

ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT



Applicant: Westermo Neratec AG
Rosswiesstrasse 29, 8608 Bubikon, Switzerland
Manufacturer: Westermo Neratec AG
Rosswiesstrasse 29, 8608 Bubikon, Switzerland
Product Name: WLAN Access Point
Brand Name: WESTERMO
Model No.: Ibex-1510-T2G2.5 NA
ISED PMN: Ibex-1510
Report Number: TERF2410003004ER
FCC ID 2AEJD-3628-15102
IC: 9301A-362815102
Date of EUT Received: Oct. 09, 2024
Date of Test: Oct. 09, 2024 ~ Dec. 16, 2024
Issue Date: Jan. 10, 2025

Approved By

Marcus Tseng

We hereby certify that:

The above equipment was tested by SGS Taiwan Ltd. Central RF Lab. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10:2013 and the energy emitted by the sample EUT comply with FCC rule part §15.407, ISSED RSS-247.

The results of this report relate only to the sample identified in this report.

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Revision History

Report Number	Revision	Description	Issue Date	Revised By	Remark
TERF2410003004ER	00	Original.	Dec. 20, 2024	Yami Kuo	
TERF2410003004ER	01	Revise chapter 1.1	Jan. 10, 2025	Yami Kuo	*

Note:

- 1、The remark "*" indicates modification of the report upon requests from certification body.

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1 GENERAL INFORMATION

1.1 Product Description

Product Name:	WLAN Access Point
Brand Name:	WESTERMO
Model No.:	Ibex-1510-T2G2.5 NA
ISED PMN:	Ibex-1510
Hardware Version:	MK1 rev.4
Firmware Version:	6.11.5
EUT Series No.:	3628-15102 00000012 2434
Power Supply:	1. From 120 VAC / 48 VDC PoE adapter. 2. From 24 to 120 VDC to optional DC input connector.

1.2 DFS Firmware version:

Master

Product Information

Product Name	Ibex-1510-T2G2.5 NA
Product Serial Number	3628-15102-01-00000012-2434
Firmware Name	IbexOS
Firmware Version	6.11.5-RC1
Firmware Revision	5f8334e9d37e68f268790aa0f4fa062338ee644f
Bootloader Version	0.6
Bootloader Build Date	Nov 08 2023 - 15:14:18 +0000

Slave

Product Information

Product Name	Ibex-1510-T2G2.5 NA
Product Serial Number	3628-15102-01-00000010-2434
Firmware Name	IbexOS
Firmware Version	6.11.5-RC1
Firmware Revision	5f8334e9d37e68f268790aa0f4fa062338ee644f
Bootloader Version	0.6
Bootloader Build Date	Nov 08 2023 - 15:14:18 +0000

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1.3 FCC WLAN 5GHz:

Wi-Fi	Frequency Range (MHz)	Channels	Avg. Power (dBm)	Maximum Antenna Gain (dBi)	EIRP (dBm)
802.11a/ 802.11n_HT20/ 802.11ac_VHT20/ 802.11ax_HE20	5180~5240	4	14.99	6	20.99
	5260~5320	4	20.81	6	26.81
	5500~5720	12	21.75	6	27.75
	5745~5825	5	24.99	6	30.99
802.11n_HT40/ 802.11ac_VHT40/ 802.11ax_HE40	5190~5230	2	14.99	6	20.99
	5270~5310	2	22.92	6	28.92
	5510~5710	6	22.90	6	28.9
	5755~5795	2	24.71	6	30.71
802.11ac_VHT80/ 802.11ax_HE80	5210	1	14.98	6	20.98
	5290	1	20.99	6	26.99
	5530~5690	3	22.59	6	28.59
	5775	1	23.34	6	29.34

1.4 IC WLAN 5GHz:

Wi-Fi	Frequency Range (MHz)	Channels	Avg. Power (dBm)	Maximum Antenna Gain (dBi)	EIRP (dBm)
802.11a/ 802.11n_HT20/ 802.11ac_VHT20/ 802.11ax_HE20	5260~5320	4	16.99	6	22.99
	5500~5720	12	21.75	6	27.75
	5745~5825	5	24.99	6	30.99
802.11n_HT40/ 802.11ac_VHT40/ 802.11ax_HE40	5270~5310	2	16.97	6	22.97
	5510~5710	6	22.90	6	28.9
	5755~5795	2	24.71	6	30.71
802.11ac_VHT80/ 802.11ax_HE80	5290	1	16.99	6	22.99
	5530~5690	3	22.59	6	28.59
	5775	1	23.34	6	29.34

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1.5 Antenna Designation

Antenna Type	Supplier	Antenna Part No.	Freq. (MHz)	Peak Antenna Gain (dBi)
omni-directional	HUBER+SUHNER	1399.35.0008	5150~5250	6
			5250~5350	6
			5470~5725	6
			5725~5850	6
Patch antenna	Westermo	ICL-5	5150~5250	4
			5250~5350	4
			5470~5725	4
			5725~5850	4

Note:

1. Pre-scanned was done on the above antennas, measurements were demonstrated by using the antenna with the highest gain as the worst case scenarios.
2. Antenna information is provided by the applicant.

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1.6 Test Methodology of Applied Standards

FCC Part 15, Subpart E §15.407

FCC KDB 905462 D02 UNII DFS Compliance Procedures New Rules v02

FCC KDB 905462 D03 UNII Clients Without Radar Detection New Rules v01r02

RSS-247 issue 3 Aug. 2023

1.7 Test Facility

Laboratory	Test Site Address	Test Site Name	FCC Designa- tion number	IC CAB identifier
SGS Taiwan Ltd. Central RF Lab. (TAF code 3702)	No.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan.	SAC 1	TW0027	TW3702
		SAC 2		
		SAC 3		
		Conduction 1		
		Conducted 1		
		Conducted 2		
		Conducted 3		
		Conducted 4		
		Conducted 5		
		Conducted 6		
	No.2, Keji 1st Rd., Guishan District, Taoyuan City, Taiwan 333	Conduction C	TW0028	
		SAC C		
		SAC D		
		SAC G		
		Conducted A		
		Conducted B		
		Conducted C		
		Conducted D		
		Conducted E		
		Conducted F		
Conducted G				
Note: Test site name is remarked on the equipment list in each section of this report as an indica- tion where measurements occurred in specific test site and address.				

1.8 Special Accessories

There are no special accessories used while test was conducted.

1.9 Equipment Modifications

There was no modification incorporated into the EUT.

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2 SUMMARY OF TEST RESULT

FCC and ISED Rules	Description Of Test	Result
§15.407(h) FCC KDB 905462 D02 IC RSS-247 §6.3	TPC and DFS Measurement	Compliant

3 MEASUREMENT UNCERTAINTY

Test Items	Uncertainty		
TPC and DFS Measurement	+/-	1.49	Hz
Temperature	+/-	0.6	°C
Humidity	+/-	3	%
DC / AC Power Source	+/-	1	%

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

The conformity assessment statement in this report is based solely on the test results, measurement uncertainty is excluded.

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4 TPC AND DFS MEASUREMENT

4.1 TPC Requirements

According to Part 15.407 (h)(1) Transmit power control (TPC). U-NII devices operating in the 5.25-5.35 GHz band and the 5.47-5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

Result:

Yes, The EUT equipped with TPC function.

4.2 DFS: Standard Applicable

4.2.1 FCC

According to §15.407(h)(2) and FCC KDB 905462 D02 , Radar Detection Function of Dynamic Frequency Selection (DFS).

Radar Detection Function of Dynamic Frequency Selection (DFS). U-NII devices operating with any part of its 26 dB emission bandwidth in the 5.25-5.35 GHz and 5.47-5.725 GHz bands shall employ a DFS radar detection mechanism to detect the presence of radar systems and to avoid co-channel operation with radar systems. Operators shall only use equipment with a DFS mechanism that is turned on when operating in these bands. The device must sense for radar signals at 100 percent of its emission bandwidth. The minimum DFS detection threshold for devices with a maximum e.i.r.p. of 200 mW to 1 W is -64 dBm. For devices that operate with less than 200 mW e.i.r.p. and a power spectral density of less than 10 dBm in a 1 MHz band, the minimum detection threshold is -62 dBm. The detection threshold is the received power averaged over 1 microsecond referenced to a 0 dBi antenna. For the initial channel setting, the manufacturers shall be permitted to provide for either random channel selection or manual channel selection.

- (i) Operational Modes. The DFS requirement applies to the following operational modes:
 - (a) The requirement for channel availability check time applies in the master operational mode.
 - (b) The requirement for channel move time applies in both the master and slave operational modes.
- (ii) Channel Availability Check Time. A U-NII device shall check if there is a radar system already operating on the channel before it can initiate a transmission on a channel and when it has to move to a new channel. The U-NII device may start using the channel if no radar signal with a power level greater than the interference threshold values listed in paragraph (h)(2) of this section, is detected within 60 seconds.
- (iii) Channel Move Time. After a radar's presence is detected, all transmissions shall cease on the operating channel within 10 seconds. Transmissions during this period shall consist of normal traffic for a maximum of 200 ms after detection of the radar signal. In addition, intermittent management and control signals can be sent during the remaining time to facilitate vacating the operating channel.

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Non-occupancy Period. A channel that has been flagged as containing a radar system, either by a channel availability check or in-service monitoring, is subject to a non-occupancy period of at least 30 minutes. The non-occupancy period starts at the time when the radar system is detected.

4.2.2 ISED

According to RSS 247 §6.2.3, Until further notice, devices subject to this section shall not be capable of transmitting in the band 5600-5650 MHz. This restriction is for the protection of Environment Canada's weather radars operating in this band.

According to RSS 247 §6.3, Devices operating in the bands 5250-5350 MHz, 5470-5600 MHz and 5650-5725 MHz band shall comply with the following:

(a) DFS radar signal detection threshold

Devices shall employ a DFS radar detection mechanism to detect the presence of radar systems and to avoid co-channel operation with radar systems. The device must detect radar signals within its entire emission bandwidth. The minimum DFS radar signal detection threshold is described below.

Devices	DFS Threshold
Devices with an e.i.r.p. < 200 mW AND a Power Spectral Density < 10 dBm/MHz	-62 dBm
Devices with $200 \text{ mW} \leq \text{e.i.r.p.} \leq 1 \text{ W}$	-64 dBm
Note: The detection threshold power is the received power, averaged over a 1-microsecond reference to a 0 dBi antenna.	

(b) Operational requirements

Devices shall comply with the following requirements, however, the requirement for in-service monitoring does not apply to slave devices without radar detection.

- (i) In-service monitoring: an LE-LAN device shall be able to monitor the operating channel to check that a co-channel radar has not moved or started operation within range of the LE-LAN device. During in-service monitoring, the LE-LAN radar detection function continuously searches for radar signals between normal LE-LAN transmissions.
- (ii) Channel availability check time: the device shall check whether there is a radar system already operating on the channel before it initiates a transmission on a channel and when it moves to a channel. The device may start using the channel if no radar signal with a power level greater than the interference threshold value specified in Section 6.3.1 above is detected within 60 seconds. This requirement only applies in the master operational mode.
- (iii) Channel move time: after a radar signal is detected, the device shall cease all transmissions on the operating channel within 10 seconds.
- (iv) Channel closing transmission time: is comprised of 200 ms starting at the beginning of

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the channel move time plus any additional intermittent control signals required to facilitate a channel move (an aggregate of 60 ms) over the remaining 10-second period of the channel move time.

- (v) Non-occupancy period: a channel that has been flagged as containing a radar signal, either by a channel availability check or in-service monitoring, is subject to a 30-minute non-occupancy period where the channel cannot be used by the LE-LAN device. The non-occupancy period starts from the time that the radar signal is detected.

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5 APPLICABLE STANDARDS

Table 1: Applicability of DFS requirements prior to use of a channel

Requirement	Operational Mode	
	<input checked="" type="checkbox"/> Master	<input type="checkbox"/> Client (with radar detection)
Non-occupancy Period	Yes	Yes
DFS Detection Threshold	Yes	Yes
Channel Availability Check Time	Yes	Not required
U-NII Detection Bandwidth	Yes	Yes

Requirement	Operational Mode	
	<input checked="" type="checkbox"/> Client(without radar detection)	
Non-occupancy Period		Not required
DFS Detection Threshold		Not required
Channel Availability Check Time		Not required
U-NII Detection Bandwidth		Not required

Table 2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode	
	<input checked="" type="checkbox"/> Master Device or Client with Radar Detection	
DFS Detection Threshold		Yes
Channel Closing Transmission time		Yes
Channel Move time		Yes
U-NII Detection Bandwidth		Yes

Requirement	Operational Mode	
	<input checked="" type="checkbox"/> Client Without Radar Detection	
DFS Detection Threshold		Not required
Channel Closing Transmission time		Yes
Channel Move time		Yes
U-NII Detection Bandwidth		Not required

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Additional requirements for devices with multiple bandwidth mode	<input checked="" type="checkbox"/> Master Device or Client with Radar Detection	<input checked="" type="checkbox"/> Client Without Radar Detection
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required
Channel Move Time and Channel Closing Transmission Time	Test using widest BW mode available	Test using the widest BW mode available for the link
All other tests	Any single BW mode	Not required
Note: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.		

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Table 3: Interference Threshold values, Master or Client incorporating In-Service Monitoring

Maximum Transmit Power	Value (See Notes 1, 2, and 3)
EIRP \geq 200 milliwatt	-64 dBm
EIRP < 200 milliwatt and power spectral density < 10 dBm/MHz	-62 dBm
EIRP < 200 milliwatt that do not meet the power spectral density requirement	-64 dBm
<p>Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna.</p> <p>Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.</p> <p>Note3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.</p>	

Table 4: DFS Response requirement values

Parameter	Value
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds See Note 1.
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.
<p>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.</p> <p>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.</p> <p>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.</p>	

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Table 5: Radar Test Waveforms
Short Pulse Radar

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
0	1	1428	18	See Note 1	See Note 1
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A	Roundup $\left\{ \left(\frac{1}{360} \right) \cdot \left(\frac{19 \cdot 10^6}{PRI_{\mu sec}} \right) \right\}$	60%	30
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120
Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.					

Long Pulse Radar

Radar Type	Pulse Width (μsec)	Chirp Width (MHz)	PRI (μsec)	Number of Pulses per Burst	Number of Bursts	Minimum Percentage of Successful Detection	Minimum Number of Trials
5	50-100	5-20	1000-2000	1-3	8-20	80%	30

Frequency Hopping Radar

Radar Type	Pulse Width (μsec)	PRI (μsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Minimum Percentage of Successful Detection	Minimum Number of Trials
6	1	333	9	0.333	300	70%	30

The applicant of this given application confirms that information regarding the parameters of the detected Radar Waveforms is not available to the end user.

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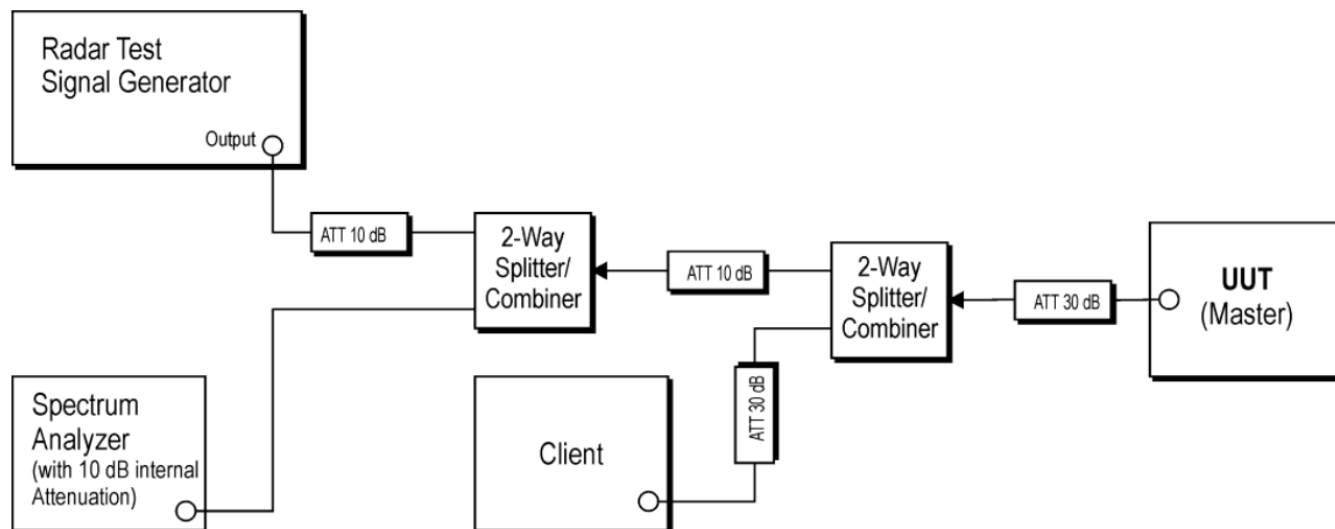
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6 TEST SETUP

Setup for Master with injection at the Master



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7 TEST EQUIPMENT USED:

Conducted Emission Test Site: Conducted 6					
EQUIPMENT TYPE	MFR	MODEL NUMBER	SERIAL NUMBER	LAST CAL. (mm/dd/yyyy)	CAL DUE. (mm/dd/yyyy)
EXA Spectrum Analyzer	Agilent	N9010A	MY54200716	10/14/2024	10/13/2025
Signal Generator	KEYSIGHT	N5182B	MY61252553	09/24/2024	09/23/2025
Test Software	KEYSIGHT	N7607B Signal Stdio for DFS Radar profile	Ver. 3.2.0.0	N.C.R	N.C.R
DC Power Supply	Gwinstek	SPS-3610	GEV856750	08/14/2024	08/13/2025
Splitter	RF-LAMBAD	RFLT2W1G18G	18112200209	12/12/2023	12/11/2024
Splitter	RF-LAMBAD	RFLT2W1G18G	18112200209	12/11/2024	12/10/2025
Splitter	RF-Lambda	RFLT2W1G18G	21032900019	12/12/2023	12/11/2024
Splitter	RF-Lambda	RFLT2W1G18G	21032900019	12/11/2024	12/10/2025
Splitter	RF-Lambda	RFLT4W1G18G	18090300133	12/12/2023	12/11/2024
Splitter	RF-Lambda	RFLT4W1G18G	18090300133	12/11/2024	12/10/2025
Splitter	Titan	T0510E2W118Q	22015158	12/12/2023	12/11/2024
Splitter	Titan	T0510E2W118Q	22015158	12/11/2024	12/10/2025
Manual Attenuator	Agilent	8496B + 8494B	MY42147434 + MY42152151	12/12/2023	12/11/2024
Manual Attenuator	Agilent	8496B + 8494B	MY42147434 + MY42152151	12/11/2024	12/10/2025

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8 DESCRIPTION OF EUT:

The EUT operates in the 5250-5350 MHz and 5470-5725 MHz frequency ranges. It can function as a Master device with radar detection and DFS capability, or as a Slave device (client equipment) without radar detection.

Timing plots are required with calculations demonstrating a minimum channel loading of approximately 17% or greater.

The rated output power of the master unit is $\geq 23\text{dBm(EIRP)}$. therefore the required interference threshold level is -64dBm . after correction for antenna gain and procedural adjustments, the required conducted threshold at the antenna port is -64dBm .

The rated output power of the master unit is $< 23\text{ dBm(EIRP)}$. therefore the required interference threshold level is -62dBm . after correction for antenna gain and procedural adjustments, the required threshold at the antenna port is -62dBm .

DFS Detection Threshold (dBm) = $-64 + G\text{ (dBi)}$, for conducted test.

DFS Detection Threshold (dBm)	Minimum of Peak Antenna Gain (dBi)	Threshold for test (dBm)
-64	4	-60

While calibrate the path on antenna port of DFS test equipment (master), measurements equipments (spectrum) is ensured to be 50 Ohms, and therefore verification on antenna gain measurement can be ignored.

The EUT employs multiple transmitter/receiver chains, each connected to an antenna to perform radiated tests.

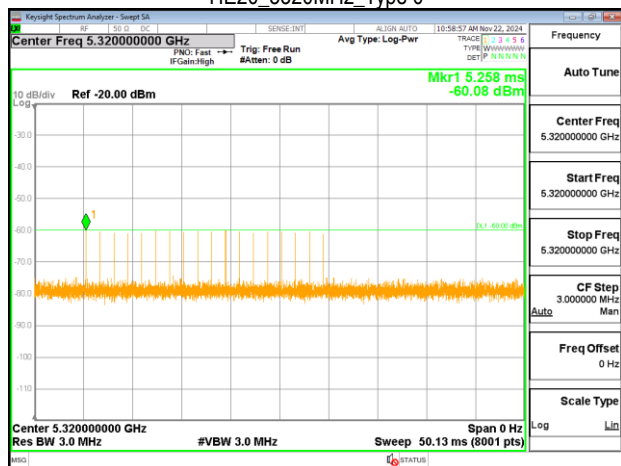
The Slave device associated with the EUT during these tests does not have radar detection capability.

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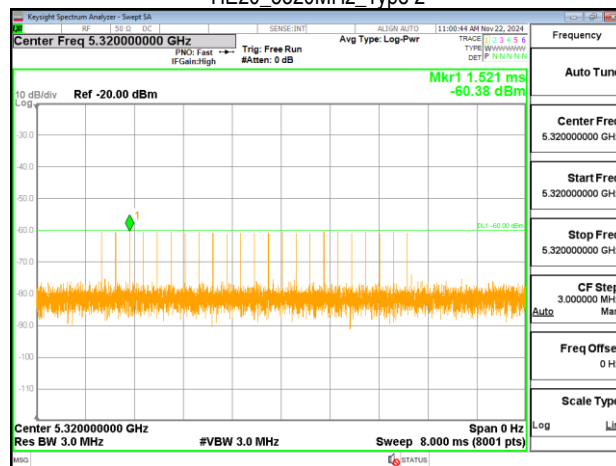
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9 RADAR TYPE WAVEFORM CALIBRATION AT DFS DETECTION THRESHOLD

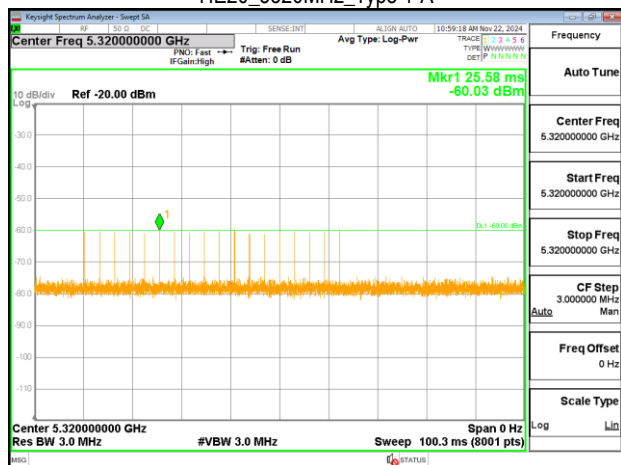
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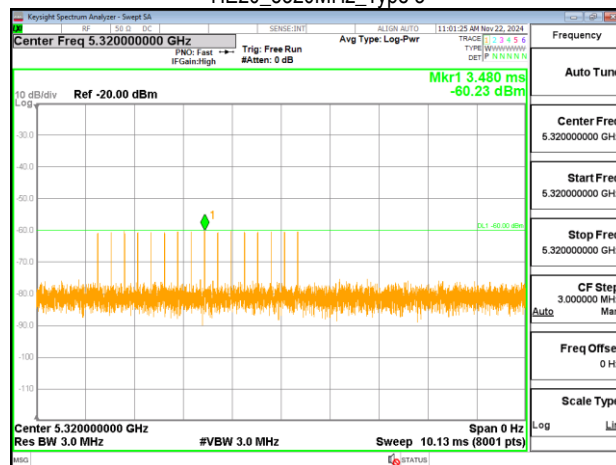
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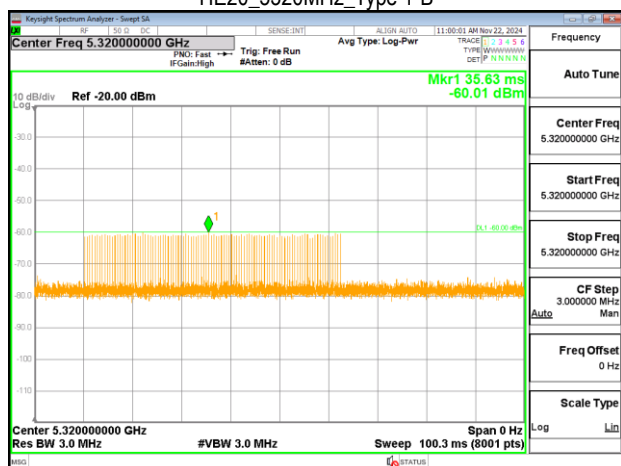
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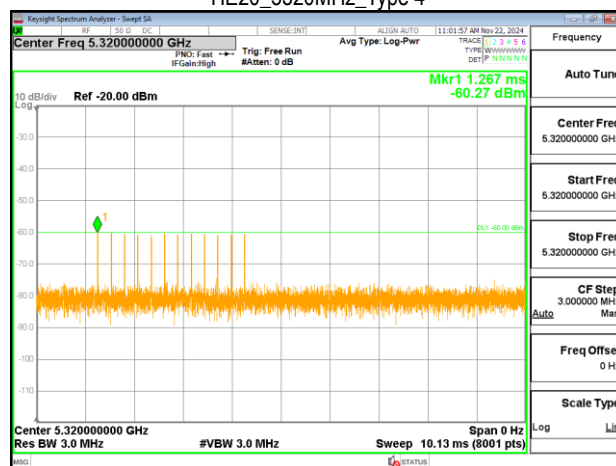
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HE20_5320MHz_Type 1-B



HE20_5320MHz_Type 4



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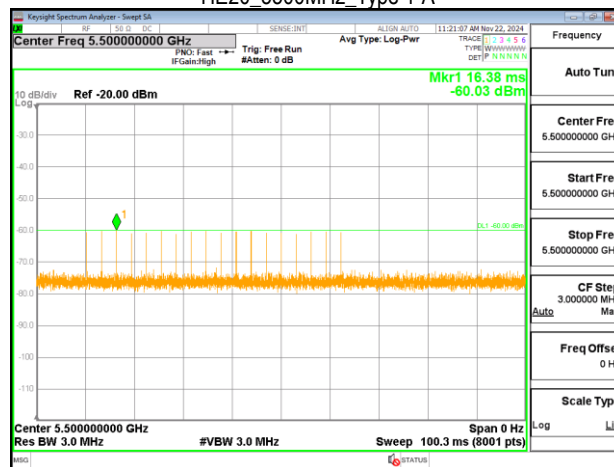
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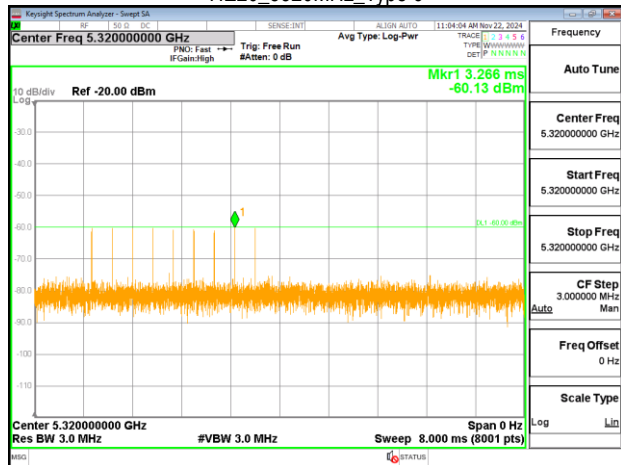
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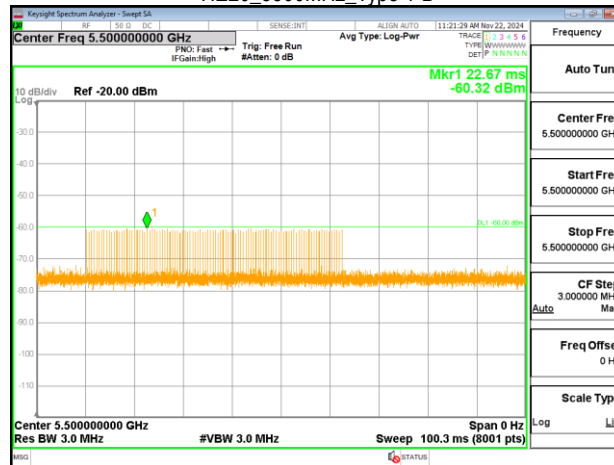
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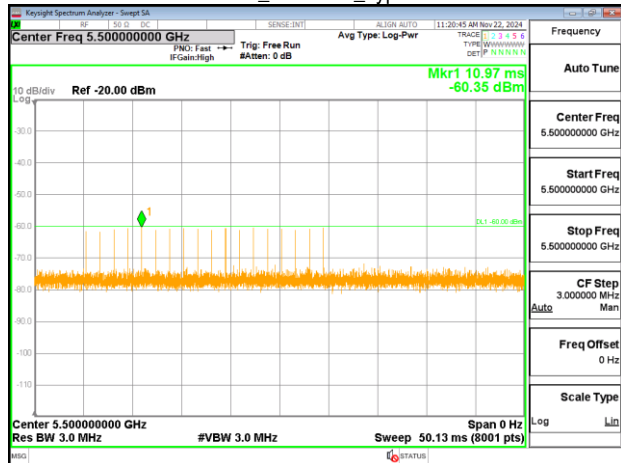
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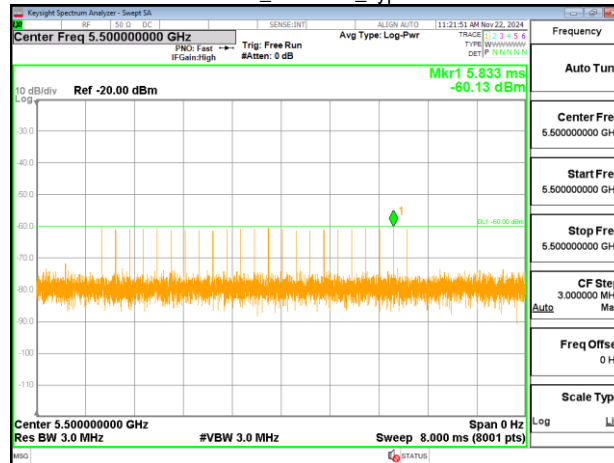
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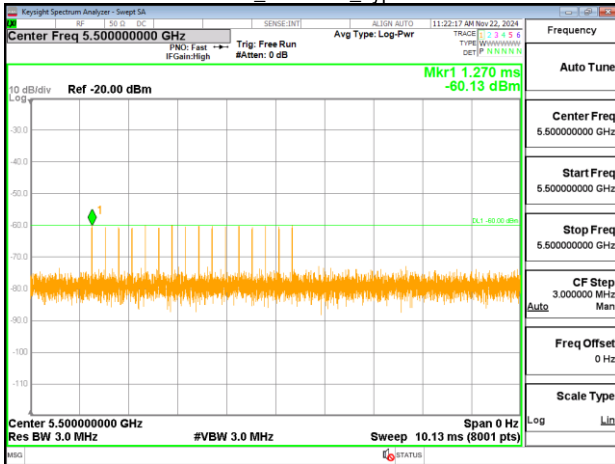


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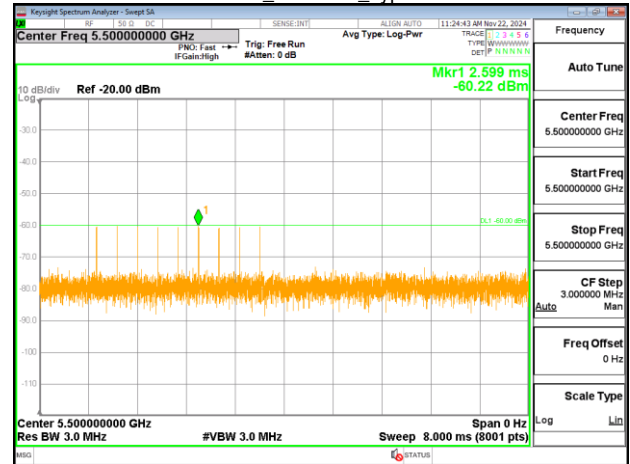
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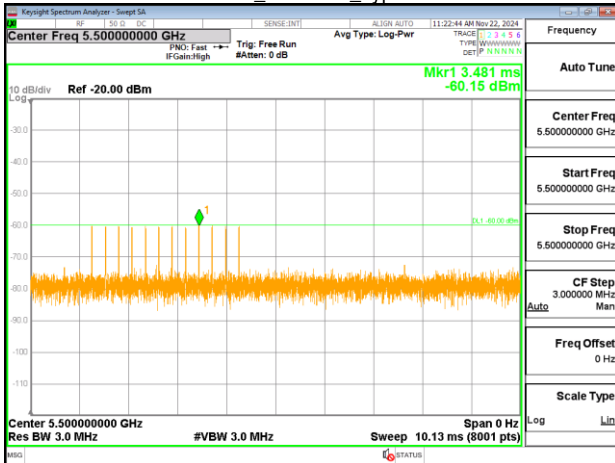
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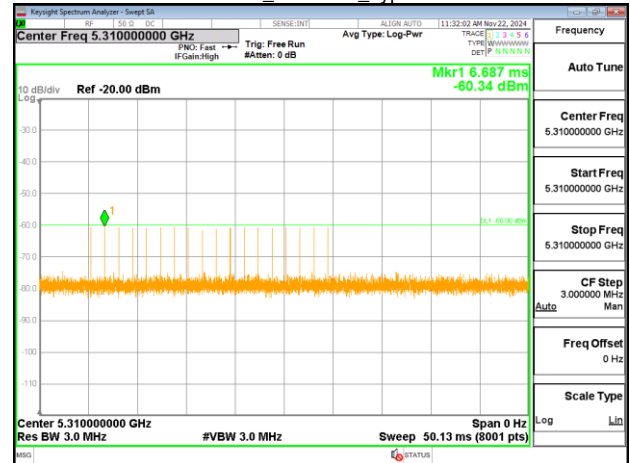
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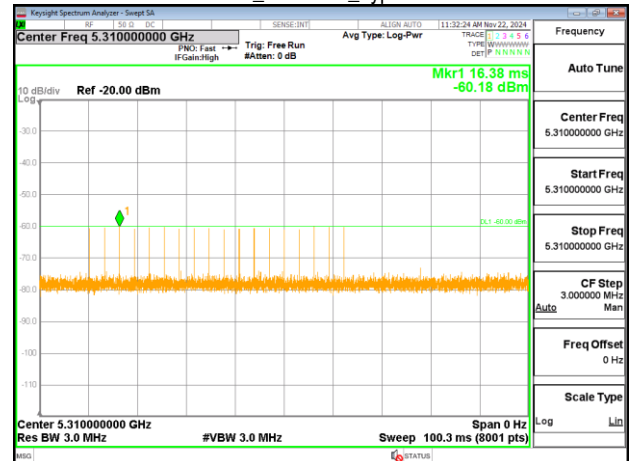
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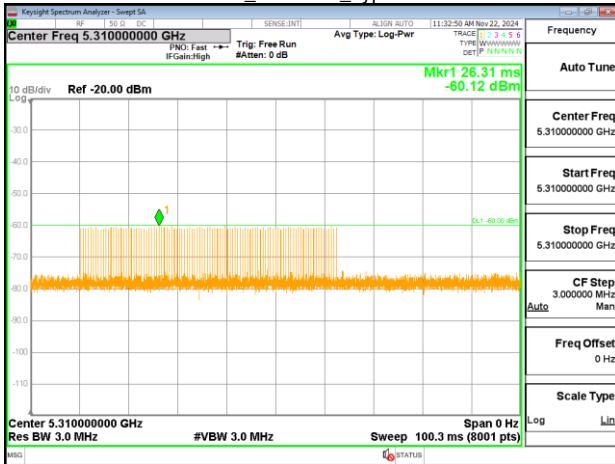


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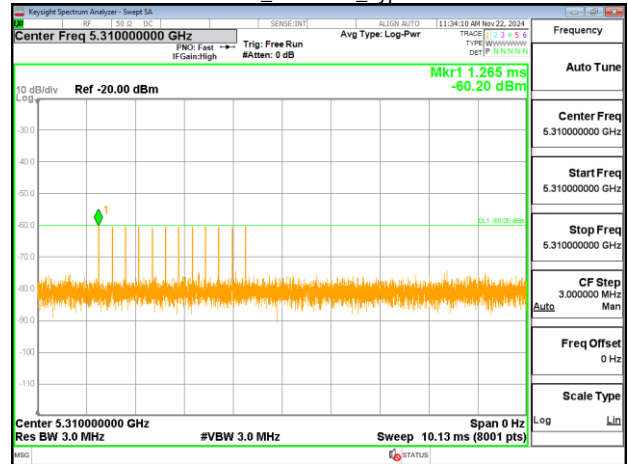
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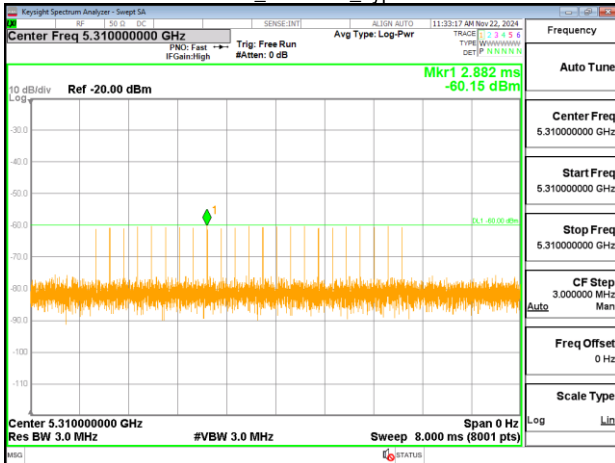
HE40_5310MHz_Type 1-B



HE40_5310MHz_Type 4



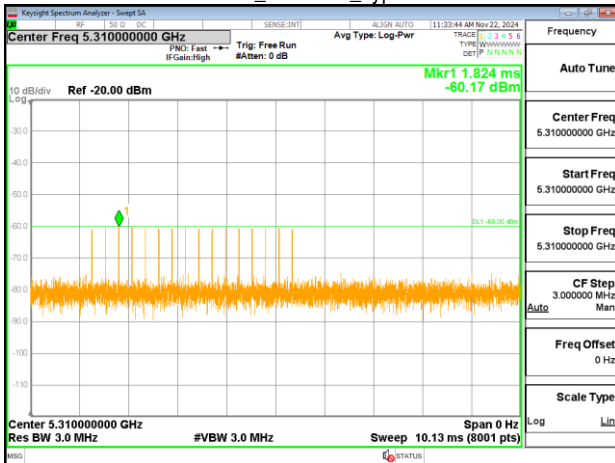
HE40_5310MHz_Type 2



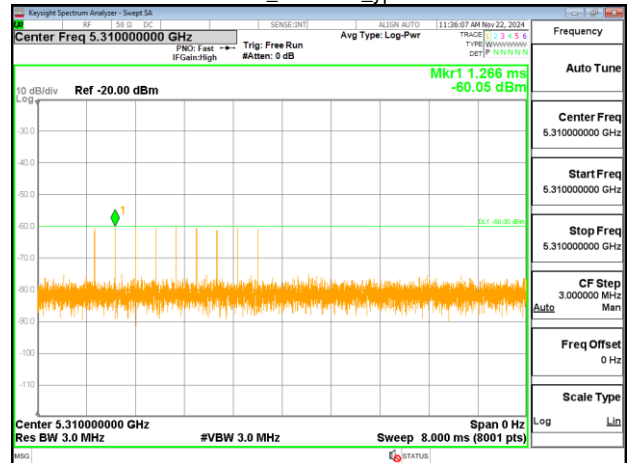
HE40_5310MHz_Type 5



HE40_5310MHz_Type 3



HE40_5310MHz_ype 6

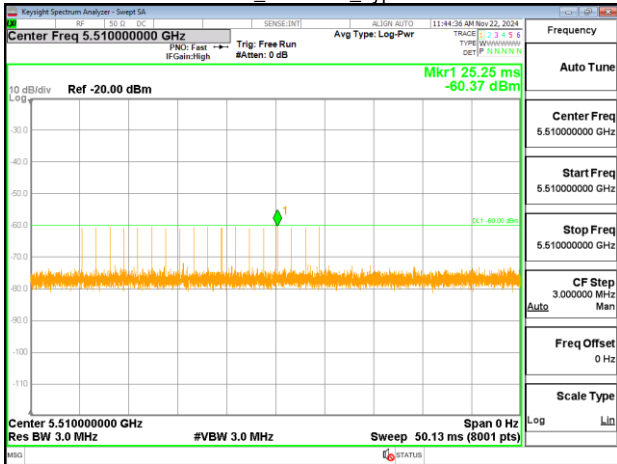


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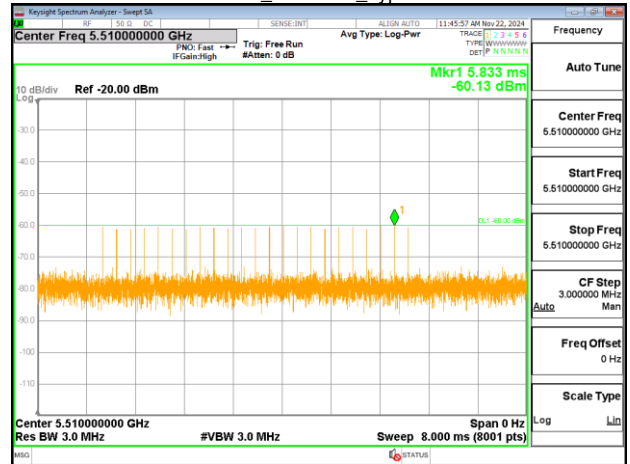
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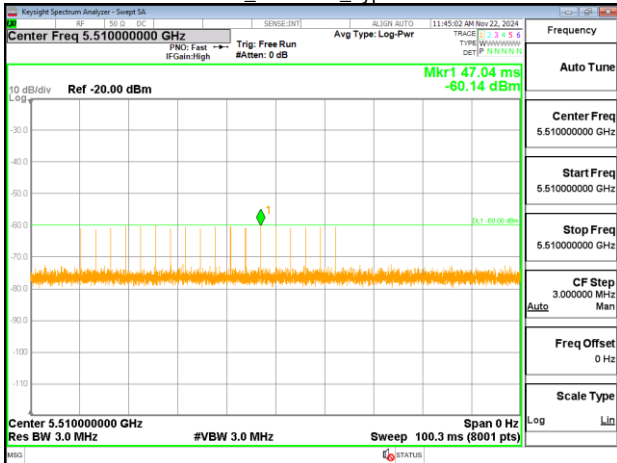
HE40_5510MHz_Type 0



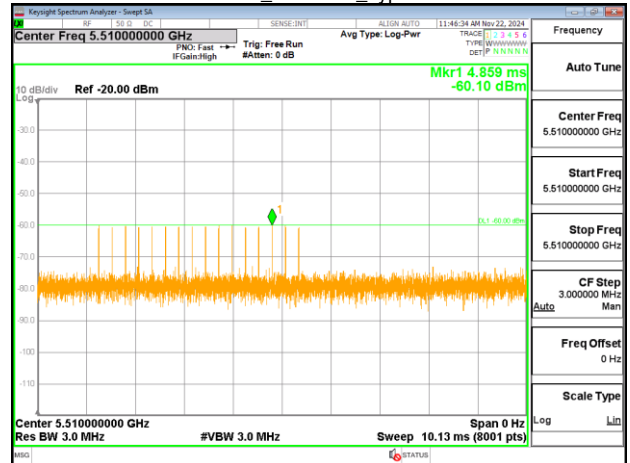
HE40_5510MHz_Type 2



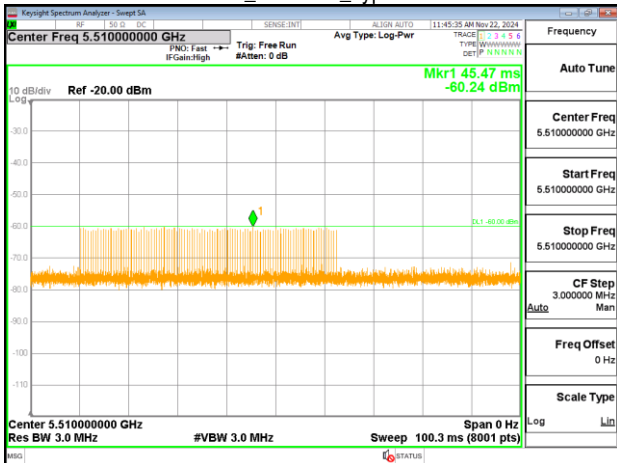
HE40_5510MHz_Type 1-A



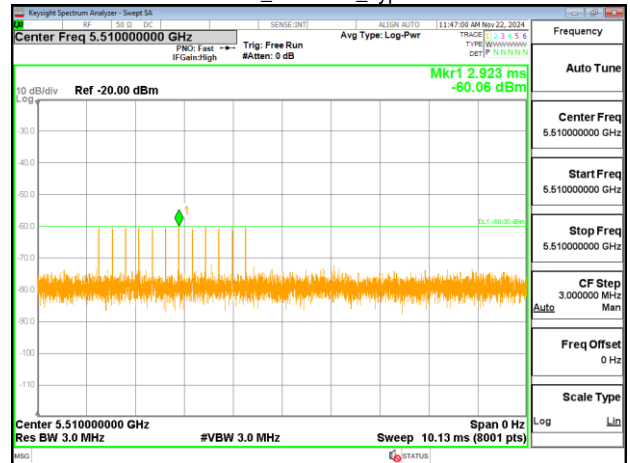
HE40_5510MHz_Type 3



HE40_5510MHz_Type 1-B



HE40_5510MHz_Type 4



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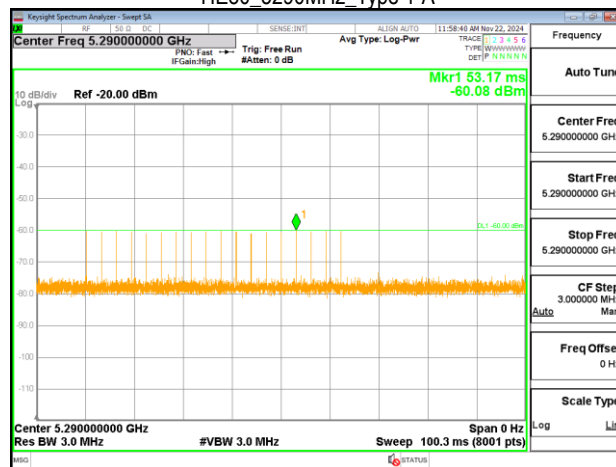
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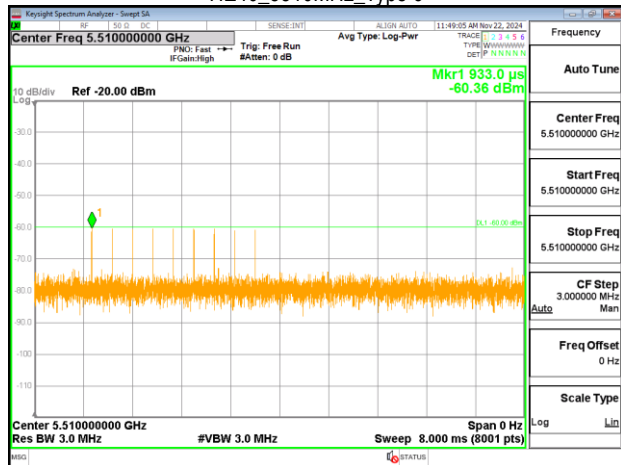
HE40_5510MHz_Type 5



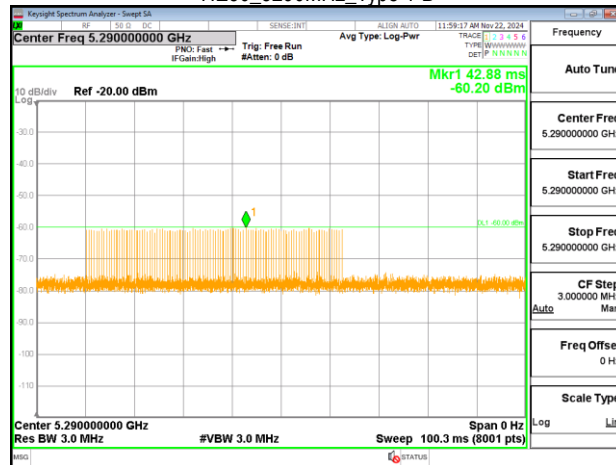
HE80_5290MHz_Type 1-A



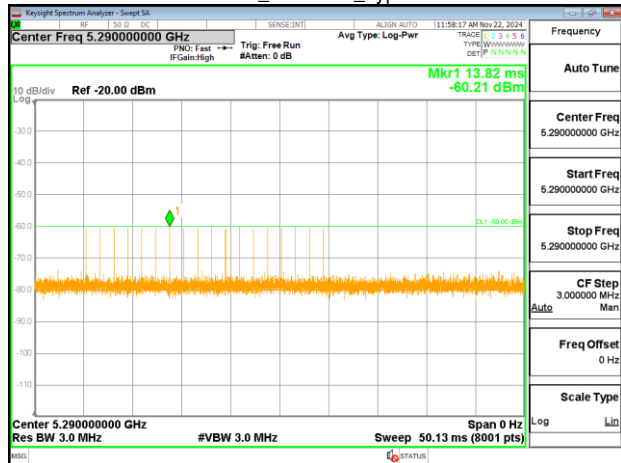
HE40_5510MHz_Type 6



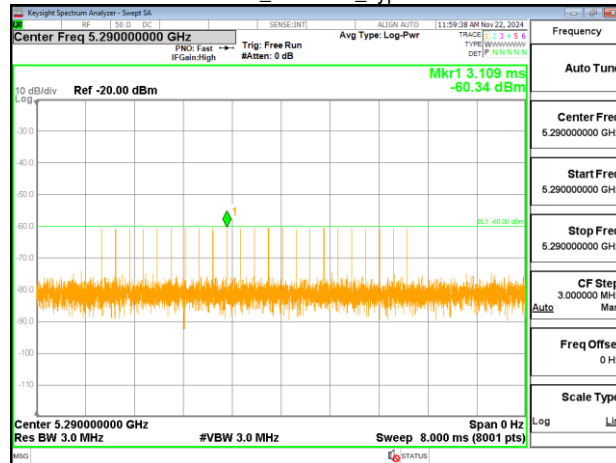
HE80_5290MHz_Type 1-B



HE80_5290MHz_Type 0



HE80_5290MHz_Type 2

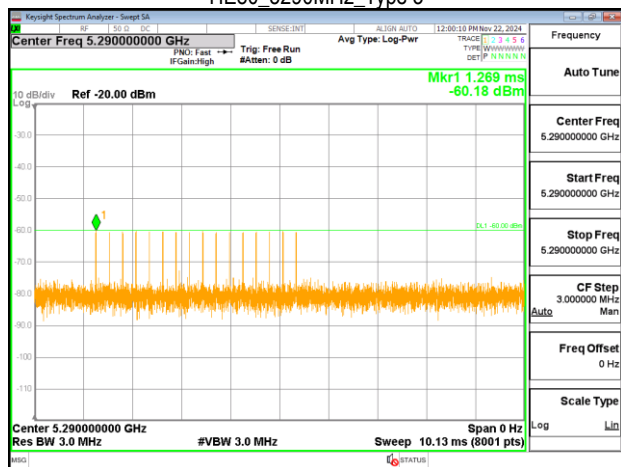


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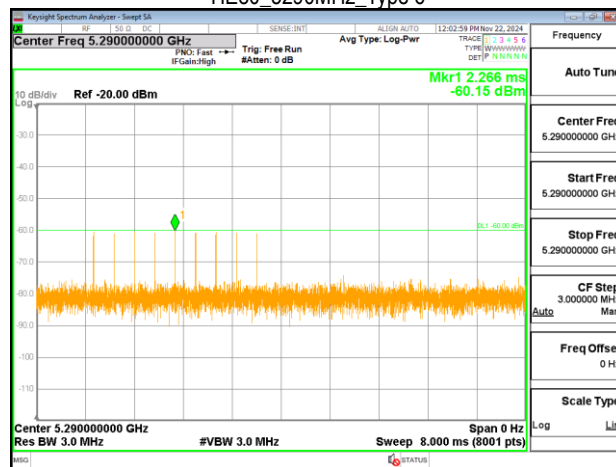
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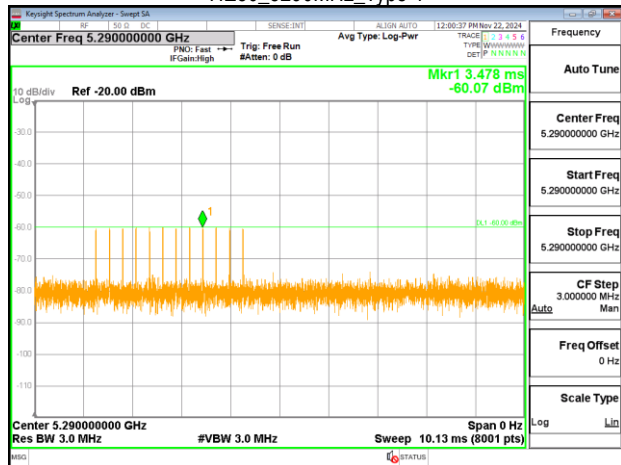
HE80_5290MHz_Type 3



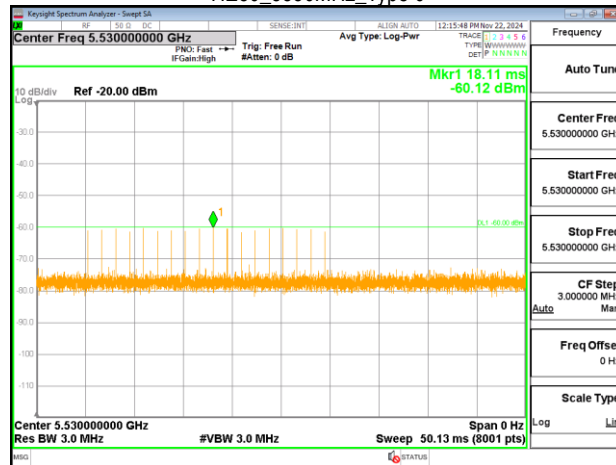
HE80_5290MHz_Type 6



HE80_5290MHz_Type 4



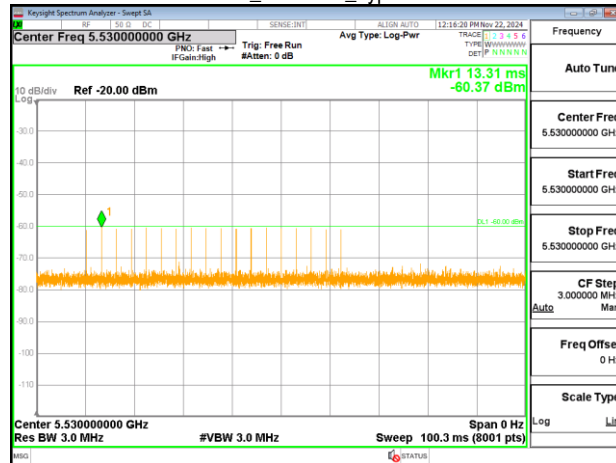
HE80_5530MHz_Type 0



HE80_5290MHz_Type 5



HE80_5530MHz_Type 1-A

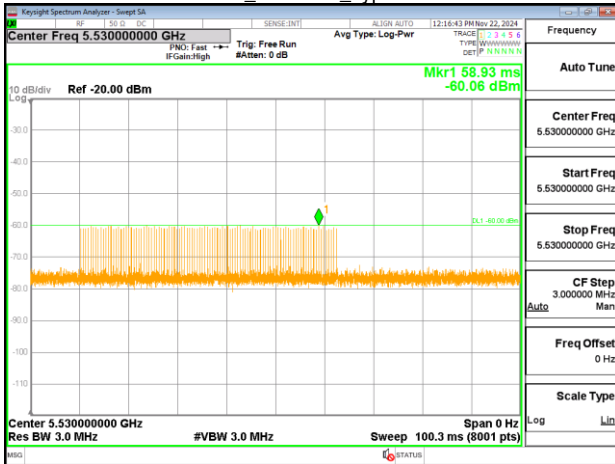


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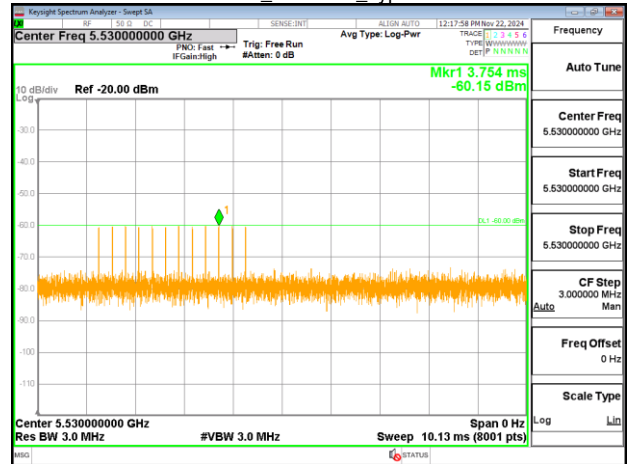
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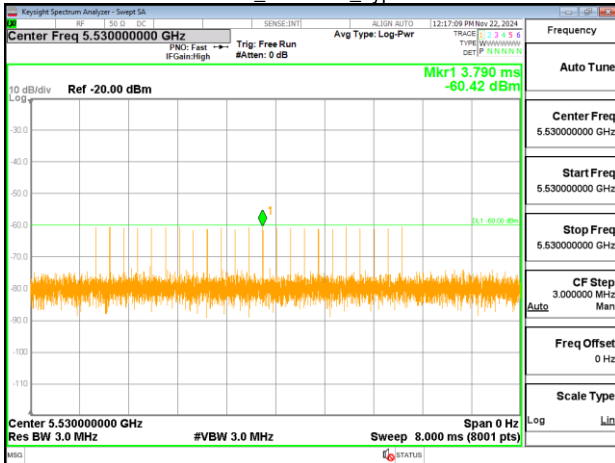
HE80_5530MHz_Type 1-B



HE80_5530MHz_Type 4



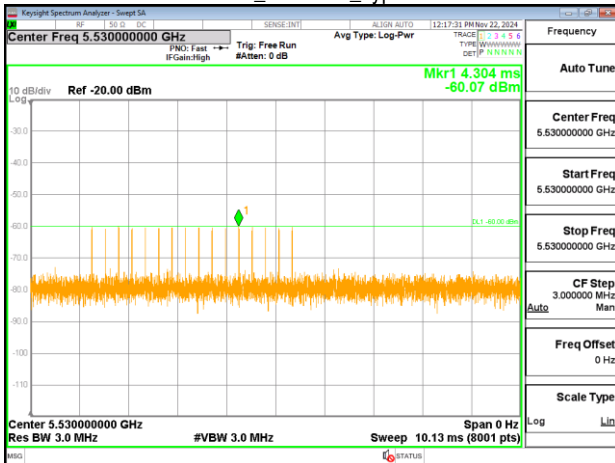
HE80_5530MHz_Type 2



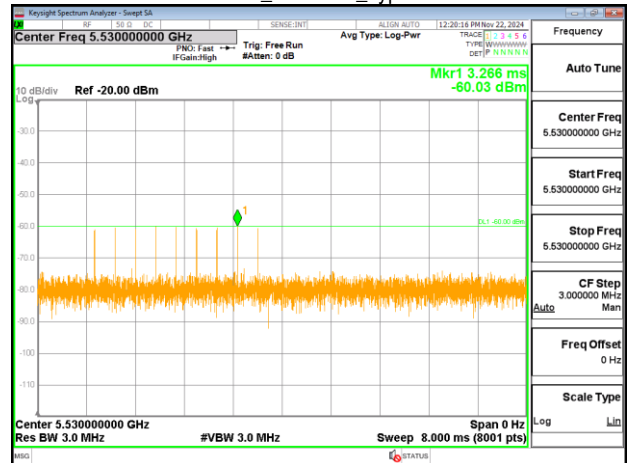
HE80_5530MHz_Type 5



HE80_5530MHz_Type 3



HE80_5530MHz_Type 6



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10 CHANNEL CLOSING TRANSMISSION AND CHANNEL MOVE TIME MEASUREMENT (RADAR TYPE 0)

Master

Channel Shutdown Result				
Detection Threshold Level (dBm)			-60	
Modulation Mode	Freq. (MHz)	Radar Test Signal	Channel Closing Transmission Time(ms) 200ms~10sec	Channel Move Time(s)
HE80	5290	Type 0	6	0.430
HE80	5530	Type 0	8	0.466
Limit			60 ms	10 sec
Result			Complied	

Slave

Channel Shutdown Result				
Detection Threshold Level (dBm)			-64	
Modulation Mode	Freq. (MHz)	Radar Test Signal	Channel Closing Transmission Time(ms) 200ms~10sec	Channel Move Time(s)
HE80	5530	Type 0	8	0.484
Limit			60 ms	10 sec
Result			Complied	

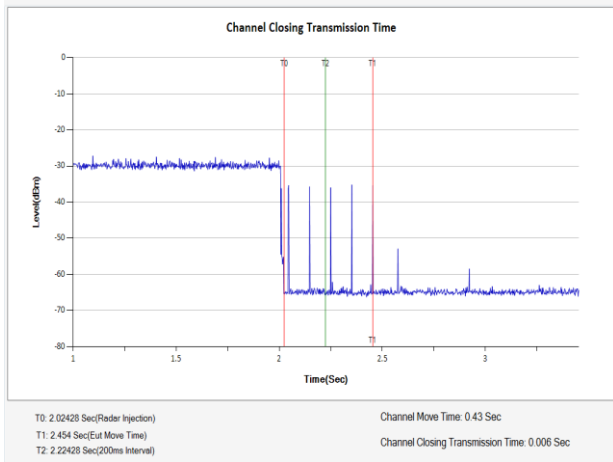
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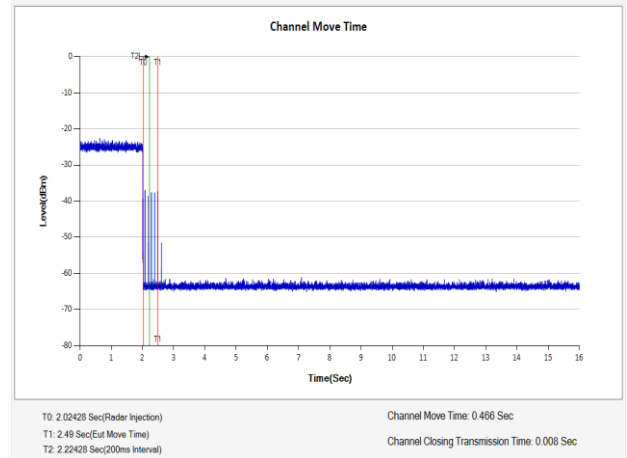
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Master

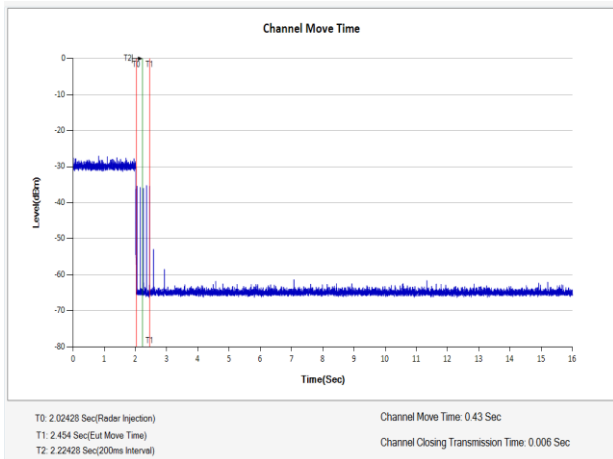
HE80_5290MHz_Channel Close Time



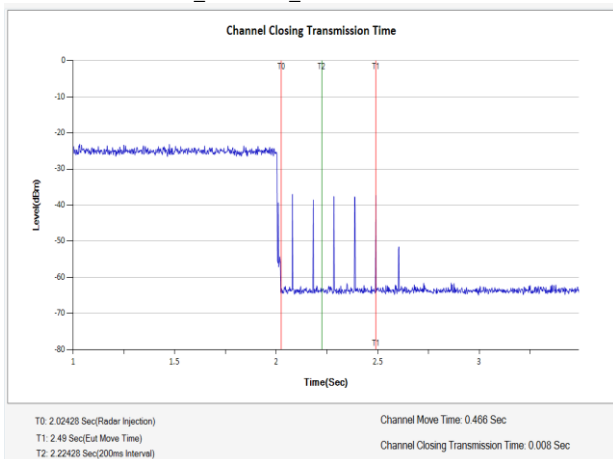
HE80_5530MHz_Channel Move Time



HE80_5290MHz_Channel Move Time



HE80_5530MHz_Channel Close Time



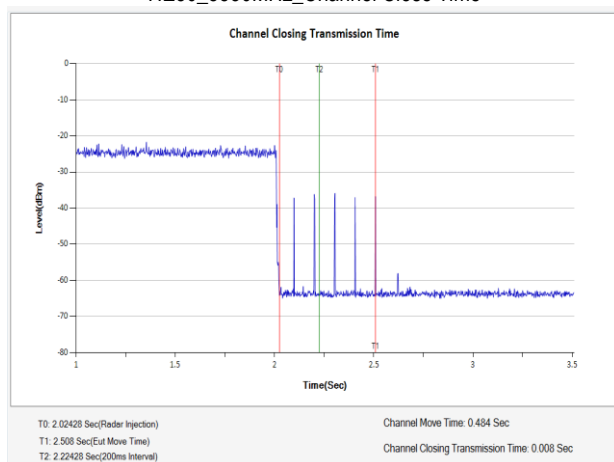
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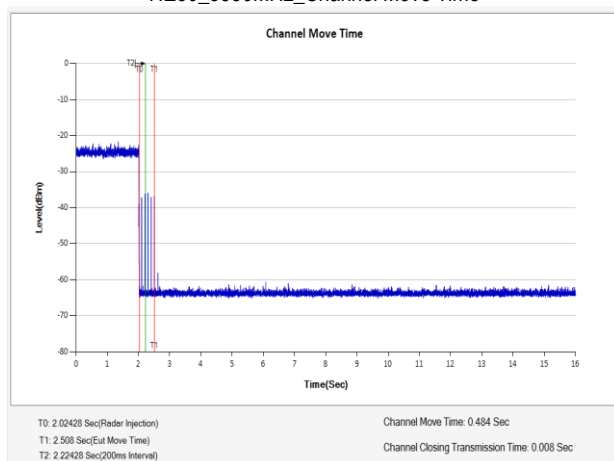
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Slave

HE80_5530MHz_Channel Close Time



HE80_5530MHz_Channel Move Time



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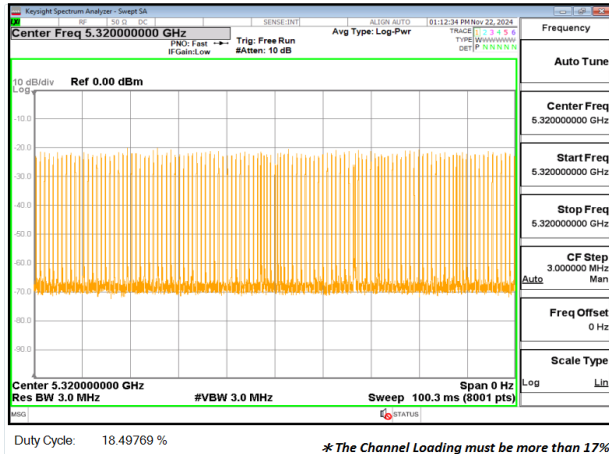
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11 DUTY CYCLE

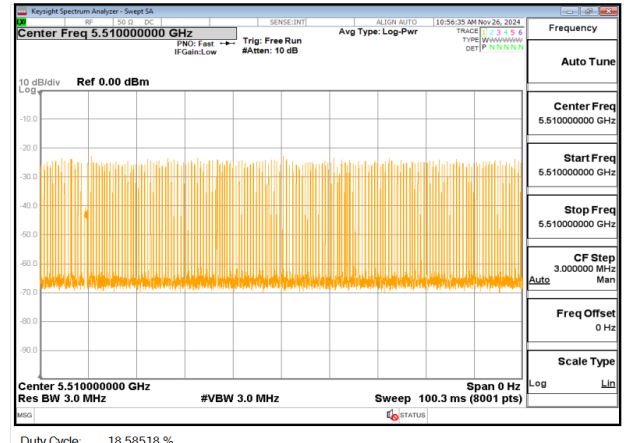
Master

HE20_5320MHz_Duty Cycle



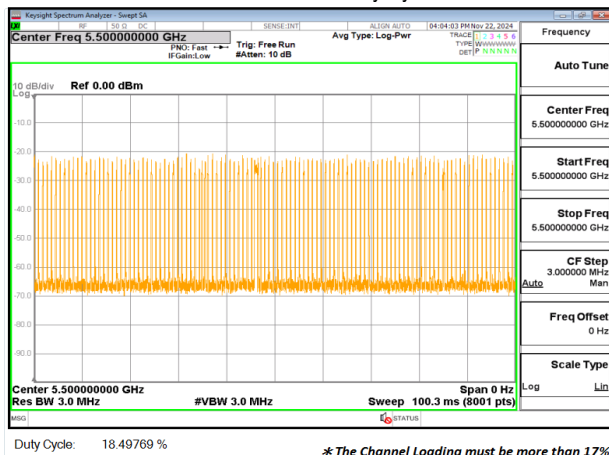
* The Channel Loading must be more than 17%

HE40_5510MHz_Duty Cycle



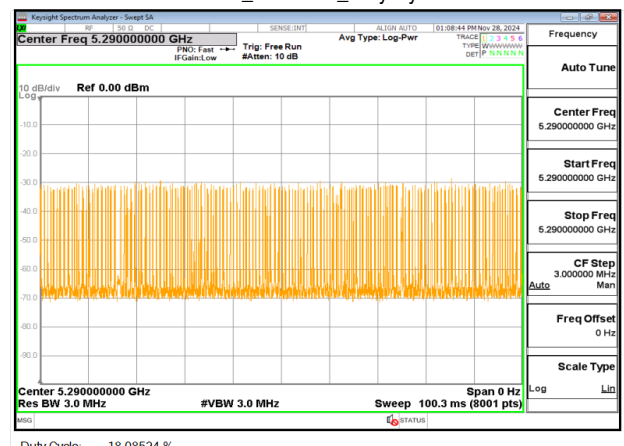
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HE20_5500MHz_Duty Cycle



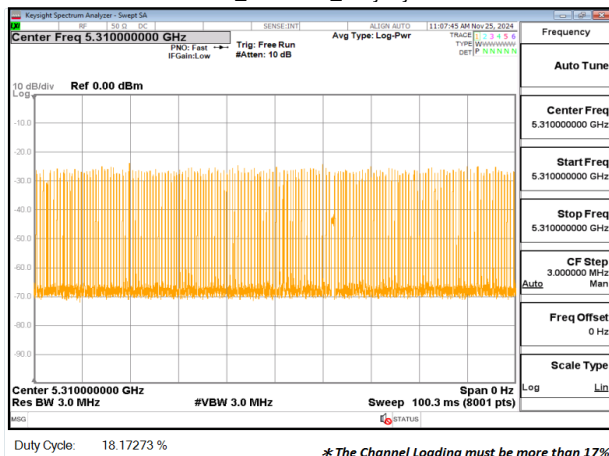
* The Channel Loading must be more than 17%

HE80_5290MHz_Duty Cycle



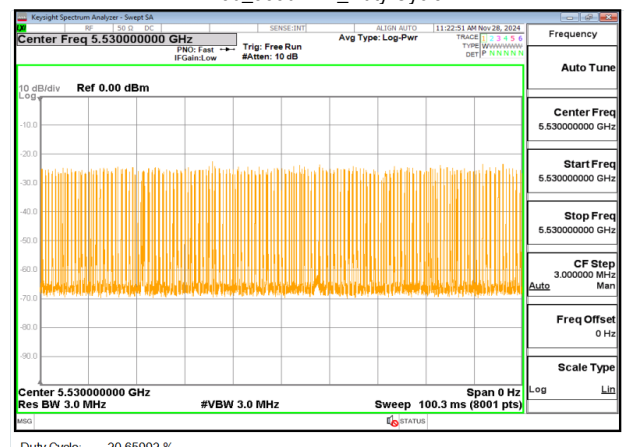
* The Channel Loading must be more than 17%

HE40_5310MHz_Duty Cycle



* The Channel Loading must be more than 17%

HE80_5530MHz_Duty Cycle



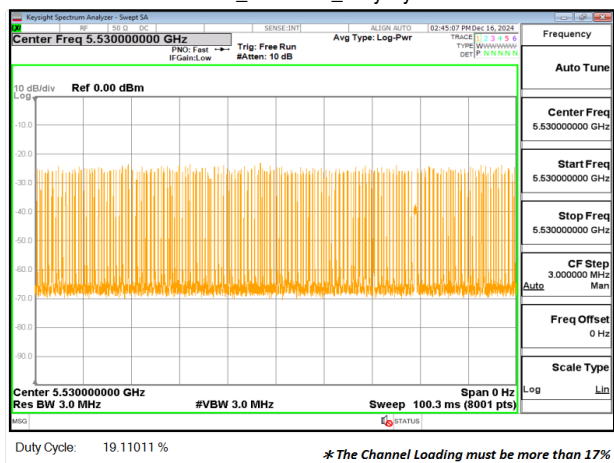
* The Channel Loading must be more than 17%

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HE80_5530MHz_Duty Cycle



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12 NON-OCCUPANCY PERIOD MEASUREMENT

To verify whether channel is unavailable to be operated in 30 minutes.

$$1.8\text{ks} = 1800\text{s} = 1800\text{ s/min} / 60 = 30\text{minute}$$

Master

Slave

HE80_5290MHz_Non-Occupancy Period



HE80_5530MHz_Non-Occupancy Period



HE80_5530MHz_Non-Occupancy Period



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