

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230600190408

Page: 1 of 29

FCC ID: APIHKVIRTUO

TEST REPORT

Application No.: SZCR2306001904AT
Applicant: Harman International Industries, Inc.
Address of Applicant: 8500 Balboa Boulevard, Northridge, California, 91329, United States
Manufacturer: Harman International Industries, Inc.
Address of Manufacturer: 8500 Balboa Boulevard, Northridge, California, 91329, United States
Factory: Guangzhou Panyu Juda Car Audio Equipment Co., Ltd
Address of Factory: NO.5 Building, No.139, Zhouxing Street, Dongchong Town, Nansha District, Guangzhou City, Guangdong Province, China

Equipment Under Test (EUT):

EUT Name: Smart Speaker
Model No.: VIRTUO
Trade Mark: harman/kardon
Standard(s) : 47 CFR Part 15, Subpart E 15.407(h)(2)
Date of Receipt: 2023-06-16
Date of Test: 2023-06-19 to 2023-06-21
Date of Issue: 2023-06-25

Test Result:

Pass*

* In the configuration tested, the EUT complied with the standards specified above.

Keny Xu

Keny Xu
EMC Laboratory Manager



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch EMC Laboratory

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Report No.: SZCR230600190408

Page: 2 of 29

Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2023-06-25		Original

Authorized for issue by:				
		Benson Wang		
		Benson Wang/Project Engineer		
		Eric Fu		
		Eric Fu/Reviewer		



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2 Test Summary

Radio Spectrum Matter Part				
Item	Standard	Method	Requirement	Result
Non-occupancy period	47 CFR Part 15, Subpart E 15.407(h) (2)	KDB 905462 D02 Section 7.8.3	KDB 905462 D02 Section 5.1	Pass
Channel Move Time		KDB 905462 D02 Section 7.8.3	KDB 905462 D02 Section 5.1	Pass
Channel Closing Transmission Time		KDB 905462 D02 Section 7.8.3	KDB 905462 D02 Section 5.1	Pass

Note:

E.U.T./EUT means Equipment Under Test.

Pass means the test result passed the test standard requirement, please find the detailed decision rule in the report relative section.



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3 Contents

	Page
1 Cover Page	1
2 Test Summary	3
3 Contents.....	4
4 General Information	5
4.1 Details of E.U.T.	5
4.2 Description of Support Units.....	5
4.3 Test Location	6
4.4 Test Facility	6
4.5 Deviation from Standards.....	6
4.6 Abnormalities from Standard Conditions	6
5 Equipment List	7
6 Radio Spectrum Matter Test Results	9
6.1 Non-occupancy period.....	9
6.1.1 E.U.T. Operation	9
6.1.2 Test Mode Description	9
6.1.3 Test Setup Diagram	10
6.1.4 Measurement Procedure and Data	10
6.2 Channel Move Time	11
6.2.1 E.U.T. Operation	11
6.2.2 Test Mode Description	11
6.2.3 Test Setup Diagram	12
6.2.4 Measurement Procedure and Data	12
6.3 Channel Closing Transmission Time.....	13
6.3.1 E.U.T. Operation	13
6.3.2 Test Mode Description	13
6.3.3 Test Setup Diagram	14
6.3.4 Measurement Procedure and Data	14
7 EUT Constructional Details (EUT Photos)	15
8 Appendix.....	16



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4 General Information

4.1 Details of E.U.T.

Power supply: AC 100-240 V, 50/60 Hz, 45 W

Cable(s): AC mains ports with unshielded cables (2m)
Aux in ports
LAN ports
Type C ports

Test Voltage: AC 120 V, 60 Hz

Operation Frequency/
Number of channels
(20MHz): U-NII-1: 5180-5240MHz (4 Channels);
U-NII-2A: 5260-5320MHz (4 Channels);
U-NII-2C: 5500-5700MHz (11 Channels);
U-NII-3: 5745-5825MHz (5 Channels)

Operation Frequency/
Number of channels
(40MHz): U-NII-1: 5190-5230MHz (2 Channels);
U-NII-2A: 5270-5310MHz (2 Channels);
U-NII-2C: 5510-5670MHz (5 Channels);
U-NII-3: 5755-5795MHz (2 Channels)

Operation Frequency/
Number of channels
(80MHz): U-NII-1: 5210MHz (1 Channel); U-NII-2A: 5290MHz (1 Channels);
U-NII-2C: 5530-5610MHz (2 Channels); U-NII-3: 5775MHz (1 Channel)

Modulation Type: 802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK);
802.11n: OFDM (BPSK, QPSK, 16QAM, 64QAM);
802.11ac: OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM);
802.11ax: OFDMA (BPSK, QPSK, 16QAM, 64QAM, 256QAM)
802.11a/n(HT20)/ac(HT20)/ax(HEW20): 20MHz;

Channel Spacing: 802.11n(HT40)/ac(HT40)/ax(HEW40): 40MHz;
802.11ac(HT80)/ax(HEW80): 80MHz

DFS Function: Slave without Radar detection

TPC Function: Without TPC function

Antenna Type: Integral Antenna

Antenna Gain: 2.85 dBi for antenna 0, 2.92 dBi for antenna 1

Remark: Two antennas can simultaneous transmission

Antenna Number: 2

Remark: The information in this section is provided by the applicant or manufacturer, SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information.

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Note Book Computer	LENOVO	ThinkPad T490	PF1D1MVJ



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SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230600190408

Page: 6 of 29

4.3 Test Location

All tests were performed at:

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No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China. 518057.

No tests were sub-contracted.

4.4 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• A2LA (Certificate No. 3816.01)

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

• VCCI (Member No. 1937)

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen EMC laboratory have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

• Innovation, Science and Economic Development Canada

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.

4.5 Deviation from Standards

None

4.6 Abnormalities from Standard Conditions

None



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5 Equipment List

Channel Move Time					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Shielding Room	AUDIX	N/A	SEM001-08	2022-05-14	2025-05-13
EXA Signal Analyzer	KEYSIGHT	N9010A	SEM004-09	2022-04-01 2023-03-31	2023-03-31 2024-03-30
Signal Generator	KEYSIGHT	N5171B	SEM006-13	2023-03-20	2024-03-19
MXG Vector Signal Generator	KEYSIGHT	N5182A	SEM006-14	2023-03-20	2024-03-19
ESG Vector Signal Generator	KEYSIGHT	E4438C	SEM006-15	2022-09-20	2023-09-19
DC Power Supply	KEYSIGHT	E3642A	SEM011-07	2023-03-21	2024-03-20
Manual Step Attenuator	KEYSIGHT	8494B	SEM021-05	2022-04-01 2023-03-31	2023-03-31 2024-03-30
Manual Step Attenuator	KEYSIGHT	8496B	SEM021-06	2022-04-01 2023-03-31	2023-03-31 2024-03-30
Power Sensor	TST PASS	TSPS2023R	SEM009-22	2022-09-21	2023-09-20
Power Sensor	TST PASS	TSPS2023R	SEM009-23	2022-09-21	2023-09-20
Power Sensor	TST PASS	TSPS2023R	SEM009-24	2022-09-21	2023-09-20
Power Sensor	TST PASS	TSPS2023R	SEM009-25	2022-09-21	2023-09-20
Programmable Temperature&Humidity Chamber	Votsch Industrietechnik GmbH	VT 4002	SEM002-15	2023-03-21	2024-03-20
Universal Radio Communication Tester	Rohde&Schwarz	CMW500	SEM010-08	2023-03-20	2024-03-19
Measurement Software	TST PASS	TST PASS V2.0	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM028-01	2022-07-08	2023-07-07

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SZEMC-TRF-01 Rev. A/0 Aug01,2022

Report No.: SZCR230600190408

Page: 8 of 29

Channel Closing Transmission Time					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Shielding Room	AUDIX	N/A	SEM001-08	2022-05-14	2025-05-13
EXA Signal Analyzer	KEYSIGHT	N9010A	SEM004-09	2022-04-01 2023-03-31	2023-03-31 2024-03-30
Signal Generator	KEYSIGHT	N5171B	SEM006-13	2023-03-20	2024-03-19
MXG Vector Signal Generator	KEYSIGHT	N5182A	SEM006-14	2023-03-20	2024-03-19
ESG Vector Signal Generator	KEYSIGHT	E4438C	SEM006-15	2022-09-20	2023-09-19
DC Power Supply	KEYSIGHT	E3642A	SEM011-07	2023-03-21	2024-03-20
Manual Step Attenuator	KEYSIGHT	8494B	SEM021-05	2022-04-01 2023-03-31	2023-03-31 2024-03-30
Manual Step Attenuator	KEYSIGHT	8496B	SEM021-06	2022-04-01 2023-03-31	2023-03-31 2024-03-30
Power Sensor	TST PASS	TSPS2023R	SEM009-22	2022-09-21	2023-09-20
Power Sensor	TST PASS	TSPS2023R	SEM009-23	2022-09-21	2023-09-20
Power Sensor	TST PASS	TSPS2023R	SEM009-24	2022-09-21	2023-09-20
Power Sensor	TST PASS	TSPS2023R	SEM009-25	2022-09-21	2023-09-20
Programmable Temperature&Humidity Chamber	Votsch Industrietechnik GmbH	VT 4002	SEM002-15	2023-03-21	2024-03-20
Universal Radio Communication Tester	Rohde&Schwarz	CMW500	SEM010-08	2023-03-20	2024-03-19
Measurement Software	TST PASS	TST PASS V2.0	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM028-01	2022-07-08	2023-07-07

General used equipment					
Equipment	Manufacturer	Model No.	Inventory No.	Cal Date	Cal Due Date
Humidity/ Temperature Indicator	Mingle	N/A	SEM002-08	2022-09-04	2023-09-03
Humidity/ Temperature Indicator	Anymetre	TH101B	SEM002-09	2022-09-04	2023-09-03
Barometer	Changchun Meteorological Industry Factory	DYM3	SEM002-01	2023-03-23	2024-03-22



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6 Radio Spectrum Matter Test Results

6.1 Non-occupancy period

Test Requirement KDB 905462 D02 Section 5.1

Test Method: KDB 905462 D02 Section 7.8.3

Limit:

Test item	Limit	Applicability	
		Master Device or client with Radar Detection	Client without Radar Detection
Non-occupancy period	Minimum 30 minutes	Yes	Not required
Channel Availability Check Time	60 seconds	Yes	Not required
Channel Move Time	10 seconds See Note 1.	Yes	Yes
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.	Yes	Yes
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.	Yes	Not required

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 24.9 °C

Humidity: 68.7 % RH

Atmospheric Pressure: 1008 mbar

6.1.2 Test Mode Description

Pre-scan / Mode
Final test Code Description

Final test 09 Normal operating_Keep the EUT communication with the companion device.



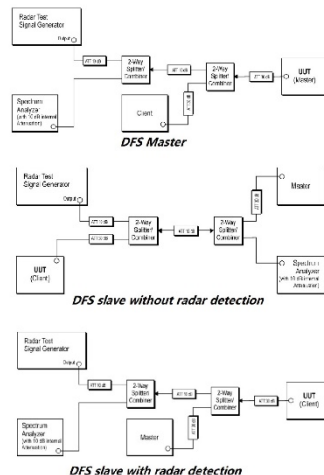
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6.1.3 Test Setup Diagram



6.1.4 Measurement Procedure and Data

- 1) The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.
- 2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device.
- 3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.
- 4) EUT will associate with the master at channel. The file "iperf.exe" specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Media Player Classic Ver. 6.4.8.6 in order to properly load the network for the entire period of the test.
- 5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.
- 6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.
- 7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: $Dwell (0.3ms) = S (12000ms) / B (4000)$; where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: $C (ms) = N \times Dwell (0.3ms)$; where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.
- 8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

Please Refer to Appendix for Details

6.2 Channel Move Time

Test Requirement KDB 905462 D02 Section 5.1

Test Method: KDB 905462 D02 Section 7.8.3

Limit:

Test item	Limit	Applicability	
		Master Device or client with Radar Detection	Client without Radar Detection
Non-occupancy period	Minimum 30 minutes	Yes	Not required
Channel Availability Check Time	60 seconds	Yes	Not required
Channel Move Time	10 seconds See Note 1.	Yes	Yes
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.	Yes	Yes
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.	Yes	Not required

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

6.2.1 E.U.T. Operation

Operating Environment:

Temperature: 24.9 °C Humidity: 68.7 % RH Atmospheric Pressure: 1008 mbar

6.2.2 Test Mode Description

Pre-scan / Final test	Mode Code	Description
Final test	09	Normal operating_Keep the EUT communication with the companion device.

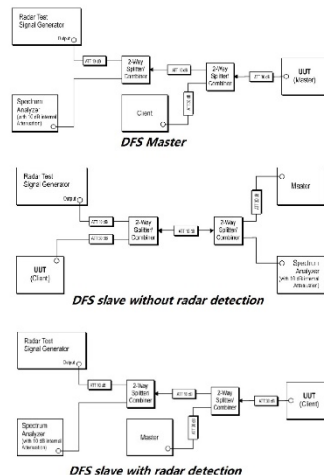


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6.2.3 Test Setup Diagram



6.2.4 Measurement Procedure and Data

- 1) The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.
- 2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device.
- 3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.
- 4) EUT will associate with the master at channel. The file "iperf.exe" specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Media Player Classic Ver. 6.4.8.6 in order to properly load the network for the entire period of the test.
- 5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.
- 6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.
- 7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: $Dwell (0.3ms) = S (12000ms) / B (4000)$; where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: $C (ms) = N \times Dwell (0.3ms)$; where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.
- 8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

Please Refer to Appendix for Details

6.3 Channel Closing Transmission Time

Test Requirement KDB 905462 D02 Section 5.1

Test Method: KDB 905462 D02 Section 7.8.3

Limit:

Test item	Limit	Applicability	
		Master Device or client with Radar Detection	Client without Radar Detection
Non-occupancy period	Minimum 30 minutes	Yes	Not required
Channel Availability Check Time	60 seconds	Yes	Not required
Channel Move Time	10 seconds See Note 1.	Yes	Yes
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.	Yes	Yes
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.	Yes	Not required

Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.

Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.

6.3.1 E.U.T. Operation

Operating Environment:

Temperature: 24.9 °C

Humidity: 68.7 % RH

Atmospheric Pressure: 1008 mbar

6.3.2 Test Mode Description

Pre-scan / Mode
Final test Code Description

Final test 09 Normal operating_Keep the EUT communication with the companion device.

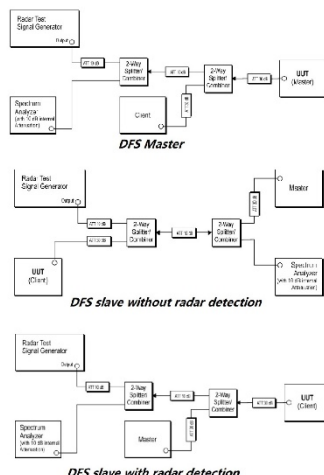


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6.3.3 Test Setup Diagram



6.3.4 Measurement Procedure and Data

- 1) The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.
- 2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device.
- 3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.
- 4) EUT will associate with the master at channel. The file "iperf.exe" specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Media Player Classic Ver. 6.4.8.6 in order to properly load the network for the entire period of the test.
- 5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.
- 6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.
- 7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: $Dwell (0.3ms) = S (12000ms) / B (4000)$; where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: $C (ms) = N \times Dwell (0.3ms)$; where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.
- 8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

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7 EUT Constructional Details (EUT Photos)

Refer to Appendix - External and Internal Photos for SZCR2306001904AT



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8 Appendix

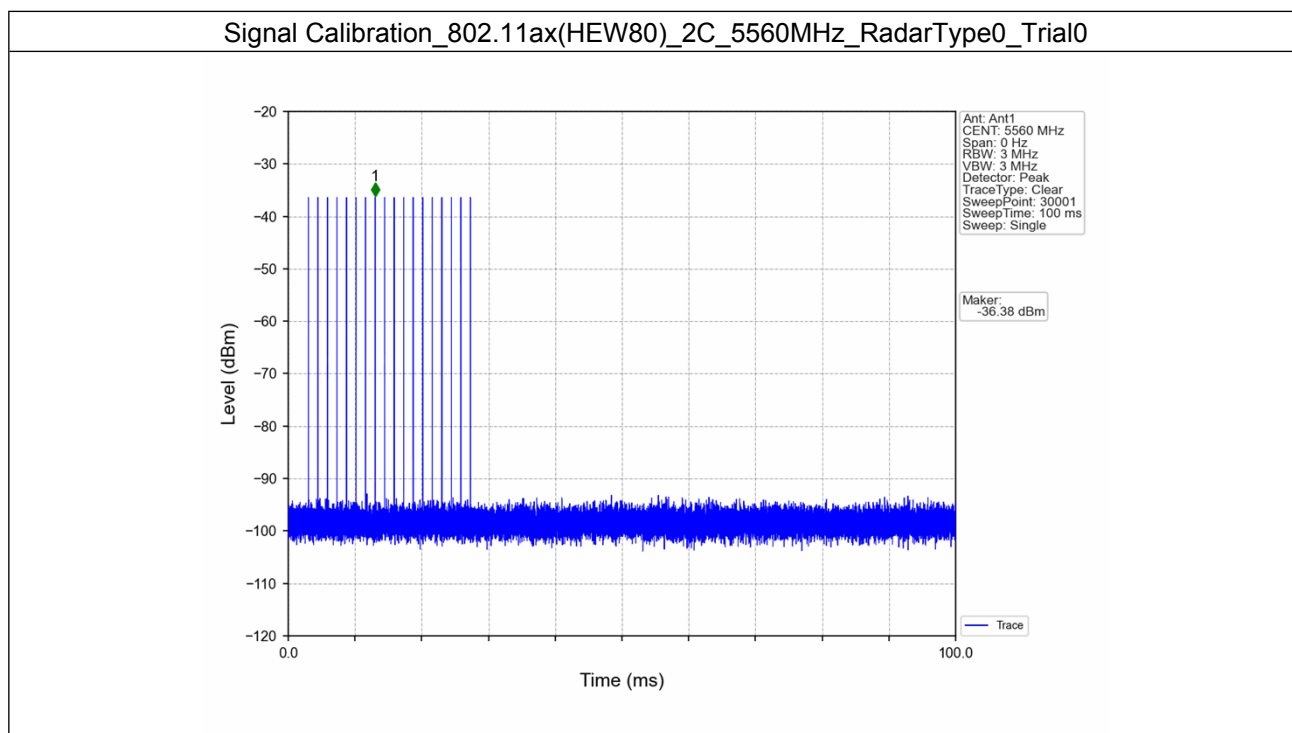
1. Signal Calibration

1.1 SC

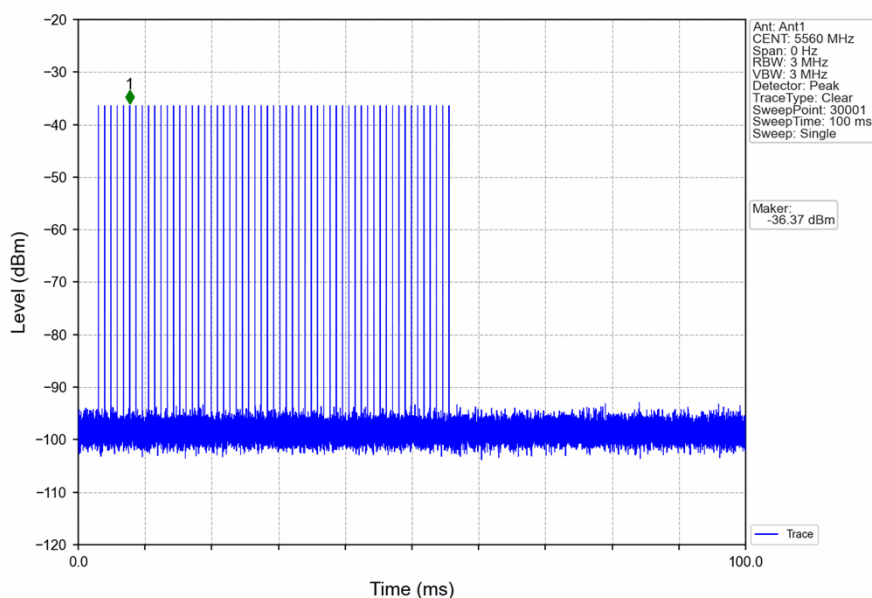
1.1.1 Test Result

Band: 2C						
Mode	Bandwidth (MHz)	Frequency (MHz)	Radar Signal		Signal Calibration	
			Type	Trial Id	Result	Limit
802.11ax (HEW80)	80	5560	0	0	Refer To Test Graph	Pass
			1	0	Refer To Test Graph	Pass
			2	0	Refer To Test Graph	Pass
			3	0	Refer To Test Graph	Pass
			4	0	Refer To Test Graph	Pass
			5	0	Refer To Test Graph	Pass
			6	0	Refer To Test Graph	Pass

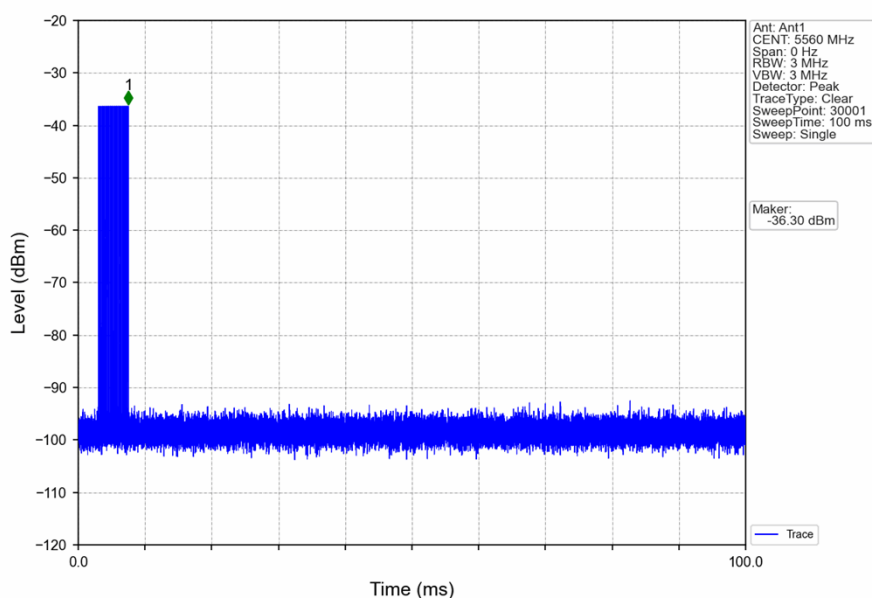
1.1.2 Test Graph



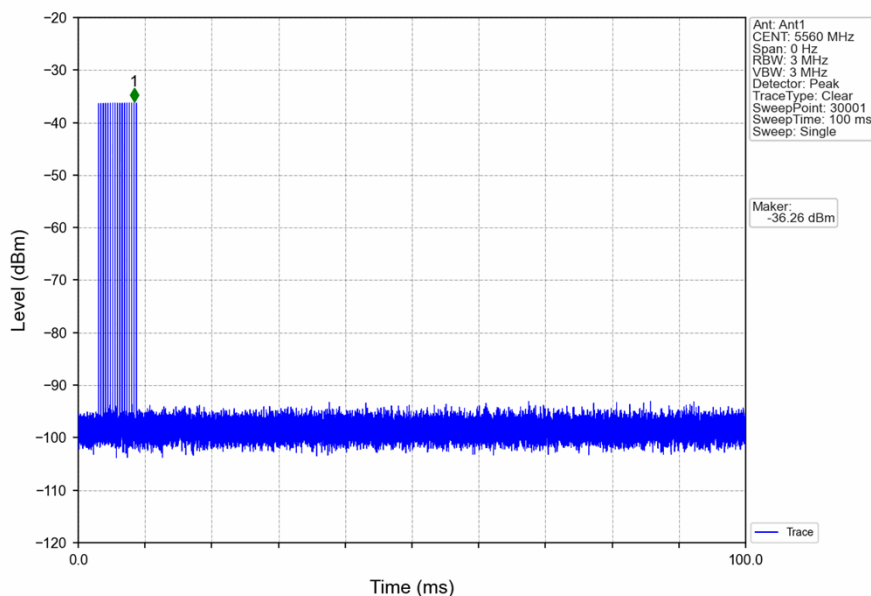
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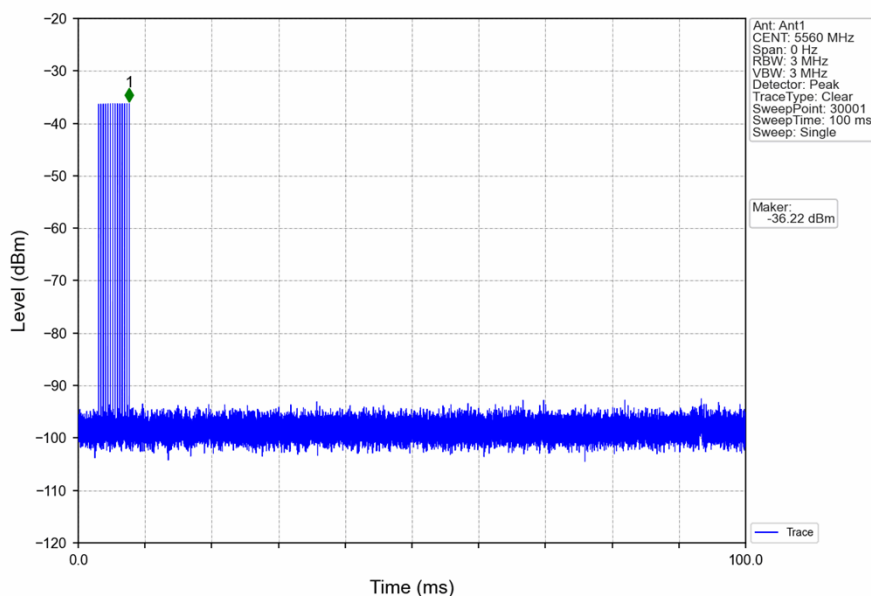
Signal Calibration_802.11ax(HEW80)_2C_5560MHz_RadarType2_Trial0



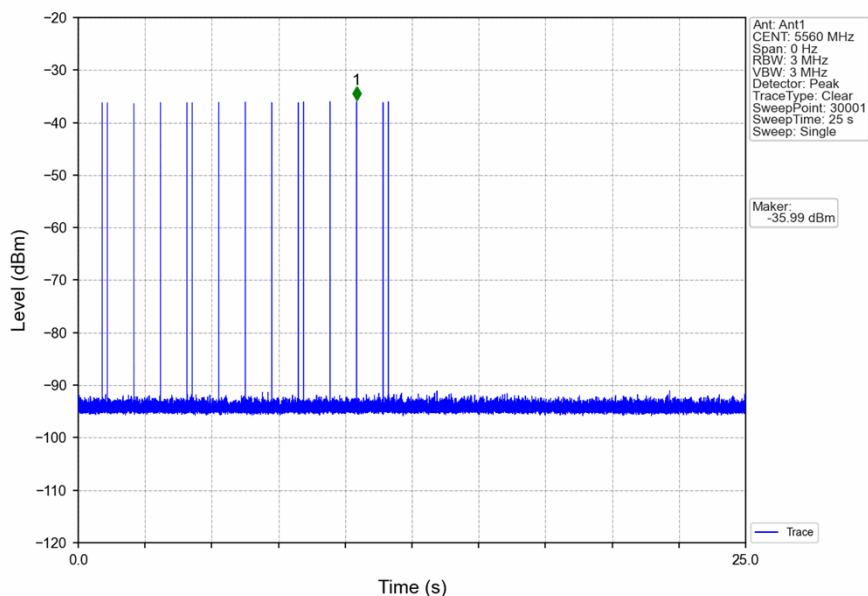
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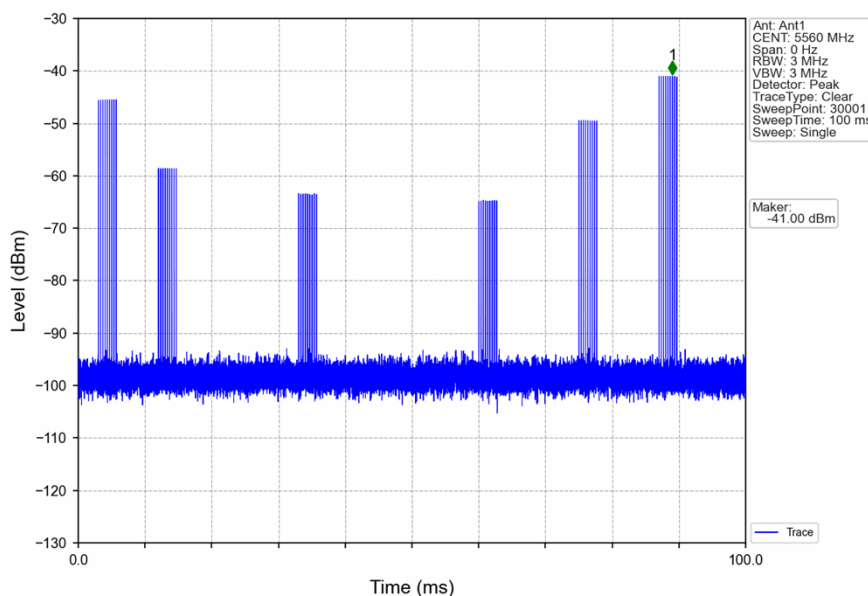
Signal Calibration_802.11ax(HEW80)_2C_5560MHz_RadarType4_Trial0



Signal Calibration_802.11ax(HEW80)_2C_5560MHz_RadarType5_Trial0



Signal Calibration_802.11ax(HEW80)_2C_5560MHz_RadarType6_Trial0

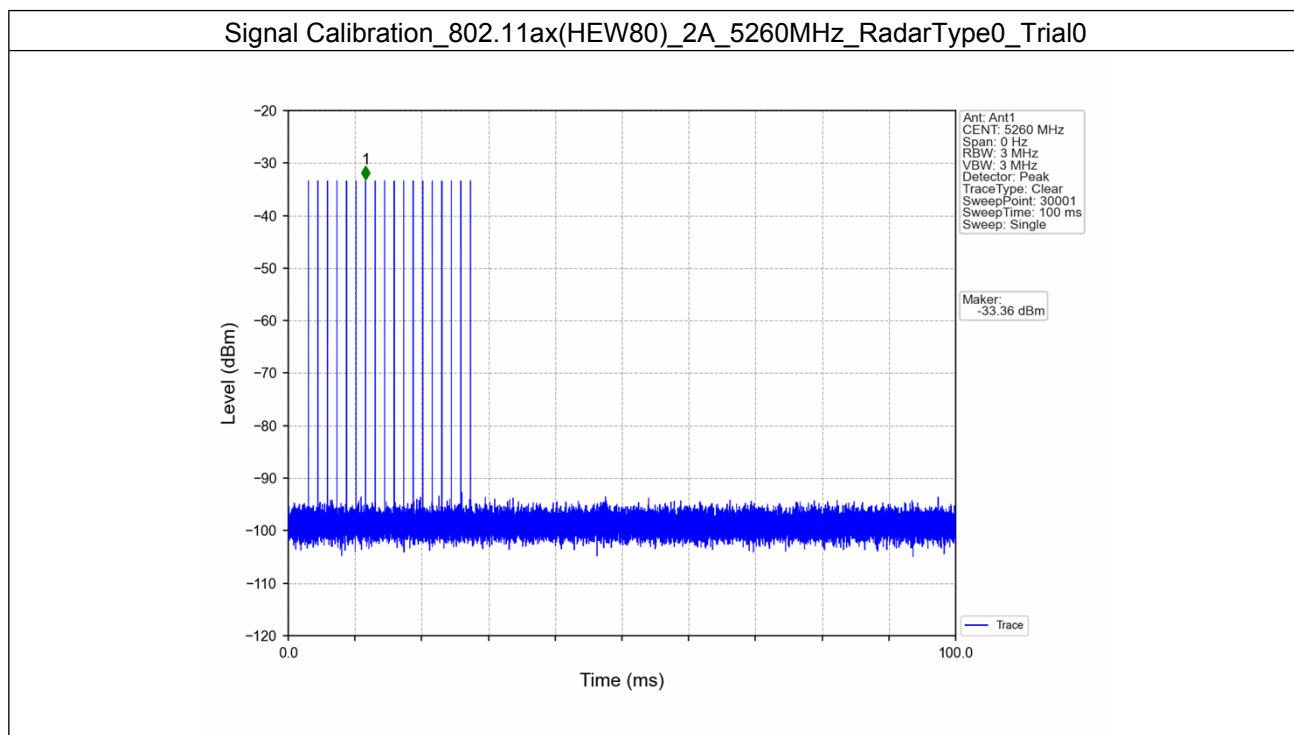


1.2 SC

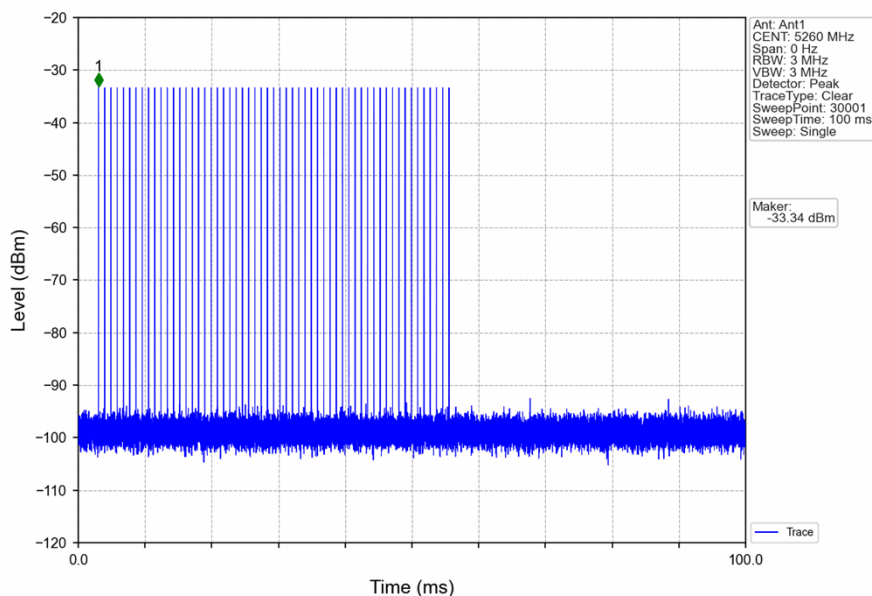
1.2.1 Test Result

Band: 2A						
Mode	Bandwidth (MHz)	Frequency (MHz)	Radar Signal		Signal Calibration	
			Type	Trial Id	Result	Limit
802.11ax (HEW80)	20	5260	0	0	Refer To Test Graph	Pass
			1	0	Refer To Test Graph	Pass
			2	0	Refer To Test Graph	Pass
			3	0	Refer To Test Graph	Pass
			4	0	Refer To Test Graph	Pass
			5	0	Refer To Test Graph	Pass
			6	0	Refer To Test Graph	Pass

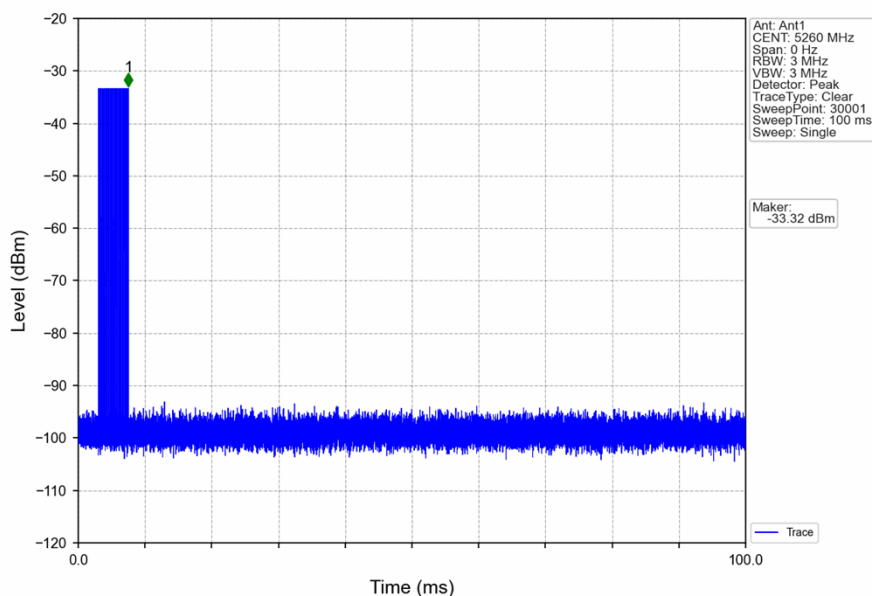
1.2.2 Test Graph



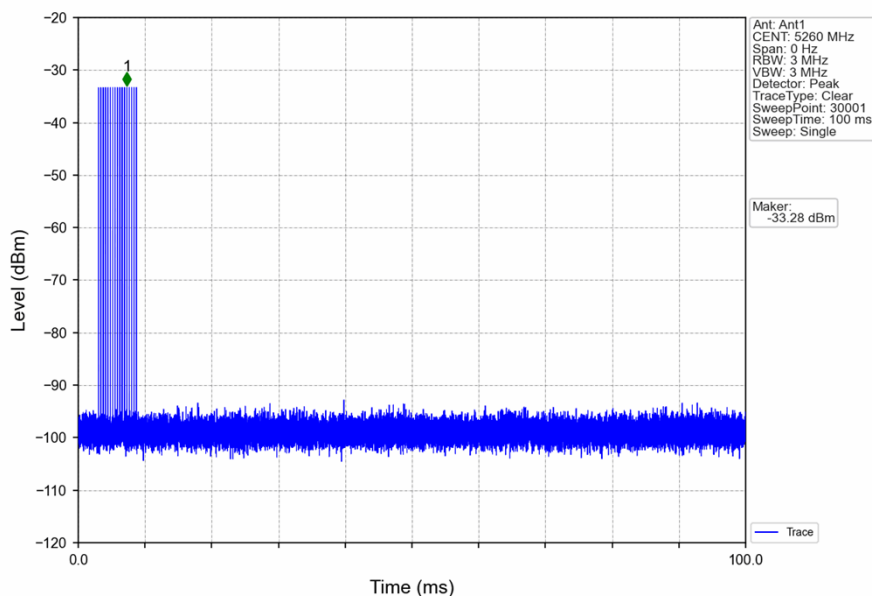
Signal Calibration_802.11ax(HEW80)_2A_5260MHz_RadarType1_Trial0



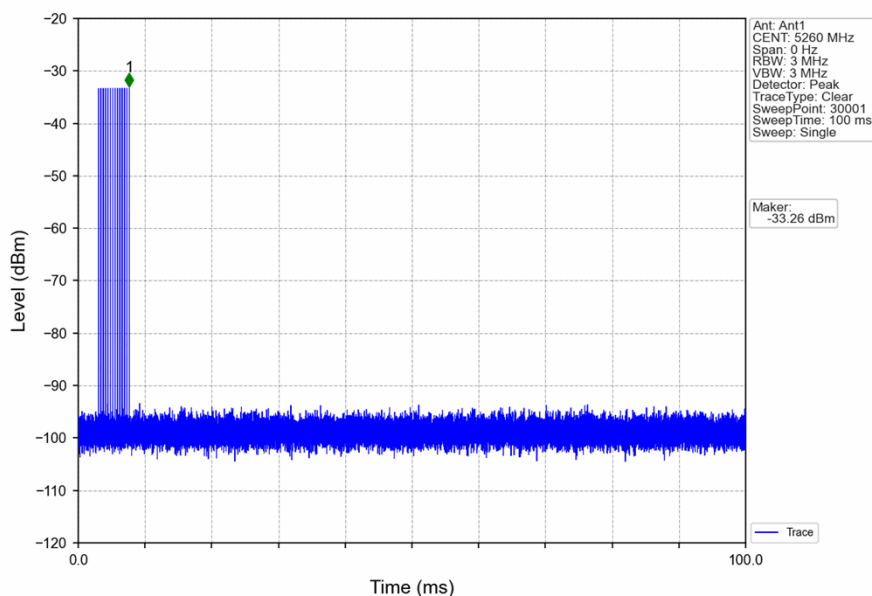
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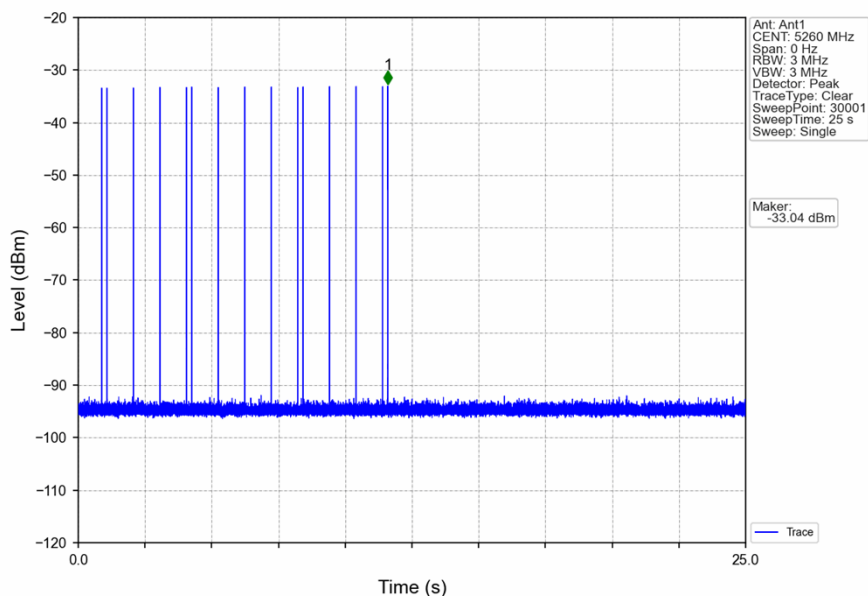
Signal Calibration_802.11ax(HEW80)_2A_5260MHz_RadarType3_Trial0



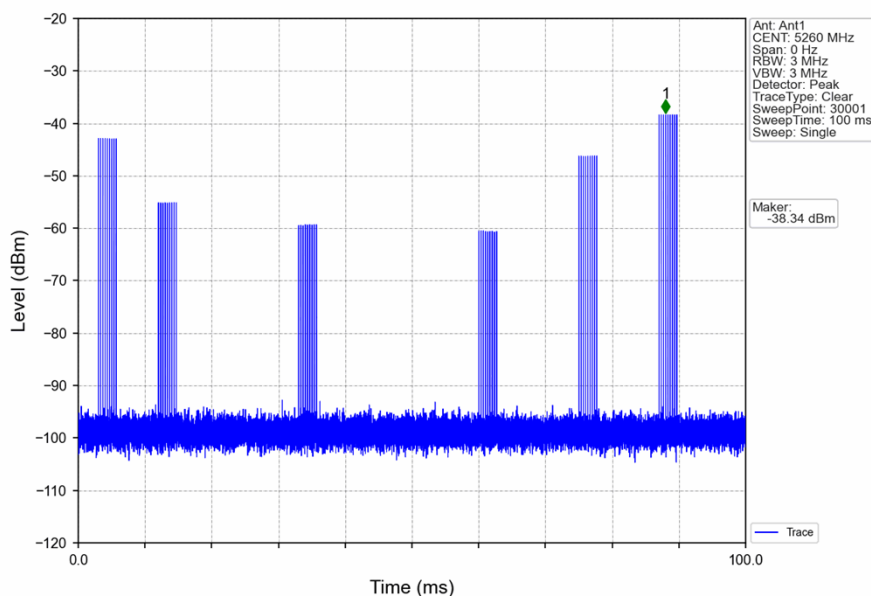
Signal Calibration_802.11ax(HEW80)_2A_5260MHz_RadarType4_Trial0



Signal Calibration_802.11ax(HEW80)_2A_5260MHz_RadarType5_Trial0



Signal Calibration_802.11ax(HEW80)_2A_5260MHz_RadarType6_Trial0



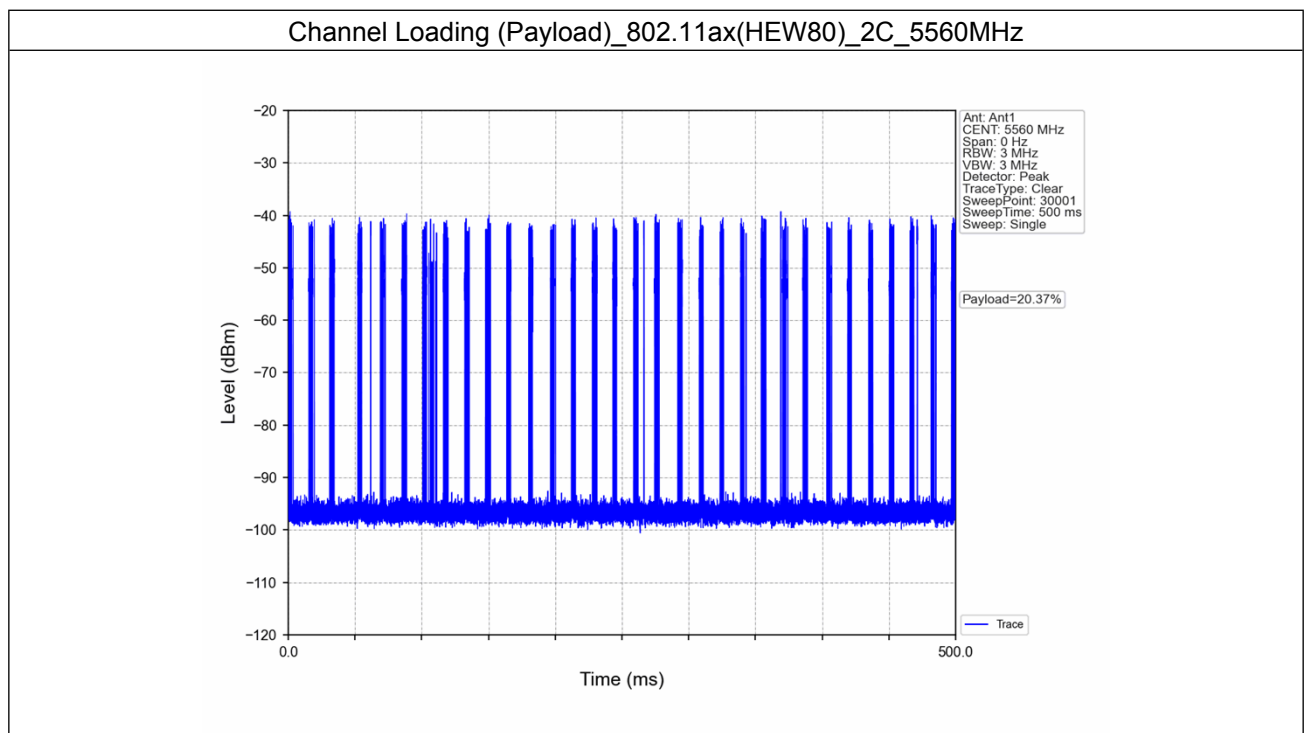
2. Channel Loading (Payload)

2.1 Payload

2.1.1 Test Result

Band: 2C					
Mode	Bandwidth (MHz)	Frequency (MHz)	Channel Loading (Payload) (%)		Verdict
			Result	Limit	
802.11ax (HEW80)	80	5560	20.37	≥ 17	Pass

2.1.2 Test Graph

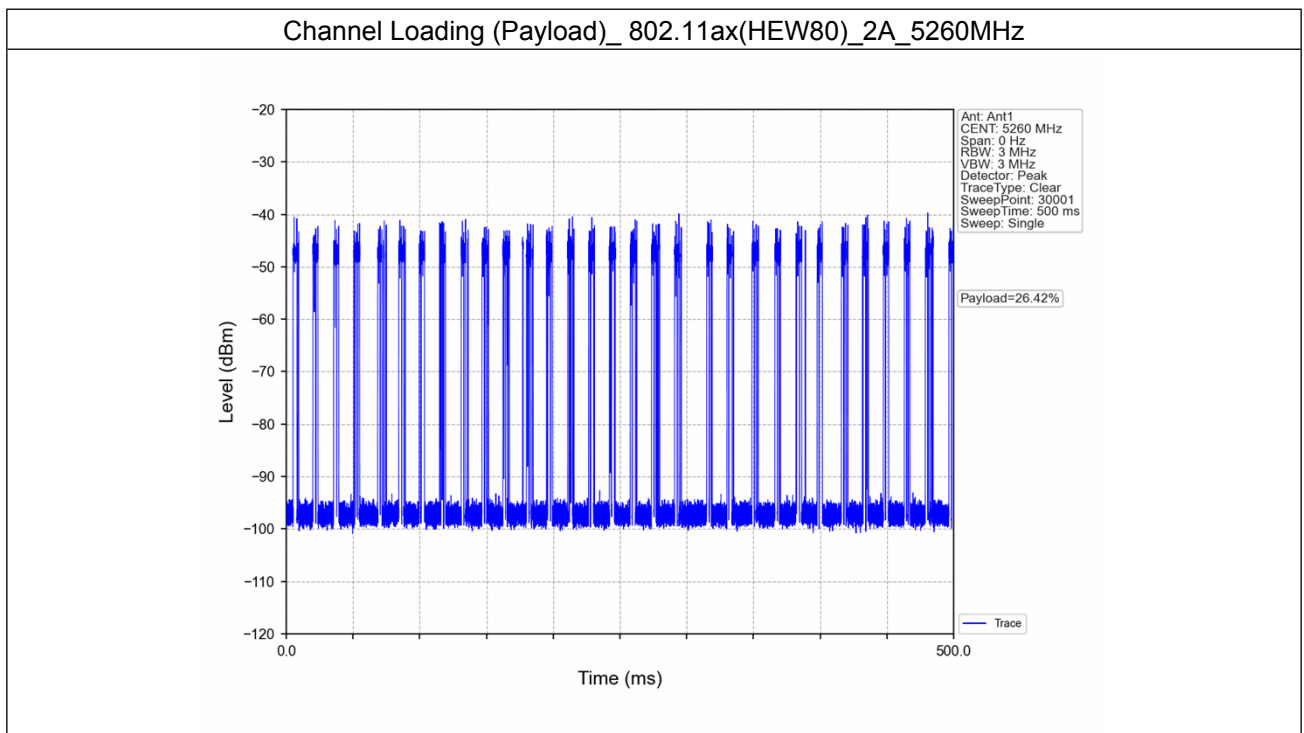


2.2 Payload

2.2.1 Test Result

Band: 2A					
Mode	Bandwidth (MHz)	Frequency (MHz)	Channel Loading (Payload) (%)		Verdict
			Result	Limit	
802.11ax (HEW80)	80	5260	26.42	>=17	Pass

2.2.2 Test Graph



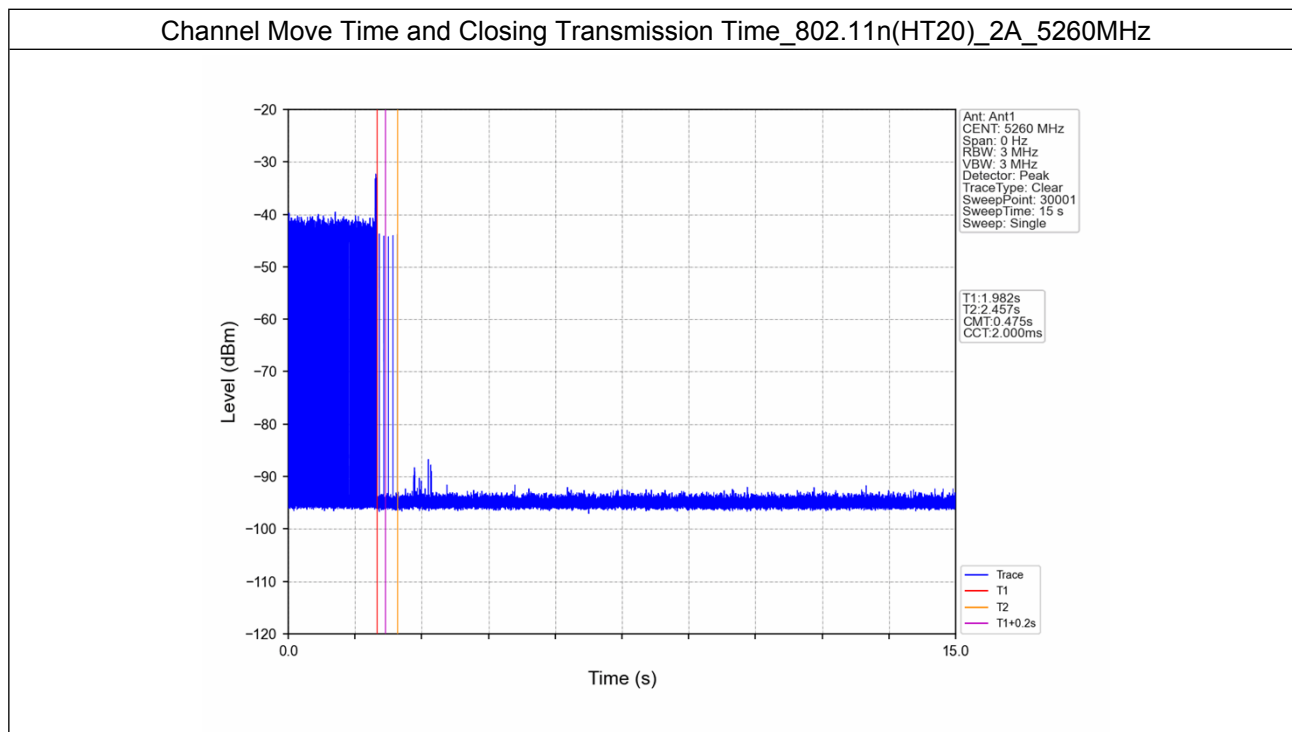
3. Channel Move Time and Closing Transmission Time

3.1 CMT_CTT

3.1.1 Test Result

Band: 2A					
Mode	Bandwidth (MHz)	Frequency (MHz)	Channel Move Time		Verdict
			Result	Limit	
802.11ax (HEW80)	80	5290	0.475 s	<=10 s	Pass
			Closing Transmission Time		Verdict
			Result	Limit	
			0.002 s	<=60 ms	Pass

3.1.2 Test Graph

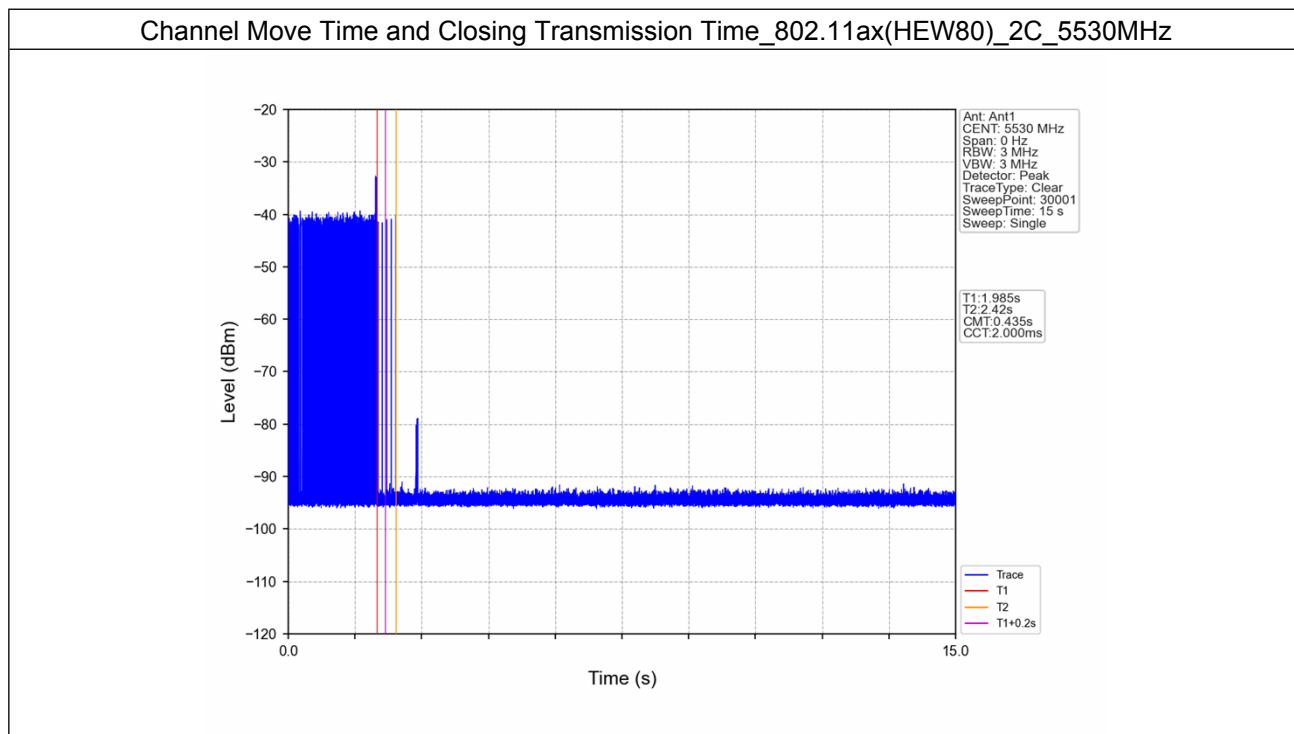


3.2 CMT_CTT

3.2.1 Test Result

Band: 2C					
Mode	Bandwidth (MHz)	Frequency (MHz)	Channel Move Time		Verdict
			Result	Limit	
802.11ax (HEW80)	80	5530	0.435 s	<=10 s	Pass
			Closing Transmission Time		Verdict
			Result	Limit	
			0.002 s	<=60 ms	Pass

3.2.2 Test Graph



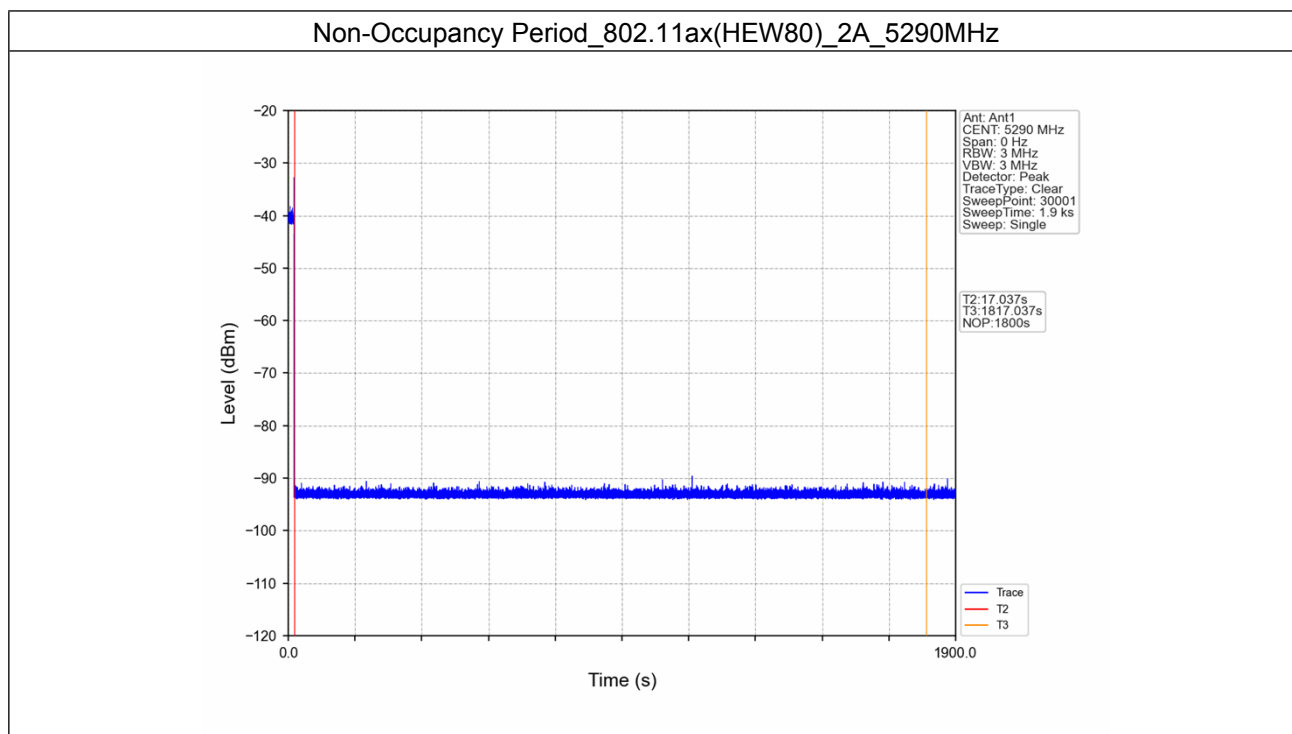
4. Non-Occupancy Period

4.1 Period

4.1.1 Test Result

Band: 2A					
Mode	Bandwidth (MHz)	Frequency (MHz)	Non-Occupancy Period		Verdict
			Result	Limit	
802.11ax (HEW80)	80	5290	1800 s	>=1800 s	Pass

4.1.2 Test Graph

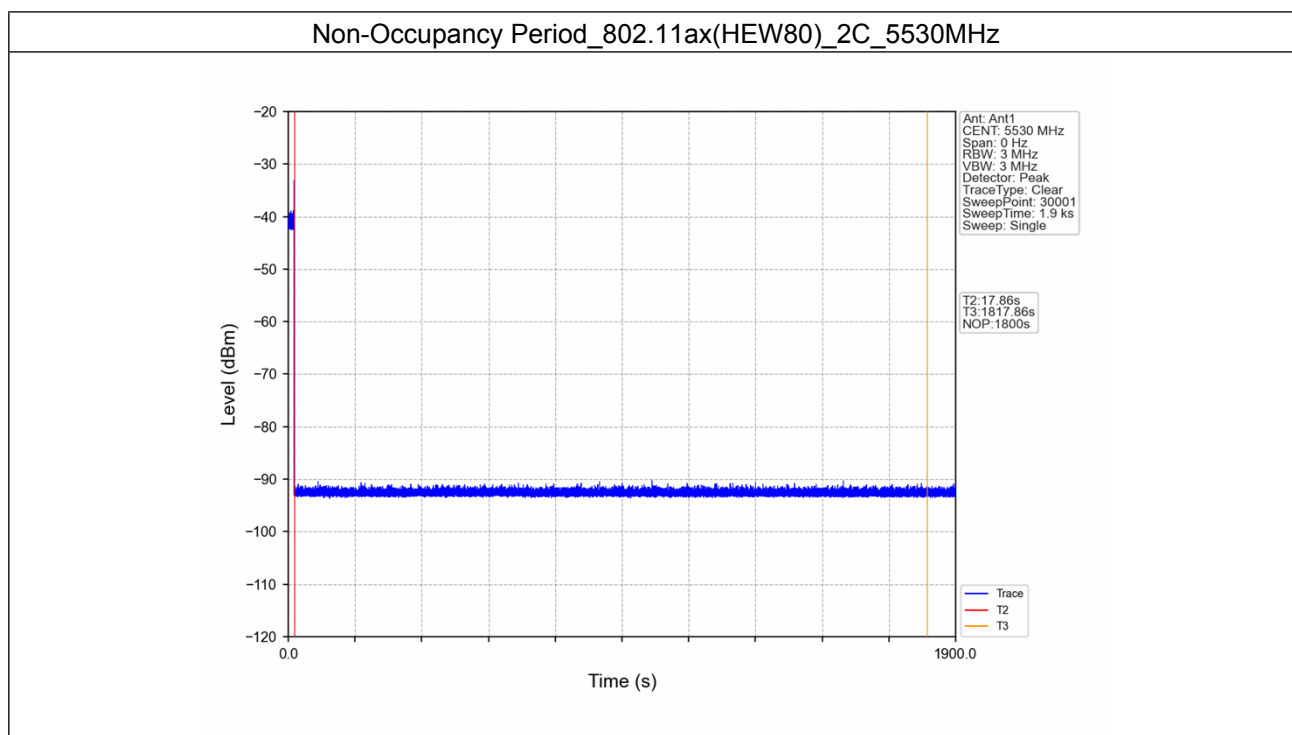


4.2 Period

4.2.1 Test Result

Band: 2C					
Mode	Bandwidth (MHz)	Frequency (MHz)	Non-Occupancy Period		Verdict
			Result	Limit	
802.11 ax (HEW80)	80	5530	Refer To Test Graph		Pass

4.2.2 Test Graph



- End of the Report -