straddles channels KDB 789033 D02, Section E.2.b (Method SA-1) was used.

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

The power output was measured on the EUT antenna port using SMA cable with 10dB attenuator connected to a power meter via wideband power sensor. Gated average output power was read directly from power meter.

RESULTS

1TX Antenna 6 MODE (FCC+IC)

Test Engineer:	44352
Test Date:	2024-03-08

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PPSSD (dBi)
62	5310	45.04	38.301	3.76	3.76

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSSD Limit (dBm)	IC PSD Limit (dBm)	PPSSD Limit (dBm)
62	5310	24.00	24.00	30.00	24.00	11.00	11.00	11.00

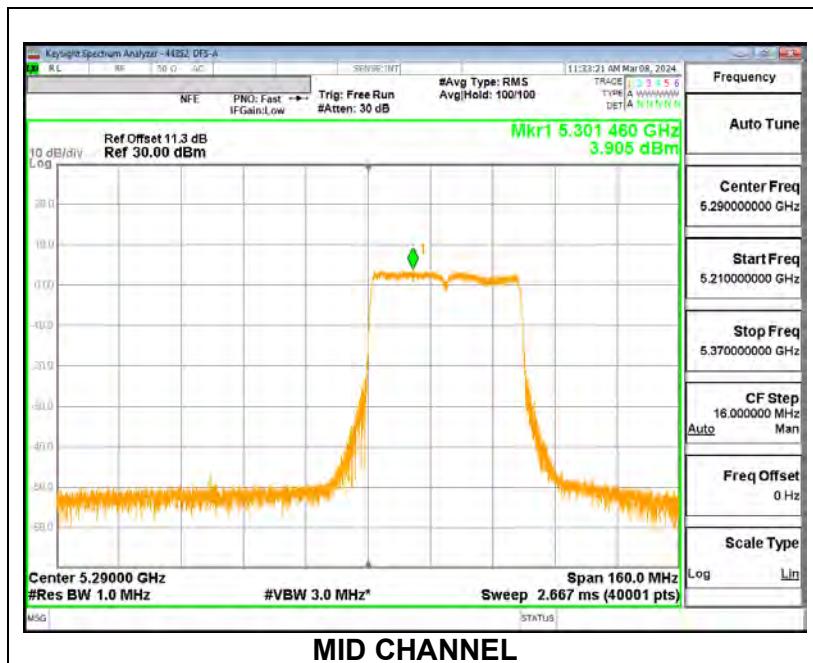
Duty Cycle CF (dB)	0.27	Included in Calculations of Corr'd PPSSD
--------------------	------	--

Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
62	5310	18.52	18.52	24.00	-5.48

PPSSD Results

Channel	Frequency (MHz)	Meas PPSSD (dBm/ 1MHz)	Total Corr'd PPSSD (dBm/ 1MHz)	PPSSD Limit (dBm/ 1MHz)	PPSSD Margin (dB)
62	5310	3.905	4.18	11.00	-6.83



9.5. UPPER BAND RESULTS FOR 240 MHz BANDWIDTH (5500)

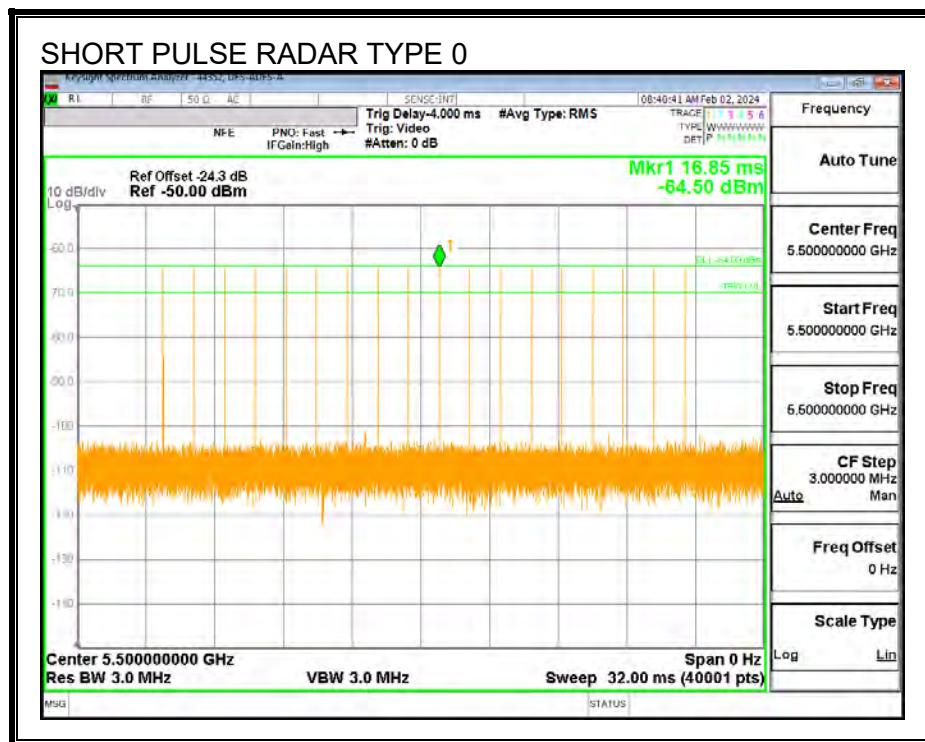
9.5.1. TEST CHANNEL

All tests were performed at a channel center frequency of 5610 MHz.
The Radar is injected at 5500 MHz

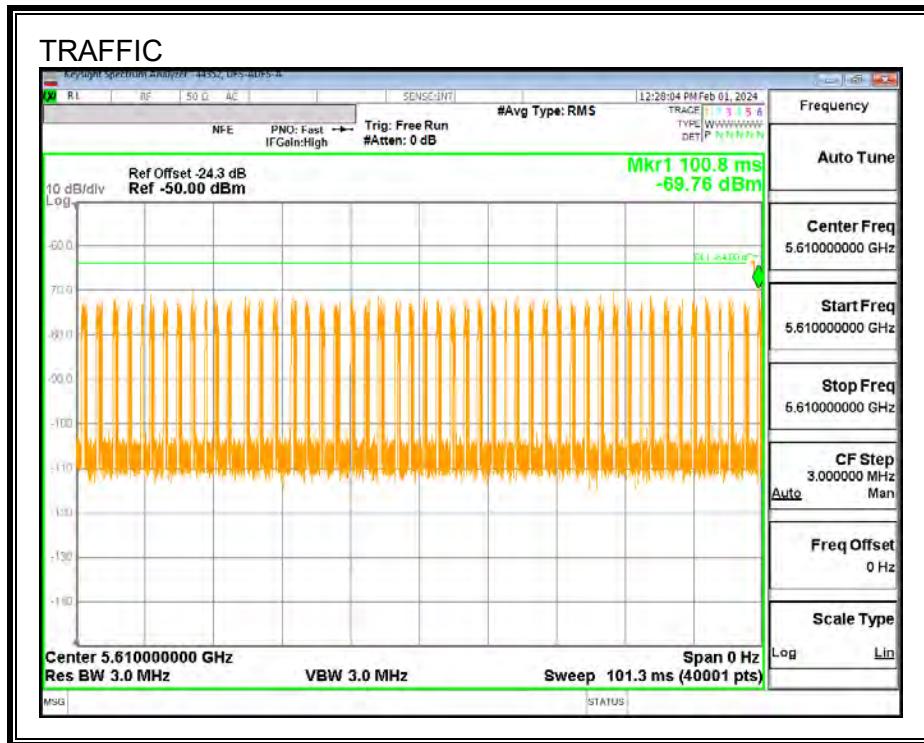
EUT bandwidth shrunk from 5610 240 MHz Bandwidth to 5610 80MHz bandwidth

9.5.2. RADAR WAVEFORMS AND TRAFFIC

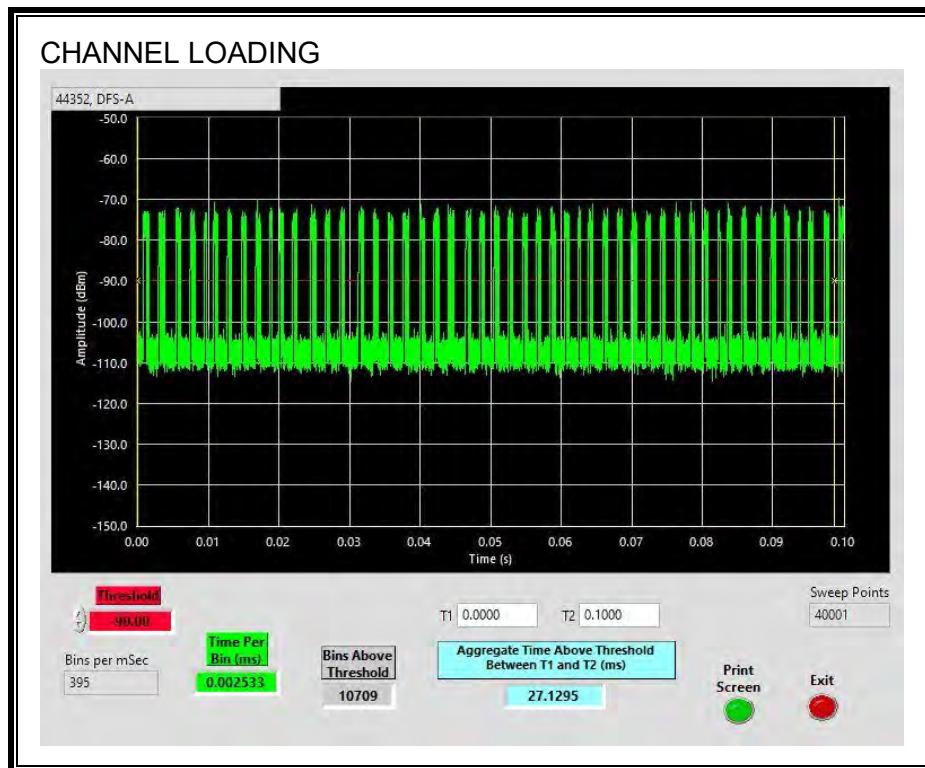
RADAR WAVEFORMS



TRAFFIC (UnBandwidth Shrinking)



CHANNEL LOADING

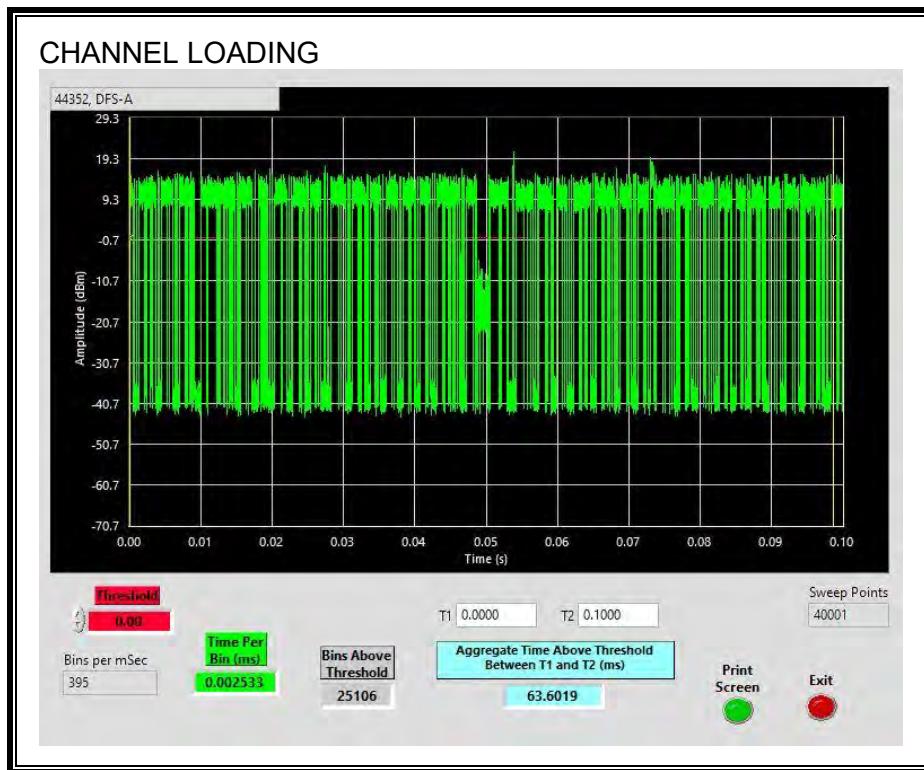


The level of traffic loading on the channel by the EUT is 27.1295%

TRAFFIC (Bandwidth Shrinking)



CHANNEL LOADING



Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
80 MHz	63.6019	100.000	0.636	63.60	1.97	0.016

9.5.3. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

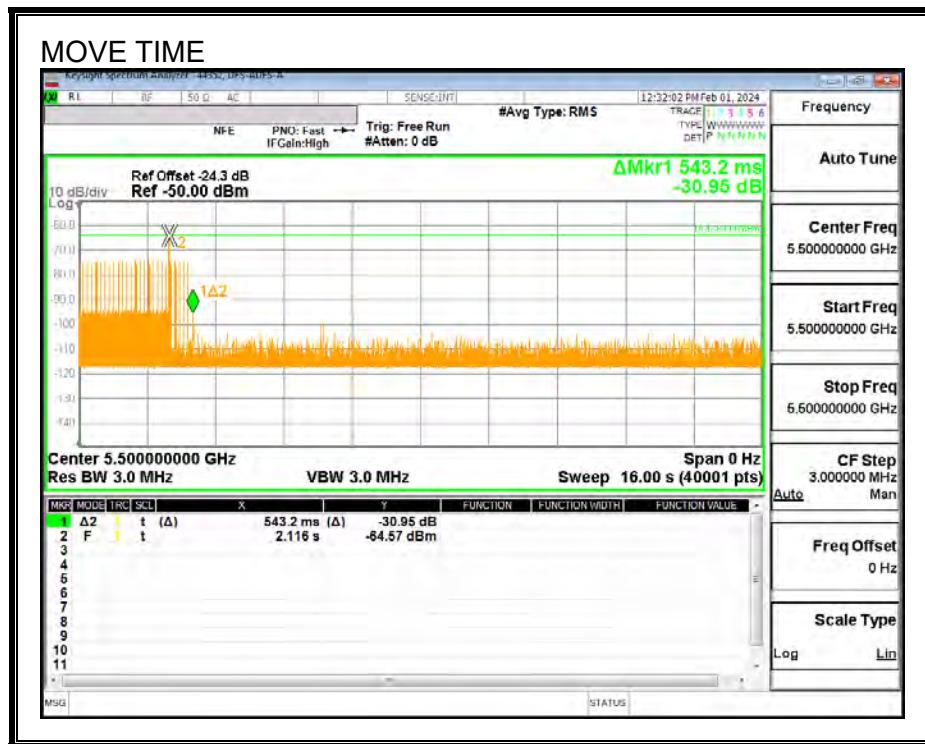
The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

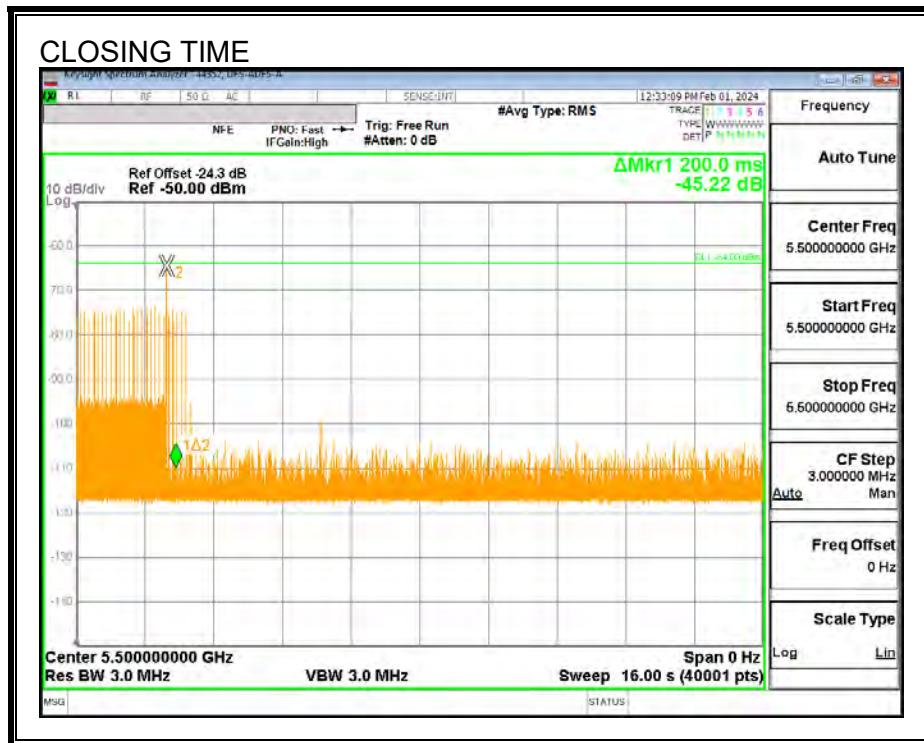
Channel Move Time (sec)	Limit (sec)
0.5432	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
6.8	60

MOVE TIME



CHANNEL CLOSING TIME



AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

Only intermittent transmissions are observed during the aggregate monitoring period.



9.5.4. 26 dB & 99% BANDWIDTH (Bandwidth Shrinking)

LIMITS

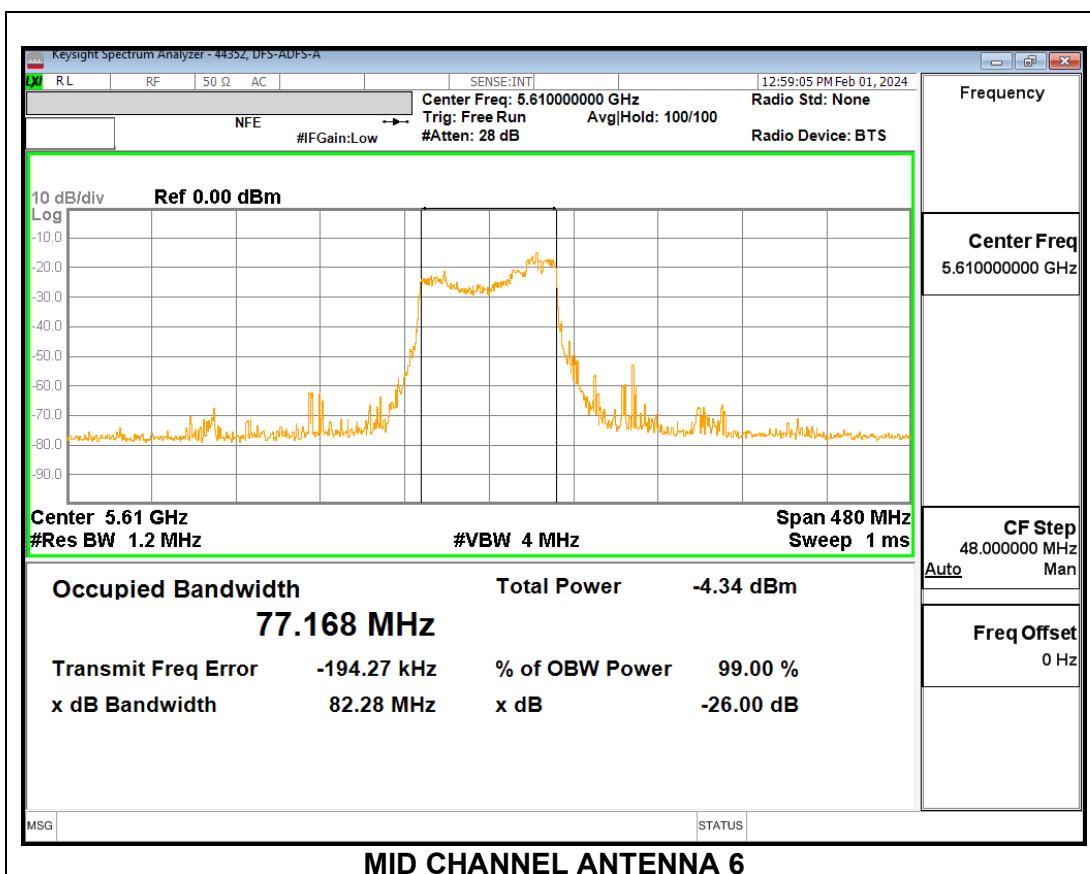
None; for reporting purposes only.

1TX Antenna 6 SISO MODE

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)
Mid	5610	82.28

Channel	Frequency (MHz)	99% Bandwidth Antenna 6 (MHz)
Mid	5610	77.17

MID CHANNEL



9.5.5. OUTPUT POWER AND PSD (Bandwidth Shrinking)

LIMITS

FCC §15.407

Bands 5.25-5.35 GHz and 5.47-5.725 GHz

The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. 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.

RSS-247

Bands 5.47-5.6 GHz and 5.65-5.725 GHz

The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log 10B$, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log 10B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

TEST PROCEDURE

The measurement method used for output power is KDB 789033 D02, Section E.3.b (Method PM-G) and for straddles channels KDB 789033 D02, Section E.2.b (Method SA-1) was used.

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

The power output was measured on the EUT antenna port using SMA cable with 10dB attenuator connected to a power meter via wideband power sensor. Gated average output power was read directly from power meter.

RESULTS

1TX Antenna 6 SISO MODE: (FCC+IC)

Test Engineer:	44352
Test Date:	2024-02-01

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW	Min 99% BW	Directional Gain (dBi)
122	5610	82.28	77.17	3.59

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm/ 1MHz)	ISED PSD Limit (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)
122	5610	24.00	24.00	30.00	24.00	11.00	11.00	11.00

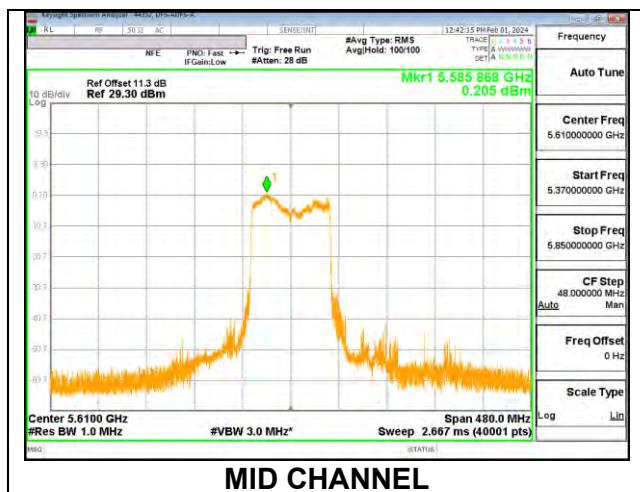
Duty Cycle CF (dB)	1.97	Included in Calculations of Corr'd PSD
--------------------	------	--

Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
122	5610	18.73	18.73	24.00	-5.27

PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
122	5610	0.205	2.175	11.00	-8.83



9.6. UPPER BAND RESULTS FOR 240 MHz BANDWIDTH (5520)

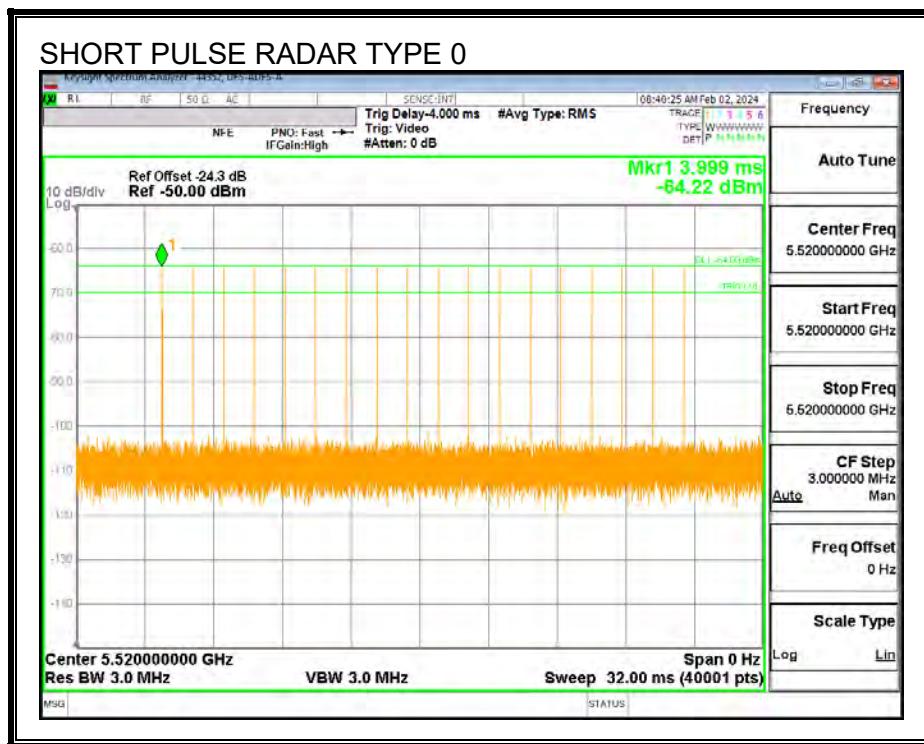
9.6.1. TEST CHANNEL

All tests were performed at a channel center frequency of 5610 MHz.
The Radar is injected at 5520 MHz

EUT bandwidth shrunk from 5610 240 MHz Bandwidth to 5610 80MHz bandwidth

9.6.2. RADAR WAVEFORMS AND TRAFFIC

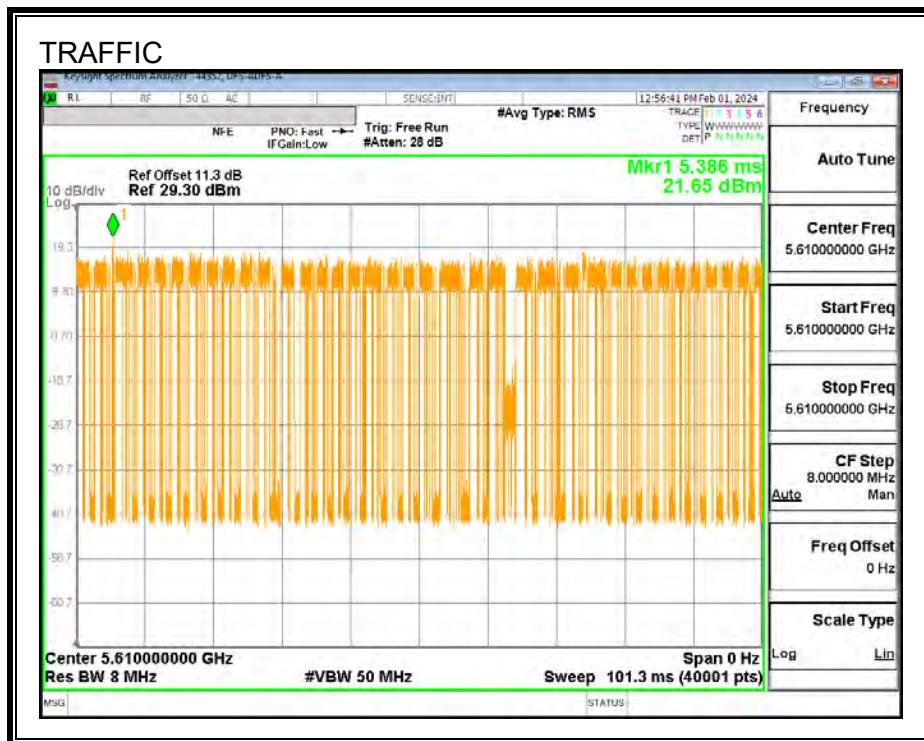
RADAR WAVEFORMS



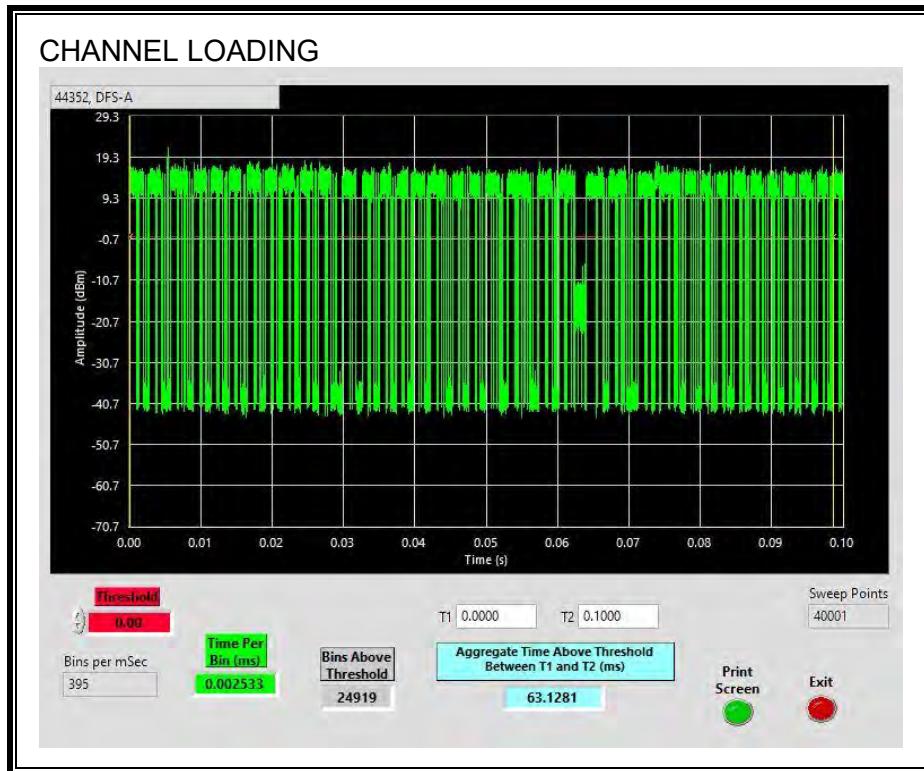
TRAFFIC & CHANNEL LOADING

Refer to section 9.5.2

TRAFFIC (Bandwidth Shrinking)



CHANNEL LOADING (Bandwidth Shrinking)



Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
80 MHz	63.6019	100.000	0.636	63.60	1.97	0.016

9.6.3. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

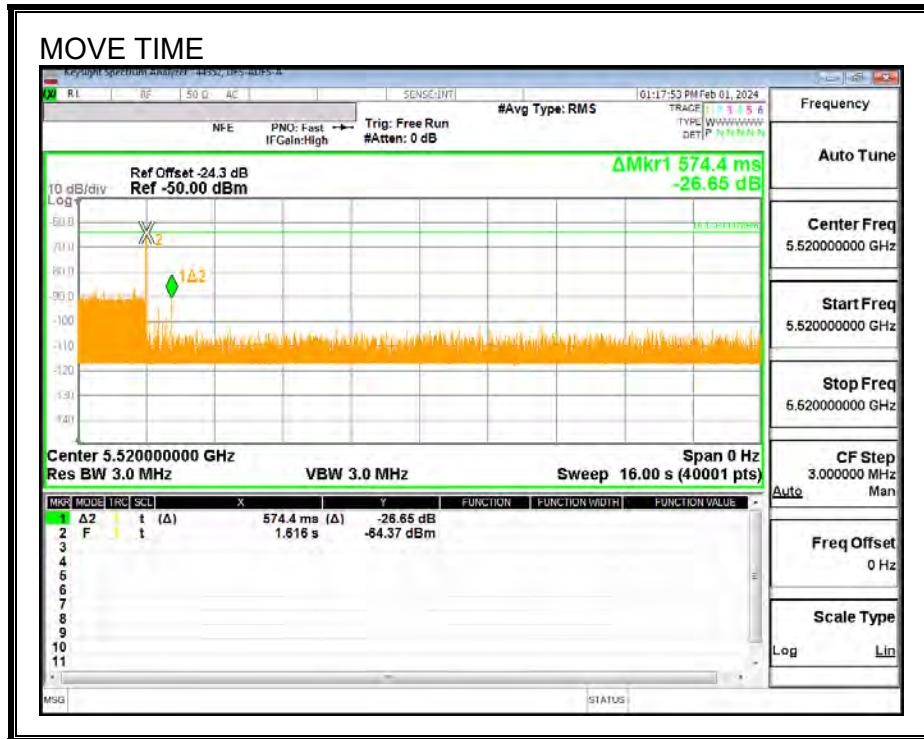
The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

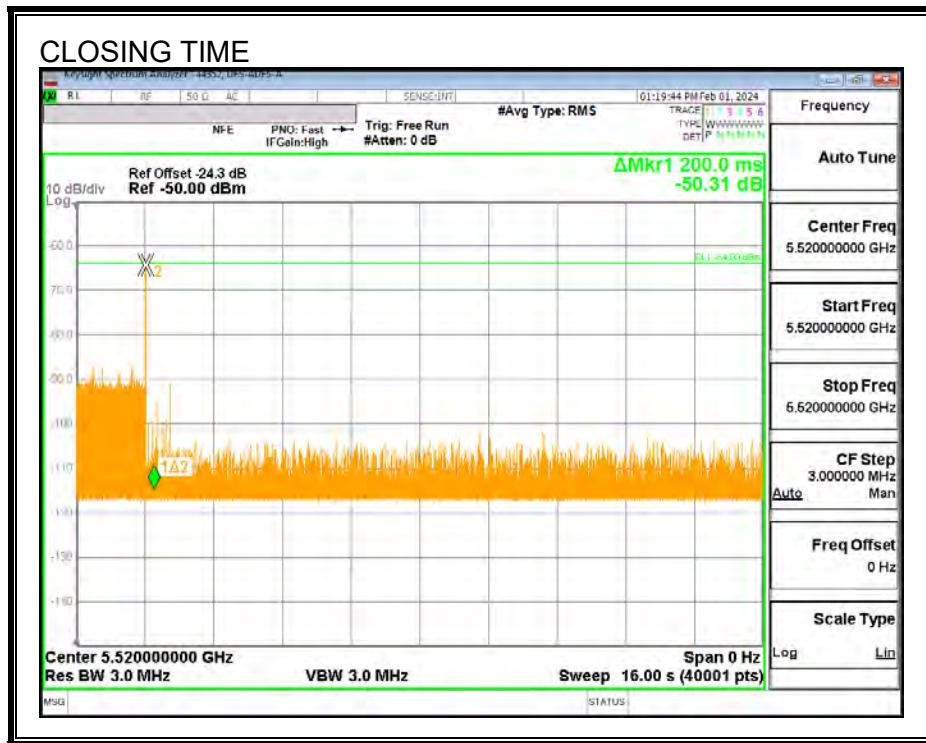
Channel Move Time (sec)	Limit (sec)
0.5744	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
6	60

MOVE TIME

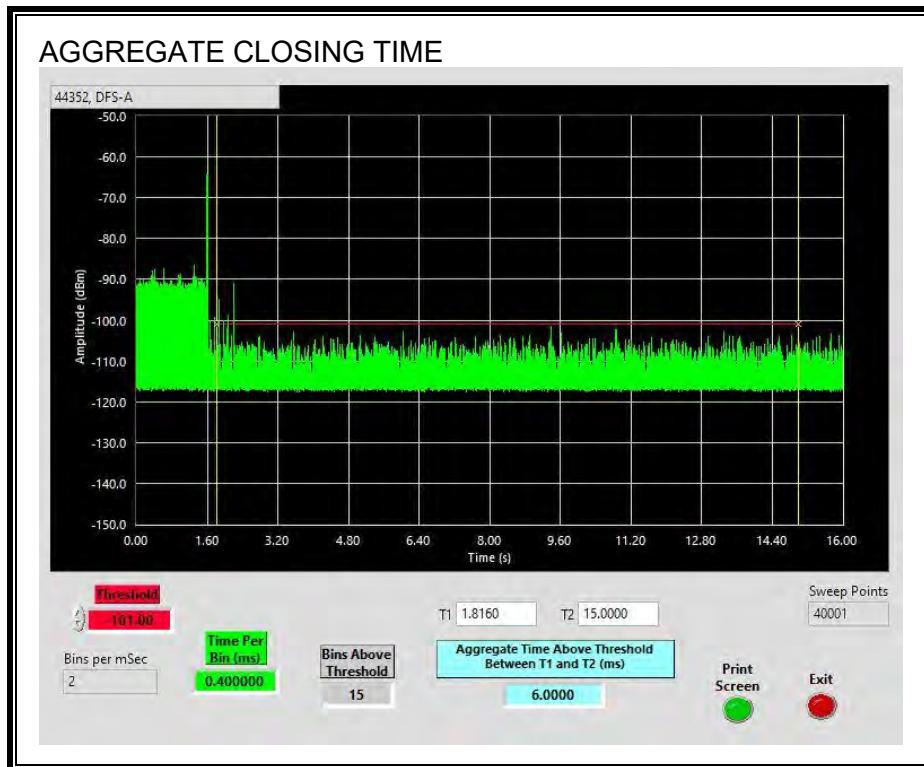


CHANNEL CLOSING TIME



AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

Only intermittent transmissions are observed during the aggregate monitoring period.



9.6.4. 26 dB & 99% BANDWIDTH (Bandwidth Shrinking)

LIMITS

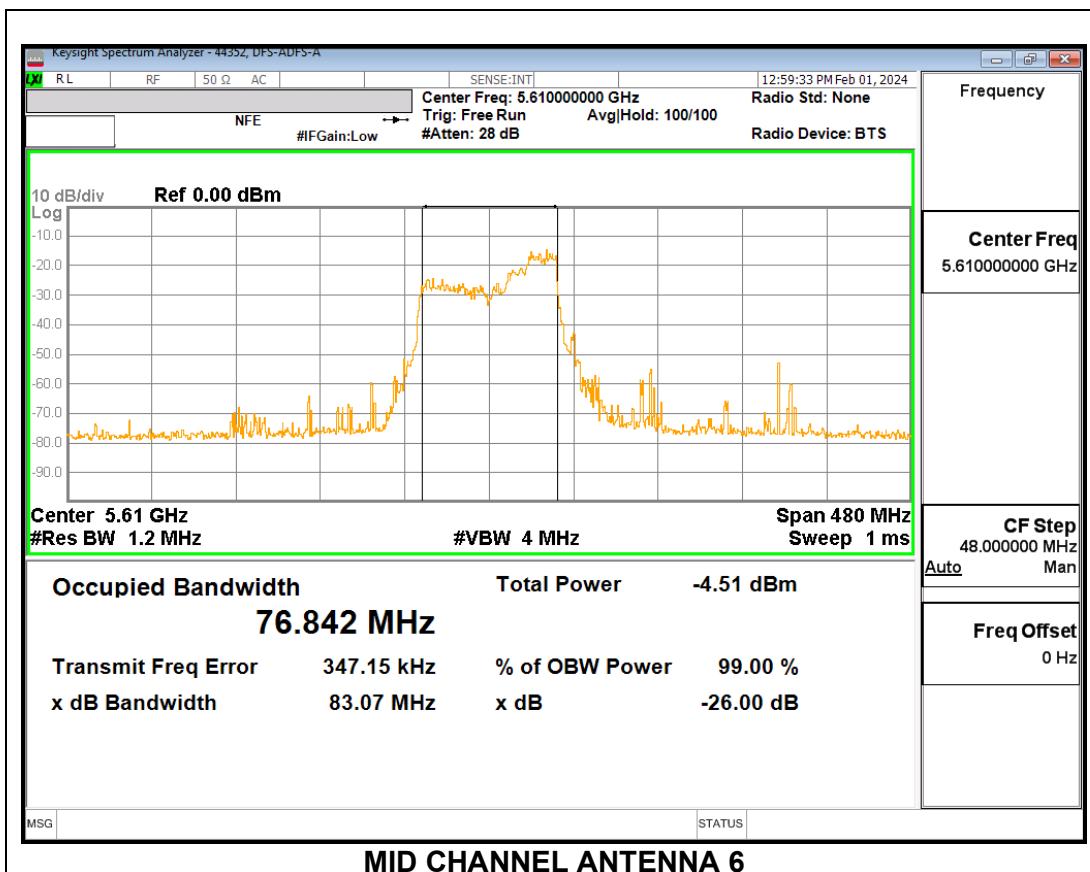
None; for reporting purposes only.

1TX Antenna 6 SISO MODE

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)
Mid	5610	83.07

Channel	Frequency (MHz)	99% Bandwidth Antenna 6 (MHz)
Mid	5610	76.84

MID CHANNEL



9.6.5. OUTPUT POWER AND PSD (Bandwidth Shrinking)

LIMITS

FCC §15.407

Bands 5.25-5.35 GHz and 5.47-5.725 GHz

The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. 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.

RSS-247

Band 5.25-5.35 GHz

The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log 10B$, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log 10B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

Bands 5.47-5.6 GHz and 5.65-5.725 GHz

The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log 10B$, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log 10B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

TEST PROCEDURE

The measurement method used for output power is KDB 789033 D02, Section E.3.b (Method PM-G) and for straddles channels KDB 789033 D02, Section E.2.b (Method SA-1) was used.

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

The power output was measured on the EUT antenna port using SMA cable with 10dB attenuator connected to a power meter via wideband power sensor. Gated average output power was read directly from power meter.

RESULTS

1TX Antenna 6 SISO MODE: (FCC+IC)

Test Engineer:	44352
Test Date:	2024-02-01

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
122	5610	83.07	76.842	3.59

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm/ 1MHz)	ISED PSD Limit (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)
122	5610	24.00	24.00	30.00	24.00	11.00	11.00	11.00

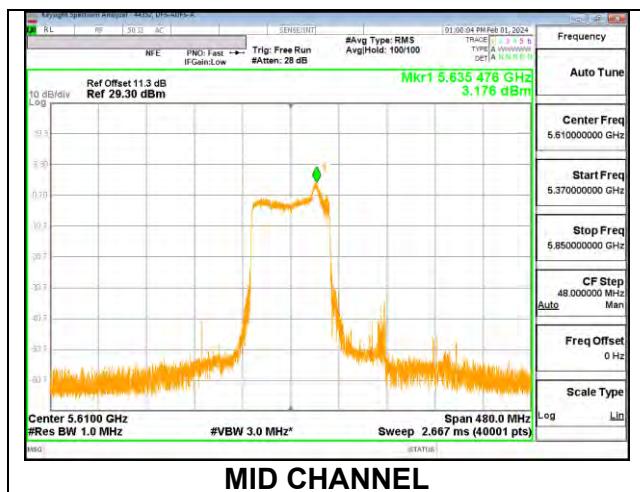
Duty Cycle CF (dB)	1.97	Included in Calculations of Corr'd PSD
--------------------	------	--

Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
122	5610	18.62	18.62	24.00	-5.38

PSD Results

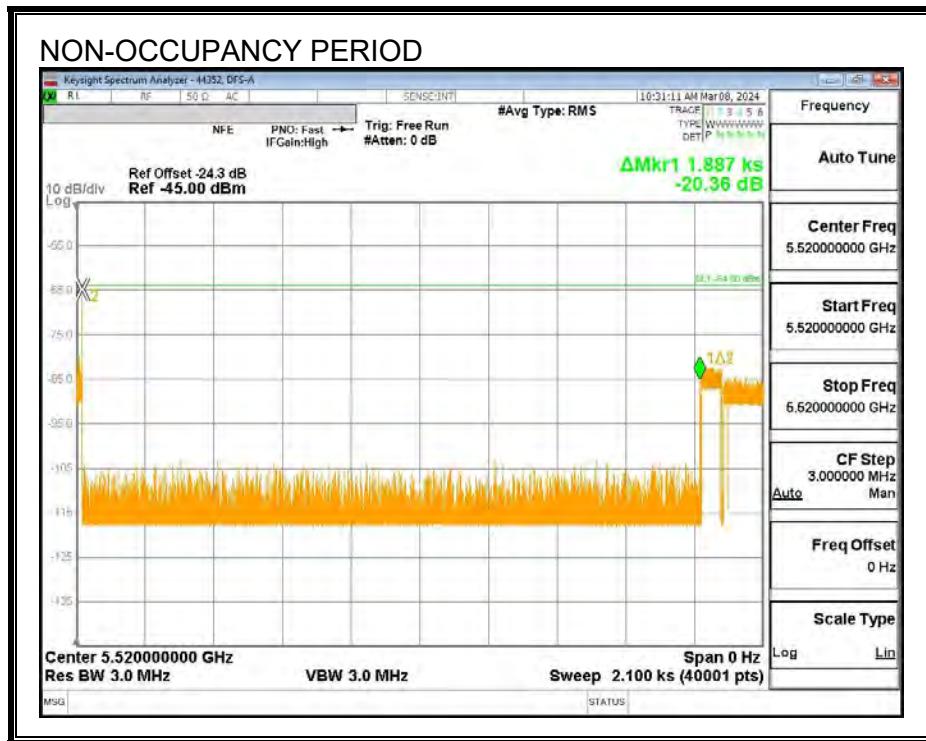
Channel	Frequency (MHz)	Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
122	5610	3.176	5.146	11.00	-5.85



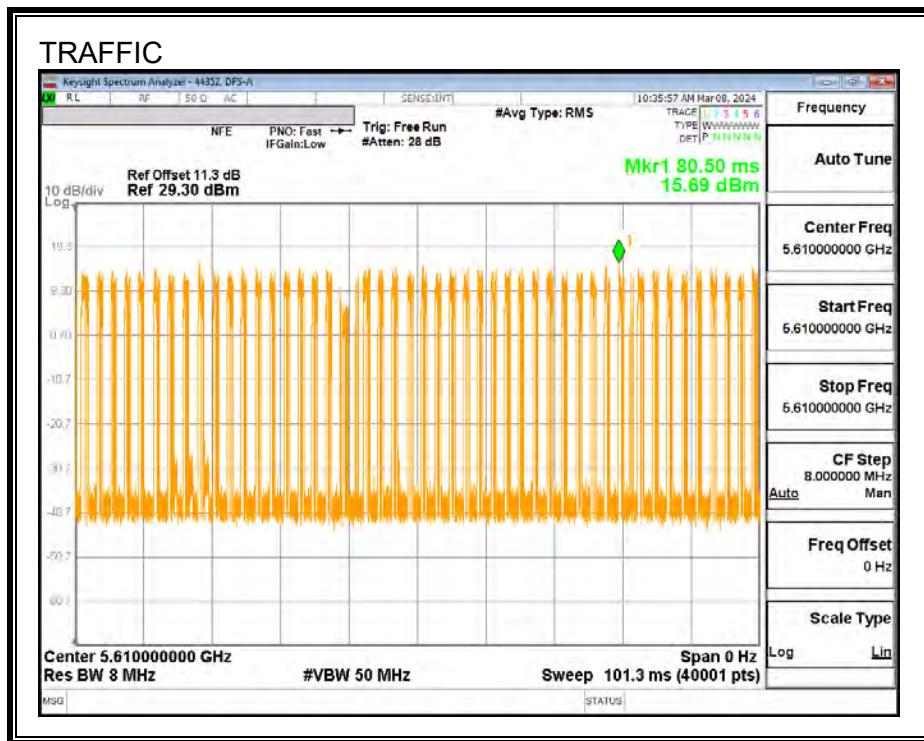
9.6.6. NON-OCCUPANCY/RECOVERY PERIOD

RESULTS

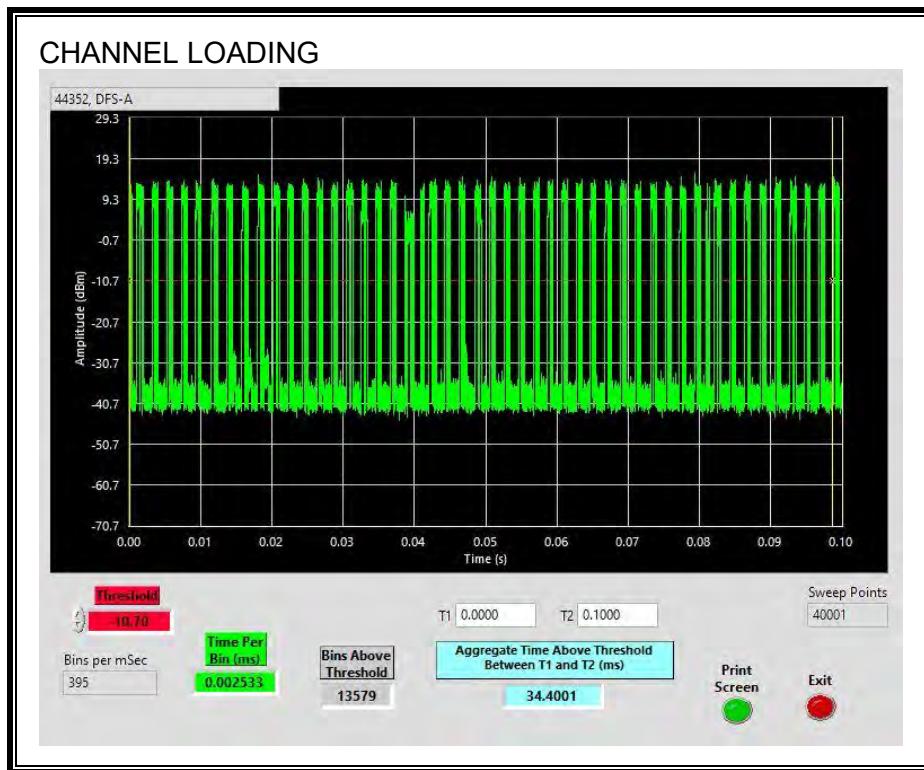
EUT transmissions were observed to resume on the channel after the completion of the 30-minute non-occupancy plus a 60s minimum subsequent CAC time (1860s).



TRAFFIC (Bandwidth Expansion)



CHANNEL LOADING (Bandwidth Shrinking)



Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
240 MHz	34.4001	100.000	0.344	34.40	4.63	0.029

9.6.7. 26 dB & 99% BANDWIDTH (Bandwidth Expansion)

LIMITS

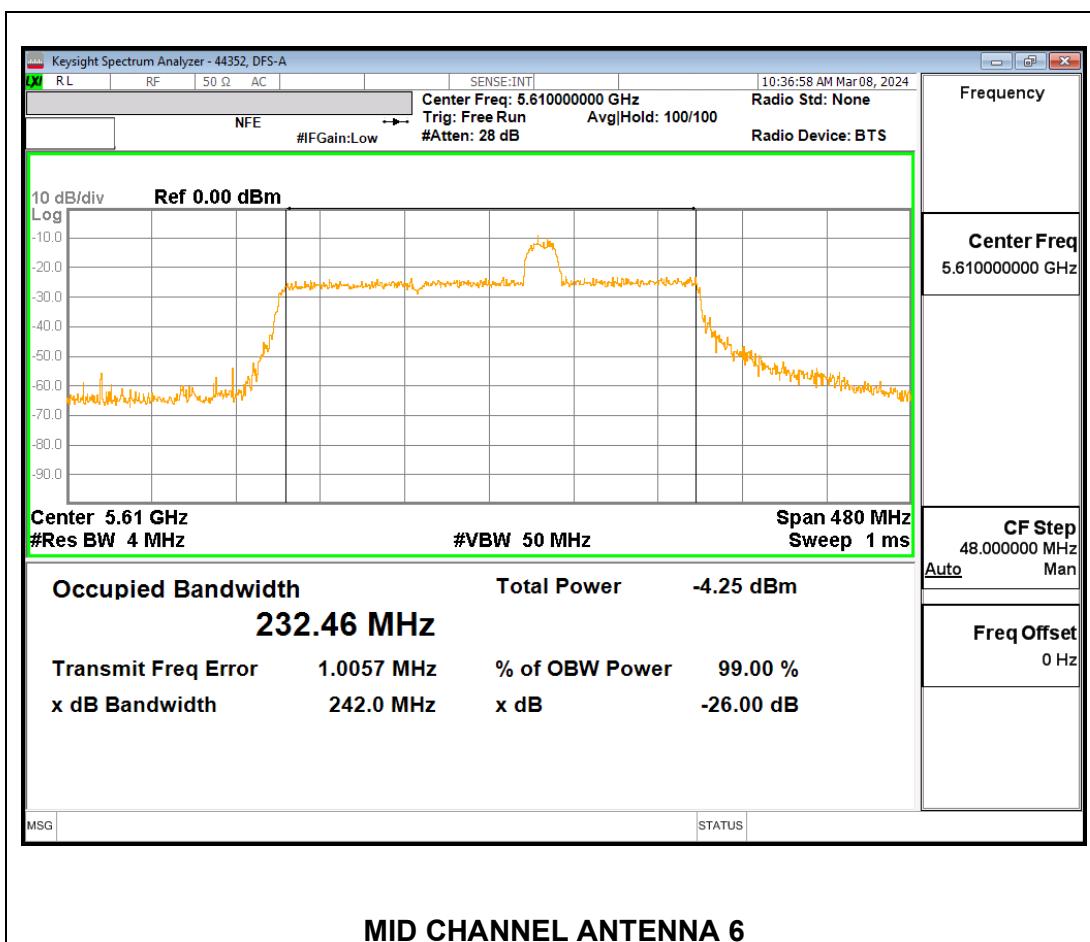
None; for reporting purposes only.

1TX Antenna 6 SISO MODE

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)
Mid	5610	242.00

Channel	Frequency (MHz)	99% Bandwidth Antenna 6 (MHz)
Mid	5610	232.46

MID CHANNEL



9.6.8. OUTPUT POWER AND PSD (Bandwidth Expansion)

LIMITS

FCC §15.407

Bands 5.25-5.35 GHz and 5.47-5.725 GHz

The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. 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.

RSS-247

Bands 5.47-5.6 GHz and 5.65-5.725 GHz

The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log_{10} B$, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log_{10} B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

TEST PROCEDURE

The measurement method used for output power is KDB 789033 D02, Section E.3.b (Method PM-G) and for straddles channels KDB 789033 D02, Section E.2.b (Method SA-1) was used.

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

The power output was measured on the EUT antenna port using SMA cable with 10dB attenuator connected to a power meter via wideband power sensor. Gated average output power was read directly from power meter.

RESULTS

1TX Antenna 6 OFDMA MODE: (FCC+IC)

Test Engineer:	44352
Test Date:	2024-03-08

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
122	5610	242.00	232.46	3.59

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm/ 1MHz)	ISED PSD Limit (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)
122	5610	24.00	24.00	30.00	24.00	11.00	11.00	11.00

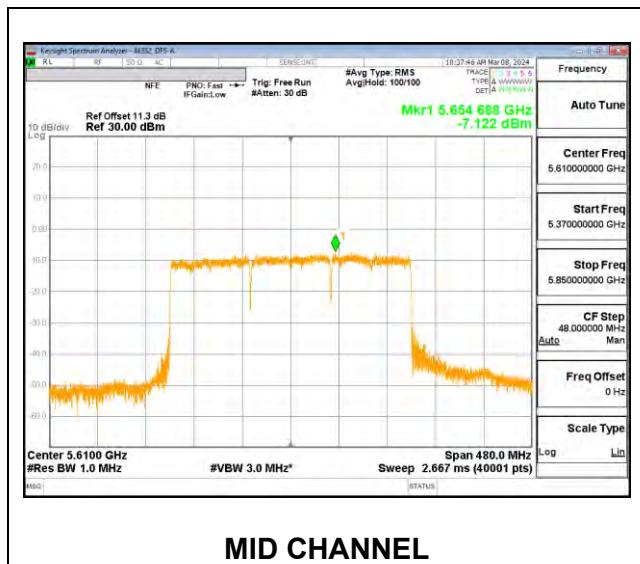
Duty Cycle CF (dB)	4.63	Included in Calculations of Corr'd PSD
--------------------	------	--

Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
122	5610	21.01	21.01	24.00	-2.99

PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
122	5610	-7.122	-2.492	11.00	-13.49



9.7. UPPER BAND RESULTS FOR 160 MHz BANDWIDTH (5500)

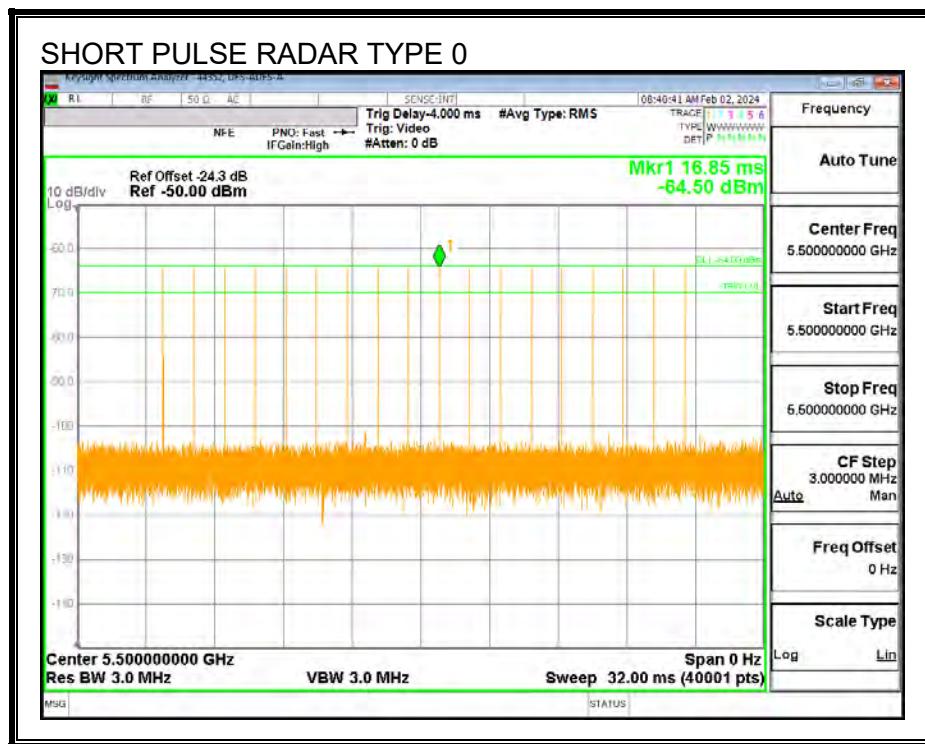
9.7.1. TEST CHANNEL

All tests were performed at a channel center frequency of 5570 MHz and 5610 MHz.
The Radar is injected at 5500 MHz

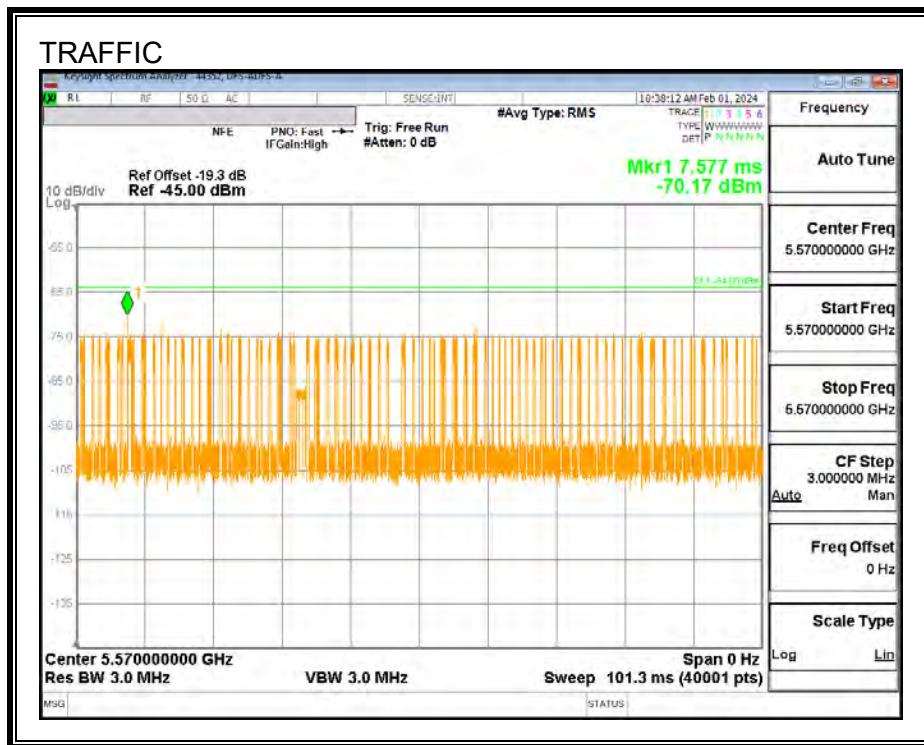
EUT bandwidth shrunk from 5570 160 MHz Bandwidth to 5610 80MHz bandwidth

9.7.2. RADAR WAVEFORMS AND TRAFFIC

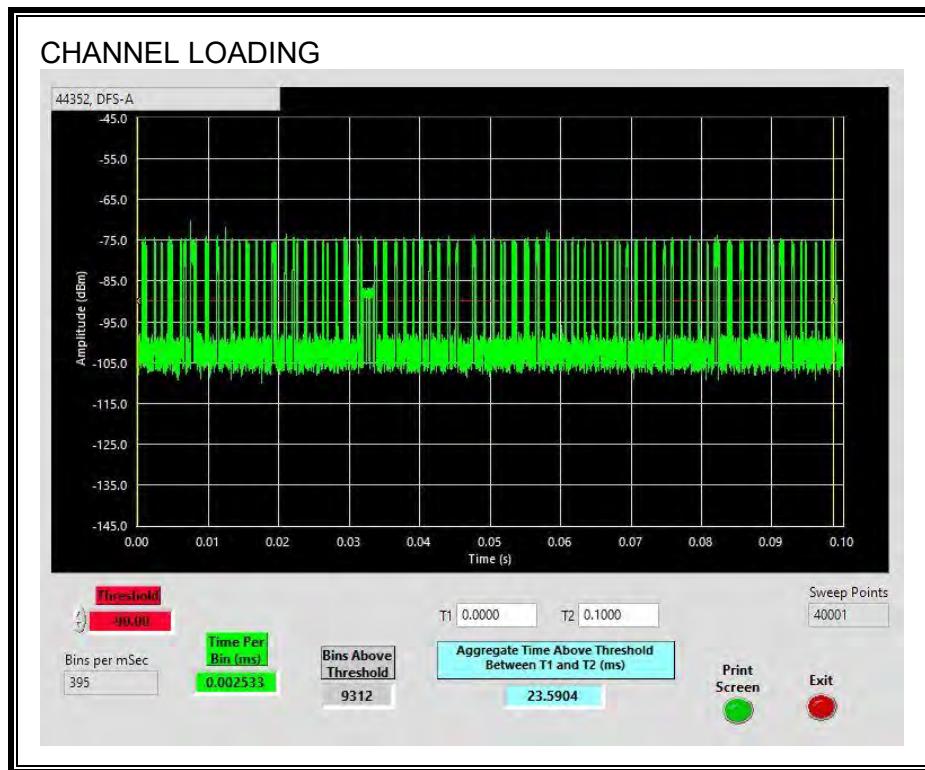
RADAR WAVEFORMS



TRAFFIC (UnBandwidth Shrinking)

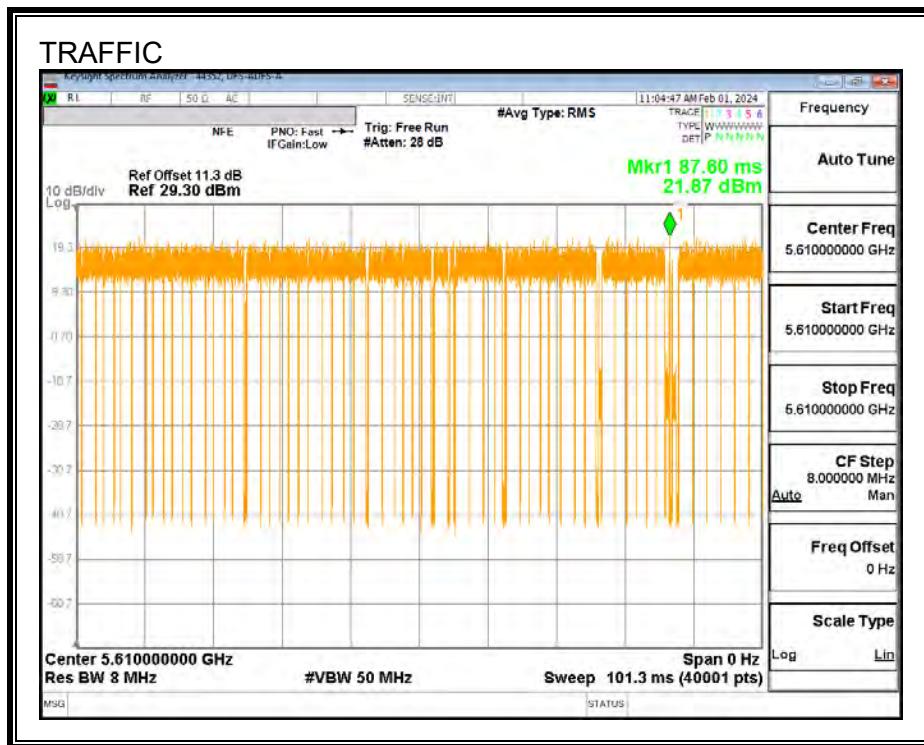


CHANNEL LOADING

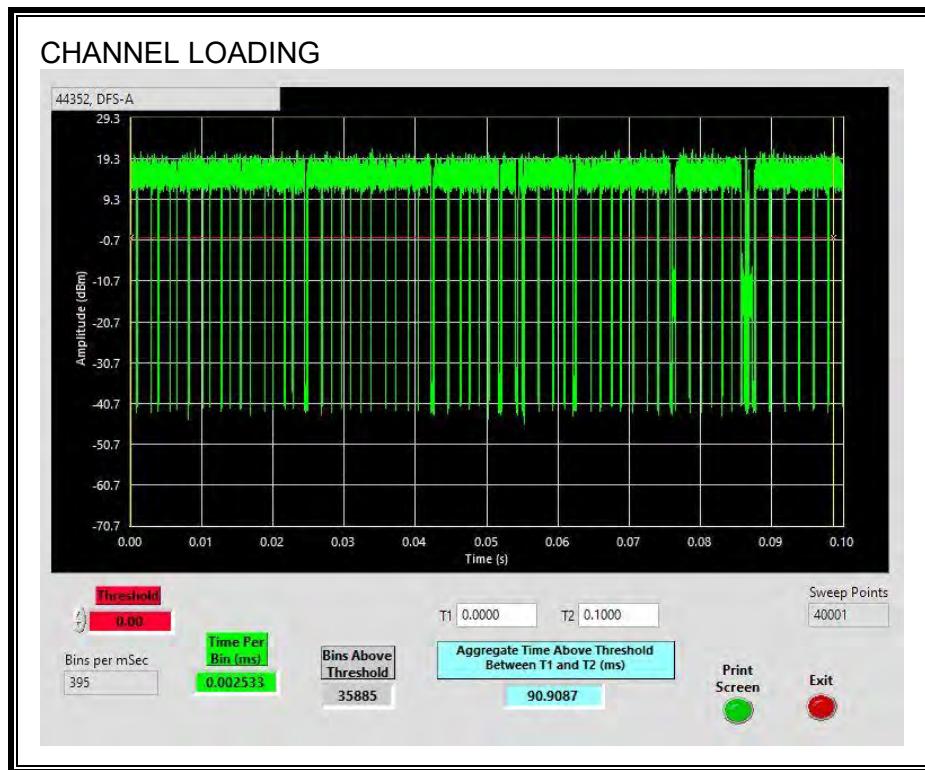


The level of traffic loading on the channel by the EUT is 23.59%

TRAFFIC (Bandwidth Shrinking)



CHANNEL LOADING



The level of traffic loading on the channel by the EUT is 17.64%

Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
160MHz	90.9087	100.000	0.909	90.91	0.41	0.011

9.7.3. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

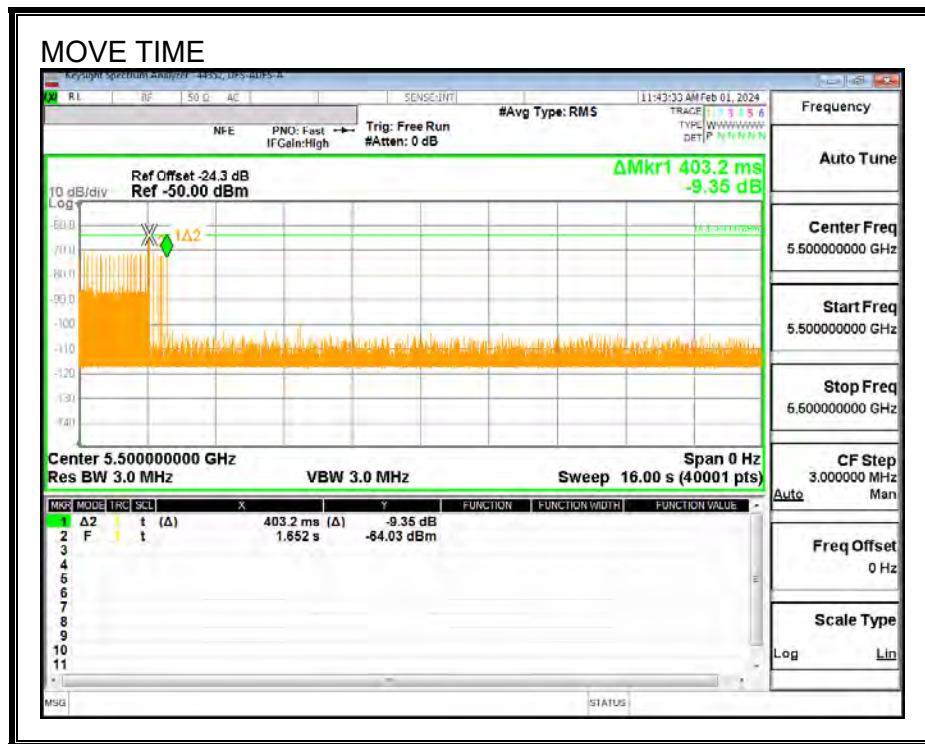
The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

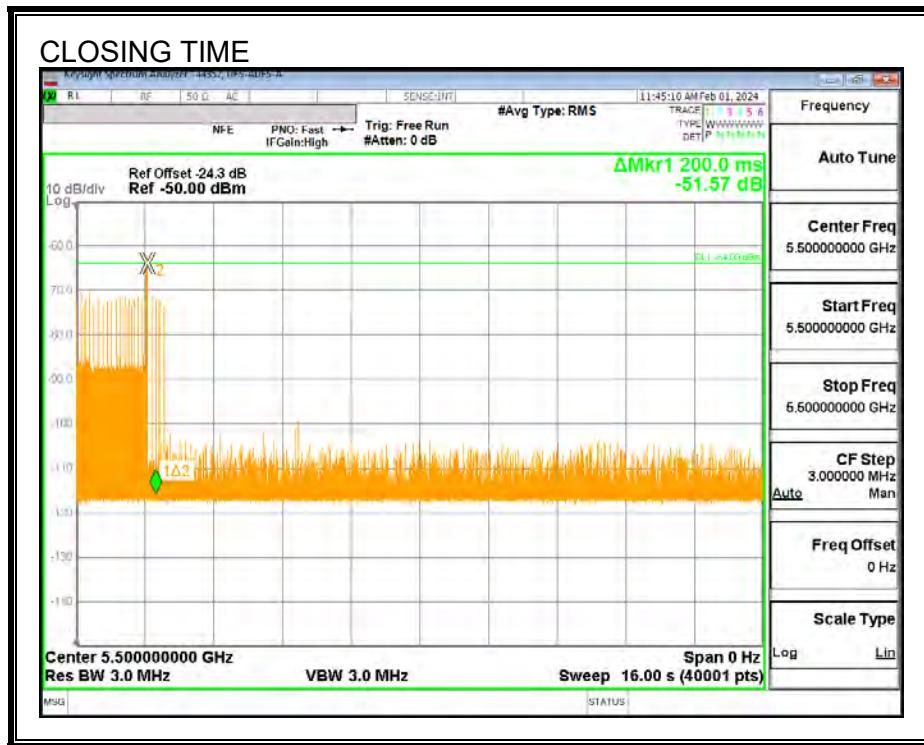
Channel Move Time (sec)	Limit (sec)
0.4032	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
5.2	60

MOVE TIME

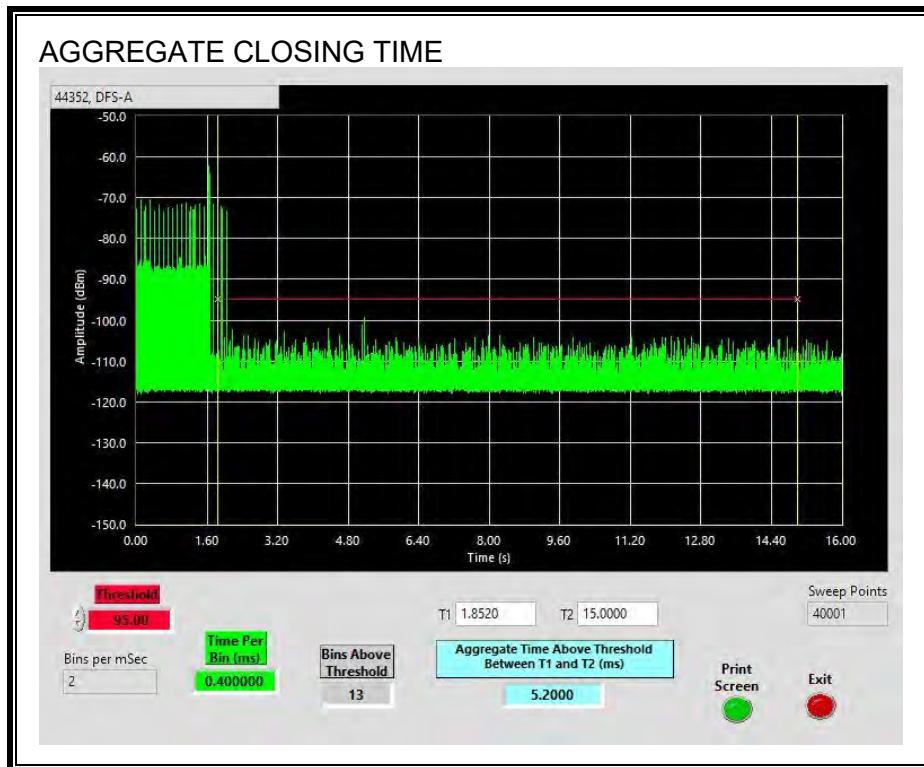


CHANNEL CLOSING TIME



AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

Only intermittent transmissions are observed during the aggregate monitoring period.



9.7.4. 26 dB BANDWIDTH + 99% BW(Bandwidth Shrinking)

LIMITS

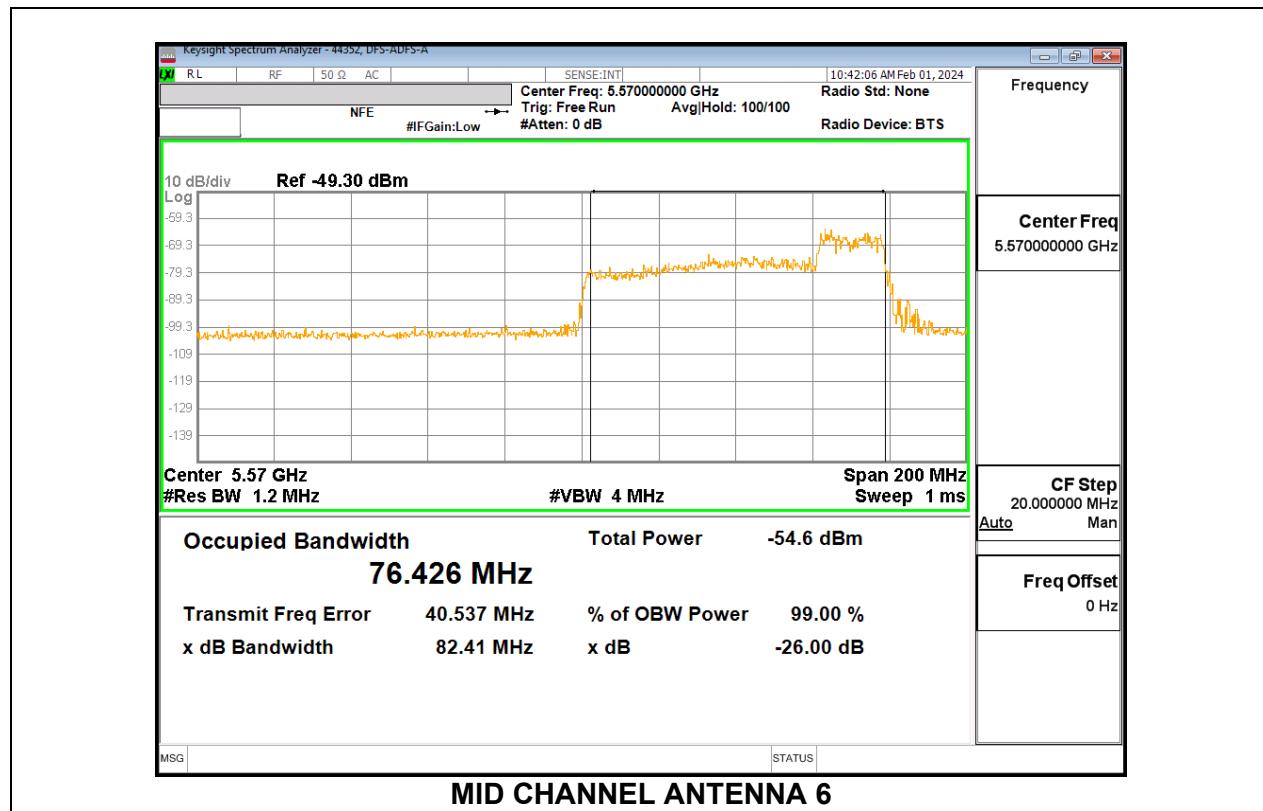
None; for reporting purposes only.

1TX Antenna 6 SISO MODE

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)
122	5610	82.41

Channel	Frequency (MHz)	99% Bandwidth Antenna 6 (MHz)
122	5610	76.426

MID CHANNEL



9.7.5. OUTPUT POWER AND PSD (Bandwidth Shrinking)

LIMITS

FCC §15.407

Bands 5.25-5.35 GHz and 5.47-5.725 GHz

The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. 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.

RSS-247

Bands 5.47-5.6 GHz and 5.65-5.725 GHz

The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log 10B$, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log 10B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

TEST PROCEDURE

The measurement method used for output power is KDB 789033 D02, Section E.3.b (Method PM-G) and for straddles channels KDB 789033 D02, Section E.2.b (Method SA-1) was used.

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

The power output was measured on the EUT antenna port using SMA cable with 10dB attenuator connected to a power meter via wideband power sensor. Gated average output power was read directly from power meter.

RESULTS

1TX Antenna 6 MODE (FCC+IC)

Test Engineer:	44352
Test Date:	2024-02-01

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Mid	5610	82.41	76.426	3.59

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm/ 1MHz)	ISED PSD Limit (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)
Mid	5610	24.00	24.00	30.00	24.00	11.00	11.00	11.00

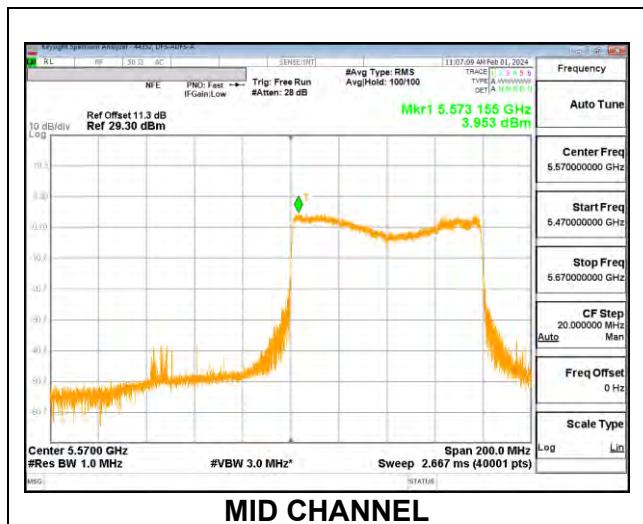
Duty Cycle CF (dB)	0.41	Included in Calculations of Corr'd PSD
--------------------	------	--

Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5610	17.80	17.80	24.00	-6.20

PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5610	3.953	4.363	11.00	-6.64



9.8. UPPER BAND RESULTS FOR 160 MHz BANDWIDTH (5520)

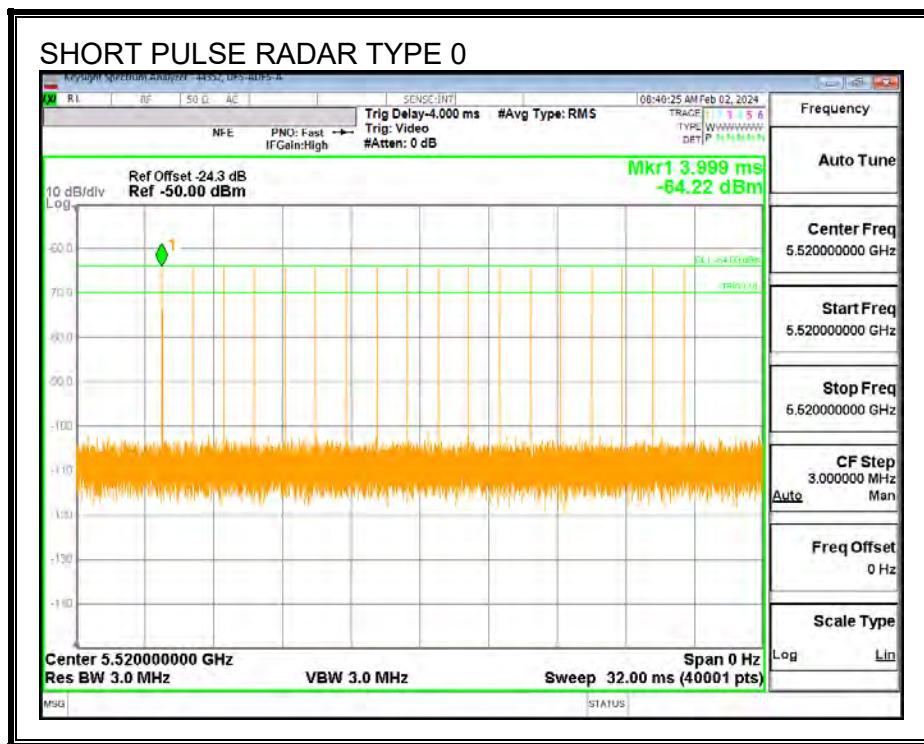
9.8.1. TEST CHANNEL

All tests were performed at a channel center frequency of 5570 MHz and 5610 MHz.
The Radar is injected at 5520 MHz

EUT bandwidth shrunk from 5570 160 MHz Bandwidth to 5610 80MHz bandwidth

9.8.2. RADAR WAVEFORMS AND TRAFFIC

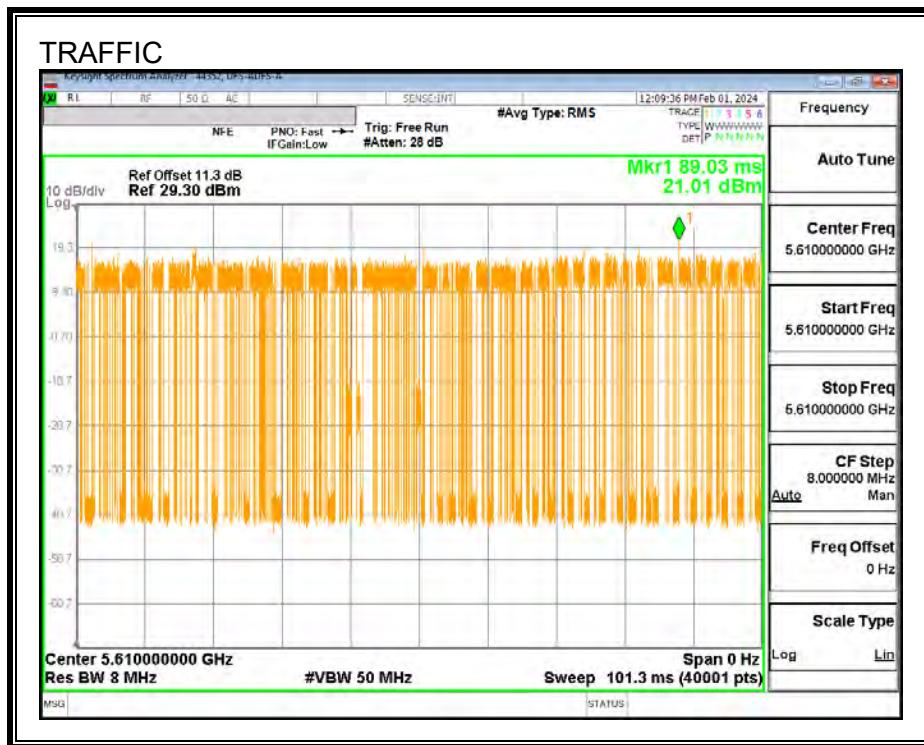
RADAR WAVEFORMS



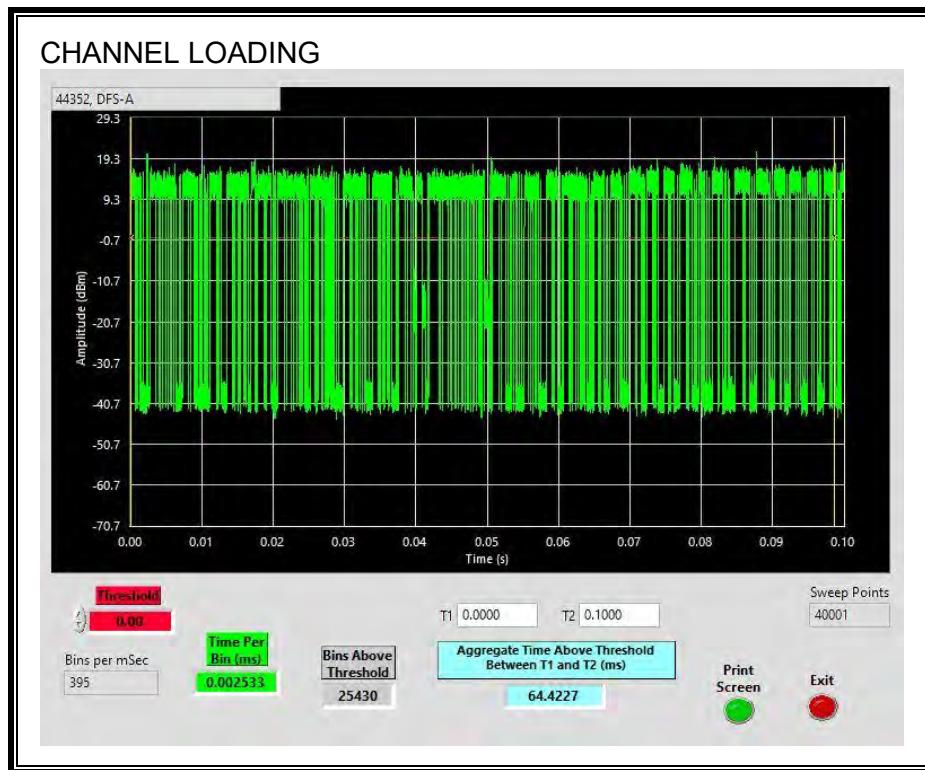
TRAFFIC & CHANNEL LOADING

Refer to section 9.7.2

TRAFFIC (Bandwidth Shrinking)



CHANNEL LOADING



Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
80MHz BW	64.4227	100.000	0.644	64.42	1.91	0.016

9.8.3. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

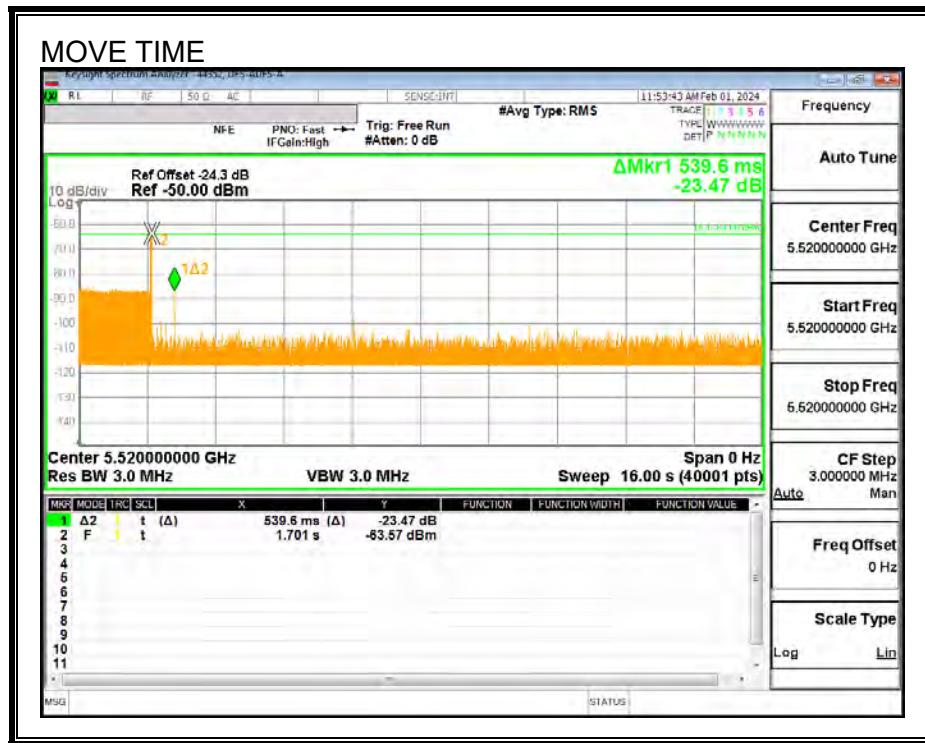
The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

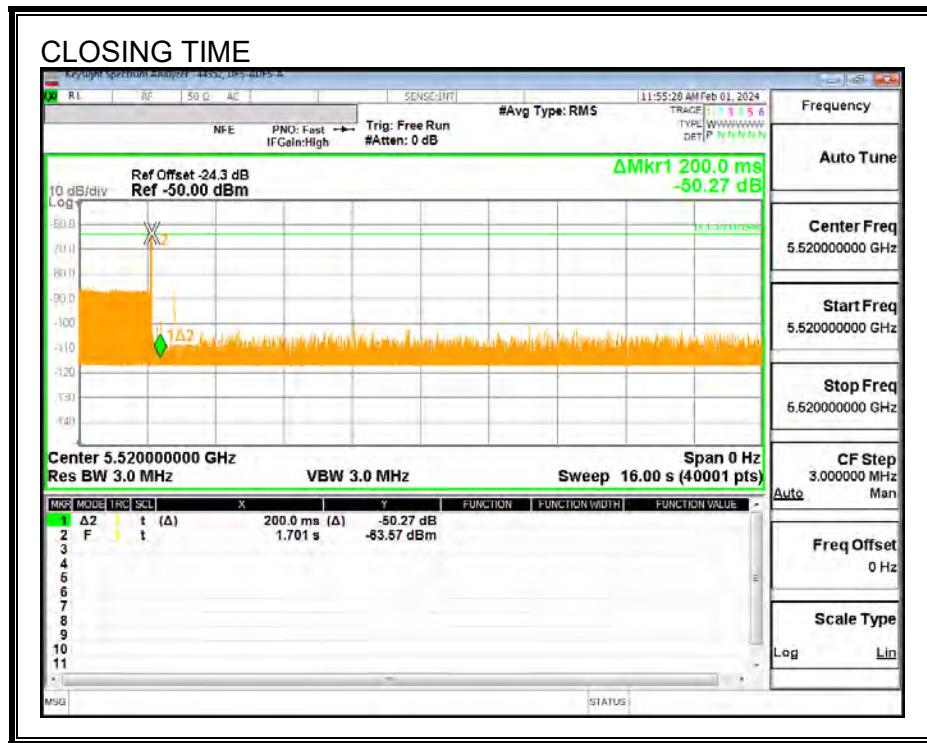
Channel Move Time (sec)	Limit (sec)
0.5396	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
1.6	60

MOVE TIME



CHANNEL CLOSING TIME



AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

Only intermittent transmissions are observed during the aggregate monitoring period.



9.8.4. 26 dB BANDWIDTH + 99% BW(Bandwidth Shrinking)

LIMITS

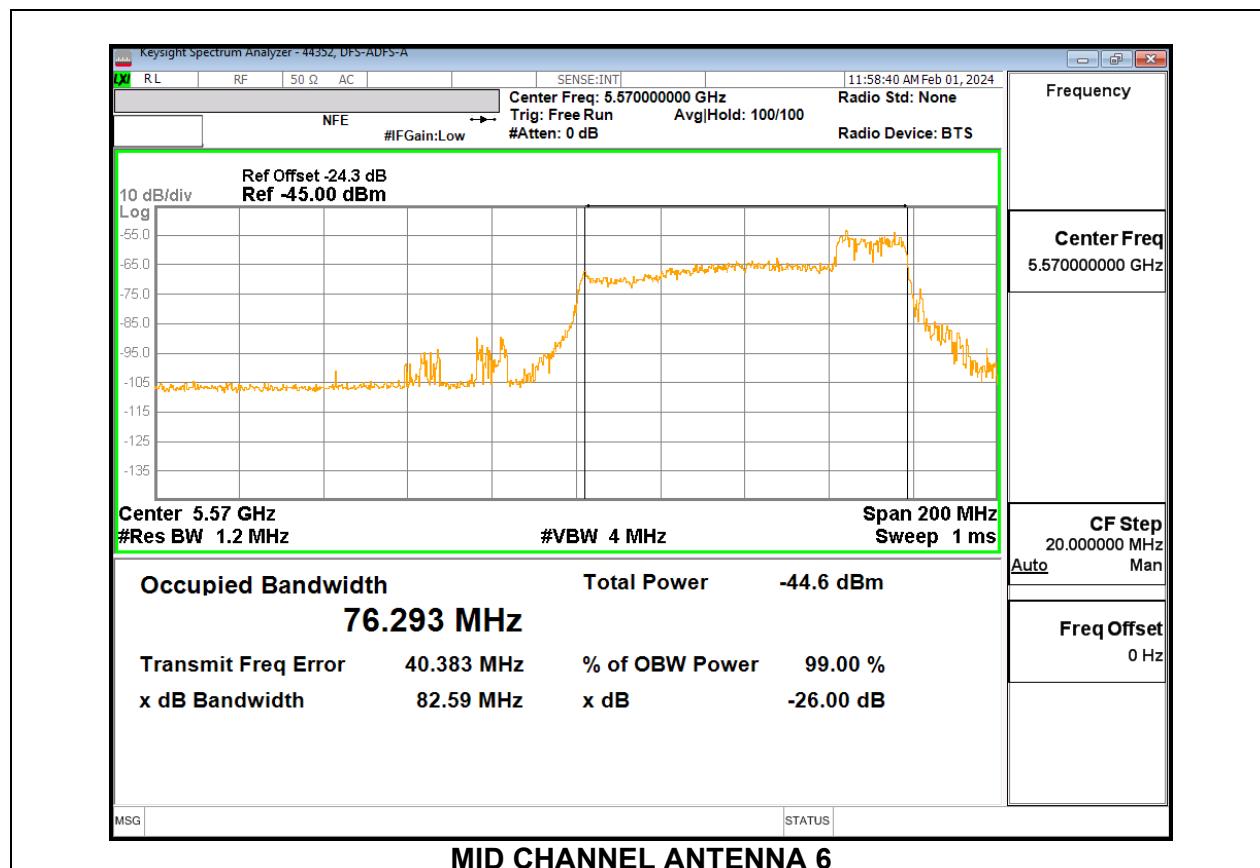
None; for reporting purposes only.

1TX Antenna 6 SISO MODE

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)
122	5610	82.59

Channel	Frequency (MHz)	99% Bandwidth Antenna 6 (MHz)
122	5610	76.293

MID CHANNEL



9.8.5. OUTPUT POWER AND PSD (Bandwidth Shrinking)

LIMITS

FCC §15.407

Bands 5.25-5.35 GHz and 5.47-5.725 GHz

The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. 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.

RSS-247

Bands 5.47-5.6 GHz and 5.65-5.725 GHz

The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log 10B$, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log 10B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

TEST PROCEDURE

The measurement method used for output power is KDB 789033 D02, Section E.3.b (Method PM-G) and for straddles channels KDB 789033 D02, Section E.2.b (Method SA-1) was used.

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

The power output was measured on the EUT antenna port using SMA cable with 10dB attenuator connected to a power meter via wideband power sensor. Gated average output power was read directly from power meter.

RESULTS

1TX Antenna 6 MODE (FCC+IC)

Test Engineer:	44352
Test Date:	2024-02-06

Bandwidth and Antenna Gain

Channel	Frequency	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
122	5610	82.59	76.29	3.59

Limits

Channel	Frequency	FCC Power Limit (dBm)	ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm/1MHz)	ISED PSD Limit (dBm/1MHz)	PSD Limit (dBm/1MHz)
122	5610	24.00	24.00	30.00	24.00	11.00	11.00	11.00

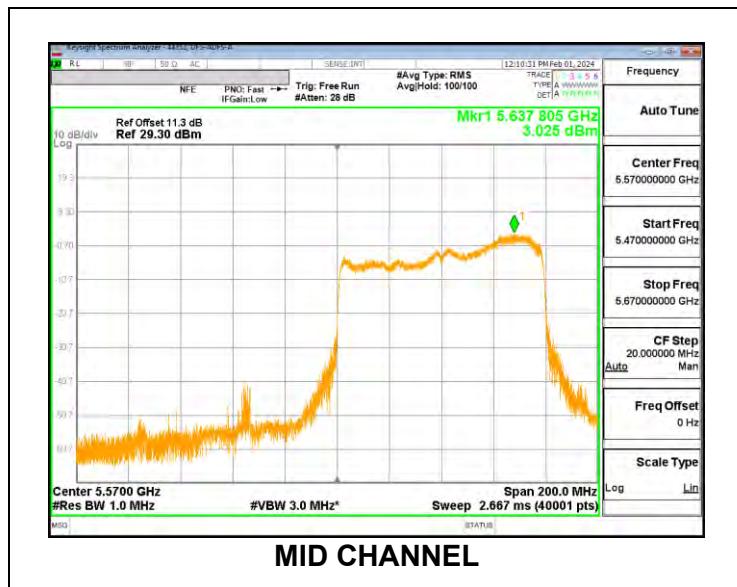
Duty Cycle CF (dB)	1.91	Included in Calculations of Corr'd PSD
--------------------	------	--

Output Power Results

Channel	Frequency	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
122	5610	17.25	17.25	24.00	-6.75

PSD Results

Channel	Frequency	Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
122	5610	3.025	4.935	11.00	-6.07



9.9. UPPER BAND RESULTS FOR 80 MHz BANDWIDTH (5500)

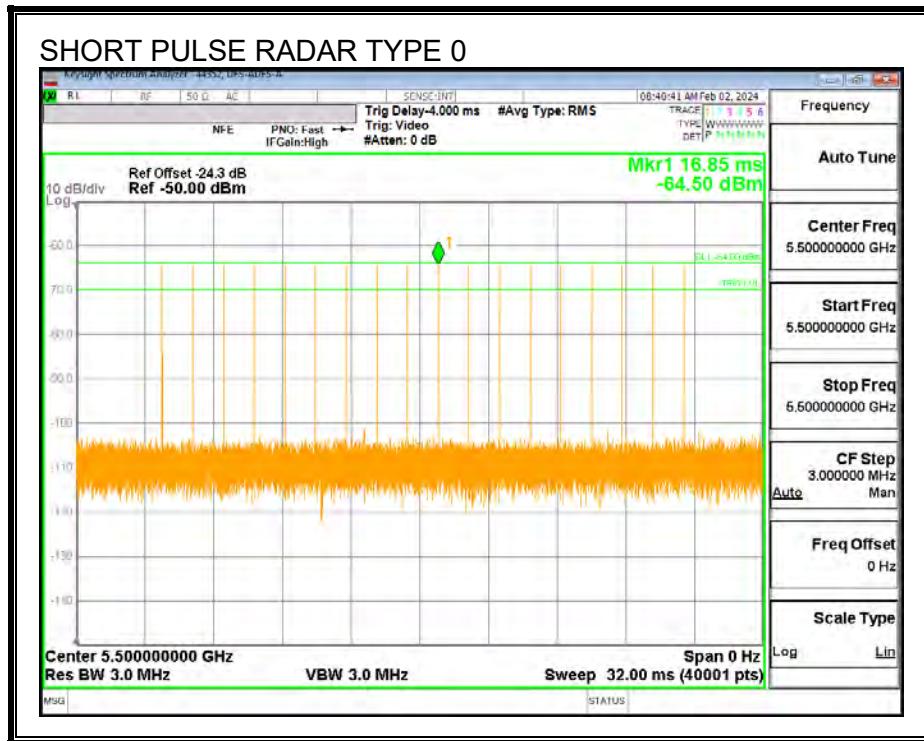
9.9.1. TEST CHANNEL

All tests were performed at a channel center frequency of 5530 MHz and 5550 MHz.
The Radar is injected at 5500 MHz

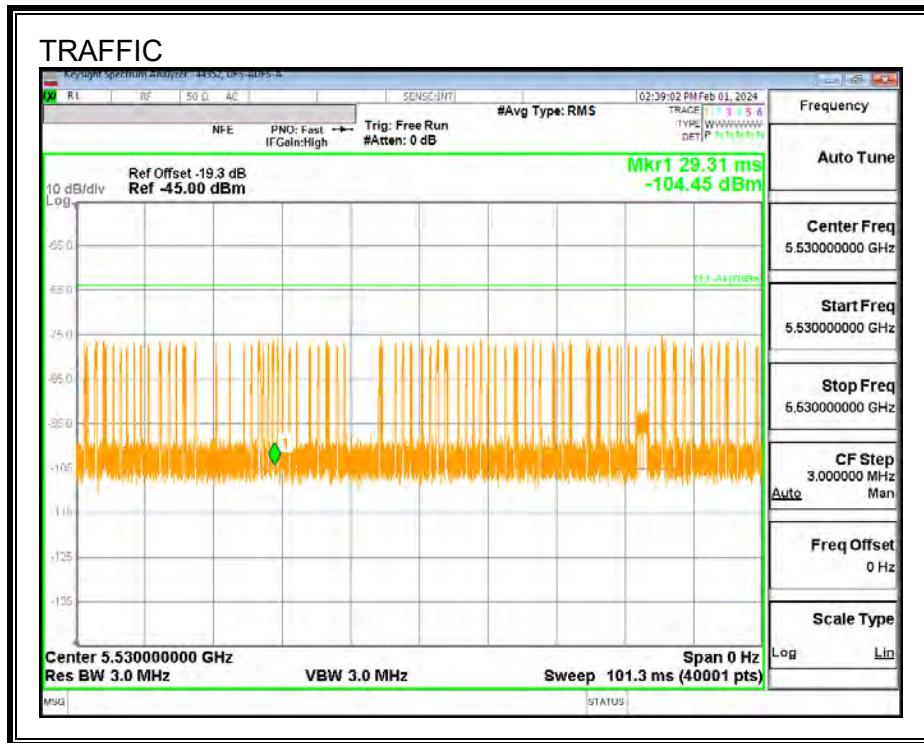
EUT bandwidth shrunk from 5530 80 MHz Bandwidth to 5550 40MHz bandwidth

9.9.2. RADAR WAVEFORMS AND TRAFFIC

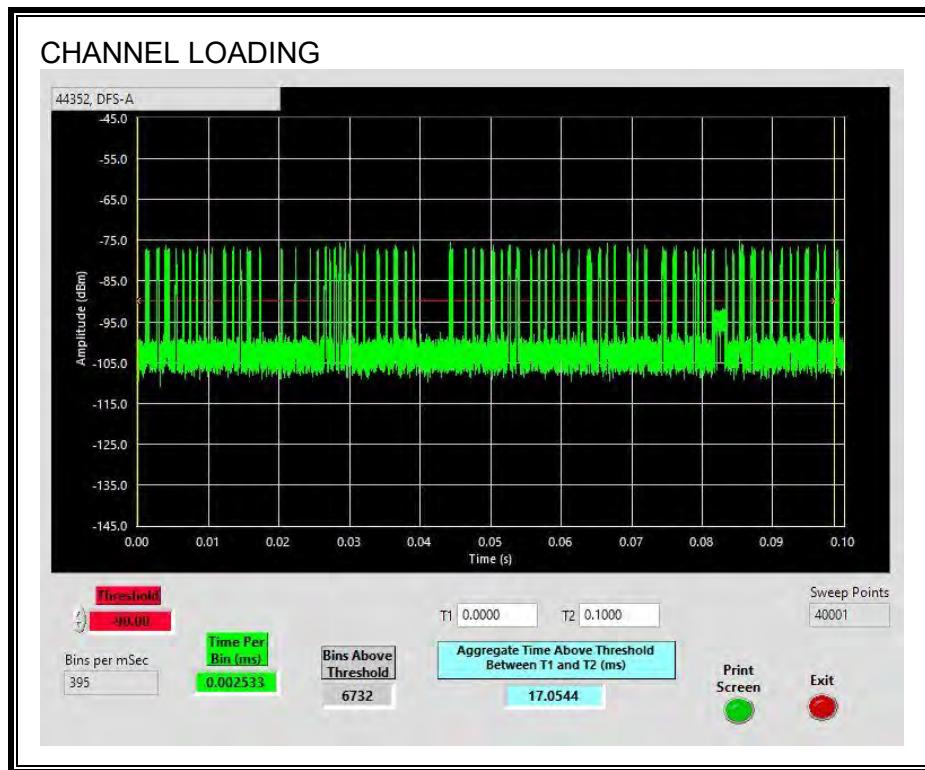
RADAR WAVEFORMS



TRAFFIC (UnBandwidth Shrinking)

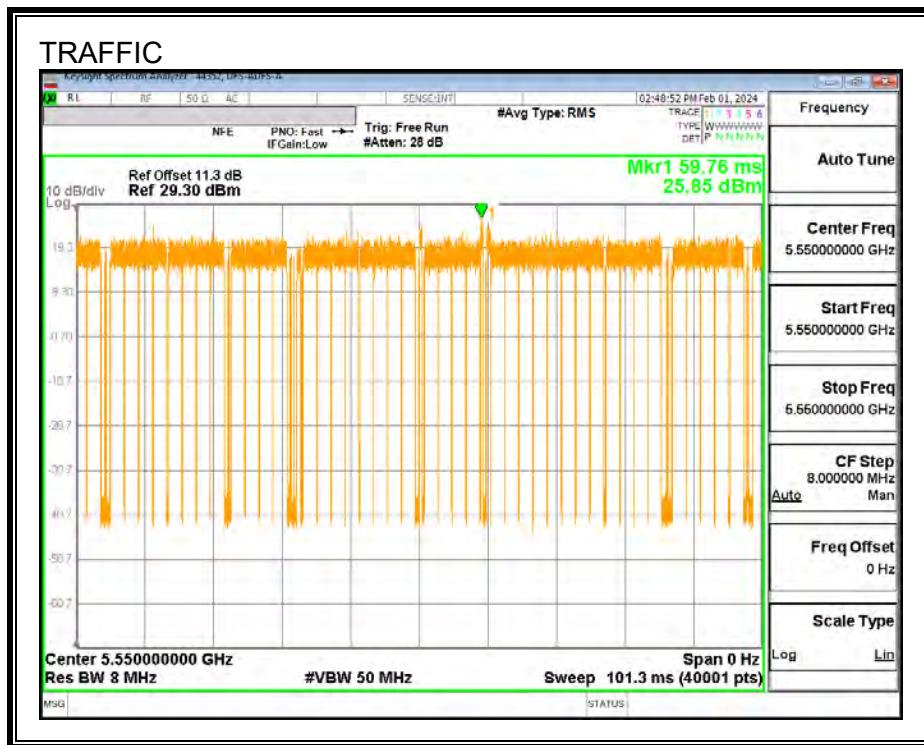


CHANNEL LOADING

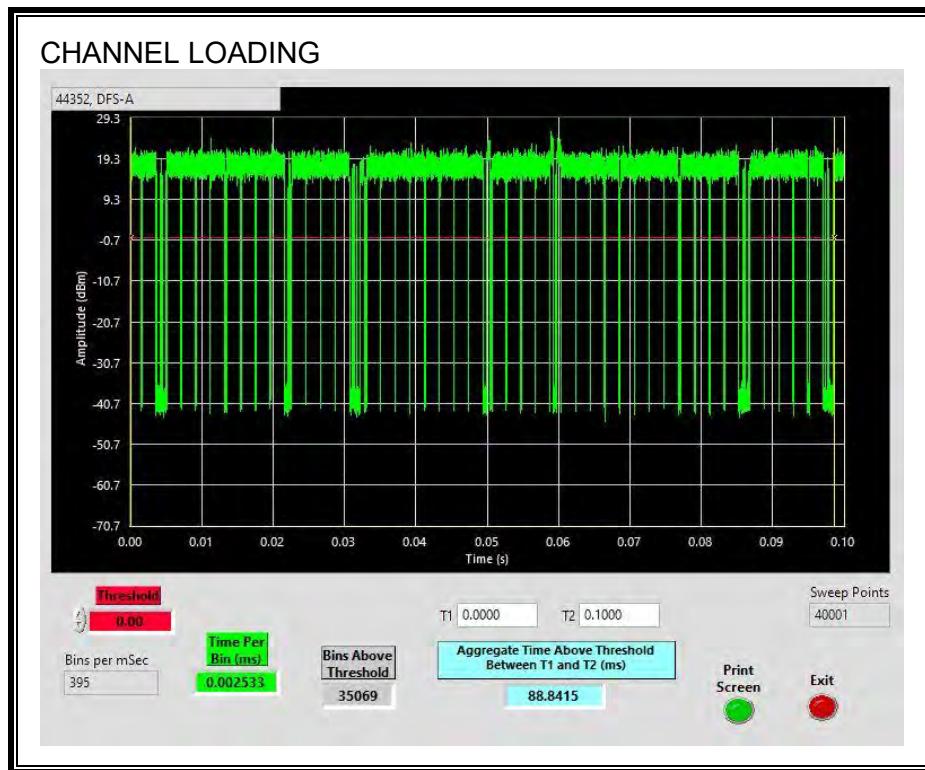


The level of traffic loading on the channel by the EUT is 17.0544%

TRAFFIC (Bandwidth Shrinking)



CHANNEL LOADING



Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
40MHz	88.8415	100.000	0.888	88.84	0.51	0.011

9.9.3. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

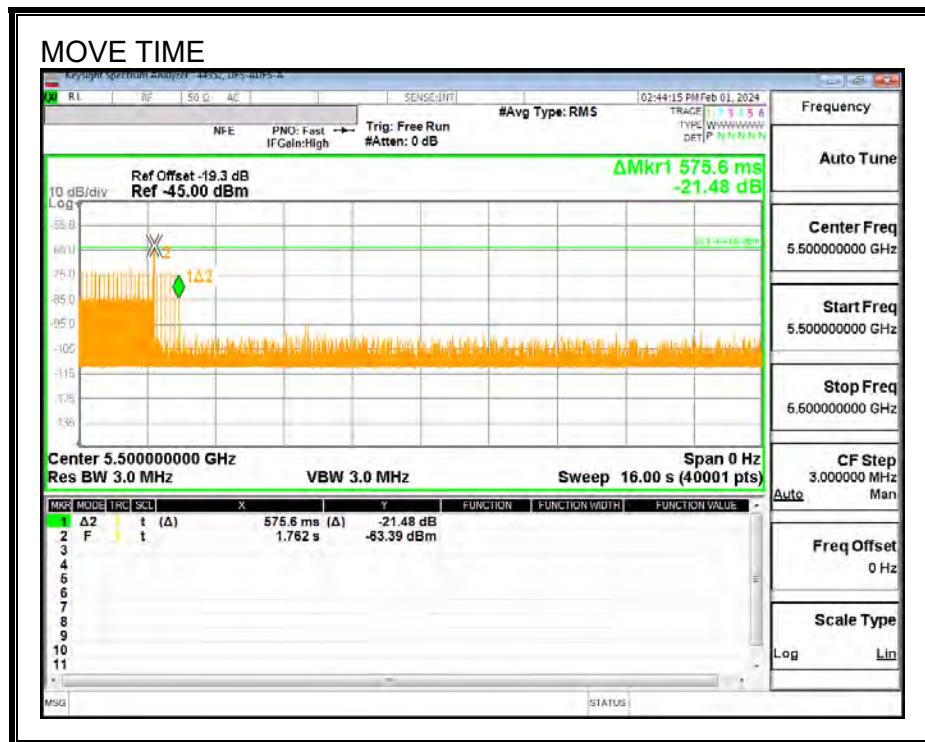
The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

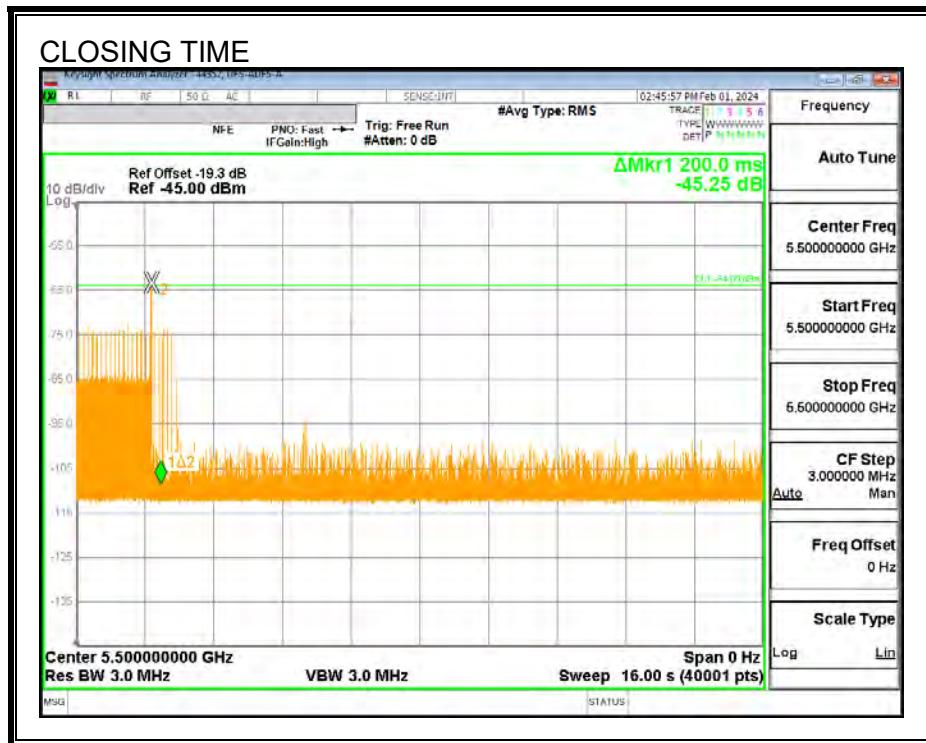
Channel Move Time (sec)	Limit (sec)
0.5756	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
9.6	60

MOVE TIME

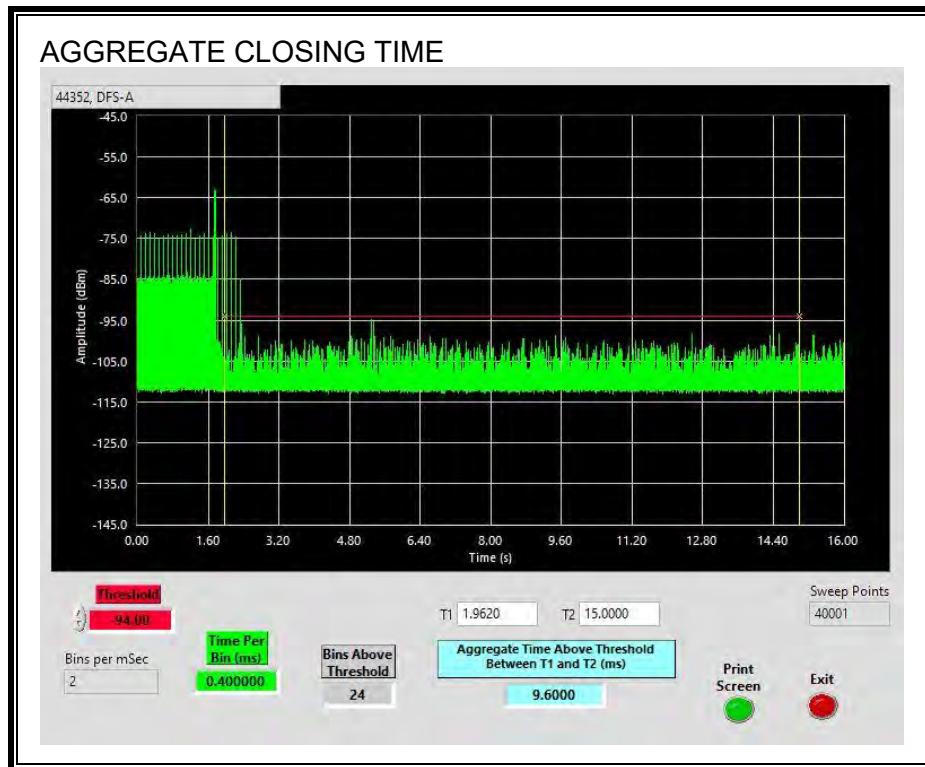


CHANNEL CLOSING TIME



AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

Only intermittent transmissions are observed during the aggregate monitoring period.



9.9.4. 26 dB BANDWIDTH + 99% BW(Bandwidth Shrinking)

LIMITS

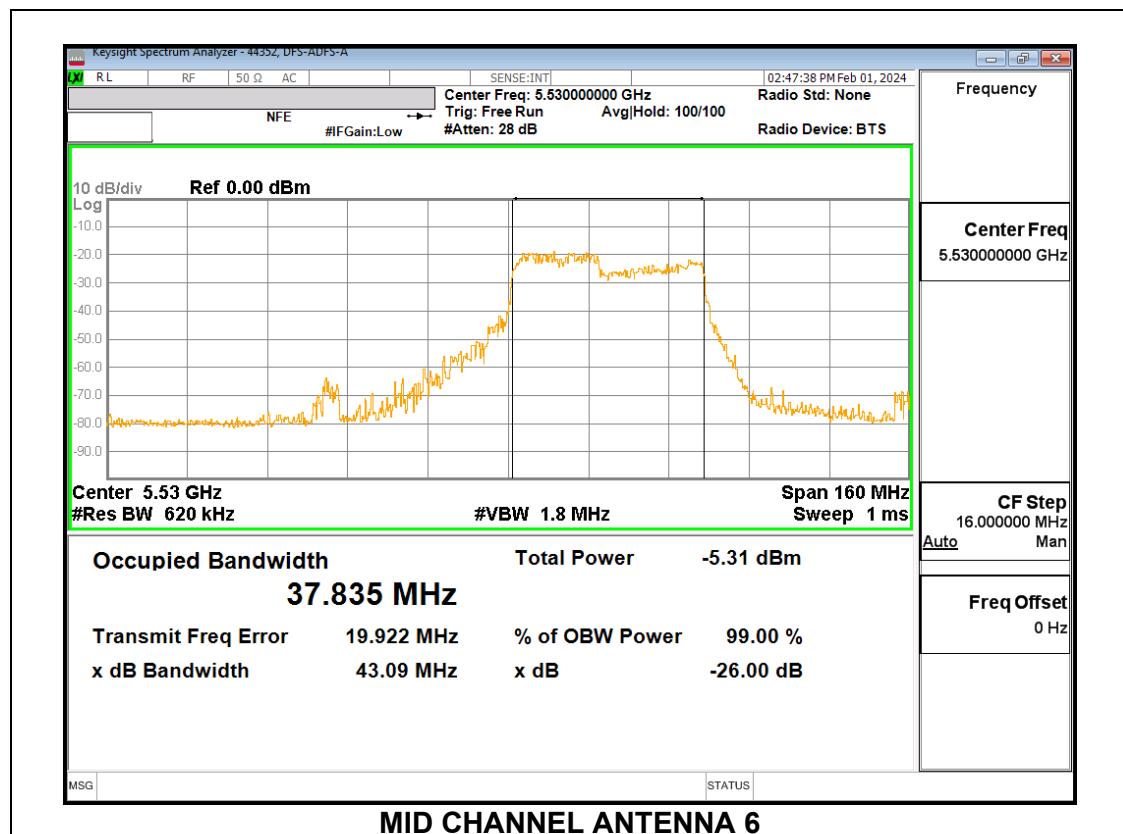
None; for reporting purposes only.

1TX Antenna 6 SISO MODE

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)
110	5550	43.09

Channel	Frequency (MHz)	99% Bandwidth Antenna 6 (MHz)
110	5550	37.835

MID CHANNEL



9.9.5. OUTPUT POWER AND PSD (Bandwidth Shrinking)

LIMITS

FCC §15.407

Bands 5.25-5.35 GHz and 5.47-5.725 GHz

The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. 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.

RSS-247

Bands 5.47-5.6 GHz and 5.65-5.725 GHz

The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log 10B$, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log 10B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

TEST PROCEDURE

The measurement method used for output power is KDB 789033 D02, Section E.3.b (Method PM-G) and for straddles channels KDB 789033 D02, Section E.2.b (Method SA-1) was used.

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

The power output was measured on the EUT antenna port using SMA cable with 10dB attenuator connected to a power meter via wideband power sensor. Gated average output power was read directly from power meter.

RESULTS

1TX Antenna 6 MODE (FCC+IC)

Test Engineer:	44352
Test Date:	2024-02-01

Bandwidth and Antenna Gain

Channel	Frequency	Min BW (MHz)	Min BW (MHz)	Directional Gain (dBi)
110	5550	43.09	37.835	3.59

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm/1MHz)	ISED PSD Limit (dBm/1MHz)	PSD Limit (dBm/1MHz)
110	5550	24.00	24.00	30.00	24.00	11.00	11.00	11.00

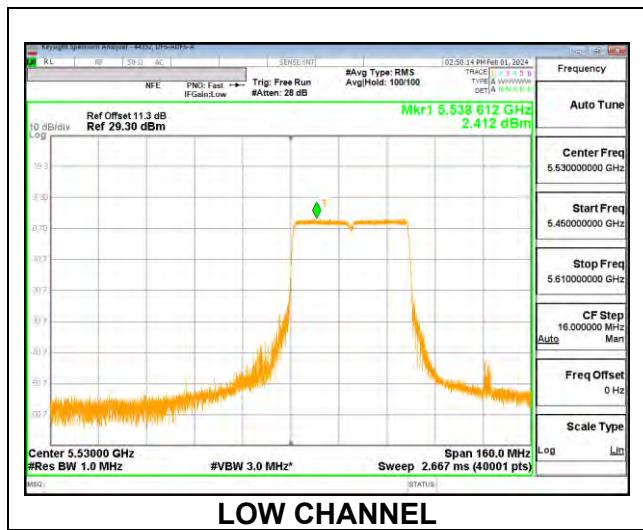
Duty Cycle CF (dB)	0.51	Included in Calculations of Corr'd PSD
--------------------	------	--

Output Power Results

Channel	Frequency	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
110	5550	17.46	17.46	24.00	-6.54

PSD Results

Channel	Frequency	Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
110	5550	2.412	2.922	11.00	-8.08



9.10. UPPER BAND RESULTS FOR 80 MHz BANDWIDTH (5520)

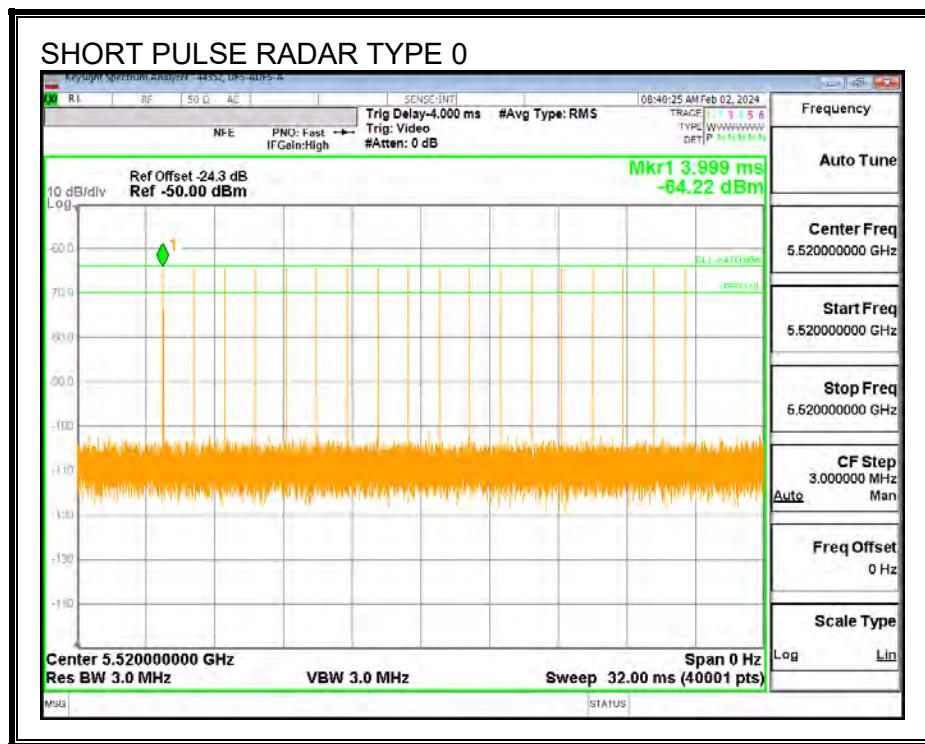
9.10.1. TEST CHANNEL

All tests were performed at a channel center frequency of 5530 MHz & 5550 MHz.
The Radar is injected at 5520 MHz

EUT bandwidth shrunk from 5530 80 MHz Bandwidth to 5550 40MHz bandwidth

9.10.2. RADAR WAVEFORMS AND TRAFFIC

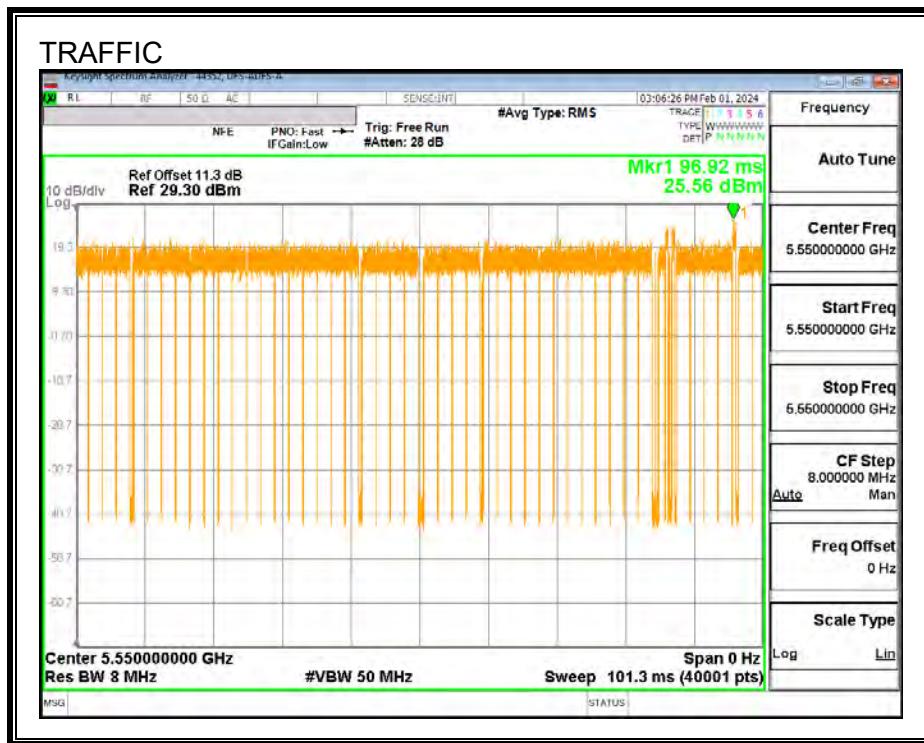
RADAR WAVEFORMS



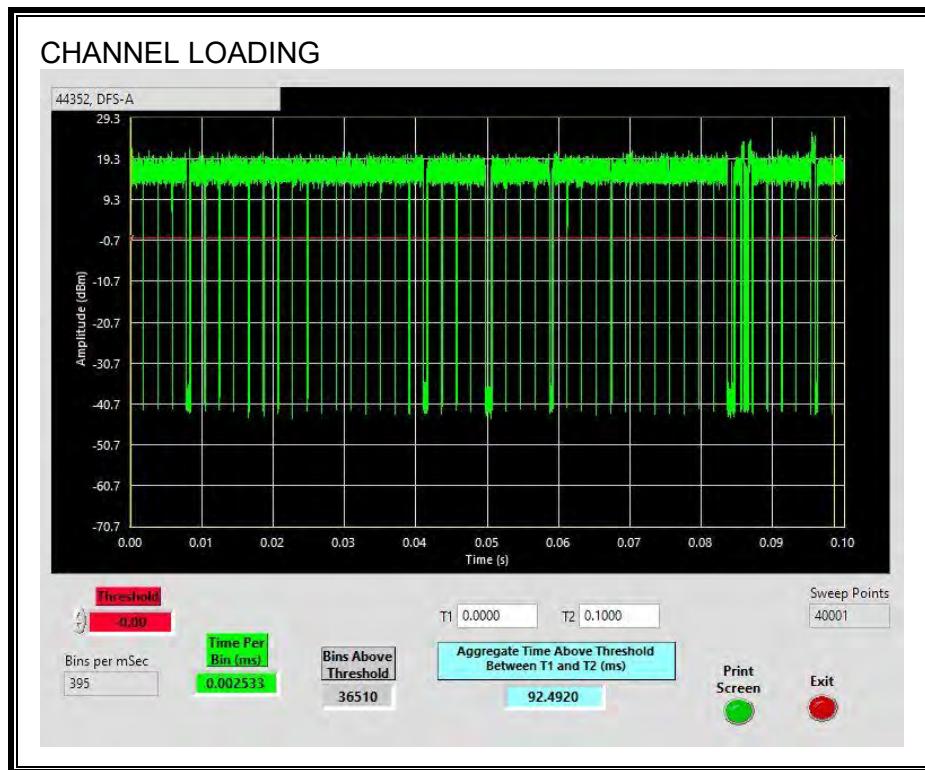
TRAFFIC and Channel Loading

Refer to section 9.9.2

TRAFFIC (Bandwidth Shrinking)



CHANNEL LOADING (Bandwidth Shrinking)



Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
40MHz	92.492	100.000	0.925	92.49	0.34	0.011

9.10.3. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

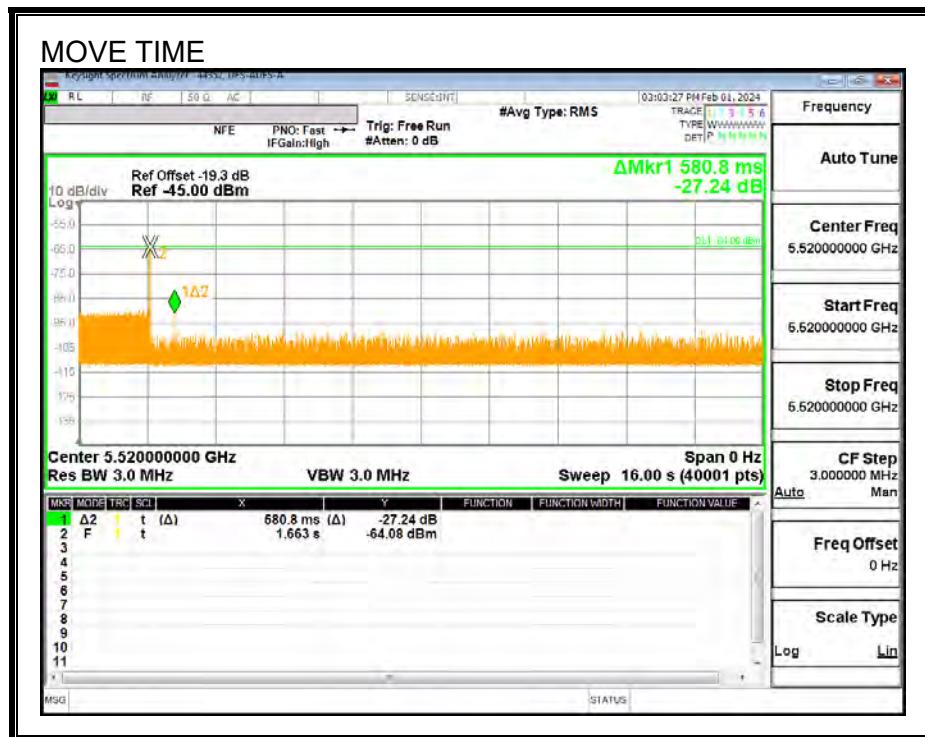
The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

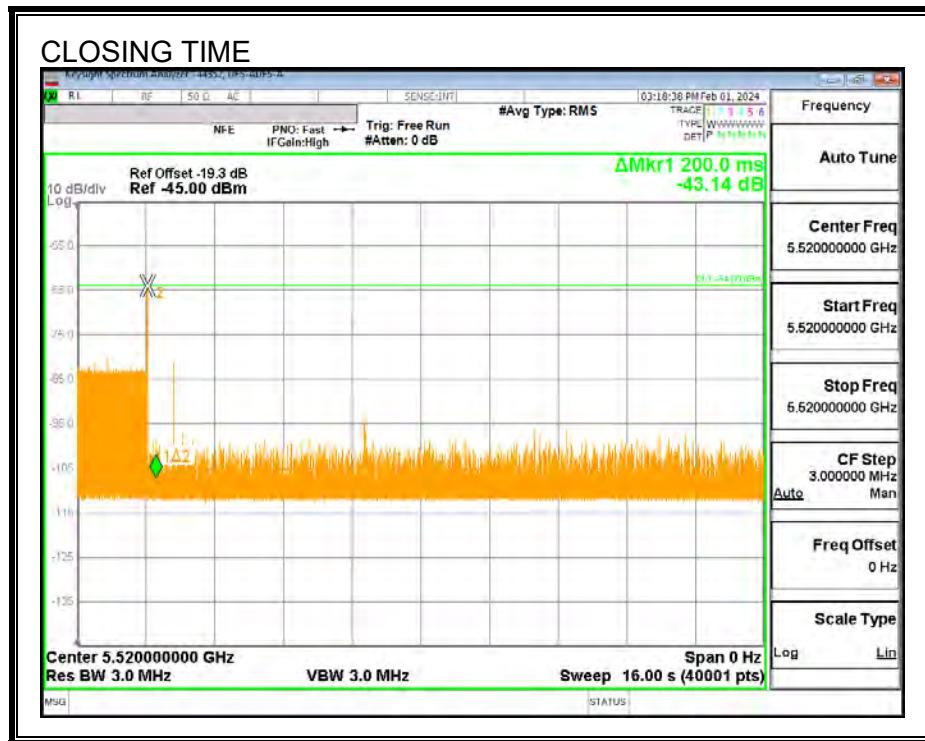
Channel Move Time (sec)	Limit (sec)
0.5808	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
2	60

MOVE TIME

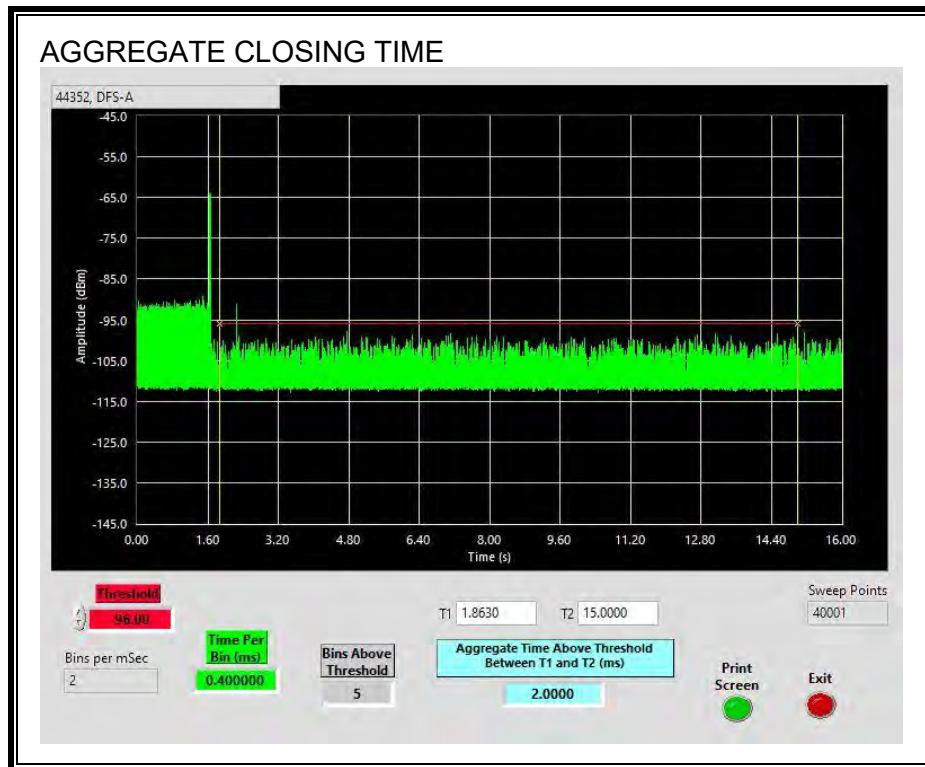


CHANNEL CLOSING TIME



AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

Only intermittent transmissions are observed during the aggregate monitoring period.



9.10.4. 26 dB BANDWIDTH + 99% BW(Bandwidth Shrinking)

LIMITS

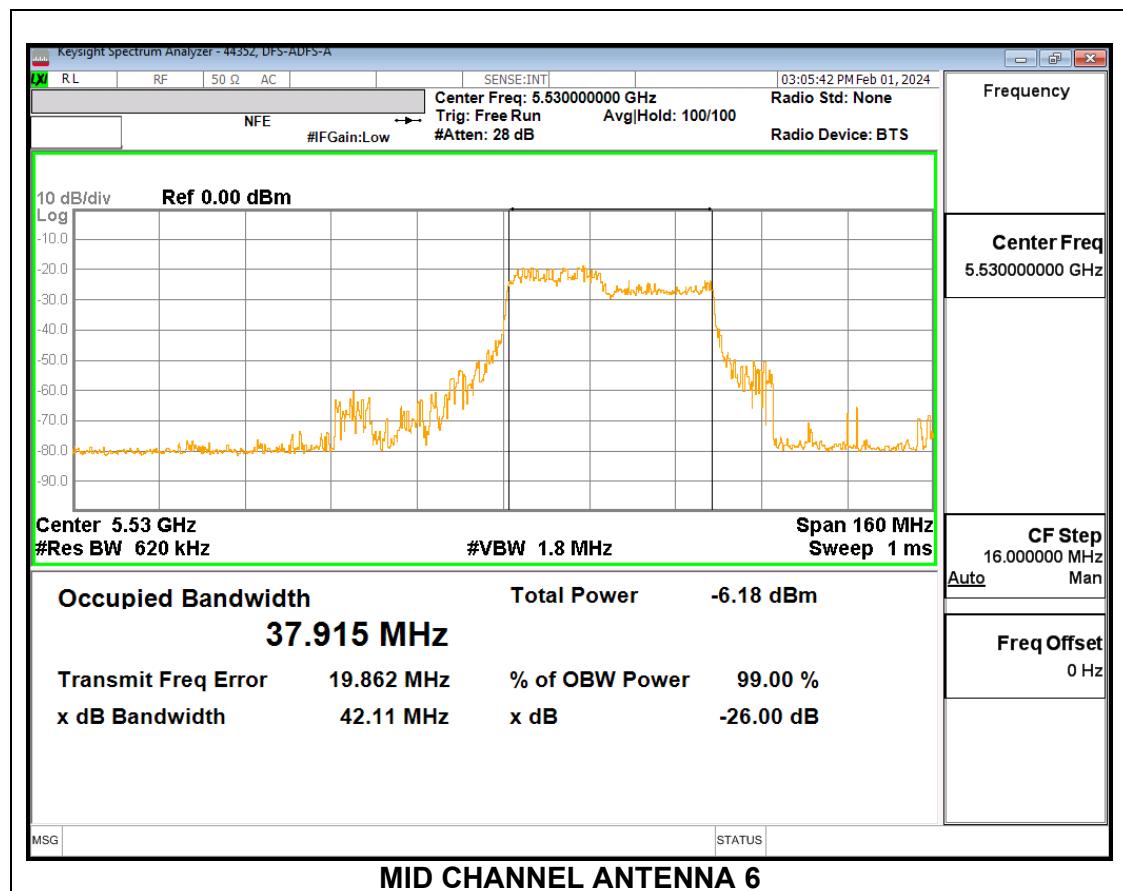
None; for reporting purposes only.

1TX Antenna 6 SISO MODE

Channel	Frequency (MHz)	26 dB Bandwidth Antenna 6 (MHz)
110	5550	42.11

Channel	Frequency (MHz)	99% Bandwidth Antenna 6 (MHz)
110	5550	37.915

MID CHANNEL



9.10.5. OUTPUT POWER AND PSD (Bandwidth Shrinking)

LIMITS

FCC §15.407

Bands 5.25-5.35 GHz and 5.47-5.725 GHz

The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. 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.

RSS-247

Bands 5.47-5.6 GHz and 5.65-5.725 GHz

The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log 10B$, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log 10B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

TEST PROCEDURE

The measurement method used for output power is KDB 789033 D02, Section E.3.b (Method PM-G) and for straddles channels KDB 789033 D02, Section E.2.b (Method SA-1) was used.

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

The power output was measured on the EUT antenna port using SMA cable with 10dB attenuator connected to a power meter via wideband power sensor. Gated average output power was read directly from power meter.

RESULTS

1TX Antenna 6 MODE (FCC+IC)

Test Engineer:	44352
Test Date:	2024-02-01

Bandwidth and Antenna Gain

Channel	Frequency	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
110	5550	42.11	37.915	3.59

Limits

Channel	Frequency	FCC Power Limit (dBm)	ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm/1MHz)	ISED PSD Limit (dBm/1MHz)	PSD Limit (dBm/1MHz)
110	5550	24.00	24.00	30.00	24.00	11.00	11.00	11.00

Duty Cycle CF (dB)	0.34	Included in Calculations of Corr'd PSD
--------------------	------	--

Output Power Results

Channel	Frequency	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
110	5550	16.43	16.43	24.00	-7.57

PSD Results

Channel	Frequency	Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
110	5550	3.969	4.309	11.00	-6.69

